VILLAGE OF Hinsdale Est. 1873

Village of Hinsdale
19 E. Chicago Avenue
Hinsdale, IL 60521-3489
(630)789-7000
Village Website: www.villageofhinsdale.org

PUBLIC SERVICES UTILITY PERMIT APPLICATION - Permit Fee of $100.00

Date of Application: 11/16/2021 Permit No: ComEd-0045 Permit Expiration Date: 07-01-22

Utility Company Information:

Company Name: Commonwealth Edison
Address: 1 Lincoln Centre
City, State, Zip: Oakbrook Terrace, IL 60181
Contact Person: Paul Edwards
Phone Number: 773) 573-8637
Email Address: paul.edwards@comed.com
Cell Number:
Project/Work Order Number: 17140172

Contractor Information:

Company Name: Meade Electric
Address: 625 Willowbrook Center Parkway
City, State, Zip: Willowbrook, IL 60527
Contact Person: Mike Jajkowski
Phone Number: 708-259-1664
Email Address:
Cell Number:

PROJECT LOCATION: S Madison St from 9th St to 55th St

Description of work covered under this permit:
Proposed conduit installation via open cut trench and directional bore; 1 proposed splice pit and 1 proposed pole. Tree trimming may be required.

Start Date: 2/1/2022 **Completion Date:** 5/1/2022

Site Plan/Details/Specifications (3 sets) included with application? ⦿ YES ○ NO
Currently registered as a Utility Contractor with the Village of Hinsdale? ⦿ YES ○ NO
Engineer Estimate of Cost included with application? ⦿ YES ○ NO

Type of Utility: ☑ ComEd ☐ Nicor ☐ Comcast ☐ Water ☐ Sewer
☐ Communications: ☐ Fiber Optic ☐ Wireless ☐ Other:

Applicant Information:

Print Name: Judy Rodriguez Phone Number: 312-253-1800
Company: HBK Engineering, LLC Email Address: judy.rodriguez@hbkengineering.com
Signature: Judy Rodriguez Digitally signed by Judy Rodriguez Date: 2021.11.16 10:52:51 -06'00' Date: 11/15/2021

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION IN EFFECT ON THE DATE OF PERMIT APPLICATION OF THE FOLLOWING: STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION & SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, AND THE VILLAGE OF HINSDALE SUBDIVISION ORDINANCES (Ord. O2007-73, 11-6-2007) AND ENGINEERING STANDARDS.

Village Use Only

Permit Approved: ☑ YES ☐ NO

Conditions for Approval/Reasons for Denial: RESTORE ALL DISTURBED AREAS WITHIN 14 DAYS OF COMPLETION. PROVIDE LOCAL RESIDENTS AND VILLAGE 48 HOUR NOTICE PRIOR TO START.

Approved By: A. Diaz Date: 01/28/22

RM-01

CE-DB-183

LEGEND

- PROPOSED TRENCHED CONDUIT
- PROPOSED DIRECTIONAL BORE
- EXISTING CTA MANHOLE
- EXISTING COMMUNICATION MANHOLE
- EXISTING RCN MANHOLE
- EXISTING SEWER CATCH BASIN
- EXISTING SEWER INLET
- EXISTING SBC MANHOLE
- EXISTING SEWER MANHOLE
- EXISTING COMED MANHOLE
- EXISTING TRAFFIC LIGHT CONTROL BOX
- EXISTING ELECTRIC MANHOLE
- EXISTING WATER VALVE
- EXISTING GAS VALVE VAULT
- EXISTING GAS VALVE
- EXISTING MCI MANHOLE
- EXISTING COMCAST MANHOLE
- EXISTING CATV MANHOLE
- EXISTING UTILITY POLE
- EXISTING SUPPORT / COLUMN
- EXISTING FIRE HYDRANT
- EXISTING PARKING PAYBOX
- EXISTING STREET LIGHT
- EXISTING STREET SIGN
- EXISTING TRAFFIC/LIGHT POLE
- EXISTING STREET LIGHT CONTROL BOX
- EXISTING MAILBOX
- EXISTING TREE
- APPROXIMATE PROPERTY LINE
- EXISTING FENCE
- EXISTING CONSTRUCTION FENCE
- EXISTING SEWER
- EXISTING STORM SEWER
- EXISTING ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING DEAD GAS
- EXISTING SBC
- EXISTING COMED
- EXISTING COMCAST
- EXISTING RCN

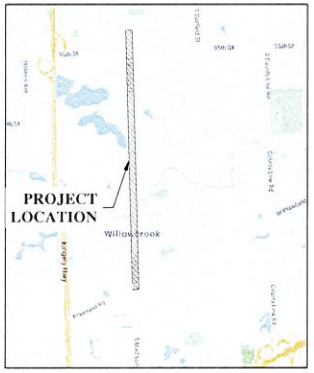
Know what's below. Call before you dig.

ComEd

An Exelon Company

COMED DISTRIBUTION
CONDUIT INSTALLATION
ALONG S. MADISON ST. FROM W. 9TH
ST. TO PLAINFIELD RD.
HINSDALE, BURR RIDGE, AND
WILLOWBROOK, ILLINOIS
W.O. #17140172

SITE LOCATION MAP



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PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

JOSEPH P. KOZIOL 062-056597 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

PROFESSIONAL ENGINEER EXPIRES 11-30-2021

SIGNATURE

11-09-2021
DATE

DUPAGE COUNTY JURISDICTION SUMMARY OF QUANTITIES

NO.	DESCRIPTION	AMOUNT	UNIT
01	2-5" PVC CONCRETE ENCASED CONDUIT	20	L.F.
02	2-6" HDPE SDR-13 DIRECTIONAL BORE	8,975	L.F.
03	DIRECTIONAL BORE PITS	1	EACH
04	SPLICE BOXES AND DIRECTIONAL BORE PITS	17	EACH
05	HMA RESTORATION	156	S.Y.
06	SEEDING RESTORATION	170	S.Y.
07	SILT FENCE	955	L.F.

NOTE:
ONLY PRINTS WITH A SIGNED SEAL ARE TO BE USED DURING CONSTRUCTION AND CONSIDERED OFFICIAL COPIES. THESE PLANS ARE NOT TRANSFERABLE.

REV.	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
321 WEST VAN BUREN, SUITE 100
CHICAGO, IL 60607
PHONE: (312) 922-0171 FAX: (312) 922-0234
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002100

ANY MODIFICATION OR ADDITION TO THIS DRAWING BY ANY ORGANIZATION OTHER THAN HBK IS NOT THE RESPONSIBILITY OF HBK

PROJ. No. 21-1167

REV.	DESCRIPTION	P.D.	P.E.	DATE

COMED DISTRIBUTION - CONDUIT INSTALLATION
ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
TITLE, LOCATION MAP, LEGEND, INDEX TO SHEETS

JPK | 312-253-1800 | LEB

PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	AS SHOWN	17140172
DATE	SCALE	P.L. NO.	PASSPORT W/D

ComEd Distribution Lines Engineering

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DRAWING NO. | PAGE

CE-DB-183

Owner: **Commonwealth Edison**
Attn: Paul Edwards
1 LINCOLN CENTER
OAKBROOK TERRACE, IL 60181
(773) 573-8637

Contractor: **Meade**
Attn: Mike Jajkowski
625 Willowbrook Center Parkway
Willowbrook, IL 60527
(708) 259-1664

Engineer: **HBK Engineering, LLC**
Attn: Enrique Voltaire
2101 West Carroll Ave
Chicago, Illinois 60612
(312) 253-1800

Section 1.0 Scope of Work

1.01 Installation of concrete encased conduit, conduit via directional bore, and splice box system.

See plans for exact location, lengths, quantities, and dimensions of proposed improvements.

1.02 Engineer's Estimate of Materials

20 Linear Feet of 2-5" PVC Concrete Encased Conduit
9,646 Linear Feet of 2-6" HDPE SDR-13.5 Directional Bore
18 Splice Boxes (C5279.C)
2-6" Steel 4 FT Radius 90° Bend

Section 2.0 General Specifications and Instructions.

2.01 The Owner/Engineer shall provide such plans, specifications, drawings, completed application forms and information necessary to secure all permits; as required by Dupage County and the Villages of Hinsdale, Burr Ridge, and Willowbrook. Work will not be started prior to acquisition of all required permits.

2.02 The Engineer has forwarded copies of the Plans, Instructions and Specifications to Dupage County and the Villages of Hinsdale, Burr Ridge, and Willowbrook for evaluation and comments. Contractor to verify that all required alterations and suggested changes have been resolved, prior to the start of any work under this project.

2.03 Use of Public Way and/or Temporary Public Way Closure and Street Opening permits shall be obtained prior to any work requiring such action.

Construction along existing roadways shall be coordinated with all controlling jurisdictions and the Owner to ensure that the convenience and safety of the general public and of residents along the roadway shall be provided for in an adequate and satisfactory manner. At no time shall the existing roadways be closed to traffic, unless approved by the Owner, the Engineer, Dupage County, and the Villages of Hinsdale, Burr Ridge, and Willowbrook. During construction operations, access shall be provided to private property along existing roadways.

The Contractor(s) shall adhere to Dupage County and the Villages of Hinsdale, Burr Ridge, and Willowbrook standards and practices and shall be responsible for the installation and maintenance of adequate signs, barricades, and warning devices to inform and protect the public. At a minimum, all traffic control practices shall be consistent with the part 6 of the Federal Highway Administration's Manual on Uniform Traffic Control Devices as well as Section 700 of the most current revision to the IDOT Standard Specifications for Road and Bridge Construction in Illinois, to prevent injury or damage to persons or property and to minimize disruptions to efficient pedestrian and vehicular traffic. The cost of furnishing and maintaining signs, barricades, and warning devices shall be incidental to the contract and no additional compensation will be allowed.

2.04 The Contractor(s) shall arrange a pre-construction meeting/walk-thru with Dupage County and the Villages of Hinsdale, Burr Ridge, and Willowbrook.

2.05 Scale for the drawings is for general information only. Locations and dimensions shall be taken as shown and the drawings shall not be scaled.

Section 3.0 Existing Utilities

3.01 J.U.L.I.E. is to be notified 48 hours prior to the start of any work on this project. (1-800-892-0123). The Contractor is cautioned to expect to encounter unrecorded utilities during excavation. All excavation work near and around existing structures and utilities shall be by hand method. All excavation shall be inspected, tested, and shall be accepted prior to placing any backfill for shoring of excavation.

3.02 The plans show the locations of water mains, gas mains, communication lines, electric lines, sewers, and other utility lines according to information available in the field and in records. This information is not deemed to be complete. It is the express responsibility of the Contractor to determine the exact location and elevation of all existing facilities, pipes, and lines, and to provide for their proper protection, support and maintenance prior to all construction operations. Whenever existing utility lines of any nature are encountered which conflict in location or elevation with proposed construction, the Contractor shall notify the Engineer in writing, who will provide any engineering required to avoid the conflict.

Section 4.0 Materials

4.01 All materials within the limits of this project shall be in conformance with Standard Recommendations of the National Electrical Manufacture's Association and American National Standards Institute.

4.02 All conduit, elbows, and couplings within the public R.O.W. shall be 2-5" PVC concrete encased conduit unless otherwise noted.

4.03 Job Site Material will be delivered to, and maintained at the street work areas in a well-managed manner, to minimize congestion or inconvenience to other workers, or contractors working under alternate permits.

Section 5.0 Work

5.01 The Contractor shall investigate the project, plans, specifications, instructions, site, utilities, traffic conditions, material, labor, excavation, restoration and required safety precautions involved with this project. Any questions or concerns the Contractor may have are to be discussed with the Owner and Engineer prior to construction.

5.02 The Contractor shall provide all material, equipment, labor, installation, restoration, utility relocation charges, job site delivery costs to complete the described, or illustrated work, under this contract.

5.03 Any change-order request must be presented in writing to the Owner's Representative; and approved prior to proceeding with the requested change. Documentation concerning any and all change orders will be reduced to formal record, filed with the Owner's Representative, and be made available for future reference.

5.04 The Engineer will not be responsible nor assume any liability for negligent acts or errors or omissions of any contractor, any subcontractor, or any of the contractor's or subcontractor's agents or employees or any other persons (except Engineer's own employees) at the Project site or otherwise performing any of the work of the Project. Any contractor or sub-contractor, as well as the Engineer, will be responsible for his own safety program.

Neither the professional activities of the Engineer, nor the presence of the Engineer or his or her employees and sub-consultants at the construction site, shall relieve any contractor of his or her obligations, duties and responsibilities including, but not limited to, construction means, methods, sequence, techniques or procedures necessary for performing, superintending or coordinating all portions of the work of construction in accordance with the contract documents and any health or safety precautions required by any regulatory agencies. The Engineer and his or her personnel have no authority to exercise any control over any construction contractor or other entity or their employees in connection with any health or safety precautions.

5.05 The Contractor is to restore all damaged structures and utilities to the satisfaction of the owners' representative.

5.06 Restoration shall be in accordance with the recommended practices and requirements of Dupage County and the Villages of Hinsdale, Burr Ridge, and Willowbrook and the permits issued.

5.07 The Contractor shall provide a minimum 48 hour advanced notice to HBK Engineering (312-253-1800) to schedule a pre-construction walk through with a HBK Engineering representative. This walk through must be completed prior to the commencement of any work within the limits of this project.

5.08 The contractor shall record the location and elevation of all utilities encountered, and installation of new work, as the work progresses and shall prepare record drawings based on his records to be supplied to HBK Engineering, LLC. at completion of work.

5.09 The Contractor(s) shall construct the proposed conduit as located/dimensioned within these design drawings. In the event the Contractor(s) wishes to vary the location, a written request must be presented to the Engineer for submittal to the governing agencies and subsequent approval prior to proceeding with the requested change.

5.10 Maintain more than 1'-6" vertical clearance and more than 4'-0" horizontal clearance between existing sewer or sewer structures and utility. If 1'-6" vertical clearance is not possible, ductile iron shall be substituted at the crossing. At drains from homes, if there is interference, replace in kind. In all cases where sewer work is done, a permit should be obtained and a sewer inspector should be present during the work.

