New Albany Planning Commission
Informal Meeting Minutes Monday, May 5, 2025 - Approved

I. Call to order

The New Albany Planning Commission held an informal meeting on Monday, May 5, 2025 in the New Albany Village Hall. Vice Chair Wallace called the meeting to order at 7:10 p.m. and asked to hear the roll.

II. Roll call

Those answering the roll:

Mr. Kirby	absent; arrived 7:22 p.m.
Mr. Wallace	present
Mr. Schell	present
Mr. Larsen	present
Ms. Briggs	present
Council Member Wiltrout	present

Having four voting members present at roll call, the commission had a quorum to transact business.

Staff members present: Law Director Albrecht, Development Engineer Albright, Planning Manager Christian, Planner II Saumenig, Deputy Clerk Madriguera

III. Action on minutes: April 21, 2025

Vice Chair Wallace asked whether there were any corrections to the minutes from the April 21, 2025 meeting. Hearing none, Commissioner Larsen moved for approval of the April 21, 2025 meeting minutes. Commissioner Briggs seconded the motion.

Vice Chair Wallace asked whether there was any discussion on the motion. Hearing none, he asked to hear the roll.

Upon roll call: Mr. Larsen yes, Ms. Briggs yes, Mr. Schell yes, Mr. Wallace abstained from the vote. Having three yes votes, the motion passed and the April 21, 2025 minutes were approved as submitted.

IV. Additions or corrections to the agenda

Vice Chair Wallace asked whether there were any additions or corrections to the agenda.

Planning Manager Christian answered none from staff.

Vice Chair Wallace administered the oath to all present who would be addressing the commission.

V. Hearing of visitors for items not on tonight's agenda

Vice Chair Wallace asked if there were any visitors present who wished to address the commission for an item not on the agenda.

Ms. Tamara Davies, 8200 Central College Road. Ms Davies addressed the commission on the Epcon Haines Creek Development, which is near her property. She reported that there is a large pond of standing water from the rain. Water is flowing from the development on to her property and she is unable to use that part of her property. If it is left untreated it will cause mosquitoes.

Vice Chair Wallace asked whether she has contacted the city regarding this issue.

Ms. Davies responded that her husband contacted the city.

Vice Chair Wallace thanked Ms. Davies for bringing this issue to the commission's attention and advised her that the commission is without authority to act on this issue. This appears to be a zoning issue, which would be handled by the city via code enforcement proceedings.

Engineer Albright stated that he became of the situation yesterday, Sunday. This is temporary and a bit of an unforeseen condition. He described the action that the city is taking and stated that the city will continue to make sure the Davies' concerns are addressed.

Ms. Davies responded that she did not think this condition was unforeseen.

Council Member Wiltrout urged Ms. Davies to share her contact information with Engineer Albright.

VI. Cases:

FDP-05-2025 AEP Substation

Final development plan to allow for construction of an AEP electrical substation on 9.50 acres located at 7375 Souder Road (PID: 222-002282).

Applicant: AEP Ohio Transmission Company Inc.

Law Director Albrecht delivered the note he drafted in the staff report.

Vice Chair Wallace stated that in February there was extensive discussion about the following: landscaping; whether the applicant had talked with the neighbors, whether the applicant could provide a detailed rendering of what the facility would look like.

Planner II Saumenig answered that AEP has images to share.

Vice Chair Wallace asked Law Director whether the commission's review was limited to a determination of whether AEP met the statutory definition of a public utility facility.

Law Director Albrecht answered that once the commission determines that the criteria is met, the commission's authority is much more limited.

Commissioner Schell asked whether the applicant been made aware of the conditions in the staff report.

Planner II Saumenig answered yes, and that she believed that they agreed with them.

Vice Chair Wallace asked whether the commission had any further questions for staff. Hearing none, he called the applicant to the lectern.

Applicant Maggie Beggs, AEP 8500 Smith's Mill Road, spoke in support of the application. She distributed renderings of the facility and various angles of the substation she also indicated the location of proposed additional plantings. She stated that the Souder Station was very important to the region and that it will accommodate new residents.

Vice Chair Wallace noted the arrival of Chair Kirby at 7:22 p.m.

Commissioner Briggs asked how long it would take for the trees to grow to 25-feet.

Ms. Beggs answered about 20 years.

Council Member Wiltrout asked how tall the mounding would be.

Ms. Beggs answered that it was 6 – 8-feet.

Commissioner Briggs asked Ms. Beggs to talk more about the feasibility study.

Ms. Beggs distributed a photo of the existing transmission line and and discussed the study and stated that AEP knows it needs to connect to an existing transmission line.

Commissioner Schell asked Ms. Beggs to talk about the lighting.

Ms. Beggs responded that they had changed their plan and now lighting at night would only occur in the case of emergency.

Council Member Wiltrout asked what what would constitute an emergency.

Ms. Beggs answered, a power outage.

Vice Chair Wallace confirmed, following up on the routing of the transmission line, that the commission will not be asked to review routing.

Chair Kirby confirned that regular maintenance would occur during regular business hours.

Applicant Jennifer Willis, AEP 8500 Smith's Mill Road, added that the current line goes to Rocky Fork Park.

Vice Chair Wallace thanked her for the clarification and asked whether the email received from AEP constituted sufficient evidence that AEP is a major utility.

Law Director Albrecht stated that that is for the commission to determine.

Applicant Hector Garcia, Counsel for AEP, spoke in support of the application and AEP's assertion that they are a major utility. In accordance with an email submitted, he generally explained that the substation and related facilities will operate at a voltage greater than 22kV, and some of the equipment in the substation will be interconnected and operate at 138 kV. The substation will be directly connected to 138kV transmission lines and it is necessary for the operation and safety of those lines, as well as for the operation and safety of the other lines connecting to the substation to the utility facilities and equipment in the area.

Council Member Wiltrout suggested that Mr. Garcia proceed through the elements of the definition of a public utility in R.C. 4905.65. [R.C. 4905.65(B) provides, To the extent permitted by existing law, a local regulation may reasonably restrict the construction, location, or use of a public utility facility, unless the public utility facility (1) is necessary for the service, convenience, or welfare of the public served by the utility in one or more political subdivisions other than the political subdivision adopting the local regulation; and (2) is to be constructed in accordance with generally accepted safety standards; and (3) does not unreasonably affect the welfare of the general public.]

Mr. Garcia addressed the elements and referred to his email to the commission.

Commissioner Wallace asked how compliance with the standards will be ensured.

Mr. Garcia responded that AEP never gets close to non-compliance. Compliance is also monitored by North American Electric Reliability Corporation (NERC) which is overseen by the Federal Energy Regulatory Commission (FERC). The substation will be connected to 138 kV transmission lines classified as major utility facilities, which are subject to regulation by the Ohio Power Siting Board.

Council Member Wiltrout asked Mr. Garcia to speak to the details of site selection.

Ms. Willis stated that the location is dictated by customers in the area. She continued that there are two customers served by this station – one is a stone's throw away and one is ½ mile away.

Commissioner Wallace asked how far away from a customer can the substation be and still be close enough.

Ms. Willis responded that the farther away from the station the higher the chance of issues.

Chair Kirby added that as power travels, there is power loss in the lines.

Vice Chair Wallace asked for further questions from the commission to the applicant or city staff before he opened the public hearing. Hearing none, he opened the public hearing.

Deputy Clerk Madriguera stated that an email from Mr. Buehrer that should be included in the record when the documents motion is passed.

Mr. Craig Srba, 6837 E. Walnut Street, stated that he has requested a 12-foot mound from AEP in order to sufficiently screen his property.

Applicant John Peltz, Engineer for AEP, 153 N. Broadway New Philadelphia Ohio, responded that there is not enough room on the site to accommodate a mound of that height.

Commissioner Wallace asked whether the mound would fit if Mr. Srba was willing to donate a portion of his property.

Chair Kirby further asked whether the applicant would agree to a condition requiring the discussion to take place.

Mr. Peltz responded that a lot of trees would have to come down, he further stated that he would not agree to the condition.

Mr. Srba continued that he was not trying to be difficult or unreasonable; he was still trying to work through the answers that AEP gave. He asked how tall the mounding on Harlem Road was.

Ms. Beggs stated that she was not sure.

Mr. Srba stated that it was about 20-feet tall.

Applicant David Hillyard, Enginner for AEP, 235 Roys Avenue added that the total MDA of the substation is 250.

Mr. Srba continued that this substation is necessary for the data center. Everywhere in New Albany that there is a data enter, there is a substation. This substation is not because of an increase in residential customers. It is not necessarily for a public purpose. He stated that AEP has communicated with him only through email. He has posed multiple questions to AEP and has

not received a response. He asserted that he wants to keep the mound in the northwest corner and that 15 years is too long to wait for adequate screening, if the screening is removed on the eastern side of the property it should be replaced with a soundwall.

Chair Kirby asked whether the landscape plan can be changed so that there is landscaping in any place where the transmission does not need to be.

Mr. Garcia said yes, it can be changed to the extent is feasible and that it does not interfere with the operations of the lines or anything underground.

Commissioner Schell asked Law Director Albrecht whether, if the pc agrees with the three criteria, whether the commission has the authority to order installation of a soundwall.

Law Director Albrecht responded probably not, unless AEP agrees to the installation.

Mr. Hillyard remarked that the sound from the substation is about the same as a washing machine.

Vice Chair Wallace asked Law Director Albrecht whether conditions that have been agreed to by AEP are illusory.

Law Director Albrecht responded that if the applicant has agreed to the conditions, they are enforceable.

Chair Kirby asked whether the city and the applicant would agree to a soundwall.

Planning Manager Christian responded that the city does not oppose a soundwall.

Commissioner Schell asked whether the applicant would agree to install a soundwall.

Ms. Willis responded that she would check, but was not in a position to agree tonight to a soundwall.

Commissioner Larsen stated that it does not sound like there is a need for a soundwall.

Chair Kirby responded ok, but would certainly agree to keep sound at its current level.

Mr. Garcia remarked that there are some things that the company cannot agree to in advance. Consideration and caution should be used when imposing restraints on the operation of a utility.

Law Director Albrecht advised the commission that there is an exemption in New Albany's code for noise from public utilities.

Mr. Srba stated that the sound wall request was for sound and it was for visual. He continued that he as without clear concise answers from AEP and was requesting two reasonable conditions: that the mounding height be increased to 12-feet; and the installation of a sound wall. He further remarked that the lighting be alarm based and that equipment installation begin on the south end of the pad first.

Ms. Willis responded that the entire station will be installed at the same time, everything will be ready at the same time.

Vice Chair Wallace remarked to the applicant that he was hearing that installation of the 12-foot mound was not possible but wondered whether installation of more mature trees was possible.

Ms. Willis responded that they could look into it. She noted that they are more costly.

Mr. Hillyard added that more mature trees would necessitate decreasing the size of the mound.

Chair Kirby confirmed that the applicant was willing to examine ways to increase opacity sooner

Ms. Willis agreed.

Ms. Beggs added that one of the reasons arborvitae is used is because of its fullness and the opacity it provides.

Vice Chair Wallace noted that the commission had been considering the applicant for close to two hours, and called a recess at 8:56 p.m.

Vice Chair Wallace called the meeting to order at 9:03 p.m.

Mr. Srba stated that picture of the oak tree that he showed at the last meeting has since been removed.

Planning Manager Christian remarked that tree removal is always allowed.

Vice Chair Wallace asked if there was anyone else present who wished to speak to the commission.

Hearing none, Vice Chair Wallace moved to accept the staff reports and related documents including the email from Mr. Buehrer, the photos from the applicant, and the documents from Mr. Srba into the record. Chair Kirby seconded the motion.

Vice Chair Wallace asked whether there was any discussion on the motion. Hearing none, he asked to hear the roll.

Upon roll call: Mr. Wallace yes, Mr. Kirby yes, Mr. Schell yes, Ms. Briggs yes, Mr. Larsen yes. Having five yes votes, the motion passed and the staff reports and related documents including the email from Mr. Buehrer, the applicant's photos, and the documents from Mr. Srba were admitted into the record for FDP-05-2025.

Vice Chair Wallace moved for approval of FDP-05-2025 based upon the findings in the staff report with the conditions in the staff report and the following additional conditions subject to staff approval:

- Lighting is alarm based;
- Addition of trees in the southwest corner as depicted and additional trees where possible;
- The extension of mounding in the northwest corner;
- Routine maintenance will be scheduled during business hours, to the extent that it does not interfere with the operation, construction, or maintenance of the facility;
- Conditional landscaping over and above commitments to the extent that it does not interfere with line operations or anything underground, subject to staff approval;
- That the applicant review provision of more opacity faster.

Commissioner Larsen seconded the motion.

Planning Manager Christian noted that New Albany's codified ordinances exempts public utilities from hours of work restrictions.

Mr. Garcia further clarified that the limitation on work hours does not interfere with the operation, construction, and maintenance of the facility.

Vice Chair Wallace asked whether there was any further discussion on the motion. Hearing none he asked to hear the roll.

Upon roll call: Mr. Wallace yes, Mr. Larsen yes, Mr. Schell yes, Ms. Briggs yes, Mr. Kirby yes. Having five yes votes the motion passed and FDP-05-2025 was approved subject the conditions as stated above.

Vice Chair Wallace thanked everyone and wanted the record to reflect that at least six people from AEP were present. He encouraged AEP to continue to communicate with Mr. Srba. He then introduced the other business on the agenda and asked to hear from staff.

VII. Other business

Engage New Albany Strategic Plan Update: US-62 Interchange Focus Area

Planning Manager Christian provided a brief introduction. He noted that Commissioner Larsen as well as Council Member Wiltrout were involved with the steering committee. He introduced representatives from MKSK, Sarah Lilly and Janco Swart, who would be presenting the update.

Chair Kirby asked whether the study included the projected impact of the Hamlet.

Sarah Lilly, Planner for MKSK, answered that it did. The analysis included the projected retail demands of the Hamlet.

Commissioner Schell asked whether the schools were happy with this. He further noted that at least one steering committee member expressed some concerns about the closure of Kitzmiller Road.

Commissioner Larsen asked whether the seven dwelling units constituted form-based code.

Ms. Lilly responded that it is a real number.

Vice Chair Wallace opened the public hearing.

Samantha Rufo, 9175 Lee Hall Ct. Ms. Rufo was on the steering committee and she is the president of the Tidewater HOA. Thanked everyone involved. P 37 – the Tidewater is not included in the overall plan at all. Five-points, Kitsmiller, were all included, but we were not. She asked whether tree removal in Tidewater can be minimized. She was further concerned about the closure of Kitzmiller Road, which was added after the committee completed its work, and the roundabout at the five points intersection.

Jamison Reem, 9147 McClellan Dr., agreed with Ms. Rufo. He opposed the disconnection of Kitzmiller Road and stated that a better option is to leave it as it is.

Ms. Lilly thanked the residents and stated that MKSK was good with these issues and that they favored not cul de sacing a road and favored the creation of multiple point of access.

Jim Rufo, 9175 Lee Hall Ct., stated that his biggest concern was safety. He agreed with the comments and added that closing off Kitzmiller is going to disconnect Tidewater and Haines Creek from the rest of New Albany. He suggested the installation of a NO Trucks sign.

Vice Chair Wallace asked for further comments from the public.

Hearing none, Chair Kirby asked how many dwelling units are in the bank and how many are being added here.

Planning Manager Christian responded maybe 700, and that the study area is 1500.

There was discussion of access to transfer housing and use of the New Albany Company's banked housing.

Vice Chair Wallace asked how the concerns about the closure of Kitzmiller Road and the dwelling unit concerns would be transmitted to council.

Planning Manager Christian responded that they would be part of the discussions with council.

Vice Chair Wallace thanked staff and MKSK. Thereafter he moved to accept the staff reports and related documents into the record for the Engage New Albany Strategic Plan Update. Chair Kirby seconded the motion.

Vice Chair Wallace asked whether there was any discussion on the motion. Hearing none he asked to hear the roll.

Upon roll call: Mr. Wallace yes, Mr. Kirby yes, Ms. Briggs yes, Mr. Schell yes, Mr. Larsen yes. Having five yes votes, the motion passed and the staff reports and related documents were admitted to the record.

Chair Kirby moved the favorably recommend the Engage New Albany Strategic Plan Update with the concerns raised at the meeting to council. Commissioner Schell seconded the motion.

Vice Chair Wallace asked whether there was any discussion on the motion. Hearing none, he asked to hear the roll.

Upon roll call: Mr. Kirby yes, Mr. Schell yes, Mr. Wallace yes, Ms. Briggs yes, Mr. Larsen yes. Having five yes votes, the motion passed and the plan update was favorably recommended to council with the concerns about the closure of Kitzmiller Road and the residential density being raised with council.

The commission thanked MKSK and the residents.

Having completed the case and other business on the agenda, Vice Chair Wallace polled the members for comment.

VIII. Poll members for comment

Commissioner Briggs commented that this presentation was less than ideal in terms of timing and presentation of such an important topic at this late hour.

IX. Adjournment

Having no further business, Vice Chair moved to adjourn the May 5, 2025 informal meeting of the New Albany Planning Commission. Without objection, the meeting was adjourned at 10:24 p.m.

Submitted by Deputy Clerk Madriguera, Esq.

Appendix
FDP-05-2025
Staff Report
Record of Action

Engage New Albany US-62 Interchange Focus Area Plan

NEW ALBANY

Community Development Department

Meeting Sign-in Sheet

NAME	ADDRESS	PHONE	EMAIL
Tamara Davies	8200 Central College Rd	720 323 3205	TLD949605@gmail.com
Anna Srba	6837 E Walnut	614-551-4408	
Craig Srba	" "	" " "	
Maggie Beggs	8500 Smiths Mill Rd.	574-606-2374	mrbeggs@aep.com
John Petz	153 N Broadway New Philadelphia	330-343-3499	jpetz@bairgoodie.com
Amy Toohey	8500 Smiths Mill Rd	614 565 1480	ajtoohey@aep.com
Jennifer Willis	8500 Smiths Mill Rd	614 719-9321	jwillis@aep.com
Molly Scott	5765 Triplett Sq.	814-935-8368	mollyscott128@gmail.com
Sarah Lilly	1122 Brick St Apt C	614-935-8426	slilly@mkskstudios.com
DAVID HILLYARD	235 S. Roys AVE	614-313-3744	DWHILLYARD@AEP.com
Janco Swart	431 Lambourne Ave	740-919-7967	jswart@mkskstudios.com
Lyndsey Paxton	7576 New Albany Condit Rd.	937-477-7944	Lynspaxton@gmail.com
Samantha Rito	9175 Lee Hall Ct	740 815 6925	tidewaterhoa@gmail.com
Sara Lowery	7377 Dean Farm Rd	412-849-1241	Sara_lowery54@hotmail.com
J Segmiller	7241 NAL Dr	614. 406-4898	

NEW ALBANY

Community Development Department

RE: City of New Albany Board and Commission Record of Action

Dear Yost Barns,

Attached is the Record of Action for your recent application that was heard by one of the City of New Albany Boards and Commissions. Please retain this document for your records.

This Record of Action does not constitute a permit or license to construct, demolish, occupy or make alterations to any land area or building. A building and/or zoning permit is required before any work can be performed. For more information on the permitting process, please contact the Community Development Department.

Additionally, if the Record of Action lists conditions of approval these conditions must be met prior to issuance of any zoning or building permits.

Please contact our office at (614) 939-2254 with any questions.

Thank you.

NEW ALBANY

Community Development Department

Decision and Record of Action

Monday, May 12, 2025

The New Albany Architectural Review Board took the following action on 05/12/2025 .

Certificate of Appropriateness

Location: 6588 NEW ALBANY CONDIT RD
Applicant: Yost Barns,

Application: PLARB20250026
Request: Certificate of Appropriateness to allow for a garage to be built and waivers for the garage size, garage door size, garage door visibility from the street, and proximity to property lines at 6588 New Albany Condit Road (PID: 222-000544).
Motion: To table for 60 days

Commission Vote: Motion Tabled, 6-0

Result: Certificate of Appropriateness, PLARB20250026 was Tabled, by a vote of 6-0.

Recorded in the Official Journal this May 12, 2025

Condition(s) of Approval: N/A

Staff Certification:

Kylie Blackburn

Kylie Blackburn
Planner

NEW ALBANY
COMMUNITY CONNECTS US

Planning Commission Staff Report
May 5, 2025 Meeting

AEP SUBSTATION
FINAL DEVELOPMENT PLAN

LOCATION:	7375 Souder Road (PID: 222-004891)
APPLICANT:	AEP, Ohio Transmission Company, Inc. c/o Amy Toohey
REQUEST:	Final Development Plan
ZONING:	Souder East Office, Research, & Information District I-PUD
STRATEGIC PLAN:	Employment Center
APPLICATION:	FDP-05-2025

Review based on: Application materials received January 23, 2025 and March 19, 2025

Staff report prepared by Sierra Saumenig, Planner 2

NOTE FROM THE LAW DIRECTOR

As noted during the April 21, 2025 Regular Meeting of the Planning Commission, from the time this matter was first tabled during the February 19, 2025 Planning Commission Meeting until the date of this Updated Staff Report, the City and AEP have exchanged correspondence and engaged in discussions with one another regarding the pending matter. While AEP indicated in correspondence dated March 14, 2025 that the construction of its Substation was "not subject to the City's zoning process" pursuant to R.C. 49065.65, the City disputed its contention and notified it of its position that it maintained the matter was subject to the jurisdiction of the Planning Commission. As such, AEP was advised the matter would proceed before the Planning Commission.

Because of the contrary positions of the parties concerning the role of the Planning Commission in reviewing the Final Development Plan ("FDP"), the following is a summary of the position taken by the City with respect to the proposed Substation.

At the outset, it is important to recognize the proposed Substation is in an I-PUD. AEP filed a FDP application giving rise to this matter. As was shared with AEP, undoubtedly, the Planning Commission has jurisdiction as it is well-settled "a public utility which seeks to build a public utility facility, as defined in R.C. 4905.65(A)(2), and which facility meets the tests under R.C. 4905.65(B)(1), (2) and (3), must first apply for any permits regarding construction or location of the facility required by the political subdivision in which the utility proposes to build. If the subdivision will not issue the permits to the satisfaction of the utility, then the utility may resort to the courts to determine the degree of local regulation permitted under R.C. 4905.65." *Cleveland Elec. Illum. Co. v. Lakewood,*64 Ohio St.2d 374, 374.

Regarding the authority of the Planning Commission to regulate the proposed Substation set forth in FDP-05-2025, it may be limited by R.C. 4905.65, though. Ohio Rev. Code 4905.65, entitled Local Regulation of Public Utility Facilities, states:

(A) As used in this section:

(1) "Public utility" means any electric light company, as the same is defined in sections 4905.02 and 4905.03 of the Revised Code.

(2) "Public utility facility" means any electric line having a voltage of twenty-two thousand or more volts used or to be used by an electric light company and supporting structures, fixtures, and appurtenances connected to, used in direct connection with, or necessary for the operation or safety of such electric lines.

(3) "Local regulation" means any legislative or administrative action of a political subdivision of this state, or of an agency of a political subdivision of this state, having the effect of restricting or prohibiting the use of an existing public utility facility or facilities or the proposed location, construction, or use of a planned public utility facility or facilities.

(B) To the extent permitted by existing law a local regulation may reasonably restrict the construction, location, or use of a public utility facility, unless the public utility facility:

(1) Is necessary for the service, convenience, or welfare of the public served by the public utility in one or more political subdivisions other than the political subdivision adopting the local regulation; and

(2) Is to be constructed in accordance with generally accepted safety standards; and

(3) Does not unreasonably affect the welfare of the general public.

Nothing in this section prohibits a political subdivision from exercising any power which it may have to require, under reasonable regulations not inconsistent with this section, a permit for any construction or location of a public utility facility by a public utility in such political subdivision.

AEP is a "public utility" as defined in R.C. 4905.65(A)(1).

AEP has submitted correspondence confirming that the electric lines will have a voltage in excess of 22,000 volts. Consequently, AEP maintains the proposed Substation is a "public utility facility" as defined in R.C. 4905.65(A)(2). In email correspondence, AEP has confirmed "the substation and related facilities are, indeed, electric facilities that will operate at a voltage greater than 22 kV. Some of the equipment in the substation will be interconnected and operate at 138 kV." (Email from hgarcia1@aep.com dated April 21, 2025).

Any action of the Planning Commission would be considered a "local regulation" as defined in R.C. 4905.65(A)(3).

Consistent with R.C. 4905.65, to the extent permitted by law, the Planning Commission "may reasonably restrict the construction, location or use of a public utility facility, unless the public utility facility" satisfies three (3) criteria. (R.C. 4905.65(B)(1)-(3), underline added). The 3 criteria are outlined above. AEP has submitted information via email in response to each of the criteria.

Necessary for the Service, Convenience or Welfare of the Public (R.C. 4905.65(B)(1))

As noted in an email, AEP stated "the substation, along with the equipment in and connected to it, is necessary to provide electric service to the public, including providing electric public utility service to the people, businesses, governments, and facilities that receive their electric service from Ohio Power in the area, as well as in neighboring areas that either draw electricity through the Ohio Power distribution system locally or are part of the distribution and electric transmission network that serves customers in other counties, cities, and townships in Ohio. (Email from hgarcia1@aep.com dated April 21, 2025).

Constructed in Accordance with Generally Accepted Safety Standards (R.C. 4905.65(B)(2))

As noted in an email, AEP indicated the proposed "substation and related facilities will be constructed in accordance with generally accepted safety standards and will be built with strict adherence to requirements from the National Electrical Safety Code (NESC) and consistent with the North American Electric Reliability Corporation (NERC), which is overseen by the Federal Energy Regulatory Commission (FERC). Additionally, the substation will be connected to 138 kV transmission lines classified as major utility facilities, which are subject to regulation and requirements from the Ohio Power Siting Board (OPSB)." (Email from hgarcia1@aep.com dated April 21, 2025).

Does Not Unreasonably Affect the Welfare of the General Public (R.C. 4905.65(B)(3))

In support of its contention that it does not unreasonably affect the welfare of the General Public, AEP submitted the following in an email: "…the substation and related facilities do not unreasonably affect the welfare of the general public, as evidenced by the fact that the facilities are part of the extensive network used by Ohio Power to provide electric service to its customers and the region. The facilities are designed and will be constructed to satisfy stringent safety and engineering requirements while minimizing their impact on surrounding areas, as is common practice in the industry for constructing and maintaining electric utility facilities of this type in both urban and rural areas." (Email from hgarcia1@aep.com dated April 21, 2025).

In the event it is determined that AEP has complied with R.C. 4905.65, the Planning Commission's authority is limited as it may not unreasonably restrict the "construction, location, or use" of the proposed Substation.

Although its authority may be limited by R.C. 4905.65, the Planning Commission does retain the authority "to require, under reasonable regulations not inconsistent with this section, a permit for any construction or location of a public utility facility by a public utility in such political subdivision." (R.C. 4905.65). As a result, the matter is not entirely outside the jurisdiction of the Planning Commission. In fact, courts have recognized a public utility has to "**make a sincere attempt** to comply with the regulations of the political subdivision in which it is trying to build. If the two sides cannot reach an agreement, then the utility has the option of resorting to courts." *Cleveland Electric Illuminating Co. v. Lakewood,* 64 Ohio St.2d 374 (1980).

Consequently, while the Planning Commission may be limited in its ability to reasonably restrict the location, construction and use of a public utility facility consistent with R.C. 4905.65(B), if AEP meets the criteria set forth therein, AEP still must engage in the permitting process and "make a sincere effort" to comply. Again, R.C. 4905.65(B) pertains to local regulations and restrictions on the "location, construction and use of a public utility facility." In the event AEP believes the Planning Commission has imposed unreasonable restrictions on it and the parties cannot reach an agreement, it has the option to pursue the matter in a court.

I. REQUEST AND BACKGROUND

This final development plan application is for a proposed AEP electrical substation located at 7375 Souder Road.

The property in question is zoned I-PUD and is located within the Souder East Office, Research, & Information District Subarea 4. The proposed use (electrical substation) is permitted as this use is identified as an essential service which is permitted in all zoning districts.

It's important to note as this use is a public utility and essential service, the applicant has broader flexibility and does not need to seek variances if a zoning requirement cannot be met per the city law director. Overall the plan is meeting the applicable zoning requirements however there is flexibility for the number of curb cuts, stormwater basin design, and street trees within a utility corridor.

II. SITE DESCRIPTION & USE

The site is generally located north of New Albany Road on the west side of Souder Road. The site is 9.50 acres and is currently undeveloped. Surrounding uses include Canine Companions to the west, undeveloped and commercial uses to the east, commercial to the south, and residential to the north.

III. EVALUATION

Staff's review is based on New Albany plans and studies, zoning text, and zoning regulations. Primary concerns and issues have been indicated below, with needed action or recommended action in underlined text. Planning Commission's review authority is found under Chapter 1159.

The Commission should consider, at a minimum, the following (per Section 1159.08):

a. *That the proposed development is consistent in all respects with the purpose, intent and applicable standards of the Zoning Code;*
b. *That the proposed development is in general conformity with the Strategic Plan/Rocky Fork-Blacklick Accord or portion thereof as it may apply;*
c. *That the proposed development advances the general welfare of the Municipality;*
d. *That the benefits, improved arrangement and design of the proposed development justify the deviation from standard development requirements included in the Zoning Ordinance;*
e. *Various types of land or building proposed in the project;*
f. *Where applicable, the relationship of buildings and structures to each other and to such other facilities as are appropriate with regard to land area; proposed density may not violate any contractual agreement contained in any utility contract then in effect;*
g. *Traffic and circulation systems within the proposed project as well as its appropriateness to existing facilities in the surrounding area;*
h. *Building heights of all structures with regard to their visual impact on adjacent facilities;*
i. *Front, side and rear yard definitions and uses where they occur at the development periphery;*
j. *Gross commercial building area;*
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l. *Spaces between buildings and open areas;*
m. *Width of streets in the project;*
n. *Setbacks from streets;*
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p. *The order in which development will likely proceed in complex, multi-use, multi-phase developments;*
q. *The potential impact of the proposed plan on the student population of the local school district(s);*
r. *The Ohio Environmental Protection Agency's 401 permit, and/or isolated wetland permit (if required);*
s. *The U.S. Army Corps of Engineers 404 permit, or nationwide permit (if required).*

It is also important to evaluate the PUD portion based on the purpose and intent. Per Section 1159.02, PUD's are intended to:

a. *Ensure that future growth and development occurs in general accordance with the Strategic Plan;*
b. *Minimize adverse impacts of development on the environment by preserving native vegetation, wetlands and protected animal species to the greatest extent possible*
c. *Increase and promote the use of pedestrian paths, bicycle routes and other non-vehicular modes of transportation;*
d. *Result in a desirable environment with more amenities than would be possible through the strict application of the minimum commitment to standards of a standard zoning district;*
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Engage New Albany Strategic Plan Recommendations

The Engage New Albany Strategic Plan lists the following development standards for the Employment Center future land use category:

1. No freeway/pole signs are allowed.
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10. The use of materials, colors and textures to break up large scale facades is required.

A. Use, Site and Layout

1. The applicant proposes to develop an AEP electrical substation that is named Souder Station. The existing total site size is 9.50 acres. The proposed use is appropriate for this location in the New Albany Business Park. It will satisfy an existing and future electrical need in the area. The use is permitted as it is an essential service that is permitted in all of the city's zoning districts.
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3. The applicant will install a leisure trail and horse fence along Souder Road.
4. The PUD zoning text requires the following setbacks from these perimeter boundaries. Since the site does not consist of pavement or a building, these setbacks do not apply.

Perimeter Boundary	Required Setback
Souder Road	30-foot building and pavement
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Southern Boundary	25-foot building and pavement

5. The applicant indicates that the onsite stormwater will be conveyed to an onsite stormwater basin on the south end of the site.

B. Access, Loading, Parking

1. The site is proposed to be accessed from two curb cuts along Souder Road including:
   a. One full-service curb cut on the northern part of the site.
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1. The applicant is providing street trees along Souder Road in the tree lawn between the leisure trail and road pavement with the exception of the utility corridor.
2. The New Albany Business Park Research and Information Campus Design Guidelines require 15 trees per 100 linear feet to be planted along Souder Road however, the applicant is not able to do so due to the utility corridor. In lieu of providing this landscaping on Souder Road, staff recommend a condition of approval that the applicant include naturalized plantings in the northwest corner of the site to provide additional screening (condition #1)
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IV. ENGINEER'S COMMENTS

The City Engineer has reviewed the application and provided the following comments. Staff recommends a condition of approval that the comments of the city engineer are addressed, subject to staff approval (condition #2).

1. Engineering staff will evaluate storm water management, water distribution, sanitary sewer collection and roadway construction related details once construction plans become available.

V. SUMMARY

Since the substation is an essential service, it will contribute economic value by meeting current and future electrical demands in the area, which is essential for the expanding business park. The

proposed development is in an appropriate location given the context of the surrounding area and serves as an important resource for the New Albany Business Park.

V. ACTION

Should the Planning Commission find that the application has sufficient basis for approval, the following motions would be appropriate:

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1. That the applicant includes naturalized plantings in the northwest corner of the site to provide additional screening
2. Engineering staff will evaluate storm water management, water distribution, sanitary sewer collection and roadway construction related details once construction plans become available.

Approximate Site Location

Source: NearMap

From:	Hector H Garcia-Santana
To:	Sierra Saumenig; Jennifer L Willis; Amy Toohey; Maggie R Beggs; Ben Albrecht; Christopher Christian; rdove@keglerbrown.com; CCunningham@keglerbrown.com
Cc:	Hector H Garcia-Santana; Marland L Turner; Robert J Schmidt
Subject:	RE: AEP Follow-up and update
Date:	Monday, April 21, 2025 2:32:15 PM
Attachments:	image001.png

Hi Sierra,

Thank you for your note. Here is the requested confirmation and information:

The substation and related facilities are, indeed, electric facilities that will operate at a voltage greater than 22 kV. Some of the equipment in the substation will be interconnected and operate at 138 kV.

You are also correct that the substation will be directly connected to 138 kV transmission lines, and that the substation is necessary for the operation and safety of those lines, as well as for the operation and safety of the other lines connecting the substation to the electric distribution system in the area. The facilities are typical examples of electric public utility facilities and equipment, and they satisfy all the requirements of the definition of "public utility facility" under R.C. 4905.65.

More detail:

1. The substation, along with the equipment in and connected to it, is necessary to provide electric service to the public, including providing electric public utility service to the people, businesses, governments, and facilities that receive their electric service from Ohio Power in the area, as well as in neighboring areas that either draw electricity through the Ohio Power distribution system locally or are part of the distribution and electric transmission network that serves customers in other counties, cities, and townships in Ohio.

2. You are also correct that the substation and related facilities will be constructed in accordance with generally accepted safety standards and will be built with strict adherence to requirements from the National Electrical Safety Code (NESC) and consistent with the North American Electric Reliability Corporation (NERC), which is overseen by the Federal Energy Regulatory Commission (FERC). Additionally, the substation will be connected to 138 kV transmission lines classified as major utility facilities, which are subject to regulation and requirements from the Ohio Power Siting Board (OPSB).

3. Lastly, you are also correct that the substation and related facilities do not unreasonably affect the welfare of the general public, as evidenced by the fact that the facilities are part of the extensive network used by Ohio Power to provide electric service to its customers and the region. The facilities are designed and will be constructed to satisfy stringent safety and engineering requirements while minimizing their impact on surrounding areas, as is common practice in the industry for constructing and maintaining electric utility facilities of this type in both urban and rural areas.

We appreciate the opportunity to provide this additional information to confirm that, in fact, the facilities you inquired about are public utility facilities. Please let us know if you would like additional detail.

Thanks!
Hector

From: Sierra Saumenig <ssaumenig@newalbanyohio.org>
Sent: Wednesday, April 16, 2025 8:20 AM
To: Jennifer L Willis <jwillis@aep.com>; Amy J Toohey <ajtoohey@aep.com>; Maggie R Beggs <mrbeggs@aep.com>; Hector H Garcia-Santana <hgarcia1@aep.com>; Ben Albrecht <balbrecht@fisheldowney.com>; Christopher Christian <cchristian@newalbanyohio.org>; rdove@keglerbrown.com; CCunningham@keglerbrown.com
Subject: [EXTERNAL] RE: AEP Follow-up and update

Good Morning,

I wanted to follow up to confirm that the proposed development meets the following definition as well.

R.C. 4905.65 defines a "public utility facility" as "**any electric line having a voltage of twenty-two thousand or more volts used or to be used by an electric light company and supporting structures, fixtures, and appurtenances connected to, used in direct connection with, or necessary for the operation or safety of such electric lines."**

The 3 criteria referenced in the email yesterday, if met, limit the authority of the Planning Commission.

Thank you!

SIERRA SAUMENIG, AICP
Planner II
Phone: (614) 939-2250
NEW ALBANY
COMMUNITY CONNECTS US
@NewAlbanyOhio

From: Sierra Saumenig
Sent: Tuesday, April 15, 2025 3:37 PM
To: Jennifer L Willis <jwillis@aep.com>; Amy Toohey <ajtoohey@aep.com>; Maggie R Beggs <mrbeggs@aep.com>; Hector H Garcia-Santana <hgarcia1@aep.com>; Ben Albrecht <balbrecht@fisheldowney.com>; Christopher Christian <cchristian@newalbanyohio.org>; rdove@keglerbrown.com; CCunningham@keglerbrown.com
Subject: AEP Follow-up and update

Good Afternoon,

I just wanted to send an update about AEP. As you are aware, this will be tabled at the April 21, 2025 meeting.

NEW ALBANY
COMMUNITY CONNECTS US

Planning Commission Staff Report
May 5, 2025 Meeting

AEP SUBSTATION
FINAL DEVELOPMENT PLAN

LOCATION:	7375 Souder Road (PID: 222-004891)
APPLICANT:	AEP, Ohio Transmission Company, Inc. c/o Amy Toohey
REQUEST:	Final Development Plan
ZONING:	Souder East Office, Research, & Information District I-PUD
STRATEGIC PLAN:	Employment Center
APPLICATION:	FDP-05-2025

Review based on: Application materials received January 23, 2025 and March 19, 2025

Staff report prepared by Sierra Saumenig, Planner 2

NOTE FROM THE LAW DIRECTOR

As noted during the April 21, 2025 Regular Meeting of the Planning Commission, from the time this matter was first tabled during the February 19, 2025 Planning Commission Meeting until the date of this Updated Staff Report, the City and AEP have exchanged correspondence and engaged in discussions with one another regarding the pending matter. While AEP indicated in correspondence dated March 14, 2025 that the construction of its Substation was "not subject to the City's zoning process" pursuant to R.C. 49065.65, the City disputed its contention and notified it of its position that it maintained the matter was subject to the jurisdiction of the Planning Commission. As such, AEP was advised the matter would proceed before the Planning Commission.

Because of the contrary positions of the parties concerning the role of the Planning Commission in reviewing the Final Development Plan ("FDP"), the following is a summary of the position taken by the City with respect to the proposed Substation.

At the outset, it is important to recognize the proposed Substation is in an I-PUD. AEP filed a FDP application giving rise to this matter. As was shared with AEP, undoubtedly, the Planning Commission has jurisdiction as it is well-settled "a public utility which seeks to build a public utility facility, as defined in R.C. 4905.65(A)(2), and which facility meets the tests under R.C. 4905.65(B)(1), (2) and (3), must first apply for any permits regarding construction or location of the facility required by the political subdivision in which the utility proposes to build. If the subdivision will not issue the permits to the satisfaction of the utility, then the utility may resort to the courts to determine the degree of local regulation permitted under R.C. 4905.65." *Cleveland Elec. Illum. Co. v. Lakewood,*64 Ohio St.2d 374, 374.

Regarding the authority of the Planning Commission to regulate the proposed Substation set forth in FDP-05-2025, it may be limited by R.C. 4905.65, though. Ohio Rev. Code 4905.65, entitled Local Regulation of Public Utility Facilities, states:

(A) As used in this section:

(1) "Public utility" means any electric light company, as the same is defined in sections 4905.02 and 4905.03 of the Revised Code.

(2) "Public utility facility" means any electric line having a voltage of twenty-two thousand or more volts used or to be used by an electric light company and supporting structures, fixtures, and appurtenances connected to, used in direct connection with, or necessary for the operation or safety of such electric lines.

(3) "Local regulation" means any legislative or administrative action of a political subdivision of this state, or of an agency of a political subdivision of this state, having the effect of restricting or prohibiting the use of an existing public utility facility or facilities or the proposed location, construction, or use of a planned public utility facility or facilities.

(B) To the extent permitted by existing law a local regulation may reasonably restrict the construction, location, or use of a public utility facility, unless the public utility facility:

(1) Is necessary for the service, convenience, or welfare of the public served by the public utility in one or more political subdivisions other than the political subdivision adopting the local regulation; and

(2) Is to be constructed in accordance with generally accepted safety standards; and

(3) Does not unreasonably affect the welfare of the general public.

Nothing in this section prohibits a political subdivision from exercising any power which it may have to require, under reasonable regulations not inconsistent with this section, a permit for any construction or location of a public utility facility by a public utility in such political subdivision.

AEP is a "public utility" as defined in R.C. 4905.65(A)(1).

AEP has submitted correspondence confirming that the electric lines will have a voltage in excess of 22,000 volts. Consequently, AEP maintains the proposed Substation is a "public utility facility" as defined in R.C. 4905.65(A)(2). In email correspondence, AEP has confirmed "the substation and related facilities are, indeed, electric facilities that will operate at a voltage greater than 22 kV. Some of the equipment in the substation will be interconnected and operate at 138 kV." (Email from hgarcia1@aep.com dated April 21, 2025).

