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## VILLAGE OF HOFFMAN ESTATES PLANNING AND ZONING COMMISSION STAFF REPORT

**PROJECT NUMBER:** MASTER22-0012  
**PROJECT NAME:** MICROSOFT DATA CENTER SUBSTATION  
**ADDRESS/LOCATION:** 2210 LAKEWOOD BLVD.  
**REQUESTS:** PRELIMINARY & FINAL SITE PLAN VARIATION

**OWNER:** MICROSOFT CORPORATION  
**APPLICANT:** BURNS & MCDONNELL  
**PROPERTY SIZE:** 53 ACRES (ENTIRE SITE)  
**ZONING / LAND USE:** M-2 MANUFACTURING DISTRICT / DATA CENTER  
**ADJACENT PROPERTIES:** NORTH: VILLAGE OF SOUTH BARRINGTON (FARM LAND)  
SOUTH: CMU – COMMERCIAL MIXED USE (BELL WORKS)  
EAST: M-2 MANUFACTURING DISTRICT (FANUC)  
WEST: B-2 COMMUNITY BUSINESS (FOUNTAIN CROSSING)  
M-2 MANUFACTURING DISTRICT (FOUNTAIN CROSSING)  
**PZC MEETING DATE:** 11/16/2022  
**PUBLIC HEARING:** YES  
**STAFF ASSIGNED:** JIM DONAHUE, SENIOR PLANNER

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### REQUESTED MOTION

Request for Preliminary and Final Site Plan including variations from the Zoning Code for height and fencing for the Microsoft Data Center Substation located at 2210 Lakewood Blvd.

### BACKGROUND

In 2021, Site Plan approval was granted for the 53-acre Microsoft Data Center project located at 2190-2200 Lakewood Blvd. Construction on Phase 1 of the project, including a 250,000 square foot building and all associated site improvements, is nearing completion. Subsequent phases of the development, including a second 150,000 square foot building and electrical substation, were also envisioned as part of the 2021 approvals. Preliminary and final site plan approval is required for the subsequent phases.

### PROPOSAL

The petitioner is proposing a new electrical substation on the southwest corner of the Microsoft Data Center development at 2210 Lakewood Blvd. The substation will be located on Microsoft's property and operated by

Commonwealth Edison (ComEd), and is proposed in the location previously identified on Phase 1 approval for the Microsoft Data Center.

The substation includes a pre-fabricated metal equipment enclosure and other necessary aboveground and underground equipment. The substation will be fed by two 138kV high voltage distribution lines that lead in from ComEd's TDC 214 Hoffman Estates Substation located south of I-90 on Pembroke Avenue. The 138/12kV power transformers will step down the voltage to feed the Microsoft Data Center development. This Site Plan request is exclusive to the substation on the Microsoft Data Center property. The transmission line extension from the Pembroke substation to the Microsoft substation will be reviewed as a separate project for consideration by the Village Board.

The substation will be surrounded by fencing and landscaping. Internally the site will include an unmanned equipment enclosure, power transformers, auxiliary transformers, and static masts for lightning protection.

## **SITE PLAN**

### ***Vehicular Access / Circulation***

- Vehicular access to the site would be via an entrance site off of Lakewood Blvd. that was previously constructed as part of Phase 1.
- An internal driveway will be accessible by vehicles to access the equipment located within the fenced area.
- The substation will be operational 24 hours a day and 7 days a week. No full-time employees will work at the substation. The site will be gated and access limited to ComEd personnel only.
- ComEd vehicles entering the site will park on the above mentioned driveway system for access to the equipment.

### ***Engineering***

- The Engineering Division has reviewed the proposed engineering, grading, and erosion control plans and find the plans acceptable. Sewer and water are not proposed for the site and storm water control has been accounted for with the overall stormwater facilities provided for the whole site.
- The site will be covered in 6" crushed stone except for the paved driveway internal to the site.

### ***Fencing / Landscaping***

- Fencing is proposed around the substation which includes a palisade style fence along the west and south perimeter of the substation and a 7' chain link fence with 1' barbed wire on top along the east and north perimeter of the substation.
- Landscaping around the substation site was provided for in the Phase 1 approvals. A copy of that plan is included for reference.

- A perspective rendering is also included to show the sight line from Lakewood Blvd.

### ***Building Design***

- A light colored unmanned equipment enclosure will be sited on the north side of the property approximately 600' from Lakewood Blvd.

### ***Exterior Lighting and Site Acoustics***

- No new light poles are proposed, but individual luminaires will be mounted on substation steel structures such as the static masts. The mounting heights vary from 6' to 30' and are intended to light up the structures and the site. The photometric plan indicates that the light levels will not exceed code and won't extend past the property lines.
- As required by Village Code, due to the fact that this project will include potential noise generators; the petitioner commissioned a noise study to identify noise impacts on the site from development. Village Code Section 7-8-3. Pollution, requires compliance with the performance standards as set forth in the Cook County Noise and Vibration Control Regulations, adopted November 1973, with amendments. The Cook County Environmental Control Ordinance, Article IX Noise and Vibration Control provides the noise emission limits based on maximum sound pressure levels (dB) along district boundaries.
- Noise modeling was performed using the industry-accepted sound modeling software, CadnaA. The project transformers are the major sources of noise for the project. The substation is expected to comply with all requirements as designed.

### **VARIATION AND VARIATION STANDARDS**

- The petitioner is requesting two variations from code in order to develop the site:
  - A variation from Section 9-9-2 E to allow a utility structure to be 86' instead of the permitted height of 45'.
  - A variation is from Section 9-3-3-B-1 to permit barbed wire fencing.
- The maximum building or structure height in the M-2 District is 45'. The petitioner is proposing static masts to be 86' in height. The static masts are part of a lightning protection system including shield wire strung between the static masts and a ground grid system used at substations to protect equipment from lightning strikes and subsequent equipment damage. Lightning strikes to the shield wire or static masts direct the lightning current away from power equipment and control wiring into the ground grid and native soil to minimize damage to these components.
- Additionally, the petitioner is proposing barbed wire atop of the chain link fence for security purposes. The code allows barbed wire on top of permitted fences in Manufacturing Districts except where adjacent to developed residential, apartment, office, business or manufacturing districts. The land uses on the adjacent properties requires the variance request.

### **STANDARDS FOR VARIATION**

Section 9-1-15 of the Zoning Code – *Standards for a Variation* - states that the Planning and Zoning Commission shall not recommend the adoption of a proposed variation unless it finds that the variation meets the Standards for Variations as set forth in the Zoning Code.

1. The Planning and Zoning Commission shall not recommend the variation of the regulations of the Code unless it shall first make a finding based upon the evidence presented to it in each specific case that:
  - a. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in the district in which it is located;
  - b. The plight of the owner is due to unique circumstances;
  - c. The variation, if granted, will not alter the essential character of the locality.
2. For the purpose of implementing the above rules, the Planning and Zoning Commission shall also, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the applicant have been established by the evidence;
  - a. The particular physical surroundings, shape of topographical condition of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out;
  - b. The conditions upon which the petition for a variation is based would not be applicable, generally, to other property within the same zoning classification;
  - c. The purpose of the variation is not based exclusively upon a desire to increase the value of the property;
  - d. The alleged difficulty or hardship has not been based exclusively upon a desire to increase the value of property;
  - e. The granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; and
  - f. The proposed variation will not impair an adequate supply of light and air to adjacent property, or substantially increase the congestion in the public streets, or increase the danger of fires, or endanger the public safety, or substantially diminish or impair property values in the neighborhood.
3. The Planning and Zoning Commission may recommend to the Village Board that such conditions and restrictions be imposed upon the premises benefited by a variation as may be necessary to comply with the standards set forth in this section to reduce or minimize the injurious effect of such variation upon other property in the neighborhood, and better to carry out the general intent of this Code.

The petitioner has provided a response to the Standards for a Variation in their application. If this request is approved, the variation ordinance would be granted to the property in perpetuity or until otherwise amended or dissolved by a future ordinance.

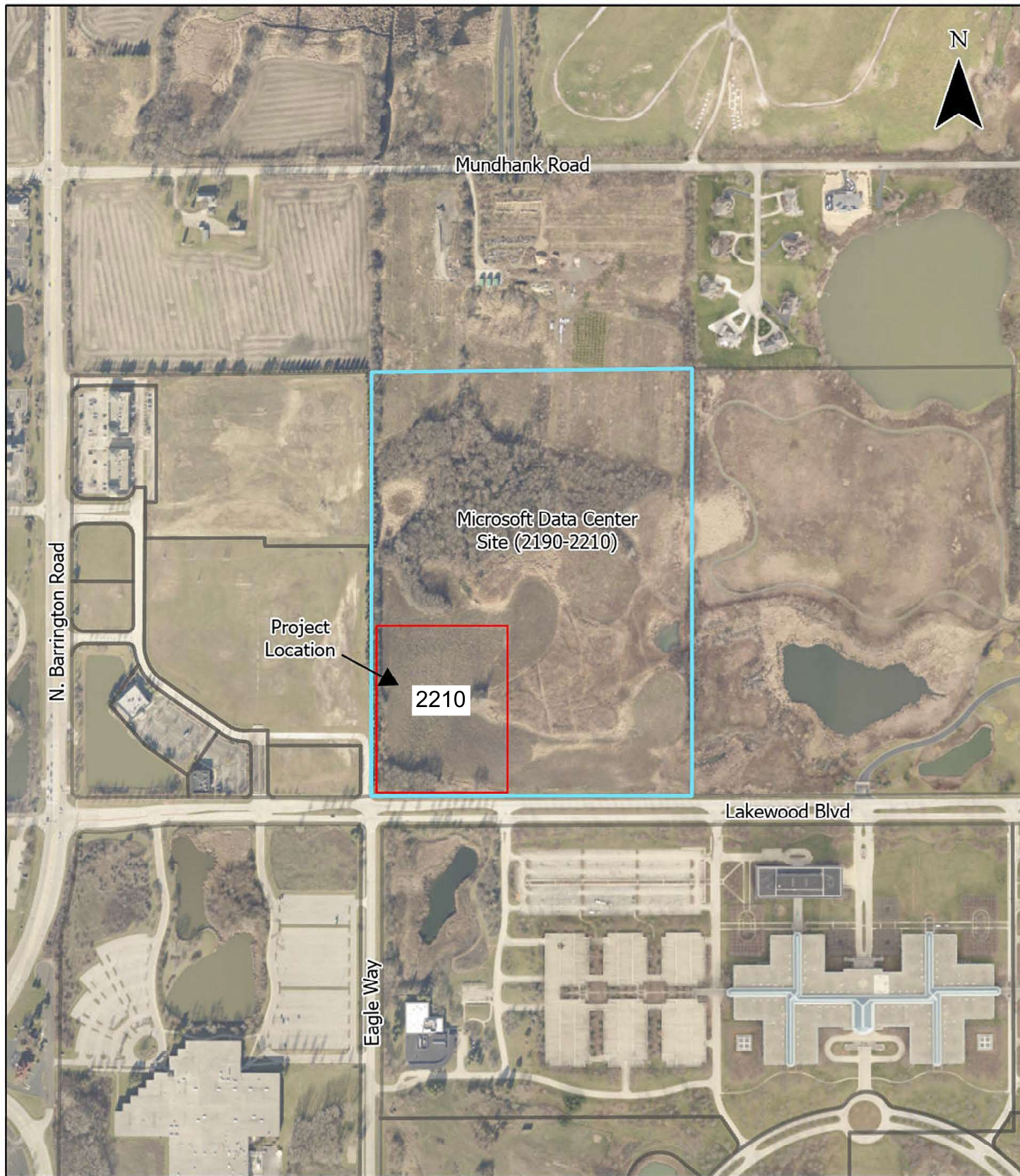
### **RECOMMENDED CONDITIONS**

1. The building permit shall be obtained within twelve (12) months of the Village Board action on this request.
2. Two variances are approved with this request:
  - A variance from Section 9-9-2 E to allow a utility structure to be 86' in height instead of the permitted height of 45'.
  - A variance from Section 9-3-3-B-1 to permit barbed wire fencing on top of a fence.
3. A performance guarantee based on an Engineers Estimate of Cost shall be submitted to the Village prior to issuance of a building permit.
4. A permit from the Metropolitan Water Reclamation District (MWRD) shall be provided prior to site construction commencing.
5. The following conditions relate to the site construction:
  - a. A pre-construction meeting shall be conducted with the Village staff prior to construction commencing.
  - b. Fire Department and emergency access to the property shall be maintained at all times. Petitioner shall make any adjustments on the site as needed for access as per direction by the Village.
  - c. In accordance with Village Code, construction hours shall be limited to 7 a.m. to 7 p.m. Monday through Friday, and 8 a.m. to 6 p.m. Saturday and Sunday.

Attachments: Location Map  
Petitioner's Application and Supporting Documents

# 2210 Lakewood Boulevard

PIN: 01-36-101-005-0000 & 01-36-101-007-0000



## Legend

-  Subject Property
-  Parcels



Planning and Transportation Division  
Department of Development Services

November 2022



# VILLAGE OF HOFFMAN ESTATES PLANNING AND ZONING GENERAL APPLICATION

**PROJECT NAME:** CHI05 Substation

**ADDRESS:** 2200 Lakewood Blvd.

**PROPERTY INDEX NO.:** 01-36-101-005-0000

**PROPERTY ACRES:** 26.6                      **ZONING:** M2 Manufacturing

**PROJECT DESCRIPTION:** Substation to service the Microsoft CHI05 data center campus.

### REQUESTS BEING MADE (check all that apply):

Application Type	Subtype	Addendum
<input type="checkbox"/> ANX - Annexation	N/A	N/A
<input type="checkbox"/> MSP - Master Sign Plan	<input type="checkbox"/> New <input type="checkbox"/> Amendment	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> PLAT - Subdivision	<input type="checkbox"/> Non-Residential Preliminary <input type="checkbox"/> Non-Residential Final <input type="checkbox"/> Non-Residential Preliminary/Final	<input type="checkbox"/> Residential Preliminary <input type="checkbox"/> Residential Final <input type="checkbox"/> Residential Preliminary/Final N/A
<input type="checkbox"/> PLAT - Other	Type _____	N/A
<input type="checkbox"/> RPD Amendment	N/A	N/A
<input type="checkbox"/> REZ - Rezoning	From _____ to _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> SPR - Site Plan Review	<input type="checkbox"/> Preliminary Concept <input type="checkbox"/> Preliminary	<input type="checkbox"/> Final <input checked="" type="checkbox"/> Preliminary/Final <input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> SPA - Site Plan Amendment	<input type="checkbox"/> Staff Review <input type="checkbox"/> Administrative Review	<input type="checkbox"/> Minor Amendment <input checked="" type="checkbox"/> Major Amendment <input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> SU - Special Use	<input type="checkbox"/> Listed Use (please list) _____	<input checked="" type="checkbox"/> Use Not Cited (please list) Substation _____ <input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> TA - Text Amendment	<input type="checkbox"/> Subdivision Code <input type="checkbox"/> Zoning Code	<input type="checkbox"/> Other (please list) _____ N/A
<input checked="" type="checkbox"/> VAR - Variation	<input checked="" type="checkbox"/> Non-Residential <input type="checkbox"/> Residential <input type="checkbox"/> Sign	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**I. Owner of Record**

Juan Vasquez

Microsoft Corporation

Name

Company

200 East Randolph Drive -Suite 200 Chicago

Street Address

City

Illinois 60601

312-617-0018

juan.vasquez@microsoft.com

State

Zip Code

Telephone Number

Email

**II. Applicant (if not the owner)**

Microsoft Corporation

Name

Firm/Company

Street Address

City

State

Zip Code

Telephone Number

Email

Applicant's relationship to property: \_\_\_\_\_

**III. Authorized Agent on Behalf of the Owner of Applicant or (Contact Person/Project Manager)**

Breanna Kim

Burns & McDonnell

Name

Firm/Company

1431 Opus Pl

Downers Grove

Street Address

City

IL 60515

312-833-4058

bmkim@burnsmcd.com

State

Zip Code

Telephone Number

Email

**IV. Owner Consent for Authorized Representative**

It is required that the **property owner or designated representative** be at all requests before the Planning and Zoning Commission (PZC). During the course of the meeting, questions may arise regarding the overall site, site improvements, special conditions to be included in a PZC recommendation, etc. The representative present must have knowledge of the property and have the authority to make commitments to comply with any and all conditions included in the PZC recommendations. Failure to have the owner or designated representative present at the meeting can lead to substantial delays in the hearing process. **If the owner cannot be present at the meeting, the following statement must be signed by the owner:**

I understand the requirement for the owner or an authorized representative to be present at the meeting with full authority to commit to requests, conditions and make decisions on behalf of the owner. I hereby authorize the following person(s)/firm(s) to act on my behalf and advise that he/she has full authority to act as my/our representative.

Ross Kaplan/Burns & McDonnell

Name/Firm

Name/Firm

Thomas Konopka/Burns & McDonnell

Name/Firm

Name/Firm

  
Digitally signed by Juan Vasquez  
DN: cn=Juan Vasquez, email=juan.vasquez@microsoft.com, o=Microsoft, cn=Juan Vasquez  
Reason: I agree to the terms defined by the placement of my signature on this document.  
Contact info: 312-617-0018  
Date: 2022.06.15 16:00:46-0500  
Owner Signature

Juan Vasquez


Print Name



#### IV. Acknowledgement(s)

- Owner, applicant and authorized representatives may include other team members (consultants, brokers, tenants, etc.) that may be called upon to present at public meetings before the Planning and Zoning Commission and Village Board.
- Applicant acknowledges, understands and agrees that under Illinois law, the Village President (Mayor), Village Trustees, Village Manager, Corporation Counsel and/or any employee or agent of the Village or any Planning and Zoning Commission member or Chair, does not have the authority to bind or obligate the Village in any way and therefore cannot bind or obligate the Village. Further, Applicant acknowledges, understands and agrees that only formal action (including, but not limited to, motions, resolutions and ordinances) by the Board of Trustees, properly voting in an open meeting, can obligate the Village or confer any rights or entitlement on the applicant, legal, equitable or otherwise.
- Planning and Zoning Commission members and Village Staff often conduct inspections of subject site(s) as part of the pre-hearing review of requests. These individuals will be carrying official Village identification cards that can be shown upon request.

**The Owner and Applicant**, by signing this Application, certify to the correctness of the application and all submittals.

Owner's Signature:  \_\_\_\_\_

Owner's Name (Please Print): Juan Vasquez

Applicant's Signature: \_\_\_\_\_  
(If other than Owner)

Applicant's Name (Please Print): \_\_\_\_\_

Date: 09/15/2022

#### IV. Application and Document Submittals

All required application materials should be submitted to the Planning & Transportation Division in electronic format via email to [planning@hoffmanestates.org](mailto:planning@hoffmanestates.org). Staff will notify the applicant if full size plan submittals are also required for a particular project review. Submittal requirements can be found in Subdivision Code, Section 10-6 of the Village's Municipal Code.

All applications fees must be paid before the Planning and Zoning Commission can hear any case.

Please contact the Planning & Transportation Division with any questions:

Email: [planning@hoffmanestates.org](mailto:planning@hoffmanestates.org)  
Address: 1900 Hassell Road  
Hoffman Estates, IL 60169  
Phone: (847) 781-2660



# VILLAGE OF HOFFMAN ESTATES PLANNING AND ZONING COMMISSION SITE PLAN ADDENDUM – NON-RESIDENTIAL

Amendment  Concept  Preliminary  Final

## I. DESCRIPTION OF PROJECT:

### A. ATTACH A NARRATIVE FOR THE PROPOSED PROJECT ON A SEPARATE SHEET

- ✓ Article 10-6 of the Subdivision Code details the application process and required submittal documents. For relevant items, provide detailed information as part of the project narrative.

B. Total Number of Buildings: N/A

C. Total Gross Floor Area: N/A square feet

D. Height of tallest building (including antennas, hvac, etc.): 86 feet

E. With respect to this project’s compatibility with adjacent land uses, address the following in the Project Narrative: Building Scale, architectural Materials, Coordinated Color Scheme, Existing and Planned Areas of Visual Interest, Design Concept and Relationship of Building Materials to one another.