5.11 Maintain minimum 2.5 ft. horizontal clearance between the edge of shoring and the cast iron gas main as it runs parallel. For steel gas mains, contractor must maintain clearance sufficient to provide for installation of shoring/sheeting between the proposed duct package and the existing steel gas main. Gas main shall not go unsupported for spans that exceed 8'-0". Sheeting/shoring shall be installed between gas main and duct package to minimize undermining the gas main. Under no circumstances shall the gas mains be unsupported during excavation for spans that exceed 8'-0". For situations where unsupported span becomes a possibility, bridge supports for the gas main become a requirement. Bridge support design (provided by Nicor gas) and installation by contractor.

5.12 Nicor gas to be on site to monitor construction activities when within 3 feet and whenever crossing high pressure gas facilities. Contractor shall contact shop manager a minimum of 3 business days prior to excavation to set up onsite inspection to add this project to a watch & protect list.

For all high pressure (HP) gas main: a minimum of 24" vertical edge to edge clearance is required, and a minimum of 5ft. edge to edge horizontal clearance

For distribution (MP& LP) gas main a minimum of 3ft. horizontal edge to edge clearance is required for gas mains with diameters of 16" or smaller, and 5ft. horizontal edge to edge clearance for gas mains with diameters 18" and larger.

Maintain a minimum of 18" edge to edge vertical clearance on gas mains less than 20" in diameter, and 24" edge to edge vertical clearance on 20" and larger diameter gas mains. Use extreme caution near all gas facilities. Hand excavation is required to locate and expose gas mains prior to crossing and working within 3 feet of all gas facilities. The use of concrete, flow fill or the like is prohibited within 24 inches of all gas facilities, nor shall it encase any gas facility. Sand is to be used a s a buffer between flow fill and all gas facilities. Any damages to gas facilities shall be the responsibility of the installing utility and their contractor(s).

5.13 Engineering shall be notified for resolution of situations where duct package depth below grade exceeds depth currently shown on plan/profile drawings. Engineering shall also be notified for disposition of situations where duct package cannot maintain 18" vertical and 6'-0" generic separation (concrete to concrete) between new and existing duct packages. Contractor shall notify ComEd in situations where steel pipe conductor is nicked during excavation. In these instances, ComEd will evaluate the extent of the damage so as to determine whether repair is required prior to backfill and grade surface restoration.

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

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A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
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A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	P.O.	P.E.	DATE

COMED DISTRIBUTION – CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
GENERAL CONSTRUCTION NOTES - 1

JPK | 312-253-1800 | LEB

hbk ENGINEERING

HBK ENGINEERING, LLC
53 WEST VAN BUREN, SUITE 100
CHICAGO, IL 60607
PHONE (312) 253-0876 FAX (312) 432-0231
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002308

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PROJ. No. 21-1167

PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	N.T.S.	171401.72
DATE	SCALE	P.E. NO.	PASSPORT W/D
ComEd Commonwealth Edison Company	GN-01	02 OF 45 PAGE
Unit Number Lines Engineering	DRAWING NO.	

CE-DB-183

Section 6.0 Conduit Run and Manhole Installation

6.01 Contractor shall coordinate all work with other utilities and city and state agencies such as water and sewer departments.

6.02 Contractor to plate openings at all times. Barricades and flashers to be installed on top of plates. (as required)

6.03 Contractor to verify all dimensions and existing conditions in the field prior to ordering materials.

6.04 Contractor is advised to read all notes on drawings, carefully.

6.05 No storage of equipment or materials in the roadway is permitted unless the contractor obtains written permission from the city and/or state or governing body.

6.06 Contractor shall take all necessary safety precautions to protect utilities, pedestrians, workers and vehicular traffic.

6.07 The contractor shall remove and install conduit run in a safe work-man like manner.

6.08 The contractor shall saw, cut, and mark trench width on surface from manhole to manhole.

6.09 Contractor shall install a test pit at each manhole location plus at sufficient intervals along conduit run. To locate obstructions the test pit shall have the following dimensions: 5'-0" wide, 10'-0" long, 6'-0" deep, and installed across run or manhole.

6.10 Contractor to excavate ± 0'-3" conduit depth and width.

6.11 Contractor to supply concrete mud coat at bottom of trench as shown in typical shoring details.

6.12 Contractor shall support all gas mains in excess of 12" diameter with a permanent type structure. Contractor to defer to the city water department for temporary water main support requirements.

6.13 Contractor to install tight sheeting per OSHA regulations and drawings. All lumber shall be new and free of defects. All used lumber must be inspected and approved before installation by ComEd. If not approved, new lumber shall be used.

6.14 Use of hoe hammer to break up previously saw cut pavement sections for removal and disposal will not be permitted unless the contractor receives permission from governing jurisdictions, all utilities and ComEd.

6.15 Contractor shall use steel shields to break out cable in conduit. Designed by the contractor.

6.16 Contractor shall assume all cables are energized and shall be supported so as not to stress any portion of the cable.

6.17 All sheeting work, form work, bracing, cable support, for Gas, Water, Telephone, Cable TV, and Western Union support shall be installed and designed by contractor.

6.18 Contractor shall break out sidewalk, driveway, curb and gutter, pavement and restore to permanent condition.

6.19 Contractor to conform concrete to color, finish, and texture of existing sidewalks, curb and gutter. Contractor to include sufficient time and delay in forming and framing work to remove and support cable. ComEd to pull slack as required, (allow 7 day delay).

6.20 The contractor shall install and design wooden bridges with guard rails over the construction site to allow the free flow of people and material, from and to the entrances into buildings, place of business or garage as required.

6.21 The contractor shall install and design wooden passageways to divert the general public around the construction site in a safe and orderly manner, as required.

6.22 Restoration of the area around the conduit run includes; concrete, sod, black dirt, backfill, shrubs, trees, street concrete base, asphalt primer, hot rolled asphalt, sidewalk, driveway, curb and gutter, handicapped ramps, and reinstallation of all signs, mailboxes, traffic signals, traffic signal box, meters, city light standard, benches, planters, and canopies. Contractor to pay all fees and obtain all permits.

6.23 Contractor shall include in the work, the removal and installation of all canopies, meters, traffic control boxes, traffic signal standards, city street lights, fire control boxes, planters, up to 5'-0" in diameter, and 20'-0" high, and benches interfering with the conduit run replacement or modifications. All permits and fees by the contractor.

6.24 All concrete work shall be installed per EM48003.

6.25 The contractor shall clean all existing and new debris from manholes worked in. Contractor shall pump manhole each day as required.

6.26 The contractor shall pump trench as required.

6.27 All existing infrastructure encountered during excavation shall be verified abandoned before removal. Facility relocation shall not be performed without notifying engineer of record, facility owner and construction field superintendent.

6.28 The contractor shall install steel plates for the full width and length of conduit run. Plates shall be designed to carry truck traffic, lay flat, cold patch to allow smooth transition, and counter sunk. Bent plates shall not be used. The use of planking and snow fences shall be used in parking or sidewalk areas as designated by ComEd.

6.29 The contractor shall remove all excavated material on a daily basis, stock piling of material is not permitted.

6.30 The contractor shall core all holes as required and seal (watertight), to allow installation of duct. Contractor shall seal and waterproof at all building lines as required. Contractor shall supply and install polysulfide clear base sealant.

6.32 Contractor shall allow sufficient cubic yards of brick work in each manhole to allow installation of conduit, new and existing, except as shown on drawings.

6.33 The contractor shall obtain a permit to pave the sidewalk and/or street in the contractor's name. All paving shall be completed 15 working days after trench is backfilled.

6.34 Conduit package shall be formed per C-specification using wood support, conduit spacers and restraints as required. All packages of conduit that have more concrete surrounding the package shall be removed at no cost to ComEd.

6.35 Contractor shall backfill trench, test pit and all other excavations with #2 torpedo sand and tamp in 6" layers, or puddle the trench or pit openings or use fluidized thermal backfill 100 psi. Excavated materials shall not be used as backfill.

6.36 Conduit installation work along railroad property is usually on a 1:1 slope and is a drainage path. In addition, over the years, the railroad leaves railroad ties and rails, spikes, ballast and other items on their rights-of-way as routine, it is the contractor's responsibility to walk the conduit route, inspect manhole sites, and determine what railroad debris shall be removed to allow for conduit or manhole installation. All debris to be removed off railroad rights-of-way.

6.37 Contractor shall install 5" PVC plastic conduit in a smooth and gentle slope with care not to make sharp bends or use broken ducts. All ducts shall be sighted for roundness. Egg shaped ducts are not to be used. All ducts shall be encased in 3000 psi fluidized thermal backfill per EM48007.

6.38 The contractor shall open up the trench for 50 feet headway prior to installing conduit and maintain this headway until conduit run is complete.

6.39 The contractor shall mandrel and rod all new and existing conduit manhole to manhole and note all blockages, if encountered. Mandrel shall be solid (wood or steel) and 1/4" diameter smaller than duct.

Section 7.0 ComEd Underground Distribution Construction Standards Specifications

C1006	Installation, removal, repair or maintenance of the public way
C4386	Concrete work for cable manholes & conduits
C5046	Underground specification for cable supports in manholes
C4050	Underground specification for preparation of trenches for conduit run in field
C4075	Underground specification for layout of curves for conduit runs
C4348	Underground typical soil condition map
C4360	Typical water main support
C4361	Typical gas main support for pipes over 18" diameter
C4362	Typical temporary support for utilities
C9315	Transmission line landscaping
C4163	Concrete to plastic conduit couplings
C4250	Conduit entrance into a manhole
C4075	Conduit run curve layouts
C4090	Conduit run formations
C4171	Conduit run installation between manholes
C4050	Conduit run trench preparation
C4270	Conduit to bend at pole
C4273	Conduit to plastic bend at pole
C4162	Plastic conduit couplings and bends
C4175	Split plastic conduit
C4290	Installation of concrete encased 90° conduit bends
C4131	Conduit run 6-duct transposition

Section 8.0 ComEd Underground Distribution Material Standards Specification

EM48003	Concrete work for cable manhole & conduit construction
EM48007	Fluidized thermal backfill (FTB)
EM48008	Granular thermal backfill
EM42250	Plastic (PVC) conduits

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV.	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB		
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	HWM	JPK

REV.	DESCRIPTION	P.D.	P.E.	DATE

hbk ENGINEERING

HBK ENGINEERING, LLC
922 WEST VAN BUREN, SUITE 300
CHICAGO, IL 60607
PHONE: (312) 492-0676 FAX: (312) 492-6231
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002308

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PROJ. No. 21-1167

COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
GENERAL CONSTRUCTION NOTES - 2

PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
JPK	312-253-1800	LEB

DATE	SCALE	P.L. NO.	PASSPORT W/O
11/09/21	N.T.S.		1714072

ComEd
Distribution
Design Engineering

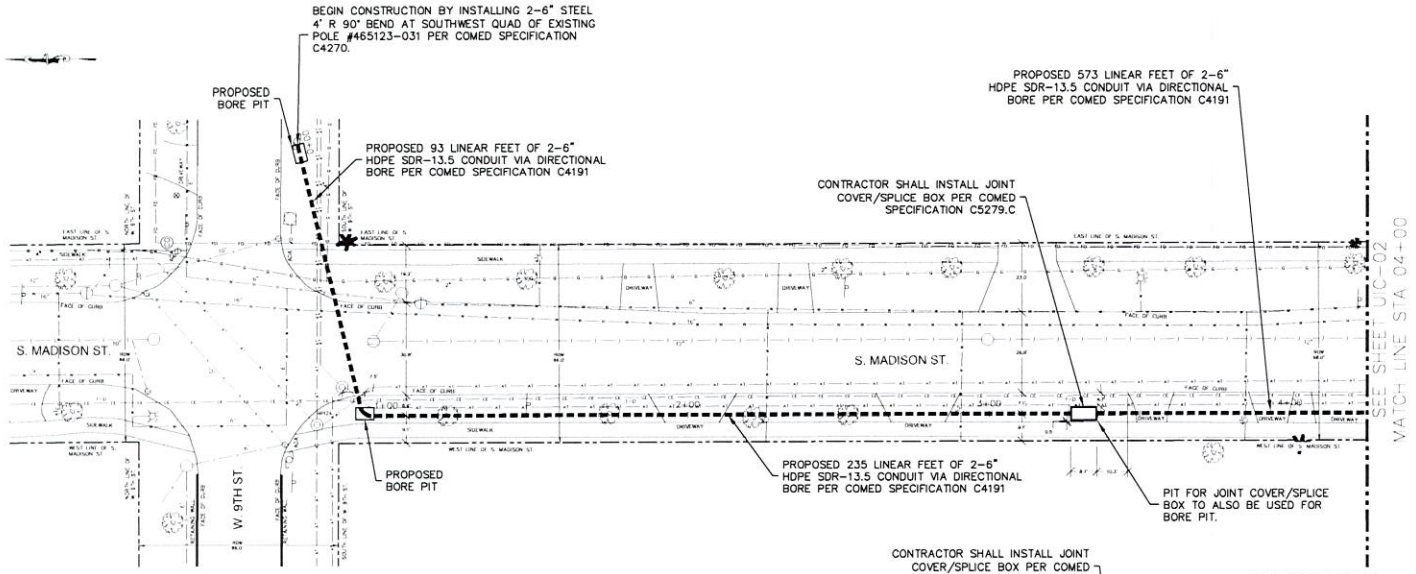
GN - 02

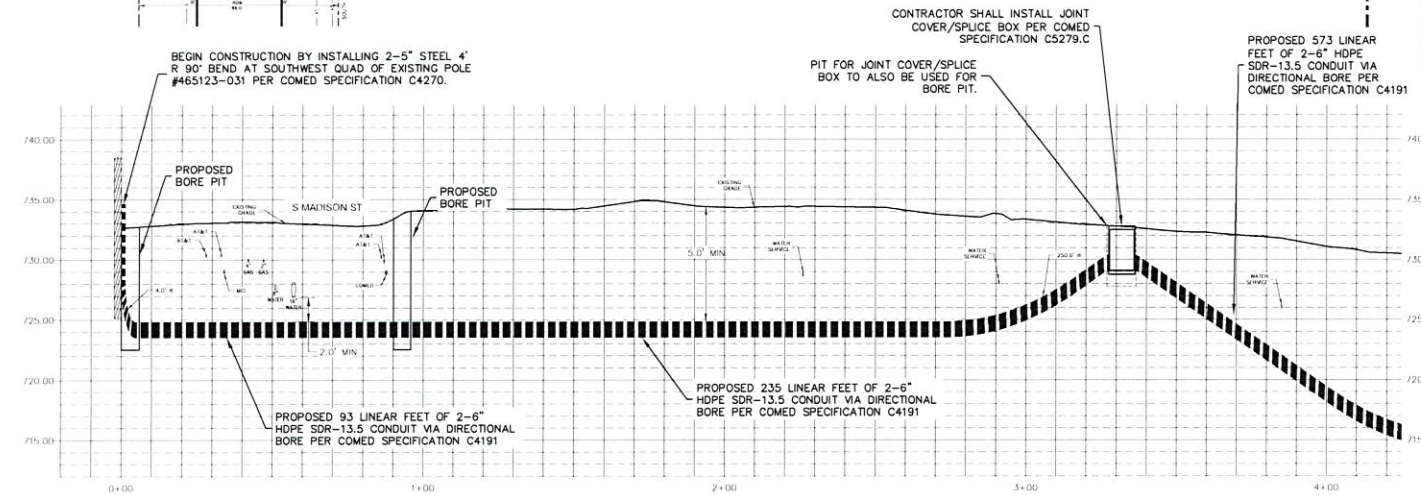
DRAWING NO.