Any action of the Planning Commission would be considered a "local regulation" as defined in R.C. 4905.65(A)(3).

Consistent with R.C. 4905.65, to the extent permitted by law, the Planning Commission "may reasonably restrict the construction, location or use of a public utility facility, unless the public utility facility" satisfies three (3) criteria. (R.C. 4905.65(B)(1)-(3), underline added). The 3 criteria are outlined above. AEP has submitted information via email in response to each of the criteria.

Necessary for the Service, Convenience or Welfare of the Public (R.C. 4905.65(B)(1))

As noted in an email, AEP stated "the substation, along with the equipment in and connected to it, is necessary to provide electric service to the public, including providing electric public utility service to the people, businesses, governments, and facilities that receive their electric service from Ohio Power in the area, as well as in neighboring areas that either draw electricity through the Ohio Power distribution system locally or are part of the distribution and electric transmission network that serves customers in other counties, cities, and townships in Ohio. (Email from hgarcia1@aep.com dated April 21, 2025).

Constructed in Accordance with Generally Accepted Safety Standards (R.C. 4905.65(B)(2))

As noted in an email, AEP indicated the proposed "substation and related facilities will be constructed in accordance with generally accepted safety standards and will be built with strict adherence to requirements from the National Electrical Safety Code (NESC) and consistent with the North American Electric Reliability Corporation (NERC), which is overseen by the Federal Energy Regulatory Commission (FERC). Additionally, the substation will be connected to 138 kV transmission lines classified as major utility facilities, which are subject to regulation and requirements from the Ohio Power Siting Board (OPSB)." (Email from hgarcia1@aep.com dated April 21, 2025).

Does Not Unreasonably Affect the Welfare of the General Public (R.C. 4905.65(B)(3))

In support of its contention that it does not unreasonably affect the welfare of the General Public, AEP submitted the following in an email: "…the substation and related facilities do not unreasonably affect the welfare of the general public, as evidenced by the fact that the facilities are part of the extensive network used by Ohio Power to provide electric service to its customers and the region. The facilities are designed and will be constructed to satisfy stringent safety and engineering requirements while minimizing their impact on surrounding areas, as is common practice in the industry for constructing and maintaining electric utility facilities of this type in both urban and rural areas." (Email from hgarcia1@aep.com dated April 21, 2025).

In the event it is determined that AEP has complied with R.C. 4905.65, the Planning Commission's authority is limited as it may not unreasonably restrict the "construction, location, or use" of the proposed Substation.

Although its authority may be limited by R.C. 4905.65, the Planning Commission does retain the authority "to require, under reasonable regulations not inconsistent with this section, a permit for any construction or location of a public utility facility by a public utility in such political subdivision." (R.C. 4905.65). As a result, the matter is not entirely outside the jurisdiction of the Planning Commission. In fact, courts have recognized a public utility has to "**make a sincere attempt** to comply with the regulations of the political subdivision in which it is trying to build. If the two sides cannot reach an agreement, then the utility has the option of resorting to courts." *Cleveland Electric Illuminating Co. v. Lakewood,* 64 Ohio St.2d 374 (1980).

Consequently, while the Planning Commission may be limited in its ability to reasonably restrict the location, construction and use of a public utility facility consistent with R.C. 4905.65(B), if AEP meets the criteria set forth therein, AEP still must engage in the permitting process and "make a sincere effort" to comply. Again, R.C. 4905.65(B) pertains to local regulations and restrictions on the "location, construction and use of a public utility facility." In the event AEP believes the Planning Commission has imposed unreasonable restrictions on it and the parties cannot reach an agreement, it has the option to pursue the matter in a court.

I. REQUEST AND BACKGROUND

This final development plan application is for a proposed AEP electrical substation located at 7375 Souder Road.

The property in question is zoned I-PUD and is located within the Souder East Office, Research, & Information District Subarea 4. The proposed use (electrical substation) is permitted as this use is identified as an essential service which is permitted in all zoning districts.

It's important to note as this use is a public utility and essential service, the applicant has broader flexibility and does not need to seek variances if a zoning requirement cannot be met per the city law director. Overall the plan is meeting the applicable zoning requirements however there is flexibility for the number of curb cuts, stormwater basin design, and street trees within a utility corridor.

II. SITE DESCRIPTION & USE

The site is generally located north of New Albany Road on the west side of Souder Road. The site is 9.50 acres and is currently undeveloped. Surrounding uses include Canine Companions to the west, undeveloped and commercial uses to the east, commercial to the south, and residential to the north.

III. EVALUATION

Staff's review is based on New Albany plans and studies, zoning text, and zoning regulations. Primary concerns and issues have been indicated below, with needed action or recommended action in underlined text. Planning Commission's review authority is found under Chapter 1159.

The Commission should consider, at a minimum, the following (per Section 1159.08):

a. *That the proposed development is consistent in all respects with the purpose, intent and applicable standards of the Zoning Code;*
b. *That the proposed development is in general conformity with the Strategic Plan/Rocky Fork-Blacklick Accord or portion thereof as it may apply;*
c. *That the proposed development advances the general welfare of the Municipality;*
d. *That the benefits, improved arrangement and design of the proposed development justify the deviation from standard development requirements included in the Zoning Ordinance;*
e. *Various types of land or building proposed in the project;*
f. *Where applicable, the relationship of buildings and structures to each other and to such other facilities as are appropriate with regard to land area; proposed density may not violate any contractual agreement contained in any utility contract then in effect;*
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More detail:

1. The substation, along with the equipment in and connected to it, is necessary to provide electric service to the public, including providing electric public utility service to the people, businesses, governments, and facilities that receive their electric service from Ohio Power in the area, as well as in neighboring areas that either draw electricity through the Ohio Power distribution system locally or are part of the distribution and electric transmission network that serves customers in other counties, cities, and townships in Ohio.

2. You are also correct that the substation and related facilities will be constructed in accordance with generally accepted safety standards and will be built with strict adherence to requirements from the National Electrical Safety Code (NESC) and consistent with the North American Electric Reliability Corporation (NERC), which is overseen by the Federal Energy Regulatory Commission (FERC). Additionally, the substation will be connected to 138 kV transmission lines classified as major utility facilities, which are subject to regulation and requirements from the Ohio Power Siting Board (OPSB).

3. Lastly, you are also correct that the substation and related facilities do not unreasonably affect the welfare of the general public, as evidenced by the fact that the facilities are part of the extensive network used by Ohio Power to provide electric service to its customers and the region. The facilities are designed and will be constructed to satisfy stringent safety and engineering requirements while minimizing their impact on surrounding areas, as is common practice in the industry for constructing and maintaining electric utility facilities of this type in both urban and rural areas.

We appreciate the opportunity to provide this additional information to confirm that, in fact, the facilities you inquired about are public utility facilities. Please let us know if you would like additional detail.

Thanks!
Hector

From: Sierra Saumenig <ssaumenig@newalbanyohio.org>
Sent: Wednesday, April 16, 2025 8:20 AM
To: Jennifer L Willis <jwillis@aep.com>; Amy J Toohey <ajtoohey@aep.com>; Maggie R Beggs <mrbeggs@aep.com>; Hector H Garcia-Santana <hgarcia1@aep.com>; Ben Albrecht <balbrecht@fisheldowney.com>; Christopher Christian <cchristian@newalbanyohio.org>; rdove@keglerbrown.com; CCunningham@keglerbrown.com
Subject: [EXTERNAL] RE: AEP Follow-up and update

Good Morning,

I wanted to follow up to confirm that the proposed development meets the following definition as well.

R.C. 4905.65 defines a "public utility facility" as "**any electric line having a voltage of twenty-two thousand or more volts used or to be used by an electric light company and supporting structures, fixtures, and appurtenances connected to, used in direct connection with, or necessary for the operation or safety of such electric lines."**

The 3 criteria referenced in the email yesterday, if met, limit the authority of the Planning Commission.

Thank you!

SIERRA SAUMENIG, AICP
Planner II
Phone: (614) 939-2250
NEW ALBANY
COMMUNITY CONNECTS US
@NewAlbanyOhio

From: Sierra Saumenig
Sent: Tuesday, April 15, 2025 3:37 PM
To: Jennifer L Willis <jwillis@aep.com>; Amy Toohey <ajtoohey@aep.com>; Maggie R Beggs <mrbeggs@aep.com>; Hector H Garcia-Santana <hgarcia1@aep.com>; Ben Albrecht <balbrecht@fisheldowney.com>; Christopher Christian <cchristian@newalbanyohio.org>; rdove@keglerbrown.com; CCunningham@keglerbrown.com
Subject: AEP Follow-up and update

Good Afternoon,

I just wanted to send an update about AEP. As you are aware, this will be tabled at the April 21, 2025 meeting.

Permit # _____
Board _____
Mtg. Date _____

NEW ALBANY

Community Development Planning Application

Project Information

Site Address 7375 Souder Road New Albany Ohio 43054

Parcel Numbers 222-004891

Acres 9.50 acres-calculated # of lots created None

Choose Application Type	Circle all Details that Apply			
☐ Appeal				
☐ Certificate of Appropriateness				
☐ Conditional Use				
X ☐ Development Plan	Preliminary	Final	Comprehensive	Amendment
☐ Plat	Preliminary	Final		
☐ Lot Changes	Combination	Split	Adjustment	
☐ Minor Commercial Subdivision				
☐ Vacation	Easement		Street	
☐ X Variance				
☐ Extension Request				
☐ Zoning	Amendment (rezoning)		Text Modification	

Description of Request: AEP, a public utility provider, is proposing to construct a new electrical station at 7375 Souder Road.

Contacts

Property Owner's Name: AEP, Ohio Transmission Company, Inc.
Address: 8500 Smiths Mill Road
City, State, Zip: New Albany, Ohio 43054
Phone number: 614 477-5410 Fax: _____
Email: jlwalker2@aep.com

Applicant's Name: Jennifer Walker/Amy Toohey
Address: 8500 Smiths Mill Road
City, State, Zip: New Albany, Ohio 43054
Phone number: 614 477-5410/614 565 1480 Fax: _____
Email: jlwaker2@aep.com/ajtoohey@aep.com

Signature

Site visits to the property by City of New Albany representatives are essential to process this application. The Owner/Applicant, as signed below, hereby authorizes Village of New Albany representatives, employees and appointed and elected officials to visit, photograph and post a notice on the property described in this application. I certify that the information here within and attached to this application is true, correct and complete.

Signature of Owner Jennifer Walker Date: 2-7-2025
Signature of Applicant Jennifer Walker Date: 2-7-2025

Fees & Submittal Information

Appeal			250.00	
Certificate of Appropriateness				
	ARB – single and two family residential		100.00	
	ARB – All other residential or commercial		300.00	
	ARB - Signage		75.00	
Conditional Use			600.00	
Development Plan – Preliminary PUD or Comprehensive				
	Planning fee	First 10 acres	750.00	
		Each additional 5 acres or part thereof	50.00 / each	
	Engineering fee	1-25 lots	155.00 / each	
		Minimum fee	1000.00	
	Engineering fee	26 – 50 lots	3875.00	
		Each additional lot over 26	75.00 / each	
	Engineering fee	Over 51 lots	5750.00	
		Each additional lot over 51	50.00 / each	
Development Plan – Final PUD				
	Planning fee	First 10 acres	650.00	X
		Each additional 5 acres or part thereof	50.00	
	Engineering fee	1-25 lots (minimum fee $1,000.00)	155.00 / each	
	Engineering fee	26 – 50 lots	3875.00	
		Each additional lot over 26	75.00 / each	
	Engineering fee	Over 51 lots	5750.00	
		Each additional lot over 51	50.00 / each	
Development Plan – Non-PUD			300.00	
Development Plan / Text Amendment			600.00	
Plat – Road Preliminary				
	Planning fee		350.00	
	Engineering fee	no lots on either side of street	1.00 / LF	
		lots on one side of street	.50 / LF	
		Minimum fee	1,000.00	
Plat – Road Final				
	Planning fee		350.00	
	Engineering fee	no lots on either side of street	1.00 / LF	
		lots on one side of street	.50 / LF	
		Minimum fee	1,000.00	
Plat – Subdivision Preliminary				
	Planning		650.00	
		Plus each lot	50.00 / each	
	Engineering fee	1-25 lots (minimum fee $1,000.00)	155.00 / each	
	Engineering fee	26 – 50 lots	3875.00	
		Each lot over 26	75.00 / each	
	Engineering fee	Over 51 lots	5750.00	
		Each lot over 51	50.00 / each	

Fees & Submittal Requirements

Plat – Subdivision Final			
	Planning	650.00	
	Plus each lot	15.00 / each	
	Engineering fee 1-25 lots (minimum fee $1,000.00)	155.00 /each	
	Engineering fee 26-50 lots	3875.00	
	Each lot over 26	75.00 / each	
	Engineering fee Over 51 lots	5750.00	
	Each lot over 51	50.00 / each	
Lot Changes		200.00	
Minor Commercial Subdivision		200.00	
Vacation (Street or Easement)		1200.00	
Variance			
Non-single family, commercial, subdivision, multiple properties		600.00	
Single Family residence		250.00	
In conjunction with Certification of Appropriateness		100.00	
Extension Request		0.00	
Zoning			
	Rezoning - First 10 acres	700.00	
	Each additional 5 acres or part thereof	50.00 / each	
	Rezoning to Rocky Fork Blacklick Accord	250.00	
	Text Modification	600.00	
Easement Encroachment		800.00	

DRAWING INDEX:

OWNER / APPLICANT:

AMERICAN ELECTRIC POWER
OHIO TRANSMISSION COMPANY
8500 SMITHS MILL ROAD
NEW ALBANY, OHIO 43054
CIVIL ENGINEER: KOKOU EKLOU
216-804-6741 CELL
KEKLOU@AEP.COM

SURVEY:

BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OHIO 44663
330-343-3499 OFFICE
330-343-9505 FAX

BENCHMARKS:

BM-300
1-1/2-INCH ALUMINUM MONUMENT IN CONCRETE (FOUND)
ELEV.: 1051.13'
NORTHING: 767,905.37'
EASTING: 1,882,961.68'

GEOTECHNICAL REPRESENTATIVE:

S&ME, INC.
6190 ENTERPRISE COURT
DUBLIN, OHIO 43016
614-793-2226 OFFICE
614-980-1093 MOBILE
WWW.SMEINC.COM

FLOODPLAIN NOTE:

SUBJECT PROPERTY IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) IN ACCORDANCE WITH THE FEMA FLOOD INSURANCE RATE MAP: FRANKLIN COUNTY, OHIO (AND INCORPORATED AREAS), PANEL 206 OF 465, MAP NUMBER: 39049C0206K, EFFECTIVE DATE: JUNE 17, 2008.

CITY OF NEW ALBANY APPROVALS

THE SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSE OF THIS PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER AT BAIR, GOODIE & ASSOCIATES. THE EXTENT OF THE CITY ENGINEER REVIEW AND APPROVAL IS BASED ONLY ON COMPLIANCE WITH CITY ORDINANCE 1181, 1183, 1187, AND OTHER APPLICABLE CITY POLICIES.

FINANCE DIRECTOR, CITY OF NEW ALBANY, OHIO — DATE

CITY ENGINEER, CITY OF NEW ALBANY, OHIO — DATE

CITY MANAGER, CITY OF NEW ALBANY, OHIO — DATE

AMERICAN ELECTRIC POWER
SOUDER STATION

7375 SOUDER ROAD
NEW ALBANY, OH 43054

LOCATED IN
LOT 16, SECTION 8, FIRST QUARTER OF T-2, R-16,
UNITED STATES MILITARY LANDS,
CITY OF NEW ALBANY,
COUNTY OF FRANKLIN,
STATE OF OHIO

LOCATION MAP

0 1/2 1
SCALE: 1" = 1/2 MILE

WO # T10593117002

APPROVED NOTICE OF INTENT (NOI)
OHIO EPA FACILITY PERMIT NUMBER : 4GC10228*AG

POST CONSTRUCTION WATER QUALITY
A PERMANENT DRY EXTENDED DETENTION BASIN WILL BE CONSTRUCTED AS PART OF THIS PROJECT TO PROVIDE WATER QUALITY TREATMENT ONCE ALL DISTURBED AREAS HAVE BEEN SUCCESSFULLY VEGETATED .

AMERICAN ELECTRIC POWER SM

GENERAL NOTES:

(1.) All work shall be performed in accordance with the appropriate articles of the AEP "Technical Specification for Substation and Switching Station Construction" #SS-160102 **(Specification)** and "Site Preparation Guidelines" #SS-710000.

(2.) The Cut and Fill Earthwork Quantities shown below reflect the minimum earthwork required. This calculation does not include 4" of #57 stone (by others) above the station pad or the removal of topsoil. The actual depth of stripping may increase under the station pad depending on site conditions.

(3.) All soft, wet, organic, or otherwise unsuitable material shall be removed and replaced in accordance with the **Specification**.

(4.) All disturbed areas that will not be stoned shall be seeded in accordance with the **Specification**.

(5.) Side slopes shall have a maximum gradient of three horizontal to one vertical unless otherwise noted.

(6.) The station pad area shall be covered with 8 inches of ODOT #304 aggregate to 5 feet outside the station fence followed by 4 inches of #57 stone (by others) to 4 feet outside the station fence.

(7.) The elevations shown for all graded areas are final elevations (top of pad #304). The contour interval shown is one foot.

(8.) All trees and shrubs located within the construction limits shall be removed. Trees and shrubs are not shown on the grading plan for clarity.

(9.) All debris shall be removed from the site.

(10.) All grading work shall be within property lines or the right of way line. Do not disturb adjacent properties.

(11.) Contractor is responsible for construction and maintenance of all erosion control measures.

(12.) Contractor initiated changes shall be submitted in writing to the owners representative for approval prior to fabrication or construction.

(13.) Scales as noted on the details are shown for 30"x46" size sheets.

(14.) Locations of all existing utilities shown on the plan are approximate. Contractor shall verify all existing utility locations prior to construction. Repair of any damaged utility shall be the responsibility of the contractor. Prior to excavation work, contractor shall have all utilities marked in the field.

(15.) The delineated wetlands as shown on these plans were provided by AEP.

(16.) A pre-construction meeting with the City of New Albany is required prior to any earth moving activity.

(17.) All concrete culverts to be tested per City of Columbus Construction and Material Specifications (CMSC) standards.

CONSTRUCTION LIMIT AREA / DISTURBED AREA = 7.38 ACRES (321,381 SQ. FT)
STATION PAD AREA = 5.08 ACRES (221,375 SQ. FT.)

ESTIMATED QUANTITIES:

NOTE: QUANTITIES SHOWN ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR SHALL PERFORM THEIR OWN QUANTITY ESTIMATES.

EARTHWORK:	
AREA OF DISTURBANCE	7.38 AC.
CLEARING AND GRUBBING	7.38 AC.
TOPSOIL REMOVAL (ASSUMED 12" THICK)	11,900 C.Y.
TOPSOIL PLACEMENT (4" TO BE SPREAD IN AREAS TO BE SEEDED)	700 C.Y.
TOPSOIL (TO BE PLACED IN NORTH BERM)	1,220 C.Y.
TOPSOIL (EXCESS)	9,980 C.Y.
CUT* (INCLUDES 20% SWELL FACTOR)	20,700 C.Y.
FILL* (INCLUDES 30% COMPACTION)	12,000 C.Y.
EXPORT CUT	8,700 C.Y.

**CUT / FILL QUANTITIES DO NOT INCLUDE STRIPPING OR PLACEMENT OF TOPSOIL.*

MATERIALS:	
ODOT #304 AGGREGATE, 8" THICK FOR STATION PAD AND ASPHALT ACCESS ROADS AND 4-1/2" THICK FOR STONE ACCESS ROADS	11,200 TONS
AASHTO #57 WASHED LIMESTONE, 4" THICK FOR STATION PAD (BY OTHERS)	4,060 TONS
ODOT #2 AGGREGATE, 4-1/2" THICK FOR STONE ACCESS ROADS	50 TONS
ASPHALT PAVEMENT, 6" THICK FOR ACCESS ROADS (INSTALL PER ODOT SPECIFICATIONS)	55 C.Y.
ODOT TYPE (D) RIPRAP	2,100 TONS
AAHHTO #57 WASHED STONE FOR CULVERT INSTALLATION	560 TONS
ITEM 912 BACKFILL (TYPE I), 8 " THICK OVER CULVERT C	3 C.Y.
CHAIN LINK FENCE & APPURTENANCES	1,840 LIN. FT.
MIRAFI 600X GEOTEXTILE FABRIC FOR ACCESS ROAD	590 S.Y.
30 MIL HDPE OR PVC GEOMEMBRANE LINER	2,760 S.Y.
ODOT TYPE B GEOTEXTILE FABRIC FOR ROCK-LINED DITCHES	1,290 S.Y.
FILTER SOCK (12"Ø MIN.)	2,420 LIN. FT.
24' SWINGING GATE	2 EA.
4' X 4' AA-S133B CATCH BASIN	1 EA.
12" HDPE PIPE	80 LIN. FT.
12" REINFORCED CONCRETE PIPE (RCP)	80 LIN. FT.
18" REINFORCED CONCRETE PIPE (RCP)	60 LIN. FT.
FAIRCLOTH SKIMMER	1 EA.
SEEDING & MULCHING	1.33 AC.
CONCRETE WASHOUT	1 EA.
CONSTRUCTION ENTRANCE	1 EA.

STATE OF OHIO JOHN M. PELTZ 68880 REGISTERED PROFESSIONAL ENGINEER
John M Peltz 3/26/25

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
TEL: 330.343.3499 FAX: 330.343.9505
WWW.BAIRGOODIE.COM

UNDERGROUND UTILITIES
TWO WORKING DAYS
CALL BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE

OLD DWG #: STD DWG #:

AEP OHIO TRANSMISSION COMPANY, INC.
SOUDER STATION
NEW ALBANY OHIO

COVER SHEET

SCALE: AS NOTED	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-CS01-S01	REV 1

(E-1110)

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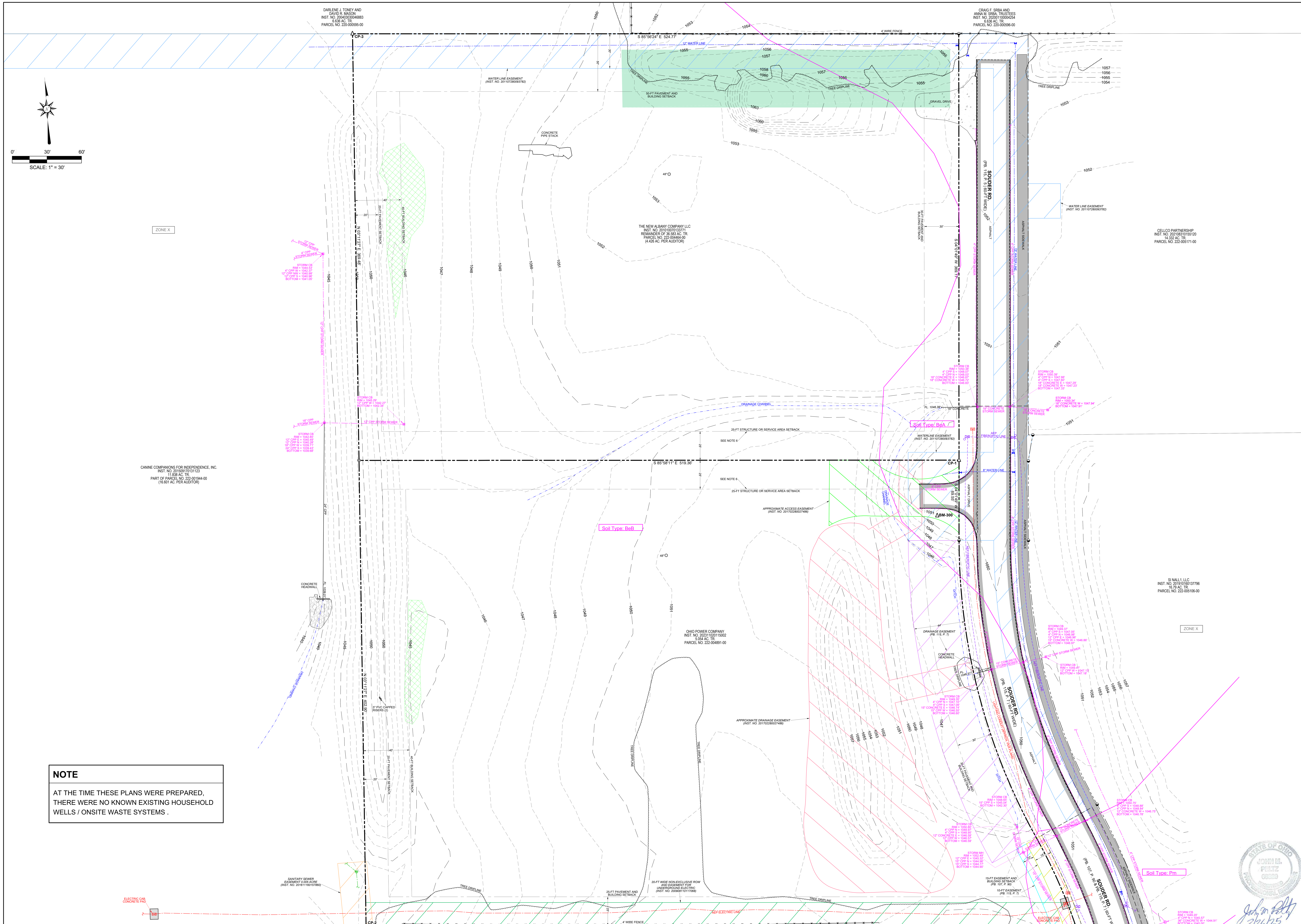

NOTE

AT THE TIME THESE PLANS WERE PREPARED, THERE WERE NO KNOWN EXISTING HOUSEHOLD WELLS / ONSITE WASTE SYSTEMS .

SURVEY CONTROL POINT DATA

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
BM-300	1-1/2-INCH ALUMINUM MONUMENT IN CONCRETE (FOUND)	767905.37'	1882961.68'	1051.13'
CP-1	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767952.05'	1882983.94'	N/A
CP-2	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767586.36'	1882443.43'	N/A
CP-3	13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)	768357.51'	1882486.40'	N/A

LEGEND - EXISTING FEATURES

- SUBJECT PROPERTY
- PROPERTY LINE
- PROPERTY LINE PER COUNTY
- PARCEL LINE
- MINIMUM SETBACK LINE (AS NOTED)
- EDGE OF ROAD
- CONCRETE CURB
- EDGE OF GRAVEL / DRIVE
- FENCE
- 1049 — 1FT CONTOUR
- 1050 — 5FT CONTOUR
- UNDERGROUND ELECTRIC LINE
- ELECTRIC VAULT (UNLESS OTHERWISE NOTED)
- UNDERGROUND FIBEROPTIC LINE
- FIBEROPTIC VAULT
- FIBEROPTIC MARKER
- UNDERGROUND PIPELINE
- PIPELINE MARKER
- UNDERGROUND WATER LINE
- WATER VALVE
- FIRE HYDRANT
- UNDERGROUND SANITARY SEWER
- SANITARY MANHOLE
- UNDERGROUND STORM SEWER
- STORM MANHOLE
- CATCH BASIN
- CPP — CORRUGATED PLASTIC PIPE
- 15" CPP — CULVERT
- FL. 1046.6' — FLOW LINE ELEVATION
- DRAINAGE CHANNEL / DITCH
- EDGE OF WATER
- TREE DRIPLINE
- 48" — TREE
- CP-1/BM-1 — CONTROL POINT / BENCHMARK (AS NOTED)
- 13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)
- IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)
- DELINEATED WETLAND
- RIPRAP
- GRAVEL
- CONCRETE
- ASPHALT
- WATER LINE EASEMENT (INST. NO. 201107280093782)
- APPROXIMATE ACCESS EASEMENT (INST. NO. 201702280027486)
- APPROXIMATE DRAINAGE EASEMENT (INST. NO. 201702280027486)
- 10-FT EASEMENT (PB. 115, P. 7)
- 44-FT DRAINAGE EASEMENT (PB. 115, P. 7)
- 15-FT EASEMENT AND BUILDING SETBACK (PB. 107, P. 90)
- SANITARY SEWER EASEMENT 0.005 ACRE (INST. NO. 201611160157860)
- 20-FT WIDE NON-EXCLUSIVE ROW AND EASEMENT FOR UNDERGROUND ELECTRIC (INST. NO. 200908110117068)
- LANDSCAPING IN SETBACK FROM NORTHERN PROPERTY LINE: SEE SOUDER EAST R&I DISTRICT SUBAREA 4 ZONING TEXT ITEM H(4) DATED JULY 9, 2008.
- STORM WATER DRAINAGE EASEMENT (INST. NO. 201509170131122)

LEGEND - FEMA FLOOD INSURANCE RATE MAP FEATURES

ZONE X — **ZONE X - OTHER AREAS.** AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

LEGEND - SOIL TYPES

- BeA — Bennington silt loam, 0 to 2 percent slopes
- BeB — Bennington silt loam, 2 to 6 percent slopes
- Pm — Pewamo silty clay loam, low carbonate till, 0 to 2 percent slopes

NOTES

1.) BEARINGS ARE ORIENTED TO THE STATE PLANE COORDINATE SYSTEM: OHIO SOUTH (3402); HORIZONTAL DATUM: NAD83 (2011), U.S. SURVEY FOOT; VERTICAL DATUM: NAVD88.

2.) UTILITIES LOCATED IN THE FIELD BY OBSERVED EVIDENCE COMBINED WITH SOURCE INFORMATION FROM PLANS AND MARKINGS (IF PROVIDED). HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE.

3.) DOCUMENTS USED: TAX MAPS, RECORDS AS NOTED, AND PLATS OF SURVEYS.

4.) SUBJECT PROPERTY IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) IN ACCORDANCE WITH THE FEMA FLOOD INSURANCE RATE MAP: FRANKLIN COUNTY, OHIO (AND INCORPORATED AREAS), PANEL 206 OF 465, MAP NUMBER: 39049C0206K, EFFECTIVE DATE: JUNE 17, 2008.

5.) THE APPROXIMATE LOCATION OF AN ACCESS EASEMENT AND DRAINAGE EASEMENT ARE DEPICTED AS SHOWN ON EXHIBITS A-1 AND A-2 OF INST. NO. 201702280027486.

6.) THE CITY OF NEW ALBANY HAS CONFIRMED THAT IN THE EVENT THE TWO PARCELS SHOWN AS THE "SUBJECT PROPERTY" COME UNDER COMMON OWNERSHIP OR CONTROL, THE MINIMUM SETBACKS SHALL NO LONGER APPLY TO THE COMMON PARCEL LINE AS NOTED AND SHOWN HEREON.

7.) EXISTING CONDITIONS SURVEY COMPLETED ON FEBRUARY 13, 2024.

STATE OF OHIO JOHN M. PELTZ 68820 REGISTERED PROFESSIONAL ENGINEER
John M. Peltz 3/26/25

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
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OLD DWG #: | STD DWG #:

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
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AEP OHIO TRANSMISSION COMPANY, INC.

SOUDER STATION

NEW ALBANY | OHIO

EXISTING CONDITIONS

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-EC02-S01	REV 1

(E-1111)

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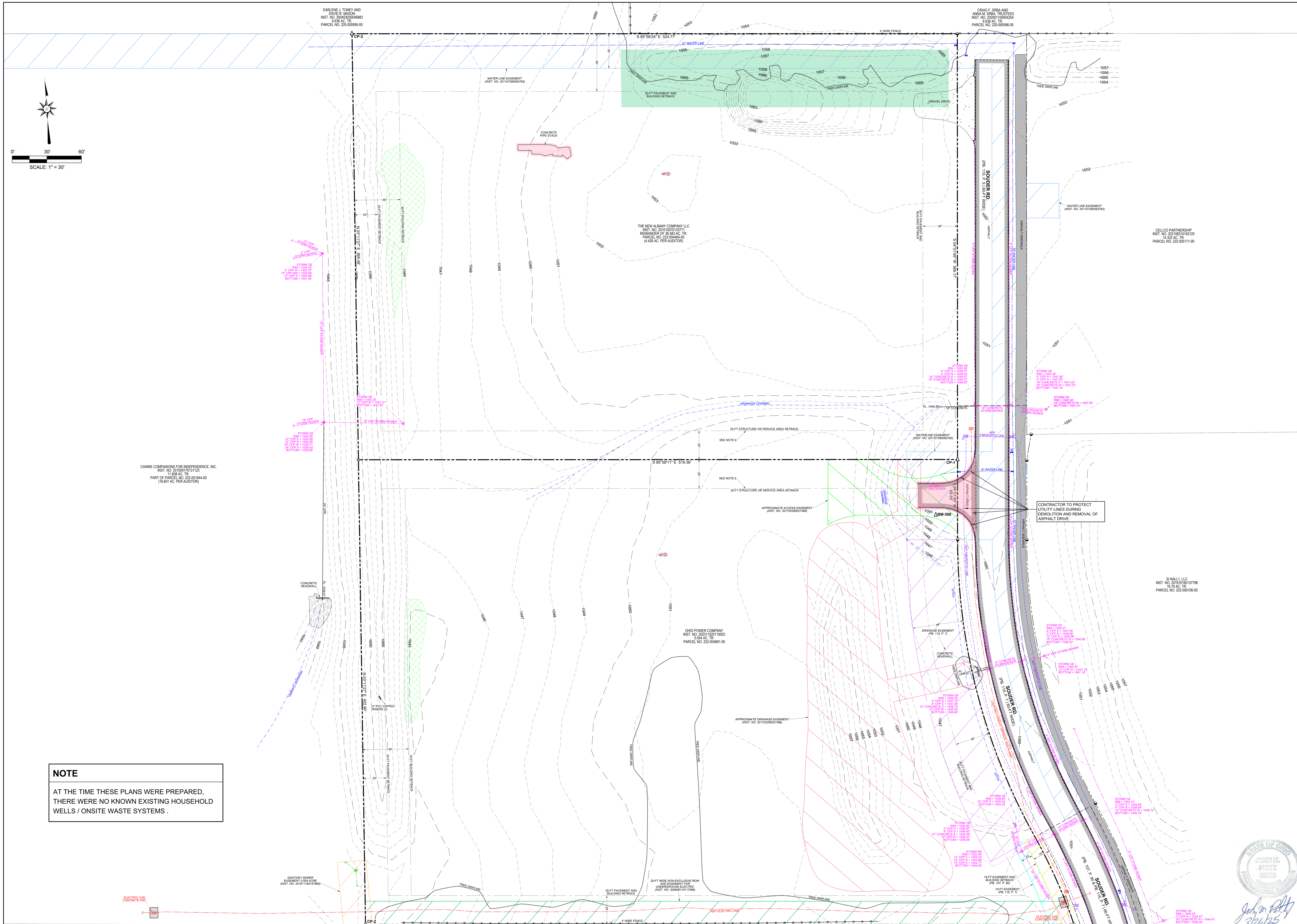

NOTE

AT THE TIME THESE PLANS WERE PREPARED, THERE WERE NO KNOWN EXISTING HOUSEHOLD WELLS / ONSITE WASTE SYSTEMS .

SURVEY CONTROL POINT DATA

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BM-300	1-1/2-INCH ALUMINUM MONUMENT IN CONCRETE (FOUND)	767905.37'	1882961.68'	1051.13'
CP-1	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767952.05'	1882983.94'	N/A
CP-2	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767586.36'	1882443.43'	N/A
CP-3	13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)	768357.51'	1882486.40'	N/A

LEGEND - EXISTING FEATURES

- SUBJECT PROPERTY
- PROPERTY LINE
- PROPERTY LINE PER COUNTY
- PARCEL LINE
- MINIMUM SETBACK LINE (AS NOTED)
- EDGE OF ROAD
- CONCRETE CURB
- EDGE OF GRAVEL / DRIVE
- FENCE
- 1FT CONTOUR (1049)
- 5FT CONTOUR (1050)
- UNDERGROUND ELECTRIC LINE
- ELECTRIC VAULT (UNLESS OTHERWISE NOTED)
- UNDERGROUND FIBEROPTIC LINE
- FIBEROPTIC VAULT
- FIBEROPTIC MARKER
- UNDERGROUND PIPELINE
- PIPELINE MARKER
- UNDERGROUND WATER LINE
- WATER VALVE
- FIRE HYDRANT
- UNDERGROUND SANITARY SEWER
- SANITARY MANHOLE
- UNDERGROUND STORM SEWER
- STORM MANHOLE
- CATCH BASIN
- CPP — CORRUGATED PLASTIC PIPE
- 15" CPP — CULVERT
- FL. 1046.6' — FLOW LINE ELEVATION
- DRAINAGE CHANNEL / DITCH
- EDGE OF WATER
- TREE DRIPLINE
- 48" — TREE
- CP-1/BM-1 — CONTROL POINT / BENCHMARK (AS NOTED)
- 13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)
- IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)
- DELINEATED WETLAND
- RIPRAP
- GRAVEL
- CONCRETE
- ASPHALT
- WATER LINE EASEMENT (INST. NO. 201107280093782)
- APPROXIMATE ACCESS EASEMENT (INST. NO. 201702280027486)
- APPROXIMATE DRAINAGE EASEMENT (INST. NO. 201702280027486)
- 10-FT EASEMENT (PB. 115, P. 7)
- 44-FT DRAINAGE EASEMENT (PB. 115, P. 7)
- 15-FT EASEMENT AND BUILDING SETBACK (PB. 107, P. 90)
- SANITARY SEWER EASEMENT 0.005 ACRE (INST. NO. 201611160157860)
- 20-FT WIDE NON-EXCLUSIVE ROW AND EASEMENT FOR UNDERGROUND ELECTRIC (INST. NO. 200908110117068)
- LANDSCAPING IN SETBACK FROM NORTHERN PROPERTY LINE: SEE SOUDER EAST R&I DISTRICT SUBAREA 4 ZONING TEXT ITEM H(4) DATED JULY 9, 2008.
- STORM WATER DRAINAGE EASEMENT (INST. NO. 201509170131122)

LEGEND - PROPOSED FEATURES

- PROPOSED DEMOLITION / REMOVE ITEMS

NOTES

1.) BEARINGS ARE ORIENTED TO THE STATE PLANE COORDINATE SYSTEM: OHIO SOUTH (3402); HORIZONTAL DATUM: NAD83 (2011), U.S. SURVEY FOOT; VERTICAL DATUM: NAVD88.

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3.) DOCUMENTS USED: TAX MAPS, RECORDS AS NOTED, AND PLATS OF SURVEYS.

4.) SUBJECT PROPERTY IS LOCATED IN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) IN ACCORDANCE WITH THE FEMA FLOOD INSURANCE RATE MAP: FRANKLIN COUNTY, OHIO (AND INCORPORATED AREAS), PANEL 206 OF 465, MAP NUMBER: 39049C0206K, EFFECTIVE DATE: JUNE 17, 2008.

5.) THE APPROXIMATE LOCATION OF AN ACCESS EASEMENT AND DRAINAGE EASEMENT ARE DEPICTED AS SHOWN ON EXHIBITS A-1 AND A-2 OF INST. NO. 201702280027486.

6.) THE CITY OF NEW ALBANY HAS CONFIRMED THAT IN THE EVENT THE TWO PARCELS SHOWN AS THE "SUBJECT PROPERTY" COME UNDER COMMON OWNERSHIP OR CONTROL, THE MINIMUM SETBACKS SHALL NO LONGER APPLY TO THE COMMON PARCEL LINE AS NOTED AND SHOWN HEREON.

7.) EXISTING CONDITIONS SURVEY COMPLETED ON FEBRUARY 13, 2024.

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
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UNDERGROUND UTILITIES
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OHIO UTILITIES PROTECTION SERVICE

STATE OF OHIO JOHN M. PELTZ 68820 REGISTERED PROFESSIONAL ENGINEER

John M. Peltz 3/26/25

OLD DWG #: | STD DWG #:

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

AEP OHIO TRANSMISSION COMPANY, INC.