F. Estimated start of construction: 10/1/2022

G. Estimated time to complete development: 1.5 years  
Attach a phasing schedule, if applicable.

H. Does the property contain flood plain lands or wetlands? Yes  No   
If yes, please address as part of the narrative.

I. Is there any historical or archeological significance to the existing structures or features of this site or the surrounding sites? Yes  No   
If yes, please address as part of the narrative.

J. Are there any endangered, threatened, or unique plants or animals located in or near the area? Yes  No   
If yes, please address as part of the narrative.

## II. OPERATIONAL CONSIDERATIONS

A. Anticipated hours of operation: 24/7 am/pm to \_\_\_\_\_ am/pm

B. Anticipated number of employees: 0 total \_\_\_\_\_ per shift \_\_\_\_\_ number of shifts

C. Estimated number of customers: 0 daily \_\_\_\_\_ peak hour

D. If there is any additional information about the proposed development or its operation that may affect the site development, address as part of the narrative.

### III. FINANCIAL CONSIDERATIONS

A. Estimated annual gross sales of general merchandise subject to sales tax for this project (includes 1% local share of state tax and 1% home rule tax):

Gross Sales (General)		Tax Rate		General Sales Tax
	X	2%	=	\$ N/A

B. Estimated annual gross sales subject to food and beverage (F & B) tax for this project (food prepared on premises and alcoholic beverages consumed on premises). See article 13-7 of the Hoffman Estates Municipal Code for detailed definition:

Gross Sales (F & B)		Tax Rate		F & B Tax
	X	2%	=	\$ N/A

C. Estimated Annual Hotel Tax: 365 Days X

Estimated Average Room Rate		Number of rooms		Occupancy Percentage		365 Days		Tax Rate		Hotel Tax
	X		X		X		X	6%	=	\$ N/A

D. Other tax/revenue:  
(Entertainment tax = 6%, etc.)

		Rate		Tax
	X		=	\$ N/A

E. Estimated Annual Telecommunications (TC) Tax:

Estimated Yearly Phone Bill		Tax Rate		TC tax
	X	6%	=	\$ N/A

F. Current assessment of the property: \$59,850

G. Estimated value of Construction: \$1,000,000

H. Will this project result in any unusual expenditure of public funds or requirements for public services in anyway?  Yes  No

If yes, please address as part of the narrative.

#### IV. TRAFFIC CONSIDERATIONS

##### A. Parking

1. Total number of parking spaces to be provided:

Employees: \_\_\_\_\_ Customers/  
Visitors: \_\_\_\_\_ Handicapped: \_\_\_\_\_ Total: 0

2. When is the peak parking period for this project?

N/A

3. Will this project share parking spaces with other businesses?  Yes  No

If yes, please address as part of the narrative.

##### B. Traffic

1. Estimated number of vehicles entering and exiting this site during the peak one hour period between 4:00 p.m. and 6:00 p.m. N/A

2. Will there be any other peak traffic times for this project?  Yes  No

If yes, give the time(s) of day and traffic volume: \_\_\_\_\_

3. Will this project contain a drive through?  Yes  No

If yes, the project narrative should address order processing time, projected stacking demand, and other details to explain the operation.

##### C. Deliveries

1. The project plan submittal should include turning templates to show all routes to be used for making deliveries to and from site. Is this plan included?  Yes  No

2. How often will deliveries be made on site? N/A

2. What is the frequency and time period expected for deliveries? N/A

3. What is the largest delivery vehicle to be used and its size?

Vehicle Type	Size	check	
Single Unit truck	30 ft.	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate Semitrailer	50 ft.	<input type="checkbox"/>	<input type="checkbox"/>
Large Semitrailer	55 ft.	<input type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>

If the delivery truck used fits into the "Other" category, please specify type, size and turning radius: \_\_\_\_\_  
 \_\_\_\_\_

D. Any additional site related traffic information not covered above?  Yes  No  
 If yes, please address as part of the narrative.

**V. RECYCLING AND GREEN INITIATIVES**

- A. Article 9 of The Municipal Code of the Village of Hoffman Estates requires that businesses maintain an effective recycling program. Address any unique recycling plans as part of the project narrative.
- B. The Village supports and promotes sustainability. Please address any planned green or sustainability initiatives as part of the narrative.
- C. Do you anticipate submitting this project for LEED certification (or any other similar certifications)?  Yes  No  
 If yes, please address as part of the narrative.

**VI. GENERAL CONSIDERATIONS**

A. Please list examples of similar uses (including name and location) in the area that can be used for comparison by the Village:

1. Substation TDC214 on Pembroke Ave \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

B. Will this project contain any noise generators that will adversely affect surrounding areas?  
 Yes  No   
 If yes, please address as part of the narrative.

C. Is there anything included in this project that may be sensitive to surrounding noise generators?

Yes  No

If yes, please address as part of the narrative.

D. Do you intend to apply for a liquor license?  Yes  No

If yes, please contact the Village Clerk's Office at 847.781.2625

E. Will this project contain a cafeteria or food service area (in order to determine applicability of a sewer and water surcharge)? Yes  No

If yes, please address as part of the narrative.

F. In the project narrative, please list and explain anything involved in this project that is not covered in this application that should be brought to the Village's attention. Also address any rare or unusual circumstances or needs related to this project.

Please contact the Planning Division with any questions:

Email: [planning@hoffmanestates.org](mailto:planning@hoffmanestates.org)

Address: 1900 Hassell Road  
Hoffman Estates, IL 60169

Phone: 847.781.2660

Fax: 847.781.2679

## STANDARDS OF VARIATION

Zoning Code Section 9-1-15-C-2 of the Municipal Code requires that the Planning and Zoning Commission shall, in making its determination whether there are practical difficulties or particular hardships, take into consideration the extent to which the following facts favorable to the applicant have been established by the evidence presented. All standards must be answered in full. A separate piece of paper may be used if more room is required.

1. The particular physical surroundings and shape of topographical conditions of the specific property involved would result in a particular hardship upon the owner, as distinguished from a mere inconvenience, if the strict letter of the regulations were carried out. Please provide an explanation.

There are no hardships associated with topographical conditions or the physical surroundings.

2. The conditions upon which the petition for a variation is based would not be applicable, generally, to other property within the same zoning classification. Please provide an explanation.

The site is a substation that requires certain design elements to meet safety and security standards. These particular conditions include security fencing consisting of chain link fence with barbed wire and static masts for electrical grounding safety.

3. The purpose of the Variation is not based exclusively upon a desire to increase the value of the property. Please provide an explanation.

The purpose of the variation is not based upon a desire to increase the value of the property, but to meet safety and security standards.

4. The alleged difficulty or hardship has not been based exclusively upon a desire to increase the value of the property. Please provide an explanation.

The alleged difficulty or hardship has not been based upon a desire to increase the value of the property, but to meet safety and security standards.

5. The granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located. Please provide an explanation.

This substation is part of the bigger Technology Park Development project that is intended to add value to the area and zone that it is located in. The variation will not be detrimental to the public welfare and will not be injurious to other properties.

6. The proposed variation will not impair an adequate supply of light and air to adjacent properties, or substantially increase the congestion in the public streets, or increase the danger of fires, or endanger the public safety, or substantially diminish or impair property values in the neighborhood. Please provide an explanation.

The variation will not have any adverse effect on lighting or air to adjacent property and will not increase congestion in the public streets or increase danger of fires, or endanger the public safety, or substantially diminish or impair property values in the neighborhood.

Security fencing is intended to deter theft, vandalism, and other illegal activities within the substation property, data center campus, and greater community. Properly installed and maintained fencing will provide a professional and cohesive appeal. Static masts reduce the potential for fires and outages, enhancing public safety.



August 12, 2022

James Donahue, Senior Planner  
Kevin Anderson, Associate Planner  
Village of Hoffman Estates  
1900 Hassell Road  
Hoffman Estates, IL 60169

Re: Planning and Zoning General Application, Site Plan Addendum, and Special Use Addendum  
Project Name: CHI05 Substation  
Address: 2200 Lakewood Boulevard  
PIN: 01-36-101-005-0000  
Applicant and Owner: Microsoft Corporation  
Authorized Agent: Burns & McDonnell Engineering Company, Inc.

Mr. Donahue and Mr. Anderson,

Thank you for your feedback during our May 5, 2022, pre-application meeting. Burn & McDonnell submits the following narrative and attachments for your review in support of the development of the new CHI05 (ESS E-535) 138/12kV electrical substation collocated within the new Microsoft Data Center Campus development located at the subject address. The substation will be operated by Commonwealth Edison (ComEd).

Project Narrative:

- The ComEd substation to serve the Microsoft Data Center Campus will be installed in the location previously identified within the approved Microsoft Data Center Campus site plan. The substation includes a pre-fabricated metal equipment enclosure and other necessary structures. The substation will be fed by two 138kV high voltage distribution lines that lead in from ComEd's TDC 214 Hoffman Estates Substation. 138/12kV power transformers will step down the voltage to feed the Microsoft Campus.

Site Plan Addendum supporting details:

- I.D. – The tallest structure is an 86-foot static mast.
- I.E. – The substation will feature a palisade fence around the perimeter. Landscaping, as outlined in the Microsoft Data Center Site Plan Review Submittal, is designed surrounding the substation and will enhance the natural beauty of the site.
- I.G. – Phasing is as follows:
  - o Construction start Dec 2022
  - o Below Grade Dec 2022 – May 2023
  - o Above Grade June 2023 – March 2024
  - o Construction complete March 2024





Village of Hoffman Estates Site Plan Submittal  
CHI05 Substation  
Page 2

- II.A. – The substation will be operational 24 hours a day and 7 days a week. No full-time employees will work at the substation.
- III.H. - Any water runoff from this site will be managed through city facilities.
- IV. A. & B. – There are no full-time employees; therefore, no parking spaces and no traffic flow are considered in the design.
- VI.B. - Noise is in consideration for the design of the substation. A Noise study has been provided as part of the Microsoft Data Center Site Plan Review Submittal.

Special Use Addendum supporting details:

- Legal Description:  
PARCEL 1:  
THE EAST ½ OF THE EAST ½ OF THE NORTHWEST ¼ (EXCEPT THE NORTH 825.0 FEET THEREOF AND EXCEPT THE SOUTH 60.0 FEET DEDICATED FOR RIGHT-OF-WAY RECORDED SEPTEMBER 6, 1989 AS DOCUMENT 89418134) OF SECTION 36, TOWNSHIP 42 NORTH, RANGE 9, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

If you have any questions or require additional information, please feel free to contact Tom Konopka at [tkonopka@burnsmcd.com](mailto:tkonopka@burnsmcd.com) or 847-791-2020.

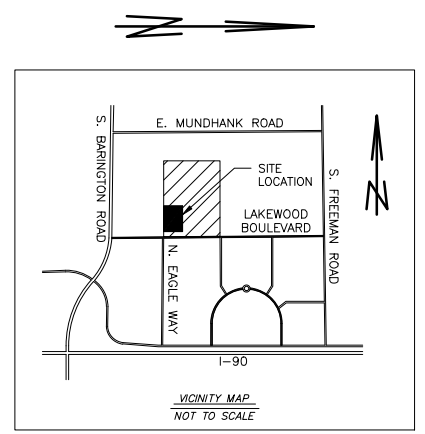
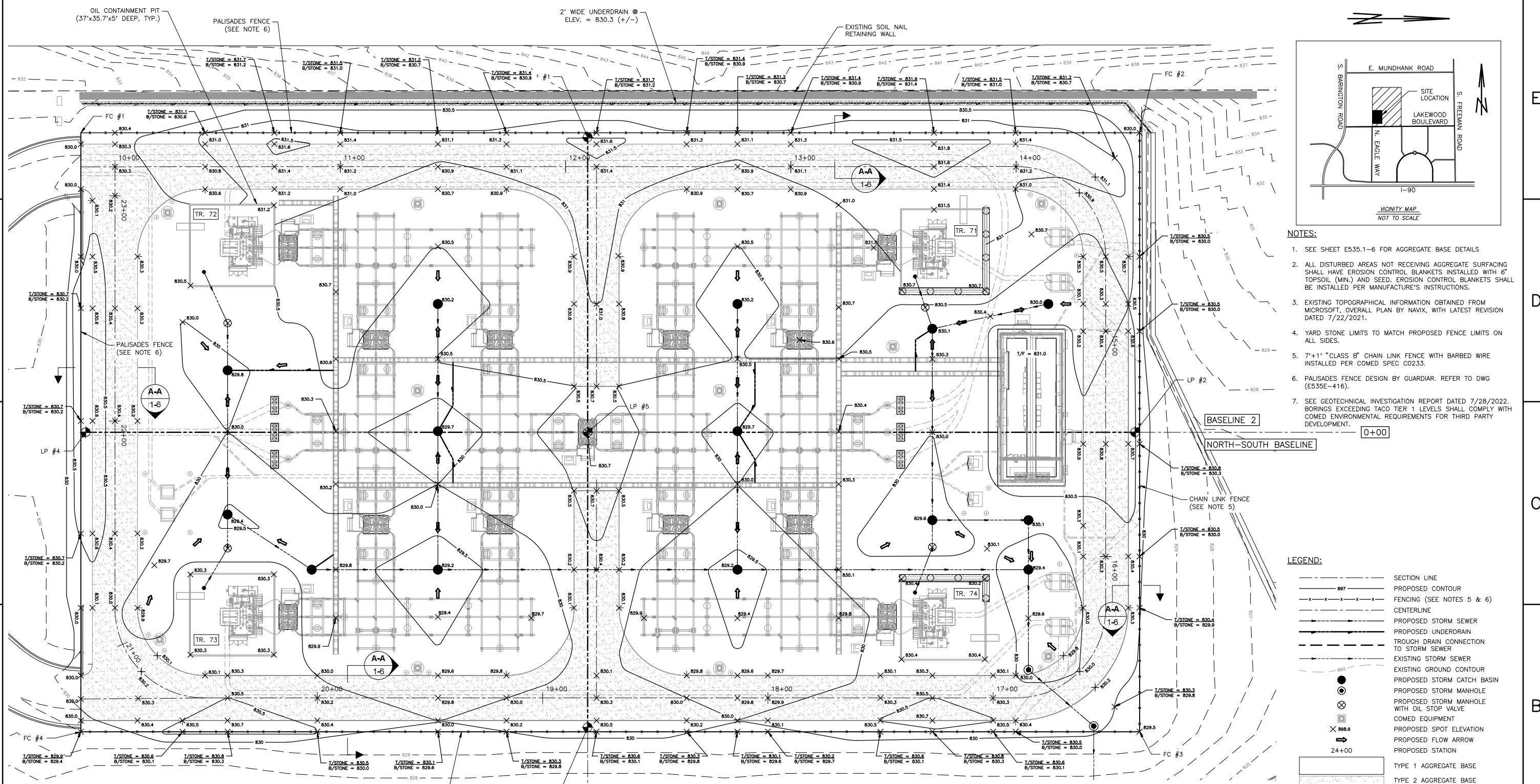
Sincerely,

A handwritten signature in black ink, appearing to read "Tom Konopka".

Thomas Konopka  
Permitting Lead

Attachments:  
General Application  
Site Plan Addendum  
Special Use Addendum  
Issued For Approval (IFA) Engineering Plans  
Plat of Survey

cc:  
Hillary Murray, Microsoft Corporation



- NOTES:**
- SEE SHEET E535.1-6 FOR AGGREGATE BASE DETAILS
  - ALL DISTURBED AREAS NOT RECEIVING AGGREGATE SURFACING SHALL HAVE EROSION CONTROL BLANKETS INSTALLED WITH 6" TOPSOIL (MIN.) AND SEED. EROSION CONTROL BLANKETS SHALL BE INSTALLED PER MANUFACTURE'S INSTRUCTIONS.
  - EXISTING TOPOGRAPHICAL INFORMATION OBTAINED FROM MICROSOFT, OVERALL PLAN BY NAVIX, WITH LATEST REVISION DATED 7/22/2021.
  - YARD STONE LIMITS TO MATCH PROPOSED FENCE LIMITS ON ALL SIDES.
  - 7'-1" "CLASS B" CHAIN LINK FENCE WITH BARBED WIRE INSTALLED PER COMED SPEC C0233.
  - PALISADES FENCE DESIGN BY GUARDIAR. REFER TO DWG (E535E-416).
  - SEE GEOTECHNICAL INVESTIGATION REPORT DATED 7/28/2022. BORINGS EXCEEDING TACO TIER 1 LEVELS SHALL COMPLY WITH COMED ENVIRONMENTAL REQUIREMENTS FOR THIRD PARTY DEVELOPMENT.

- LEGEND:**
- SECTION LINE
  - PROPOSED CONTOUR
  - FENCING (SEE NOTES 5 & 6)
  - CENTERLINE
  - PROPOSED STORM SEWER
  - PROPOSED UNDERDRAIN
  - TROUGH DRAIN CONNECTION TO STORM SEWER
  - EXISTING STORM SEWER
  - EXISTING GROUND CONTOUR
  - PROPOSED STORM CATCH BASIN
  - PROPOSED STORM MANHOLE
  - PROPOSED STORM MANHOLE WITH OIL STOP VALVE
  - COMED EQUIPMENT
  - PROPOSED SPOT ELEVATION
  - PROPOSED FLOW ARROW
  - PROPOSED STATION
  - TYPE 1 AGGREGATE BASE
  - TYPE 2 AGGREGATE BASE (INSIDE PERIMETER ROAD)
  - OIL CONTAINMENT CURB

**FENCE CORNER TABLE**

FC	NORTHING	EASTING
1	1970024.26	1037802.51
2	1970494.26	1037802.51
3	1970494.26	1038068.51
4	1970024.26	1038068.51

**BASELINE LOCATION POINTS**

LP	NORTHING	EASTING
1	1970249.26	1037804.51
2	1970492.26	1037935.51
3	1970249.26	1038066.51
4	1970026.41	1037935.51
5	1970249.26	1037935.51

- CONSTRUCTION NOTES:**
- FOUNDATIONS AND ALL OTHER CIVIL WORK TO BE CONSTRUCTED BY MICROSOFT. SEE DWG E535.1-1 THRU 1-9 AND 535.2-2 THRU 2-5 FOR ADDITIONAL DETAIL.
  - PERIMETER FENCING TO BE PURCHASED AND INSTALLED BY MICROSOFT.