SHT. 03 OF 45
PAGE

UIC-01

CE-DB-183





GENERAL CONSTRUCTION NOTES

1. ALL WORK DONE BY CONTRACTOR/INSTALLER PURSUANT TO THIS DRAWING SHALL:
   (A) CONFORM TO THE GOVERNING CONTRACT DOCUMENTS.
   (B) BE PERFORMED EXCLUSIVELY BY ITS TRAINED, COMPETENT PERSONNEL OR, WHERE PERMITTED, THAT OF ITS SUBCONTRACTOR(S).
   (C) COMPLY WITH ALL APPLICABLE SAFETY LAWS, REGULATIONS, PROGRAMS AND PRACTICES TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE, INCLUDING THE CONTRACTOR'S/INSTALLER'S PERSONNEL (OR THAT OF ITS SUBCONTRACTOR(S)) PERFORMING THE WORK.

2. REFERENCES USED HAVE BEEN IDENTIFIED ON EXCAVATION/FOUNDATION/DEMOLITION DRAWINGS AND HAVE BEEN PROVIDED TO ASSIST THE CONTRACTOR/INSTALLER IN THE FIELD FOR LOCATING EXISTING UTILITIES AND OTHER POTENTIAL UNDERGROUND OR EMBEDDED INTERFERENCES. THESE REFERENCES ONLY SHOW THE APPROXIMATE LOCATION OF POTENTIAL UNDERGROUND OR EMBEDDED UTILITIES AND MAY NOT INDICATE OR REFLECT ALL EXISTING UNDERGROUND OR EMBEDDED UTILITIES OR THEIR ACTUAL LOCATIONS.

3. UNDERGROUND OR EMBEDDED UTILITIES [MAY] EXIST WITHIN THE AREA OF AND ADJACENT TO THE LIMITS OF THE WORK. THE LOCATION OR IDENTIFICATION OF SUCH UTILITIES HAS NOT BEEN VERIFIED BY OWNER OR BY HBK ENGINEERING. CONTRACTOR/INSTALLER IS RESPONSIBLE FOR FIELD LOCATING AND IDENTIFYING UNDERGROUND AND EMBEDDED UTILITIES AND ANY OTHER UNDERGROUND AND EMBEDDED UTILITY DIMENSIONS.

4. REFERENCES IDENTIFIED SHALL NOT SUBSTITUTE FOR THE CONTRACTOR'S/INSTALLER'S OBLIGATION TO FIELD LOCATE ANY UNDERGROUND OR EMBEDDED UTILITIES OR INTERFERENCES THAT MAY AFFECT THE WORK.

5. DUE CAUTION SHALL BE TAKEN DURING ANY EXCAVATION/FOUNDATION/DEMOLITION WORK WITHIN THE AREA OF AND ADJACENT TO THE LIMITS OF THE WORK DUE TO POSSIBLE INTERFERENCES THAT MAY NOT BE REFLECTED ON THE REFERENCES IDENTIFIED.

6. CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE, INCLUDING CONTRACTOR'S/INSTALLER'S PERSONNEL (OR THAT OF ITS SUBCONTRACTOR(S)) PERFORMING THE WORK.

7. THE UNDERGROUND UTILITY LOCATIONS SHOWN ON THIS PLAN WERE DERIVED FROM DRAWINGS PROVIDED BY COMMONWEALTH EDISON AND J.U.L.I.E. DESIGN STAGE REQUEST. EXISTING FACILITY LOCATIONS ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION. "J.U.L.I.E." IS TO BE NOTIFIED 48 HOURS PRIOR TO THE START OF ANY EXCAVATION WORK ON THIS PROJECT. (1-800-892-0123).

8. CONTRACTOR SHALL VERIFY LOCATIONS OF CONDUIT DEAD-ENDS WITH COMED CONSTRUCTION SUPERVISOR.

9. THE CONTRACTOR IS ADVISED TO MAINTAIN THE APPROVED MINIMUM 4'-0" HORIZONTAL AND 1'-6" VERTICAL CLEARANCES BETWEEN EXISTING SEWER AND SEWER STRUCTURES AND 3'-0" HORIZONTAL AND 1'-6" MINIMUM VERTICAL SEPARATION FOR ALL EXISTING WATER MAINS AND STRUCTURES.

10. THE EXISTING ABOVE GROUND UTILITY STRUCTURES AND IMPROVEMENTS SHOWN ON THIS PLAN WERE FIELD LOCATED AND VERIFIED UTILIZING CONVENTIONAL (TOTAL STATION) DATA COLLECTION METHODS.

11. RESTORE ANY DISTURBED PAVEMENT AND SEEDING TO VILLAGE AND COUNTY STANDARDS.

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

VERTICAL SCALE

0 2.5 5 10

1 inch = 5 ft.

HORIZONTAL SCALE

0 10 20 40

1 inch = 20 ft.

WORK HOURS PER VILLAGE ORDINANCE ARE: M-F 8AM TO 5PM, SAT 9AM TO 5PM, NO WORK ON SUNDAYS OR HOLIDAYS.

CONTRACTOR TO RESTORE/REPAIR ANY DAMAGED LAWN SPRINKLER SYSTEMS WITHIN EXCAVATED/DISTURBED AREAS.

ALL DISTURBED/REMOVED SIDEWALK/RAMPS ARE TO BE REPLACED, MEETING CURRENT ADA REQUIREMENTS.

FOLLOW VILLAGE STANDARDS FOR ANY/ALL STREET PATCHING AND CURB & GUTTER REPAIRS.

ANY EXCAVATION WITHIN THE PARKWAY TREE DRIP LINE IS PROHIBITED.

VILLAGE REQUIRES PRE & POST CONSTRUCTION VIDEOTAPING OF THE SANITARY SERVICE LINES WITHIN THE DIRECTIONAL BORE LIMITS.

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	HWM	JPK

REV	DESCRIPTION	P.D	P.E	DATE

COMED DISTRIBUTION – CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.

PLAN AND PROFILE - 1

hbk ENGINEERING

HBK ENGINEERING, LLC
915 WEST VAN BUREN, SUITE 166
CHICAGO, IL 60607
PHONE (312) 913-0670 FAX (312) 432-0231
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-001288

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PROJ. No. 21-1167

JPK | 312-253-1800 | LEB

PROJECT ENGINEER | PHONE NO. | PROJECT DESIGNER

11/09/21 | AS SHOWN | | 12740172

DATE | SCALE | P.I. NO. | PASSPORT W/D

ComEd An Exelon Company

UIC-01

DRAWING NO.

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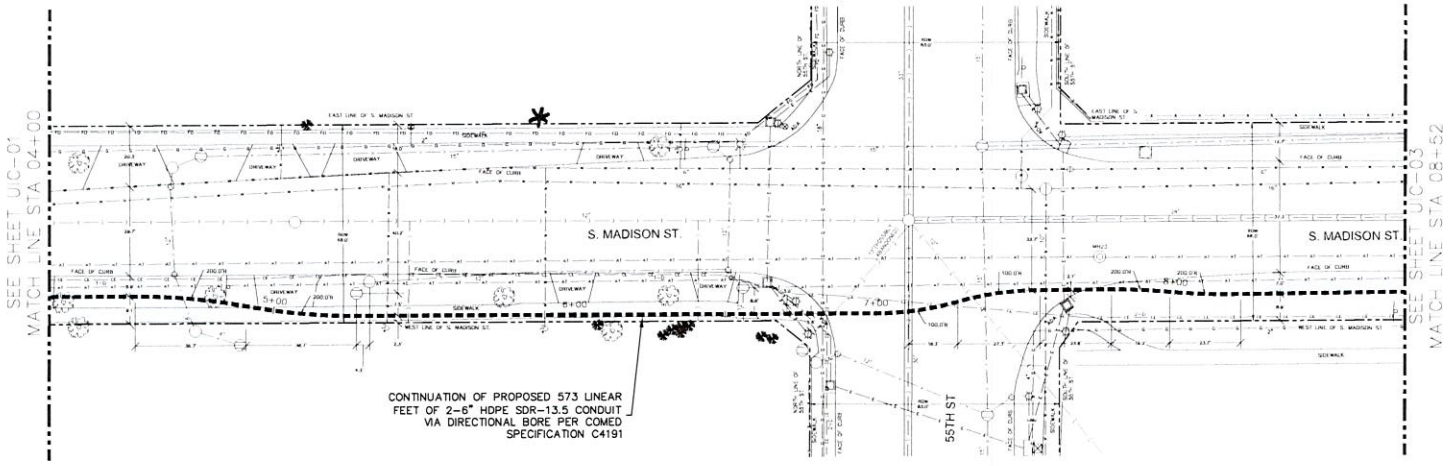

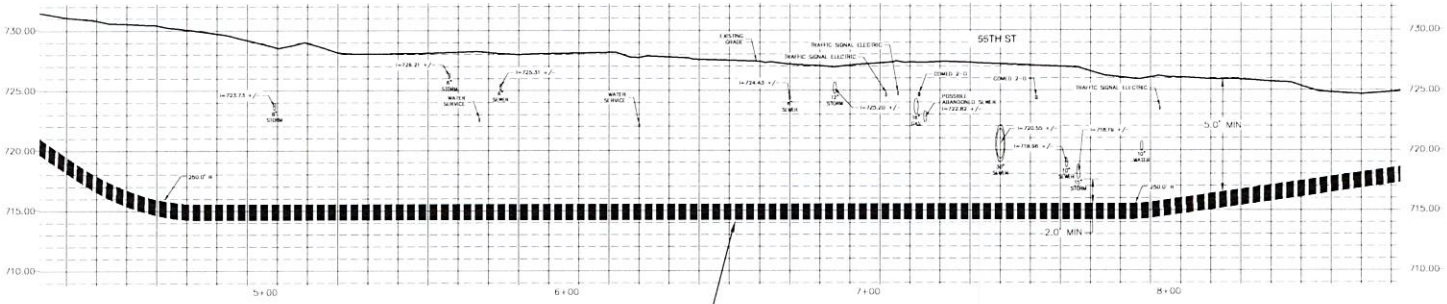

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

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VILLAGE REQUIRES PRE & POST CONSTRUCTION VIDEOTAPING OF THE SANITARY SERVICE LINES WITHIN THE DIRECTIONAL BORE LIMITS.

GENERAL CONSTRUCTION NOTES

1. SEE SHEET UIC-01 FOR GENERAL NOTES.

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
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A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	P.O.	P.E.	DATE

VERTICAL SCALE: 0 2.5 5 10 — 1 inch = 5 ft.

HORIZONTAL SCALE: 0 10 20 40 — 1 inch = 20 ft.

hbk ENGINEERING
HBK ENGINEERING, LLC
512 WEST VAN BUREN, SUITE 100
CHICAGO, IL 60607
PHONE: (312) 913-0676 FAX: (312) 913-0234
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002100

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PROJ. No. 21-1167

COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
PLAN AND PROFILE - 2

JPK	312-253-1800	LEB
PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	AS SHOWN	1/14012/2
DATE	SCALE	P.I. NO.	PASSPORT W/O
ComEd An Exelon Company Distribution Lines Engineering	UIC-02	05 OF 45 PAGE
	DRAWING NO.	

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APPROX. 5 SQUARE YARDS OF SEEDING RESTORATION.

CONTRACTOR TO INSTALL SILT FENCE AROUND ALL TRENCHES, PITS, AND STOCKPILES TO CONTAIN MATERIAL RUNOFF.

CONTRACTOR TO INSTALL SILT FENCE AROUND ALL TRENCHES, PITS, AND STOCKPILES TO CONTAIN MATERIAL RUNOFF.

APPROX. 5 SQUARE YARDS OF SEEDING RESTORATION.

CONTRACTOR TO INSTALL SILT FENCE AROUND ALL TRENCHES, PITS, AND STOCKPILES TO CONTAIN MATERIAL RUNOFF.

S. MADISON ST.

S. MADISON ST.

W. 9TH ST.

APPROX. 9 SQUARE YARDS OF SEEDING RESTORATION.

APPROX. 6 SQUARE YARDS SIDEWALK RESTORATION.

SEE BELOW MATCH LINE A-A

SEE ABOVE MATCH LINE A-A

S. MADISON ST.

S. MADISON ST.

55TH ST

SEE SHEET UIC-24 MATCH LINE B-B

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

GENERAL CONSTRUCTION NOTES

SEE SHEET UIC-01 FOR GENERAL CONSTRUCTION NOTES AND SESC LEGEND.

HORIZONTAL SCALE

0 10 20 40

1 inch = 20 ft.