SOUDER STATION

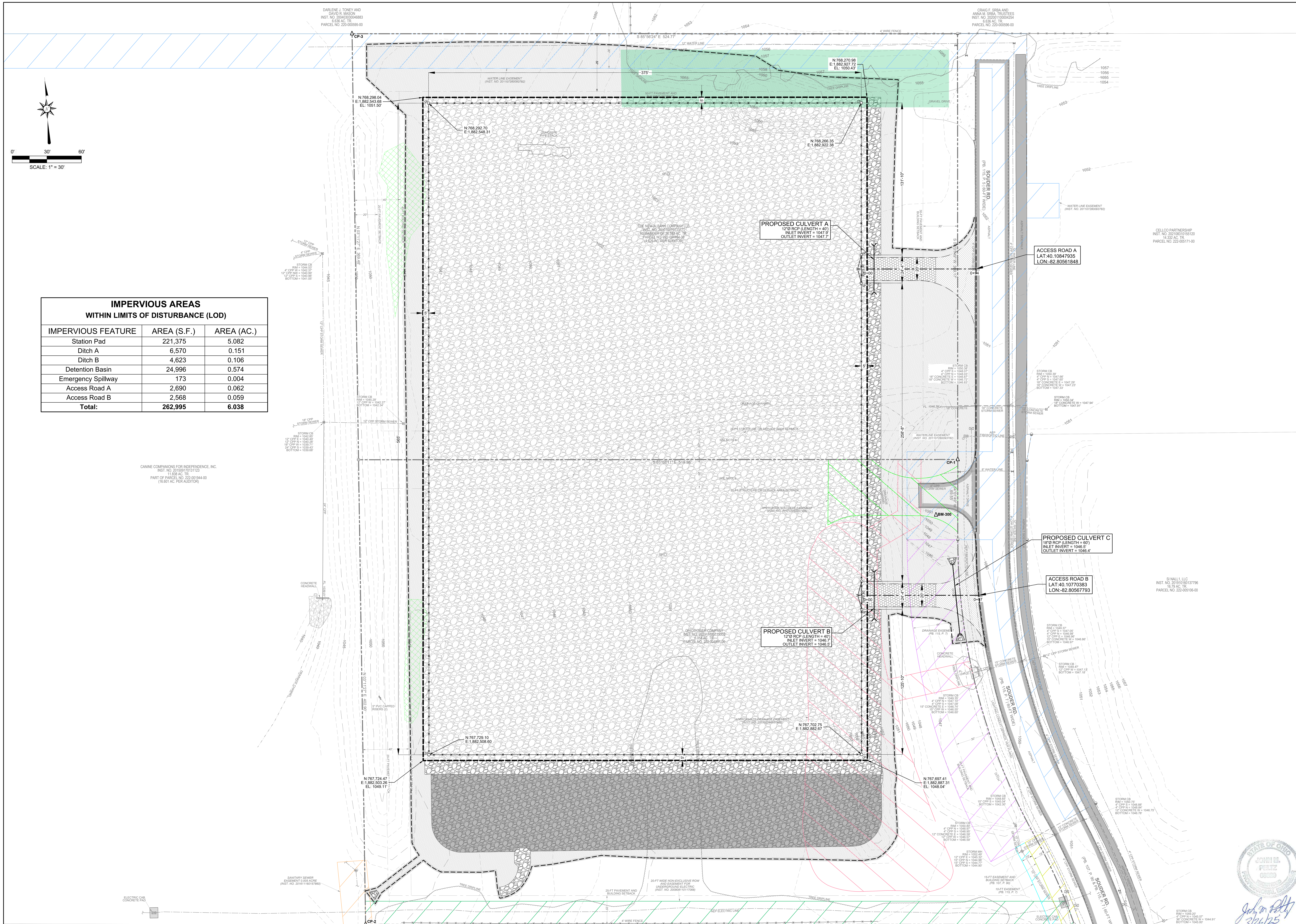
NEW ALBANY — OHIO

DEMOLITION PLAN

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
AMERICAN ELECTRIC POWER	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-EC02-S02	REV 1

(E-1112)

CM 1 2 3 4 5 6 7 | 3/16 INCH 4 8 12 16 | TENTHS 10 20 30 | INCHES 1 2 3



IMPERVIOUS AREAS

WITHIN LIMITS OF DISTURBANCE (LOD)

IMPERVIOUS FEATURE	AREA (S.F.)	AREA (AC.)
Station Pad	221,375	5.082
Ditch A	6,570	0.151
Ditch B	4,623	0.106
Detention Basin	24,996	0.574
Emergency Spillway	173	0.004
Access Road A	2,690	0.062
Access Road B	2,568	0.059
Total:	**262,995**	**6.038**

SURVEY CONTROL POINT DATA

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION
BM-300	1-1/2-INCH ALUMINUM MONUMENT IN CONCRETE (FOUND)	767905.37'	1882961.68'	1051.13'
CP-1	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767952.05'	1882983.94'	N/A
CP-2	IRON PIN WITH "CENTRAL SURV. CO. LTD" CAP (FOUND)	767586.36'	1882443.43'	N/A
CP-3	13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)	768357.51'	1882486.40'	N/A

LEGEND - EXISTING FEATURES

- SUBJECT PROPERTY
- PROPERTY LINE
- PROPERTY LINE PER COUNTY
- PARCEL LINE
- MINIMUM SETBACK LINE (AS NOTED)
- EDGE OF ROAD
- CONCRETE CURB
- EDGE OF GRAVEL / DRIVE
- FENCE
- 1FT CONTOUR
- 5FT CONTOUR
- UNDERGROUND ELECTRIC LINE
- ELECTRIC VAULT (UNLESS OTHERWISE NOTED)
- UNDERGROUND FIBEROPTIC LINE
- FIBEROPTIC VAULT
- FIBEROPTIC MARKER
- UNDERGROUND PIPELINE
- PIPELINE MARKER
- UNDERGROUND WATER LINE
- WATER VALVE
- FIRE HYDRANT
- UNDERGROUND SANITARY SEWER
- SANITARY MANHOLE
- UNDERGROUND STORM SEWER
- STORM MANHOLE
- CATCH BASIN
- CORRUGATED PLASTIC PIPE
- CULVERT
- FLOW LINE ELEVATION
- DRAINAGE CHANNEL / DITCH
- EDGE OF WATER
- TREE DRIPLINE
- TREE
- CONTROL POINT / BENCHMARK (AS NOTED)
- 13/16-INCH ID IRON PIPE WITH "EMHT INC." CAP (FOUND)
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- DELINEATED WETLAND
- RIPRAP
- GRAVEL
- CONCRETE
- ASPHALT
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- STORM WATER DRAINAGE EASEMENT (INST. NO. 201509170131122)

LEGEND - PROPOSED FEATURES

- PROPOSED EDGE OF PAD
- PROPOSED FENCE
- PROPOSED CORNER POST / GATE POST
- PROPOSED CENTERLINE OF ACCESS ROAD
- PROPOSED EDGE OF ACCESS ROAD
- PROPOSED CONSTRUCTION LIMITS - 7.38 ACRES
- PROPOSED CULVERT
- PROPOSED SWINGING GATE
- PROPOSED STATION PAD STONE
- PROPOSED STONE ACCESS ROAD
- PROPOSED ASPHALT ACCESS ROAD
- PROPOSED SEEDING AREA
- PROPOSED 30 MIL HDPE OR PVC GEOMEMBRANE LINER
- PROPOSED ODOT TYPE (D) RIPRAP

NOTES

1.) BEARINGS ARE ORIENTED TO THE STATE PLANE COORDINATE SYSTEM: OHIO SOUTH (3402); HORIZONTAL DATUM: NAD83 (2011), U.S. SURVEY FOOT; VERTICAL DATUM: NAVD88.

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STATE OF OHIO — JOHN M. PELTZ 83820 — REGISTERED PROFESSIONAL ENGINEER
John M. Peltz 3/26/25

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OLD DWG #: | STD DWG #:

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
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AEP OHIO TRANSMISSION COMPANY, INC.

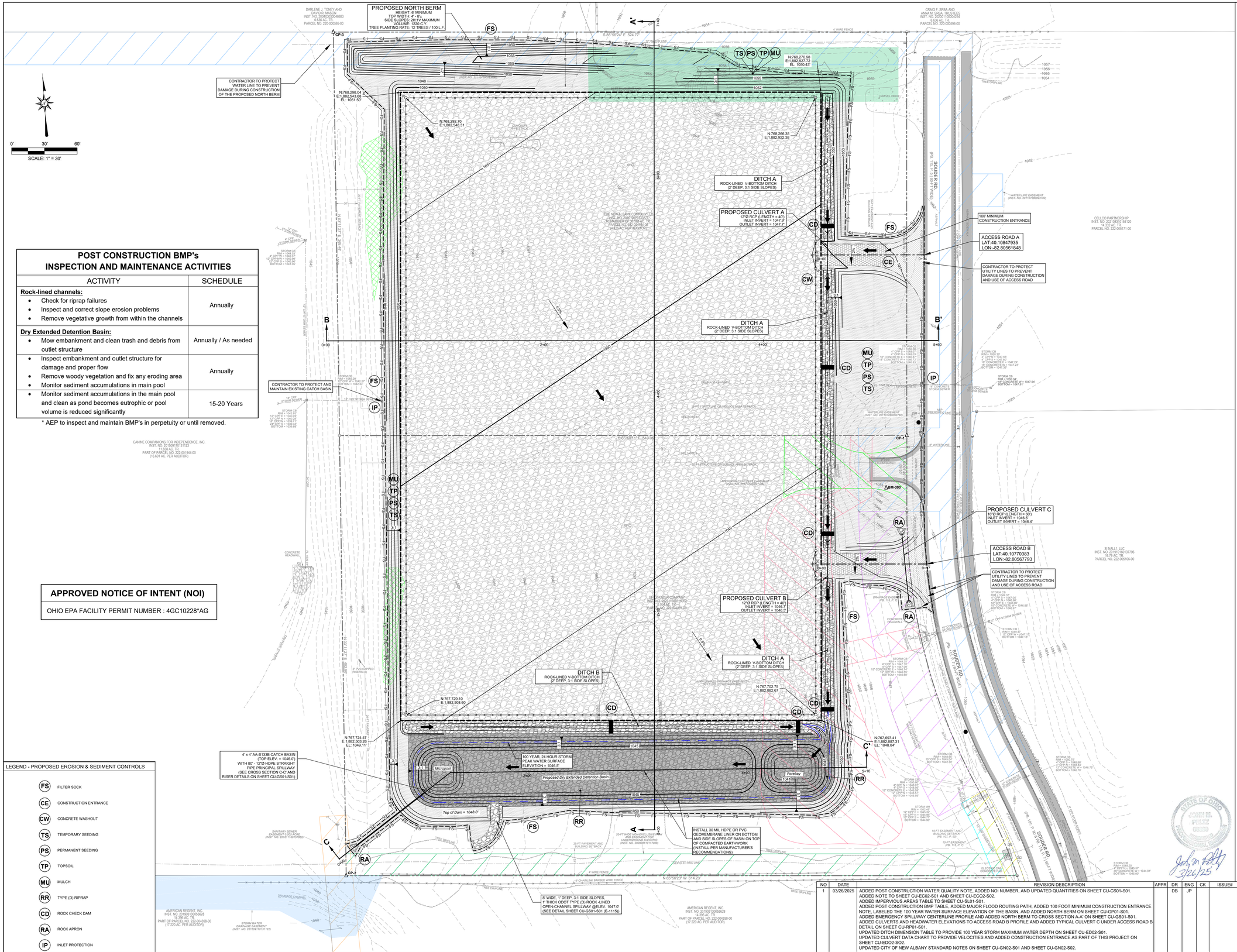
SOUDER STATION

NEW ALBANY — OHIO

SITE DIMENSION PLAN

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-SL01-S01	REV 1

(E-1113)



0' 30' 60'

SCALE: 1" = 30'

POST CONSTRUCTION BMP's INSPECTION AND MAINTENANCE ACTIVITIES

ACTIVITY	SCHEDULE
Rock-lined channels: • Check for riprap failures • Inspect and correct slope erosion problems • Remove vegetative growth from within the channels	Annually
Dry Extended Detention Basin: • Mow embankment and clean trash and debris from outlet structure	Annually / As needed
• Inspect embankment and outlet structure for damage and proper flow • Remove woody vegetation and fix any eroding area • Monitor sediment accumulations in main pool	Annually
• Monitor sediment accumulations in the main pool and clean as pond becomes eutrophic or pool volume is reduced significantly	15-20 Years

* AEP to inspect and maintain BMP's in perpetuity or until removed.

APPROVED NOTICE OF INTENT (NOI)

OHIO EPA FACILITY PERMIT NUMBER : 4GC10228*AG

LEGEND - PROPOSED EROSION & SEDIMENT CONTROLS

FS	FILTER SOCK
CE	CONSTRUCTION ENTRANCE
CW	CONCRETE WASHOUT
TS	TEMPORARY SEEDING
PS	PERMANENT SEEDING
TP	TOPSOIL
MU	MULCH
RR	TYPE (D) RIPRAP
CD	ROCK CHECK DAM
RA	ROCK APRON
IP	INLET PROTECTION

SURVEY CONTROL POINT DATA

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- STORM WATER DRAINAGE EASEMENT (INST. NO. 201509171031122)

LEGEND - PROPOSED FEATURES

- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR
- PROPOSED EDGE OF PAD
- PROPOSED FENCE
- PROPOSED CORNER POST / GATE POST
- PROPOSED CENTERLINE OF ACCESS ROAD
- PROPOSED EDGE OF ACCESS ROAD
- PROPOSED ROCK-LINED DITCH
- PROPOSED CONSTRUCTION LIMITS - 7.38 ACRES
- PROPOSED CULVERT
- PROPOSED SWINGING GATE
- PROPOSED ROCK CHECK DAM
- PROPOSED SLOPE INDICATOR
- PROPOSED FILTER SOCK
- PROPOSED CONSTRUCTION ENTRANCE AHEAD SIGN
- MAJOR FLOOD ROUTING PATH
- PROPOSED STATION PAD STONE

NOTES

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7.) EXISTING CONDITIONS SURVEY COMPLETED ON FEBRUARY 13, 2024.

8.) FILTER SOCK WILL BE PLACED AT THE ACTUAL CONSTRUCTION LIMITS AND IS SHOWN OFFSET ON THE PLANS FOR CLARITY ONLY.

9.) IF REGULATORY AGENCIES REQUIRE SILT FENCE INSTEAD OF FILTER SOCK, INSTALL PER STANDARD DETAILS.

BAIR GOODIE

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AEP OHIO TRANSMISSION COMPANY, INC.

SOUDER STATION

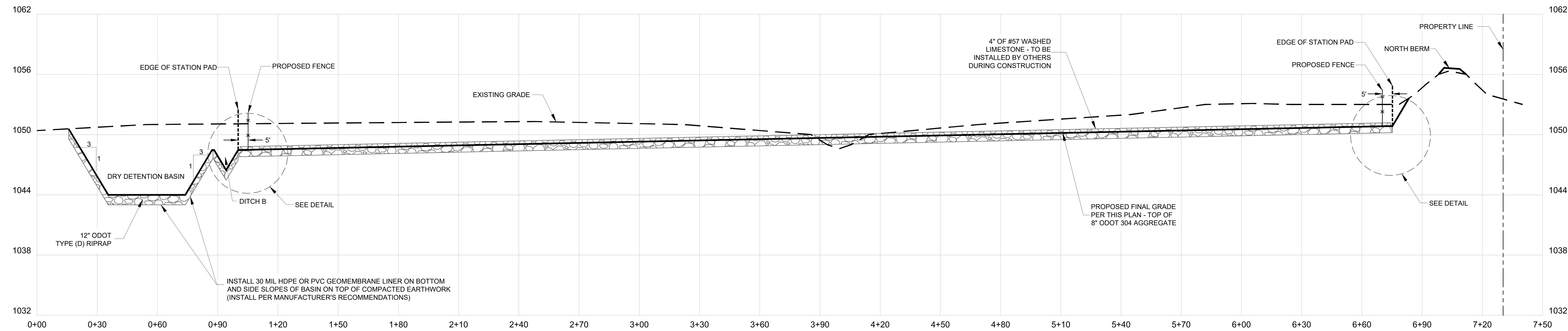
NEW ALBANY — OHIO

GRADING / EROSION & SEDIMENT CONTROL PLAN

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
AMERICAN ELECTRIC POWER	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-GP01-S01	REV. 1

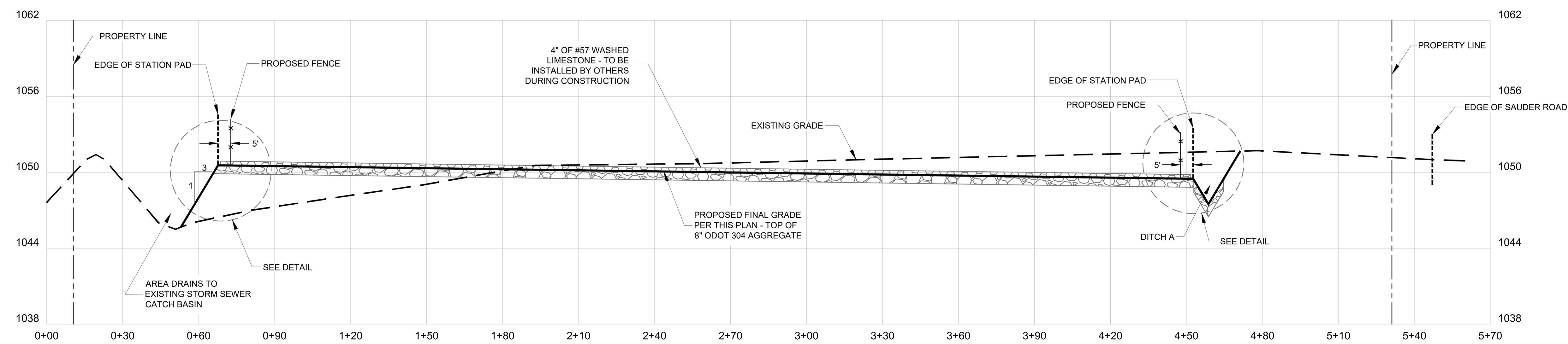
(E-1114)

CM 1 2 3 4 5 6 7 — 1/16 INCH 4 8 12 16 — TENTHS 10 20 30 — INCHES 1 2 3



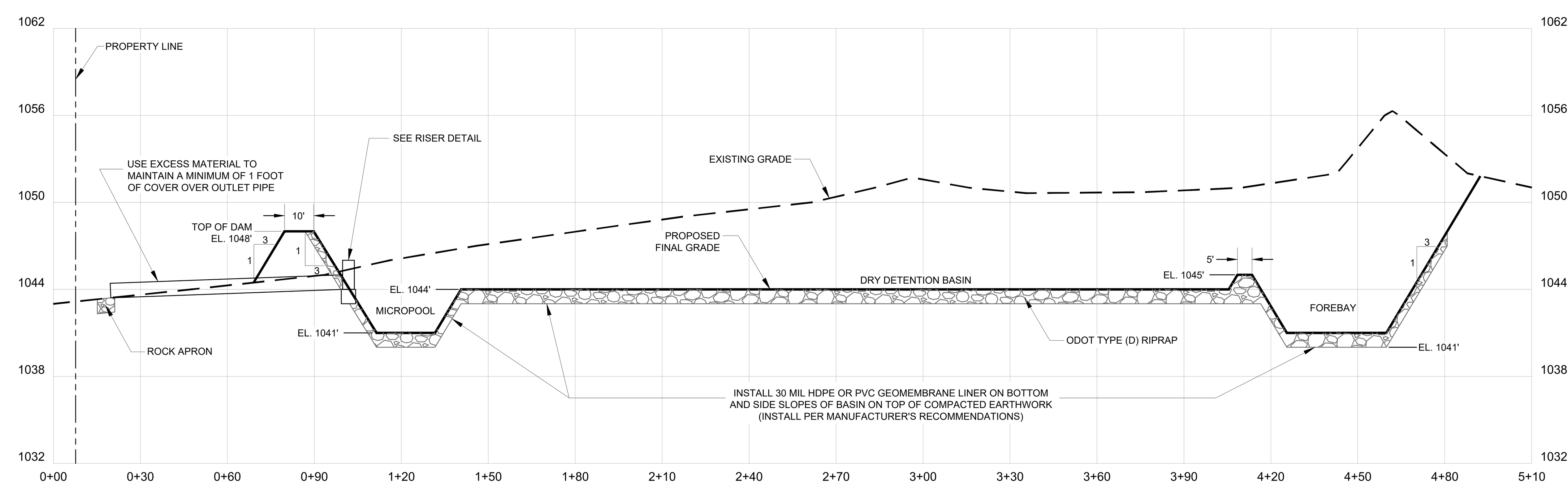
CROSS-SECTION A-A'

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'



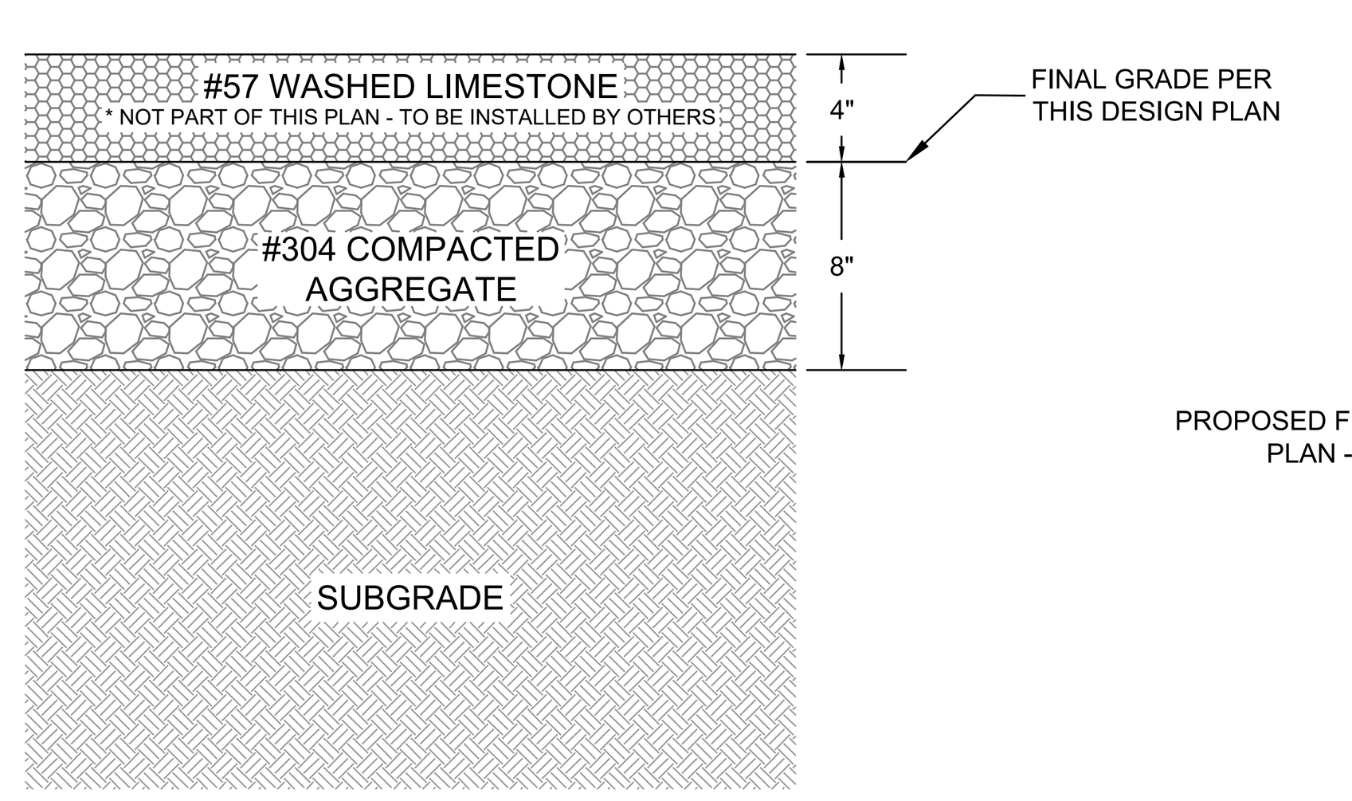
CROSS-SECTION B-B'

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'



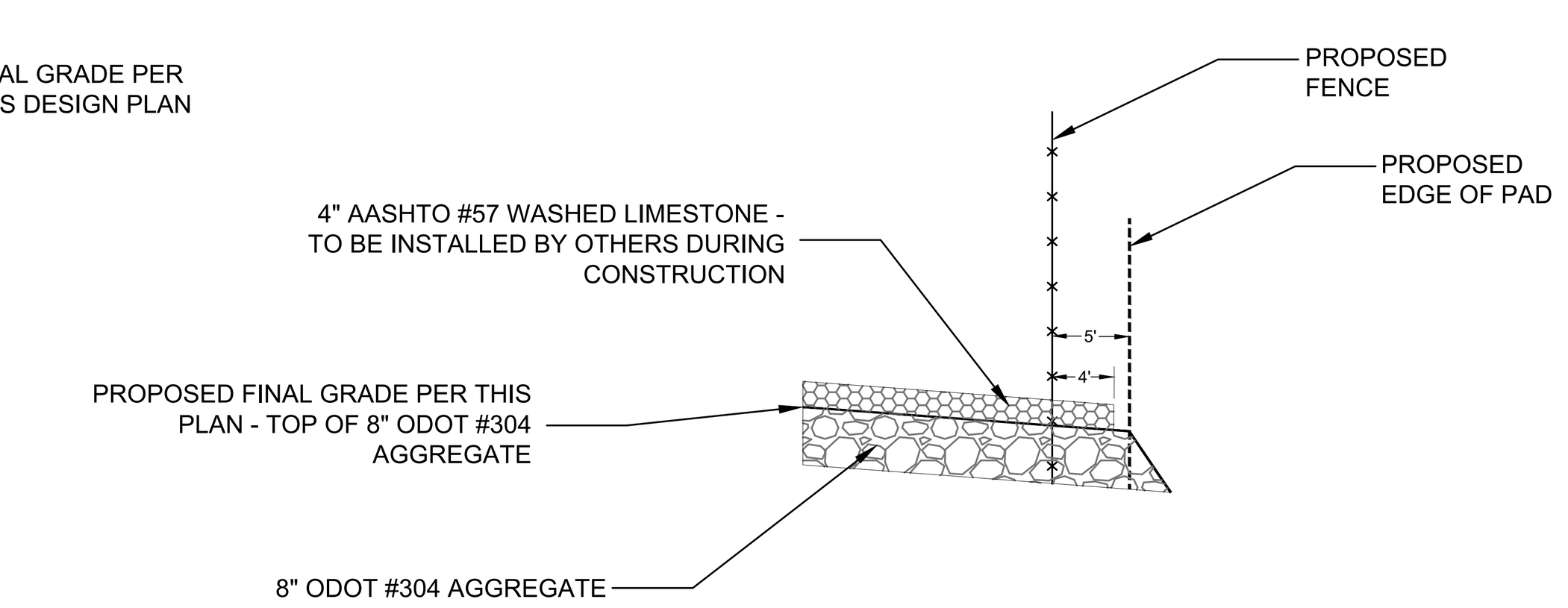
CROSS-SECTION C-C'

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'



TYPICAL STATION PAD DETAIL

NOT TO SCALE



TYPICAL EDGE OF STATION PAD DETAIL

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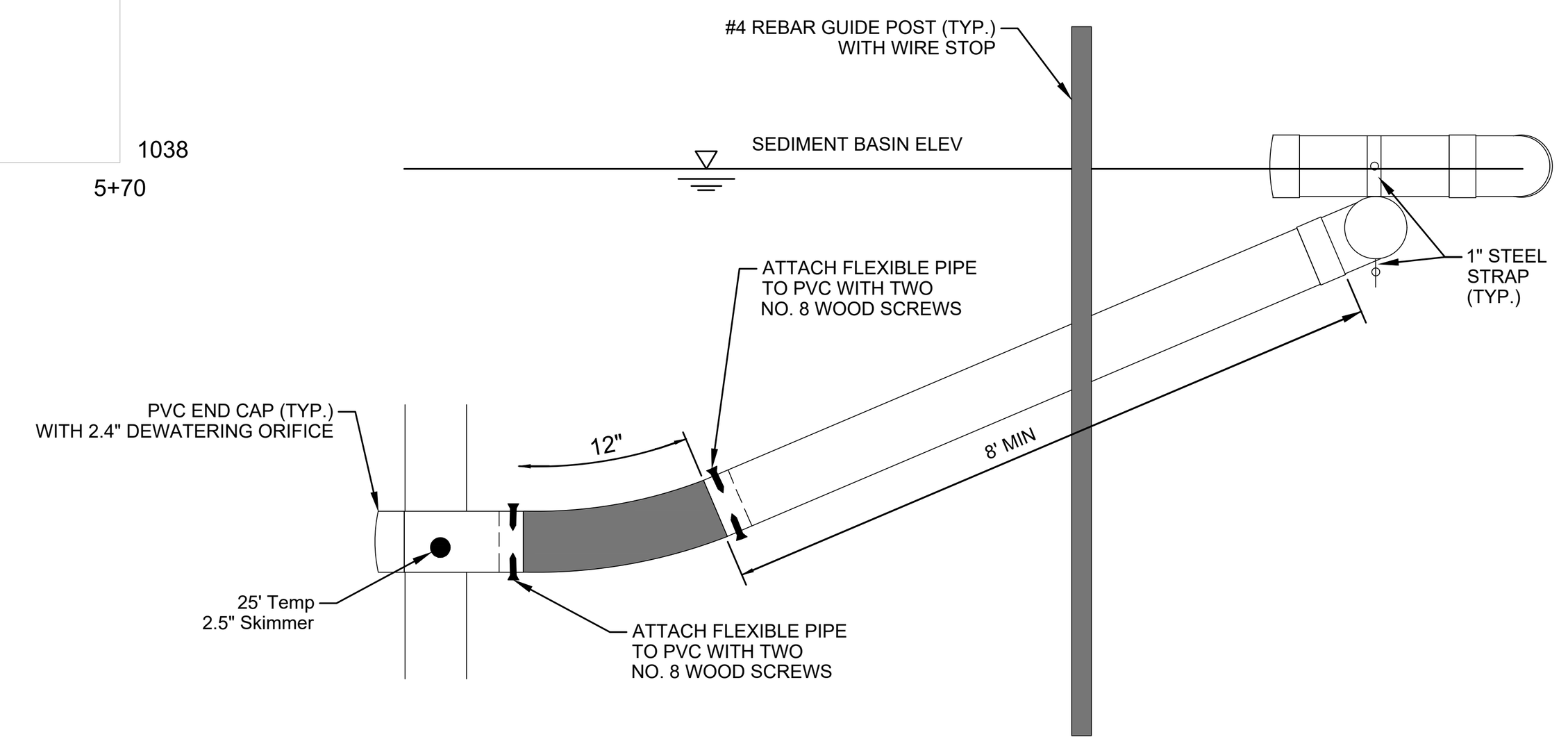
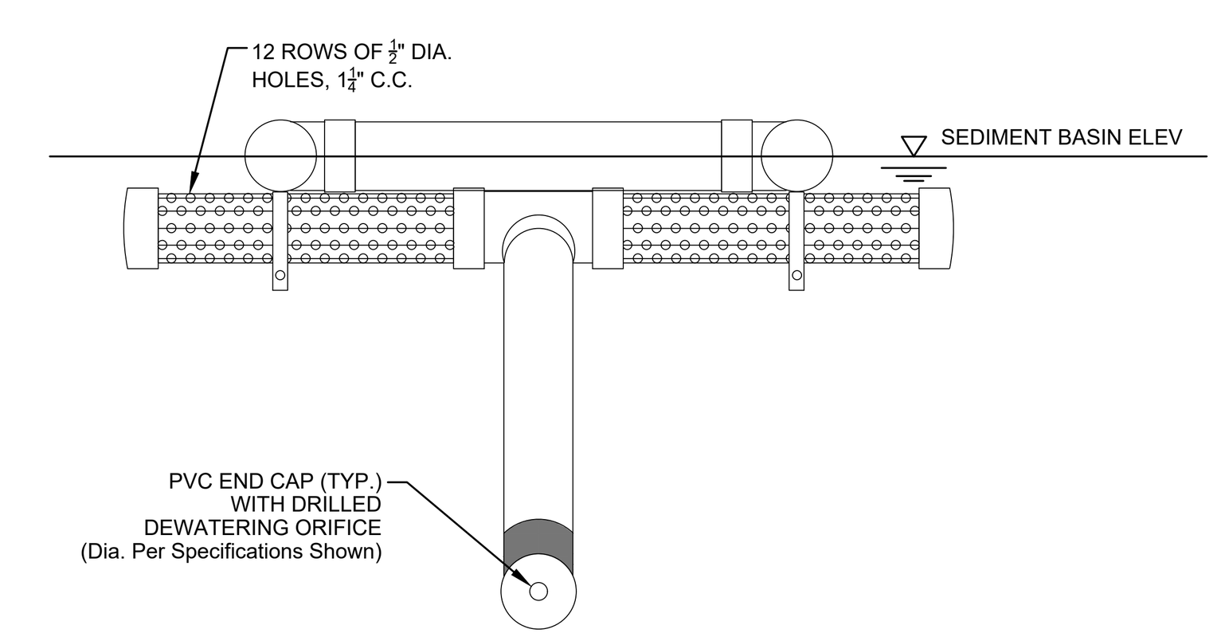


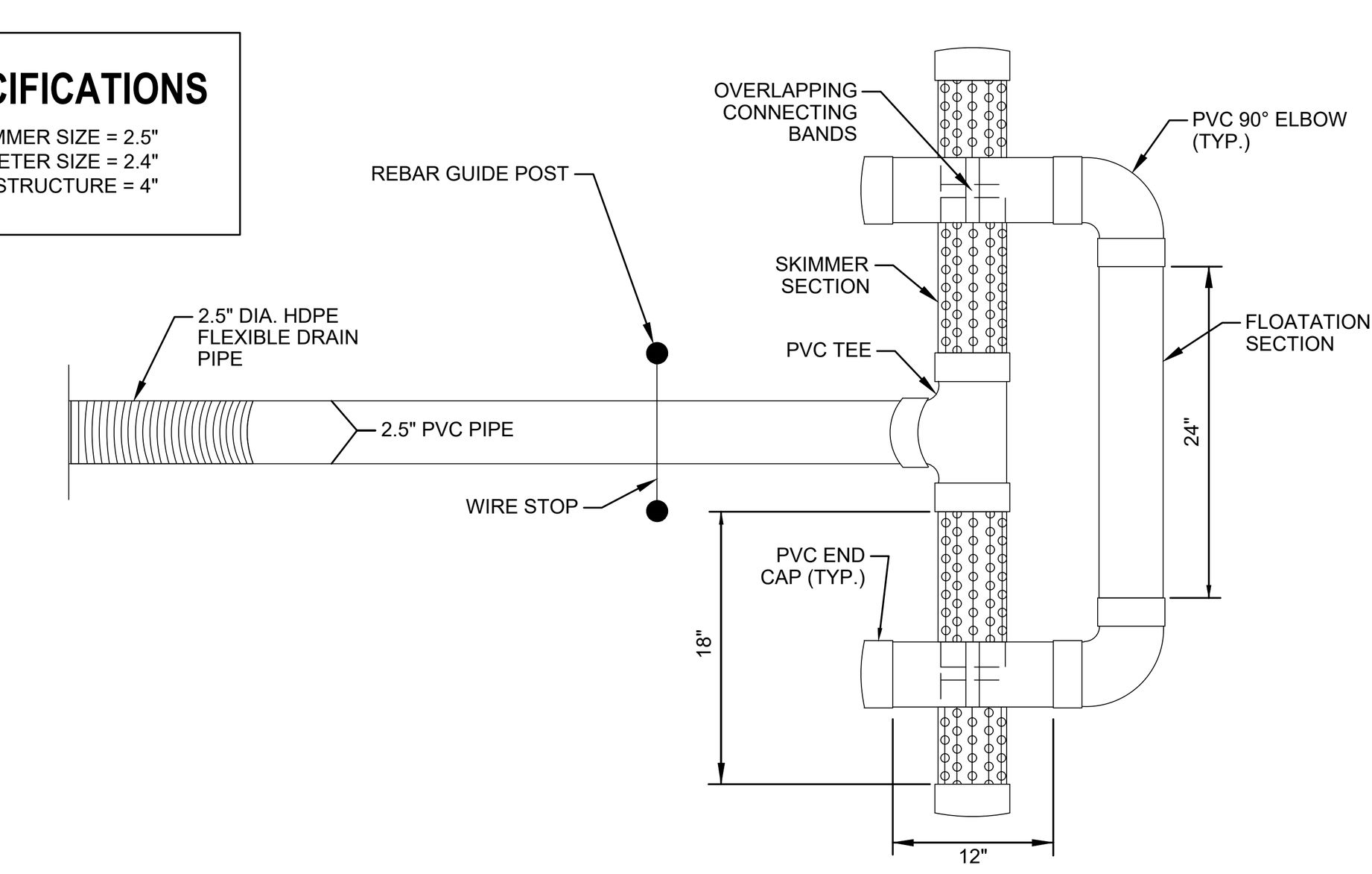
SIDE VIEW



FRONT VIEW

SKIMMER SPECIFICATIONS

FAIRCLOTH SKIMMER SIZE = 2.5"
ORIFICE DIAMETER SIZE = 2.4"
STUB SIZE ON OUTLET STRUCTURE = 4"

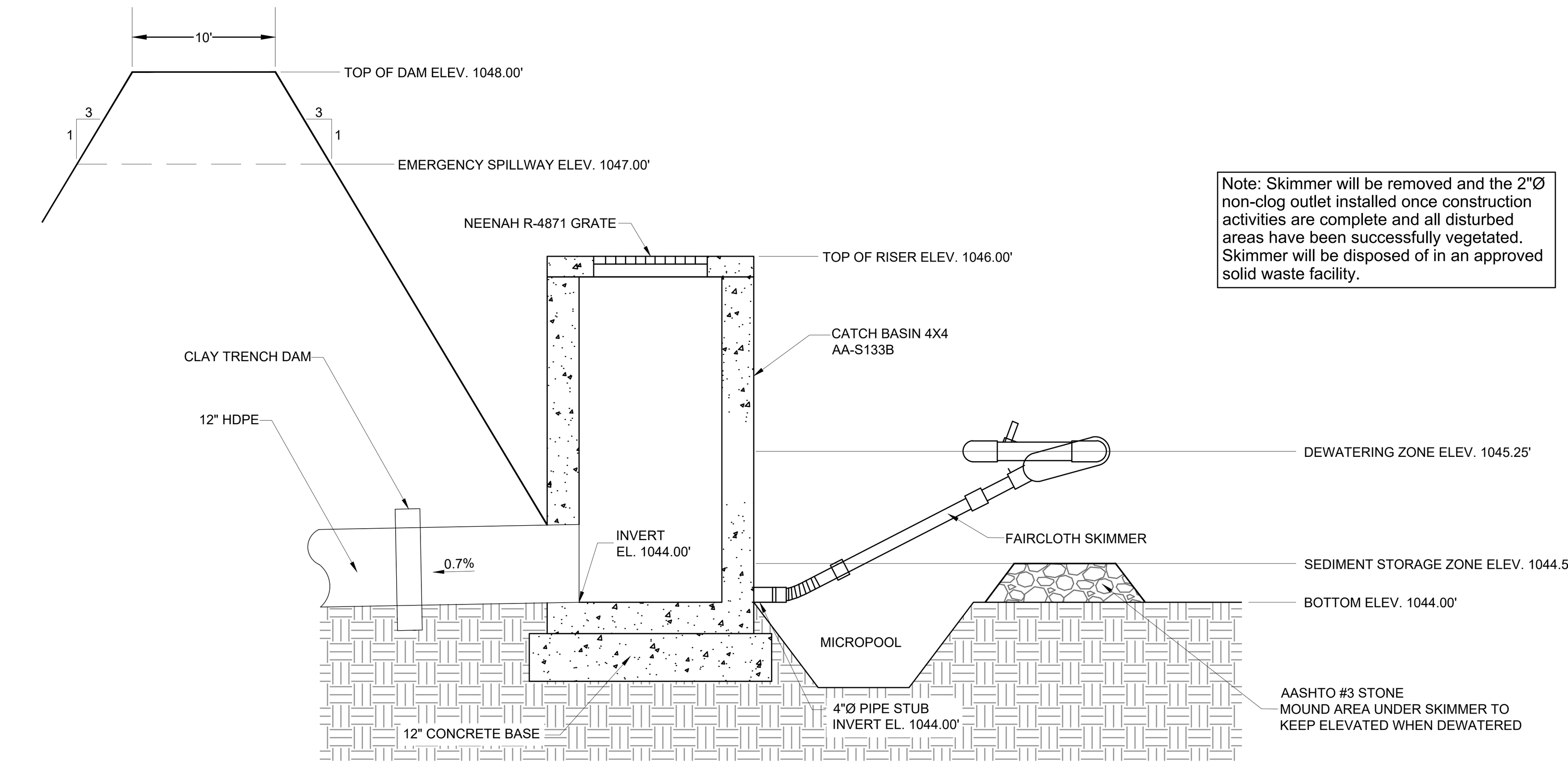


PLAN VIEW

SKIMMER DETAIL

NOT TO SCALE

Note: If an alternative skimmer is to be used the Contractor is required to submit for review and approval to the Engineer shop drawings and supporting calculations which show the specified skimmer meets the required 48-hour drawdown time.