- REFERENCE DRAWINGS:**
- PLAN OF STORM SEWER SYSTEM
  - SECTION OF STORM SEWER PROFILES SHEET 1 OF 2
  - SECTION OF STORM SEWER PROFILES SHEET 2 OF 2
  - OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES
  - PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS
  - PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
  - PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
  - PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR 71, 72, 73, 74
  - PLAN OF SPCC
  - PLAN OF 138KV EQUIPMENT FOUNDATION

- E535.1-2
- E535.1-3
- E535.1-4
- E535.1-5
- E535.1-6
- E535.1-7
- E535.1-8
- E535.1-9
- E535.1-SPCC-1
- E535.2-1

TOP 6" OF AGGREGATE PAD TO BE FREE DRAINING. NO FILL IS TO BE PLACED ABOVE FINISH GRADE-6", WITHOUT OWNER APPROVAL. SEE SECTION A-A ON SHEET 1-6 FOR ADDITIONAL DETAIL



REV	DATE	DESCRIPTION	DRFT.	ENG.
1B	10/10/22	BELOW GRADE IFC PACKAGE W.O. #17915014	DJB	DC
1A	07/08/22	BELOW GRADE IFA PACKAGE W.O. #17915014	DJB	DC

**DBS** DB STERLIN CONSULTANTS, INC. 123 N. Wacker Drive, Suite 2000 Chicago, Illinois 60606 312.857.1006

**BURNS & MCDONNELL** 200 W. ADAMS STREET, SUITE 2700 CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.

BURNS & MCDONNELL'S ILLINOIS DFRP REGISTRATION NUMBER IS 184-001310

**ComEd** Commonwealth Edison Co. Chicago, Illinois  
Transmission and Distribution Operations

**PLAN OF CIVIL GRADING**

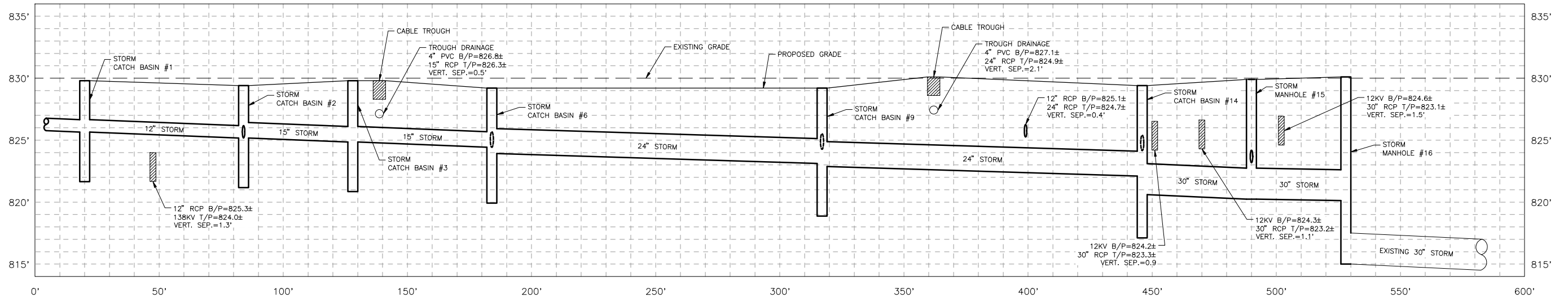
ESS E-535 MICROSOFT HOFFMAN ESTATES DC 00 SC

SCALE 1" = 20' DATE 04/19/22 THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.

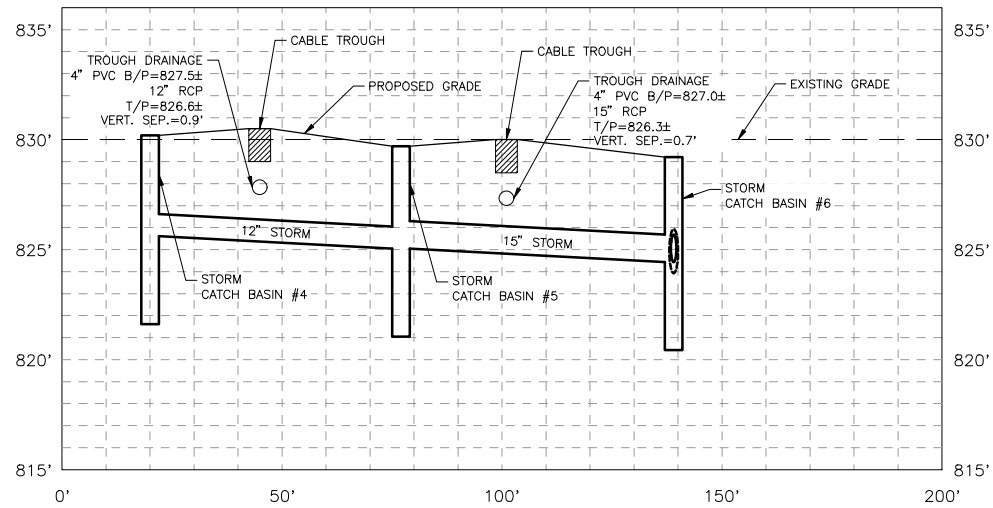
E535.1-1\_S2022-0319



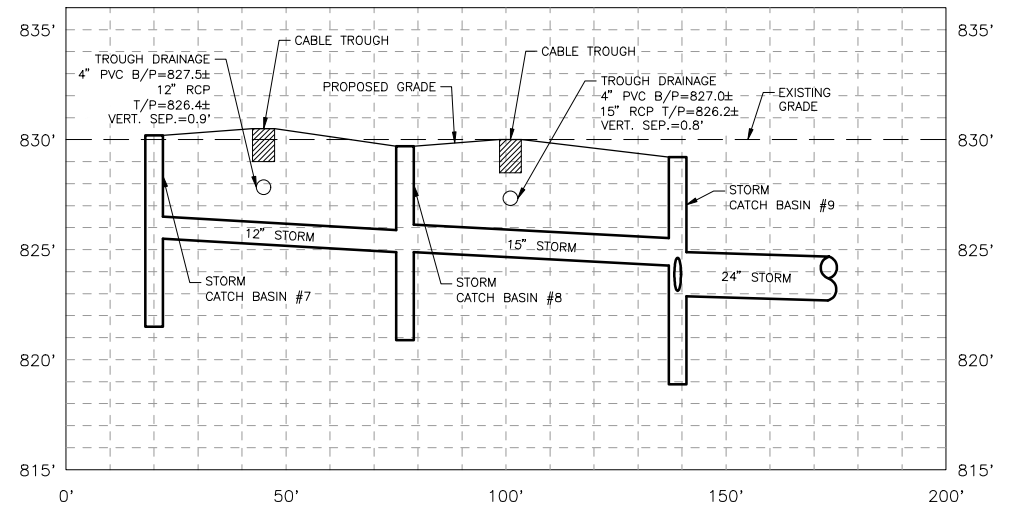
PROFILE A (1-2-3-6-9-14-15-16)



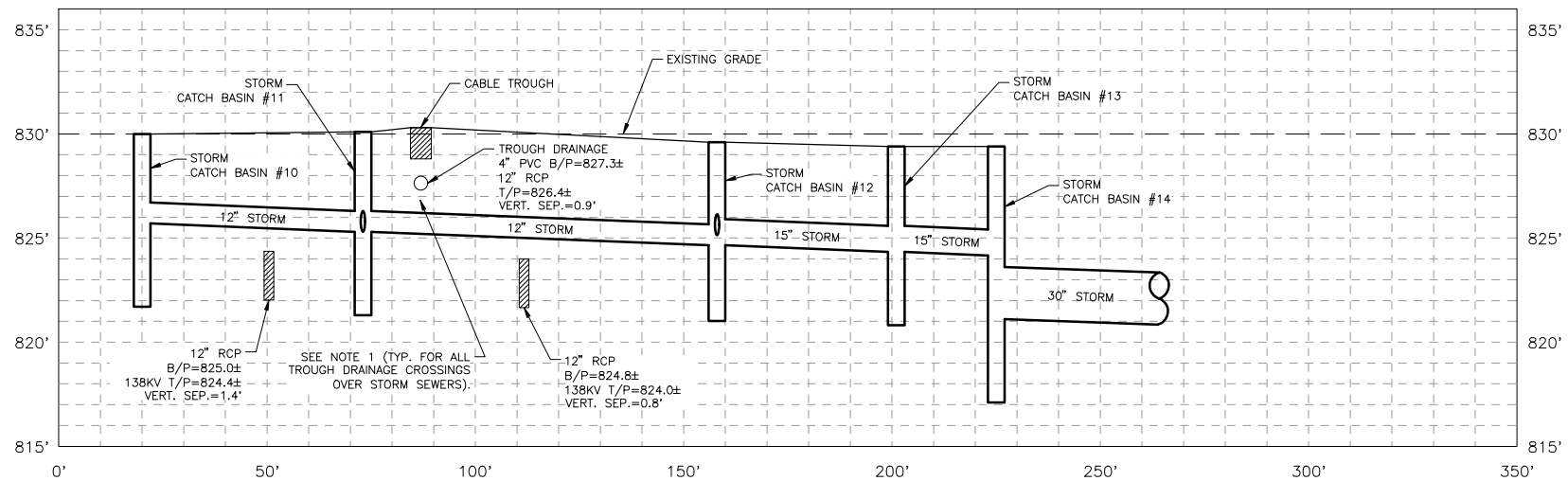
PROFILE B (4-5-6)



PROFILE C (7-8-9)



PROFILE D (10-11-12-13-14)



REFERENCE DRAWINGS:

- PLAN OF CIVIL GRADING
- PLAN OF STORM SEWER SYSTEM
- SECTION OF STORM SEWER PROFILES SHEET 2 OF 2
- OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
- PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS

- E535.1-1
- E535.1-2
- E535.1-4
- E535.1-5
- E535.1-6
- E535.1-7
- E535.1-8

NOTES:

- AT LOCATIONS WHERE TROUGH DRAINAGE CROSSES OVER THE TOP OF STORM SEWER, FLOWABLE FILL TO BE USED AS BACKFILL MATERIAL UP TO TOP OF STORM SEWER (ACROSS ENTIRE TRENCH WIDTH). FLOWABLE FILL TO FOLLOW ASTM STANDARDS FOR CONTROLLED LOW STRENGTH MATERIAL (CLSM), AND EXTEND 3' PAST EACH SIDE OF TROUGH OUTER LIMITS.
- ALL STORM CATCH BASINS TO AVE A 4'-0" SUMP PER COMED C4378.
- SEE SHEET E535.X-2 FOR STRUCTURE AND PIPE INFORMATION.

SCALE:

HORIZONTAL: 1"=20'  
 VERTICAL: 1"=4'



REV	DATE	DESCRIPTION	TECH.	ENG.
1B	10/10/22	BELOW GRADE IFC PACKAGE W.O. #17915014	DJB	DC
1A	07/08/22	BELOW GRADE IFA PACKAGE W.O. #17915014	DJB	DC

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Chicago, Illinois  
Transmission and Distribution Operations

**SECTION OF STORM SEWER PROFILES SHEET 1 OF 2**

ESS E-535 MICROSOFT HOFFMAN ESTATES

SCALE: SEE NOTE ABOVE | DATE: 04/19/22

DRAWN BY: B&M  
 ENG. BY: B&M

E535.1-3\_S2022-0319

**BURNS & MCDONNELL**  
 200 W. ADAMS STREET, SUITE 2700  
 CHICAGO, IL 60606

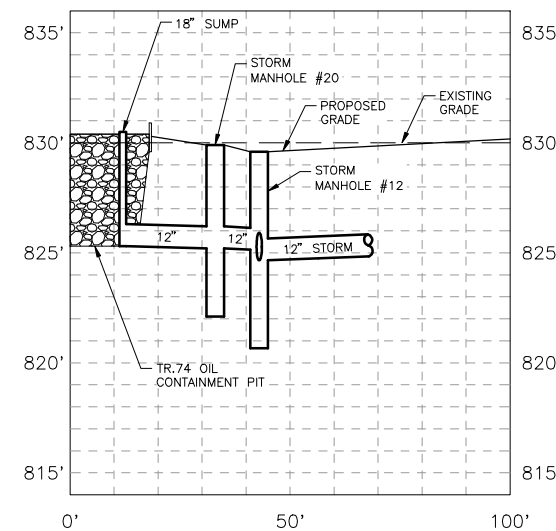
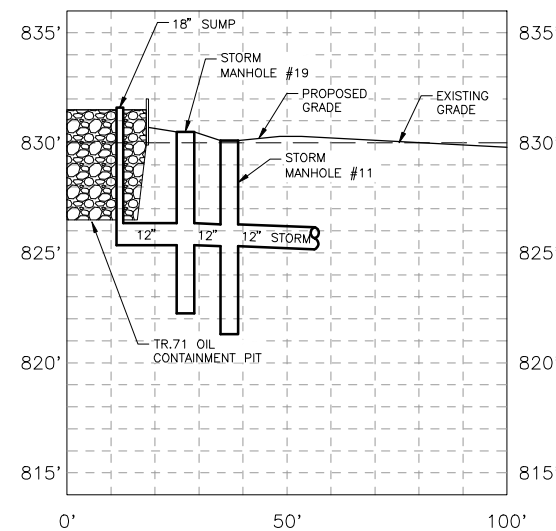
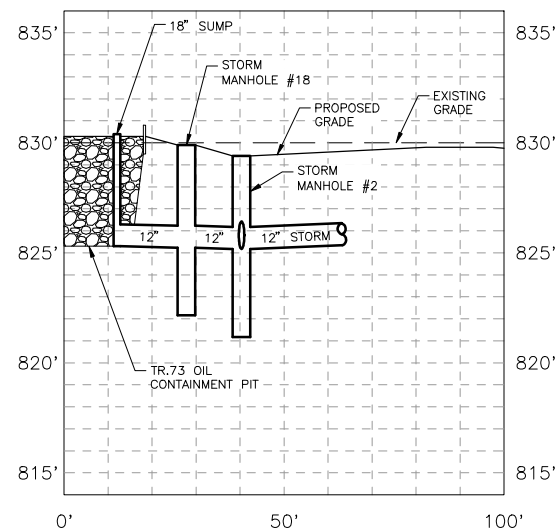
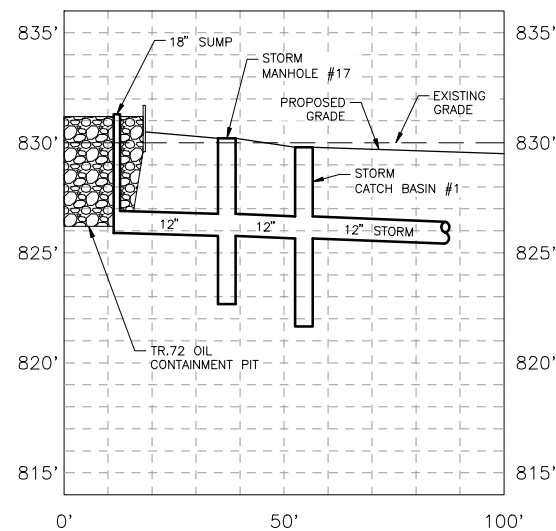
THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.  
 BURNS & MCDONNELL'S ILLINOIS DFPR REGISTRATION NUMBER IS 184-001310

PROFILE E (TR.72 OIL CONTAINMENT PIT-17-1)

PROFILE F (TR.73 OIL CONTAINMENT PIT-18-2)

PROFILE G (TR.71 OIL CONTAINMENT PIT-19-11)

PROFILE H (TR.74 OIL CONTAINMENT PIT-20-12)



REFERENCE DRAWINGS:

- PLAN OF CIVIL GRADING E535.1-1
- PLAN OF STORM SEWER SYSTEM E535.1-2
- SECTION OF STORM SEWER PROFILES SHEET 1 OF 2 E535.1-3
- OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES E535.1-5
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS E535.1-6
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS E535.1-7
- PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS E535.1-8

NOTES:

- AT LOCATIONS WHERE TROUGH DRAINAGE CROSSES OVER THE TOP OF STORM SEWER, FLOWABLE FILL TO BE USED AS BACKFILL MATERIAL UP TO TOP OF STORM SEWER (ACROSS ENTIRE TRENCH WIDTH). FLOWABLE FILL TO FOLLOW ASTM STANDARDS FOR CONTROLLED LOW STRENGTH MATERIAL (CLSM), AND EXTEND 3' PAST EACH SIDE OF TROUGH OUTER LIMITS.
- ALL STORM CATCH BASINS TO AVE A 4'-0" SUMP PER COMED C4378.
- SEE SHEET E535.X-2 FOR STRUCTURE AND PIPE INFORMATION.

SCALE:

HORIZONTAL: 1"=20'  
VERTICAL: 1"=4'



REV	DATE	DESCRIPTION	TECH.	ENG.

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Chicago, Illinois  
Transmission and Distribution Operations

**SECTION OF STORM SEWER PROFILES SHEET 2 OF 2**

**ESS E-535 MICROSOFT HOFFMAN ESTATES** DC 00 SC

SCALE SEE NOTE ABOVE DATE 04/19/22 THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.

DRAWN BY B&M  
ENG. BY B&M

**E535.1-4\_S2022-0319**

REV	DATE	DESCRIPTION	DRFT.	ENG.
1B	10/10/22	BELOW GRADE IFC PACKAGE W.O. #17915014	DJB	DC
1A	07/08/22	BELOW GRADE IFA PACKAGE W.O. #17915014	DJB	DC

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.

BURNS & MCDONNELL'S ILLINOIS DFPR REGISTRATION NUMBER IS 184-001310

GENERAL:

- ALL REFERENCES TO STANDARD SPECIFICATIONS IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", LATEST EDITION.
- UPON REVIEW OF THE U.S. FISH & WILDLIFE SERVICE NATIONAL WETLANDS INVENTORY MAP, THERE ARE NO DELINEATED WETLANDS ON THE PROPERTIES SHOWN HEREON.
- THE PROJECT SITE IS LOCATED IN FLOOD ZONE "X", AREA OF MINIMAL FLOOD HAZARD, PER F.I.R.M. MAP PANEL NO. 17031C01595, WITH AN EFFECTIVE DATE OF AUGUST 19, 2008.
- UPON REVIEW OF THE NATIONAL PIPELINE MAPPING SYSTEM, THERE ARE NO PIPELINES ON THE PROPERTY SHOWN HEREON.
- ALL CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH ALL COMED SPECIFICATIONS, INCLUDING:
  - A: C4378 STORM SEWER FOR SUBSTATION CONSTRUCTION
  - B: C4379 CONCRETE WORK FOR SUBSTATIONS
  - C: C4388 SUBGRADE SOIL MODIFICATIONS FOR SUBSTATION CONSTRUCTION
  - D: C5499 ROADWAY PREPARATION FOR SUBSTATION CONSTRUCTION
  - E: C5500 SUBSTATION CONSTRUCTION SUBGRADE PREPARATION

UTILITIES:

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, WATER, SEWER, AND CABLE TELEVISION FACILITIES. (48 HOURS NOTICE REQUIRED.)
- PRIOR TO THE START OF THE CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. THE LOCATION OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ACCURACY CANNOT BE GUARANTEED. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATION AND MATERIAL OF SUCH UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MAY BE LOCATED AND ADJUSTED OR MOVED IF REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ABOVE AND BELOW GROUND UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

RESTORATION WORK:

- ALL DISTURBED AREAS WITHIN PROPERTY SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION ACCEPTABLE TO THE OWNER.
- UPON COMPLETION OF ANY CONSTRUCTION WORK WITHIN THE R.O.W. AREA SHALL BE RESTORED TO A CONDITION ACCEPTABLE TO THE TOWNSHIP AND/OR COUNTY HIGHWAY DEPARTMENT.

STAKING:

- PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OR PROPOSED PAVEMENT GRADES, UNLESS OTHERWISE NOTED.