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
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A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
53 WEST VAN BUREN, SUITE 506
CHICAGO, IL 60605
PHONE: (312) 913-0675 FAX: (312) 492-0231
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002348

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REV	DESCRIPTION	P.D.	P.E.	DATE
	COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD. RESTORATION AND SESC			

JPK	312-253-1800	LEB
PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	AS SHOWN	171420.72
DATE	SCALE	P.L. NO.	PASSPORT #/D
ComEd Distribution Lines Engineering	UIC-23	26 OF 45 PAGE
	DRAWING NO.	

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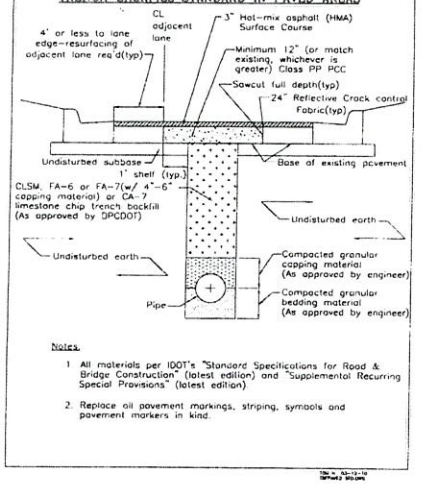
03/15/2021

DUPAGE COUNTY DIVISION OF TRANSPORTATION TRENCH BACKFILL STANDARD IN PAVED AREAS

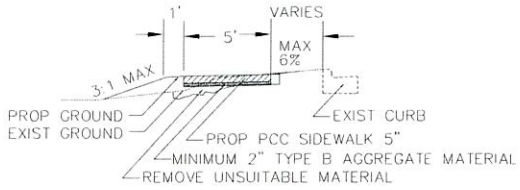


Notes.

1. All materials per IDOT's "Standard Specifications for Road & Bridge Construction" (latest edition) and "Supplemental Recurring Special Provisions" (latest edition)
2. Replace all pavement markings, striping, symbols and pavement markers in kind.

TOM H. 03-12-19

DUPAGE COUNTY DIVISION OF TRANSPORTATION SIDEWALK TYPICAL CROSS SECTION



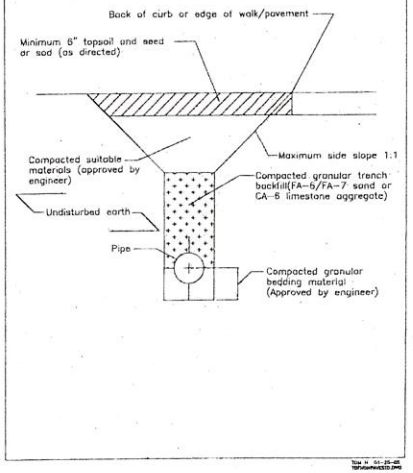
4/2/09 TOM H.
\\DOTSERVER\ENGINEERING\STANDARD\DETAILS\SIDEWALKTYP.DWG

DuPage County Division of Transportation General Notes and Specifications

1. All construction within the County's right-of-way shall be performed according to IDOT'S "Standard Specifications for Road and Bridge Construction" (Latest Edition) and the "Supplemental Specifications and Recurring Special Provisions" (Latest Edition).
2. Daily lane closures are permitted between 9:00 a.m. and 4:00 p.m. ONLY. Traffic control shall conform to IDOT's Highway Standards and the FHWA's "Manual for Uniform Traffic Control Devices' and IDOT's Supplement at all times during construction. Traffic control shall include use of advance warning lane closure signage, an arrow board and Type I barricades with sandbags.
3. Lane closures are not permitted on County roadways during snowfall or within 2 hours prior to predicted snowfall or precipitation conditions between November 15 and April 15 for maintenance of the roadway pavement by County Highway Maintenance Department staff and equipment.
4. Disturbed areas of the right-of-way shall be dressed with a minimum of 6" topsoil and Class 2A salt tolerant seed (with erosion control blanket) or sod (salt tolerant and staked in place).
5. Erosion control measures shall comply with the minimum requirements of the DuPage County Stormwater and Floodplain Ordinance specifications at all times.
6. Equipment and materials shall not be stored within the County's right-of-way at any time without the express written permission of the County Engineer, or his duly authorized assign.
7. Pavement, curb/gutter and storm structures within the County's right-of-way shall be maintained free of mud/debris at all times and shall be cleaned as is required and/or as directed by DuPage County.
8. Contact DuPage County (630/407-6900) a minimum of 48 hours prior to the start of construction to arrange for inspections of and at the completion of the described work within the County's right-of-way.
9. Trench backfill for non-paved areas shall be installed within the County's right-of-way per DuPage County's standard.
10. Trench backfill below existing or proposed pavement, curb/gutter and/or sidewalk shall be installed within the County's right of way per DuPage County's standard.
11. Trees and landscaping is prohibited in the County right of way.
12. Brick Mail boxes are prohibited in the County right of way.

IDPC DOT Specifications.doc.; rjk

DUPAGE COUNTY DIVISION OF TRANSPORTATION TRENCH BACKFILL STANDARD IN NON-PAVED AREAS (PARKWAYS, ETC.)



TOM H. 04-25-08

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	P.D.	P.E.	DATE
	COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD			
	DETAILS 1			

JPK	312-253-1800	LEB	
PROJECT ENGINEER	PHONE NO	PROJECT DESIGNER	
11/09/21	N.T.S.		171407.72
DATE	SCALE	P.I. NO.	PASSPORT W/O
ComEd	UIC 54		37 OF 45
Unit Author: Lines Engineering			PAGE
	DRAWING NO		

hbk ENGINEERING

HBK ENGINEERING, LLC
321 WEST CONGRESS, SUITE 100
CHICAGO, IL 60607
PHONE (312) 435-0670 FAX (312) 435-0230
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO 184-001300

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PROJ. No. 21-1167

CE-DB-183

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C5279
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REVISES STANDARD DATED 3-3-16
COMPATIBLE UNITS AVAILABLE IN ASSET SUITE

JOINT COVER/SPLICE BOX
34.5kV AND BELOW SYSTEMS

TYPE OF INSTALLATION

C5279-A JOINT COVER (3-1/C 750kcmil STRAIGHT JOINTS MAXIMUM)
B TWO-PIECE COVER SPLICE BOX (3-1/C 750kcmil STRAIGHT JOINTS AND BELOW)
C THREE-PIECE COVER SPLICE BOX (3-1/C 750kcmil STRAIGHT JOINTS MAXIMUM)
D TWO-PIECE COVER SPLICE BOX (3-1/C 3/0 STRAIGHT JOINTS MAXIMUM)

ITEM	CAT ID DESCRIPTION TABLE-1	CAT ID	UNIT	QUANTITY A	QUANTITY B	QUANTITY C
A	CONDUIT CABLE SEALING FOAM CS119-A			4	4	8
B	BOX, SPLICE, 48 X 96 X 48 IN. STRAIGHT HEAVY DUTY, ADJUSTABLE	000167752	EA	1		
	COVER, CABLE JOINT, 12 IN. HIGH X 72 IN. WIDE X 36 IN. LONG, P	000065149	EA	3		
	BOX SPLICE, 48 X 96 X 48 IN. STRAIGHT HEAVY DUTY, ADJUSTABLE	000038379	EA		1	
	BOX, SPLICE, 30 X 60 X 24 OPENING, HEAVY DUTY, 3-4 IN KNOCKOUT	000160428	EA			1
C	MARKER, ELECTRONIC, MID-RANGE, RED, 4.5 IN. DIAMETER, POLYETHY	000064202	EA	2	2	2
G	SAND, TEMPERED, NO. 2, KILN DRIED, 80 LB. BAG, IN MOISTURE PROO	000070102	BG	TBD		
E	SUPPORT, BRACKET, WALL, 24 IN., STAINLESS STEEL	000163850	EA	2	2	
F	ANCHOR, CONCRETE, 1/2-13, LENGTH 4-1/4 IN., NO WASHER AND NUT,	000038104	EA	4	4	
G	WASHER, FLAT, 1/2 IN., 18/8 AUSTENITIC STAINLESS STEEL, ANSI/A	000053047	EA	4	4	
H	WASHER, PLASTIC, 1/2 IN., PVC	000038160	EA	4	4	
J	NUT, HEX HEAD, 1/2 -13, ASTETATE ALLOY 304 STAINLESS STEEL,	000053445	EA	4	4	
K	BRACKET, CABLE, 21 1/2 IN X 6 IN, FIBERGLASS, REPLACES 282087	000168865	EA		2	
L	SADDLE, CABLE, * 5-1/2 IN. LONG, HIGH DENSE POLYETH, 3 IN. WI	(1) 000168843	EA	4	4	

NOTES:

APPLICATION

- THIS STANDARD SHALL BE USED TO COVER STRAIGHT JOINTS IN A SPLICE PIT OR SPLICE BOX. SPLICE BOX FOR USE IN PAVED AND UNPAVED PATHWAYS, SIDEWALKS, NOT FOR USE IN STREETS.

SUPPLEMENTARY MATERIAL

(1) FOR ADDITIONAL CABLE SUPPORTS AND INSTALLATION SEE CS050

INFORMATION

(11) BOTTOM OF SPLICE PIT SHALL BE UNDISTURBED OR WELL TAMPED EARTH FREE FROM ROCKS OR DEBRIS.

(12) COVER CABLE AND JOINTS WITH SAND BEFORE INSTALLING COVERS.

(13) LAY ELECTRONIC MARKER AT END OF CABLE PROTECTION TUBE ON APPROXIMATELY 2 INCHES OF BACKFILL.

(14) BACKFILL SHALL BE FREE OF STONES, BROKEN GLASS, CANS, OR OTHER DEBRIS THAT MAY DAMAGE CABLES. IF THIS IS NOT AVAILABLE, SAND MAY BE SUBSTITUTED.

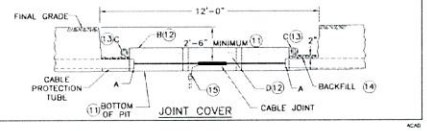
(15) JACKETED CABLE BRIDGES AT LEAST EIGHT GROUNDS WITHIN A MILE WITH 600 FEET MAXIMUM SEPARATION. INSTALL GROUND AT CABLE JOINT PER JOINT STANDARD.

(16) THE BOTTOM OF THE EXCAVATION SHOULD BE FIRM, UNDISTURBED, OR COMPACTED EARTH, LEVELED, WITHOUT ANY LARGE ROCKS OR OBSTRUCTIONS THAT WOULD PREVENT THE SPLICE BOX FROM SETTING LEVEL. SHORING OR SHEETING MAY BE REQUIRED. IF SHORING IS NECESSARY WILL DEPEND ON SOIL CONDITIONS AND LOCAL CONSTRUCTION CODES. THE EXCAVATION SHOULD BE LARGE ENOUGH FOR THE INSTALLATION OF A GROUND ROD (IN DISTURBED SOILS) AND TO ENABLE THE SPLICE BOX TO BE INSTALLED WITHOUT DISTURBING THE SIDEWALLS.

(17) REPLACEMENT OF PAVING, CURBS, OR SIDEWALKS REMOVED BECAUSE OF SPLICE BOX CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH MUNICIPAL OR STATE REQUIREMENTS. SAND OR OTHER LOCALLY APPROVED MATERIAL SHALL BE USED AS BACKFILL EXCEPT WHEN THE EXCAVATED MATERIAL IS FINE AND DRY, CAN BE WELL TAMPED, AND WILL NOT SUBSEQUENTLY SETTLE AFTER PAVEMENT (OR SIDEWALK) IS INSTALLED. ALL BACKFILL AREAS SHALL BE THOROUGHLY COMPACTED AND FLOODED.

(18) PLASTIC CONDUIT ENTRANCE BELLS ARE ONLY IN WINDOW WALL AND SHALL BE USED IN ALL PLASTIC CONDUIT ENTRANCE BELLS. IF DESIRED WITH A REMOVABLE MEMBRANE TO BE REMOVED AT THE TIME OF CABLE INSTALLATION. WHEN USING 5 INCH POLYVINYL TRANSITION TO SHORT PIECE OF 5 INCH PLASTIC CONDUIT (BPA TO SIM COUPLING CAT ID 000065445) AND BRING 5 INCH PLASTIC CONDUIT TO SPLICE BOX ENTRANCE BELLS.

(19) A LIMIT OF 3-1/C STRAIGHT JOINTS SHALL BE INSTALLED PER SPLICE BOX. NO ADDITIONAL JOINTS OR CABLES SHALL BE INSTALLED IN OR PASS THROUGH SPLICE BOX.



ACAD

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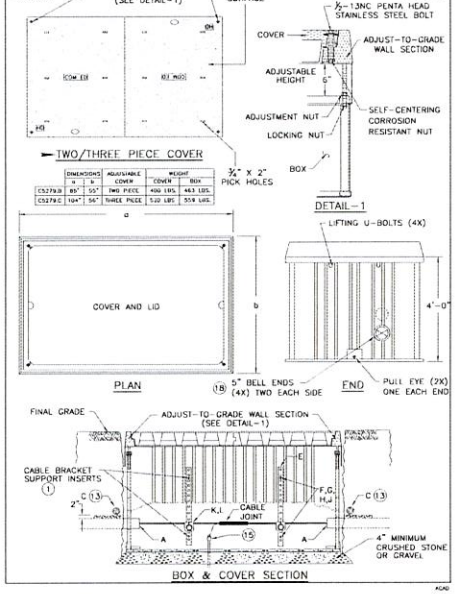
ComEd SYSTEM STANDARD

3-26-21
C5279
PAGE 2 OF 3



DIMENSIONS		ADJUSTABLE	WEIGHT	
a	b	COVER	COVER	BOX
C5279-B	90"	55"	TWO PIECE	400 LBS.	463 LBS.
C5279-C	104"	56"	THREE PIECE	520 LBS.	559 LBS.