TEMPORARY SEDIMENT BASIN RISER DETAIL

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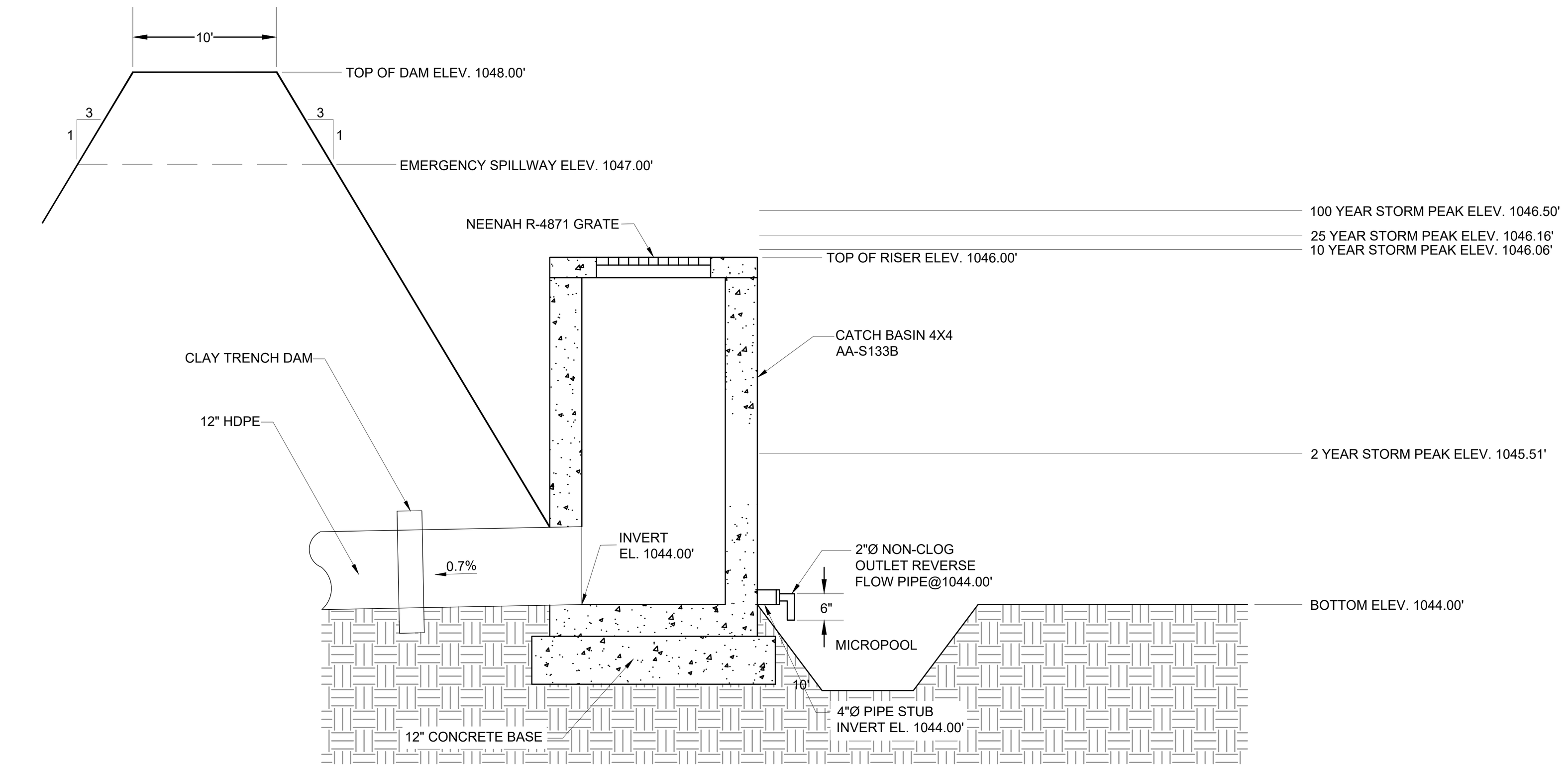
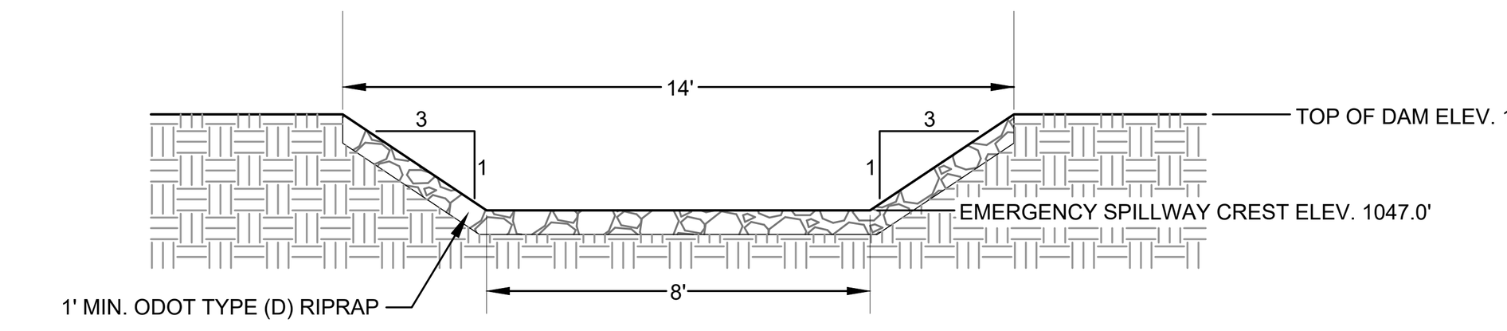


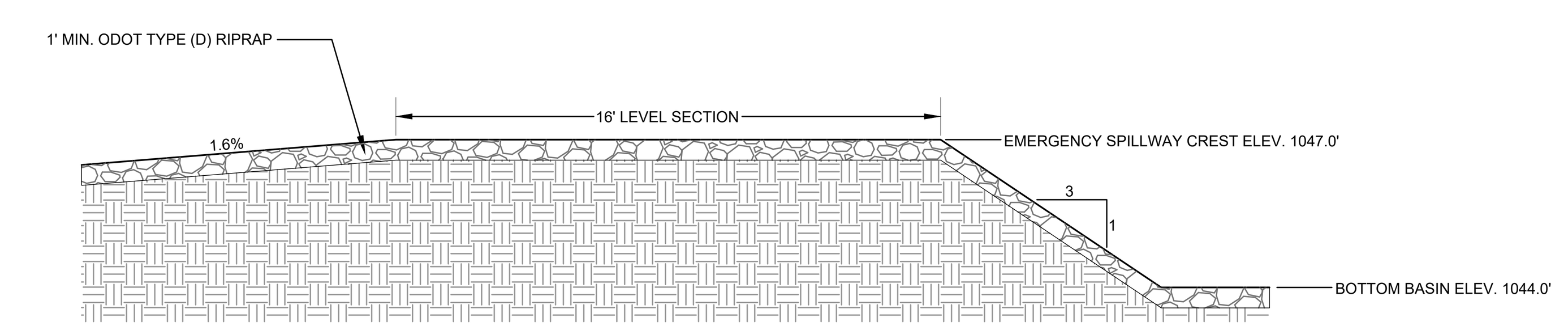
PERMANENT DRY DETENTION BASIN RISER DETAIL

NOT TO SCALE



EMERGENCY SPILLWAY DETAIL

NOT TO SCALE



EMERGENCY SPILLWAY CENTERLINE PROFILE

NOT TO SCALE

DETENTION BASIN - TEMPORARY SEDIMENT CONTROL STRUCTURE SCHEDULE					
TRIBUTARY ACREAGE (AC)	DISTURBED ACREAGE (AC)	REQUIRED BASIN DEWATERING VOLUME (1800 CF/AC) (AC-FT)	PROVIDED BASIN DEWATERING VOLUME (AC-FT)	REQUIRED SEDIMENT STORAGE VOLUME (1000 C.F./ DISTURBED A.C.) (AC-FT)	PROVIDED SEDIMENT STORAGE VOLUME (AC-FT)
6.38	6.27	0.26	0.57	0.14	0.16

Sediment Basin Required Dewatering Volume Drawdown = 48 Hrs.
Sediment Basin Provided Dewatering Volume Drawdown > 48Hrs.

STATE OF OHIO JOHN M. PELTZ 63629 REGISTERED PROFESSIONAL ENGINEER

John M Peltz 3/26/25

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
TEL: 330.343.3499 FAX: 330.343.9505
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AEP OHIO TRANSMISSION COMPANY, INC.

SOUDER STATION

NEW ALBANY — OHIO

CROSS SECTIONS & DETAILS

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-GS01-S01	REV 1

(E-1115)

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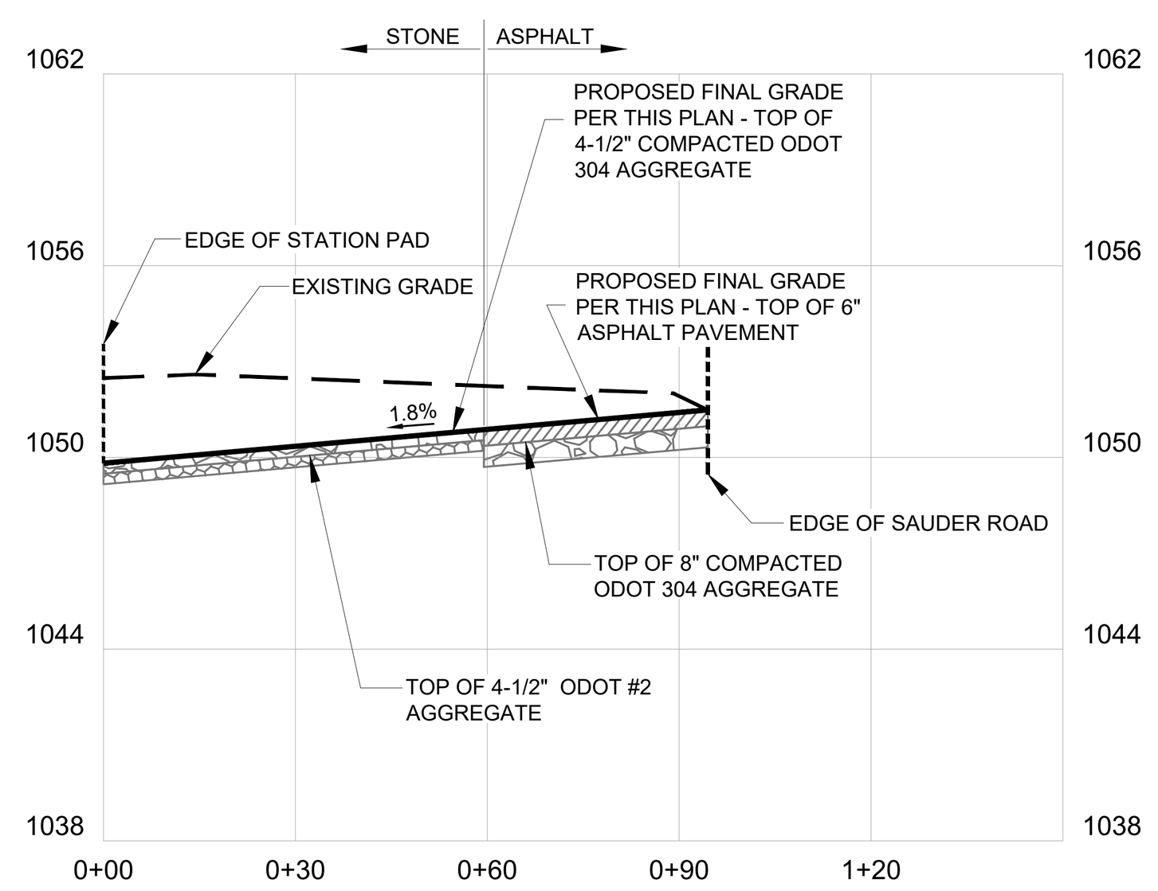
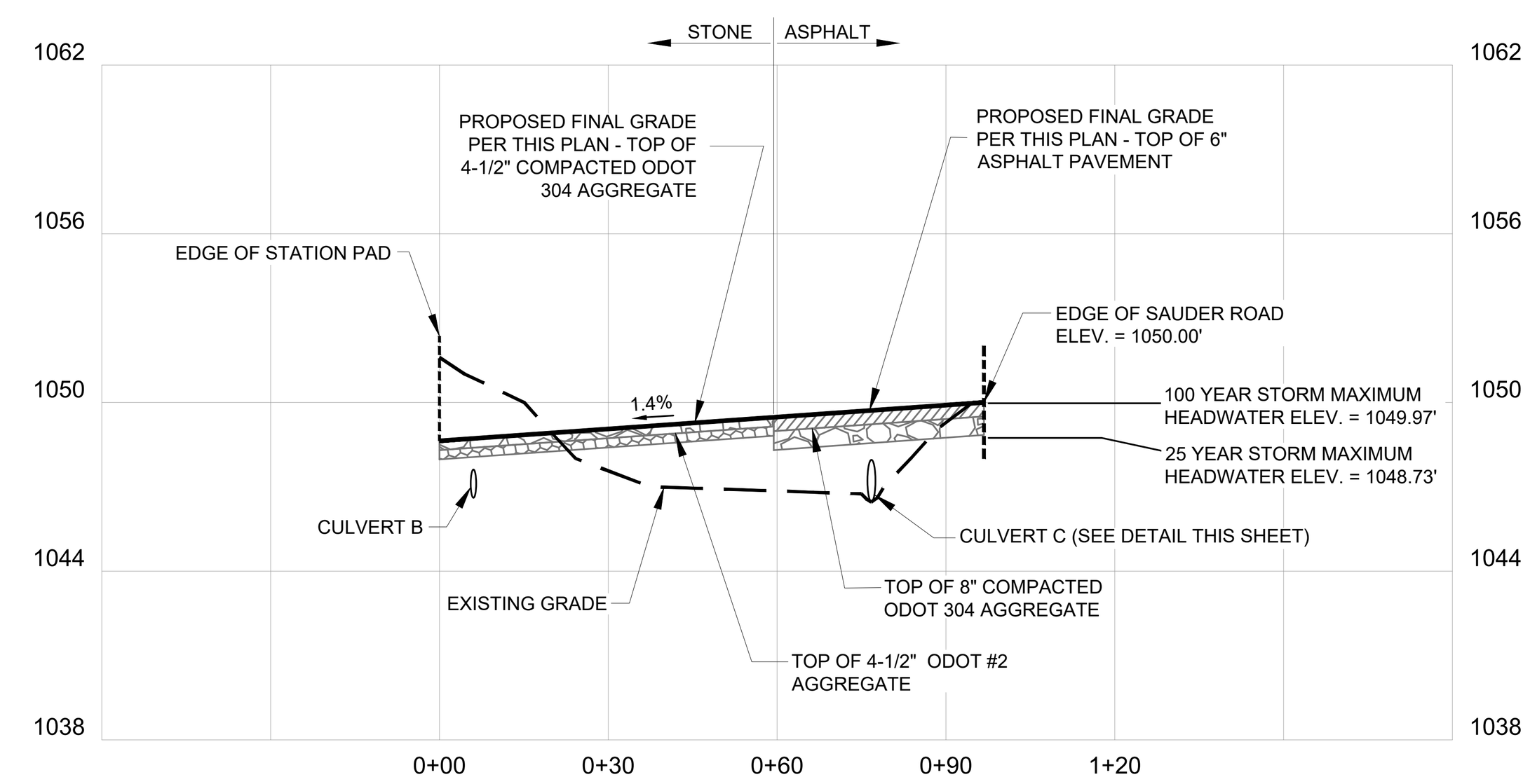


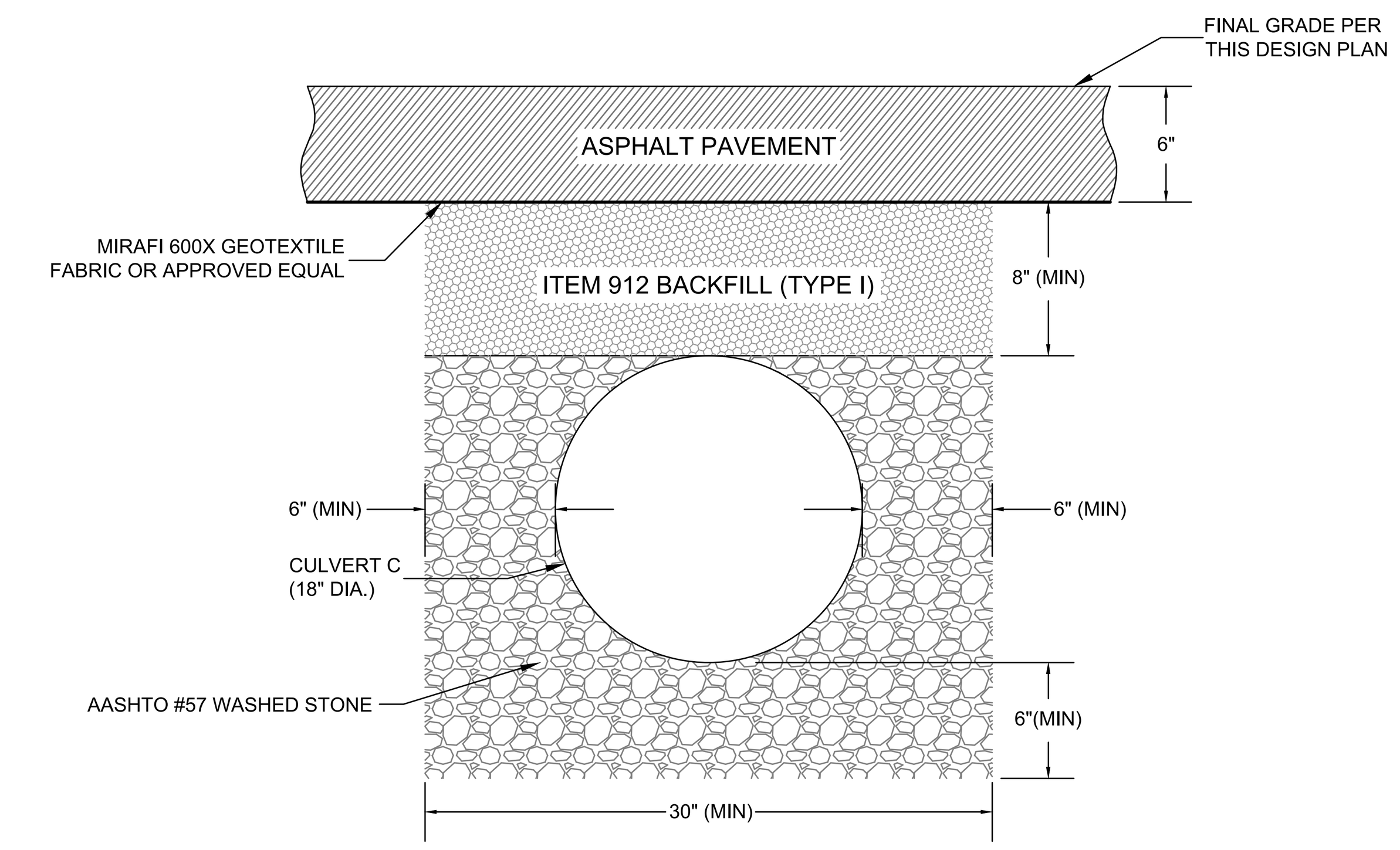
ACCESS ROAD A

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'



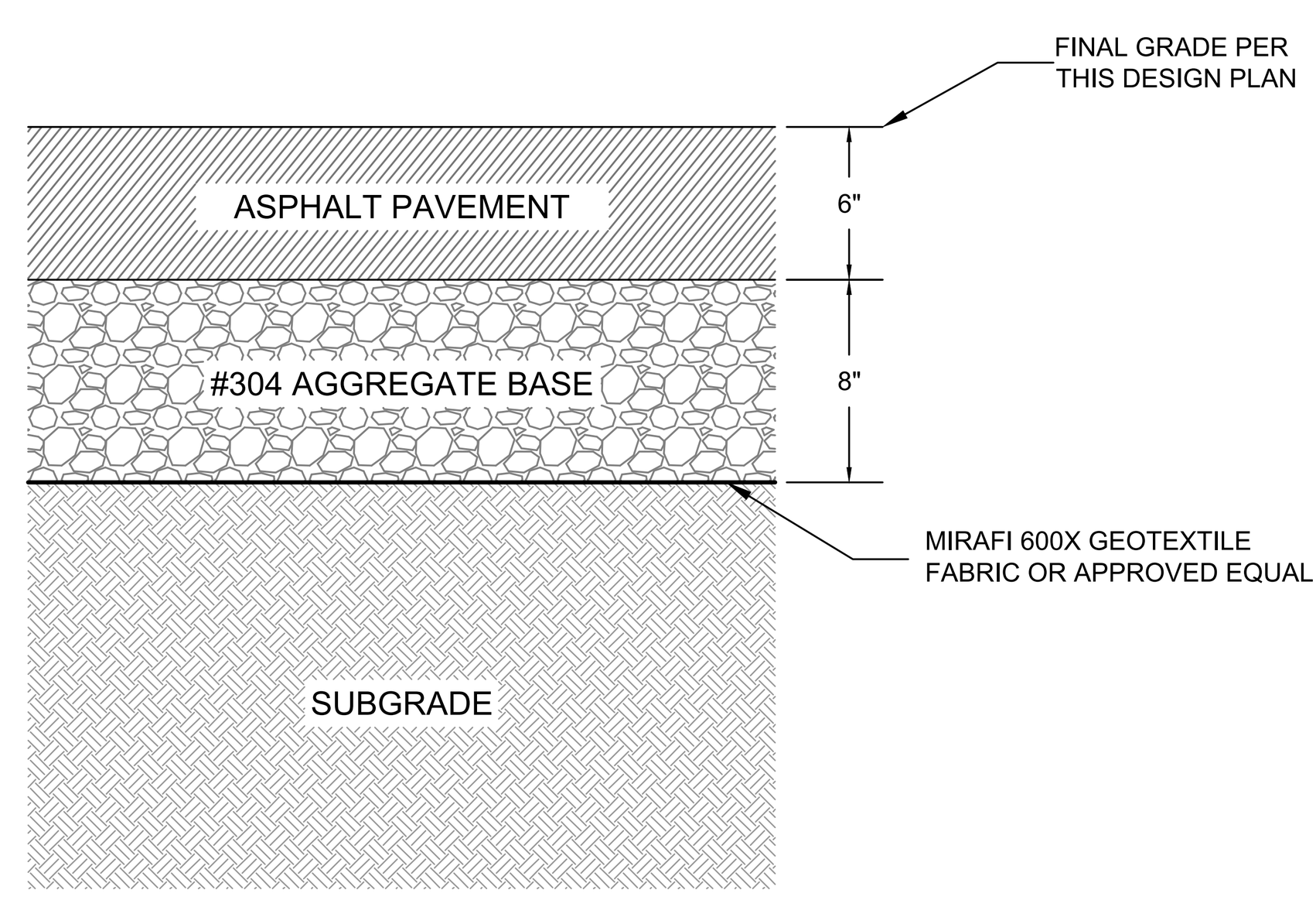
ACCESS ROAD B

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 6'



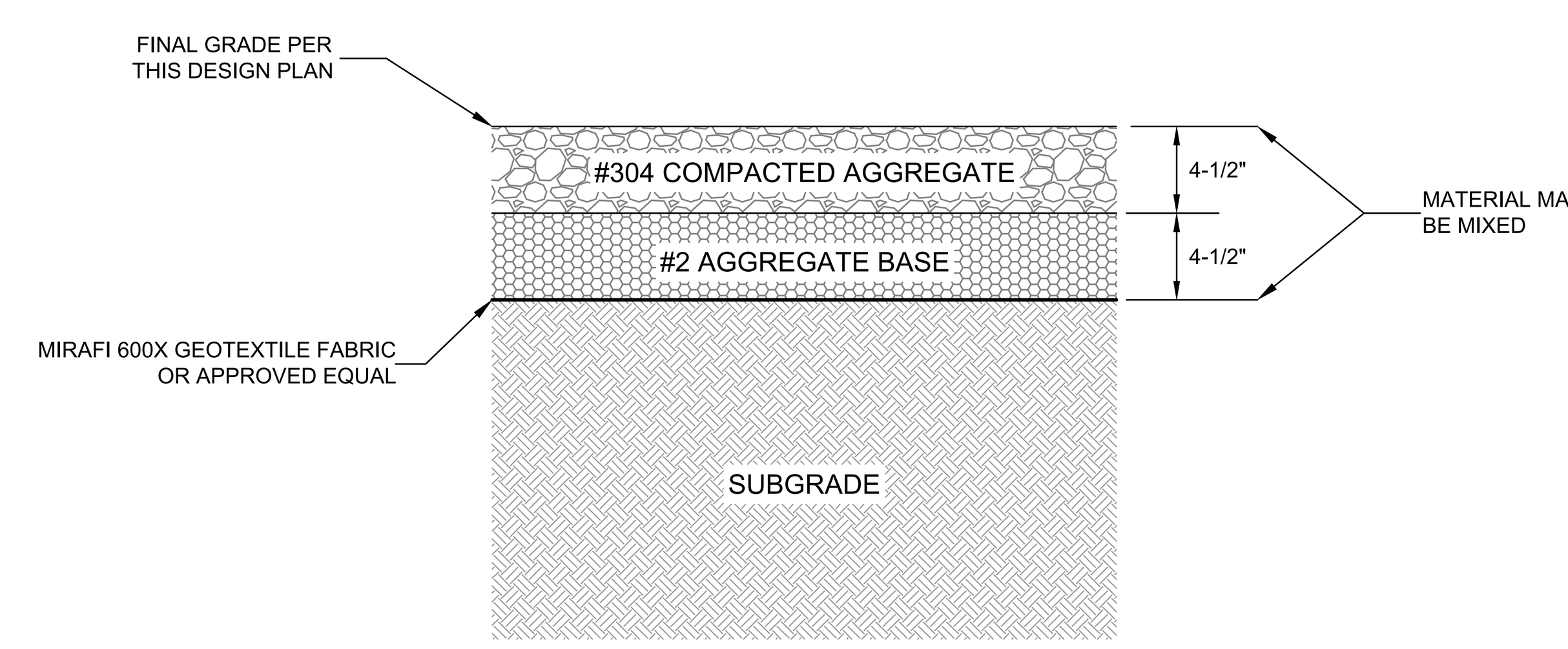
TYPICAL CULVERT C UNDER ACCESS ROAD DETAIL

NOT TO SCALE



TYPICAL ASPHALT ACCESS ROAD DETAIL

NOT TO SCALE



TYPICAL STONE ACCESS ROAD DETAIL

NOT TO SCALE

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

STATE OF OHIO JOHN M. PELTZ ... REGISTERED PROFESSIONAL ENGINEER
John M. Peltz 3/26/25

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SOUDER STATION

NEW ALBANY OHIO

ACCESS ROAD PROFILES & DETAILS

SCALE: 1" = 30'	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-RP01-S01	REV 1

(E-1116)

CM 1 2 3 4 5 6 7 1/16 INCH 4 8 12 16 TENTHS 10 20 30 INCHES 1 2 3

ADDITIONAL BMP'S

OPEN BURNING

NO MATERIALS MAY BE BURNED WHICH CONTAIN RUBBER, GREASE, ASPHALT, OR PETROLEUM PRODUCTS SUCH AS TIRES, CARS, AUTO PARTS, PLASTICS OR PLASTIC COATED WIRE (SEE OAC 3745-9). OPEN BURNING IS NOT ALLOWED IN RESTRICTED AREAS. RESTRICTED AREAS ARE DEFINED AS:

1. WITHIN CORPORATION LIMITS.
2. WITHIN 1,000 FEET OF A MUNICIPAL CORPORATION.
3. WITHIN A ONE MILE ZONE OUTSIDE OF A CORPORATION OF 10,000 OR MORE.

OUTSIDE THE RESTRICTED AREA, NO OPEN BURNING CAN TAKE PLACE WITHIN 1,000 FEET OF AN INHABITED BUILDING LOCATED OFF THE PROPERTY WHERE THE FIRE IS SET. OPEN BURNING IS PERMISSIBLE IN A RESTRICTED AREA FOR THE FOLLOWING ACTIVITIES: HEATING TAR, WELDING AND ACETYLENE TORCHES, SMUDGE POTS AND SIMILAR OCCUPATIONAL NEEDS, AND HEATING OR WARMTH FOR OUTDOOR BARBEQUES. OUTSIDE OF RESTRICTED AREAS, OPEN BURNING IS PERMISSIBLE FOR LANDSCAPE WASTES (PLANT MATERIAL, WITH PRIOR WRITTEN PERMISSION FROM OHIO EPA), AND AGRICULTURAL WASTES (MATERIAL GENERATED BY CROP, HORTICULTURAL, OR LIVESTOCK PRODUCTION PRACTICES).

DUST CONTROL / SUPRESSANTS

DUST CONTROL IS REQUIRED TO PREVENT NUISANCE CONDITIONS. DUST CONTROLS MUST BE USED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION AND NOT BE APPLIED IN A MANNER WHICH WOULD RESULT IN A DISCHARGE TO WATERS OF THE STATE. ISOLATION DISTANCES FROM BRIDGES, CATCH BASINS, AND OTHER DRAINAGE WAYS MUST BE OBSERVED. APPLICATION (EXCLUDING WATER) MAY NOT OCCUR WHEN PRECIPITATION IS IMMINENT, AS NOTED IN THE SHORT TERM FORECAST. USED OIL MAY NOT BE APPLIED FOR DUST CONTROL, CHEMICAL STABILIZERS MAY ONLY BE USED WITH AEP PERMISSION.

AIR PERMITTING REQUIREMENTS

ALL CONTRACTORS AND SUB CONTRACTORS MUST BE MADE AWARE THAT CERTAIN ACTIVITIES ASSOCIATED WITH CONSTRUCTION WILL REQUIRE AIR PERMITS. ACTIVITIES INCLUDING BUT NOT LIMITED TO MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, LARGE GENERATORS, ETC., WILL REQUIRE SPECIFIC OHIO EPA AIR PERMITS FOR INSTALLATION AND OPERATION. NOTIFICATION FOR RESTORATION AND DEMOLITION MUST BE SUBMITTED TO OHIO EPA FOR ALL COMMERCIAL SITES TO DETERMINE IF ASBESTOS CORRECTIVE ACTIONS ARE REQUIRED.

WASTE DISPOSAL

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION OF MATERIALS WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION. ALL FERTILIZER, HYDROCARBON, OR OTHER CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE EPA'S STANDARD PRACTICES. NO SOLID MATERIAL INCLUDING BUILDING AND CONSTRUCTION MATERIAL SHALL BE DISPOSED OF, DISCHARGED OR BURIED ONSITE.

OFFSITE VEHICLE TRACKING

LOADED HAUL TRUCKS SHALL BE COVERED WITH A TARPAULIN. EXCESS DIRT MATERIAL ON THE ROADS SHALL BE REMOVED IMMEDIATELY. HAULING ON UNPAVED SURFACES SHALL BE MONITORED TO MINIMIZE DUST AND CONTROL EROSION. HAUL ROADS SHALL BE WATERED OR OTHER CONTROLS PROVIDED AS NECESSARY TO REDUCE DUST AND CONTROL SEDIMENTS.

SANITARY WASTE

THE CONTRACTOR SHALL PROVIDE PORTABLE SANITARY WASTE FACILITIES. THESE FACILITIES SHALL BE COLLECTED OR EMPTIED BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR AS REQUIRED BY STATE REGULATIONS.

FERTILIZERS AND PESTICIDES

FERTILIZER SHALL BE APPLIED AT A RATE SPECIFIED BY THE SPECIFICATIONS OR THE MANUFACTURER. THE APPLICATION OF FERTILIZERS SHALL BE ACCOMPLISHED IN A MANNER AS DESCRIBED BY THE SPECIFICATION OR MANUFACTURER TO ENSURE THE PROPER INSTALLATION AND TO AVOID OVER FERTILIZING. PESTICIDES ARE NOT ANTICIPATED FOR THIS PROJECT.

ESTABLISH PROPER EQUIPMENT/VEHICLE FUELING AND MAINTENANCE PRACTICES

EQUIPMENT FUELING AND MAINTENANCE, OIL CHANGING, ETC., SHALL BE PERFORMED AWAY FROM THE WATERCOURSES, DITCHES, OR STORM DRAINS, IN AN AREA DESIGNATED FOR THAT PURPOSE, THE DESIGNATED AREA SHALL BE EQUIPPED FOR RECYCLING OIL AND CATCHING SPILLS. SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL FUEL OIL STORAGE TANKS. THESE AREAS MUST BE INSPECTED EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A 0.5 INCH OR GREATER RAIN EVENT TO ENSURE THERE ARE NO EXPOSED MATERIALS WHICH WOULD CONTAMINATE STORM WATER.

SPILL PREVENTION CONTROL PLAN

SITE OPERATORS MUST BE AWARE THAT SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) REQUIREMENTS APPLY. AN SPCC PLAN IS REQUIRED FOR SITES WITH ONE SINGLE ABOVE GROUND STORAGE TANK OF 1,320 GALLONS OR MORE, OR 42,000 GALLONS OF UNDERGROUND STORAGE. SOILS THAT HAVE BEEN CONTAMINATED MUST BE DISPOSED OF IN ACCORDANCE WITH SECTION "CONTAMINATED SOILS" FOUND BELOW.

SPILLS ON PAVEMENT SHALL BE ABSORBED WITH SAWDUST, CAT LITTER OR OTHER ABSORBENT MATERIAL AND DISPOSED OF WITH THE TRASH AT A LICENSED SANITARY LANDFILL. HAZARDOUS OR INDUSTRIAL WASTES SUCH AS MOST SOLVENTS, GASOLINE, OIL-BASED PAINTS, AND CEMENT CURING COMPOUNDS REQUIRE SPECIAL HANDLING. SPILLS SHALL BE REPORTED TO THE OHIO EPA (1-800-282-9378). SPILLS OF 25 GALLONS OR MORE OF PETROLEUM PRODUCTS SHALL BE REPORTED TO THE OHIO EPA, THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE DISCOVERY OF THE RELEASE. ALL SPILLS WHICH RESULT IN CONTACT WITH WATERS OF THE STATE MUST BE REPORTED TO OHIO EPA'S HOTLINE.

CONTAMINATED SOILS

IF SUBSTANCES SUCH AS OIL, DIESEL FUEL, HYDRAULIC FLUID, ANTIFREEZE, ETC., ARE SPILLED, LEAKED, OR RELEASED ONTO THE SOIL, THE SOIL SHOULD BE DUG UP AND DISPOSED OF AT A LICENSED SANITARY LANDFILL OR OTHER APPROVED PETROLEUM CONTAMINATED SOIL REMEDIATION FACILITY (NOT A CONSTRUCTION/DEMOLITION DEBRIS LANDFILL). PLEASE BE AWARE THAT STORM WATER RUN OFF ASSOCIATED WITH CONTAMINATED SOILS ARE NOT BEING AUTHORIZED UNDER OHIO EPA'S GENERAL STORMWATER PERMIT ASSOCIATED WITH CONSTRUCTION ACTIVITIES. IN THE EVENT THERE ARE LARGE EXTENSIVE AREAS OF CONTAMINATED SOILS, ADDITIONAL MEASURES ABOVE AND BEYOND THE CONDITIONS OF OHIO EPA'S GENERAL CONSTRUCTION STORMWATER PERMIT WILL BE REQUIRED. DEPENDING ON THE EXTENT OF CONTAMINATION, ADDITIONAL TREATMENT AND/OR COLLECTION DISPOSAL MAY BE REQUIRED. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONTAMINATED SOILS MUST BE AUTHORIZED UNDER AN ALTERNATIVE NPDES PERMIT.

FILTER SOCK (FS)

DESCRIPTION

FILTER SOCKS ARE SEDIMENT-TRAPPING DEVICES USING COMPOST INSERTED INTO A FLEXIBLE, PERMEABLE TUBE WITH A PNEUMATIC BLOWER DEVICE OR EQUIVALENT. FILTER SOCKS TRAP SEDIMENT BY FILTERING WATER PASSING THROUGH THE BERM AND ALLOWING WATER TO POND, CREATING A SETTLING OF SOLIDS.

SPECIFICATIONS FOR FILTER SOCK

1. MATERIALS - COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF A PARTICLE RANGING FROM 3/8" TO 2".

2. FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.

INSTALLATION:

3. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE.

4. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.

5. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.

MAINTENANCE:

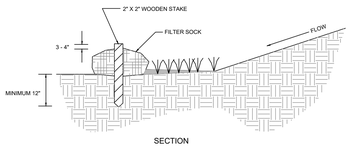
6. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.

7. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE PRACTICE.

8. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.

9. REMOVAL - FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDLINGS.

NOTE: IF REGULATORY AGENCIES REQUIRE SILT FENCE INSTEAD OF FILTER SOCK, INSTALL PER STANDARD DETAILS.



SECTION

TEMPORARY ROLLED EROSION CONTROL PRODUCTS (EROSION CONTROL MATTING) (EM)

DESCRIPTION

A TEMPORARY ROLLED EROSION CONTROL PRODUCT (RECP) IS A DEGRADABLE MANUFACTURED MATERIAL USED TO STABILIZE EASILY ERODED AREAS WHILE VEGETATION BECOMES ESTABLISHED. TEMPORARY ROLLED EROSION CONTROL PRODUCTS ARE DEGRADABLE PRODUCTS COMPOSED OF BIOLOGICALLY, PHOTO CHEMICALLY OR OTHERWISE DEGRADABLE MATERIALS. TEMPORARY RECP'S CONSIST OF EROSION CONTROL NETTING, OPEN WEAVE TEXTILES, AND EROSION CONTROL BLANKETS AND MATTINGS. THESE PRODUCTS REDUCE SOIL EROSION AND ASSIST VEGETATIVE GROWTH BY PROVIDING TEMPORARY COVER FORM THE EROSIVE ACTION OF RAINFALL AND RUNOFF WHILE PROVIDING SOIL-SEED CONTACT.

SPECIFICATIONS FOR TEMPORARY ROLLED EROSION CONTROL PRODUCT

1. CHANNEL/SLOPE SOIL PREPARATION: GRADE AND COMPACT AREA OF INSTALLATION, PREPARING SEEDBED BY LOOSENING 2"-3" OF TOPSOIL ABOVE FINAL GRADE. INCORPORATE AMENDMENTS SUCH AS LIME AND FERTILIZER INTO SOIL. REMOVE ALL ROCKS, CLODS, STICKS AND OTHER DEBRIS SO THAT INSTALLED RECP WILL HAVE DIRECT CONTACT WITH THE SOIL SURFACE.

2. CHANNEL/SLOPE SEEDING: APPLY SEED TO SOIL SURFACE PRIOR TO INSTALLATION. ALL CHECK SLOTS, ANCHOR TRENCHES, AND OTHER DISTURBED AREAS MUST BE RESEEDED. REFER TO THE PERMANENT SEEDING SPECIFICATION FOR SEEDING RECOMMENDATIONS.

SLOPE INSTALLATION

3. EXCAVATE TOP AND BOTTOM TRENCHES (12"X6"). INTERMITTENT EROSION CHECK SLOTS (6"X6") MAY BE REQUIRED BASED ON SLOPE LENGTH. EXCAVATE TOP ANCHOR TRENCH 2'X3' OVER CREST OF THE SLOPE.

4. IF INTERMITTENT EROSION CHECK SLOTS ARE REQUIRED, INSTALL RECP IN 6"X6" SLOT AT A MAXIMUM OF 30' CENTERS ON THE MID POINT OF THE SLOPE. RECP SHOULD BE STAPLED INTO TRENCH ON 12" CENTERS.

   INSTALL RECP IN TOP ANCHOR TRENCH, ANCHOR ON 12" SPACINGS, BACKFILL AND COMPACT SOIL.

6. UNROLL RECP DOWN SLOPE WITH ADJACENT ROLLS OVERLAPPED A MINIMUM OF 3". ANCHOR THE SEAM EVERY 1'. LAY THE RECP LOOSE TO MAINTAIN GOOD SOIL CONTACT, DO NOT PULL TAUGHT.

7. OVERLAP ROLL ENDS A MINIMUM OF 12" WITH UPSLOPE RECP ON TOP FOR A SHINGLE EFFECT. BEGIN ALL NEW ROLLS IN AN EROSION CHECK SLOT IF REQUIRED, DOUBLE ANCHOR ACROSS ROLL EVERY 12'.

8. INSTALL RECP IN BOTTOM ANCHOR TRENCH (12"X6"), ANCHOR EVERY 12". PLACE ALL OTHER STAPLES THROUGHOUT SLOPE AT 1 TO 2.5 PER SQUARE YARD DEPENDENT ON SLOPE. REFER TO MANUFACTURER'S ANCHOR GUIDE.

CHANNEL INSTALLATION

9. EXCAVATE INITIAL ANCHOR TRENCH (12"X6") ACROSS THE LOWER END OF THE PROJECT AREA.

10. EXCAVATE INTERMITTENT CHECK SLOTS (6"X6") ACROSS THE CHANNEL AT 30' INTERVALS ALONG THE CHANNEL.

11. EXCAVATE LONGITUDINAL CHANNEL ANCHOR SLOTS (4"X4") ALONG BOTH SIDES OF THE CHANNEL TO BURY THE EDGES. WHEN EVER POSSIBLE EXTEND THE RECP 2'-3' ABOVE THE CREST OF CHANNEL SIDE SLOPES.

12. INSTALL RECP IN INITIAL ANCHOR TRENCH (DOWNSTREAM) ANCHOR EVERY 12", BACKFILL AND COMPACT SOIL.

13. ROLL OUT RECP BEGINNING IN THE CENTER OF THE CHANNEL TOWARD THE INTERMITTENT CHECK SLOT. DO NOT PULL TAUGHT. UNROLL ADJACENT ROLLS UPSTREAM WITH A 3" MINIMUM OVERLAP (ANCHOR EVERY 18") AND UP EACH CHANNEL SIDE SLOPE.

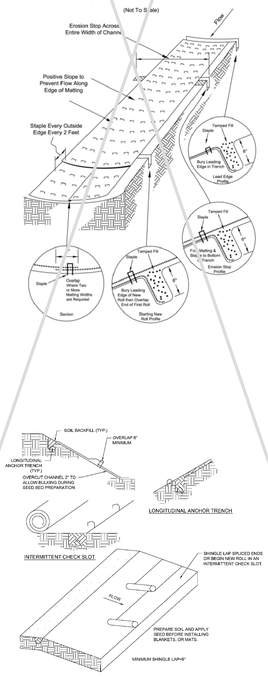
14. AT TOP OF CHANNEL SIDE SLOPES INSTALL RECP IN THE LONGITUDINAL ANCHOR SLOTS, ANCHOR EVERY 18".

15. INSTALL RECP IN INTERMITTENT CHECK SLOTS, LAY INTO TRENCH AND SECURE WITH ANCHORS EVERY 12", BACKFILL WITH SOIL AND COMPACT.

16. OVERLAP ROLL ENDS A MINIMUM OF 12" WITH UPSTREAM RECP ON TOP FOR SHINGLING EFFECT. BEGIN ALL NEW ROLLS IN AN INTERMITTENT CHECK SLOT, DOUBLE ANCHORED EVERY 12'.