STORM SEWERS:

- INLET FILTERS OR AN APPROVED EQUAL SHALL BE USED ON ALL EXISTING AND PROPOSED DRAINAGE STRUCTURES WITHIN PROJECT LIMITS.
- ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE STORM SEWER PAY ITEMS.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN AN OPERATING CONDITION TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE DRAINAGE ITEMS.
- STORM SEWERS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE PIPE (RCP) CONFORMING TO ASTM C76 WITH O-RING GASKET JOINTS CONFORMING TO ASTM C443. PIPE SHALL BE CLASS IV.
- ALL STORM STRUCTURES SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE SECTIONS WITH TONGUE AND GROOVE JOINTS CONFORMING TO ASTM C478. THE PRECAST REINFORCED CONCRETE BASE AND BOTTOM SECTION SHALL BE MONOLITHICALLY CAST. ALL PIPE OPENINGS IN THE STRUCTURE SHALL BE PRECAST INTO THE STRUCTURE WALLS AT THE PROPER INVERT ELEVATION AND ORIENTATION.
- FLAT TOP STRUCTURES SLABS SHALL CONFORM TO IDOT STANDARD DETAIL 602601 AND MEET THE H-20/HS-20 LOADING REQUIREMENT.
- CONCRETE ADJUSTING RINGS WILL BE PERMITTED WHERE NECESSARY AND SHALL BE LIMITED TO TWO (2) ADJUSTING RINGS TOTALING EIGHT (8) INCHES IN HEIGHT.
- ALL JOINTS BETWEEN STRUCTURES SECTIONS, ADJUSTING RINGS, AND FRAMES SHALL BE SECURELY SEALED TO ONE ANOTHER USING A RESILIENT, FLEXIBLE, NON-HARDENING BITUMINOUS MASTIC OR BUTYL SEALING COMPOUND IN ACCORDANCE WITH ASTM C990, OR FLEXIBLE RUBBER GASKET IN ACCORDANCE WITH ASTM C443 IN ORDER TO PROVIDE A WATERTIGHT JOINT. THE CONTRACTOR SHALL REMOVE ALL EXCESS MASTIC ON INSIDE OF STRUCTURE AND BUTTER JOINTS WITH MORTAR.
- MANHOLE STEPS SHALL BE FURNISHED AND INSTALLED IN ALL STRUCTURES IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER CONSTRUCTION", LATEST EDITION. STEPS SHALL BE PLACED UNIFORMLY AT TWELVE (12) TO SIXTEEN (16) INCHES ON-CENTER AND SHALL BE LOCATED DIRECTLY BELOW THE MANHOLE FRAME OPENING AND SHALL NOT BE LOCATED DIRECTLY OVER A PIPE OPENING, WITH THE ALIGNMENT OF STEPS GENERALLY PERPENDICULAR TO THE PIPE FLOW DIRECTION WHEREVER POSSIBLE.
- OPEN LID STORM STRUCTURE FRAME AND GRATES SHALL BE IDOT TYPE 1.
- CLOSED LID STORM STRUCTURES FRAMES AND LIDS SHALL BE NEENAH R-1713, WITH TYPE B LID, OR APPROVED EQUAL, AND IMPRINTED WITH THE WORD "STORM".
- ANY EXISTING DRAIN TILE ENCOUNTERED SHALL BE TIED INTO THE PROPOSED STORM SEWER. CONTRACTOR TO PROVIDE DOCUMENTATION TO OWNER OF ALL FIELD TILE ENCOUNTERED.
- ALL STORM STRUCTURES TO BE CLEANED UPON COMPLETION OF THE SEWER SYSTEM.
- ALL COMED STORM SEWER STANDARDS AND SPECIFICATIONS TO BE FOLLOWED.

REFERENCE DRAWINGS:

PLAN OF CIVIL GRADING	E535.1-1
PLAN OF STORM SEWER SYSTEM	E535.1-2
SECTION OF STORM SEWER PROFILES SHEET 1 OF 2	E535.1-3
SECTION OF STORM SEWER PROFILES SHEET 2 OF 2	E535.1-4
PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS	E535.1-6
PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS	E535.1-7
PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS	E535.1-8
PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR 71, 72, 73, 74	E535.1-9
PLAN OF SPCC	E535.1-SPCC-1

SOIL EROSION AND SEDIMENT CONTROL NOTES:

- CONTRACTOR SHALL REFER TO COMED SE/SC PROCESS DOCUMENT EN-CE-P942
- SOIL EROSION AND SEDIMENT CONTROL (SESC) FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF ANY DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER TO MINIMIZE EROSION SOIL STABILIZATION MEASURES WHICH MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL WILL BE INSTALLED AT THE MINIMUM ACCORDING TO THE STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, REVISED TO LATEST VERSION AS AMENDED. A COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL (SESC) PLAN MUST BE MAINTAINED ON SITE AT ALL TIMES.
- THE EROSION AND SEDIMENT CONTROLS SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED AS DIRECTED BY COMED, OR THEIR AUTHORIZED REPRESENTATIVE. ALL ADDITIONAL MEASURES MUST BE IN PLACE WITHIN 3 DAYS OF DISTURBANCE AND ANY EMERGENCY SESC MEASURES MUST BE INSTALLED IMMEDIATELY.
- THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREAS AS THE PROJECT PROGRESSES, AND INSTALL EROSION PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE TRACK-OUT MATERIAL.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT ALL WATER DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREE OF WATER. BYPASS PUMPING, INCLUDING SILT BAGS AND ENERGY DISSIPATION SURFACE FOR THE PUMPS, SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF DEWATERING.
- TEMPORARY CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC ENTERS AND LEAVES THE SITE. THESE LOCATIONS SHALL BE DETERMINED IN THE FIELD, AS NEEDED, GRAVELED ROADS, ACCESS DRIVES, PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH, AND VEHICLE WASH DOWN FACILITIES IF NECESSARY, MUST BE PROVIDED TO PREVENT THE DEPOSITION OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING PUBLIC OR PRIVATE ROADWAY MUST BE REMOVED IMMEDIATELY.
- STABILIZATION OF DISTURBED AREAS MUST, AT A MINIMUM, BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NOT LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED AS FOLLOWS:
  - WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
  - ON AREAS WHERE CONSTRUCTION ACTIVITY CEASED AND WILL RESUME AFTER 14 DAYS, TEMPORARY STABILIZATION METHODS CAN BE USED.
- STOCK PILES OR SOIL MUST NOT BE LOCATED IN FLOOD PLAINS, RIPARIAN AREAS (VEGETATED FLOOD PLAINS), WETLANDS AND WATERS OF THE U.S., UNLESS OTHERWISE AUTHORIZED BY THE RELEVANT PERMITTING AUTHORITY. IF A STOCKPILE IS TO REMAIN IN PLACE FOR MORE THAN THREE DAYS, PERIMETER EROSION BARRIER MUST BE PROVIDED. ALL STOCKPILE LOCATIONS MUST BE APPROVED BY COMED.
- CONTRACTOR MUST INSTALL PERIMETER EROSION BARRIER AT ANY LOCATION IN WHICH SHEET FLOWS MAY RESULT IN SEDIMENT RUNOFF OUTSIDE THE CONSTRUCTION LIMITS. THE CONTRACTOR MAY USE OTHER METHODS TO CONTROL RUNOFF, INCLUDING, BUT NOT LIMITED TO, TEMPORARY DIVERSION SWALES, TEMPORARY SEDIMENT TRAPS, SHAPED DITCHES TO CONVEY WATER, ETC.
- SOIL DISTURBANCES SHALL BE STABILIZED WITH EROSION CONTROL BLANKET, MINIMUM 6" OF TOPSOIL, AND WITH A SEED MIXTURE PER TABLE B, AS SHOWN ON SHEET 1.4. ADDITIONAL LANDSCAPING MEASURES SHALL BE IN ACCORDANCE WITH LAND MANAGEMENT PRACTICES GUIDE ESP 1.2.1.12.
- THE CONTRACTOR SHALL INSPECT THE ADJACENT ROADWAY PERIODICALLY DURING EACH WORKING DAY AND ANY TRACK-OUT OF MUD, SOIL, OR DEBRIS SHALL BE CLEANED UP IMMEDIATELY. ADDITIONAL TRACK-OUT CONTROL BMPs AND/OR STABILIZED CONSTRUCTIONS ENTRANCES SHALL BE INSTALLED AS DETERMINED BY COMED.
- IF A STOCKPILE IS NECESSARY, THE LOCATION SHALL BE APPROVED BY COMED.
- AFTER ALL PERIMETER EROSION BARRIER IS REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION BARRIER MUST BE RESTORED.
- ALL COMED SOIL EROSION AND SEDIMENT CONTROL STANDARDS AND SEQUENCING SPECIFICATIONS TO BE FOLLOWED.

CONSTRUCTION NOTES:

- ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION EM312000 AND COMED SPECIFICATION C5500.
- EXISTING TOPOGRAPHICAL INFORMATION WAS OBTAINED FROM MICROSOFT, OVERALL PLAN BY NAVIX, WITH LATEST REVISION DATED 7/22/2021.
- CONTRACTOR SHALL USE SURVEYED BENCHMARKS/CONTROL POINTS TO ESTABLISH HORIZONTAL AND VERTICAL CONTROL.
- ELEVATIONS INDICATED ARE TO FINISH GRADE (TOP OF CRUSHED ROCK SURFACING). CONTRACTOR SHALL VERIFY ALL EXISTING GRADES IN THE FIELD PRIOR TO START OF CONSTRUCTION.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING STRUCTURES, UTILITIES AND SURVEY INFORMATION, AND TO TAKE NECESSARY PRECAUTIONS DURING DEMOLITION AND CONSTRUCTION. THE CONTRACTOR SHALL FIELD-CHECK ALL EXISTING CONDITIONS AND BE THOROUGHLY FAMILIAR WITH THE SITE BEFORE ANY WORK COMMENCES. IN THE EVENT OF UNEXPECTED UTILITY OR STRUCTURE INTERFERENCE IS ENCOUNTERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND IMPLEMENTING SOIL AND SEDIMENT CONTROL DEVICES IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL LAWS PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. ENSURE THAT ALL PIPES, CATCH BASINS, MANHOLES, SWALES, ETC. WITHIN AND NEAR THE AREA OF WORK ARE KEPT FREE FROM MATERIAL THAT WOULD HAMPER THE PERFORMANCE OF THE DRAINAGE SYSTEMS. SILT FENCING SHALL BE INSTALLED AT THE BASE OF SLOPE ALONG THE PERIMETER OF DISTURBED AREA. SILT FENCING SHALL BE INSPECTED WEEKLY AND AFTER ANY RAINFALL EXCEEDING 0.5 INCHES AND SHALL BE REPAIRED OR REPLACED AS NECESSARY.
- CONTRACTOR SHALL PERFORM WORK WITHIN THE IDENTIFIED SILT FENCE BOUNDARY. ANY LAND DISTURBING ACTIVITY OUTSIDE THIS BOUNDARY WILL REQUIRE THE CONTRACTOR TO VERIFY THE DISTURBED AREA FOOTPRINT.
- TO THE EXTENT THEY ARE NEEDED, ALL SUITABLE MATERIAL FROM THE SPECIFIED EXCAVATIONS SHALL BE USED IN THE CONSTRUCTION OF REQUIRED PERMANENT EARTH FILL. THE SUITABILITY OF MATERIAL FOR SPECIFIC PURPOSES IS DETERMINED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL NOT WASTE OR OTHERWISE DISPOSE OF SUITABLE EXCAVATED MATERIAL.
- EXCAVATIONS SHALL COMPLY WITH OSHA CONSTRUCTION INDUSTRY STANDARDS (29CFR PART 1926) SUBPART P, EXCAVATIONS, TRENCHING, AND SHORING. ALL EXCAVATIONS SHALL BE COMPLETED AND MAINTAINED IN A SAFE AND STABLE CONDITION THROUGHOUT THE TOTAL CONSTRUCTION PHASE. STRUCTURE AND TRENCH EXCAVATIONS SHALL BE COMPLETED TO THE SPECIFIED ELEVATIONS AND TO THE LENGTH AND WIDTH REQUIRED TO SAFELY INSTALL, ADJUST AND REMOVE ANY FORMS, BRACING, OR SUPPORTS NECESSARY FOR THE INSTALLATION OF THE WORK. EXCAVATIONS OUTSIDE THE LINES AND LIMITS SHOWN ON THE DRAWINGS OR SPECIFIED HEREIN REQUIRED TO MEET SAFETY REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN CONSTRUCTING AND MAINTAINING A SAFE AND STABLE EXCAVATION.
- FILL OR BACKFILL SHALL BE PLACED IN NO MORE THAN 8" LIFTS OF UNIFORM THICKNESS.

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4633	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

- A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
- NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HIGH QUALITY WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
- THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN A MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
- THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



REV	DATE	DESCRIPTION	TECH.	ENG.

**ComEd** Commonwealth Edison Co.  
Chicago, Illinois  
An Exelon Company Transmission and Distribution Operations

**OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES**

**ESS E-535 MICROSOFT HOFFMAN ESTATES** DC 00 SC

SCALE: N/A DATE: 04/19/22  
DRAWN BY: B&M  
ENG. BY: B&M

E535.1-5\_S2022-0319

**DBS** DB STERLIN CONSULTANTS INC.  
123 N. Wacker Drive, Suite 2000  
Chicago, Illinois 60606  
312.857.1006

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606  
BURNS & MCDONNELL'S ILLINOIS DFPF  
REGISTRATION NUMBER IS 184-001310

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### SILT FENCE PLAN

**ELEVATION**

**FABRIC ANCHOR DETAIL**

**NOTES:**

- Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
- Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 40 for woven.
- Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IUM-620A  
 SHEET 1 OF 2  
 DATE 3-16-12

### EROSION CONTROL BLANKET INSTALLATION DETAILS

**DETAIL 1** **DETAIL 2** **DETAIL 3**

**STAPLE DETAIL** **PUSH PIN DETAIL**

**NOTES:**

- Staples shall be placed in a diamond pattern at 2 per s.y. for stitched blankets. Non-stitched shall use 4 staples per s.y. of material. This equates to 200 staples with stitched blanket and 400 staples with non-stitched blanket per 100 s.y. of material.
- Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
- Erosion control material shall be placed in contact with the soil over a prepared seedbed.
- All anchor slots shall be stapled at approximately 12" intervals.

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
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 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IUM-561D  
 SHEET 1 OF 1  
 DATE 01-11-11

### STABILIZED CONSTRUCTION ENTRANCE PLAN

**PLAN VIEW** **SIDE ELEVATION**

**NOTES:**

- Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
- Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
- Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
- If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IL-630  
 SHEET 1 OF 2  
 DATE 8-18-94

### STABILIZED CONSTRUCTION ENTRANCE PLAN

**SECTION A-A** **SECTION B-B**

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IL-630  
 SHEET 2 OF 2  
 DATE 8-18-94

### TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE

**PLAN VIEW** **STRAW BALE ANCHOR SECTIONS** **SIGN DETAIL**

**NOTES:**

- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
- Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
- Each straw bale is to be staked in place using (2) 2"x2"x4" wooden stakes.

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IUM-561D  
 SHEET 1 OF 1  
 DATE 01-11-11

### INLET DROP-IN PROTECTION

**NOTE: ALL STORM STRUCTURES HAVE NON-CURB TYPE FRAMES**

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IUM-561D  
 SHEET 1 OF 1  
 DATE 01-11-11

### TYPE 1 AGGREGATE BASE DETAIL

**TYPE 2 AGGREGATE BASE DETAIL**

REFERENCE DRAWINGS:

- PLAN OF CIVIL GRADING
- PLAN OF STORM SEWER SYSTEM
- OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
- PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
- PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR 71, 72, 73, 74

REFERENCE PROJECT: \_\_\_\_\_ DATE: \_\_\_\_\_  
 DESIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_ DATE: \_\_\_\_\_  
 APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

STANDARD DWG. NO. IUM-561D  
 SHEET 1 OF 1  
 DATE 01-11-11

### SECTION A-A

TYPICAL SECTION AT EDGE OF AGGREGATE BASE

1B 10/10/22 BELOW GRADE IFC PACKAGE W.O. #17915014 DJB DC  
 1A 07/08/22 BELOW GRADE IFA PACKAGE W.O. #17915014 DJB DC  
 REV DATE DESCRIPTION DRFT. ENG.

DAVID J. COOK  
 REGISTERED PROFESSIONAL ENGINEER  
 STATE OF ILLINOIS  
 002-058017  
 312.657.1000  
 EXPIRES 11/2023

DESK

BURNS & MCDONNELL  
 200 W. ADAMS STREET, SUITE 2700  
 CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.  
 BURNS & MCDONNELL'S ILLINOIS DFRP REGISTRATION NUMBER IS 184-001310

ComEd Commonwealth Edison Co.  
 Chicago, Illinois  
 An Exelon Company Transmission and Distribution Operations

PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS

ESS E-535 MICROSOFT HOFFMAN ESTATES DC 00 SC

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E535.1-1  
 E535.1-2  
 E535.1-5  
 E535.1-7  
 E535.1-8  
 E535.1-9