ACAD

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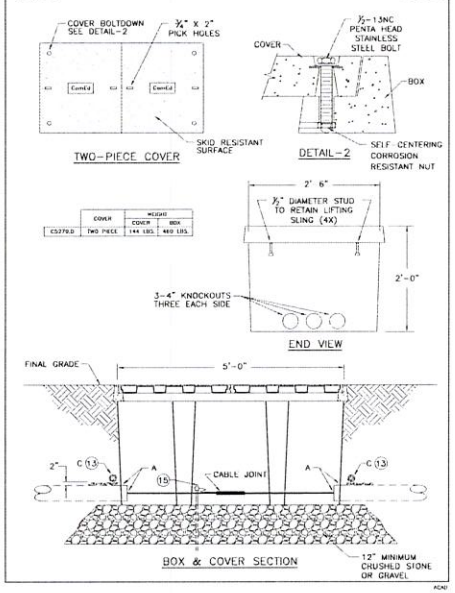
ComEd SYSTEM STANDARD

3-26-21
C5279
PAGE 3 OF 3



COVER	WEIGHT	
	COVER	BOX
C5279-D TWO PIECE	144 LBS.	463 LBS.

ACAD

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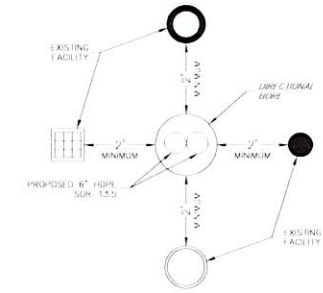
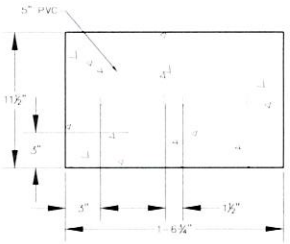
ComEd SYSTEM STANDARD

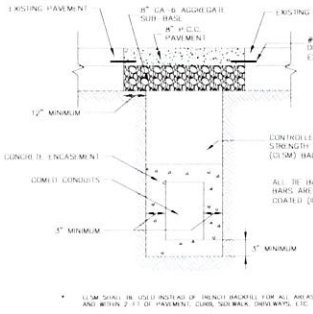


MAINTAIN A MINIMUM OF AT LEAST 2 FEET OF SEPARATION IN ANY DIRECTION BETWEEN DIRECTIONAL BORE AND ALL EXISTING FACILITIES.

UTILITY SEPARATION DETAILS FOR HORIZONTAL DIRECTIONAL DRILLING



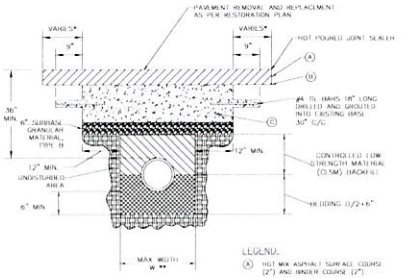
TYPICAL DUCT CROSS SECTION FOR 2 DUCT PACKAGE
NOT TO SCALE



* CLSM SHALL BE USED INSTEAD OF TRENCH BACKFILL FOR ALL AREAS UNDER AND WITHIN 2 FT OF PAVEMENT, CURB, SIDEWALK, DRIVEWAYS, ETC.

CONCRETE PAVEMENT RESTORATION DETAIL

CONTRACTOR TO VERIFY PAVEMENT DEPTHS



LEGEND:

(A) HOT MIX ASPHALT SURFACE COURSE (2") AND BINDER COURSE (2")

(B) BITUMINOUS MATERIAL & AGGREGATE (PRIME COAT)

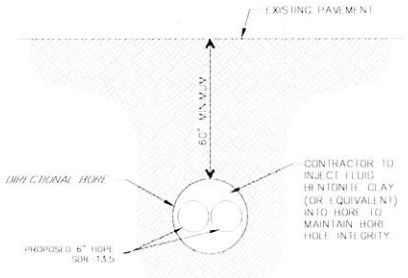
(C) PCC BASE COURSE (12")

* FOR TRENCHES UNDER ROADWAY, THE PAVEMENT SHALL BE RESTORED WITH A 4" GRIND AND OVERLAY FOR THE ENTIRE LANE WIDTH.

* CLSM SHALL BE USED INSTEAD OF TRENCH BACKFILL FOR ALL AREAS UNDER AND WITHIN 2 FT OF PAVEMENT, CURB, SIDEWALK, DRIVEWAYS, ETC.

** W = 9" + O.D. + 9", WHEN TRENCH DEPTH ≤ 5 FT.
W = 18" + O.D. + 18", WHEN TRENCH DEPTH > 5 FT.

TRENCH RESTORATION DETAIL



HORIZONTAL DIRECTIONAL DRILLING DETAIL
TYP.

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A2	01/28/22	ISSUED FOR APPROVAL	LEB	JPK	JPK
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	P.O.	P.I.	DATE

COMED DISTRIBUTION CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
DETAILS 2

JPK	312-253-1808	LEB
PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	N.T.S.	1/24017/2
DATE	SCALE	P.I. NO.	PASSPORT W/O
ComEd Distribution Area Engineering	UIC-35	36 OF 45 PAGE
	DRAWING NO.	

hbk ENGINEERING

HBK ENGINEERING, LLC
53 WEST JACKSON BLVD., SUITE 1101
CHICAGO, IL 60604
PHONE: (312) 253-1808 FAX: (312) 332-0215
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002308

ANY MODIFICATION OR ADDITION TO THIS DRAWING BY ANY ORGANIZATION OTHER THAN HBK IS NOT THE RESPONSIBILITY OF HBK

PROJ. No. 21-1167

UIC 36

CE-DB-183

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. CONTRACTOR SHALL REFER TO COMED SE/SC PROCESS DOCUMENT EN-CE-1942.

2. SOIL EROSION AND SEDIMENT CONTROL (SESC) FEATURES MUST BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE MUST BE PHASED OR ENACTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES MUST CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES.

3. PERIMETER SESC BMPS, INCLUDING SILT FENCE AND STAKED STRAW WATTLES, MUST BE INSTALLED PRIOR TO SOIL DISTURBANCE AT EACH MANHOLE AND DIRECTION BORE PIT SITE PRIOR TO SOIL DISTURBANCE. THE EXACT LOCATION OF EACH PERIMETER SESC BMP MAY BE AMENDED IN THE FIELD BASED ON FIELD CONDITIONS.

4. PERIMETER SESC BMPS, INCLUDING SILT FENCE AND STAKED STRAW WATTLES, MUST BE INSTALLED PRIOR TO SOIL DISTURBANCE ALONG THE LINEAR EXCAVATION ROUTE PRIOR TO SOIL DISTURBANCE. THE EXACT LOCATION OF EACH PERIMETER SESC BMP MAY BE AMENDED IN THE FIELD BASED ON FIELD CONDITIONS.

5. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED AT 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 THE SITE AT ALL TIMES.

6. 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 SHALL MAINTAIN AN INVENTORY OF SESC BMPS (SILT FENCE AND STRAW WATTLE) ONSITE FOR INSTALLATION DURING CHANGING SITE CONDITIONS.

7. 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.

8. AFTER ALL PERIMETER SESC BMPS ARE REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION BARRIER MUST BE RESTORED.

9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DIVERT ALL WATER (GROUND, STORM, AND CONSTRUCTION) DURING CONSTRUCTION IN ORDER TO KEEP THE CONSTRUCTION AREAS FREED OF WATER, BYPASS PUMPING, INCLUDING FILTER BAGS AND AN ENERGY DISSIPATION SURFACE FOR THE PUMPS, SHALL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE COST OF WEIR STRUCTURE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SIZE THE PUMPS APPROPRIATELY.

10. DURING DE-WATERING/PUMPING OPERATIONS, ONLY UNCONTAMINATED WATER SHOULD BE ALLOWED TO DISCHARGE TO PROTECTED NATURAL AREAS, WATERS OF THE STATE, OR TO A STORM SEWER SYSTEM (IN ACCORDANCE WITH LOCAL PERMITS). INLET HOSES SHOULD BE PLACED IN A STABILIZED SUMP PIT OR FLOATED AT THE SURFACE OF THE WATER IN ORDER TO LIMIT THE AMOUNT OF SEDIMENT INTAKE. PUMPING OPERATIONS MAY BE DISCHARGED TO A STABILIZED AREA THAT CONSISTS OF AN ENERGY DISSIPATING DEVICE (E.G., STONE), SEDIMENT FILTER BAG, OR BOTH. ADEQUATE EROSION AND SEDIMENT CONTROLS SHOULD BE USED DURING DE-WATERING OPERATIONS AS NECESSARY. DEWATERING SEDIMENT LADEN WATER DIRECTLY INTO FIELD TILES, STORM WATER STRUCTURES, OR WATERS OF THE US IS PROHIBITED. DE-WATERING ACTIVITIES MUST FOLLOW COMED ENVIRONMENTAL PROTOCOL. THE CONTRACTOR SHALL SUBMIT A DE-WATERING PLAN TO COMED FOR APPROVAL PRIOR TO CONSTRUCTION.

11. 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, A TEMPORARY STABILIZATION METHOD CAN BE USED.
- STABILIZATION IS NOT REQUIRED FOR EXIT POINTS AT LINEAR UTILITY CONSTRUCTION SITES THAT ARE USED ONLY EPISODICALLY AND FOR VERY SHORT DURATIONS OVER THE LIFE OF THE PROJECT, PROVIDED OTHER EXIT POINT CONTROLS ARE IMPLEMENTED TO MINIMIZE SEDIMENT TRACK-OUT.

12. STOCKPILES 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. PERIMETER SEDIMENT CONTROL BARRIERS MUST BE PROVIDED AT STOCKPILES LOCATIONS, WHEN APPLICABLE.

13. 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 EROSION AND SEDIMENT CONTROL NOTES (CONT'D.)

14. COMED SHALL PROVIDE A QUALIFIED PERSON WHO WILL BE RESPONSIBLE FOR CONDUCTING SITE INSPECTIONS IN COMPLIANCE WITH THE ILRTO NPDES PERMIT. AFTER EACH INSPECTION, A REPORT SHOULD BE PREPARED BY THE PERSON WHO PERFORMED THE INSPECTION. THE INSPECTION REPORT SHOULD BE MAINTAINED ON SITE OR MADE AVAILABLE UPON REQUEST.

INSPECTIONS SHOULD BE CONDUCTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM, OR BY THE END OF THE FOLLOWING BUSINESS OR WORKDAY, THAT IS 0.5 INCHES OR GREATER. AREAS INACCESSIBLE DURING INSPECTIONS DUE TO FLOODING OR OTHER UNSAFE CONDITIONS SHALL BE INSPECTED WITHIN 72 HOURS OF BECOMING ACCESSIBLE.

INSPECTIONS MAY BE REDUCED TO ONCE PER MONTH WHEN CONSTRUCTION ACTIVITIES HAVE CEASED DUE TO FROZEN CONDITIONS (WHEN GROUND AND/OR AIR TEMPERATURES ARE AT OR BELOW 32 DEGREES FAHRENHEIT). WEEKLY INSPECTIONS WILL RECOMMENCE WHEN CONSTRUCTION ACTIVITIES ARE CONDUCTED, OR IF THERE IS A 0.50 INCH OR GREATER RAIN EVENT, OR A DISCHARGE DUE TO SNOWMELT OCCURS.

15. THE CONTRACTOR MUST TAKE CORRECTIVE ACTION TO ADDRESS ANY OF THE FOLLOWING CONDITIONS IDENTIFIED AT THE SITE DURING AND NPDES SITE INSPECTION.

- A STORMWATER CONTROL NEEDS REPAIR OR REPLACEMENT; OR
- A STORMWATER CONTROL NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT WAS NEVER INSTALLED, OR WAS INSTALLED INCORRECTLY; OR
- SITE DISCHARGES ARE CAUSING AN EXCEEDANCE OF APPLICABLE WATER QUALITY STANDARDS, OR
- A PROHIBITED DISCHARGE HAS OCCURRED.

ROUTINE CORRECTIVE ACTIONS SHALL BE COMPLETED AS SOON AS POSSIBLE AND DOCUMENTED WITHIN 7 DAYS OF A SITE INSPECTION REPORT. IF IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN 7 CALENDAR DAYS, THE CONTRACTOR MUST PROVIDE DOCUMENTATION IN SITE RECORDS WHY IT IS INFEASIBLE TO COMPLETE THE INSTALLATION OR REPAIR WITHIN THE 7-DAY TIMEFRAME AND DOCUMENT THE SCHEDULE FOR INSTALLING THE STORMWATER CONTROL(S) AND MAKING IT OPERATIONAL AS SOON AS FEASIBLE AFTER THE 7-DAY TIMEFRAME.

16. ALL PROPOSED AND EXISTING STORM SEWER INLET STRUCTURES (INCLUDING INLETS LOCATED WITHIN THE HAUL ROUTES AND FLARED SEND SECTIONS LOCATED WITHIN DRAINAGE SWALES) MUST BE PROTECTED WITH STORM SEWER INLET PROTECTION (I.E. INLET FILTERS) PER INLET PROTECTION DETAILS IN THE PLANS. ALTERNATE TYPES OF PROTECTION MAY BE SUBMITTED FOR REVIEW AND APPROVAL COMED. INLET FILTERS SHOULD BE INSPECTED FOR PROPER FILTERING. IF COMED HAS AUTHORITY TO ACCESS THE STORM DRAIN INLET, CLEAN, REMOVE AND REPLACE. THE PROTECTION MEASURES AS SEDIMENT ACCUMULATES, THE FILTER BECOMES CLOGGED, AND/OR PERFORMANCE IS COMPROMISED. WHERE THERE IS EVIDENCE OF SEDIMENT ACCUMULATION ADJACENT TO THE INLET PROTECTION MEASURE, REMOVE THE DEPOSITED SEDIMENT BY THE END OF THE SAME BUSINESS DAY IN WHICH IT IS FOUND OR BY THE END OF THE FOLLOWING BUSINESS DAY IF REMOVAL BY THE SAME BUSINESS DAY IS NOT FEASIBLE. ACCUMULATED MATERIAL IN THE FILTERS SHOULD BE DISPOSED OF PROPERLY.

17. SOIL DISTURBANCES SHALL BE STABILIZED WITH NAG 75 EROSION CONTROL BLANKET, MINIMUM 4"OF TOPSOIL, AND IDOT CLASS 2A SEED MIX UNLESS OTHERWISE NOTED ON THE PLANS.