17. INSTALL UPSTREAM END IN A TERMINAL ANCHOR TRENCH (12"X6") ANCHOR EVERY 12", BACKFILL AND COMPACT.

18. COMPLETE ANCHORING THROUGHOUT CHANNEL AT 2.5 PER SQUARE YARD USING SUITABLE GROUND ANCHORING DEVICES (U SHAPED WIRE STAPLES, METAL GEOTEXTILE PINS, PLASTIC STAKES, AND TRIANGULAR WOODEN STAKES). ANCHORS SHOULD BE OF SUFFICIENT LENGTH TO RESIST PULLOUT. LONGER ANCHORS MAY BE REQUIRED IN LOOSE SANDY OR CRAVELLY SOILS.



ISOMETRIC VIEW

*SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, AND VEGETATIVE STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS, SEED MIXTURES, AND MULCHING INFORMATION. LINING TO BE TENSAR VMAX SC250 OR APPROVED EQUAL.

NOTE

1. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.

SLOPE PROTECTION
NOT TO SCALE

NOT PART OF THIS PROJECT

TYPICAL COMPOST SOCK CHECK DAM (CS)

1. COMPOST SOCK NETTING SHALL USE A KNITTED MESH FABRIC WITH 1/8 - 3/8 INCH OPENINGS, AND COMPOST MEDIA WITH PARTICLE SIZES 99% < 3 INCHES, AND 60% > 3/8 INCHES (CONFORMING TO MEDIA DESCRIBED IN CHAPTER 6 OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL).

2. COMPOST SOCK CHECK DAMS SHALL BE USED IN AREAS THAT DRAIN 5 ACRES OR LESS.

3. SEDIMENT SHALL BE REMOVED FROM BEHIND THE SOCK WHEN IT REACHES 1/2 THE HEIGHT OF THE CHECK DAM.

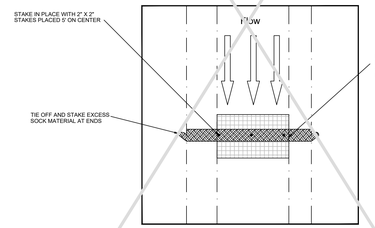
4. COMPOST SOCK CHECK DAMS SHALL BE CONSTRUCTED WITH 12, 18, OR 24 INCH DIAMETER COMPOST SOCKS, AND SHALL COMPLETELY COVER THE WIDTH OF THE CHANNEL. THE MIDPOINT OF THE COMPOST SOCK CHECK DAM SHALL BE A MINIMUM OF 6 INCHES LOWER THAN THE SIDES IN ORDER TO DIRECT FLOW ACROSS THE CENTER AND AWAY FROM THE CHANNEL SIDES. FILTER SOCK CHECK DAMS SHALL BE FILLED TO A DENSITY SUCH THAT THEY SHALL REACH THEIR INTENDED HEIGHT (DIAMETER), AFTER INSTALLATION AND USE, THEY SHALL BE CONSIDERED UNSUITABLE AND IN NEED OF REPLACEMENT AFTER FALLING BELOW 80% OF THEIR MINIMUM REQUIRED HEIGHT (DIAMETER).

5. ALTHOUGH NO TRENCHING IS NECESSARY, COMPOST SOCK CHECK DAMS SHALL BE PLACED ON A GRADED SURFACE WHERE CONSISTENT CONTACT WITH THE SOIL SURFACE IS MADE WITHOUT BRIDGING OVER GAPS, RILLS, GULLIES, STONES OR OTHER IRREGULARITIES.

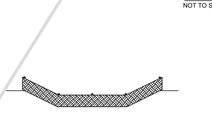
6. PLACE COMPOST SOCK CHECK DAMS SO THAT THE ENDS EXTEND TO THE TOP OF BANK. STAKING FOR COMPOST SOCK CHECK DAMS SHALL USE 2 INCH X 2 INCH X 2 INCH WOODEN STAKES, PLACED 5 FOOT ON CENTER. STAKE LENGTH SHALL ALLOW THEM TO BE DRIVEN 12 INCHES INTO EXISTING SOIL AND ALLOW AT LEAST 2 INCHES ABOVE THE SOCK.

7. SPACE COMPOST SOCK CHECK DAMS SO THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION OR LOWER ELEVATION AS THE TOP OF THE DOWNSTREAM COMPOST SOCK CHECK DAM (AT THE CENTER OF THE CHANNEL). THIS WILL BE INFLUENCED BY THE HEIGHT OF THE SOCKS AND GRADIENT OF THE WATERWAY.

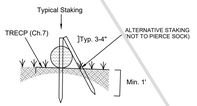
8. A SPLASH APRON MAY BE NEEDED WHERE FLOWS OVER THE SOCK MAY ERODE THE CHANNEL AND UNDERCUT THE COMPOST SOCK CHECK DAM. CREATE THE APRON BY FIXING A LENGTH OF TEMPORARY ROLLED EROSION CONTROL PRODUCT (TRECP - EROSION CONTROL MATTING) OR TURF REINFORCEMENT MATTING STARTING UPSTREAM OF THE SOCK A DISTANCE EQUAL TO THE SOCK HEIGHT AND EXTENDING A LENGTH TWO TIMES THE HEIGHT OF THE COMPOST SOCK CHECK DAM. SEE CHAPTER 7 OF THE ODNR RAINWATER AND LAND DEVELOPMENT MANUAL FOR INFORMATION REGARDING THESE MATERIALS. MATERIALS USED SHOULD BE ABLE TO BE LEFT IN PLACE (E.G. BIODEGRADABLE/PHOTODEGRADABLE TRECP) WITHOUT CREATING PROBLEMS FOR FUTURE MOWING OR MAINTENANCE OF THE CHANNEL.



PLAN VIEW
NOT TO SCALE



CROSS SECTION VIEW
NOT TO SCALE



Staking

NOT PART OF THIS PROJECT

TYPICAL ROCK CHECK DAM (CD)

1. THE CHECK DAM SHALL BE CONSTRUCTED OF 4-8 INCH DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL. ODOT TYPE (D) STONE IS ACCEPTABLE, BUT SHOULD BE UNDERLAIN WITH A GRAVEL FILTER CONSISTING OF ODOT NO. 3 OR 4 OR SUITABLE FILTER FABRIC.

2. MAXIMUM HEIGHT OF CHECK DAM SHALL NOT EXCEED 3.0 FEET.

3. THE MIDPOINT OF THE ROCK CHECK DAM SHALL BE A MINIMUM OF 6 INCHES LOWER THAN THE SIDES IN ORDER TO DIRECT ACROSS THE CENTER AND AWAY FROM THE CHANNEL SIDES.

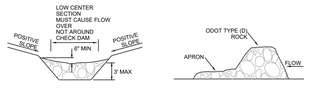
4. THE BASE OF THE CHECK DAM SHALL BE ENTRENCHED APPROXIMATELY 6 INCHES.

5. SPACING OF CHECK DAMS SHALL BE IN A MANNER SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.

6. A SPLASH APRON SHALL BE CONSTRUCTED WHERE CHECK DAMS ARE EXPECTED TO BE IN USE FOR AN EXTENDED PERIOD OF TIME. A STONE APRON SHALL BE CONSTRUCTED IMMEDIATELY DOWNSTREAM OF THE CHECK DAM TO PREVENT FLOWS FROM UNDERCUTTING THE STRUCTURE. THE APRON SHOULD BE 6 INCHES THICK AND ITS LENGTH TWO TIMES THE HEIGHT OF THE DAM.

7. STONE PLACEMENT SHALL BE PERFORMED EITHER BY HAND OR MECHANICALLY AS LONG AS THE CENTER OF CHECK DAM IS LOWER THAN THE SIDES AND EXTENDS ACROSS ENTIRE CHANNEL.

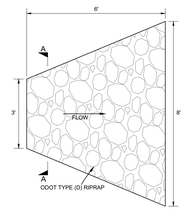
8. SIDE SLOPES SHALL BE A MINIMUM OF 2:1.



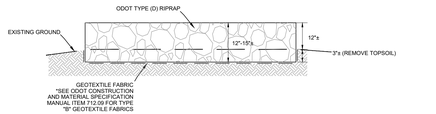
CROSS-SECTION PROFILE

TYPICAL ROCK CHECK DAM
NOT TO SCALE

TYPICAL ENERGY DISSIPATING ROCK APRON (RA)

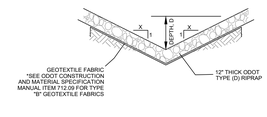


TYPICAL ENERGY DISSIPATING ROCK APRON
PLAN VIEW
NOT TO SCALE

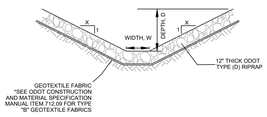


TYPICAL ENERGY DISSIPATING ROCK APRON
SECTION A-A
NOT TO SCALE

TYPICAL ROCK-LINED DITCH

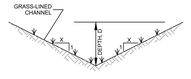


V-BOTTOM DITCH
NOT TO SCALE



FLAT BOTTOM DITCH
NOT TO SCALE

TYPICAL VEGETATED DITCH



V-BOTTOM DITCH
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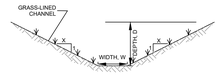

TYPICAL VEGETATED FLAT BOTTOM DITCH
NOT TO SCALE

DITCH DIMENSION TABLE

DITCH	SLOPE	MIN. DEPTH, D (ft.)	MIN. WIDTH, W (ft.)	MIN. SIDE SLOPES (H : V)	CHANNEL LINING	100 YEAR, 24 HOUR STORM MAXIMUM WATER DEPTH (ft.)
A	0.4%	2.0	0.0	3 : 1	ODOT TYPE (D) RIPRAP	1.25
B	0.3%	2.0	0.0	3 : 1	ODOT TYPE (D) RIPRAP	1.26

INLET PROTECTION (IP)

STORM DRAIN INLET PROTECTION DEVICES REMOVE SEDIMENT FROM STORM WATER BEFORE IT ENTERS STORM SEWERS AND DOWNSTREAM AREAS. INLET PROTECTION DEVICES ARE SEDIMENT BARRIERS THAT MAY BE CONSTRUCTED OF WASHED GRAVEL OR CRUSHED STONE, GEOTEXTILE FABRICS AND OTHER MATERIALS THAT ARE SUPPORTED AROUND OR ACROSS STORM DRAIN INLETS.

INLET PROTECTION IS INSTALLED TO CAPTURE SOME SEDIMENT AND REDUCE THE MAINTENANCE OF STORM SEWERS AND OTHER UNDERGROUND PIPING SYSTEMS PRIOR TO THE SITE BEING STABILIZED. DUE TO THEIR POORER EFFECTIVENESS, INLET PROTECTION IS CONSIDERED A SECONDARY SEDIMENT CONTROL TO BE USED IN CONJUNCTION WITH OTHER MORE EFFECTIVE CONTROLS.

NO	DATE	REVISION DESCRIPTION	APPR
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-EC02-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-ED02-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DR: DB	ENG: JP	CK:	ISSUE#:

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SOUDER STATION

NEW ALBANY — OHIO

EROSION & SEDIMENT CONTROL DETAILS - SHEET 1

SCALE: AS NOTED	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG NO.: CU-ED02-S01	REV: 1	

(E-1117)

TEMPORARY SEEDING (TS)

DESCRIPTION

TEMPORARY SEEDINGS ESTABLISH TEMPORARY COVER ON DISTURBED AREAS BY PLANTING APPROPRIATE RAPIDLY GROWING ANNUAL GRASSES OR SMALL GRAINS. TEMPORARY SEEDING PROVIDES EROSION CONTROL ON AREAS IN BETWEEN CONSTRUCTION OPERATIONS. GRASSES, WHICH ARE QUICK GROWING, ARE SEEDED AND USUALLY MULCHED TO PROVIDE PROMPT, TEMPORARY SOIL STABILIZATION. IT EFFECTIVELY MINIMIZES THE AREA OF A CONSTRUCTION SITE PRONE TO EROSION AND SHOULD BE USED EVERYWHERE THE SEQUENCE OF CONSTRUCTION OPERATIONS ALLOWS VEGETATION TO BE ESTABLISHED.

SPECIFICATIONS FOR TEMPORARY SEEDING

LBS / AC	BOTANICAL NAME	COMMON NAME
32	AVENA SATIVA	SEED OATS
10	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS

1. STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
2. TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 14 DAYS OR GREATER. THESE IDLE AREAS SHALL BE SEEDED WITHIN 7 DAYS AFTER GRADING.
3. THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. TEMPORARY SEEDING SHOULD NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
4. SOIL AMENDMENTS--TEMPORARY VEGETATION SEEDING RATES SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION, WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. BASE RATES FOR LIME AND FERTILIZER SHALL BE USED.
5. SEEDING METHOD--SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SPREADER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLYTAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON-SITE AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MULCHING TEMPORARY SEEDING

1. APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH, WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDING MADE DURING OPTIMUM SEEDING DATES ON FAVORABLE, VERY FLAT SOIL CONDITIONS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.

2. MATERIALS:
- STRAW--IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT A RATE OF 2 TONES PER ACRE OR 90 LBS./1,000 SQ. FT. (2-3 BALES)
- HYDROSEEDERS--IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2000 LBS./AC OR 496 LB./1,000-SQ.-FT.
- OTHER--OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TON/AC

3. STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER. ANCHORING METHODS:
- MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT LEFT TO A LENGTH OF APPROXIMATELY 6 INCHES.
- MULCH NETTING--NETTING SHALL BE USED ACCORDING TO THE MANUFACTURES RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
- SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TRACK OR EQUIVALENT MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
- WOOD-CELLULOSE FIBER--WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WT. 750 LB./AC. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL.

DUST CONTROL (DC)

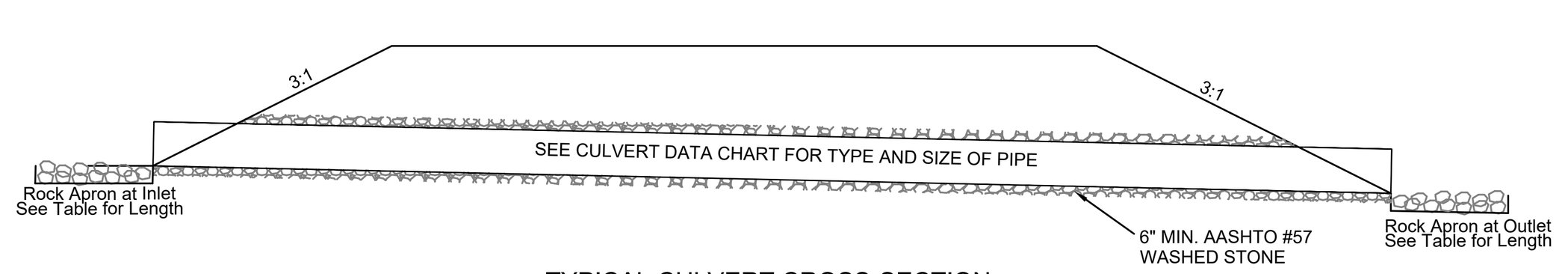
DESCRIPTION

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIR-BORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

SPECIFICATIONS FOR DUST CONTROL

1. VEGETATIVE COVER AND/MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
2. WATERING--SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
3. SPRAY-ON ADHESIVES--APPLY ADHESIVE ACCORDING TO MANUFACTURERS' INSTRUCTIONS.
4. STONE--GRADED ROADWAYS AND OTHER SUITABLE AREAS WILL BE STABILIZED USING CRUSHED STONE OR COARSE GRAVEL AS SOON AS PRACTICABLE AFTER REACHING AN INTERIM OR FINAL GRADE. CRUSHED STONE OR COARSE GRAVEL CAN BE USED AS A PERMANENT COVER TO PROVIDE CONTROL OF SOIL EMISSIONS.
5. BARRIERS--EXISTING WINDBREAK VEGETATION SHALL BE MARKED AND PRESERVED. SNOW FENCING OR OTHER SUITABLE BARRIER MAY BE PLACE PERPENDICULAR TO PREVAILING AIR CURRENTS AT INTERVALS OF ABOUT 15 TIMES THE BARRIER HEIGHT TO CONTROL AIR CURRENTS AND BLOWING SOIL.
6. OPERATION AND MAINTENANCE--WHEN TEMPORARY DUST CONTROL MEASURES ARE USED; REPETITIVE TREATMENT SHOULD BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.
7. STREET CLEANING--PAVED AREAS THAT HAVE ACCUMULATED SEDIMENT FROM CONSTRUCTION SHOULD BE CLEANED DAILY, OR AS NEEDED UTILIZING A STREET SWEEPER OR BUCKET-TYPE END LOADER OR SCRAPER.

TYPICAL CULVERT CROSS-SECTION



TYPICAL CULVERT CROSS-SECTION
NOT TO SCALE

									INLET				OUTLET			
CULVERT ID	WATERSHED	DIA. (in)	LENGTH (ft)	INLET ELEV (ft)	OUTLET ELEV (ft)	SLOPE (%)	VELOCITY (ft/sec)*	PIPE MATERIAL	TYPE OF PROTECTION	LENGTH OF RCP (ft)	NORTHING	EASTING	TYPE OF PROTECTION	LENGTH OF RCP (ft)	NORTHING	EASTING
A	0.3 Ac	12	40	1047.9	1047.7	0.4	5.2	RCP	ODOT TYPE D	6	768,142	1,882,925	ODOT TYPE D	6	768,102'	1,882,922
B	1.8 Ac	12	40	1046.7	1046.5	0.4	5.2	RCP	ODOT TYPE D	6	767,860'	1,882,905'	ODOT TYPE D	6	767,820'	1,882,902'
C	5.6 Ac	18	60	1046.5	1046.4	0.2	6.3	RCP	ODOT TYPE D	6	767,861'	1,882,973'	ODOT TYPE D	6	767,801'	1,882,975'

MANNING'S n FOR REINFORCED CONCRETE PIPE (RCP) = 0.0130
*VELOCITIES CALCULATED ASSUMING PIPES ARE FLOWING FULL

CULVERT DATA CHART

PERMANENT SEEDING (PS)

DESCRIPTION

PERENNIAL VEGETATION IS ESTABLISHED ON AREAS THAT WILL NOT BE RE-DISTURBED FOR PERIODS LONGER THAN 12 MONTHS. PERMANENT SEEDING INCLUDES SITE PREPARATION, SEEDBED PREPARATION, PLANTING SEED, MULCHING, IRRIGATION AND MAINTENANCE.

PERMANENT VEGETATION IS USED TO STABILIZE SOIL, REDUCE EROSION, PREVENT SEDIMENT POLLUTION, REDUCE RUNOFF BY PROMOTING INFILTRATION, AND PROVIDE STORMWATER QUALITY BENEFITS OFFERED BY DENSE GRASS COVER.

SPECIFICATIONS FOR PERMANENT SEEDING

SITE PREPARATION

1. SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
2. THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
3. TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

SEEDBED PREPARATION

1. LIME--AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER 1,000-SQ. FT. OR 2 TONS PER ACRE.
2. FERTILIZER--FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN PLACE OF SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 25 POUNDS PER 1,000-SQ. FT. OR 1000 POUNDS PER ACRE OF A 10-10-10 OR 12-12-12 ANALYSES.
3. THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THE ABOVE-SPECIFIED DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION. TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDING

1. SEEDING SHOULD NOT BE MADE FROM OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.

2. THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":
- FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE SEEDING.
- FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
- APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
- WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER, ROLLER, OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING

1. MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. DORMANT SEEDING SHALL BE MULCHED. 100% OF THE GROUND SURFACE SHALL BE COVERED WITH AN APPROVED MATERIAL.

2. MATERIALS
- STRAW--IF STRAW IS USED IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 POUNDS (TWO TO THREE BALES) PER 1,000-SQ. FT. THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY APPLIED SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000-SQ. FT. SECTIONS AND SPREAD TWO 45-LB. BALES OF STRAW IN EACH SECTION.
- HYDROSEEDERS--IF WOOD CELLULOSE FIBER IS USED, IT SHALL BE APPLIED AT 2,000 LB./AC. OR 46 LB./1,000 SQ. FT.
- OTHER--OTHER ACCEPTABLE MULCHES INCLUDE ROLLED EROSION CONTROL MATTINGS OR BLANKETS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.

3. STRAW AND MULCH ANCHORING METHODS
STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
- MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.
- MULCH NETTING--NETTING SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
- ASPHALT EMULSION--ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURE OR AT THE RATE OF 160 GALLONS PER ACRE.
- SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUIVALENT MAY BE USED AT RATES SPECIFIED BY THE MANUFACTURER.
- WOOD CELLULOSE FIBER--WOOD CELLULOSE FIBER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER WITH THE MIXTURE CONTAINING A MAXIMUM OF 50 POUNDS CELLULOSE PER 100 GALLONS OF WATER.

IRRIGATION

PERMANENT SEEDING SHALL INCLUDE IRRIGATION TO ESTABLISHED VEGETATION DURING DRY WEATHER OR ON ADVERSE SITE CONDITIONS, WHICH REQUIRE ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.

IRRIGATION RATES SHALL BE MONITORED TO PREVENT EROSION AND DAMAGE TO SEEDED AREAS FROM EXCESSIVE RUNOFF.

PERMANENT SEED MIXES

NATIVE SLOPE SEED MIX*

		GRASSES	
OZ / AC	LB / AC	SCIENTIFIC NAME	COMMON NAME
48	3	ANDROPOGON GERADII	BIG BLUESTEM
16	1	BOUTELOUA CURTIPENDULA	SIDE OATS GRAMA
16	1	ELYMUS VIRGINICUS	VIRGINIA WILD RYE
32	2	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
32	2	SORGHASTRUM NUTANS	INDIAN GRASS
TOTAL	9		
		NURSE CROP	
OZ / AC	LB / AC		
	32	AVENA SATIVA	OATS
		FORBES	
OZ / AC	LB / AC		
4	0.25	BIDENS ARISTOSA	SHOWY (SUNFLOWER) TICKSEED
10	0.625	CASSIA FASCICULATA	PARTRIDGE PEA
8	0.50	ECHINACEA PURPUREA	PURPLE CONEFLOWER
0.75	0.047	MONARDA FISTULOSA	WILD BERGAMOT
2	0.125	RATIBIDA PINNATA	GREYHEADED CONEFLOWER
2	0.125	RUDBECKIA HIRTA	BLACKEYED SUSAN
0.5	0.031	SOLIDAGO NEMORALIS	GRAY GOLDENROD
TOTAL	1.70		

*The AEP Native Slope Mix 6/2023 is based on pure live seed and per acre. It should not exceed $350.00 per acre. If the price exceeds $350.00 per acre, please contact Amy Toohey, ajtoohey@aep.com or (614) 565-1480 for clarification or modification. Do not revise seed mix without approval of AEP permit lead (WERS-TDT). Seed mix can be adjusted for Hydro Seeding application - please contact AEP permit lead (WERS-TDT).

LAWN MIX - SUN TO PARTIAL SHADE

LBS / AC	GRASSES	
20	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
100	POA PROTENSIS	KENTUCKY BLUEGRASS
100	LOLIUM PERENNE	PERENNIAL RYEGRASS

LAWN MIX - SHADE

LBS / AC	GRASSES	
20	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
100	POA PROTENSIS	KENTUCKY BLUEGRASS
100	FESTUCA RUBRA	CREEPING RED FESCUE

SWALE AND RETENTION AREA SEED MIX

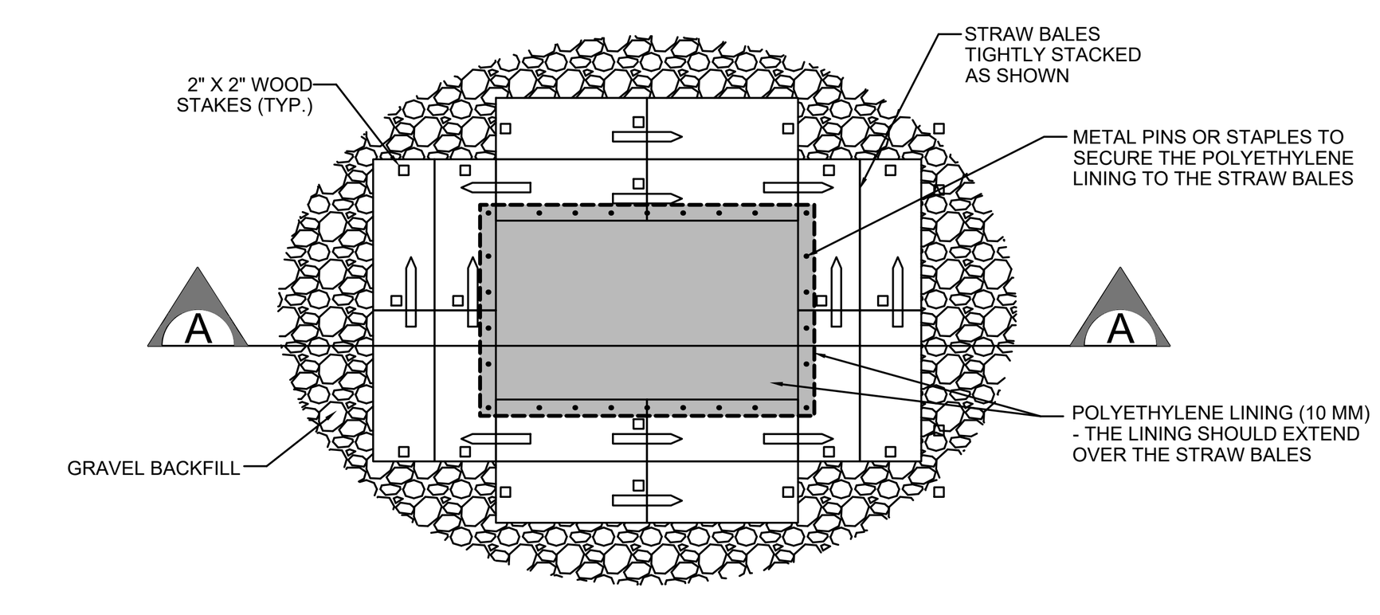
TEMPORARY MATRIX		
OZ / AC	GRASSES	
512	AVENA SATIVA	SEED OATS
160	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
PERMANENT MATRIX		
OZ / AC	GRASSES	
8	CAREX FRANKII	FRANK'S SEDGE
2	ELEOCHARIS OBTUSA	BLUNT SPIKE RUSH
8	CAREX VULPINOIDEA	FOX SEDGE
32	PANICUM VIRGATUM	SWITCHGRASS
2	SCIRPUS ACUTUS	HARD STEM RUSH
OZ / AC	FORBES	
2	ASCLEPIAS INCARNATA	SWAMP MILKWEED
2	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER
2	EUPATORIUM PERFOLIATUM	BONESET
1	HELENIUM AUTUMNALE	AUTUMN SNEEZEWEED
2	MONARDO FISTULOSA	BERGAMOT
2	RATIBIDA PINNATA	YELLOW CONEFLOWER
2	RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN

FARM LANE AREA SEED MIX

TEMPORARY MATRIX		
OZ / AC	GRASSES	
512	AVENA SATIVA	SEED OATS
160	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
PERMANENT MATRIX		
OZ / AC	GRASSES	
64	TRIFOLIUM PRATENSE	RED CLOVER
32	TRIFOLIUM REPENS	WHITE CLOVER

CONCRETE WASHOUT (CW)

1. THE RESIDUE OR CONTENTS OF ALL CONCRETE MIXERS, DUMP TRUCKS, OTHER CONVEYANCE EQUIPMENT AND FINISHING TOOLS SHALL BE WASHED INTO CONCRETE CLEAN-OUT STRUCTURES CONSISTING OF A POLYETHYLENE-LINED STRAW BALE BARRIER WITH GRAVEL BACKFILL. THE LENGTH AND WIDTH OF THESE STRUCTURES SHALL BE AS DETERMINED BY THE CONTRACTOR TO FACILITATE THE PARTICULAR EQUIPMENT USED. THESE STRUCTURES SHALL BE CONSTRUCTED ON LEVEL GROUND AT LEAST 100' FROM THE NEAREST WATERCOURSE, DRAINAGE SWALE OR INLET. AT NO TIME SHALL THE STRUCTURE BE ALLOWED TO BE MORE THAN 50% FULL. THE CONTRACTOR SHALL MAINTAIN THESE PONDS UNTIL ALL CONCRETE PLACEMENT IS COMPLETE FOR THE PROJECT.
2. EMBED THE STRAW BALES 4" INTO THE SOIL. PROVIDE TWO ROWS OF BALES, AS SHOWN ON THE DETAIL, WITH ENDS AND CORNERS TIGHTLY ABUTTING. ORIENT THE STRAW BALES LENGTHWISE WITH BINDINGS AROUND THE SIDES OF THE BALES SO THE WIRE DOES NOT CONTACT THE SOIL. DRIVE 2" X 2" WOOD STAKES THROUGH EACH BALE, TO SECURELY ANCHOR THE BALE AND CONNECT ADJACENT BALES. GRAVEL BACKFILL SHALL BE PROVIDED AND TAMPED AROUND THE OUTSIDE PERIMETER OF THE BALES TO PREVENT EROSION AND FLOW AROUND THE BALES.
3. THE INTENT OF THESE STRUCTURES IS TO COLLECT ALL CONCRETE WASH OUT WATER AND ALLOW IT TO DRY TO A SOLID MATERIAL. AFTER DRYING, THE SOLID MATERIAL CAN BE REMOVED WITH A LOADER OR EXCAVATOR FOR PROPER DISPOSAL. WASH OUT WILL NOT BE PERMITTED IN ANY OTHER AREAS.
4. USE THE MINIMUM AMOUNT OF WATER TO WASH THE VEHICLES AND EQUIPMENT. NEVER DISPOSE OF WASH OUT INTO THE STREET, STORM INLET, DRAINAGE SWALE OR WATERCOURSE. DISPOSE OF SMALL AMOUNTS OF EXCESS DRY CONCRETE, GROUT AND MORTAR IN THE TRASH. ANY SOAPS THAT ARE UTILIZED SHALL BE PHOSPHATE-FREE AND BIODEGRADABLE.
5. ADDITIONAL CONCRETE CLEAN-OUT STRUCTURES SHALL BE CONSTRUCTED WITHIN THE SPECIFIED AREA AS NEEDED BASED UPON THE VOLUME OF WASH OUT GENERATED DAILY.



PLAN VIEW
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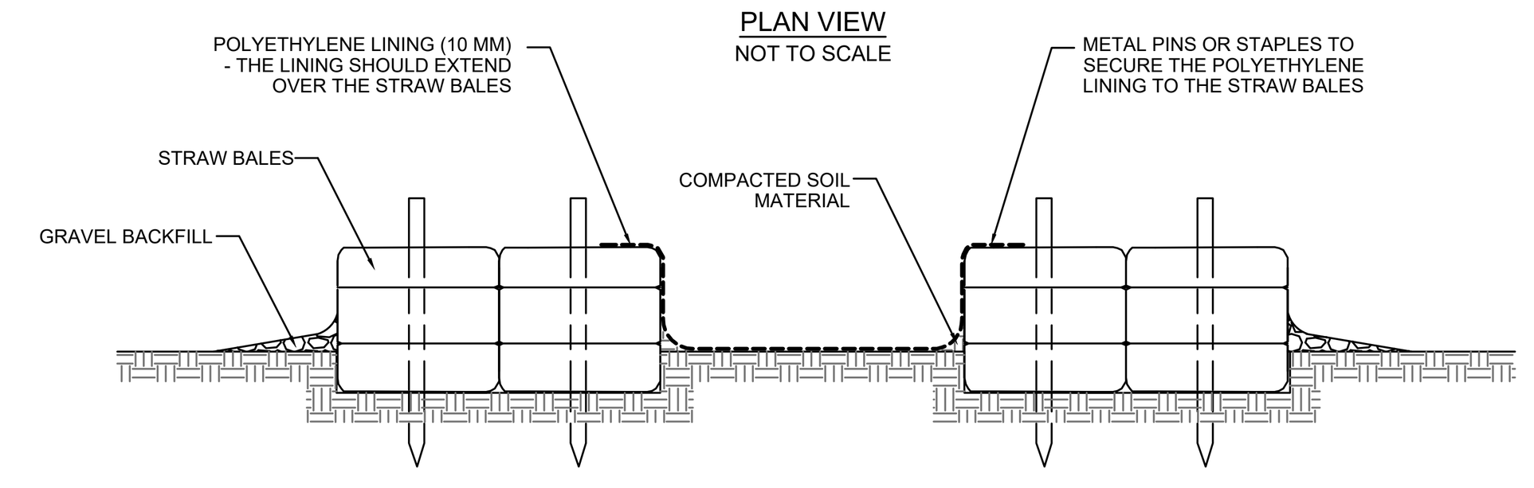


SECTION A-A
NOT TO SCALE

CONSTRUCTION ENTRANCE (CE)

DESCRIPTION

A CONSTRUCTION ENTRANCE IS A STABILIZED PAD OF STONE UNDERLAIN WITH A GEOTEXTILE AND IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC. LOCATED AT POINTS OF INGRESS/EGRESS, THE PRACTICE IS USED TO REDUCE THE AMOUNT OF MUD TRACKED OFF-SITE WITH CONSTRUCTION TRAFFIC.

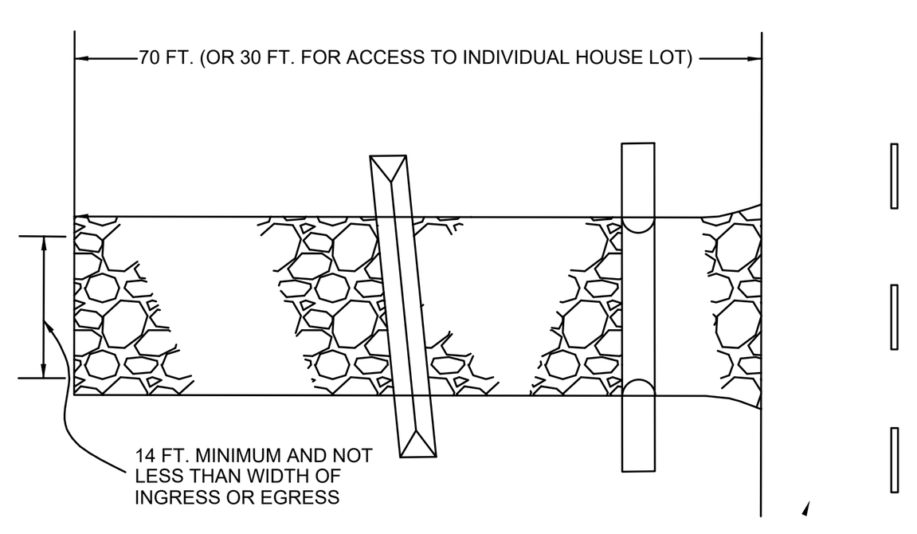
SPECIFICATIONS FOR CONSTRUCTION ENTRANCE

1. STONE SIZE--ODOT #2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH--THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS.)
3. THICKNESS--THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH--THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE--A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:

GEOTEXTILE SPECIFICATIONS FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 LBS.
MINIMUM PUNCTURE STRENGTH	80 PSI.
MINIMUM TEAR STRENGTH	50 LBS.
MINIMUM BURST STRENGTH	320 PSI.
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS<0.6 MM.
PERMITTIVITY	1X10-3 CM/SEC.

6. TIMING--THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT--A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR-A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE--TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL-THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

NOTES:
1. ***FOR THIS PROJECT THE CONSTRUCTION ENTRANCE WILL HAVE A MINIMUM LENGTH OF 100 FEET.***
2. ***CONTRACTOR IS REQUIRED TO HAVE ACCESS TO A VACUUM STREET SWEEPER ON A DAILY BASIS.***



PLAN VIEW
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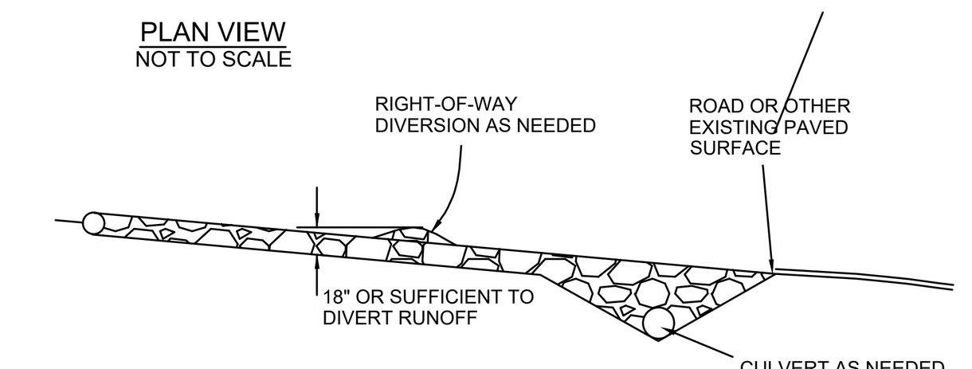


PROFILE
NOT TO SCALE

TEMPORARY SILT FENCE (SF)

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.
4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6 INCH OVERLAP PRIOR TO DRIVING INTO THE GROUND.
10. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING SHALL BE PERFORMED AS APPROPRIATE: 1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE INSTALLED.

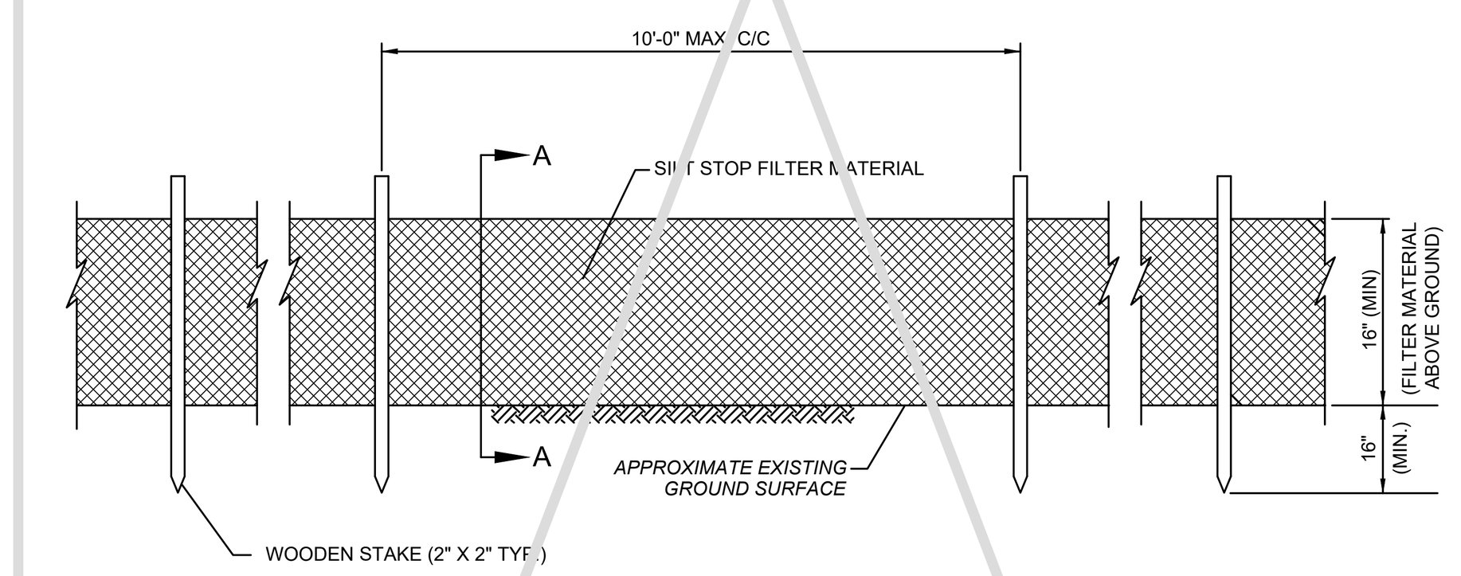
SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE SILT FENCE.

SILT FENCES SHALL BE INSPECTED AFTER AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POST - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FEET. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.
2. SILT FENCE FABRIC - SEE CHART BELOW.