E535.1-6\_S2022-0319

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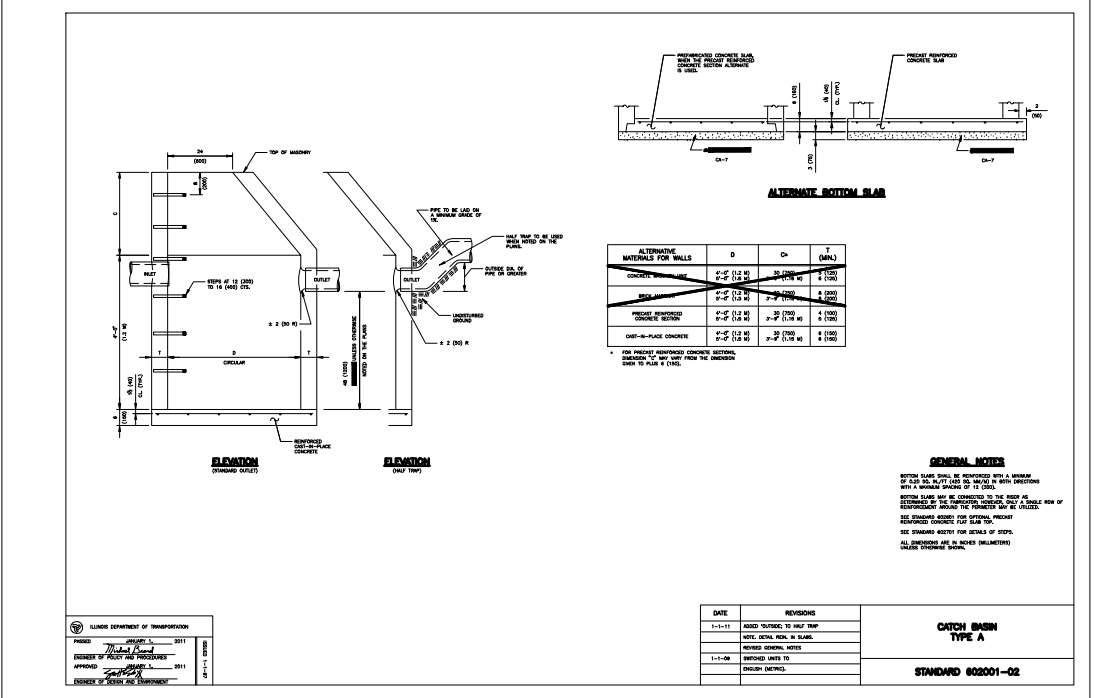
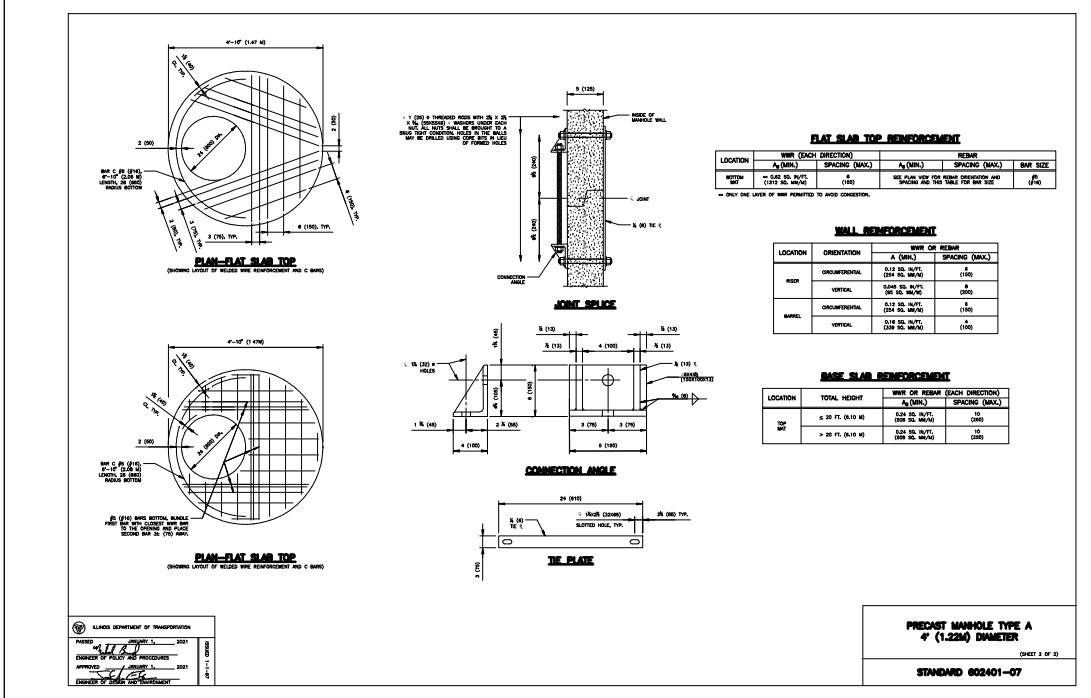
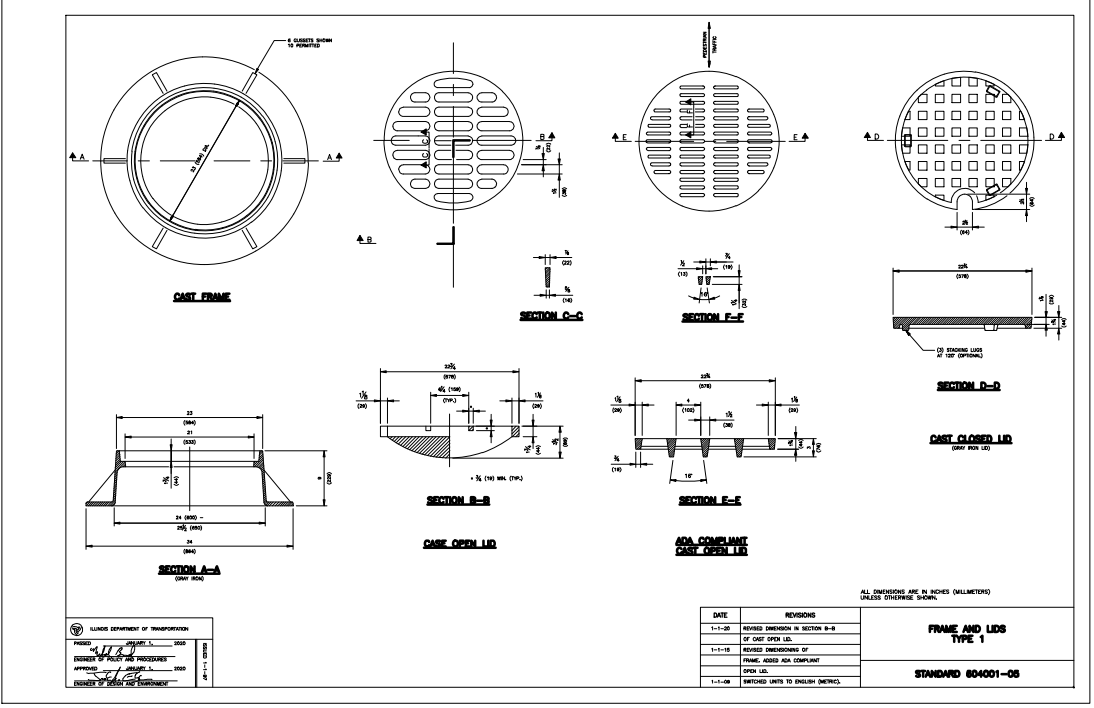
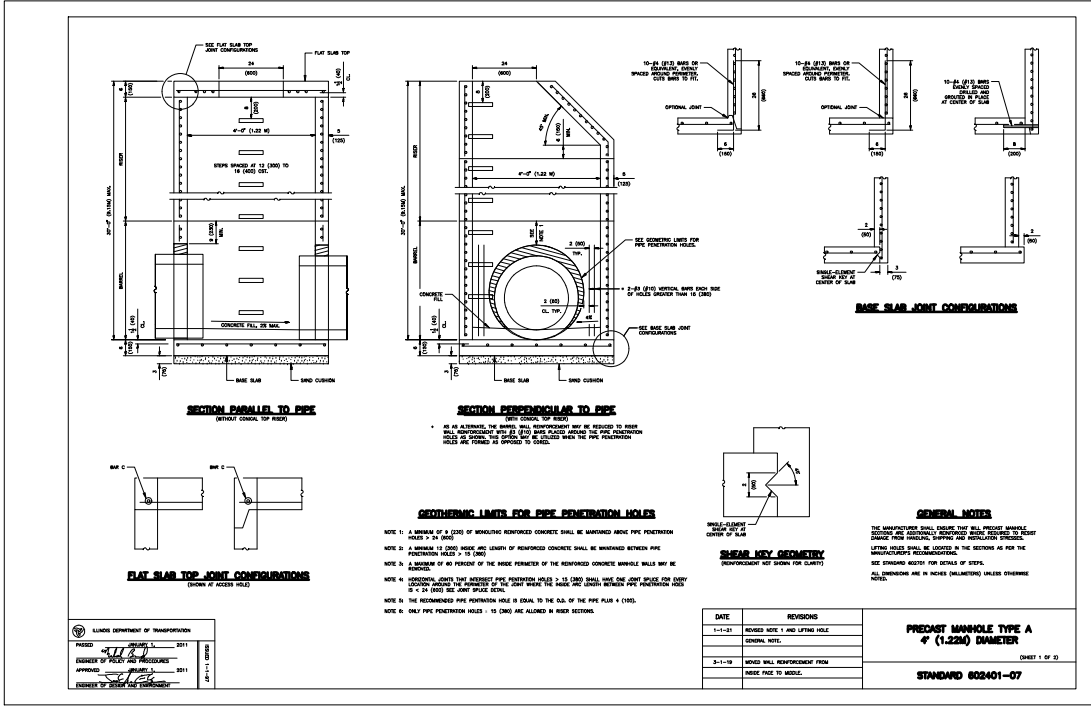
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ALL STORM STRUCTURES TO BE MONOLITHICALLY  
POURED WITH THE BASE PER COMED C4378

ALL STORM CATCH BASINS TO HAVE  
A 4'-0" SUMP PER COMED C4378

REFERENCE DRAWINGS:  
PLAN OF CIVIL GRADING E535.1-1  
PLAN OF STORM SEWER SYSTEM E535.1-2  
SECTION OF STORM SEWER PROFILES SHEET 1 OF 2 E535.1-3  
SECTION OF STORM SEWER PROFILES SHEET 2 OF 2 E535.1-4  
OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES E535.1-5  
PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS E535.1-6



REV	DATE	DESCRIPTION	DRFT.	ENG.
1B	10/10/22	BELOW GRADE IFC PACKAGE W.O. #17915014	DJB	DC
1A	07/08/22	BELOW GRADE IFA PACKAGE W.O. #17915014	DJB	DC

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.

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REV	DATE	DESCRIPTION	TECH.	ENG.

**ComEd** Commonwealth Edison Co.  
Chicago, Illinois  
Transmission and Distribution Operations

**PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS**  
SHEET 1 OF 2

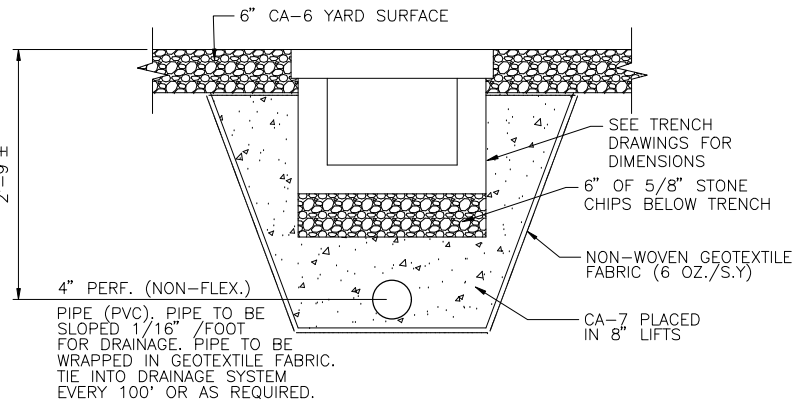
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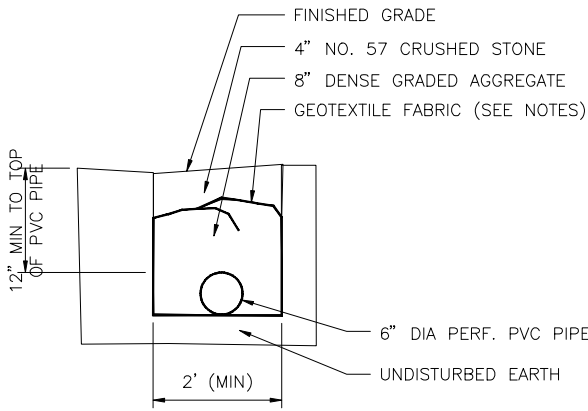




TYPICAL CABLE TROUGH SECTION

SCALE: N.T.S.

**FLOWABLE FILL TO BE USED AT ALL STORMPIPE/CABLE TROUGH DRAINAGE CROSSINGS TO MINIMIZE SETTLEMENT.**

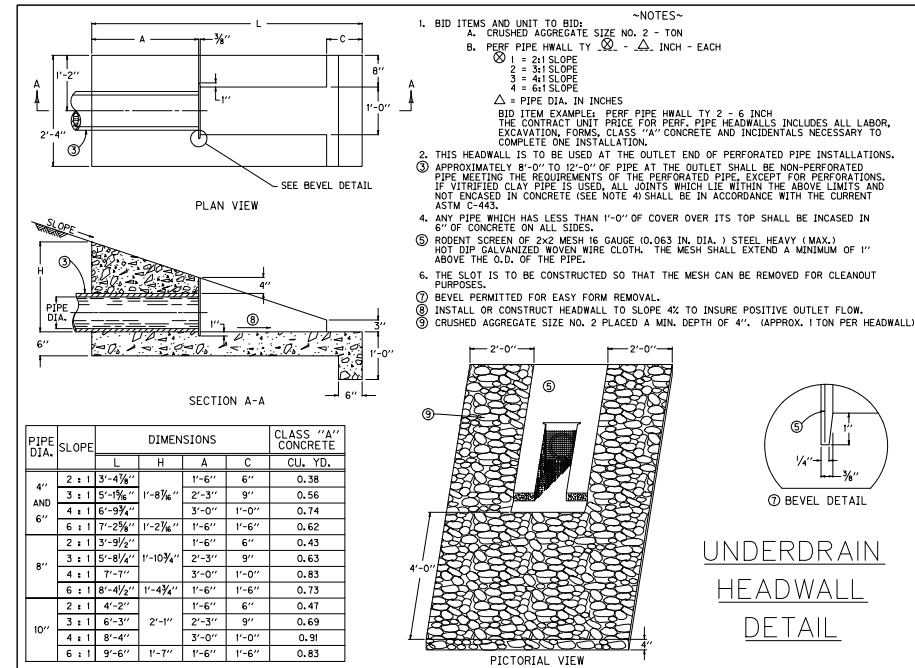


UNDERDRAIN DETAIL

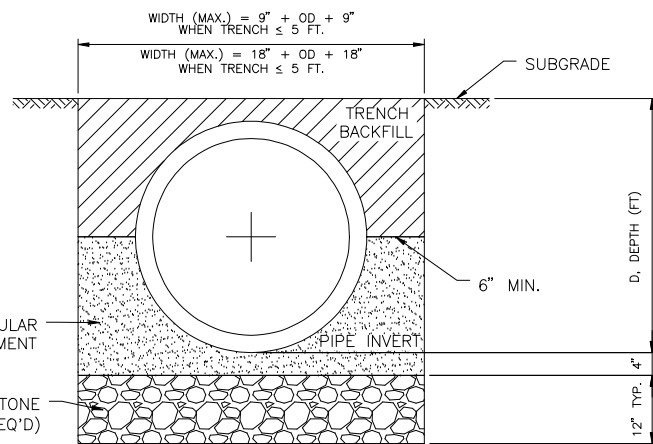
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NOTE:

1. GEOTEXTILE FABRIC TO BE OVERLAPPED A MINIMUM OF 12 INCHES PRIOR TO PLACING YARD STONE.



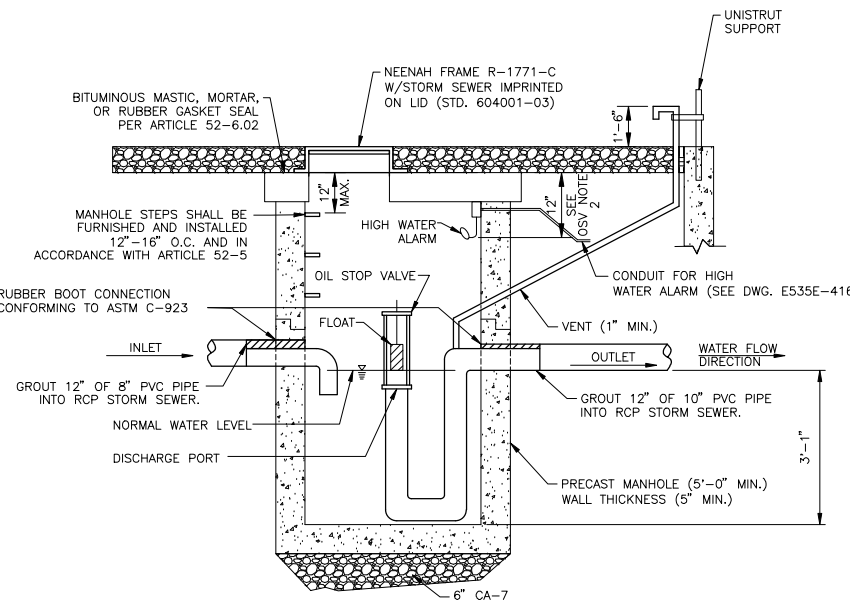
UNDERDRAIN HEADWALL DETAIL



SEWER TRENCH DETAIL

NOTES:

1. FOR TRENCH BACKFILL, REFER TO IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION, ARTICLE 1003.04.
2. FOR GRANULAR EMBANKMENT, ARTICLE 1003.04, USE CA-6
3. FOR STABILIZATION STONE, UP TO 24" OF CA-1 STONE IS ONLY REQUIRED WHEN UNSTABLE MATERIAL IS ENCOUNTERED AT TRENCH BOTTOM. DEWATERING MUST BE PERFORMED PRIOR TO PLACING STRUCTURAL FILL.
4. AGGREGATE PLACED FOR TEMPORARY SURFACE RESTORATION WILL NOT BE PAID SEPARATELY AND SHALL BE INCIDENTAL TO THE CONTRACT.
5. AT LOCATIONS WHERE TROUGH DRAINAGE CROSSES OVER THE TOP OF STORM SEWER, FLOWABLE FILL TO BE USED AS BACKFILL MATERIAL UP TO TOP OF STORM SEWER (ACROSS ENTIRE TRENCH WIDTH). FLOWABLE FILL TO FOLLOW ASTM STANDARDS FOR CONTROLLED LOW STRENGTH MATERIAL (CLSM), AND EXTEND 3' PAST EACH SIDE OF TROUGH OUTER LIMITS.



OIL STOP VALVE

SCALE: N.T.S.

**ALL STORM STRUCTURES TO BE MONOLITHICALLY POURED WITH THE BASE PER COMED C4378**

OIL STOP VALVE NOTES:

1. OIL STOP VALVES ARE TO BE USED IN GRAVITY FLOW STORM SEWER SYSTEMS. FLOAT IS SHOWN IN THE OPEN POSITION. FLOAT WILL LOSE ITS BUOYANCY AND SEAT ONTO THE DISCHARGE PORT, WHEN OIL IS PRESENT, AND THE WATER / OIL FLOW WILL BE STOPPED.
2. THE POSITION OF THE HIGH WATER ALARM TO BE VERIFIED WITH SITE SPECIFIC GRADING CONDITIONS TO ASSURE THAT THE HIGH WATER ALARM WILL BE ACTIVATED WHEN NEEDED.
3. OIL STOP VALVES (OSV) SHALL BE 10" DIA. STAINLESS STEEL MODEL OSV-10SSSV. MANUFACTURED BY AFL/CLARK INDUSTRIES OR APPROVED EQUAL.
  - A. THE OIL VALVE SHALL BE INSTALLED WITH ALL THE CONNECTIONS AND ACCESSORIES.
  - B. THE VALVE SHALL BE INSTALLED, OPERATED AND MAINTAINED AS PER THE RECOMMENDATIONS OF THE MANUFACTURER.
  - C. THE MANUFACTURER'S WARNINGS SHALL BE STRICTLY FOLLOWED.
  - D. THE VALVE SHALL BE OPENED BY LIFTING THE FLOATER IN A VERTICAL DIRECTION ONLY. TO FACILITATE MANUAL OPENING OF THE VALVE, ATTACH 1/16" DIA. WIRE TO THE FLOAT STEM AND THE OTHER END TO AN EASILY ACCESSIBLE AREA. MAKE SURE THERE IS ENOUGH SLACK IN THE WIRE FOR THE VALVE FLOAT TO CLOSE.
  - E. THE OIL STOP VALVE SHALL BE INSTALLED IN PRECAST CONCRETE MANHOLES AS SHOWN ON THE DRAWINGS. IN BOTTOM SECTIONS, FLOORS AND WALLS SHALL BE CAST AS A MONOLITHIC SECTION.
  - F. THE VALVE MUST BE RE-OPENED MANUALLY BY LIFTING THE FLOAT USING THE LIFT CABLE, AFTER ANY OIL SPILL.