18. TEMPORARY CONSTRUCTION ENTRANCES WILL BE CONSTRUCTED AT LOCATIONS WHERE CONSTRUCTION TRAFFIC ENTERS OF 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 DEPOSIT OF SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. IF SEDIMENT HAS BEEN TRACKED-OUT FROM THE SITE ONTO PAVED ROADS, SIDEWALKS, OR OTHER PAVED AREAS OUTSIDE OF THE SITE, REMOVE THE DEPOSITED SEDIMENT BY THE END OF THE SAME BUSINESS DAY IN WHICH THE TRACK-OUT OCCURS OR BY THE END OF THE NEXT BUSINESS DAY IF TRACK-OUT OCCURS ON A NON-BUSINESS DAY. REMOVE THE TRACK-OUT BY SWEEPING, SHOVELING, OR VACUUMING THESE SURFACES, OR BY USING OTHER SIMILARLY EFFECTIVE MEANS OF SEDIMENT REMOVAL. COMED AND ITS CONTRACTORS IS PROHIBITED FROM HOSING OR SWEEPING TRACKED-OUT SEDIMENT INTO ANY STORMWATER CONVEYANCE, STORM DRAIN INLET, OR WATER OF THE U.S. SEDIMENT THAT COLLECTS ON THE SHOULDER OF THE ROADS OR THE CURB SYSTEMS FROM THE SWEEPING ACTIVITIES MUST BE REMOVED. IF A LARGE AMOUNT OF SEDIMENT MUST BE REMOVED, OR IF SWEEPING THE SEDIMENTS IS LIKELY TO CREATE EXCESSIVE DUST, USE ANOTHER MEANS OF REMOVAL OR DAMPEN THE SEDIMENTS PRIOR TO SWEEPING. IF TRACKING OF SEDIMENT CANNOT BE CONTROLLED WITH ROCK ACCESS ROADS OR SWEEPING, WHEEL WASH SYSTEMS MAY HAVE TO BE INSTALLED.

19. ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED TO ADEQUATELY PROTECT SPECIAL MANAGEMENT AREAS DEPENDING ON FIELD CONDITIONS AND CONSTRUCTION ACTIVITIES.

20. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED WITH PERMANENT SOIL STABILIZATION MEASURES. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF AND THE AREA PERMANENTLY STABILIZED.

21. THE CONTRACTOR SHALL PROVIDE CONCRETE WASHOUT CONTAINMENT BMPS. THE LOCATION OF CONCRETE WASHOUT BMPS SHALL BE APPROVED BY COMED OR THEIR AUTHORIZED REPRESENTATIVE. PREFABRICATED CONCRETE WASHOUT BMPS SHALL BE WATERTIGHT AND FREE OF LEAKS. CONCRETE WASHOUT BMPS CONSTRUCTED IN THE FIELD SHALL INCLUDE A 30-MIL IMPERMEABLE LINER. WASHOUT BMPS SHOULD BE CLEANED OUT, OR NEW FACILITIES SHOULD BE CONSTRUCTED AND OPERATIONAL ONCE THE EXISTING WASHOUT IS TWO-THIRDS FULL. WASHOUTS SHOULD BE INSPECTED FREQUENTLY TO ENSURE THAT LININGS (AS APPLICABLE) ARE INTACT AND SIDEWALLS HAVE NOT BEEN DAMAGED BY CONSTRUCTION ACTIVITIES. WHEN THE WASHOUT AREA IS ADJACENT TO A PAVED ROAD, THE PAVED ROAD SHOULD BE INSPECTED FOR ACCUMULATED CONCRETE WASTE. ANY ACCUMULATED CONCRETE WASTE ON THE ROAD, CURB, OR GUTTER SHOULD BE REMOVED AND DISPOSED OF PROPERLY.

22. HYDRO-EXCAVATED SOILS BERMS SHALL BE DESIGNED, CONSTRUCTED, AND MAINTAINED TO CURRENT COMED STANDARD (VERSION 2, NOVEMBER 20, 2020).

DEWATERING SPECIFICATION FOR TRANSMISSION/DISTRIBUTION PROJECTS

THIS WORK SHALL CONSIST OF PROVIDING LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY FOR DEWATERING ALL TRANSMISSION AND DISTRIBUTION LINE WORK AREAS TO RELATIVELY DRY CONDITIONS AS DETERMINED BY THE ENGINEER AND MAINTAIN SUITABLE WORKING CONDITIONS AND SEDIMENT CONTROL SO THAT THE IMPROVEMENTS ARE CONSTRUCTED IN THE DRY. THIS SPECIFICATION DOES NOT APPLY TO DEWATERING WITHIN A SUBSTATION, COMED VAULTS OR MANHOLES. IT IS ALSO NOT INTENDED TO DEWATER EXCAVATION AREAS THAT CONTAIN CONTAMINATED SOILS OR WATER.

APPLICABLE REGULATIONS. IT IS A VIOLATION OF THE FEDERAL CLEAN WATER ACT TO DISCHARGE ANY POLLUTANTS (INCLUDING SEDIMENT) TO ANY WATERWAY WITHOUT A PERMIT. DISCHARGE OF POLLUTANTS SUCH AS SEDIMENT IS ALSO A VIOLATION OF STATE REGULATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE IF COUNTY AND LOCAL REGULATIONS HAVE ADDITIONAL REQUIREMENTS FOR DISCHARGE OF PUMPED WATER. FOR CONSTRUCTION PROJECTS THAT DISTURB ONE OR MORE ACRE OF LAND, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NDPES) PERMIT IS REQUIRED AND PUMPING SHALL COMPLY WITH THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR THE PROJECT. WHEN APPLICABLE, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SWPPP AND COMPLY WITH IT AT ALL TIMES.

GENERAL REQUIREMENTS. WATER PUMPED OR DRAINED FROM THE WORK AREA SHALL BE DISPOSED OF IN A SAFE AND LEGAL MANNER WITHOUT DAMAGE TO ADJACENT WETLANDS, WATERWAYS, ADJACENT PROPERTY, OR STREETS OR TO OTHER WORK UNDER CONSTRUCTION. WATER SHALL BE DISCHARGED WITH ADEQUATE EROSION AND SEDIMENT CONTROL PROTECTION AT THE POINT OF DISCHARGE. NO WATER SHALL BE DISCHARGED INTO STORM SEWERS OR SANITARY SEWERS WITHOUT APPROPRIATE PERMITS. COMED ENVIRONMENTAL SHALL BE NOTIFIED OF ANY AND ALL DAMAGES CAUSED BY DEWATERING AND THE PROMPT REPAIR OF THIS DAMAGE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY AND ALL LABOR, MATERIALS AND EQUIPMENT NEEDED FOR THE DEWATERING IN ORDER TO MEET THE SCHEDULED COMPLETION OF THE PROJECT.

THE CONTRACTOR SHALL REVIEW ALL AVAILABLE DATA (SOIL BORINGS, ETC.) AND SELECT THE PUMP SIZE, PUMP DISCHARGE RATE AND APPROPRIATELY SIZED SEDIMENT CONTROL MEASURES. ALL WATER SHALL BE DISCHARGED ON COMED OWNED PROPERTY OR AT A COMED APPROVED FACILITY.

- FOR A PUMP DISCHARGE LOCATION THAT IS GREATER THAN 100 FEET FROM A WETLAND OR WATERWAY, FILTER BAGS OR SIMILAR SEDIMENT CONTROL MEASURES SHALL BE REQUIRED IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL (IUM) DEWATERING PRACTICE STANDARD (CODE: 813).
- FOR PUMP DISCHARGES WITHIN 100 FEET OF A WETLAND OR WATERWAY, THE PUMP DISCHARGE WATER MUST BE CONTAINERIZED AND CAN BE RELEASED WITH APPROPRIATE SEDIMENT CONTROL MEASURES OUTSIDE OF THE 100 FOOT RADIUS.
- UNDER NO CIRCUMSTANCES CAN PUMP DISCHARGE WATER BE DISCHARGED DIRECTLY INTO A WETLAND OR WATERWAY.

THE CONTRACTOR SHALL MONITOR AND MAINTAIN ALL PUMPING OPERATIONS. THE FREQUENCY OF INSPECTIONS SHALL DEPEND ON THE DEWATERING METHOD, VOLUME AND RATE OF DISCHARGE, POTENTIAL DAMAGE AND PROXIMITY TO RECEIVING WATERS. INSPECTIONS SHALL BE COMPLETED TO ENSURE PROPER OPERATION AND COMPLIANCE WITH ANY PERMITS OR WATER QUALITY STANDARDS. THE CONTRACTOR SHALL DESIGNATE A PERSON KNOWLEDGEABLE IN DEWATERING OPERATIONS (CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL [CPESC] OR EQUIVALENT) TO DESIGN AND INSPECT DEWATERING OPERATIONS WHEN ANIONIC POLYMER FLOCCULATION SYSTEMS ARE USED.

BEST MANAGEMENT PRACTICES (BMPS) THAT MAY BE REQUIRED (BUT NOT LIMITED TO) INCLUDE:

- MINIMUM 100 FEET FROM WETLANDS OR WATERWAYS.
- 0 SUMP PIT WITH FLOATED PUMP INTAKE (IUM PRACTICE STANDARD 950)
- 0 PUMPS, HOSES, ETC.
- 0 PROPERLY SIZED DEWATERING FILTER BAGS AND SECONDARY CONTAINMENT
- 0 REMOVAL AND PROPER DISPOSAL OF ALL BMPS AND SEDIMENT ASSOCIATED WITH DEWATERING
- 0 NOISE ABATEMENT
- 0 ANIONIC POLYMER FLOCCULATION SYSTEMS SUCH AS PRE-TREATMENT, MIXING TANKS AND SETTLING TANKS -- FIELD SOIL TESTS FOR POLYMERS SHALL BE UTILIZED (IUM PRACTICE STANDARDS 894 – 895)
- 0 ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS AT COMED'S DIRECTION.

- WITHIN 100 FEET OF A WETLAND OR WATERWAY:
- 0 CONTAINERIZING PUMP DISCHARGE WATER IN TANKS TO BE RELOCATED FOR DISCHARGE MORE THAN 100 FEET AWAY FROM WETLANDS, BUT WITHIN COMED PROPERTY, USING IUM STANDARDS AS NOTED ABOVE.

ADVANCED DEWATERING METHODS IN ADDITION TO THOSE ABOVE MAY BE REQUIRED UNDER SPECIAL CIRCUMSTANCES. THE CONTRACTOR IS RESPONSIBLE FOR SEEKING EXPERT GUIDANCE FOR THESE CIRCUMSTANCES IN COORDINATION WITH COMED ENVIRONMENTAL.

PRODUCTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CHOICE OF THE PRODUCT(S) AND EQUIPMENT AS WELL AS MEANS AND METHODS FOR THE SITE DEWATERING WORK TO BE PERFORMED SUBJECT TO THE REVIEW OF COMED ENVIRONMENTAL. ALL PRODUCTS AND MEANS AND METHODS SELECTED SHALL BE ADEQUATE FOR THE INTENDED USE/APPLICATION AND IN CONFORMANCE WITH THE REQUIREMENTS OF THE ILLINOIS URBAN MANUAL. COMED'S REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIAL PROVISION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVALS FROM COMED ENVIRONMENTAL AND THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA) FOR DISCHARGE OF ANY CHEMICALS SUCH AS DRILLING POLYMERS USED DURING PUMPING OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE SEDIMENT FILTERING DEVICES, INCLUDING FILTER BAGS ARE SIZED APPROPRIATELY.

SUBMITTALS. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO COMED ENVIRONMENTAL FOR REVIEW A DESCRIPTION OF DEWATERING TECHNIQUES AND EQUIPMENT TO BE USED, TOGETHER WITH DETAIL DRAWINGS SHOWING LENGTHS OF DISCHARGE PIPING AND POINT(S) OF DISCHARGE INCLUDING SEDIMENT AND EROSION CONTROL PROCEDURES USING BMPS. THE DEWATERING PLAN SHALL BE COMPLETED AND SUBMITTED BY THE CONTRACTOR TO COMED ENVIRONMENTAL AT LEAST 2 WEEKS PRIOR TO ANTICIPATED DEWATERING.

RESPONSIBILITY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CHOICE OF PRODUCT(S) AND EQUIPMENT, FOR THE DESIGN, INSTALLATION, AND OPERATION, AS WELL AS MEANS AND METHODS IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR THE SUBSEQUENT REMOVAL OF DEWATERING SYSTEMS AND THEIR SAFETY AND CONFORMITY WITH LOCAL CODES, REGULATIONS AND THESE SPECIFICATIONS. ALL PRODUCT(S), EQUIPMENT AND MEANS AND METHODS SELECTED SHALL BE ADEQUATE FOR THE INTENDED USE/APPLICATION. REVIEW BY COMED ENVIRONMENTAL DOES NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS SPECIFIED HEREIN.