FABRIC PROPERTIES	VALUES	TEST METHOD
MINIMUM TENSILE STRENGTH	120 LBS. (535N)	ASTM D 4632
MAXIMUM ELONGATION AT 60 LBS	50%	ASTM D 4632
MINIMUM PUNCTURE STRENGTH	50 LBS. (220N)	ASTM D 4833
MINIMUM TEAR STRENGTH	40 LBS. (180N)	ASTM D 4533
APPARENT OPENING SIZE	≤0.84MM	ASTM D 4751
MINIMUM PERMITTIVITY	1X10-2 SEC.-1	ASTM D 4491
UV EXPOSURE STRENGTH RETENTION	70%	ASTM G 4355



BACK VIEW
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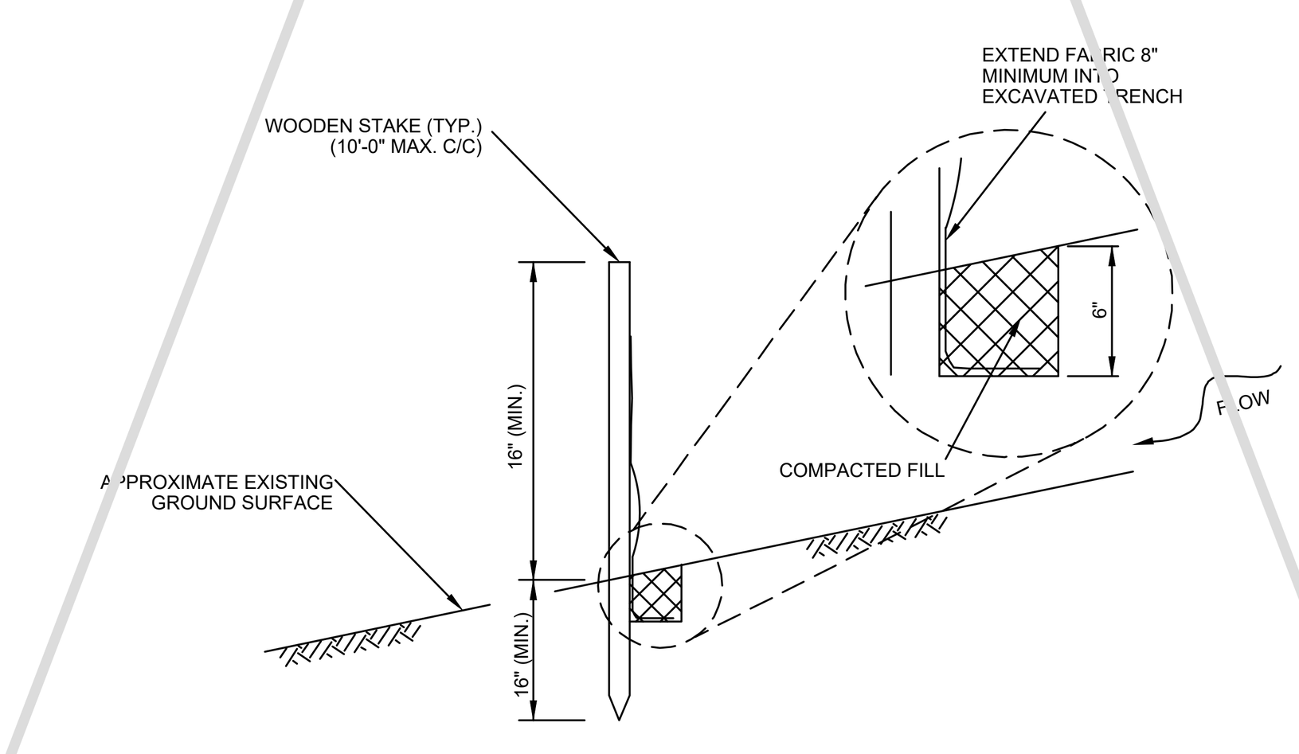

SECTION A-A
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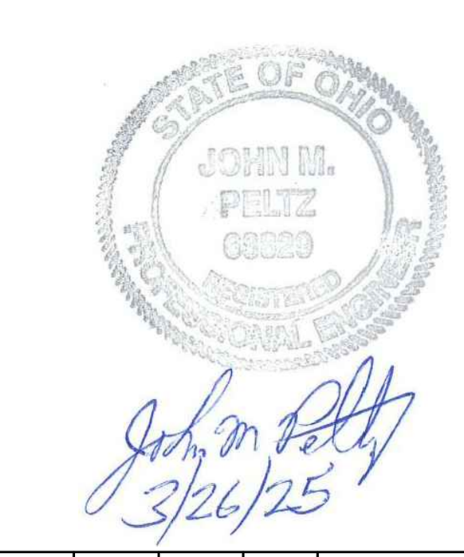
NOT PART OF THIS PROJECT



NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
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SOUDER STATION
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EROSION & SEDIMENT CONTROL DETAILS - SHEET 2

SCALE: AS NOTED	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-ED02-S02	REV 1

(E-1118)

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CITY OF NEW ALBANY
STANDARD NOTES

Revised
July 2024

1 GENERAL
1.1 Standards
1.1.1 The City of Columbus and Ohio Department of Transportation Construction and Material Specifications, current editions, together with the City of New Albany specifications including all supplements thereto (hereafter referred to as Standard Specifications), shall govern all construction items of these plans unless otherwise noted. If conflict between specifications is found, the more strict specification will apply as decided by the City Engineer. CMSC item numbers listed refer to the City of Columbus Construction and Material Specifications.

1.2 Plan Modifications
1.2.1 Any modifications to the work as shown on these drawings must have prior written approval by the City Engineer, City of New Albany. Inspectors have no authority to approve revisions in the field.

1.3 Preconstruction Conference
1.3.1 A pre-construction conference involving a representative of the City of New Albany, the Owner, the Principal Contractor, and all available Sub-Contractors will be held prior to the start of construction.

1.3.2 All easements shall be recorded and submitted to the City Engineer prior to the pre-construction conference.

1.3.3 During the conference the Contractor shall submit his construction schedule, proposed schedule for controlling siltation and erosion, and for temporary and permanent seeding for the project.

1.4 Working Hours
1.4.1 City Ordinance 521.12 restricts the hours of work to 7:30 am to 7:00 pm.

1.4.2 Work will not be permitted on Sundays unless otherwise approved by the City Manager.

1.5 Inspection
1.5.1 Inspection on this project will be provided by the representatives of the City of New Albany.

1.5.2 The Owner shall deposit with the City of New Albany the total estimated costs for construction inspection prior to any construction operations.

1.5.3 The Contractor shall notify the City Engineer at least 48 hours prior to construction.

1.6 Work Within Public Right of Ways
1.6.1 All trenches within public right-of-way shall be backfilled according to the approved construction drawings or securely plated during non-working hours. Trenches outside these areas shall be backfilled or shall be protected by approved temporary fencing or barricades during non-working hours. Clean up shall follow closely behind the trenching operation. Trenches within City right of way shall be backfilled per item 911, City of Columbus Construction and Material specification. Item 912 (Type 1 Only) compacted granular backfill shall be used within the 45 degree influence plane of paved surfaces.

1.6.2 The contractor shall be responsible for the condition of trenches within the right-of-way and public easements for a period of 2 (two) years from the final acceptance of the work, and shall make any necessary repairs at no cost to the City of New Albany. The Developer/Contractor shall provide a letter to the City indicating any settlement of the trenches will be repaired at their expense for a period of 5 (five) years from the date of acceptance of the subdivision or site (whichever applicable).

1.6.3 Non-rubber tired vehicles shall not be moved on public streets. The City Engineer may grant exceptions where short distances and special circumstances are involved. Granting exceptions must be in writing, and any damages must be repaired to the satisfaction of the City of New Albany.

1.6.4 No materials, including pipe, shall be stored within the public right-of-way or within one hundred (100) feet of any intersecting street or driveway. During non-working hours, storage of equipment shall comply with these same requirements. Compliance with these requirements along with additional provisions of the contract specifications shall not relieve the contractor of their legal responsibility to maintain job safety.

1.6.5 Any deteriorated pavement due to construction operations shall be saw cut and removed and replaced as per City of Columbus Standard Drawing 2130 Dr.A. The location of the saw cut shall be determined by the City Engineer in the field.

1.6.6 When a new roadway is to adjoin an existing roadway any existing underdrain is to be maintained, or replaced if not functional. A relief joint shall be constructed at the intersection of the existing and new road.

1.6.7 Ingress and egress shall be maintained at all times to public and private property. Access to all adjoining properties shall be maintained at all times.

1.6.8 Access to the site shall be provided through the construction access drive (only) as shown on the erosion control plan.

1.6.9 When mail boxes, road or street name signs and supports interfere with construction, the contractor shall remove and erect them in temporary locations during construction in a manner satisfactory to the City Engineer and U.S. Postal Service. After completion of the construction and before final acceptance of the project the contractor shall erect the mailboxes, road or street name signs and supports in a permanent location in accordance with the plans unless otherwise directed by the City Engineer. Removal, temporary erection and permanent erection of mailboxes shall be in accordance with U.S. Postal regulations. This work shall be performed at no cost to the City or the property owners.

1.6.10 Trenches along roadways shall be protected in accordance with the ODOT "Drop offs in Work Zones" policy copies of which are available from the Ohio Department of Transportation, Bureau of Traffic, 1980 E. Broad Street, Columbus, Ohio 43215.

1.7 Equipment on Public Roads
1.7.1 Non-rubber tired vehicles shall not be moved on public streets. The City Engineer may grant exceptions where short distances and special circumstances are involved. Granting exceptions must be in writing, and any damages must be repaired to the satisfaction of the City of New Albany.

1.8 Traffic Maintenance
1.8.1 All traffic control devices shall be furnished, erected, maintained and removed by the Contractor in accordance with the Ohio Manual of Uniform Traffic Control Devices for Construction and Maintenance Operations (current edition), copies of which are available from the Ohio Department of Transportation, Bureau of Traffic, 1980 West Broad Street, Columbus, Ohio 43215.

1.8.2 All traffic lanes shall be fully open to traffic on all public roadways. Any lane closings must be coordinated with the City Engineer at least 48 hours prior to the lane closure.

1.8.3 Steady-burning Type "C" lights shall be required on all barricades, drums, and similar devices in use at night.

1.8.4 Manual control of traffic by anyone other than a police officer is not permitted.

1.8.5 The maintenance of traffic should follow Typical Application (TA)-6 "Shoulder Work with Minor Encroachment" from the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) current edition and ODOT SCD MT-101.90 for drop off requirements.

1.8.6 The minimum lane width of 10 feet must be maintained if the work zone encroaches in to the traveled lane. If this requirement cannot be met, the lane must be closed and flaggers employed following Typical Application (TA)-10 "Lane Closure on a Two-Lane Road Using Flaggers" from the Ohio Manual of Uniform Traffic Control Devices (OMUTCO) current edition.

1.8.7 This operation may be performed at any time, except during peak hours (7am – 9am and 4pm-6pm).

1.8.8 If in the opinion of the City Engineer, the Contractor fails to comply with these requirements and the provisions of the approved maintenance of traffic plan, the City Engineer shall suspend work until all requirements are met. Any costs or delays incurred as a result of the failure shall be the full responsibility of the Contractor.

1.8.9 The following devices must meet NCHRP 350 or MASH-08 before the devices are installed on the project: drums, cones, vertical panels and the panel support, portable sign supports, temporary impact attenuators, temporary concrete barrier, and barricades.

1.8.10 Payment for all traffic maintenance items shall be included within the price bid for the project improvements.

1.8.11 All permanent traffic controls not in conflict with the temporary controls shall be maintained throughout this project by the Contractor. Permanent traffic controls may be temporarily relocated, as approved by the Engineer. The Contractor shall assume all liability for missing, damaged and improperly placed signs.

1.8.12 The Contractor shall be responsible for the reinstallation and/or replacement of all permanent traffic control devices damaged or removed during the construction. Permanent traffic control no longer in conflict with temporary traffic control shall be replaced immediately.

1.9 Existing Traffic Sign Maintenance
1.9.1 Special care shall be taken to maintain existing signs. If necessary, the contractor shall relocate these signs out of the way of construction, but in conformance with OMUTCD. Any damaged signs shall be replaced at the expense of the contractor.

1.10 Local Access
1.10.1 Ingress and egress shall be maintained to all residential and commercial properties. Driveway closure may be necessary to enable work on or in front of a drive. The contractor will be responsible for notifying owners, residents, or business operators in writing at least 48 hours but not more than 72 hours prior to closure. The engineer shall be given a list of the persons that were given notices with the date of notice included. Closure is permitted only during work hours and access must be returned at the end of each working day. Properties with multiple drives may have one drive closed at a time, while work is performed in the area of the closed drive. Individual drive closures shall be kept to the minimum time needed for construction activities. Every effort must be made to accommodate the owner's need for access.

1.11 Dust Control
1.11.1 The contractor shall be responsible for providing Dust Control measures in accordance with COCCMS Item 616. Dust control operations shall be performed on a periodic basis and/or as directed by the City Engineer to alleviate or prevent a dust nuisance originating within the project limits. Calcium chloride on areas to be seeded and mulched will not be permitted. The cost for all dust control measures shall be included in the price bid for the project improvements.

1.12 Maintain Drainage
1.12.1 The flow in all sewers, drains, field tiles and watercourses encountered shall be maintained by the Contractor. Whenever such watercourses and drains are disturbed or destroyed during the prosecution of the work, they shall be restored by the Contractor to a condition satisfactory to the City Engineer.

1.13 Replacement of Drain Tile and Storm Sewer
1.13.1 All drain tile and storm sewers damaged, disturbed, or removed as a result of the Contractor's operations shall be replaced with the same quality pipe or better, maintaining the same gradient as existing. The drain tile and/or storm sewer shall be connected to the curb sub-drain, storm sewer system or provided with an outlet into the roadway ditch as applicable. Replaced drain tile/storm sewer shall be laid on bedding compacted to 98% maximum density.

1.14 Dewatering
1.14.1 Contractors installing any well, well point, pit, or other device(s) used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report with the Ohio Department of Natural Resources within 30 days of the well completion in accordance with the Ohio Revised Code Section 1521.16 and 1524.05. In addition, any such facility shall be completed in accordance with Section 1521.15 of the Ohio Revised code. For copies of the necessary well log, drilling report, or registration forms, contact:

Ohio Department of Natural Resources
Division of Water
Fountain Square
Columbus, Ohio 43224-1387
(614) 265-6717

1.14.2 The contractor shall be responsible to the ODNR for registry, maintenance and abandonment of any withdrawal device used in the construction of this project.

1.14.3 Any well, well point, pit, or device installed for the purpose of lowering the ground water to facilitate construction of this project shall be properly abandoned in accordance with the provisions of Section 3745.9.10 of the Ohio Administrative Code or in accordance with the provisions of this plan.

1.14.4 The outlet for the well shall be directed into a suitable erosion control device as approved by the City Engineer.

1.14.5 If during construction of the sewer, the water wells belonging to nearby residences are dewatered, the contractor shall provide potable water to the residents. Bottled water will be provided in 4 hours and a 500 gallon water tank hooked up to the existing plumbing system will be provided within 48 hours should well service become dewatered. If the well is unable to be re-commissioned after construction, a tap to a water line shall be provided if available or another well dug, at no extra cost to the residents.

1.15 Blasting
1.15.1 If the contractor intends to use blasting during excavation, the blasting shall be in accordance with the City of a New Albany Ordinance 1505.

1.16 Street Lighting
1.16.1 Contractor Requirements
(a) The contractor must register with the City of New Albany and show evidence of liability insurance and a copy of their State of Ohio license.
(b) Obtain required permits through the New Albany Service Department and Community Development Department.

1.16.2 Street Light Submittals
(a) A site development plan must be submitted by Ohio Registered Engineer to the City of New Albany Service Department for preliminary review. The plans need to show the following information:
   (1) Property lines.
   (2) Utility and drainage easements.
   (3) Storm drains and catch basins.
   (4) Street light layout.
(b) Submit three (3) copies of the standard construction drawings to Community Development for review to receive approval. Permit must be issued prior to beginning work.
(c) Information on the construction drawings are to include:
   (1) Location of light poles, disconnect switch, and power source.
   (2) Voltage drop calculations, loads, wire size, and over-current protection.
   (3) Photo cell location shown near or at disconnects.
   (4) Foundation and rebar placement details for pole bases.

1.16.3 Inspection Requirements
(a) The Contractor must schedule inspections through the Community Development.
(b) The following inspections from the Community Development Department are required:
   Rough inspections
   (1) Conduit Depth. (100% of conduit must be inspected before burial)
   (2) Ground rod and rebar connections
   (3) Rebar reinforcement of light pole foundation

Final inspection
(1) Final connections at disconnect and light poles.
(2) Demonstrate 25 OHMS or less to the ground or add a second ground rod.
(3) Light pole finish (scratches, dents or paint defects) shall be repaired if damaged.
(4) Final inspection demonstrating the operation of all lights

1.16.4 Installation Requirements
(a) This work shall consist of furnishing and installing electrical materials and equipment complete and ready for service, in reasonably close conformity with locations, dimensions, and grades shown on the plans or as ordered by the City Engineer. This work shall also include necessary excavation and backfill, and disposal of discarded materials, and restoration of disturbed areas.
(b) Foundations shall have a sleeve for the grounding electrode conductor. The connection to the ground rod shall be by exothermic welding or listed pressure connector. The ground rod shall be driven 8 feet into undisturbed earth next to the pole base.
(c) Trenches adjacent to the pavement shall be excavated in a manner that will prevent the curb from moving or separating from the road base. Minimum distance from the curb to the ditch shall be 2 feet.
(d) Where conduit crosses the street, a pull-box shall be installed on both sides of the street and at directional changes more than 45 degrees. No conduit runs to exceed 200' between junction points.
(e) Conduit shall be schedule 40 PVC and shall be at a depth of at least 24".
(f) Where, in the opinion of the Engineer, an excavation for a foundation has revealed an unstable condition at the bottom of the excavation, the foundation shall be deepened or enlarged in size as directed by the Engineer. Payment for additional quantities of excavation and foundation concrete required by the Engineer for this purpose shall be made by the Contractor. If a cave-in should occur during the excavation, the Contractor may continue excavation with use of a casing, sleeves, or other methods, with the approval of the Engineer.
(g) Anchor bolts for light poles shall be installed in the foundations in accordance with approved shop drawings and anchor bolt setting templates. The tops of foundations shall be finished smooth and level. Anchor bolt settings for light poles shall provide that light poles predominantly illuminating a mainline roadway shall be positioned with the arm of the pole perpendicular to the longitudinal centerline of the roadway at that location. After forms have been removed, excavated spaces around the foundations shall be backfilled with suitable materials placed and tamped in thin layers as directed by the Engineer.
(h) When pull boxes are installed in paved areas, an adequate area shall be removed by saw cutting on the sides, or by removal back to an expansion joint. The cover surface shall be adjusted to be slightly above the surrounding pavement.

1.16.5 General Requirements
(a) Street lighting illumination and installation shall meet the New Albany Standards.

Luminaire supports shall be a Holophane brand Hallbrook Series, with a 15' pole plus goose arm(s).
- **Reference for single head pole is Model HLBK ALN 15 1A QSM CMC AGB.**
- **Double Head pole (twin Goosenecks) shall be Model HLBK ALN 15 2A QSM CMC ABG.**
- **Clam Shell Pole Base shall be Model GWBA512RP99P335.**
- **Pole and Base shall be factory painted New Albany Green (Paint Reference PMS 5535).**

Luminaires shall be:
- **Holophane Brand Glaswerks LED Hallbrook Model GSLF3 P40 40K MVOLT ASY QSM CMC.**
- **Color Temperature 3000K.**
- **Photocontrol receptacle reference PR3.**
- **120-277V.**
- **Luminaire housing shall be factory painted New Albany Green (Paint Reference PMS 5535).**

(1) This work shall consist of furnishing and installing electrical materials and equipment complete and ready for service, in conformity with the locations, dimensions, and grades shown on the plans or as ordered by the Engineer. This work shall also include necessary excavation and backfill, and disposal of discarded materials, and restoration of disturbed facilities and surfaces.
(2) Each system shall conform as to voltage, amperage, frequency and type as specified by design. The Contractor shall furnish and install all incidentals necessary to provide a complete and practical working unit or system. All installations shall be in accordance with the National Electrical Code and shall also conform to local laws and codes governing such work. The Contractor shall obtain and pay for all permits required. In order to provide the necessary requirements for the proposed lighting system, the Contractor shall cooperate with the agency which will furnish electrical service also hereinafter referred to as the supplying agency.
(3) Light poles conforming to approved shop drawings shall be set in the ground, erected up on the completed concrete foundations or other specified type of mounting. Light poles shall be plumbed. After erection, each light pole shall be adequately grounded and shall have hand hole covers or transformer base doors fastened in place. After erection, painted poles shall be inspected for defects in the painted surfaces. Minor scratches shall be given two coats of matching paint. The second coats

shall not be applied until after the first coat has adequately dried. Poles having major scratches or defects in the painted surfaces will not be accepted.
(4) The contractor shall furnish all of the materials in accordance with the listed specifications. The equipment list and receipts shall be delivered to the Service Department. A copy of the receipt shall be provided to the City Engineer.
(5) The contractor shall provide the required number of poles complete with light fixture, bulb, wiring, and pedestal to the City. The equipment shall be delivered to the Service Department and a copy of the receipt shall be provided to the City Engineer.
(6) Street fixtures shall be controlled to operate at the same time when in close proximity or on the same street in the areas they serve. Some areas may require a single photocell for each light, while others may be joined to one photocell. In no case shall there be more than 6 lights on a photocell. The photo controller shall be placed near the disconnect box.

1.16.6 Material Specifications

(a) Disconnect box for a 120 rated current circuit shall be mounted to a 4x6 treated lumber pole containing a circuit breaker and have a lockable door. The box needs to be a minimum of 24 inches above final grade. Disconnect box for a 480 volt circuit shall be stainless steel in material and mounted to a concrete footer. The box shall be a minimum of 30 inches tall, 18 inches wide, and 15 inches deep. The concrete footer shall exceed 4 inches in all directions beyond base of disconnect box. The access door on disconnect shall be a minimum of 16 inches wide by 23 inches tall. The door shall have a latching handle that can be locked by padlock, and hinged on one side.
(b) Wiring for a 120 volt circuit to the pole and/or disconnect shall be 6 gauge in size, copper conductor, and have a USE jacketing or equivalent thickness. Wiring for a 480 volt circuit to the pole and/or disconnect shall be 4 gauge in size, copper conductor, and have a USE jacketing or equivalent thickness. Wiring going up all poles to the load shall be 10 gauge stranded copper wire. The hot lead shall have a black jacket, neutral lead shall have a white jacket, and the ground lead shall have a green jacket.
(c) Each electrical circuit shall have a fuse in the pole base. The fuse holder must be capable of accepting #6 awg on line side and 10 gauge on load side. 480 volt circuits must be capable of passing power to another pole on the line side of the holder.
(d) Pull boxes in residential areas shall be 18 inches long, 12 inches wide and 18 inches deep in size or equivalent. All 480 volt circuit pull boxes shall be traffic rated. The 480 volt boxes shall be 25 inches long, 16 inches wide, and 18 inches deep in size or equivalent. All pull boxes must have the word "electrical" embossed on the cover of the box. Plates attached to the cover will not be accepted. All pull boxes must be a minimum of curb height or final grade.

1.17 Permits
1.17.1 The Contractor shall be responsible to obtain all necessary permits unless otherwise noted.

1.17.2 A tap permit for domestic and commercial waterline services must be obtained from the City of Columbus and the City of New Albany prior to making the tap into the public waterline.

1.17.3 No service connection permits shall be issued or connections made to any existing service taps until waterlines have been disinfected (chlorinated).

1.17.4 Excavation and Driveway Permit(s) for work within the public right-of-way limits shall be obtained from the City as warranted.

1.17.5 No building permits will be issued until all punch list items are completed to the satisfaction of the City of New Albany. Domestic waterline taps for potable use and fire supply and sanitary sewer connection permits must be coordinated with the City of Columbus and the City of New Albany and all associated fees must be paid prior to making the tap. Water service will not be provided until all lines have been chlorinated.

1.18 Construction Layout
1.18.1 General Field layout control will be provided by the Owner. Provisions for all other construction staking required to accomplish the utility improvements shall be performed by a State of Ohio Licensed Professional Surveyor in accordance with Contract Documents.

1.18.2 All construction layout stakes (placed at intervals not to exceed 50') are to be set on the opposite side of the trench from where the excavated soil is placed. Stakes are to be preserved by the Contractor. If the above is not followed, work shall be suspended until the Contractor has requested re-staking, stakes have been replaced, and revised cut sheets have been approved.

1.18.3 Construction shall not be initiated until cut sheets have been submitted to the City Engineer's office in digital format.

1.19 Clearing and Grubbing
1.19.1 Any additional clearing and grubbing beyond that performed as part of the Mass Excavation shall be included as part of this plan. Costs associated with tree, brush or stump removal shall be included with the unit prices for the improvements. Trees planned to be removed shall be shown on the plans. City approval shall be obtained prior to removing trees.

1.19.2 Silt Fence or Snow Fence shall be used, if deemed necessary, to preserve the maximum amount of existing trees and vegetation.

1.20 Aggregate Base and Backfill Material
1.20.1 Aggregate base and backfill material shall be free of recycled concrete, reclaimed asphalt pavement, brick, wood or any other deleterious material that would prevent proper compaction from being achieved.

1.21 Prohibited Construction Activities
1.21.1 The contractor shall not use construction proceedings, activities or operations that may unnecessarily impact the natural environment or the public health and safety. Prohibited construction proceedings, activities or operations include, but are not limited to:

(a) Disposing of excess or unsuitable excavated material in wetlands or floodplains, even with the permission of the property owner.
(b) Indiscriminate, arbitrary, or capricious operation of equipment in any stream corridors, any wetlands, any surface waters, or outside the easement limits.
(c) Pumping of sediment-laden water from trenches or other excavations into any surface waters, any stream corridors, any wetlands or storm drains.
(d) Discharging pollutants such as chemicals, fuel, lubricants, bituminous materials, raw sewage, and other harmful waste into or alongside of rivers, streams, impoundments or into natural or man-made channels leading thereto.
(e) Permanent or unspecified alteration of flow line of a stream.
(f) Damaging vegetation outside of the construction area.
(g) Disposal of trees, brush and other debris in any stream corridors, an wetlands, and surface water, or at unspecified locations.
(h) Open burning of project debris without a permit.
(i) Storing construction equipment and vehicles and/or stock piling construction materials on property, public or private, not previously specified by the City Engineer for said purpose.

2 SANITARY SEWER
2.1 Clean Water Connections Prohibited
2.1.1 Roof drains, foundation drains, and other clean water connections to the sanitary sewer system are prohibited on this project.

2.2 Risers
2.2.1 Service risers, Item 914, shall be installed where depth from the wye fitting to the existing or proposed surface elevation exceeds 10 feet. Top of riser shall be no more than 9 feet +/- below existing or proposed surface elevation, whichever is higher.

2.3 Sanitary Services
2.3.1 All sanitary services shall be a minimum of 2.08% grade (1/4" per foot).

2.3.2 All sanitary sewer lines installed on this project shall be in accordance with CMSC Item 901 & ASTM D-2321, or approved equal. Minimum requirements for sanitary sewer on the project shall be PVC sewer pipe ASTM D-3034 or High Density HDPP ASTM F-2736 & F-2764. All joints shall be gasketed integral bell & spigot in accordance with ASTM D-3212.

2.3.3 All sanitary sewer including service lines shall be subject to and pass infiltration or ex-filtration tests according to CMSC Item 901.20 and must be approved for use by the City Engineer before any service connections are tapped into sewers. Refer to Item 901.20 (3) for sanitary manhole testing requirements. All public sanitary sewer lids shall be stamped NEW ALBANY OHIO SANITARY SEWER. Private sewers shall be stamped SANITARY SEWER.

2.3.4 Existing manhole shall be core cut to accept proposed sanitary sewer. All manholes shall be tested in accordance with CMSC Item 901.20.

2.3.5 All precast products shall be inspected at the location of manufacture (refer to Note Block 4).

2.3.6 Provide cut sheets in digital format to the City's inspection agency.

2.4 Deflection Testing
2.4.1 All sewer lines installed on this project using P.V.C., HDPE or HDPP pipe will be deflection tested by pulling an approved Mandrel equal in diameter to 95% of the pipe diameter through the pipe after pipe is backfilled and a sufficient amount of time is allowed for weight transfer of the backfill to the pipe and bedding, as required under CMSC item 901.21. Testing shall be performed no sooner than 30 days after installation and backfilling.

2.5 Trench Dams
2.5.1 Cut off trench dams, in accordance with item 901.11, shall be constructed between each pair of manholes.

2.6 Temporary Bulkheads
2.6.1 Temporary bulkheads shall be placed where indicated on the plans, and shall remain in place until removal is directed by the City Engineer.

2.7 Wye Poles
2.7.1 Wye poles shall be placed at the end of sanitary service laterals and at the end of stub mainlines ending 5 feet or more from a manhole. The wye pole shall be placed from the pipe to at least three feet above the proposed grade. A 2 foot long minimum section of rebar shall be placed vertically alongside the wye pole 6 inches below the proposed grade. The rebar shall not be fastened in any way to the wye pole.

2.8 Manhole Coring
2.8.1 The contractor shall furnish all material, equipment, and labor to make connections to existing manholes. The sewer pipe to manhole connections for all sanitary sewers shall be flexible and watertight. All holes shall be neatly cored. The sewer pipe barrel at the springline shall not extend more than 1-inch beyond the inside face of the manhole. Any metal that is used shall be Type 300 Series Stainless Steel. The connection may be any of the following:
1. Rubber Sleeve with Stainless Steel Banding.
   a. Kor-N-Seal as manufactured by National Pollution Control Systems, Inc.
   b. Lock Joint Flexible Manhole Sleeve as manufactured by Interpace Corporation.
   c. Or equal as approved by the City Engineer.

2. Rubber Gasket Compression.
   a. Press Wedge II as manufactured by Press-Seal Gasket Corporation.
   b. Dura Seal III as manufactured by Dura Tech, Inc.
   c. Link-Seal as manufactured by Thunderline Corporation.
   d. Or equal as approved by the City Engineer.

2.9 Sewer Inspection
2.9.1 See note block 4.14 for inspection requirements.

3 STREETS
3.1 Concrete Base Construction
3.1.1 In addition to the requirements set forth in the City of Columbus Specifications, the following shall apply:
a) No water shall be added to the concrete while in the mixers unless specifically authorized by the City Engineer or his representative.
b) Subgrade shall be at proper moisture content prior to base construction. Water shall be added to the subbase if necessary.
c) Concrete exceeding a 4" slump or being on the truck for 60 minutes or more will be rejected from the project.

3.2 Street Pre-Construction Conference
3.2.1 Prior to street construction a pre-construction conference shall be held at the City Hall with the owner and superintendent/foremen of the base, curb and asphalt sub-contractors. The pre-construction conference shall be scheduled by the contractor for 48 hours prior to the pouring of the curb. The purpose of the meeting is to ensure a 6" curb height is provided upon the completion of the street system.

3.3 Transverse & Longitudinal Joints
3.3.1 Transverse contraction and longitudinal joints shall be constructed as per 305.01 paragraph (C) & (D). (Including 26' pavement)

3.3.2 No transverse joints shall be permitted adjacent to a new pavement surface which is more than 24 hours old, weather permitting, except for joints which have existed over weekends and holidays. The surface course shall be continuous to the existing pavement surface.

3.3.3 The contractor shall provide a written procedure on how he/she intends to construct the final two courses of asphalt prior to construction for approval by the City Engineer. The procedure should include specifics for construction of intersections.

3.4 Curb Height
3.4.1 When constructing the pavement (concrete base to asphalt courses) the contractor shall ensure that a 6" height curb is available upon completion of street construction. The City may require this curb to be removed and reconstructed if this height deviates more or less than ½" of the 6" required height. All costs associated with the above shall be borne by the contractor.

3.5 Crack Sealing
3.5.1 The contractor, thirty (30) days prior to project acceptance by City Council or as directed by the City Engineer and weather permitting shall crack seal all pavement cracks as directed by the City Engineer. The crack seal shall be in accordance with Item 423. If acceptance occurs in winter months, crack seal may be delayed until weather permits.

3.6 Pavement Relief Joints
3.6.1 Asphalt shall not be placed in the pavement relief joints until permanent or temporary street signs are erected.

3.7 Curb Stamps
3.7.1 During installation, curb shall be stamped with the following symbols at the noted utilities:
"X" – Utility Crossing
"T" – Sump Pump Junction Box
"W" – Water Service
"WV" - Water Valve
"S" - Sanitary Sewer Crossing

3.8 Detectable Warnings
3.8.1 Type A detectable warning shall be installed as per COC Std. Dwg. 2319. Material shall be pre-cast manufactured 4"x8"x2.25" red clay brick.

4 STORM SEWER
4.1 Storm Sewer Pipe and Structures
4.1 Pipe specification for the plan improvements may be in accordance with the following (Except as designated within the profiles.)

STATE OF OHIO
JOHN M. PELTZ
REGISTERED PROFESSIONAL ENGINEER
John M Peltz 3/26/25

NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-EDO2-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

BAIR GOODIE
BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
TEL: 330.343.3499 FAX: 330.343.9505
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OHIO UTILITIES PROTECTION SERVICE

OLD DWG #: | STD DWG #:

AEP OHIO TRANSMISSION COMPANY, INC.
SOUDER STATION
NEW ALBANY OHIO

CITY OF NEW ALBANY STANDARD NOTES - SHEET 1

SCALE: AS NOTED	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T10593117002	APPD: JP/BGA	DATE: 09/11/2024
	1 RIVERSIDE PLAZA COLUMBUS, OH 43215	DWG. NO. CU-GN02-S01	REV 1

(E-1119)

A) Reinforced concrete pipe ASTM C-76 (CMSC 706.02). Concrete classification shall be in conformance with the following unless otherwise referenced by the profiles.
- 12" -15" diameter Class IV- 18" – 24" diameter Class III
- 27" and larger diameter Class II, or

B) High Density Polypropylene, HDPP 12" – 60" Polypropylene Double Wall ASTM F 2736 12" thru 30" and ASTM F- 2881 36" thru 60" with integral bell & spigot meeting the watertight requirements of ASTM D 3212 (CMSC 720.13 & ODOT 707.65), or

C) Smooth-lined corrugated polyethylene pipe (CMSC Item 720.12) (Hancor Hi-Q, ADS N-12, or equal). Except any sewers within Public R/W or as directed by the City Engineer, or

D) P.V.C. sewer pipe ASTM D3034 with joints as per ASTM D3212. PVC sewer pipe placement shall be limited to sewers through 10" diameter.

4.2 The Contractor shall provide written certification to the Engineer reflecting the pipe material to be used along with the current City consignment list identifying the approved pipe material specification.

4.3 All bedding shall be in accordance with Standard Drawing AA-S151 for rigid pipe sewer and in accordance with Standard Drawing AA-S149 for flexible pipe sewer.

4.4 The cost of compacted backfill shall be included in unit price bid for Item 901. Concrete encasement will be required (CCMS 901.12) where 30" of cover is not maintained. Cost to be included in unit price bid for Item 901.

4.5 All public manhole castings shall be stamped NEW ALBANY OHIO STORM. Temporary casting tops may be used until such are made available. Private manhole lids shall be stamped Storm Sewer.

4.6 All pre-cast concrete products shall be inspected at the location of manufacture. Approved pre-cast concrete products must be stamped or have such identification noting that inspection has been performed by the City of Columbus. Pre-cast concrete products without proof of inspection shall not be approved for installation.

4.7 The contractor shall submit a copy of the plans and a list of proposed pre-cast concrete product manufactures to the City of Columbus Construction Inspection Division before commencing construction. Send the information to the following address:

Construction Inspection Division
City of Columbus
1800 East 17th Avenue
Columbus, Ohio 43219

4.8 Openings shall be provided in the drainage structures to accommodate underdrain outlets.

4.9 All storm structures with a depth greater than four feet shall have steps (AA-S119) installed at 16" intervals maximum.

4.10 All standard catch basins and curb inlets within paved areas are to have bicycle safe grates.

4.11 When a new roadway is to adjoin an existing roadway any existing underdrain is to be maintained, or replaced if not functional. A relief joint shall be constructed at the intersection of the existing and new road.

4.12 All existing inverts along with the proposed top of casting elevations shall be verified by the Contractor prior to construction of the sewer.

4.13 Within proposed roadway sections that include straight 18" concrete curb, all frames and grates for curb and gutter inlets shall be per East Jordan 7505 Series or approved equal.

4.14 Sewer Inspection

4.14.1 The Contractor shall ensure there is a surveyor's level and rod on the project for use in performing grade checks whenever sewer line structures or pipe are being installed. The Contractor shall make this equipment available for the use of and assist the City Inspector in performing grade checks when requested by the inspector. The Inspector will make all reasonable attempts to confine requests for assistance in performing grade checks to times convenient to the Contractor.

4.14.2 These checks will be performed to ensure the following:

1. Proper placement of each structure.
2. Proper installation of initial runs of pipe from a structure.
3. Grade, after an overnight or longer shutdown.
4. Grade, at any other time the Inspector has reason to question grade of installation,

4.14.3 Grade checks performed by the City Inspector in no way relieve the Contractor for the ultimate responsibility to ensure construction to the plan grade.

4.14.4 At the request of the City Engineer, the contractor shall remove 36" storm sewer castings for inspection during construction and for final inspection.

4.14.5 Deflection Testing

All sewer lines installed on this project using P.V.C., HDPP, or H.D.P.E. pipe will be deflection tested by pulling an approved Mandrel equal in diameter to 95% of the pipe

diameter through the pipe after pipe is backfilled and a sufficient amount of time is allowed for weight transfer of the backfill to the pipe and bedding, as required under CMSC Item 901.21. Testing shall be performed no sooner than 30 days after installation and backfilling.

4.14.6 Adjustments of manholes that would result in a chimney section greater than 24" high shall require adding another barrel section. Adjustments of manholes shall include the use of HDPE or concrete grade rings in addition to the requirements of CMS Section 604. Grade rings are not acceptable if the top of casting change in elevation exceeds nine inches. Use of brick to adjust the heights of castings is unacceptable. Payment shall be included within Item 604-Manhole Reconstructed to Grade, As Per Plan where depths of adjustments are greater than 9" and Item 604-Manhole Adjusted to Grade where depths of adjustments are less than 9".

5 WATER LINE

5.1 All water line and fire hydrant construction, material and specification shall be in accordance "City of Columbus Construction and Material Specifications", 2018 edition and all revisions, including supplements and City of New Albany requirements including Chapter 939 of the City Code. Water main materials and installations shall be in accordance with the current rules, regulations and standard drawings of the City of Columbus, Division of Water with the exception of utilization of C900 PVC pipe. Use of C900 PVC pipe will not be permitted in New Albany unless otherwise approved by the City Engineer.

5.2 For any emergencies involving the water distribution system, please contact the Division of Water Distribution Maintenance Office at 614-645-7788.

5.3 Each fire hydrant shall be acceptable to the City of New Albany with two (2) 2-1/2" side nozzles and one (1) 5" integrated Storz fitting in place of pumper nozzle (no add-on fittings) in accordance with New Albany Fire specifications. Hydrants shall be in accordance with the CCMS. All public hydrants and nozzles shall receive 2 coats of New Albany Red (Federal Color Book 595, Color 11105). Private fire hydrants shall be painted red with white caps and bonnets. An additional fire hydrant for future maintenance purposes shall be delivered to the Public Service Department Building located at 7800 Bevelhymer Road, New Albany, OH 43054 (Residential Subdivision Projects Only). Prior to final acceptance, fire hydrants shall be inspected and accepted by the Plain Township Fire Chief and the Public Service Department Building located at 7800 Bevelhymer Road, New Albany, OH 43054. These inspections will be scheduled by contacting the New Albany Building Department at (614) 939-2254. All brass fittings associated with water work, including repairs to the existing system, shall conform to the revised allowable lead extraction limit per the updated NSF/ANSI 61 Standard. The Division of Water's Approved Materials List has been updated to reflect this requirement.

5.4 No water service construction before or after the water meter shall begin until permits are issued by the City of Columbus Division of Water. It shall be unlawful for

any person to perform any work on City of Columbus water line systems without first securing license to engage in such work, as indicated in Columbus City Code Section 1103.02 and 1103.06. This work includes any attachments, additions to or alterations in any city service pipe or appurtenances (including water service lines and taps). This requirement may be met by utilization of a subcontractor who holds a City of Columbus Water Contractor License or a Combined Water/Sewer Contractor License to perform this work. Utilization of a subcontractor must meet the licensing requirements of City of Columbus Building Code, in particular Section 4114.119 and 4114.529.

5.5 Water service taps 2" and smaller shall be Type K, soft temper copper tubing conforming with the requirements of 805.03 of the CMSC. The Contractor shall obtain the proper hydrant permit(s), and pay any applicable fees, for any approved hydrant usage deemed necessary for work under this improvement. Permits must be obtained from the New Albany Building Department prior to contacting the Division of Water Permit Office (645-7330). The Contractor shall adhere to all rules & regulations governing said permit and must have the original permit on site anytime in which the hydrant is in use. Cost to be included in the various bid items.

5.6 All water mains shall be disinfected in accordance with Section 801.15 of the City of Columbus Construction and Material Specifications. Special attention is directed to applicable sections of AWWA C-651. When water mains are ready for disinfection, the Contractor shall submit the survey coordinates to the Design Engineer for preparation of digital as-built drawings. The Design Engineer shall then submit three (3) SETS OF THE RED LINED "As-Built" plans (with survey coordinates) to the City Engineer. The City of New Albany Shall submit a letter stating that the waterlines have been pressure tested and need to be disinfected to the City of Columbus, Division of Water. The Contractor shall be responsible for all costs associated with the disinfection of all water mains constructed under this plan. All water mains shall be cleaned and flushed, and any water main 12-inch and larger must be properly pigged, in accordance with section 801.13 of the City of Columbus, Construction, and Material Specifications. Only one connection to an existing water line is permitted before disinfection of a new water line has been completed. All other connections must be made after the line has been disinfected.

The contractor and representatives from the City of New Albany shall meet with COC/DOW staff prior to installing blow-offs and taps to obtain pre-approval.

5.6.1.1 Any section of water main that is longer than 20 feet in length shall be chlorinated. Hand swabbing methods will only be permitted for sections less than or equal to 20 feet in length. Use unscented household bleach for hand swabbing of pipe and fittings. Please note that cut-in tees, sleeves, and any other required fittings or piping shall be taken into account and are included in the total length of the section (cut to cut).

5.6.1.2 Contractor shall adhere to the requirements of the Ohio Administrative Code Chapter 3745-83.02 Water Disruption of Service Rule. Excavate pits sufficiently below

the area to be connected in order to maintain water levels below the water main. If water from the pit enters the existing main, contact the Division of Water immediately. Ensure that sufficiently sized pumps are utilized to remove water from the trench and back-up pumps are kept on site for redundancy.

5.7 All water mains shall be pressure tested in accordance with section 801.14 of the City of Columbus Construction and Material Specifications, with the following exception: 150 psi of pressure shall be maintained for at least two hours in any tested section. The City may not approve any test lasting less than two hours regardless of the amount of leakage.