REFERENCE DRAWINGS:

- PLAN OF CIVIL GRADING E535.1-1
- PLAN OF STORM SEWER SYSTEM E535.1-2
- SECTION OF STORM SEWER PROFILES SHEET 1 OF 2 E535.1-3
- SECTION OF STORM SEWER PROFILES SHEET 2 OF 2 E535.1-4
- OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES E535.1-5
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS E535.1-6
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGH, TYPICAL GRADING AND STORM SEWERS E535.1-7
- PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR 71, 72, 73, 74 E535.1-9
- PLAN OF SPCC E535.1-SPCC-1
- SCHEMATIC AND WIRING DIAGRAM OIL STOP VALVE ALARM E535E-416



Commonwealth Edison Co. Chicago, Illinois

PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGH, TYPICAL GRADING AND STORM SEWERS SHEET 2 OF 2

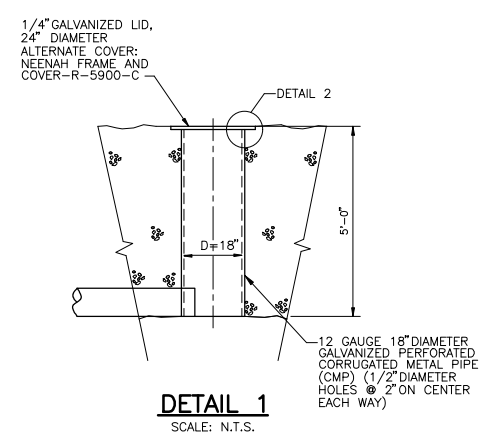
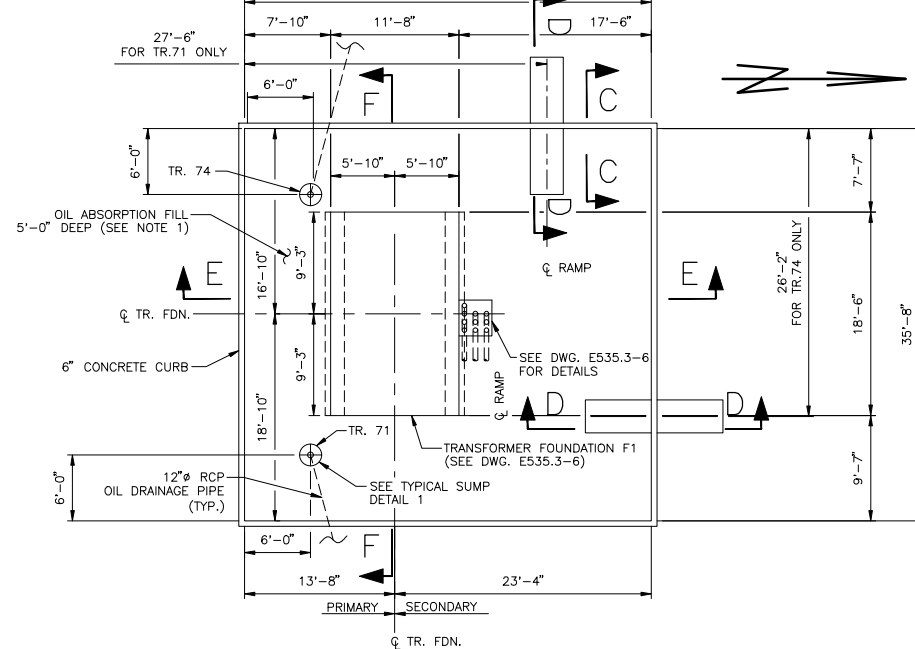
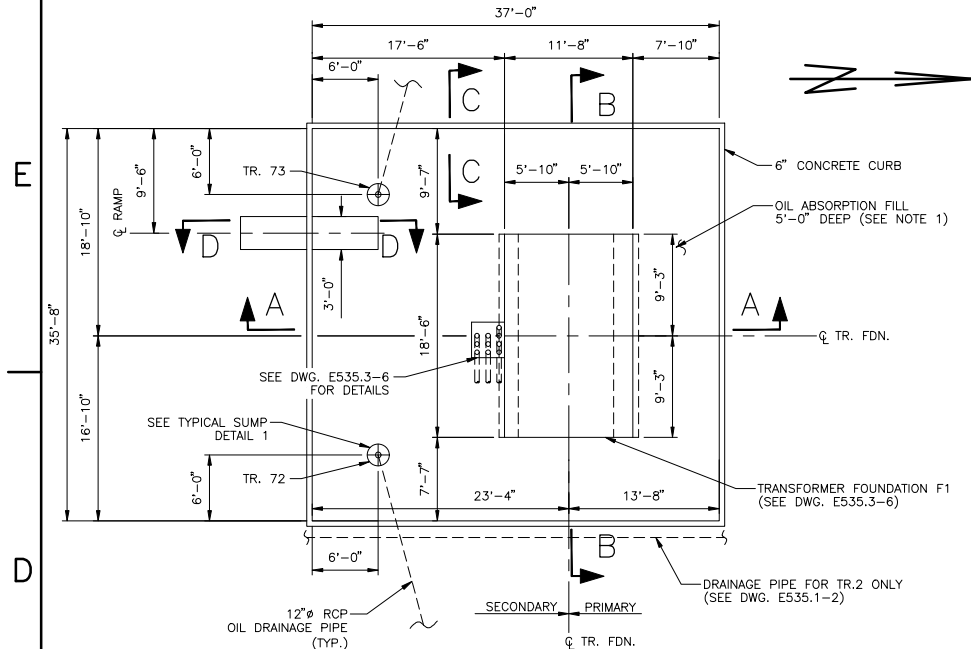
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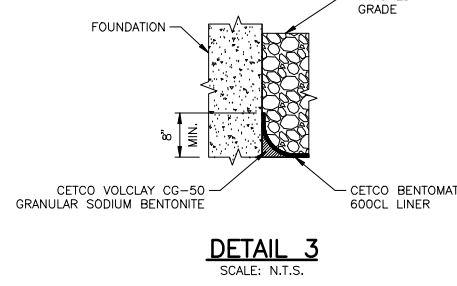
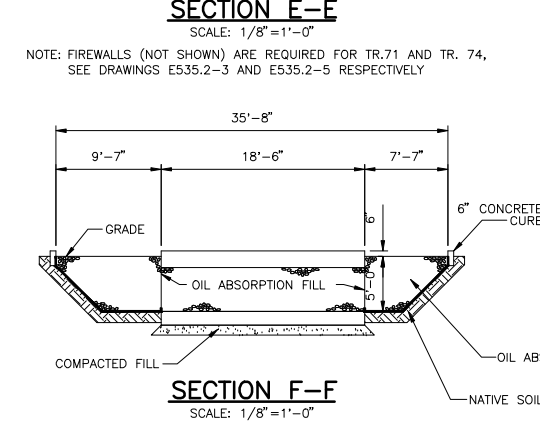
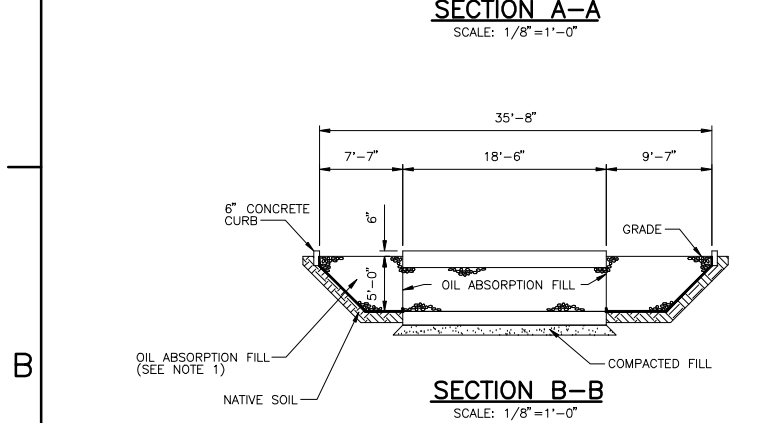
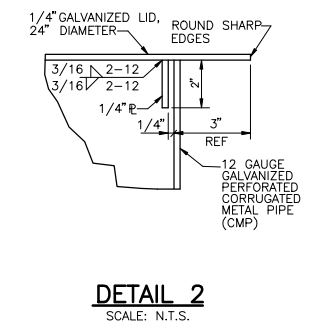
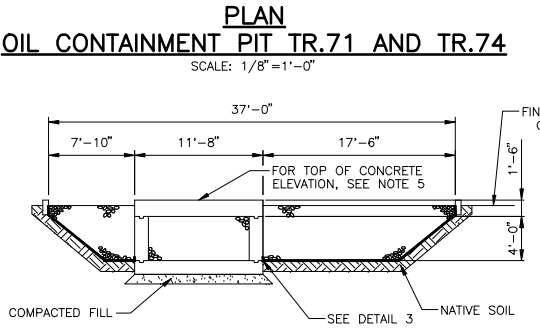
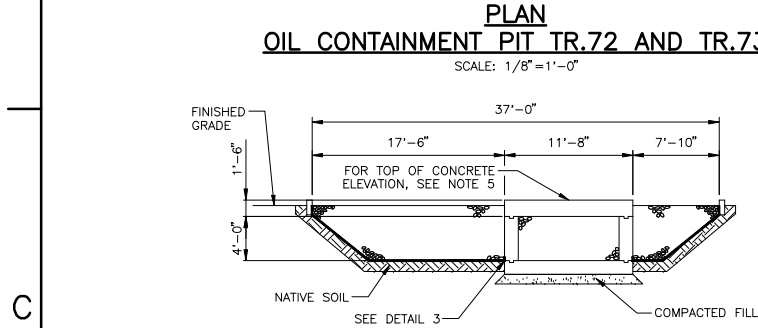
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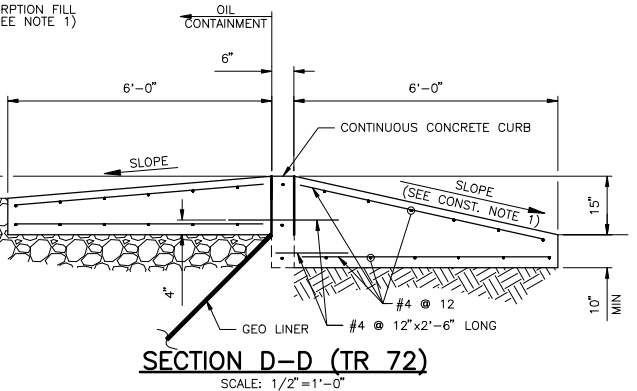
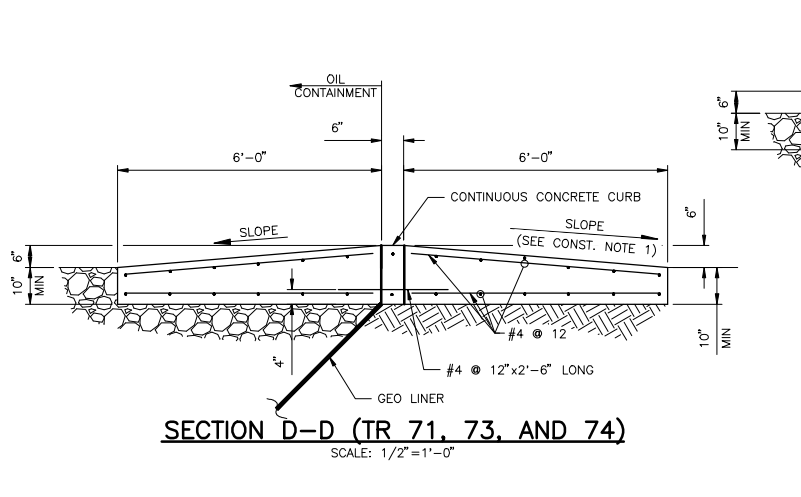
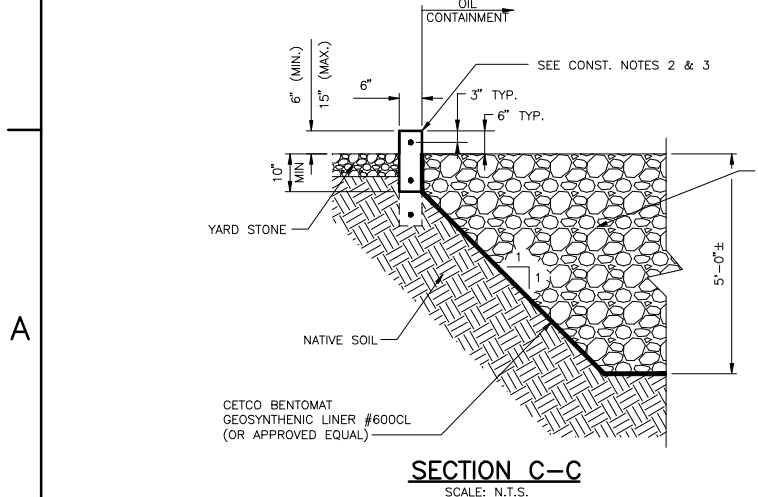


- NOTES:**
1. THE OIL ABSORPTION FILL AREA SHOWN IS FOR 13,853 GALLONS OF OIL. THE OIL ABSORPTION AREA SHALL BE CLEAN, WASHED GRAVEL CONFORMING TO STATE OF ILLINOIS APPROVED COARSE AGGREGATE GRADATION CA-1. IF CA-1 IS NOT AVAILABLE, CA-3 MAY BE USED IF APPROVED BY A COMED STRUCTURAL ENGINEER.
  2. ALL CONCRETE WORK SHALL BE PER C4386 (OR EM48003).
  3. ALL ABOVE GRADE EXPOSED EDGES OF CONCRETE SHALL BE FORMED WITH A 45 DEGREE CHAMFER.
  4. CETCO BENTOMAT GEOSYNTHETIC LINER #600CL (OR APPROVED EQUAL)
  5. TOP OF CONCRETE OF TRANSFORMER SHOWN IN SITE FOUNDATION PLANS. TOP OF CURBS FOR ALL CONTAINMENT PITS TO MATCH TOP OF CONCRETE OF TRANSFORMER FOUNDATIONS:  
TR. 71 (DWG. E535.2-3)  
TR. 72 (DWG. E535.2-2)  
TR. 73 (DWG. E535.2-4)  
TR. 74 (DWG. E535.2-5)



- CONSTRUCTION NOTE:**
1. CONTRACTOR TO ADJUST THE SLOPE OF THE RAMP TO MATCH FINISH GRADE ADJACENT TO EACH OIL CONTAINMENT PIT
  2. FOR TR 73 & TR 74: 6" WIDE x 16" MINIMUM DEPTH CONTINUOUS CONCRETE CURB WITH (2) #4 CONTINUOUS REINFORCING BARS. FINISH GRADE ADJACENT TO CURB (BOTH SIDES) TO BE TOP OF CURB ELEVATION-6".
  3. FOR TR 71 & TR 72: 6" WIDE CONTINUOUS CONCRETE CURB WITH DEPTH RANGING FROM 16" (MIN) TO 25" (MAX), WITH A MINIMUM OF (2) #4 CONTINUOUS REINFORCING BARS. CURB DEPTH DETERMINED BY GRADE ELEVATIONS SHOWN ON E535.1-1 + A MINIMUM BELOW GRADE DEPTH OF 10". IN LOCATIONS WHERE THE CURB DEPTH EXCEEDS 16", THERE ARE TO BE (3) #4 CONTINUOUS REINFORCING BARS. FINISH GRADE ADJACENT TO CURB (ON OIL CONTAINMENT SIDE) TO BE TOP OF CURB ELEVATION-6". FINISH GRADE ADJACENT TO CURB (NON OIL CONTAINMENT SIDE) RANGES FROM TOP OF CURB ELEVATION-6" (MIN) TO TOP OF CURB ELEVATION-15" (MAX), AS SHOWN ON E535.1-1.

- REFERENCE DRAWINGS:**
- E535.1-1 PLAN OF CIVIL GRADING
  - E535.1-2 PLAN OF STORM SEWER SYSTEM
  - E535.1-4 SECTION OF STORM SEWER PROFILES SHEET 2 OF 2
  - E535.1-5 OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS
  - E535.1-6 PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
  - E535.1-7 PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS
  - E535.1-8 PLAN OF SPCC
  - E535.2-1 PLAN OF 138KV EQUIPMENT FOUNDATION
  - E535.2-2 PLAN OF ENLARGED AREA AREA A 138KV EQUIPMENT FOUNDATION
  - E535.2-3 PLAN OF ENLARGED AREA AREA B 138KV EQUIPMENT FOUNDATION
  - E535.2-4 PLAN OF ENLARGED AREA AREA C 138KV EQUIPMENT FOUNDATION
  - E535.2-5 PLAN OF ENLARGED AREA AREA D 138KV EQUIPMENT FOUNDATION
  - E535.3-6 PLANS, SECTIONS, DETAILS OF 138KV TRANSFORMER FOUNDATION



REPRODUCED AND MODIFIED FROM COMED STANDARD C0247, DATED 12-02-02

REV	DATE	DESCRIPTION	TECH.	ENG.
1				

**ComEd** Commonwealth Edison Co.  
Chicago, Illinois  
An Exelon Company Transmission and Distribution Operations

**PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR.71, 72, 73, 74**

**ESS E-535 MICROSOFT HOFFMAN ESTATES**

SCALE AS SHOWN DATE 06/20/22

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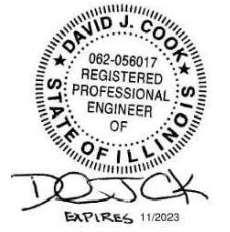
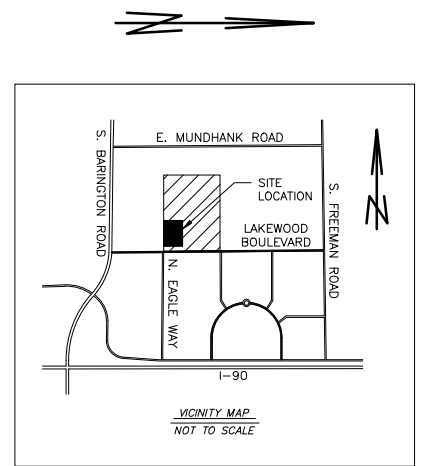
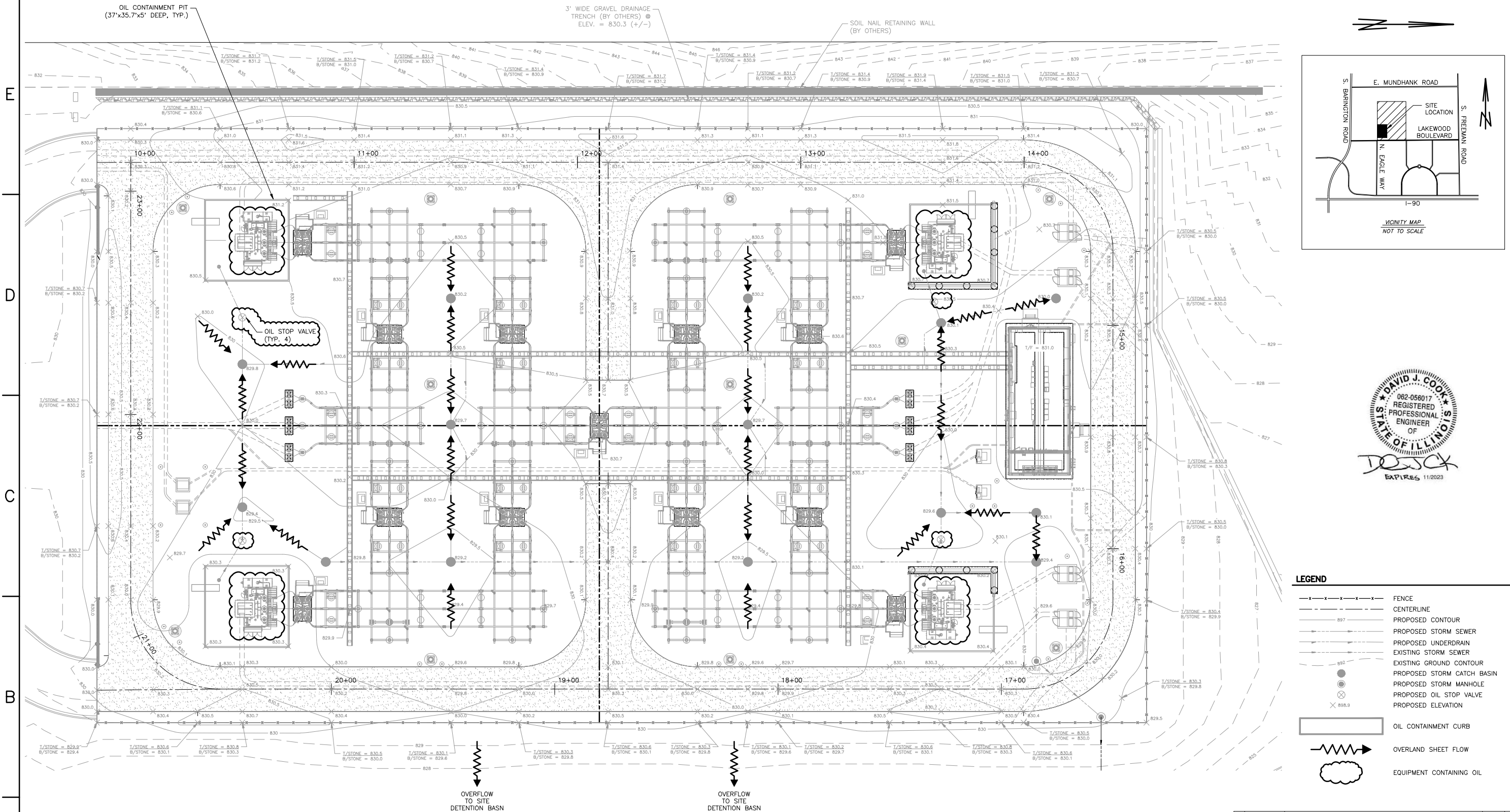
**E535.1-9\_S2022-0319**

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

THE REGISTRANT OF THE NEWLY APPLIED SEAL ONLY ASSUMES RESPONSIBILITY FOR THE CURRENT REVISION.