ILLINOIS URBAN MANUAL WEBSITE: HTTPS://ILLINOISURBANMANUAL.ORG/

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	PD	PE	DATE

COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
DETAILS - 5

JPK	312-253-1800	LEB
PROJECT ENGINEER	PHONE NO	PROJECT DESIGNER
11/09/21	N.T.S.	17401/2
DATE	SCALE	PL NO / PASSPORT WO
ComEd	UIC -36	39 OF 45
Distribution Field Engineering	DRAWING NO	PAGE

hbk ENGINEERING

HBK ENGINEERING, LLC
931 WEST 75TH STREET, SUITE 100
DOWNERS GROVE, IL 60517
PHONE: (312) 993-0876 FAX: (312) 332-6215
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO: 184-002308

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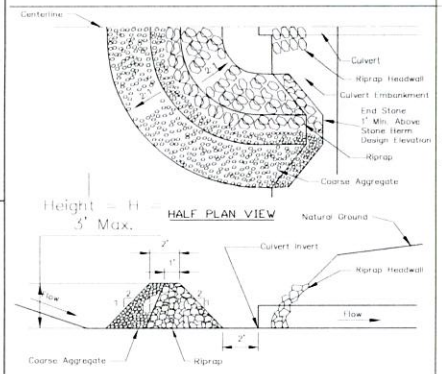
PROJ. No. 21-1167

UIC-37

CE-DB-183

CULVERT INLET PROTECTION - STONE



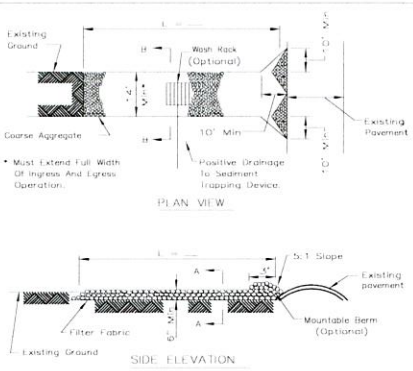
Notes:
1. Sediment shall be removed when the sediment has accumulated to one-half the height of the stone berm.
2. Coarse aggregate shall meet one of the following IDOT coarse aggregate gradations, CA-1, CA-2, CA-3 or CA-4.
3. Riprap shall meet IDOT gradation RR-3 or RR-4. Any permanent riprap, such as for the culvert headwall, shall meet IDOT Quality Designation A.
4. Coarse aggregate and riprap shall be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
5. The maximum drainage area to the culvert being protected is 3 acres.
6. See plans for H dimension.
7. Tie the stone berm into the culvert embankment a minimum of 1 foot above the design elevation of the stone berm.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-508ST
SHEET 1 OF 1
DATE 1-29-99

STABILIZED CONSTRUCTION ENTRANCE PLAN



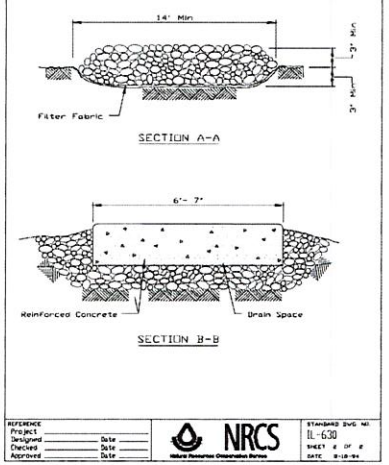
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class A, 1 off, and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2,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

REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS Natural Resources Conservation Service

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

STABILIZED CONSTRUCTION ENTRANCE PLAN

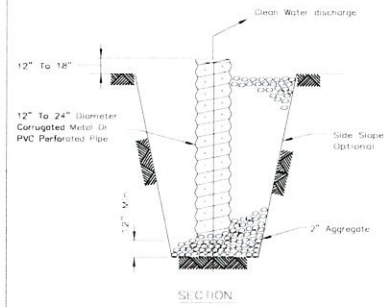


REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS Natural Resources Conservation Service

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

SUMP PIT PLAN



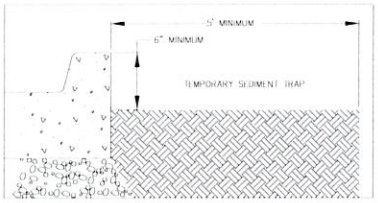
NOTES
1. Pit dimensions are optional.
2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
3. A base of 2" aggregate will be placed in the pit to a minimum depth of 12". After installing the standpipe, the pit surrounding the standpipe will then be backfilled with 2" aggregate.
4. The standpipe will extend 12" to 18" above the lip of the pit.
5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with filter fabric before installation.
6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-650
SHEET 1 OF 1
DATE 8-11-94

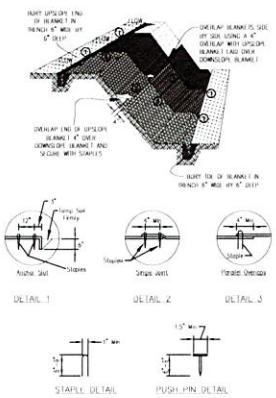
BACK CUT CURB



REFERENCE
Project
Designed Date
Checked Date
Approved Date

STANDARD DWG. NO. IUM-501
SHEET 1 OF 1
DATE 08-26-2016

EROSION CONTROL BLANKET INSTALLATION DETAILS



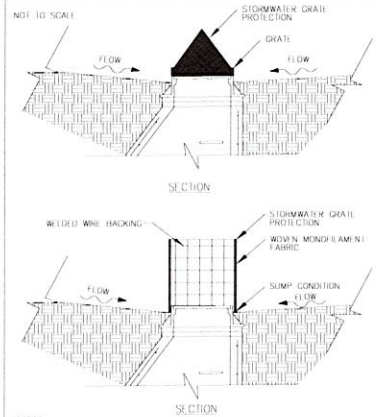
NOTES
1. Staples shall be placed in a diamond pattern at 2 per s.y. for stitched blankets. Non-stitched shall use 4 staples per s.y. of material. This equates to 200 staples with stitched blanket and 400 staples with non-stitched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be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

REFERENCE
Project
Designed Date
Checked Date
Approved Date

STANDARD DWG. NO. IUM-501
SHEET 1 OF 1
DATE 03-07-2017

MANUFACTURED ABOVE GRADE INLET PROTECTION

NOT TO SCALE



NOTES:
1. A maintenance schedule must maintain a sediment accumulation of less than 50% of the height of the inlet protection.
2. Device should be supported.
3. Fabric type should be IUM 592 Standard Table 1 Class 4.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

STANDARD DWG. NO. IUM-531
SHEET 1 OF 1
DATE 03-07-2017

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	REVISED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LER	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LER	TDWW	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
512 WEST VAN BUREN, SUITE 106
CHICAGO, IL 60607
PHONE: (312) 253-1800, FAX: (312) 252-6234
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-001168

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PROJ. No. 21-1167

REV	DESCRIPTION	P.O.	P.E.	DATE
	COMED DISTRIBUTION CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD. DETAILS 4			
JPK	312-253-1800		LER	

PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	N.T.S.	LPM/DT/Z
DATE	SCALE	P.I. NO.	PASSPORT NO.
UIC-37		40 OF 45
		PAGE

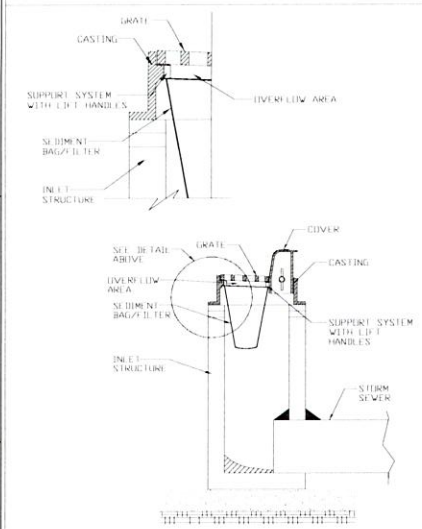
ComEd An Exelon Company
Joint Anchor Lines Engineering

DRAWING NO.

UIC-38

CE-DB-183

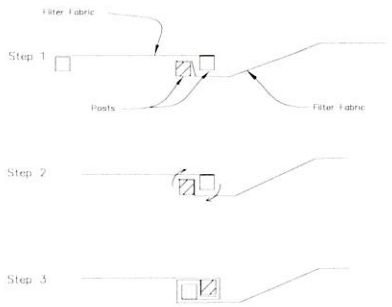
INLET PROTECTION - PAVED AREAS DROP-IN PROTECTION



REFERENCE
Project
Designed Date
Checked Date
Approved Date

STANDARD DWG. NO. IUM-S61D
SHEET 1 OF 1
DATE 01-11-11

SILT FENCE - SPLICING TWO FENCES



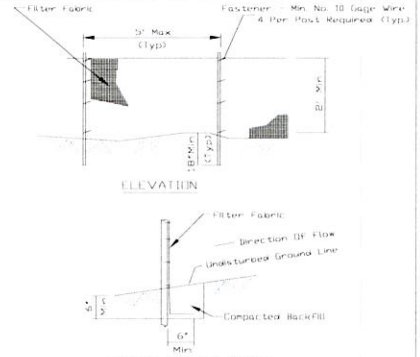
ATTACHING TWO SILT FENCES

1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Cut the fabric near the bottom of the stakes to accommodate the 6" flap.
4. Drive both posts a minimum of 18 inches into the ground and bury the flap.
5. Compact backfill (particularly at splices) completely to prevent stormwater piping.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

STANDARD DWG. NO. IUM-620B(W)
SHEET 1 OF 1
DATE 3-16-12

SILT FENCE PLAN

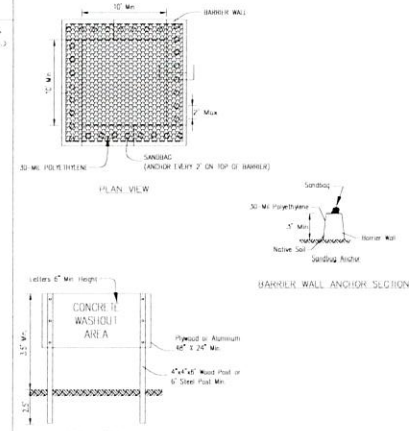


FABRIC ANCHOR DETAIL

NOTES:
1. 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.
2. 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.
3. Fence posts shall be either standard steel post or wood post with a minimum cross sectional area of 3.0 sq. in.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

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

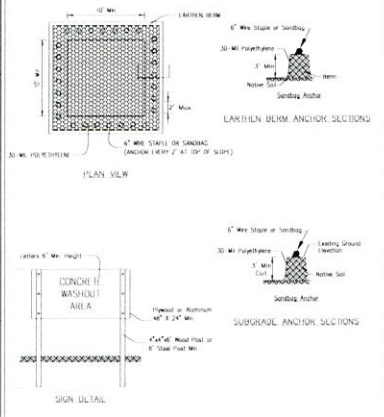


NOTES
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two thirds full.

REFERENCE
Project
Designed Date
Checked Date
Approved Date

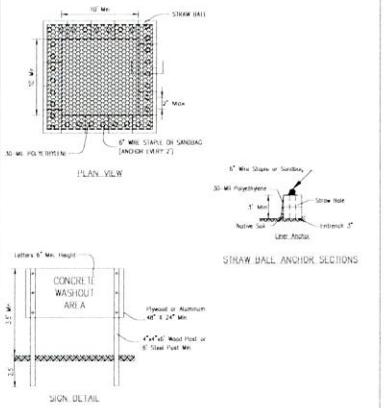
STANDARD DWG. NO. IUM-620A

TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL



NOTES
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two thirds full.

TEMPORARY CONCRETE WASHOUT FACILITY - EARTHEN TYPE



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

TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV.	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
322 WEST VAN BUREN, SUITE 106
CHICAGO, IL 60607
PHONE: (312) 853-0670 FAX: (312) 853-0671
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-004508

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PROJ. No. 21-1167

REV.	DESCRIPTION	P.O.	P.E.	DATE

COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
DETAILS - 5

JPK	312-253-1800	LEB
PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/09/21	N.T.S.	1174012.02
DATE	SCALE	P.I. NO.	PASSPORT W/O
ComEd An Exelon Company	UIC-38	41 OF 45
Links Engineering	DRAWING NO.	PAGE

ILLINOIS URBAN MANUAL
PRACTICE STANDARD

DEWATERING

(no.)
CODE 813

(Source: Illinois Urban Manual Technical Committee)

DEFINITION

The controlled removal of water from construction sites.

PURPOSE

The purposes of this practice are as follows:

1. To minimize construction impacts in areas with surface water or a high water table.
2. To prevent sediment transport.
3. To provide work site safety.
4. To prevent pollution of groundwater or surface water from suspended soil particles carried in construction site dewatering operations.
5. To preserve down-gradient natural resources and property.

CONDITIONS WHERE PRACTICE APPLIES

Construction sites, including any onsite and offsite excavated areas, where the presence of water creates unsafe conditions, potential damage, or restricts construction operations.

Construction sites where water is present in any form, including stormwater runoff, stormwater ponding, intermittent runoff, streams, standing water, ground water, or other bodies of water.

Where water pumping operations occur.

Where the water table is intercepted.

Where work is performed in-stream.

Where collected stormwater runoff is removed from construction sites.

Not for the removal of water that is polluted by chemicals, fuel, etc. This standard only addresses a suspended solid in the form of uncontaminated sediment.

CRITERIA

Dewatering shall consist of the removal of surface water and/or ground water by diverting and/or removing water from construction sites to perform the required construction in accordance with the plans and specifications.

Discharging sediment to upland vegetated areas shall not be used as a stand-alone sediment control practice during dewatering operations.

Construction projects may be subject to local, county, state and federal rules and regulations.

Accumulated sediment from dewatering operations shall be disposed of in accordance with all applicable laws and regulations.

Diverting Surface Water – Cofferdams, channels, sumps, flumes and temporary diversions shall be built and maintained, according to contract plans, specifications, and respective IUM Practice Standards.

For the installation of cofferdams and sumps, follow the requirements as outlined in Practice Standards COFFERDAM 803 and SUMP PIT 950.

Excess surface runoff shall be diverted from the construction area as outlined in the IUM Practice Standards TEMPORARY DIVERSION 955, TEMPORARY SWALE 980, DIVERSION 815 and DIVERSION DIKE 829.

A permanent stream or other concentrated flow shall be diverted away from the construction area as outlined in Practice Standard TEMPORARY STREAM DIVERSION 975.

Removing Water – Drains, sumps, pumps, casings, well points and all other practices required to dewater the site shall be furnished, installed and maintained according to contract plans, specifications, and respective IUM Practice Standards.

When dewatering by well points and deep wells is utilized, the wells shall be placed at intervals along the construction area as necessary to depress the groundwater table during construction. Monitoring wells shall be installed where measurement of the pumping effectiveness is required. Well point and deep well dewatering shall be terminated and sealed immediately upon completion of the dewatering operation.

Sediment Control - All dewatering activities shall be performed in a manner that does not negatively impact the water quality of the water table, cause erosion, or transport sediment to wetlands, water bodies, water conveyance features, etc. on or off site.

In poorly drained soil areas where well dewatering is not practical, pumping directly from construction trenches is permitted provided appropriate sediment control practices are incorporated with the pumping activity.

All outlets and drainage pathways for dewatering discharges shall be stable and protected from erosion.