5.8 Where indicated on the plans, the existing water main shall be abandoned; and any existing water services off this main shall be transferred to the new water main. Prior to abandonment of the existing water main, the proposed water main shall be pigged (if required), tested, chlorinated and put in service and then the existing water services shall be transferred. The Contractor shall maintain water services to all properties during construction of the new water main and shall notify all customers affected by the transfer of services. To ensure that all existing services are transferred to the new main, no water main shall be abandoned until the new water main has been put in service; all affected water services have been transferred; and the existing water main to be abandoned has been shut down for 24 hours. All visible valve boxes, fire hydrants, and service boxes on the water main to be abandoned, which will no longer be in service, shall be removed. All water mains to be abandoned shall be made water tight. The required surface restoration shall be paid for under the appropriate bid item(s).
5.9 Water service boxes shall be placed 1' from the edge of the proposed or existing sidewalk between the sidewalk and the curb, or 2 feet inside the right-of-way or easement line when no sidewalk is present or proposed. Refer to Standard Drawing L-9901 for additional information.

5.9 Maintain eighteen (18) inches vertical and ten (10) feet horizontal separation between any sanitary or storm sewer piping and all proposed water mains.

5.10 When Controlled Density Fill (Item 613, Type 3 Only within Public R/W) is to be used as backfill, the Contractor shall provide Size No. 57 Crushed Carbonate Stone (CCS) 1 foot below to 1 foot above the existing water line.

5.11 All water lines installed within a 45 degree influence plain of pavement shall be backfilled with Item 912 (Type 1 Only) compacted granular backfill.

5.12 Survey Coordinates

5.12.1 Survey Coordinates shall include all material, equipment, and labor necessary to obtain horizontal and vertical (Northing, Easting, and Elevation) survey coordinates for the water main improvements. The survey coordinates shall be obtained for the completed water main construction and shall include all valves, tees, crosses, bends, deflections, plugs, reducers, tapping sleeves, blow offs, chlorination taps, fire hydrants, air releases, curb stops, casing pipe termini, and other fittings. Additional survey

coordinates are required on the water main every 200' where no fitting or other water main structure is being installed within that length of the improvement.

5.12.2 All survey coordinates shall be referenced to the applicable County Engineer's Monuments, and shall be based on the North American Datum of 1983 (NAD 83) with the NSRS2007 adjustment, with further reference made to the Ohio State Plane South Coordinate System, South Zone, with elevations based on NAVD 88 datum. All coordinates (Northing, Easting, Elevation) shall be referenced to the nearest hundredth (NXX,XXX.XX,EXXX,XXX.XX, Elev. XXX.XX). All survey coordinates shall be accurate to within 1.0 foot horizontal and a tenth of a foot (0.10) or less vertical.

5.12.3 The coordinates shall be documented to the Municipality Engineer or designated Representative in digital spreadsheet form and shall include the applicable Item, Station, Northing, Easting, and elevation. Coordinates shall be submitted to the Municipality Engineer or designated Representative on a bi-weekly basis. Coordinates shall also be submitted to the Division of Power and Water as part of the request for chlorination (See Note Block 5.6).

5.12.4 Lump sum payment is full compensation for all work involved in obtaining and documenting the survey coordinates as described in this specification.

5.13 The Contractor must receive pre-approval from the Division of Water and City Engineer 48 hours in advance if elimination of bends is proposed and joint deflection is utilized instead.

5.14 Special Notes (If Applicable)

5.14.1 All water line valve boxes, service boxes, test stations, pitometer tap structures, meter pit covers, and other surface utility structures within the disturbed area shall be adjusted to grade. Any of these structures located within pavement, driveways, or other traveled areas, whether existing or proposed, shall be equipped with a traffic rated, heavy duty valve box and/or cover in accordance with the Standard Drawings. Existing water service boxes to remain that are encountered within the project limits shall be cleaned out, centered over the curb stop, and adjusted to the proposed grade.

5.14.2 Where new conduit is proposed to cross an existing or proposed water main or water service, a minimum of 12-inch of vertical clearance shall be maintained between the conduit and the water main or service. A minimum of 3-feet of horizontal clearance (out to out) is required at locations where the conduit is parallel to the water main and at locations of water line thrust blocks.

5.14.3 A minimum of 3 feet horizontal clearance (out to out) shall be maintained between all existing water mains and foundations for poles, pull boxes, push button pedestals, and any other miscellaneous electrical structure.

5.14.4 A minimum of 4 feet of cover is required prior to pressure testing any water main. A sufficient amount of backfill shall be installed to provide the adequate restraint in areas where required.

5.14.5 Proposed water mains shall be located a minimum distance of twenty (20) feet away from any structure, overhang or footer.

5.14.6 No two (2) adjacent fire hydrants shall be taken out of service concurrently.

5.14.7 Relocated fire hydrants shall be put back in service as soon as possible.

5.14.8 The Contractor shall coordinate his work such that no water customer will have their service disrupted more than two (2) times throughout the duration of this project.

5.14.9 Fire hydrant relocations shall conform to applicable sections of Item 809 of the Columbus Construction and Material Specifications. Work shall consist of removing the existing hydrant, installing new 6" pipe and fitting as required to locate the fire hydrant 2 feet from back of proposed curb or 8 feet off edge of pavement, resetting hydrant and blocking as required. All 6" pipe shall be installed at 4'0)' minimum cover. Hydrant extensions shall be provided per Item 810, as required. Relocated fire hydrants shall be adjusted to proper grade and faced in proper direction. When a hydrant is relocated fifteen (15) feet or more from the "Typical Hydrant Setting" valve location (see L-6409 & L-6637), an additional valve shall be installed, and restrained, within two (2) feet of the relocated hydrant. Payment is to be included under Item 809, Fire Hydrant Relocated.

6 OWNERS NOTES IF APPLICABLE

7 EROSION CONTROL

7.1 Control of erosion and sedimentation shall be in accordance with the City of New Albany Codified Ordinance chapter 1183.

7.2 Temporary Soil Erosion and Sediment Control

7.2.1 Erosion and sediment control measures are required as a part of this project. The erosion and sediment control plan reflects a schematic diagram of the intended measures for compliance with the required standards. General practice and/or site field conditions may warrant variation in the placement or use of the specific controls. Any variations shall be approved by the City Engineer.

7.2.2 The contractor in compliance with the NPDES General Permit for Storm Water Discharge associated with construction activity and in accordance with the City of New

Albany's Ordinance 1183, will be responsible for providing adequate erosion and sediment control measures along with proper maintenance and inspection. An erosion control maintenance log shall be kept on site in compliance with OEPA regulations. The log shall be available for public inspection.

7.3 Seeding

7.3.1 "Temporary seeding" No area for which grading has been completed shall be left unseeded or un-mulched for longer than 14 days. If permanent seed is not applied at this time, temporary seeding shall be done at the following rates:

March 1 to August 15		
Seed:	Oats	14 lbs./1,000 sq. ft.
Fertilizer:	(12:12:12)	12-½ lbs./1,000 sq. ft.
Mulch:	(Straw or Hay)	2 tons/acre
August 15 to November 1		
Seed:	Annual Rye	14 lbs./1,000 sq. ft.
Fertilizer:	(12:12:12)	12-½ lbs./1,000 sq. ft.
Mulch:	(Straw or Hay)	2 tons/acre
November 1 to March 1		
Mulch (ONLY):	(Straw or Hay)	2 tons/acre

7.3.2 "Permanent seeding" shall be done between March 15 and September 15. If seeding is done between September 15 and March 15, it shall be classified as "Temporary Seeding". Permanent seed shall be 40% Kentucky Bluegrass, 40% Creeping Red Fescue, 20% Annual Ryegrass.

7.3.3 Permanent seeding shall consist of fertilizing, watering and seeding rates indicated under Item 659. Seeding shall be applied within two (2) days after final grading or following seed bed preparation.

Rates of application of Item 659:

Seed:		14 lbs./1,000 sq. ft.
Fertilizer:	(12:12:12)	25 lbs./1,000 sq. ft.
Mulch:	(Straw or Hay)	2 tons/acre

7.4 Stabilization of Denuded Areas

7.4.1 Denuded areas shall have soil stabilization applied within seven days if they are to remain dormant for more than fourteen - days.

7.4.2 Sheet flow runoff from denuded areas shall be filtered or diverted to a setting facility.

7.4.3 Sediment Barriers such as sediment fence or diversions to settling facilities shall protect adjacent properties and water resources from sediment transported by sheet flow.

7.4.4 Prior to Construction Operations in a particular area, all sedimentation and erosion control features shall be in place. Field adjustments with respect to locations and dimensions may be made by the Engineer.

7.4.5 The Contractor shall place inlet protection for the erosion control immediately after construction of the catch basins or inlets, which are not tributary to a sediment basin or dam.

7.4.6 It may become necessary to remove portions of the barrier during construction to facilitate the grading operations in certain areas. However, the barrier shall be in place in the evening or during any inclement weather.

7.5 Maintenance

7.5.1 It is the Contractor's responsibility to maintain the sediment control features used on this project. The site shall be inspected periodically and within 24 hours of a significant rainfall. Records of these inspections shall be kept and made available to jurisdictional agencies if requested. Any sediment or debris which has reduced the efficiency of a structure shall be removed immediately. Should a structure or feature become damaged, the Contractor shall repair or replace at no additional cost to the Owner.

7.5.2 All Erosion & Sediment Control practices are subject to Field Modification at the direction of the City Engineer and/or Ohio EPA.

8 RIGHT OF WAY PERMITS

8.1 The contractor shall have all necessary permits before beginning construction. A permit is required to bury in public right-of-way. Permits may be required from more than one governing agency. The contractor shall notify the appropriate governing agency at least forty-eight hours in advance of commencement of work. On state right-of-way, call Ohio Department of Transportation, division of Highways Permit Expediter forty-eight hours in advance.

9 PAVEMENT REPLACEMENT

9.1 If any street or road within the City is damaged as a result of construction traffic related to Construction as determined by the City Engineer, all requested repairs shall be made by the Contractor. Existing pavement surfaces shall be video taped prior to

the pre-construction meeting by the Contractor and a copy of the tape is to be furnished to the City Engineer.

10 EXISTING UTILITIES

10.1 The identity and location of the existing underground utility facilities know to be located in the construction area have been shown on the plans as accurately as provided by the Owner of the underground utility. The City of New Albany and/or Engineer assumes no responsibility to the accuracy or the depths of the underground facilities shown on the plans.

10.2 Investigation, location, support, protection and restoration of all existing utilities and appurtenances shall be the responsibility of the Contractor. This work includes maintenance of adequate depth on all existing utility facilities. The Contractor is responsible to identify and coordinate field stakeout of all locations of possible grade conflicts with existing utilities prior to construction.

10.3 The Contractor is responsible for coordinating the relocation and/or protection of any utilities as required by the plan with the owner of the affected utility.
Private utility manholes within the limits of the work shall be adjusted to grade by the respective utility. The cost of this work shall be included in the price bid for the project improvements.

10.4 Utility poles within the influence of the earthwork operations shall be reinforced by the utility company prior to these construction activities. Notification of the utility company prior to construction shall be the responsibility of the Contractor.

10.5 Abandonment (Capping, Etc.) of existing utility facilities (Ameritech, Columbia Gas, American Electric Power) shall be performed by the respective utility company. Upon completion of same, the Contractor shall be responsible to remove any or all the necessary utility as required to complete the plan improvements. The cost of all removal along with the proper disposal thereof should be included in the price bid for the project improvement.

10.6 The Contractor shall cause notice to be given to the Ohio Utilities Protection Service (Telephone 800-362-2764, toll–free) and to the owners of the underground utilities who are not members of a registered underground protection service in accordance with Section 153.64 of the Revised Code. The above mentioned notice shall be given at least 48 hours prior to start of construction. The following utilities and Owners are located within the work limits of this project:

UTILITY	OWNER	TELEPHONE
Electric/FOC	AEP 8500 Smiths Mill Road New Albany, OH 43054	(614) 716-1000
Sanitary Sewer, & Storm Sewer & Water & Fiber Optic Cable (FOC)	City of New Albany Service Department 7800 Bevelhymer Road New Albany, OH 43054	(614) 855-0076
Gas	Columbia Gas of Ohio, Inc. 3550 Johnny Appleseed Court Columbus, OH 43231	(614) 280-7500

11 TREES

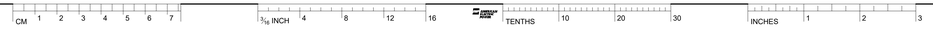
11.1 All branches or growth from trees that are to be saved and which are interfering with the grading operation may be removed by the use of pruning tools. All pruning tools used and methods employed shall meet with the approval of the City Arborist. The branches shall be removed with a good clean cut made flush with the parent trunk or if having a good healthy lateral branch, the cut shall be a good clean slanting cut close to and beyond the healthy branch. All pruning cuts shall be painted with an accepted pruning preservative. All branches removed shall be at the direction of the City Arborist (614) 855-0076. The cost of all work and expenses connected with the removal of trees and/or branches shall be included in the price bid for clearing and grubbing. No extra payment shall be made therefore.

12 Benchmarks and Survey Monuments

12.1 Do not disturb any Franklin County or Licking County certified benchmarks (vertical and/or horizontal) located within the working limits of the project. The Contractor shall contact either the Franklin County Survey Department (614) 462-3026 or Licking County Survey Department (740) 670- 5280, prior to construction, to coordinate the proper procedures for resetting, relocation, or replacement of any Franklin County Certified Benchmark or Survey Monument.

12.2 The Contractor shall reference all iron pins and monuments before excavating at or near said iron pins or monuments. The contractor shall not disturb existing right-of-way or property corner markers that are required to remain after construction. If any pins or monuments are disturbed, destroyed, or damaged by the Contractor that have not been designated to be removed in these plans, they shall be accurately replaced by a Registered Surveyor at the completion of the project or at the direction of the City

Engineer and at the contractor's expense as per the City of Columbus Construction and Materials Specifications, Section 107.12. If replacement of pins or monuments is required, the Engineer, Developer, or Contractor shall provide an exhibit during the final punch list inspection verifying that monuments have been placed at all property corners.



NO	DATE	REVISION DESCRIPTION	APPR	DR	ENG	CK	ISSUE#
1	03/26/2025	ADDED POST CONSTRUCTION WATER QUALITY NOTE, ADDED NOI NUMBER, AND UPDATED QUANTITIES ON SHEET CU-CS01-S01. ADDED NOTE TO SHEET CU-EC02-S01 AND SHEET CU-ECO2-S02. ADDED IMPERVIOUS AREAS TABLE TO SHEET CU-SL01-S01. ADDED POST CONSTRUCTION BMP TABLE, ADDED MAJOR FLOOD ROUTING PATH, ADDED 100 FOOT MINIMUM CONSTRUCTION ENTRANCE NOTE, LABELED THE 100 YEAR WATER SURFACE ELEVATION OF THE BASIN, AND ADDED NORTH BERM ON SHEET CU-GP01-S01. ADDED EMERGENCY SPILLWAY CENTERLINE PROFILE AND ADDED NORTH BERM TO CROSS SECTION A-A' ON SHEET CU-GS01-S01. ADDED CULVERTS AND HEADWATER ELEVATIONS TO ACCESS ROAD B PROFILE AND ADDED TYPICAL CULVERT C UNDER ACCESS ROAD B DETAIL ON SHEET CU-RP01-S01. UPDATED DITCH DIMENSION TABLE TO PROVIDE 100 YEAR STORM MAXIMUM WATER DEPTH ON SHEET CU-ED02-S01. UPDATED CULVERT DATA CHART TO PROVIDE VELOCITIES AND ADDED CONSTRUCTION ENTRANCE AS PART OF THIS PROJECT ON SHEET CU-ED02-SO2. UPDATED CITY OF NEW ALBANY STANDARD NOTES ON SHEET CU-GN02-S01 AND SHEET CU-GN02-S02.		DB	JP		

BAIR GOODIE

BAIR, GOODIE AND ASSOCIATES, INC.
153 NORTH BROADWAY STREET
NEW PHILADELPHIA, OH 44663
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OHIO UTILITIES PROTECTION SERVICE

OLD DWG #:
STD DWG #:

AEP OHIO TRANSMISSION COMPANY, INC.

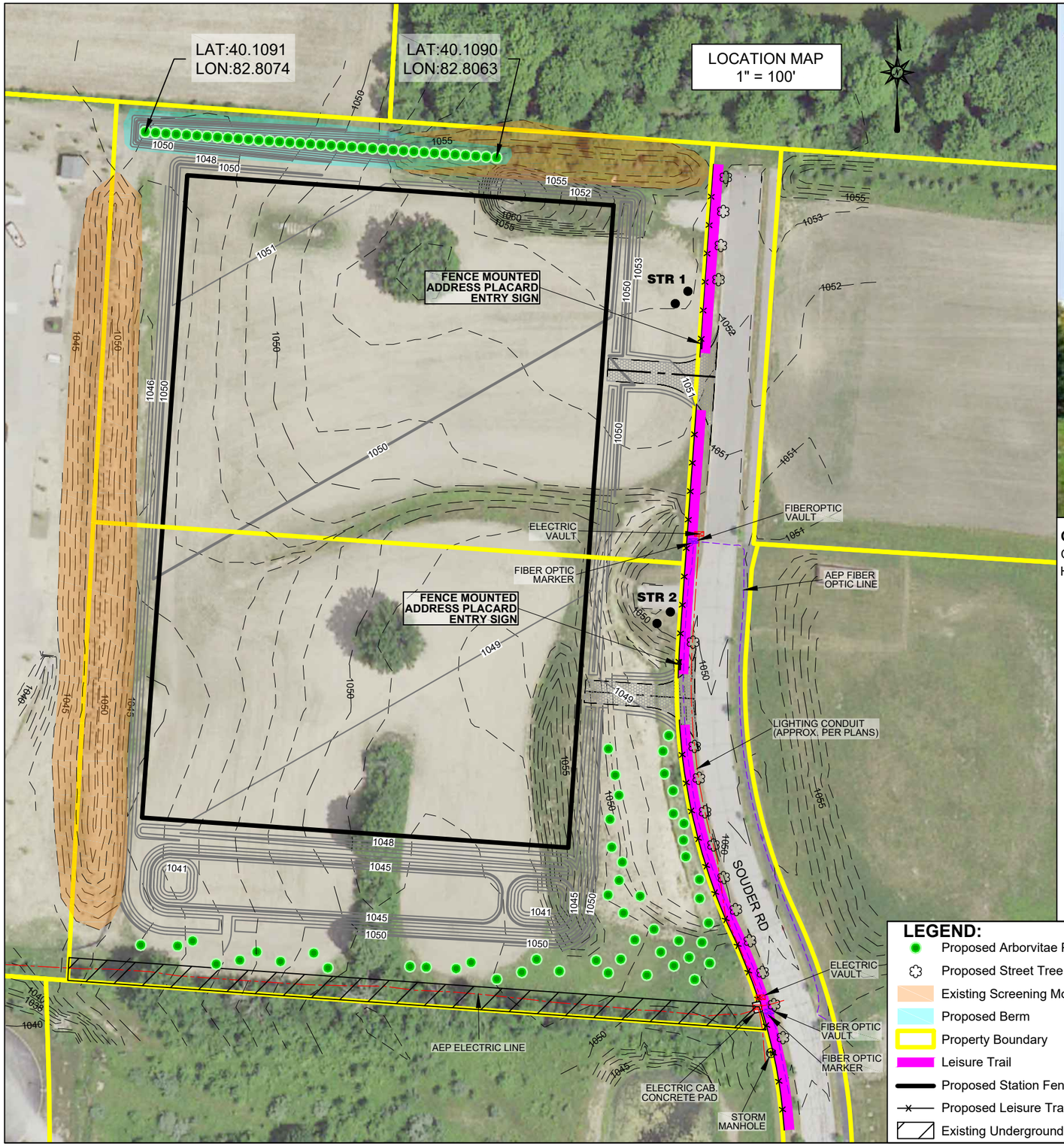
SOUDER STATION

NEW ALBANY OHIO

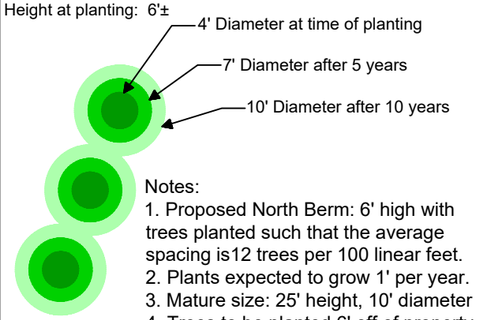
CITY OF NEW ALBANY STANDARD NOTES - SHEET 2

SCALE: AS NOTED	DR: DB/BGA	ENG: JP/BGA	CH: JP/BGA
AMERICAN ELECTRIC POWER	WO#: T1059317002	APPD: JP/BGA	DATE: 09/11/2024
1 RIVERSIDE PLAZA, COLUMBUS, OH 43215	DWG. NO. CU-GN02-S02	REV 1	

(E-1120)

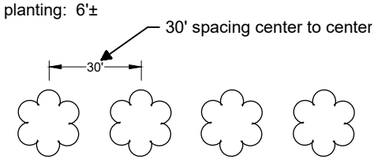


Green Giant Western Arborvitae
Quantity: 86
Height at planting: 6'±



Notes:
1. Proposed North Berm: 6' high with trees planted such that the average spacing is12 trees per 100 linear feet.
2. Plants expected to grow 1' per year.
3. Mature size: 25' height, 10' diameter
4. Trees to be planted 6' off of property line and easement.
5. Growth projections are approximate and require typical growing conditions.
6. Arborvitae or equivalent, depending on local nursery availability.

Quercus Rubra (Northern Red Oak)
Quantity: 15
Height at planting: 6'±



Notes:
1. Shall be planted no less than thirty (30) feet apart
2. Shall be planted in the tree lawn (between the leisure trail and the road pavement)
3. Shall be planted a minimum of three (3) inches caliper dbh (trunk diameter at breast height)
4. Tree species on the list of undesirable species in the New Albany Code of Ordinances shall not be planted
5. Shall be planted in locations to maintain a twenty-five (25) foot sight triangle at street intersections
6. Shall be maintained by developer for one (1) year after planting. Replacing any tree which dies during this period

LEGEND:
- Proposed Arborvitae Planting (86)
- Proposed Street Tree Planting (15)
- Existing Screening Mound
- Proposed Berm
- Property Boundary
- Leisure Trail
- Proposed Station Fence
- Proposed Leisure Trail Fence
- Existing Underground Electric Easement

BAIR GOODIE

NAD 83 Ohio State Plane South

March 26, 2025

OVERVIEW MAP

CONCEPTUAL LANDSCAPE PLAN
SHEET 1 OF 3

AEP OHIO TRANSMISSION COMPANY
An AEP Company
BOUNDLESS ENERGY

Souder Station

General Notes

1. Plant Materials. Plant materials include all trees, shrubs, perennial and vines, and plants required as part of the Work. Provide plant materials that are sourced from nurseries licensed by the Ohio Department of Agriculture or state equivalent, healthy specimens, typical of their species or variety, and that exhibit a normal habit of growth as set forth in the most current edition of the American Standard for Nursery Stock (ANSI Z60).

1.1. Location and Source of Supply. Supply the Engineer with complete and detailed information concerning the source of supply for each item of required plant material within 15 days after receiving the notice of award of the Contract. Ensure that all plant materials have been grown in the same hardiness zone or 1 zone colder than the project.

1.2. Transportation, Storage, and Handling. Transport all plants from nursery sources to the project site with the entire load completely covered for protection from drying winds. Thoroughly water all plants that cannot be immediately planted so as to keep the roots in a continually moist and protected condition. The TCR may reject plants that are not adequately protected during transportation and storage. Immediately remove all rejected plant materials from the project site. Handle all plant materials by the root ball or container.

1.3. Labeling. Attach legible labels to all specimens, or boxes, bundles, and other containers, indicating detailed information including, but not limited to, the botanical genus and the species name, the common name, the size or age of each species or variety and the quantity contained in the individual bundles or boxes. Remove all labels no more than two weeks prior to the completion of the establishment period. Notify the TCR prior to removing the plant material labels. Provide AEP copies.

1.4. Acceptance. Prior to acceptance by the Engineer, notify the Engineer when plant materials are delivered to the project site. Ensure that the plant species delivered are as described in the plans and are healthy, vigorous, and free from harmful plant diseases, and insect pests. Stockpiled materials can be inspected by ODA with advanced notice. Species substitutions must have written approval from the project engineer prior to delivery to the project. Do not install any plant materials until the TCR provides the Contractor with notification that the plant materials have been accepted.

1.5. Scheduling. Install all plant materials after March 15 and before June 1 or after September 15 and before November 30. Do not install plant materials in frozen or saturated soil conditions. Ensure a sufficient water supply is available to satisfy the requirements of 1. Plant Materials and 2. Watering.

1.6. Layout of Plant Materials. Before installation, use suitable staking to lay out the locations of all planting holes and beds. Provide the TCR with a scaled drawing that indicates the location, species, and size of plant materials required in the plan. Obtain the Engineer's approval of these locations before installation.

1.7. Backfill Mix. For all plantings, use backfill mix consisting of the following:

A. One part soil.
B. One part sphagnum peat moss, shredded pine bark, or EPA rated Class IV compost.
C. One part sand.

Do not use backfill mix that is frozen or muddy.

1.8. Planting

A. Planting Holes: Dig planting holes that have sloping side walls and are 'bowl shaped'. Slope the side walls to approximately 45 degrees. Dig the planting hole so that the diameter at the top is at least two times the diameter of the root ball. Dig the planting hole to the same depth as the root ball structure. Dig planting holes for vines and perennials to a minimum depth and diameter of 6 inches (150 mm). Make planting holes for rooted cuttings and tree seedlings large enough to accommodate the root system.

B. Planting Trees & Shrubs: Set each plant in the center of the planting hole, plumb, and straight at a level such that the top of the root structure (i.e., trunk flare or root collar) is 1 inch (25 mm) above the surrounding soil. Set the root ball on compacted or unexcavated soil to prevent settlement. Prior to backfilling the hole, remove all twine, bags, and roping. For trees shipped with wire baskets supporting the root structure, remove the top two-third of the wire basket from root balls. Remove all rot-proof burlap. Remove or fold down the top one-third of standard (biodegradable) burlap. Take care not to separate the soil of the root ball from the plant's root system. Cut or remove circling roots before planting. Backfill the planting hole with the backfill mix. Fill the hole gradually and settle the backfill with water to the top of the root structure. Do not place backfill mix in direct contact with the trunks or stems. Add backfill mix around the root structure up to the plant's root collar is at the soil surface.

1.9. Landscape Mulch. Provide Landscape Mulch that consists of shredded bark and shredded wood. The length of any individual component cannot exceed 2 inches (50 mm). Ensure that at least 75 percent of the mulch can pass a 1 inch (25 mm) screen. Landscape Mulch may contain up to 50 percent shredded wood. Wood chips are not acceptable. Provide mulch that is free of soil, rocks, and weeds, and that has been aged at least one year before installation.

Smooth and shape the backfill mix to form a shallow basin slightly larger than the planting hole. Mulch these areas with a 4 inch (100 mm) layer of Landscape Mulch uniform in texture and size. Do not place mulch in direct contact with the trunks of any trees. Rake and smooth all planting beds upon completion of the work.

1.10. Bracing. Use only flexible, biodegradable ties when bracing trees. Use bracing only in areas where mower damage, vandalism, or windy conditions are a concern or as directed by the Engineer. Install loose fitting ties that will not girdle the trunk. Ensure that the tie will allow trunk movement and growth. Install all bracing as shown on the standard construction drawing SCD 1.10-1

1.11. Period of Establishment. Before final inspection, install all plants and care for them for a period of establishment. The period of establishment begins immediately upon completion of the planting operations and continues until October 1.

The minimum period of establishment is one complete growing season, beginning June 1 and ending the following October 1. During the period of establishment, follow standard horticultural practices to ensure the vigor and growth of the transplanted material including watering (according to 2. Watering), re-mulching, re-staking, and cultivating as necessary. Prune branches of deciduous plants to preserve the natural characteristics of the species according to ANSI Pruning Standards (ANSI A300). Remove broken, damaged, and dead branches. Do not trim the central leader of trees. Completely remove weeds and grasses from the planted and mulched areas by weeding and mowing (around trees, shrubs, and bed edges) at least two times during the growing season. Weed and mow the first time on or about June 15 and again approximately 8 weeks later.

1.12. Final Acceptance. On or about October 1 at the end of the establishment period, the TCR, in coordination with the AEP's Environmental Services, will inspect the plantings and supply the Contractor with a list of plant materials that do not comply with the contract requirements. Install all replacement plantings in accordance with the contract requirements. Replacement plants are subject to a new establishment period. Care for, water and maintain the replacement plant materials throughout the new establishment period at no additional cost to AEP.

1.13. Removal of Stakes and Wrapping. After receiving notification from the Department of the date of the final inspection, remove all stakes and wrapping material from all plants not more than 14 days before the final inspection, with the exception of the replacement plantings that have not been in place for a full growing season.

2. Watering. This work consists of furnishing, delivering, applying, measuring, and scheduling a sufficient amount of water necessary to keep each plant included in 1. Plant Materials in a healthy growing condition throughout the period of establishment and the Contract.

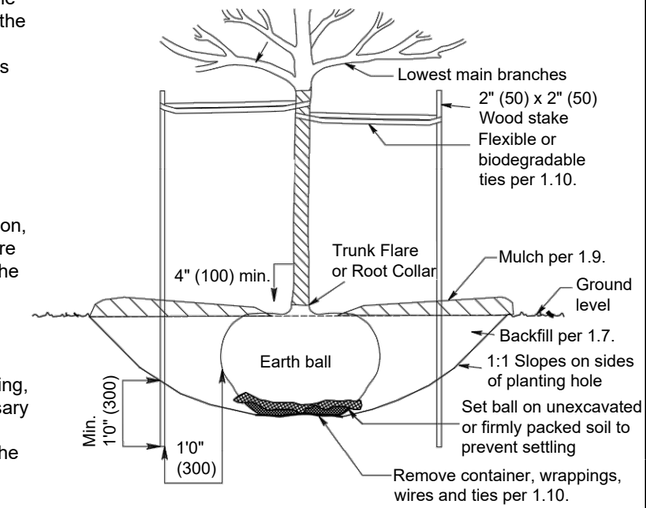
Furnish the water used in watering landscape plants. Thoroughly water all plant material at the time of planting regardless of soil moisture content. Continue to water throughout the period of establishment. Saturate the root zone and mulched area of each plant without causing run-off according to Table 2.1-1. During fall planting, continue to water until the ground is frozen and recommence watering after the spring thaw. Furnish a rain gauge approved by the Engineer.

2.1. Method of Measurement. The AEP TCR will measure Landscape Watering by the number of gallons (liters) delivered to plants from approved metered tanks or individually measured containers as follows:

Table 2.1-1

Plant Description	Gallons (L)
Shrubs:	
12 to 36 inches (300 to 900 mm), height	4 (15)
36 inches to 5 feet (900 mm to 1.5 m), height	7 (25)
Trees:	
5 to 8 feet (1.5 to 2.5 m), height	15 (55)
2 to 3 inches (50 to 75 mm), caliper	25 (95)
3 to 4 inches (75 to 100 mm), caliper	30 (115)
Greater than 4 inches (100 mm), caliper	35 (130)

SCD 1.10-1



Top of hole shall be minimum of 2 x width of root ball

TREE PLANTING AND BRACING
PLANTING ON LEVEL GROUND

BAIR GOODIE

NAD 83 Ohio State Plane South

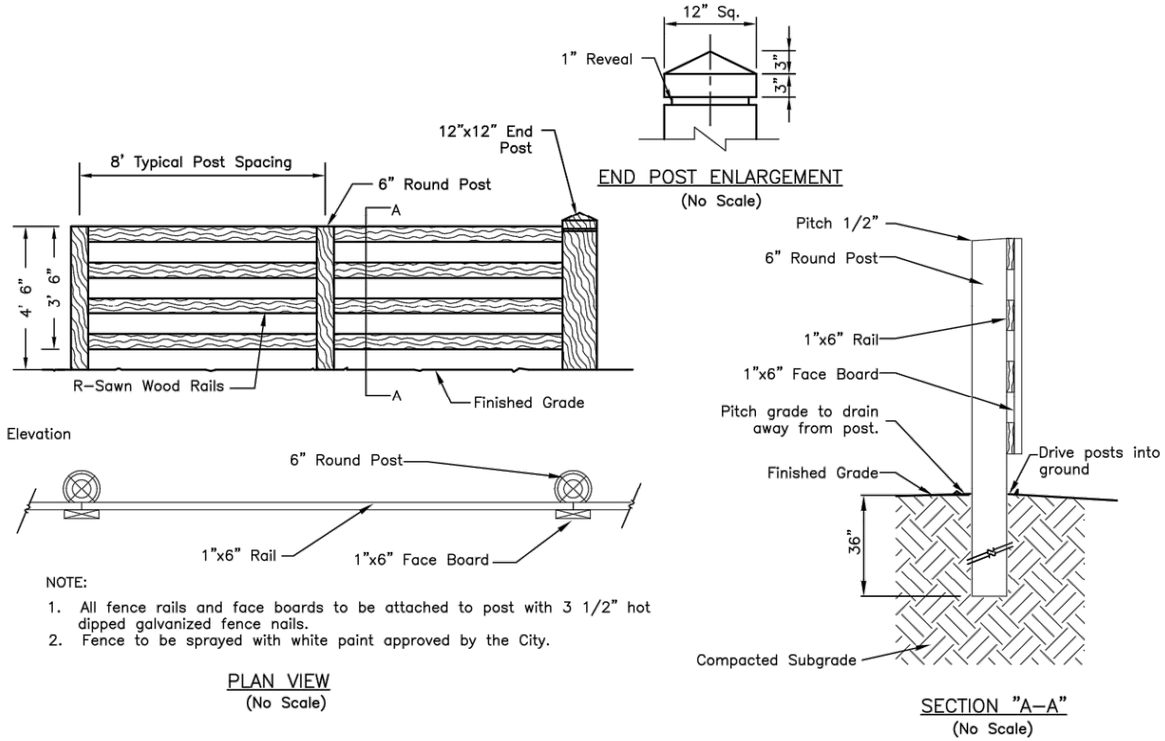
March 26, 2025

OVERVIEW MAP

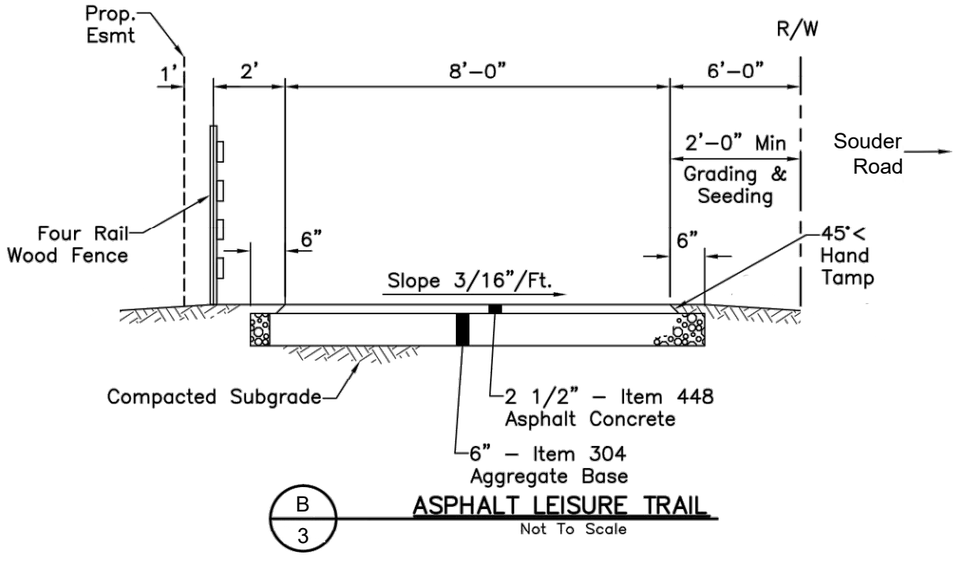
CONCEPTUAL LANDSCAPE PLAN
SHEET 2 OF 3

AEP OHIO TRANSMISSION COMPANY
An AEP Company
BOUNDLESS ENERGY

Souder Station



A 3 **FOUR RAIL WOOD FENCE**
(No Scale)



B 3 **ASPHALT LEISURE TRAIL**
Not To Scale

NOTES:

1. Signs shall be a **Standard Street Address Marker** in accordance to the Code of Ordinances City of New Albany, Ohio 1169.09 (c)

2. Signs shall be fence mounted

3. Site address to be displayed on signs: **7375 Souder Road**

4. Signs to be displayed at both entrances, attached to the four(4) rail wood fence

C 3 **FENCE MOUNTED ADDRESS PLACARD**
(No Scale)

BAIR GOODIE

NAD 83 Ohio State Plane South

March 26, 2025

OVERVIEW MAP

CONCEPTUAL LANDSCAPE PLAN
SHEET 3 OF 3

AEP OHIO TRANSMISSION COMPANY
An AEP Company
BOUNDLESS ENERGY

Souder Station

FDP-05-2025 ED

From: Logan Buehrer
To: Sierra Saumenig
Subject: Re: 7375 Souder Road
Date: Monday, May 5, 2025 12:02:37 PM
Attachments: image001.png

I'm writing to express my strong concerns regarding the proposed AEP substation planned near 7550 New Albany Condit Road. As a resident of the area, I am deeply troubled by the size of this substation and the potential health, safety, and quality-of-life impacts it poses to this residential neighborhood.

First, the issue of **EMF (electromagnetic field) radiation** is a serious concern. Numerous studies, including this NIH article, point to health risks for individuals living near high-voltage electrical infrastructure. Installing such a facility in a residential setting—particularly near a property like the recently sold 7550 New Albany Condit Road and future housing developments—is a poor choice when more rural locations are available.

In addition to health concerns, I am very worried about:

- **Noise pollution** from the substation's operations and how AEP plans to mitigate its impact on neighboring homes;
- **The height and appearance** of the proposed structures, which will create an enormous visual blight and diminish the rural character of the area; and
- **The lack of public notice**—many residents, including myself, were unaware of this project until stumbling upon it through unrelated research.

Landscaping, mounding, or visual screens will not adequately address these issues. Tall structures cannot be hidden, EMF emissions cannot be "landscaped away," and no amount of aesthetic mitigation will prevent the likely decline in nearby **property values**.

No resident willingly wants to live next to a massive electrical substation—and for good reason. While I recognize the need to support future development, this project should not come at the cost of the health, safety, and investments of current residents. With the amount of open and less-populated land around the area, I urge the city to **reject this site location** and require AEP to consider alternatives in less residential zones.

I ask that the city not approve this project as proposed and protect the wellbeing and property values of our community.

Thank you for your time and consideration.

Sincerely,

On Fri, Apr 25, 2025 at 12:42 PM Logan Buehrer <loganbuehrer@gmail.com> wrote:

> Yes! Will do:) thanks!
>
> On Fri, Apr 25, 2025 at 12:41 PM Sierra Saumenig <ssaumenig@newalbanyohio.org> wrote:
>
> > Logan,
> >
> > Yes if you want to send me an email with all your concerns in one I will make sure the Planning Commission receives that!
> >
> > Thank you,

SIERRA SAUMENIG, AICP
Planner II
Phone: (614) 939-2250

NEW ALBANY
COMMUNITY CONNECTS US
@NewAlbanyOhio

> > **From:** Logan Buehrer <loganbuehrer@gmail.com>
> > **Sent:** Friday, April 25, 2025 12:36 PM
> > **To:** Sierra Saumenig <ssaumenig@newalbanyohio.org>

Br. J. Cancer (1989), **60**, 793–798

FDP-05-2025
5/5/25

Leukaemia and residence near electricity transmission equipment: a case–control study

M.P. Coleman[1], C.M.J. Bell[2], H.-L. Taylor[2] & M. Primic-Zakelj[3]

[1]*International Agency for Research on Cancer, 150 cours Albert-Thomas, 69372 Lyon Cedex 08, France;* [2]*London School of Hygiene & Tropical Medicine, Keppel Street, London, WC1E 7HT, UK; and* [3]*Cancer Registry of Slovenia, Institute of Oncology, Zaloska 2, 61000 Ljubljana, Yugoslavia.*

Summary A population-based case–control study of leukaemia and residential proximity to electricity supply equipment has been carried out in south-east England. A total of 771 leukaemias was studied, matched for age, sex, year of diagnosis and district of residence to 1,432 controls registered with a solid tumour excluding lymphoma; 231 general population controls aged 18 and over from one part of the study area were also used. The potential for residential exposure to power frequency magnetic fields from power-lines and transformer substations was assessed indirectly from the distance, type and loading of the equipment near each subject's residence. Only 0.6% of subjects lived within 100 m of an overhead power-line, and the risk of leukaemia relative to cancer controls for residence within 100 m was 1.45 (95% confidence interval (CI) 0.54–3.88); within 50 m the relative risk was 2.0 but with a wider confidence interval (95% CI 0.4–9.0). Over 40% of subjects lived within 100 m of a substation, for which the relative risk of leukaemia was 0.99. Residence within 25 m carried a risk of 1.3 (95% CI 0.8–2.0). Weighted exposure indices incorporating measures of the current load carried by the substations did not materially alter these risks estimates. For persons aged less than 18 the relative risk of leukaemia from residence within 50 m of a substation was higher than in adults (RR = 1.5, 95% CI 0.7–3.4).