BURNS & MCDONNELL'S ILLINOIS DFPR REGISTRATION NUMBER IS 184-001310

REV	DATE	DESCRIPTION	DRFT.	ENG.
1B	10/10/22	BELOW GRADE IFC PACKAGE W.O. #17915014	DJB	DC
1A	07/08/22	BELOW GRADE IFA PACKAGE W.O. #17915014	DJB	DC



- LEGEND**
- FENCE
  - CENTERLINE
  - PROPOSED CONTOUR
  - PROPOSED STORM SEWER
  - PROPOSED UNDERDRAIN
  - EXISTING STORM SEWER
  - EXISTING GROUND CONTOUR
  - PROPOSED STORM CATCH BASIN
  - PROPOSED STORM MANHOLE
  - PROPOSED OIL STOP VALVE
  - PROPOSED ELEVATION
  - OIL CONTAINMENT CURB
  - OVERLAND SHEET FLOW
  - EQUIPMENT CONTAINING OIL

**REFERENCE DRAWINGS:**

- PLAN OF CIVIL GRADING E535.1-1
- PLAN OF STORM SEWER SYSTEM E535.1-2
- SECTION OF STORM SEWER PROFILES SHEET 1 OF 2 E535.1-3
- SECTION OF STORM SEWER PROFILES SHEET 2 OF 2 E535.1-4
- OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES E535.1-5
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS AND TYPICAL GRADING DETAILS E535.1-6
- PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS E535.1-7
- PLANS, SECTIONS, DETAILS OF ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS E535.1-8
- PLANS, SECTIONS, DETAILS OF OIL CONTAINMENT PIT FOR 138KV TR 71, 72, 73, 74 E535.1-9
- PLAN OF 138KV EQUIPMENT FOUNDATION E535.2-1



REV	DATE	DESCRIPTION	TECH.	ENG.
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REV	DATE	DESCRIPTION	DRFT.	ENG.

**ComEd** Commonwealth Edison Co.  
Chicago, Illinois  
Transmission and Distribution Operations

**PLAN OF SPCC**

**ESS E-535 MICROSOFT HOFFMAN ESTATES** DC 00

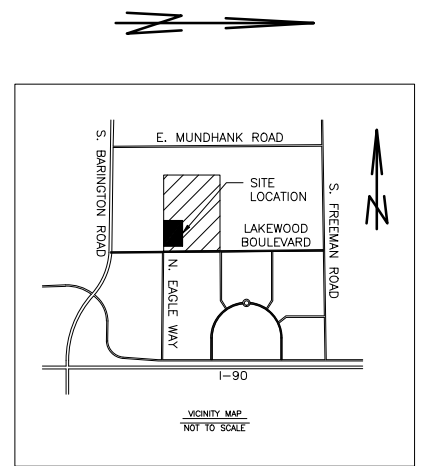
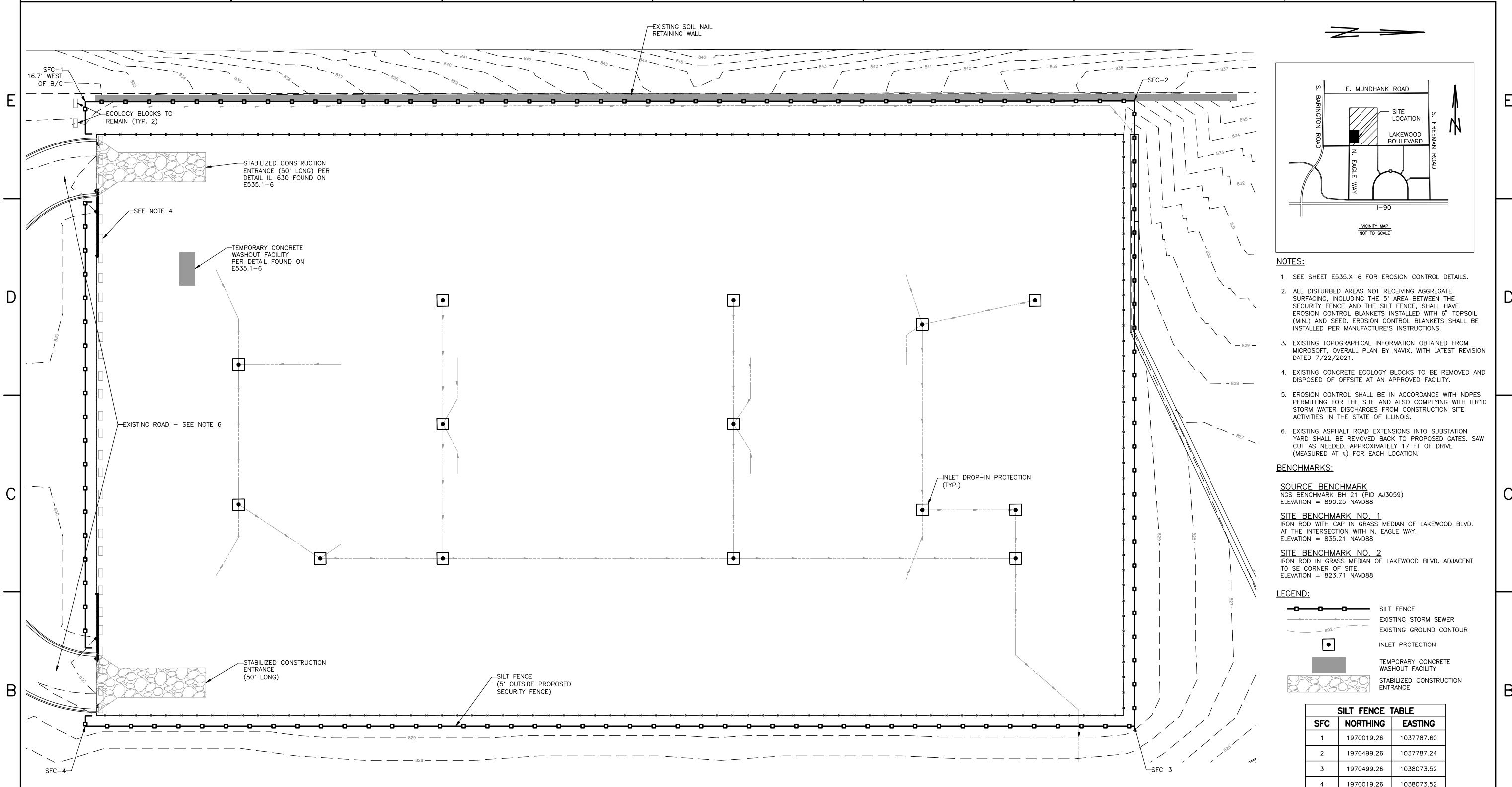
SCALE 1" = 20' DATE 04/19/22 THIS MATERIAL IS THE PROPERTY OF COMED AND CONTAINS CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY COMED.

**E535.1-SPCC-1\_S2022-0319**

**DBS** DB STERLIN CONSULTANTS, INC.  
123 N. Wacker Drive, Suite 2000  
Chicago, Illinois 60606  
312.857.1006

**BURNS & MCDONNELL**  
200 W. ADAMS STREET, SUITE 2700  
CHICAGO, IL 60606

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BURNS & MCDONNELL'S ILLINOIS DFRP REGISTRATION NUMBER IS 184-001310



- NOTES:**
- SEE SHEET E535.X-6 FOR EROSION CONTROL DETAILS.
  - ALL DISTURBED AREAS NOT RECEIVING AGGREGATE SURFACING, INCLUDING THE 5' AREA BETWEEN THE SECURITY FENCE AND THE SILT FENCE, SHALL HAVE EROSION CONTROL BLANKETS INSTALLED WITH 6" TOPSOIL (MIN.) AND SEED. EROSION CONTROL BLANKETS SHALL BE INSTALLED PER MANUFACTURE'S INSTRUCTIONS.
  - EXISTING TOPOGRAPHICAL INFORMATION OBTAINED FROM MICROSOFT, OVERALL PLAN BY NAVIX, WITH LATEST REVISION DATED 7/22/2021.
  - EXISTING CONCRETE ECOLOGY BLOCKS TO BE REMOVED AND DISPOSED OF OFFSITE AT AN APPROVED FACILITY.
  - EROSION CONTROL SHALL BE IN ACCORDANCE WITH NDPES PERMITTING FOR THE SITE AND ALSO COMPLYING WITH ILR10 STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES IN THE STATE OF ILLINOIS.
  - EXISTING ASPHALT ROAD EXTENSIONS INTO SUBSTATION YARD SHALL BE REMOVED BACK TO PROPOSED GATES. SAW CUT AS NEEDED, APPROXIMATELY 17 FT OF DRIVE (MEASURED AT  $\downarrow$ ) FOR EACH LOCATION.

- BENCHMARKS:**
- SOURCE BENCHMARK**  
 NGS BENCHMARK BH 21 (PID AJ3059)  
 ELEVATION = 890.25 NAVD88
- SITE BENCHMARK NO. 1**  
 IRON ROD WITH CAP IN GRASS MEDIAN OF LAKEWOOD BLVD. AT THE INTERSECTION WITH N. EAGLE WAY.  
 ELEVATION = 835.21 NAVD88
- SITE BENCHMARK NO. 2**  
 IRON ROD IN GRASS MEDIAN OF LAKEWOOD BLVD. ADJACENT TO SE CORNER OF SITE.  
 ELEVATION = 823.71 NAVD88

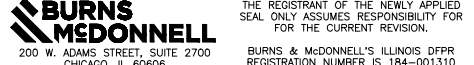
- LEGEND:**
- SILT FENCE
  - EXISTING STORM SEWER
  - EXISTING GROUND CONTOUR
  - INLET PROTECTION
  - TEMPORARY CONCRETE WASHOUT FACILITY
  - STABILIZED CONSTRUCTION ENTRANCE

SILT FENCE TABLE		
SFC	NORTHING	EASTING
1	1970019.26	1037787.60
2	1970499.26	1037787.24
3	1970499.26	1038073.52
4	1970019.26	1038073.52

- REFERENCE DRAWINGS:**
- PLAN OF CIVIL GRADING E535.1-1
  - PLAN OF STORM SEWER SYSTEM E535.1-2
  - SECTION OF STORM SEWER PROFILES SHEET 1 OF 2 E535.1-3
  - SECTION OF STORM SEWER PROFILES SHEET 2 OF 2 E535.1-4
  - OUTLINE OF SITE GRADING SPECIFICATIONS AND CONSTRUCTION NOTES E535.1-5
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  - PLANS, SECTIONS, DETAILS OF CONSTRUCTION ROADWAYS, TROUGHS, TYPICAL GRADING AND STORM SEWERS E535.1-7
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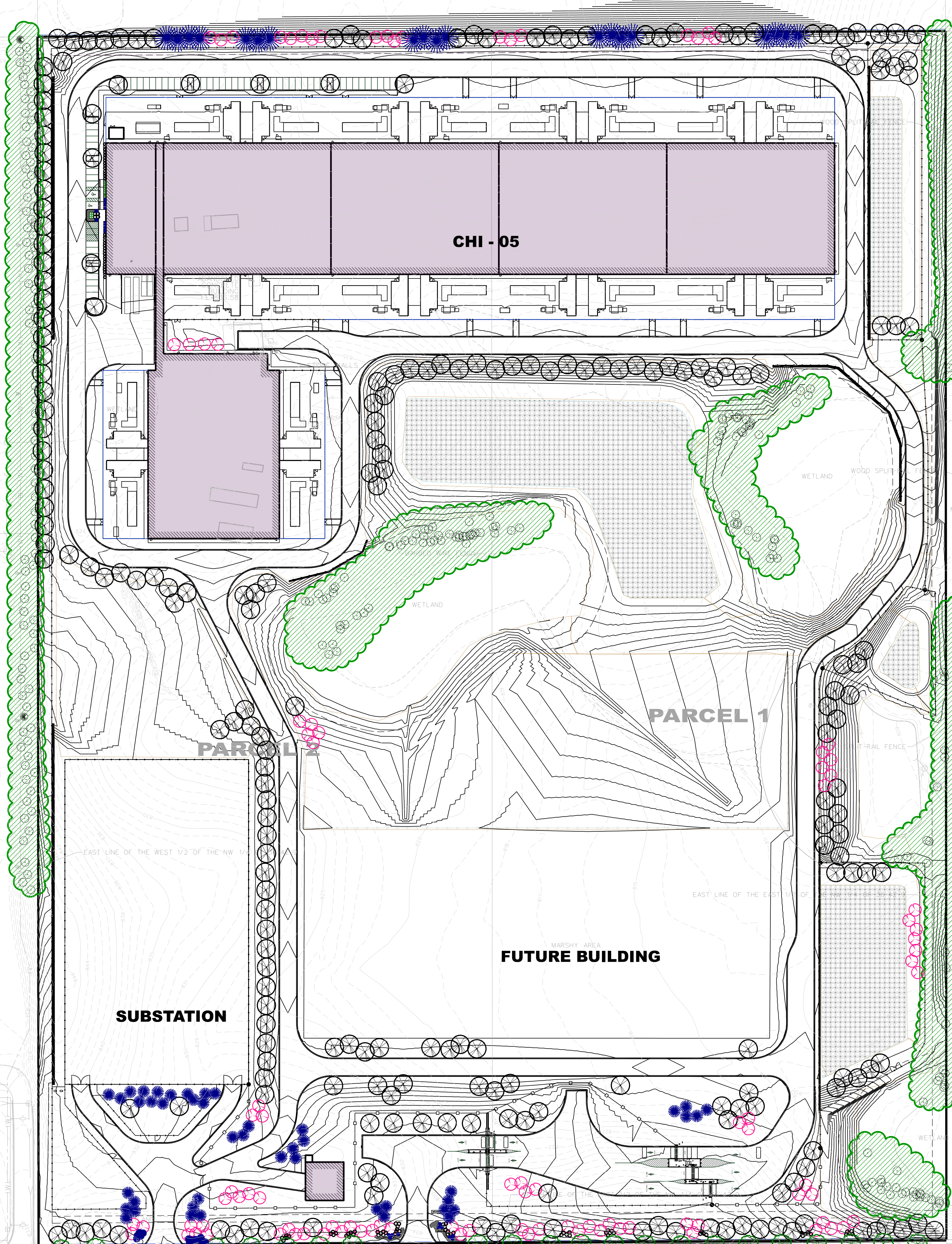
**EXISTING CONDITIONS AND EROSION CONTROL**

**ESS E-535 MICROSOFT HOFFMAN ESTATES**

SCALE 1" = 20' DATE 04/19/22

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**SKE535.1-EXISTING\_S2022-0319**



**PRAIRIE SEEDING**  
See Plant List on L-5

**EMERGENT PLANTING/SEEDING**  
See Plant List on L-5

**TURF SOD/SEEDING**  
Areas adjacent to and south of the Com Ed Substation and south of the Future Building shall receive 6" topsoil and bluegrass mix sod. All other turf areas shall receive 6" topsoil and IDOT Class 1 seed.

PLANT LIST	Qty./Root Form/Size
<b>Trees</b>	
<b>White Fir</b> <i>Abies concolor</i>	3/b&b/8'
<b>Autumn Blaze Maple</b> <i>Acer freemanii</i> 'Autumn Blaze'	10/b&b/3"
<b>Armstrong Red Maple</b> <i>Acer rubrum</i> 'Armstrong'	25/b&b/3"
<b>Crescendo Sugar Maple</b> <i>Acer saccharum</i> 'Morton'	30/b&b/3"
<b>Hackberry</b> <i>Celtis occidentalis</i>	41/b&b/3"
<b>Shademaster Honeylocust</b> <i>Gleditsia tricanthos inermis</i> 'Shademaster'	30/b&b/3"
<b>Kentucky Coffeetree</b> <i>Gymnocladus dioica</i>	6/b&b/3"
<b>Moraine Sweetgum</b> <i>Liquidambar styraciflua</i> 'Moraine'	24/b&b/3"
<b>Black Hills Spruce</b> <i>Picea glauca densata</i>	18/b&b/8'
<b>Colorado Blue Spruce</b> <i>Picea pungens</i>	5/b&b/6'
<b>Eastern White Pine</b> <i>Pinus strobus</i>	36/b&b/8'
<b>Exclamation London Planetree</b> <i>Platanus acerifolia</i> 'Morton Circle'	5/b&b/4"
<b>Shingle Oak</b> <i>Quercus imbricaria</i>	6/b&b/3"
<b>Northern Red Oak</b> <i>Quercus rubra</i>	12/b&b/3"
<b>Redmond Linden</b> <i>Tilia americana</i> 'Redmond'	30/b&b/3"
<b>Sterling Silver Linden</b> <i>Tilia tomentosa</i> 'Sterling Silver'	5/b&b/3"
<b>Frontier Elm</b> <i>Ulmus</i> 'Frontier'	25/b&b/3"
<b>Morton Elm</b> <i>Ulmus</i> 'Morton Accolade'	9/b&b/3"
<b>Patriot Elm</b> <i>Ulmus</i> 'Patriot'	5/b&b/3"
<b>Ornamental Trees</b>	
<b>Autumn Brilliance Serviceberry</b> <i>Amelanchier grandiflora</i> 'Autumn Brilliance'	25/b&b/6' multi
<b>River Birch</b> <i>Betula nigra</i> 'Heritage'	11/b&b/8' multi
<b>Eastern Redbud</b> <i>Cercis canadensis</i>	7/b&b/6'
<b>Washington Hawthorn</b> <i>Crataegus phaenopyrum</i>	6/b&b/2.5"
<b>Prairiefire Crabapple</b> <i>Malus</i> 'Prairiefire'	13/b&b/2.5"
<b>Red Splendor Crabapple</b> <i>Malus</i> 'Red Splendor'	5/b&b/3"
<b>Spring Snow Crabapple</b> <i>Malus</i> 'Spring Snow'	11/b&b/3"
<b>China Snow Lilac</b> <i>Syringa pekinensis</i> 'Morton'	4/b&b/6' clump
<b>Baldcypress</b> <i>Taxodium distichum</i>	11/b&b/6'
<b>Shrubs</b>	
<b>Hinsdale Black Chokeberry</b> <i>Aronia melanocarpa</i> 'Hinsdale'	27/b&b/36"
<b>Northern Charm Boxwood</b> <i>Buxus</i> 'Northern Charm'	31/b&b/36"
<b>Cardinal Dogwood</b> <i>Cornus sericea</i> 'Cardinal'	8/b&b/36"
<b>Vanilla Strawberry Hydrangea</b> <i>Hydrangea paniculata</i> 'Vanilla Strawberry'	15/b&b/48"
<b>Sargent Juniper</b> <i>Juniperus chinensis</i> 'Sargentii'	5/b&b/36"
<b>Sea Green Juniper</b> <i>Juniperus chinensis</i> 'Sea Green'	14/b&b/36"
<b>Dwarf Mugo Pine</b> <i>Pinus mugo</i> var. <i>pumillo</i>	2/b&b/36"
<b>Fragrant Sumac</b> <i>Rhus aromatica</i>	14/b&b/36"
<b>Spreading Yew</b> <i>Taxus media</i> 'Dark Green Spreader'	10/b&b/36"
<b>Sugar and Spice Viburnum</b> <i>Viburnum carlesii</i> 'Sugar and Spice'	4/b&b/36"
<b>Perennials and Grasses</b>	
<b>Summer Beauty Allium</b> <i>Allium tanguticum</i> 'Summer Beauty'	210/pot/1 gal.
<b>Korean Featherreedgrass</b> <i>Calamagrostis brachytricha</i>	8/pot/1 gal.
<b>Lilyturf</b> <i>Liriope spicata</i>	80/pot/1/2 ga.
<b>Prairie Dropseed</b> <i>Sporobolus heterolepis</i>	6/pot/1 gal.

**SYSKA HENNESSY GROUP**  
MEP Engineer  
330 N. Wabash Avenue, Suite 1505  
Chicago, IL 60611  
Tel 312.588.3560  
Fax 312.588.3579

**Gensler**  
Architect  
11 East Madison Street, Suite 300  
Chicago, IL 60602  
Tel 312.456.0123  
Fax 312.456.0124

**Thornton Tomasetti**  
Structural Engineer  
330 North Wabash Avenue, Suite 1500  
Chicago, IL 60611

**NAVIX**  
Civil Engineer  
11235 SE 8th Street, Suite 150  
Bellevue, WA 98004  
Tel 425.453.9501  
Fax 425.453.8208

**ARUP**  
Security  
77 Water Street  
New York, NY 10005

**Microsoft**

**CHI05 DATA CENTER**

HOFFMAN TECHNOLOGY PARK  
HOFFMAN ESTATES, IL

Design Team

CHRS CALLISON / JARED STEFANOFF  
Design  
CHRS CALLISON / JARED STEFANOFF  
Owner  
STEVE PERICE / PAUL MANZER  
Checker  
MSF 10010  
Project No.  
Job  
M.S. Project No.

Approvals

CUSTOMER OPERATIONS Date

PETER WANDIA  
Microsoft Mechanical Engineer Date  
ERIC BEAL  
Microsoft Civil Engineer  
RAYMOND CHIU  
Microsoft Electrical Engineer  
TSD  
Engineering Manager  
FRIED HANDEL  
Security Manager  
TODOR NIKOLOV  
CSA

PROJECT MANAGEMENT

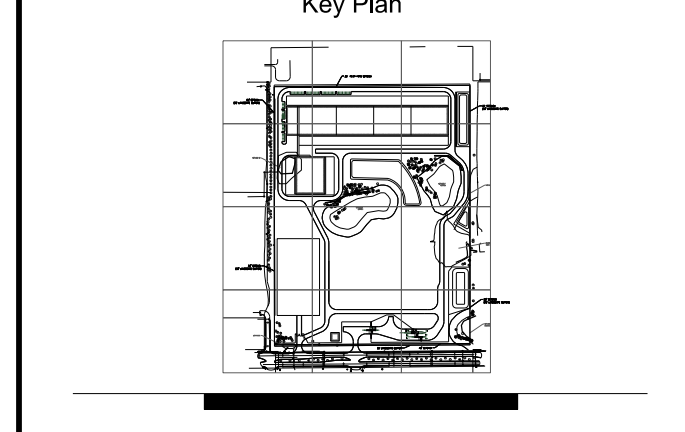
HELARY MURRAY  
Project Planner  
JOSHUA FLUECKE  
Project Manager  
TSD  
Senior Project Manager  
TSD  
Development Manager  
TSD  
Quality Control Reviewer  
TSD  
Quality Control FR&E

Revisions

No.	Date	Description
A	11.06.2009	ISSUE FOR SITE PLAN DCE REVIEW
B	02.03.2011	ISSUE REVIEW
C	03.12.2011	SITE PLAN FOR FINAL ENG. RESPONSE

Registration

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A	11.06.2009	ISSUE FOR SITE PLAN DCE REVIEW
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C	03.12.2011	SITE PLAN FOR FINAL ENG. RESPONSE



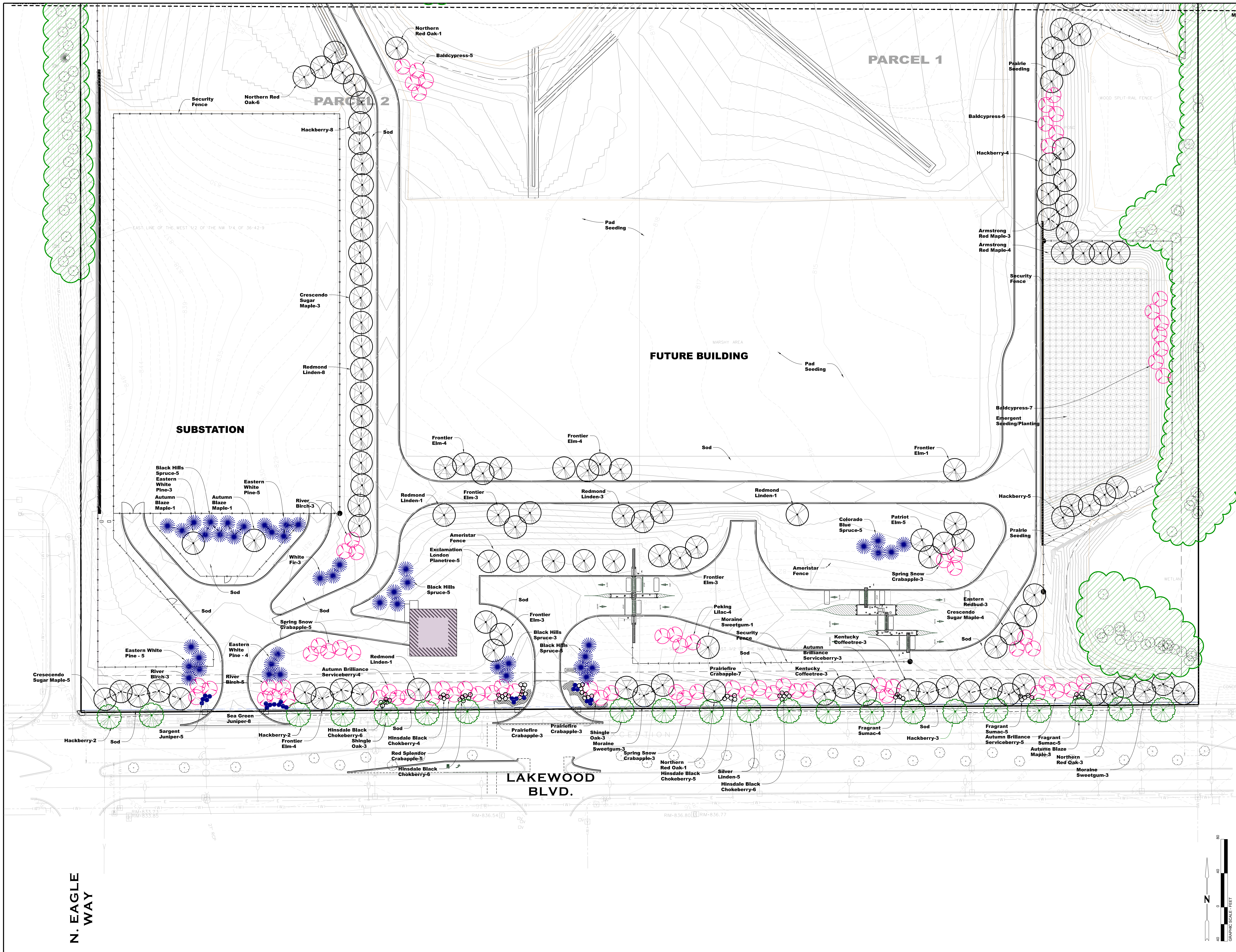
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Sheet Title/Number

Overall Landscape Plan

**CHI05**

L-1



**SYSKA HENNESSY**  
 MEP Engineer  
 330 N. Wabash Avenue, Suite 1505  
 Chicago, IL 60611  
 Tel 312.588.3500  
 Fax 312.588.3579

**Gensler**  
 Architect  
 11 East Madison Street, Suite 300  
 Chicago, IL 60602  
 Tel 312.456.0123  
 Fax 312.456.0124

**Thornton Tomasetti**  
 Structural Engineer  
 330 North Wabash Avenue, Suite 1500  
 Chicago, IL 60611

**NAVIX**  
 Civil Engineer  
 11235 SE 6th Street, Suite 150  
 Bellevue, WA 98004  
 Tel 425.453.9501  
 Fax 425.453.8208

**ARUP**  
 Security  
 77 Water Street  
 New York, NY 10005



**CHI05  
 DATA CENTER**

HOFFMAN TECHNOLOGY PARK  
 HOFFMAN ESTATES, IL

**Design Team**

CHRIS CALLIBON / JARED STEFANOFF  
 Design  
 CHRIS CALLIBON / JARED STEFANOFF  
 Green  
 STEVE PENCE / PAUL MANDER  
 Owner  
 MSF 0010  
 Project No.  
 No.  
 M.S. Project No.

**Approvals**

**CUSTOMER OPERATIONS**

PETER WAGDA  
 Microsoft Mechanical Engineer  
 ERIC BEAL  
 Microsoft Civil Engineer  
 RAYMOND CHU  
 Microsoft Electrical Engineer  
 TBD  
 Engineering Manager  
 FRED WARRIS  
 Security Manager  
 TODOR NIKOLOV  
 CSA

**PROJECT MANAGEMENT**

HILARY MURRAY  
 Project Planner  
 DONALD FUSCO  
 Project Manager  
 TBD  
 Senior Project Manager  
 TBD  
 Development Manager  
 TBD  
 Quality Control Reviewer  
 TBD  
 Quality Control FRM

**Revisions**

No.	Date	Description
A	11.06.2020	ISSUE FOR SITE PLAN DCGL REVIEW
B	02.09.2021	VOLUME PERMIT
C	03.12.2021	SITE PLAN FOR FINAL ENG. RESPONSE

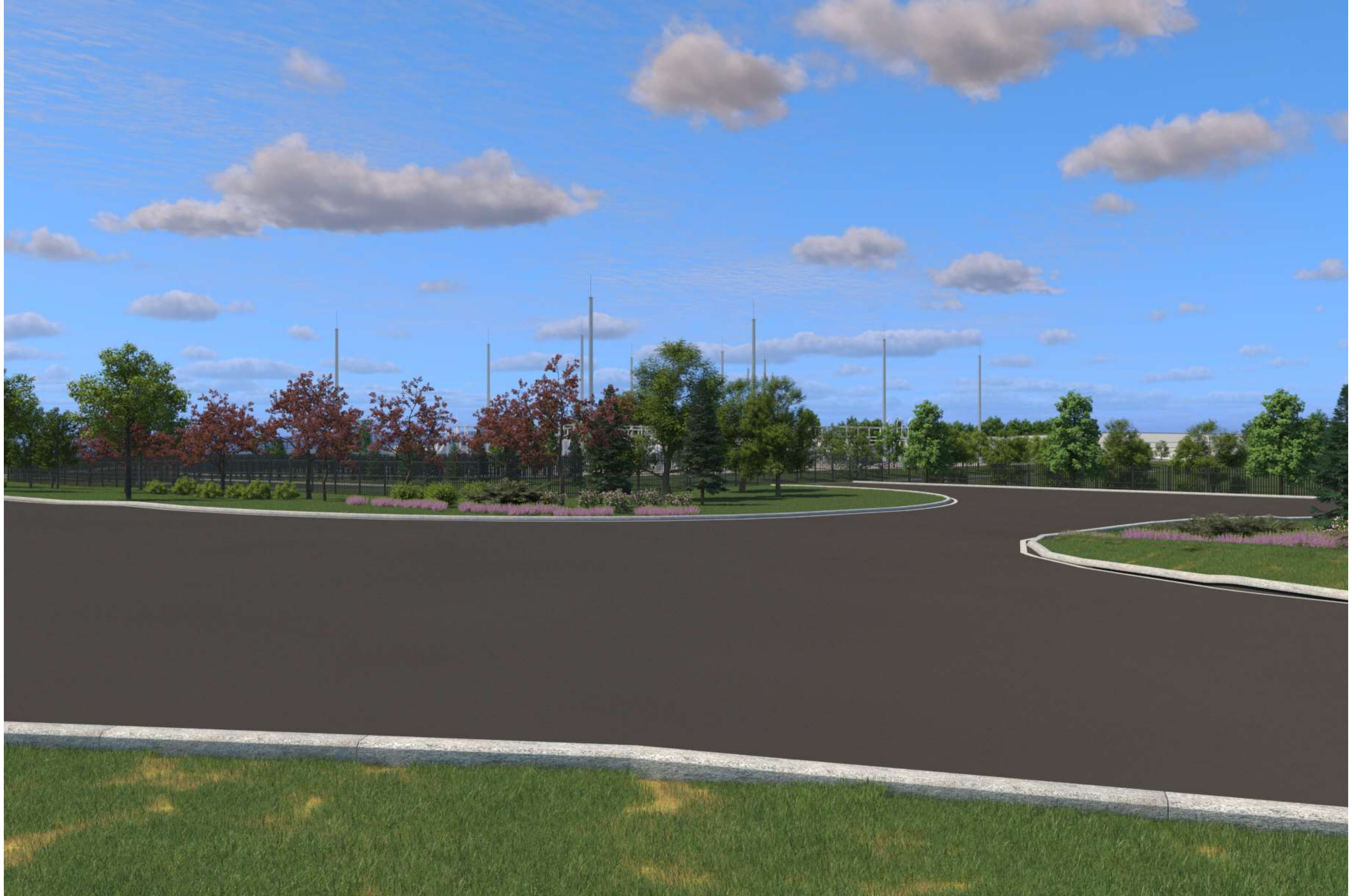
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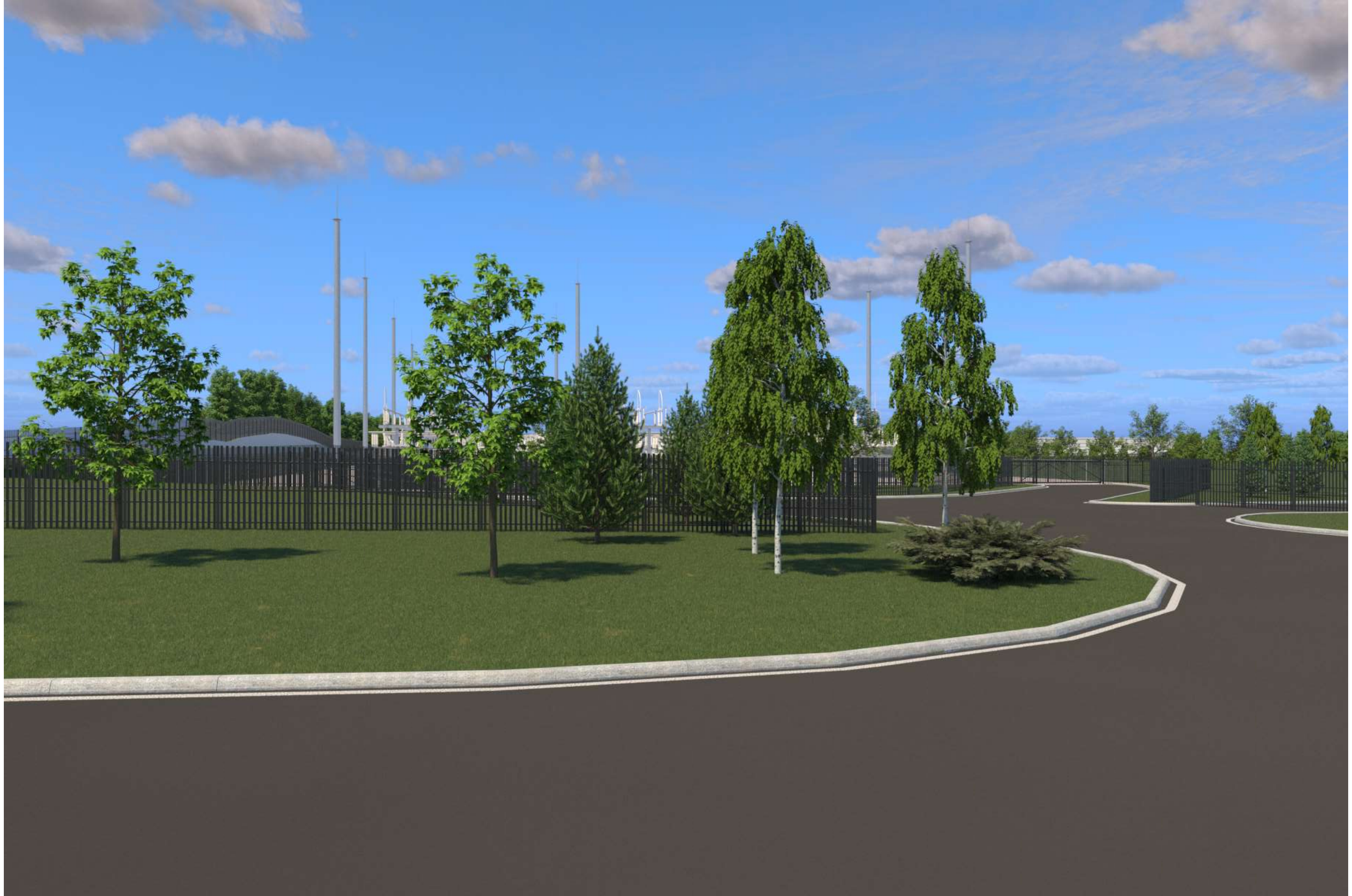
**Key Plan**

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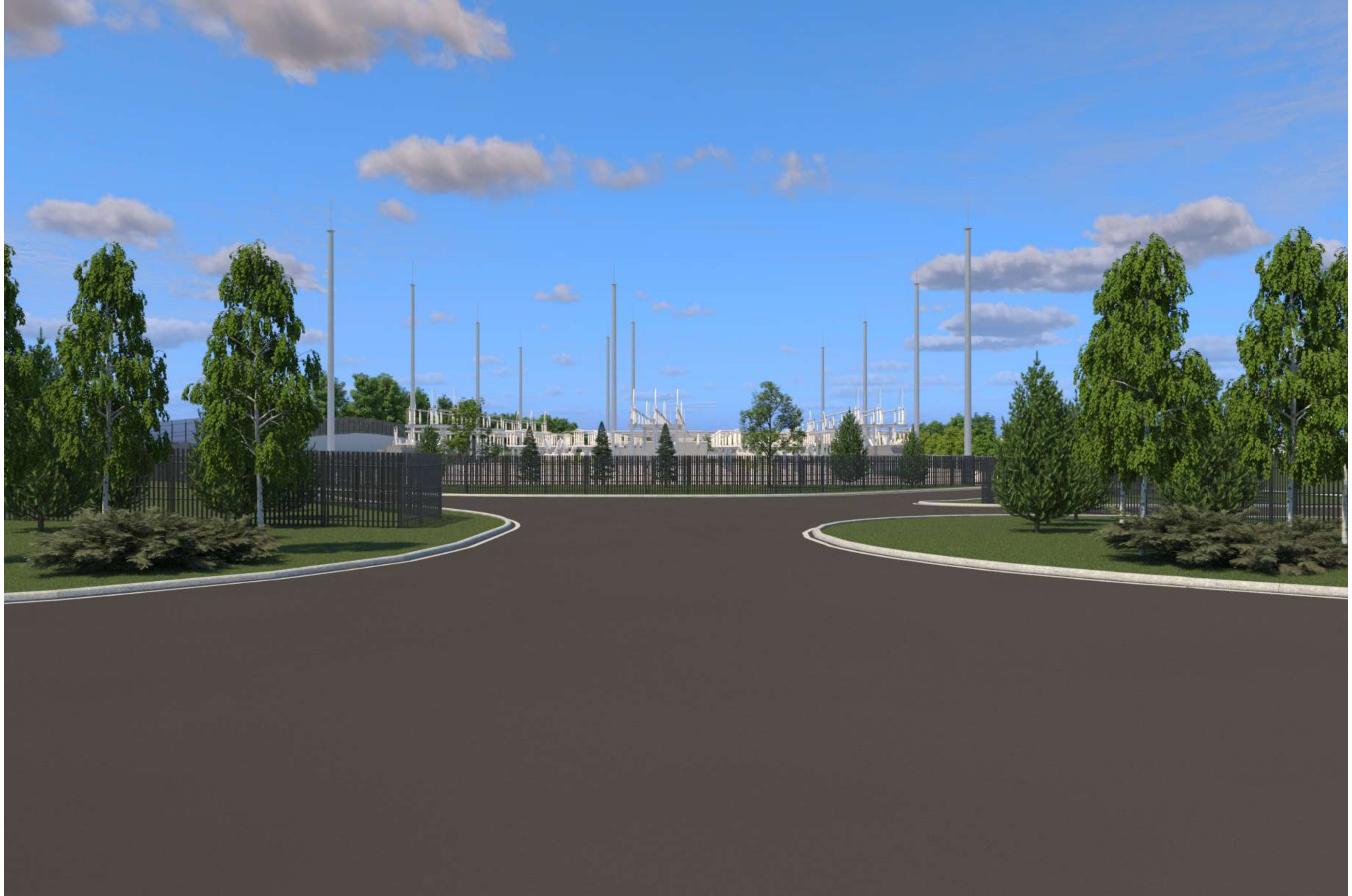
Sheet Title/Number

South Landscape Plan  
**CHI05**  
 L-3













LIGHTNING MAST:  
86FT

138/12KV  
TRANSFORMER:  
17'-9"

138KV CIRCUIT  
BREAKER: 15'

138KV  
DISCONNECT  
SWITCH: 23'-6"

138KV HIGH BUS:  
23'-6"

138KV LOW BUS:  
15'-6"