Epidemiological evidence suggests a possible leukaemogenic effect in man from exposure to electromagnetic fields in the extremely low frequency range (ELF, 0–300 Hz), which includes the usual public electricity power supply frequencies (50–60 Hz). Three case–control studies have shown a two- to three-fold increase in leukaemia risk in persons who lived close to electricity power-lines and supply equipment (Wertheimer & Leeper, 1979, 1982; Savitz *et al.*, 1988). Two studies showed no association (Tomenius, 1986; Severson *et al.*, 1988), although the study by Tomenius showed a two-fold risk of all cancers. The subjects' exposure to ELF fields was categorised indirectly in these studies by the type and proximity of electricity transmission and distribution equipment variously within 40–150 m of the subject's home. In addition, ELF magnetic field intensities were measured directly at all addresses in one study (Tomenius, 1986), and at most addresses in the two recent studies (Severson *et al.*, 1988; Savitz *et al.*, 1988).

A number of studies of men likely to be exposed occupationally to power frequency electromagnetic fields have also suggested a raised risk of leukaemia, especially acute myeloid leukaemia (see Aldrich & Easterly, 1987; Savitz & Calle, 1987; Coleman & Beral, 1988). Interpretation of the evidence is made difficult by the complexity and ubiquity of human exposure to man-made ELF fields in modern society, and by the difficulty of obtaining satisfactory retrospective measures of this exposure. The National Research Council (NRC, 1986) and the reviews cited have emphasised the need for further human cancer studies, particularly of leukaemia, in relation to ELF magnetic field exposure.

We have conducted a population-based case–control study in south-east England to test the hypothesis that residential proximity to electricity transmission and distribution equipment may increase the risk of leukaemia. The purpose of the study was to address the practical question of whether typical public exposures related to the UK power supply system were associated with an excess leukaemia risk. In contrast to Sweden and the USA, from where studies have been reported so far, urban electricity distribution in the UK is almost entirely by underground cable. Only high-tension transmission lines in rural areas, operated at 132 kV or more, are placed above ground on pylons, as elsewhere. The two types of electricity supply equipment considered in this study were thus overhead powerlines rated at 132 kV and above, which constitute the main transmission network above ground, and transformer substations, which reduce the voltage in various steps to the local supply voltage (usually 240 V).

Correspondence: M.P. Coleman.

Materials and methods

In order to obtain a sufficiently large and unbiased sample of leukaemia cases, the records of an established population-based cancer registry for a densely populated area were used. Cases were all persons registered with incident leukaemia by the Thames Cancer Registry during the period 1965–80 and resident in one of four adjacent London boroughs (Bromley, Croydon, Merton and Sutton; see Figure 1) which comprised the study area. Over 99% of leukaemias registered are histologically confirmed. The study area contains both urban and semi-rural sectors. There were no boundary changes during the study period, and the 1981 census population was 931,000. Most of the dwellings are houses of 1–3 floors or apartment buildings of 2–5 floors; high-rise blocks of 10–12 floors are infrequent.

Two groups of controls were used. The first group ('cancer controls') was identified from the same registry as the cases. Two controls were randomly selected among all persons registered with a solid tumour (excluding lymphoma) who could be individually matched to each case for sex, exact age in years and year of diagnosis. Controls were also required to be living in the same borough of residence as the case, as a partial surrogate for urban–rural and socio-economic status. Where possible, a reserve control was also selected for each case.

The second control group ('population controls') comprised a random sample of the general population aged 18 and over, drawn from the electoral roll for Bromley for 1975. Electoral registration is not compulsory, but largely complete. The roll does not state age or sex, and the population control series was therefore compared to Bromley cases aged 18 or over in an unmatched analysis. The same subset of the cancer controls (Bromley, aged 18 or over) was also analysed in this way, in order to provide a direct contrast between

Exposure assessment

The electricity transmission and distribution network in the study area has changed little since 1962. Overhead high-tension power-lines at 132, 275 or 400 kV provide the main visible transmission network in the study area; some of the high voltage distribution is by underground cable. Voltage reduction transformers (33 to 11 kV, and 11 kV to supply voltage) were the most common type of electricity supply equipment, occurring every few hundred metres, more densely in built-up areas. These ground-level distribution transformers are roughly equivalent to the pole-mounted transformers in the USA.

It was not possible to obtain direct measurements of field intensity for this study, or of duration of exposure, since interviews and residence histories would have been required, and it was a condition of access to Thames Cancer Registry data for the study that no contact would be made with study subjects or their kin. Further, many subjects had been diagnosed up to 18 years before data collection began, and many were known to be dead. Instead we assessed the potential for past residential exposure of cases and controls to power frequency magnetic fields indirectly, from the distance, type and power loading of each component of the electricity supply equipment (source) within 100 m of each subject's home. Several exposure measures were then derived, and subjects were grouped into four or five ranked categories of each measure for analysis. Such measures are similar in principle to the 'wire configuration codes' first used by Wertheimer and Leeper (1979, 1982) and later by most other workers. These indirect measures have been shown to correlate well with concurrent direct measurements of ELF fields inside the home (Kaune *et al.*, 1987), and several authors have suggested that wire configuration codes may be a better surrogate for historical exposure to ELF fields emitted by power-lines than direct measurement at a single recent point in time (Savitz *et al.*, 1988, 1989; Wertheimer & Leeper, 1983). Savitz *et al.* (1988) found that for leukaemia there was a stronger association with wire codes than with direct contemporary measures of field intensity. Severson *et al.* (1988), however, found no association between either wire codes or direct measures of field intensity and the risk of acute non-lymphocytic leukaemia in adults.

The intensity of magnetic fields emitted by electrical equipment increases with the electric current flowing and decreases with the distance from the equipment. For linear sources such as overhead power-lines, the field intensity is inversely proportional to the distance from the line. The magnitude and spatial distribution of the field emitted by transformers and other equipment depends on the precise configuration of the electrical conductors in the equipment and the complex paths of current in the vicinity, however, and cannot be readily calculated, but tends to fall more rapidly than the reciprocal of distance. The conductors used in underground cables in the UK, rated at up to 132 kV, are intertwined in a helical arrangement which results in a very small net unbalanced current, and the small fields which they produce decay rapidly with distance (roughly as the inverse cube). They were excluded from exposure assessment.

The distance between each subject's residence and each source within 100 m was computed from their respective geographical grid references. Ten-metre grid references were recorded for the address of each subject at diagnosis (or on the electoral roll) from large-scale contemporary Ordnance Survey maps of the study area, which show individually numbered houses and street names. The 'centre of gravity' of the building was used as a reference point. The maps were of two scales: 1 in 1,250 (8 mm = 10 m) and 1 in 2,500 (4 mm = 10 m). The X and Y co-ordinates were recorded with specially prepared scale devices enabling accuracy to within 5 m or less in each axis. Even though exposure variables were not obtained directly from the maps, the case or control status of the subject was concealed from the person recording the grid references, in order to avoid any possible bias in exposure assessment. It was not possible to establish residential grid references 'blindly' for the population controls.

The grid reference of every substation was recorded systematically from each of the 600 or more maps of the study area; for overhead power-lines the co-ordinates of every pylon along the path of the line were recorded. The distance from each subject's home to each substation within 100 m and to the span of any overhead line within 100 m was then computed from the grid references. Additional data on representative power loads carried by each substation were provided by the electricity supply authorities, permitting a weighted index of exposure to be computed. The weighting factor used, w, was the peak winter load in kilovolt-amps (kVA) recorded for each substation, averaged over three consecutive winters. This 'peak winter load' was the only available measure of the electrical power loads carried in the past by each substation, and while it does not enable any direct estimation of magnetic fields, it does provide a simple measure of the likely relative magnitude of field produced by substations within the study area.

The main index of exposure used in the analysis was the distance, d, of the subject's residence from the nearest source, categorised as 0–24, 25–49, 50–99 and $\geqslant$100 m, the last being the referent category. Overhead lines and substations were analysed separately. Other exposure indices were examined, including inverse measures of distance ($1/d$ for overhead lines and $1/d^2$ for substations), both for the nearest source (within 100 m) and for all sources within 200 m. Weighted indices (w/d and w/d^2) were also used for the nearest source and for all sources within 200 m.

Matched analyses were done by conditional logistic regression for case–control studies with a variable matching ratio and categorical exposure variables (Breslow & Day, 1980). Unmatched analyses were done with the Mantel extension procedure, and test-based confidence intervals, using programs provided by Rothman and Boice (1982).

The limited available data on residential proximity to electricity supply equipment suggested that about 1% of urban populations in the UK might live within 100 m of a source (M.E. McDowall, personal communication). To estimate the likely power of the study in advance, residence within 100 m of a source was arbitrarily defined as a dichotomous 'exposure', and power calculations were based on two controls per case, a one-sided 5% significance level, and the expected availability of at least 650 cases for assessment. These calculations suggested that the study would have 90% power to detect a two-fold risk if 3% of the population were 'exposed', but only 80% power to detect a 2.5-fold risk if as few as 1% of the population were 'exposed' (Schlesselmann, 1982).

Results

We identified 811 eligible cases of leukaemia registered in the study area in the period 1965–80, and 1,614 cancer controls. Thirty-six cases were excluded, each with both controls, because the address recorded at registration of the case could not be located; for 106 primary controls similarly excluded there was no eligible reserve. Four other cases were excluded because none of their controls could be located for use in matched analyses, and four controls were excluded on their second occurrence in the control group with a different primary tumour. Thus, 771 cases (95% of those eligible) were available for analysis, 110 matched to one control and 661 matched to two controls, a total of 1,432 controls (89% of those eligible). Only three (0.4%) of the 771 leukaemias were histologically unclassified. The distribution of leukaemia types by district of residence is given in Table I. The population control group comprised 254 persons from the 1975 Bromley electoral roll, of whom the addresses of 231 (91%) were located and assessed for exposure.

The odds ratios for leukaemia by distance from the nearest source are shown in Table II. High-tension overhead power-

Table I Distribution of subjects by leukaemia type and borough

	Borough				
Leukaemia type	*Bromley*	*Croydon*	*Merton*	*Sutton*	*Total (%)*
Acute lymphoid	32	42	20	22	116 (15)
Chronic lymphoid	66	107	55	57	285 (37)
Acute myeloid	81	85	38	44	248 (32)
Chronic myeloid	30	54	20	15	119 (15)
Unclassified					3
All cases	209	288	133	138	771
Cancer controls	368	546	284	234	1432
Population controls	231	–	–	–	231

Table II Relative risk by distance from source: cancer controls

	Distance from subject's address to nearest source (metres)				
	0–24	*25–49*	*50–99*	*⩾100*	*Total*
Power lines					
Cases	1	2	4	764	771
Controls	1	2	6	1423	1432
Matched RR	2.00	2.00	1.33	1.00	
Substations					
Cases	35	62	244	430	771
Controls	51	129	456	796	1432
Matched RR	1.26	0.89	0.99	1.00	

study area (Figure 1), and only nine (0.6%) of the controls lived within 100 m of such a power-line at cancer registration. The relative risk of leukaemia for residence within 100 m was 1.45 (95% CI 0.54–3.88). This excess is not statistically significant, and depends on only seven exposed cases. Residence within 50 m of a power-line was associated with a risk of 2.0 (95% CI 0.4–9.0), but this risk depends on only three exposed cases, and the trend of increasing risk with proximity is not significant ($P = 0.20$). Alternative exposure measures, including a weighted measure incorporating the line voltage rating, made no material difference to the risk estimates. In view of the rarity of residential exposure to overhead power-lines in this population, no more detailed analysis was feasible.

More than 4,600 transformer substations were identified in the study area, and 44% of the cancer controls lived within 100 m of at least one substation at cancer registration. Residence within 100 m of a substation was not associated with an excess leukaemia risk (RR = 0.99). Analysis by distance from the nearest substation revealed no clear pattern of risk (Table II), although the closest distance category also had the highest risk (RR = 1.3, 95% CI 0.81–1.98). There was a slight increase in the risk of acute lymphatic leukaemia within 50 m of the nearest substation (Table III). There was no consistent pattern of risk between the leukaemia types, and in particular there was no suggestion of an increased risk of acute myeloid leukaemia.

The peak winter load of each substation (in kVA) was used to provide a weighted exposure variable. The great majority (86%) of substations were of similar type (11 kV reduced to supply voltage) and had similar recorded peak winter loads (Table IV); unknown kVA values for 21 (0.5%) substations were set to the mean load (335 kVA) in the analysis. An example analysis using such a weighted index of exposure (load/d^2 for the substation nearest to the home) is shown in Table V. There was no evidence of an excess leukaemia risk. The same weighted index was then added for all substations within 200 m of each subject's home as a cumulative measure (Table VI). The category with the highest exposure index had the largest risk, but this was still small (RR = 1.3, 95% CI 0.8–2.3).

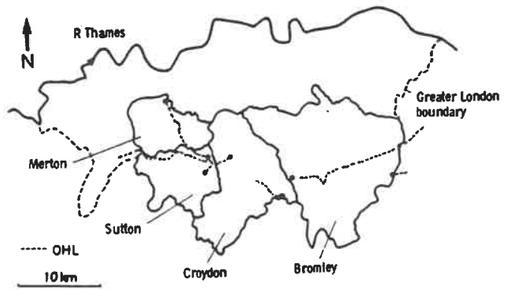


Figure 1 Map of study area in south London, showing main overhead high tension power lines (OHL).

Results obtained using population controls, for Bromley only, are shown in Table VII. These controls were compared with the 190 cases (91%) and 339 cancer controls (92%) resident in Bromley who were aged 18 or more. Similar proportions of both control groups lived within 100 m of at least one substation. Risk estimates within 50 m of the nearest substation were higher with population controls (RR = 1.14, 95% CI 0.55–2.39) than with cancer controls (RR = 0.85, 95% CI 0.45–1.62), but the trend of leukaemia risk with proximity to the nearest substation was not significant with either control group. None of these subjects lived within 100 m of a power-line.

In an analysis covering the entire study area but restricted to subjects aged less than 18 years (Table VIII), there were 84 leukaemia cases (11% of total) and 141 cancer controls (10%). There is a suggestion that residence within 25 or 50 m of a substation is associated with a small increase in risk, but this trend is not statistically significant. Sixty-three (45%) of the controls lived within 100 m of a substation and the relative risk of leukaemia for this exposure was 0.93 (95% CI 0.54–1.60); for residence within 50 m the relative risk compared to the referent category was 1.52 (95% CI 0.67–3.42). Only one case and one control were resident within 100 m of an overhead power-line.

Discussion

The design of this study provided several advantages over earlier studies in selection of the study subjects and avoidance of bias in exposure assessment, but exposure assessment was crude and indirect, and caution is required when interpreting the results.

The leukaemia cases are a virtually complete population sample of incident cases from a well-defined territory and

Table III Unmatched relative risk (no. of cases) by type of leukaemia and distance from nearest substation: cancer controls

	Distance from subject's address (metres)					
Type of leukaemia	*0–24*	*25–49*	*50–99*	*⩾100*	*χ^b*	*P*
Acute lymphatic	1.76 (7)	1.39 (14)	0.93 (33)	1.00 (62)	1.31	0.10
Chronic lymphatic	1.61 (16)	0.96 (24)	1.01 (90)	1.00 (155)	0.90	0.18
Acute myeloid	0.98 (9)	0.73 (17)	0.95 (78)	1.00 (144)	−0.82	>0.50
Chronic myeloid	0.70 (3)	0.65 (7)	1.09 (42)	1.00 (67)	0.79	0.22
All types[a]	1.28 (35)	0.89 (62)	0.99 (243)	1.00 (428)	0.25	0.40
No. of controls	51	129	456	796		

[a]All specified types: small differences in risk from Table II are due to exclusion of the three unclassified leukaemias, two of which are in the referent exposure category. [b]Test for linear trend in risk.

Table IV Distribution of substation peak winter loads (kVA)

kVA[a]	*No. (%)*
1–9	17 (0.4)
10–99	308 (6.6)
100–499	4015 (86.1)
500–999	278 (6.0)
1,000–9,999	3 (0.1)
⩾10,000	40 (0.9)
Total	4661

[a]Mean of the peak loads recorded in three consecutive winters (see text).

Table V Relative risk by weighted index of exposure[a] to nearest substation

	Exposure index				
	0 (low)	*1*	*2*	*3*	*4 (high)*
Cases	76	16	288	287	104
Controls	138	20	547	521	206
Relative risk[b]	1.00	1.45	0.96	1.00	0.92

[a]Index obtained by dividing the range of weighted relative exposure values (10^4 kVA/d^2) into five categories (0, 1–99, 100–999, 1000–4,999, ⩾5,000: the constant (10^4) was used to obtain a suitable numerical range. Subjects in the referent category (index: 0) lived 100 m or more from the nearest substation: see text. [b]χ for linear trend in risk 0.43; $P = 0.33$.

Table VI Relative risk by sum of weighted exposure index[a] for all substations within 200 m

	Exposure index					
	0 (low)	*1*	*2*	*3*	*4*	*5 (high)*
Cases	65	179	163	208	124	32
Controls	128	329	299	366	263	47
Matched RR[b]	1.00	1.06	1.09	1.14	0.95	1.32

[a]See notes to Table V. [b]χ for linear trend in risk 0.03; $P = 0.49$.

Table VIII Relative risk by distance from substation: subjects aged less than 18 years

	Distance from subject's home (metres)				
	0–24	*25–49*	*50–99*	*⩾100*	*Total*
Cases	3	11	22	48	84
Controls	3	12	48	78	141
RR[a]	1.63	1.49	0.75	1.00	

[a]χ for linear trend in risk 0.53; $P = 0.30$.

time period, and a large number of cases was available. The choice of cancer controls as the main comparison group was made for several reasons. Several studies of electrical occupations using proportional measures of risk had reported excess risks of leukaemia relative to other cancers (Milham, 1982; Wright *et al.*, 1982; Coleman *et al.*, 1983; McDowall, 1983), and it seemed reasonable to expect that if these observations represented a specific causal association, this might be reflected in a comparison between leukaemia and other cancers in a case–control study. A random sample of such controls was also readily and cheaply available, closely matched to the cases for age, sex, district of residence and year of diagnosis. Residence data were thus obtained in identical fashion for cases and controls, from the same point in time.

Observer bias was eliminated from exposure assessment, since grid references of each subject's residence were obtained 'blind' as to case or control status, and separately from the grid references of sources of exposure; the various exposure parameters were computed subsequently. Although residential grid references for the population controls were not established blindly, other aspects of exposure assessment were the same as for cancer controls.

The two-fold leukaemia risk observed in this study for subjects resident within 50 m of high-tension overhead power-lines is not statistically significant, and there is no significant trend of risk with increasing proximity to power-lines. This result unfortunately contributes little information on the assessment of possible leukaemia risks associated with residence near high-tension overhead power-lines, because only 0.6% of controls were so exposed. The power of the study (calculated after its execution) to detect even a three-fold risk of leukaemia from living near an overhead power-line was less than 80% on this definition of exposure.

In contrast, a large proportion of the population (44% of controls) was resident within 100 m of one or more transformer substations. Overall, residence near substations showed no association with leukaemia risk relative to cancer controls. Only at less than 25 m was the relative risk of leukaemia elevated in comparison to both sets of controls, but in both cases the risk was small (RR = 1.3). When leukaemia types were examined separately, the excess risks within 50 m of a substation were limited to acute and chronic lymphatic leukaemia. In this analysis large numbers of subjects were classified as exposed, but there was no significant trend in risk with distance from the nearest substation, and the weighted index of exposure incorporating both distance from the substation and a measure of its power throughput (directly related to the magnetic field emitted) gave risk estimates closer to unity than the unweighted estimate. When population controls were used, there was again no significant trend in risk with distance from the nearest substation.

For the 84 leukaemias registered in persons aged under 18, and for which only cancer controls were available, the relative risk within 50 m of the nearest substation was 1.5 (14 exposed cases; 95% CI 0.7–3.4). This result is similar to that of Savitz *et al.* (1988), who reported an odds ratio for leukaemia of 1.54 (95% CI 0.9–2.6) in the same age-group, based on 97 cases, comparing high- and low-exposure categories derived from external wiring configurations: the high-exposure category in this study is similar to typical exposures at 0–40 m from a high-tension line. Savitz *et al.*, (1988) also reported an odds ratio for leukaemia of 1.93 (95% CI 0.7–5.6), based on 36 cases for which direct field measurements were available, using 2 milliGauss ('low-power condition') as the cut-off between exposed and non-exposed subjects.

The study reported here does not provide clear evidence of any overall association between residence near transformer substations and leukaemia risk, but there are several difficulties in its interpretation. Cancer controls were used as the main comparison group: this may give rise to underestimation of the association with leukaemia if any effect of exposure applies equally to some or all other cancers as well (Linet & Brookmeyer, 1987; Smith *et al.*, 1988), since the observed association represents the ratio of the odds of exposure in the two groups of diseases, rather than the odds of exposure in leukaemia cases relative to the general popula-

Table VII Relative risk (unmatched) by distance from nearest substation: Bromley subjects aged 18 or more

	Distance from subject's address (metres)				
	0–24	*25–49*	*50–99*	⩾100	Total
Cases	4	11	63	112	190
Cancer controls	10	21	91	217	339
Relative risk	0.78	1.02	1.34	1.00	$\chi = 0.45$ ($P = 0.33$)
Population controls	4	13	69	145	231
Relative risk	1.30	1.10	1.18	1.00	$\chi = 0.70$ ($P = 0.24$)
All controls	14	34	160	362	570

tion. The overall result would not appear to be due simply to the use of cancer controls, however, since in one district for which population controls were also obtained the results were not strikingly different for the two control groups. The age of the population controls was unknown, and this analysis was therefore unmatched, but age was not associated with distance from the nearest substation among the cases or cancer controls, and is therefore unlikely to have confounded the risk estimate derived using population controls. Matched and unmatched analyses using only cancer controls also produced similar odds ratios.

Valid and precise assessment of past residential exposure to electromagnetic fields presents considerable problems (Coleman *et al.*, 1989), and these may have reduced the risk estimates observed in our study. Even in the relatively large population resident in our study area (over 900,000), it was necessary to identify cases over a 16-year period in order to have enough power to detect a two-fold risk. Many of the study subjects were dead, and it was not possible to interview either their kin or living subjects. Surrogate measures of past exposure were therefore required: such measures are inevitably less precise than direct (contemporary) measurements, but direct measurements of past exposure are not available, and contemporary measurements are not necessarily relevant, since they may not adequately reflect past exposure. Direct measures of ELF magnetic field have been shown to correlate well with surrogate measures derived concurrently from the configuration and distance of external wiring (Wertheimer & Leeper, 1979; Tomenius, 1986; Kaune *et al.*, 1987; Savitz *et al.*, 1988).

Indirect assessment of historical residential exposures by surrogate techniques is inevitably imprecise, and may lead to substantial misclassification of subjects' exposure even between fairly broad categories. The most likely result of such misclassification is a reduction in observed estimates of the relative risk. In addition, there are several reasons why the exposure assessment used in this study may have resulted in underestimation or misclassification of past ELF field exposure. These include unrecorded external sources of residential exposure; other, unassessed domestic or occupational ELF field exposures, and lack of data on residential mobility. The maps used in this study covered the entire study period, and showed all the overhead high-tension power-lines, but some of the substations in commercial areas were omitted, and underground cables were not always shown. The maps were the primary source of data for this purpose, but additional data on the siting of substations were provided by the power companies. Omission of such sources will reduce both the number of subjects classified as exposed and (if omissions are similar for cases and controls), the estimate of risk obtained. The address at cancer diagnosis used to construct the measures of exposure in this study was not necessarily the relevant address (i.e. the address occupied between initiation and diagnosis of the leukaemia or the equivalent period for the control), and since residential histories were not available, it was not possible to take into account the duration of residence at the address recorded. Both points could lead to exposure misclassification; again, the effect would almost certainly be to reduce risk estimates toward unity.

Domestic ELF magnetic fields appear to be dominated by external sources (Kaune *et al.*, 1987), and to be affected by the manner in which the wiring system is grounded (Silva *et al.*, 1988). The electromagnetic environment in the UK is still largely unexplored (Maddock, 1987), but in comparing our results to those obtained elsewhere, it may be useful to consider typical environmental magnetic field strengths near power lines and substations. Magnetic fields generated by typical overhead high tension power lines in the UK (400 kV) have maximum values at ground level of the order of 200 milliGauss (20 microTesla), depending on the current load being carried (Maddock & Male, 1987), and decay roughly as the reciprocal of distance. Houses situated near overhead high tension lines in the UK have typical ambient domestic magnetic fields of up to 40 mG at 30 m from the line, 23 mG at 50 m, and 14 mG at 100 m. These values correspond with the maximum values of 10–35 mG reported by Wertheimer and Leeper (1979, 1982) and mean values of 1–3 mG reported by Savitz *et al.* (1988) in their 'high current configuration' homes, sited within 40 m of such lines. In the UK, substations include both local 'green box' transformers, equivalent to the pole-mounted transformers in the USA, and the grid-point and primary substations, which step down transmission voltages (132 kV and over) to distribution voltages (33 kV and less). Primary substations are larger and much less frequent than local substations, and are usually housed in brick buildings or large fenced areas. Our own informal measurements showed magnetic fields of 5–10 mG near the ground at up to 20 m distance from primary substations, comparable to the fields in some 'high current configuration' homes in US studies (Wertheimer & Leeper, 1982; Savitz *et al.*, 1988). In contrast, magnetic fields of up to 10 mG immediately above buried street cables decreased to background levels within a few metres and had no effect on ambient domestic magnetic fields. The median intensity of domestic magnetic fields measured in a small number of homes in the UK by Myers *et al.* (1985) was 0.15 mG, compared to values of about 0.8 mG in various American and Swedish studies; if there is a real association between ELF magnetic fields and leukaemia risk, this difference may help to explain the results in our study.

Myers *et al.* (1985) have reported preliminary results from a population-based study of childhood cancer in the north of England which included 190 leukaemias and lymphomas and 186 solid tumours. About 7% of their controls lived within 100 m of an overhead power-line. These data show that for residence within 50 m the relative risks were 1.25 for leukaemia/lymphoma (95% CI 0.5–3.1) and 1.61 for solid tumours (95% CI 0.6–4.6), although numbers of exposed subjects were small, as in our own study, and there was no clear trend of risk with distance.

The only other study of cancer in people living near electricity transmission and distribution facilities in the UK is a 12-year retrospective mortality study of 7631 people identified by McDowall (1986) from the 1971 census. The subjects lived within 30 m of a power-line or within 50 m of a substation. Standardised mortality ratios for all-causes mortality were 87 for men and 92 for women. For leukaemia, the SMR was 61 (two deaths) for men and 154 (four deaths) for women, neither result significantly different from expected. There was no consistent relationship between cancer mortality and distance from an electrical installation, and SMRs were not different in people who had lived at the same address for at least 5 years and in those who had not. This negative study confronted the same problems of indirect exposure assessment and lack of data on potential confounders as our own study.

The absence of any clear association in this study between leukaemia and residence in south London near electricity transmission and distribution equipment is of some practical interest, since a large leukaemia risk (three-fold or more) would probably have been detected despite weaknesses in the study design. There is some uncertainty about the small minority of the population living very close (within 25 m) to sources, however: our results are similar to those of several other investigators in suggesting a possible excess leukaemia risk, particularly among children.

Public concern about possible excess risks of leukaemia and cancer from living near to power-lines is reflected in the press, radio and television and, in the USA, in an increasing number of damage claims against power companies, for both cancer and loss of property value. In effect, the courts are being asked to resolve issues which are still the subject of scientific debate. The adversarial nature of court proceedings is not appropriate for this purpose, but the public concern and the legal conflicts do emphasise the need for better evidence on how ELF fields interact with biological organisms and whether they are responsible for any increase in the risk of cancer or leukaemia (Aw, 1988). A new group of epidemiological studies is now under way, using com-

monly agreed methods of exposure assessment in both occupational and residential settings (Coleman *et al.*, 1989). These studies have newly available instruments, suitable for personal exposure assessment in large-scale studies, and should provide better evidence on the existence and magnitude of any excess risk of leukaemia or cancer from human exposure to extremely low frequency magnetic fields.

We are grateful for the advice and assistance of Dr V. Beral, (London School of Hygiene and Tropical Medicine), Dr M. McDowall, (Office of Population Censuses and Surveys), Professor B. Sayers, Professor E. Freeman and Dr P Allen (Imperial College of Science and Technology) and Ms H. Thornton-Jones (Thames Cancer Registry). The kind co-operation of London Electricity Board, South East Electricity Board and Central Electricity Generating Board is acknowledged.

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FDP-05-2025 AEP Subm @ 5/5/25

3 pages

FDP-05-2025 AEPsubm

(N)

5/5/25

Proposed Conditions at Initial Planting

Proposed Conditions at Full Growth

Souder

Substation and Transmission Line Extension Project

Viewpoint

Date: 2/28/2025 Time: 12:43 p.m.

Viewing Direction: Northwest

Proposed Souder Substation

Proposed Transmission Line

Photo Viewpoint Location

The visual simulation is an approximation using the best available data. Final engineering and construction details are not complete.

AEP OHIO

An AEP Company

FDR

Proposed Conditions at Initial Planting

Proposed Conditions at Full Growth

Souder

Substation and Transmission Line Extension Project

Viewpoint

Date: 2/28/2025 Time: 1:36 p.m.

Viewing Direction: South

Proposed Souder Substation

Photo Viewpoint Location

The visual simulation is an approximation using the best available data. Final engineering and construction details are not complete.

AEP OHIO

An AEP Company

FDP-05-2025 Srba 5/5/25 (m) 1-6 pages

- Summary
- Land Profile
- Residential
- Commercial
- Improvements
- Permits
- Mapping
- Sketch
- Photo
- StreetSmart
- Aerial Photos
- Transfers
- BOR Status
- CAUV Status
- Tax & Payments
- Tax Distribution
- Tax Calculators
- Value History
- Rental Contact
- Incentive Details
- Quick Links

Parcel ID: 150-000812-00
COLUMBUS & SOUTHERN OHIO ELECTRIC CO

Map Routing: 150-O025B-00200
4999 PARSONS AVE

Record Navigator
1 of 1

OWNER

Owner	COLUMBUS & SOUTHERN OHIO ELECTRIC CO
Owner Mailing / Contact Address	1 RIVERSIDE PLAZA COLUMBUS OH 43215-2373 Submit Mailing Address Correction Request
Site (Property) Address	4999 PARSONS AVE Submit Site Address Correction Request
Legal Description	4999 PARSONS AVE ~~R22 T4 S28~~ 6.150 ACRES
Calculated Acres	6.12
Legal Acres	6.15
Tax Bill Mailing	View or Change on the Treasurer's Website **If you have recently satisfied or refinanced your mortgage, please visit the above link to review your tax mailing address to ensure you receive your tax bill and other important mailings.**
Parcel Permalink	https://audr-apps.franklincountyohio.gov/redir/Link/Parcel/150-000812-00
eAlerts	Sign Up for or Manage Property eAlerts The Auditor's office provides a Property eAlerts tool through which a property owner can sign up to receive an automated email alert whenever a change in owner or value is made to their property record. Click on the above button to sign up for or manage your Property eAlerts.
Tools	View Google Map Print Parcel Summary

MOST RECENT TRANSFER

Transfer Date	JAN-06-2004
Transfer Price	$0

Actions
- Neighborhood Sales
- Proximity Search
- Printable Version
- Custom Report Builder

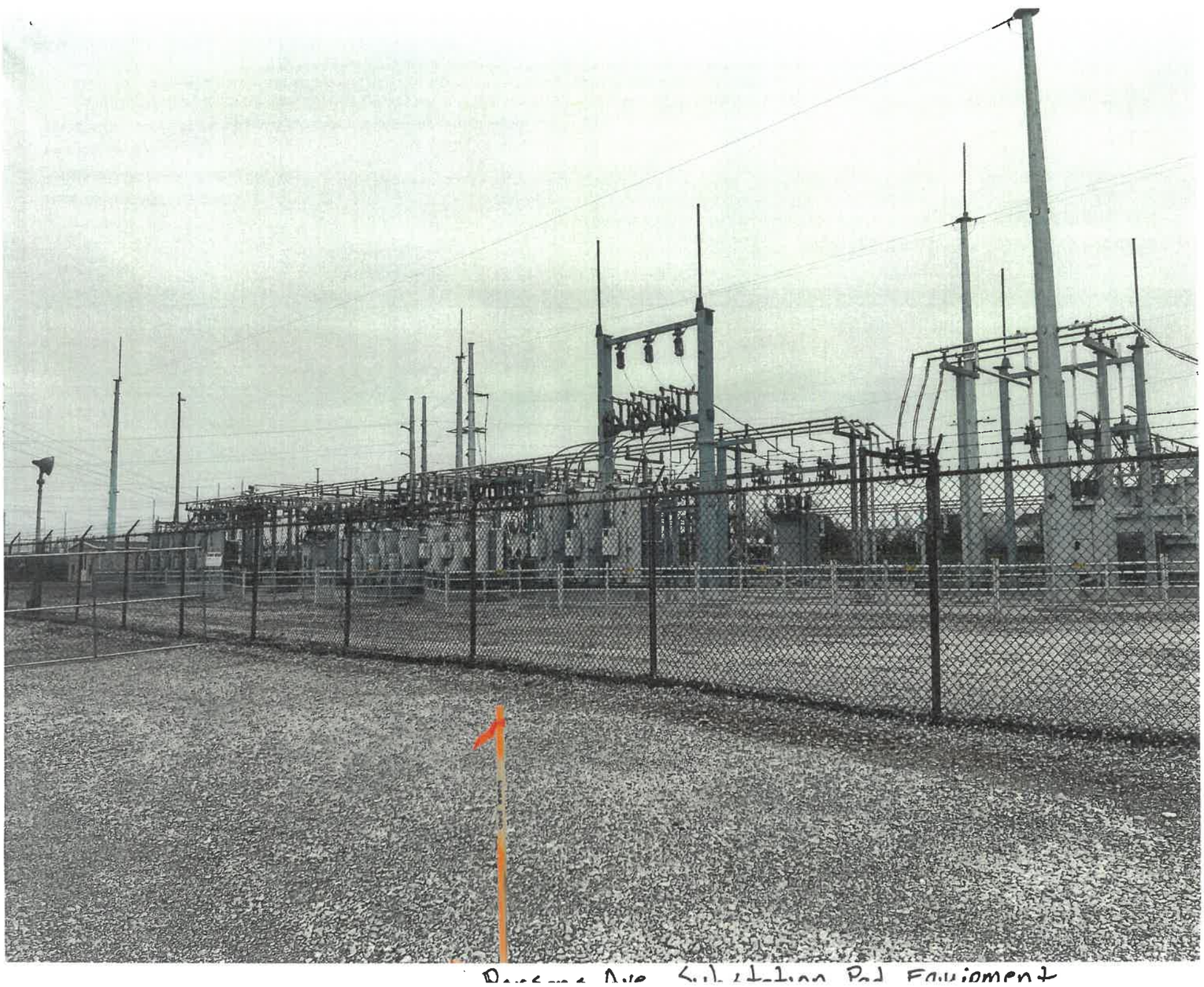
Reports
- Proximity Report
- Map Report
- Parcel Summary
- Parcel Detail

Go

1


Google Earth - New Polygon
Name: Untitled Polygon
Description | Style, Color | View | Altitude
Measurements
Perimeter: 0.23 Miles
Area: 1.88 Acres
Cancel
OK
4999 Parsons Ave
Image © 2025 Airbus

2



Parsons Ave. Substation Pad Equipment

Need Number: AEP-2023-OH016

Process Stage: Solutions Meeting 5/9/2023

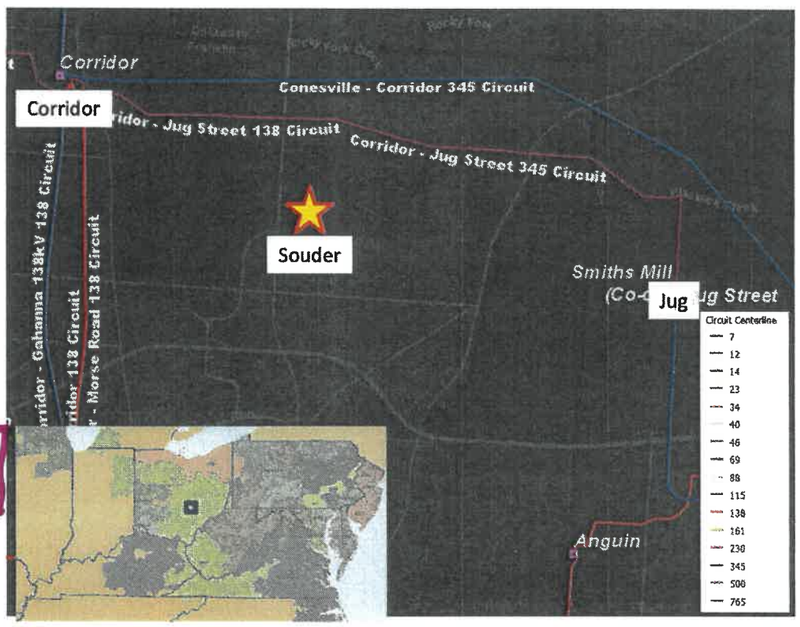
Previously Presented: Need Meeting 2/17/2023

Supplemental Project Driver: Customer Service

Specific Assumption Reference: AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions Slide 8)

Problem Statement:

AEP Ohio is requesting a new 138kV delivery point near the Corridor - Jug 138kV circuit by June 2025 to support continued growth in and around the New Albany, Ohio area. Initial load is anticipated to be approximately 24.0 MVA with a future projected load of approximately ~~79~~ 100 MVA.



Need Number: AEP-2023-OH016

Process Stage: Solutions Meeting 5/9/2023

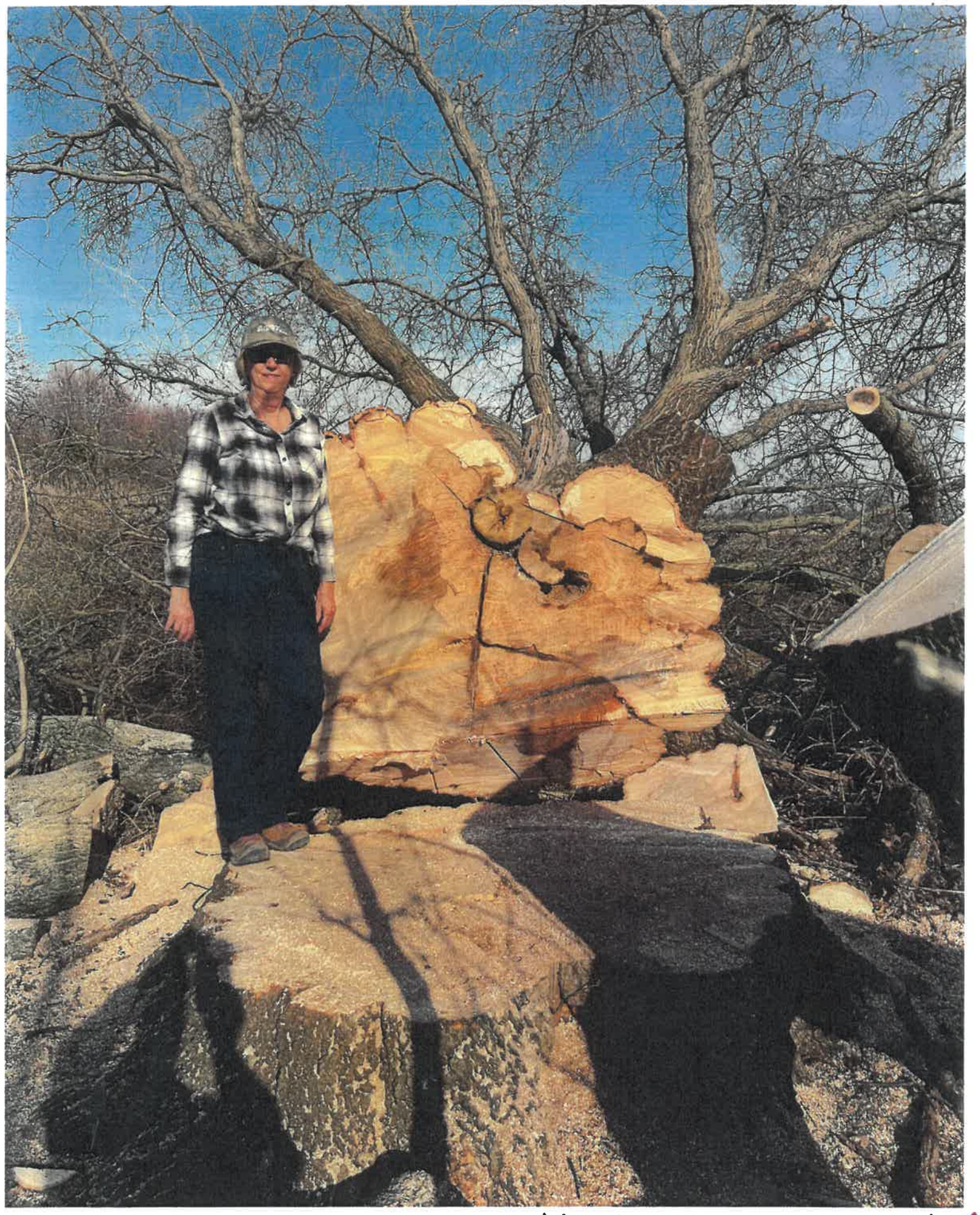
Proposed Solution:

The following work is all direct connect substations to physically connect demand to the grid.

- **Souder 138 kV:** Cut into the Corridor – Green Chapel 138 kV circuit and extend ~1.0 mile of new double circuit line, utilizing 2-bundled ACSR Falcon 1590 (54/19) conductor, SE rating 1118 MVA , to the greenfield Souder station with (5) 80 kA, 4000 A breakers laid out as 5-CB ring bus for future expansion to 6-CB ring. Cost: **$14.31 M**

4

Existing 12 foot Mound on Site (Fremok)



So much for Preserving Native Vegetation 300 Year Old Oak 6