Sediment Removal Practices - Sediment removal shall be provided using the following practices, or combination of practices, depending on the soil type, suitability of dewatering method, volume of sediment to be removed, location, and amount of dewatering.

Practice Standard, TEMPORARY SEDIMENT TRAP 960 shall be used to detain water and remove sediment from pumping and diversion operations where space is available.

Practice Standard, PORTABLE SEDIMENT TANK 895 shall be used to retain sediment during dewatering operations where there is limited space.

Practice Standards POLYACRYLAMIDE (PAM) FOR TURBIDITY REDUCTION AND SEDIMENT CONTROL 894.

Pumps with Sediment Filtration Bags. Where there is low, intermittent pumping activity, pumps with sediment filtration bags attached to pump discharges shall be used. Sediment filtration bags shall be placed on a stabilized surface area. Sediment filtration bags shall not be placed, whole or partially, within aquatic areas (wetlands, streams, etc.), or water conveyance features (ditches, swales, etc.). Sediment filtration bags shall be raised above the supporting ground on a surface, or material, that allows water to flow out of the bottom of the bag at the respective design discharge rate for the sediment filter bag selected. The pump discharge rate shall not exceed the design discharge rate for the sediment filter bag.

Materials, structures, etc. that are used to ensure that water flows out of the bottom of a sediment filter bag must be non-erodible and be placed atop a stabilized surface area.

The material for the sediment filtration bag shall meet the requirements of Material Specification 592, GEOTEXTILE, Table 2, Class I with a minimum tensile strength of 200 lbs, or Table 1, Class 4 value. The sediment filter bag shall be sized per manufacturer recommendations and based on the size of the pump however, the minimum bag size shall be 10 feet x 15 feet with a usable surface drainage area of 300 square feet (10 x 15 x 2) sides, top & bottom) The largest diameter size pump hose to be used with a sediment filtration bag is 4-inch. Multiple hoses/pipes shall not be attached to a single filtration bag inlet sleeve.

Removal of Dewatering Facilities - The temporary dewatering areas shall be removed after they have served their purpose. The dewatering areas shall be graded where necessary, and stabilized with appropriate erosion control practices. Shall not create any obstruction of normal water flow, or any other interference with the operation of, or access to the permanent works.

CONSIDERATIONS

Federal, State, County and local water quality requirements also need to be considered when choosing a dewatering method and may include requirements for sampling and evaluating discharges for clarity.

Base the location, method of dewatering, and configuration on site conditions. The following items should be considered when selecting the proper dewatering method:

1. Amount of water to remove.
2. The amount of sediment to be removed.
3. Maintenance and operation required as a result of the construction operations.
4. Length of time to complete the work.
5. The space available in the work area.
6. Ability to supervise pump operation.

Evaluate function, need, velocity control, outlet stability, and site aesthetics. The location and capacity of temporary diversion and protective works should be based on the characteristics of the site, accessibility, and the potential for off-site, or on-site damage during the construction phase.

Secondary Containment. Secondary sediment containment practices may be required to ensure that sediment from a dewatering activity does not adversely impact a particular body of water, wetland, or water conveyance feature (ditch, swale, etc.). Secondary containment may be required if the method of sediment removal concentrates the sediment in one location or practice. Secondary containment measures shall be placed between the area of control and the receiving area and/or aquatic resource.

Winter conditions and freezing temperatures can impact the effectiveness and functionality of sediment filter bags and anionic polymers for sediment removal during dewatering. If dewatering activities are likely to occur over winter, dewatering practices for sediment control should be included in the development of the Stormwater Pollution Prevention Plan that can be effective in freezing temperatures.

An analysis of the effects of dewatering a site should also be considered. For example, permanent dewatering of a site may cause subsidence of surface areas and settlement of foundations and pavements. Additionally, temporary dewatering may create dry areas during construction but the effect of allowing water tables to rise after construction may result in excess pressure on subsurface structures, potentially causing damage and/or excessive sump pump cycling.

PLANS AND SPECIFICATIONS

Plans and specifications for installing and building dewatering facilities shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose. At a minimum include:

1. Approximate location and proposed type of dewatering method shown on plans.
2. Drawings, specifications, etc. for all items of work as needed for dewatering.
3. Include the dewatering plan as part of the Storm Water Pollution Prevention Plan (SWPPP) and/or the erosion and sediment control plan, detailing the location of dewatering activities, presence of aquatic areas, equipment, fuel storage, and discharge point.
4. Any total maximum daily load (TMDL) requirements for the receiving waters or turbidity standards shall be stated on the plan set.
5. A brief narrative outlining a construction sequence for the dewatering operation.
6. Drawing details for proper installation of the various dewatering facilities as needed.

All plans shall include installation, inspection, and maintenance schedules with the responsible party identified.

Methods of dewatering shall be constructed to meet the requirements of Construction Specification REMOVAL OF WATER 11.

OPERATION AND MAINTENANCE

The frequency of inspections shall depend on the dewatering method, amount of discharge, potential damage, and quality of the receiving bodies of water. The frequency of inspections, responsible party and specific tasks shall be identified.

1. Inspections shall be conducted to ensure proper operation and compliance with all permits and water quality standards.
2. Accumulated sediment shall be removed from the flow area and temporary diversions shall be repaired, as required.
3. Outlet areas shall be checked and repairs shall be made in a timely manner, as needed.

4. Pump outlets shall be inspected for erosion, and sumps shall be inspected for accumulated sediment.
5. Sediment filtration bags shall be removed and replaced when half full of sediment, or when the design flow rate of the filter bag is no longer being maintained.
6. If the receiving area is showing any signs of turbid water, erosion, or sediment accumulation, discharges shall be stopped immediately once safety and property damage concerns have been addressed.
7.

REFERENCES

Maine Department of Environmental Protection, Bureau of Land and Water Quality. Maine Erosion and Sediment Control BMPs. G-3 Construction Dewatering. Augusta, ME. March 2003.

IDOT Erosion and Sediment Control Field Guide for Construction Inspection, July 1, 2010

January, 2019

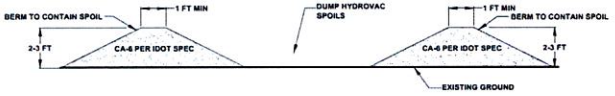
urbst813.doc

VERSION 2 NOVEMBER 20, 2020

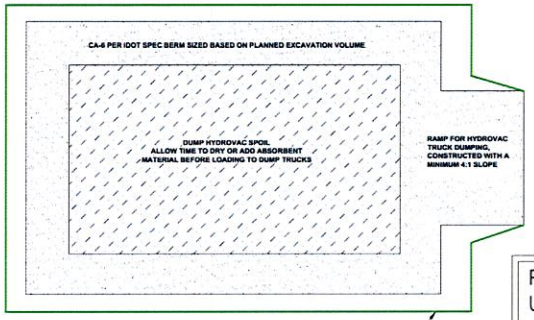
HYDRO-EXCAVATED SPOILS BERM DESIGN GUIDELINES

VERSION 2 NOVEMBER 20, 2020

SIDE VIEW



TOP VIEW



IF BERM WILL BE PLACED ADJACENT TO WETLANDS OR OUTSIDE OF SUBSTATION FENCE, SILT FENCE MUST BE INSTALLED IN ACCORDANCE WITH IL URBAN MANUAL AND THE LOCATION MUST BE APPROVED BY ESD.

NOTES:

1) BERM MUST BE CONSTRUCTED OF VIRGIN CA-6 PER IDOT SPEC
2) BERM MATERIAL MAY NOT BE REUSED TO CONSTRUCT OTHER BERMS
3) BERM SIDES MUST BE SLOPED AT A 2:1 RATIO
4) BERM SIDES MUST HAVE A TOP WIDTH OF AT LEAST 1 FOOT
5) BERM HEIGHT MUST NOT EXCEED 3 FEET IN HEIGHT
6) BERM MUST BE SIZED AND MAINTAINED TO PROJECT REQUIREMENTS (E.G., BERMS CONSTRUCTED TOO LARGE ARE HARD TO MAINTAIN AND BERMS CONSTRUCTED TOO SMALL REQUIRE FREQUENT SOLIDIFICATION AND EMPTYING). ANY REPAIRS TO THE BERM TO BE COMPLETED IMMEDIATELY IF EROSION OR ANY OTHER DAMAGE IS OBSERVED
7) SPOILS IN BERM MUST BE SOLIDIFIED WHEN BERM REACHES 60% OF CAPACITY OR WITHIN 1 FOOT OF THE TOP OF THE BERM
8) SPOILS MUST BE PLACED IN SUCH A MANNER THAT RAIN EVENTS WILL NOT CAUSE SPOILS TO OVERTOP BERM
9) BERM MUST BE LOCATED AWAY FROM HIGH-TRAFFIC AREAS, STORM WATER INLETS, AND WETLANDS (AS MUCH AS REASONABLY POSSIBLE) WITHIN THE SUBSTATION PROPERTY
10) SEDIMENT CONTROL AND INLET PROTECTION PER THE IL URBAN MANUAL MUST BE PROPERLY PLACED AROUNDIN THE NEAREST STORM WATER INLETS FOR THE DURATION OF THE PROJECT.
11) PLACEMENT OF BERM MUST BE PRE-APPROVED BY COMED ENVIRONMENTAL SERVICES DEPT (ESD) PRIOR TO PROJECT WORK STARTING
12) IF BERM CONSTRUCTED ADJACENT TO WETLAND OR OUTSIDE OF SUBSTATION FENCE, A SILT FENCE MUST SURROUND THE PERIMETER OF THE BERM AND THE LOCATION MUST BE APPROVED BY ESD
13) BERM MUST BE USED ONLY AS A TEMPORARY SPOIL STOCKPILE AND MUST BE REMOVED WITHIN 90-DAYS OF END OF PROJECT
14) THE BERM INTEGRITY AND WATER LEVEL MUST BE INSPECTED AND DOCUMENTED DAILY BY THE CONSTRUCTION MANAGER AND/OR CIVIL CONTRACTOR OR COMED EMPLOYEE. INSPECTION TO BE COMPLETED AT THE BEGINNING AND END OF EACH DAY TO AID IN ENSURING THE BERM INTEGRITY
15) ONLY ESD APPROVED, COMMERCIALLY AVAILABLE DRYING AGENTS MUST BE USED SUCH AS WOOD PELLETS OR OTHER ABSORBENT MATERIAL
16) AFTER THE SPOILS AND BERM ARE REMOVED, JOB OWNER IS RESPONSIBLE TO ENSURE THAT A POST INSPECTION OF THE BERM AREA IS PERFORMED BY COMED OR COMED REPRESENTATIVE TO ENSURE THE PREVIOUS AREA HAS NOT CHANGED GRADE AND MEETS COMED EXPECTATIONS

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PRIMED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/29/21	ISSUED FOR APPROVAL	LEB	RWM	JPK

REV	DESCRIPTION	PD	PE	DATE

COMED DISTRIBUTION CONDUIT INSTALLATION
ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
DETAILS - 6

JPK | 312-253-1800 | LEB

hbk ENGINEERING

HBK ENGINEERING, LLC
321 WEST LAKE SUITE 100
CHICAGO, IL 60607
PHONE: (312) 372-0870 FAX: (312) 372-0871
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-001298

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PROJ. No. 21-1167

PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER
11/29/21	N.T.S.	1/14/2022
DATE	SCALE	PE NO.	PASSPORT #/ID

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Distribution Lines Engineering

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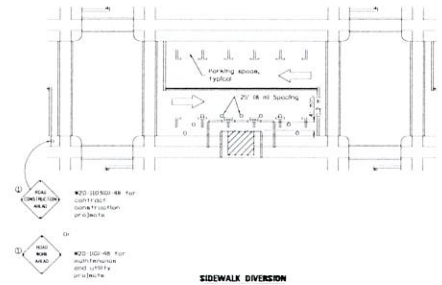
DRAWING NO.

CE-DB-183

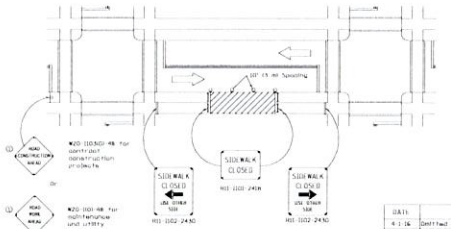
UIC-40

CE-DB-183



SIDEWALK DIVERSION

① Omit whenever duplicated by road work traffic control



SIDEWALK CLOSURE

SYMBOLS

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channeling barricade

GENERAL NOTES

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closure.

Type III barricades and R11-2-4R30 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701601.

All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation

APPROVED	— NOV —	2006
ENGINEER OF SAFETY ENGINEERING		
APPROVED		2006
ENGINEER OF DESIGN AND ENVIRONMENT		

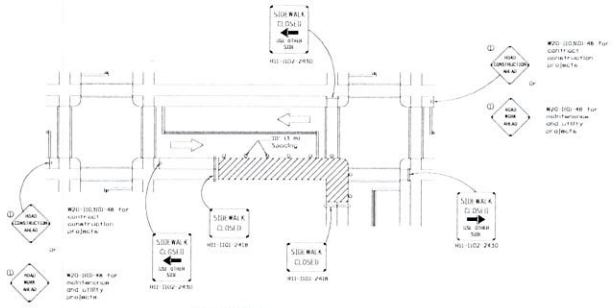
STANDARD

DATE	REVISIONS
4-1-16	Omitted orange safety fence from standard as this is covered in the std. specs.
1-1-12	Added SIDEWALK DIVERSION.
	Modified specs/note of plan views. Renamed Std.

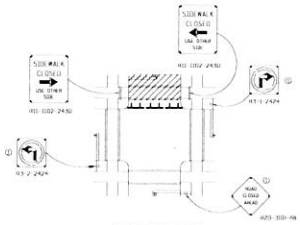
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06



CORNER CLOSURE



CROSSWALK CLOSURE

Illinois Department of Transportation

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ENGINEER OF SAFETY ENGINEERING		
APPROVED		2006
ENGINEER OF DESIGN AND ENVIRONMENT		

STANDARD

SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 2 of 2)

STANDARD 701801-06

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PREPARED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	TWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
321 WEST CHICAGO AVENUE
CHICAGO, IL 60610
PHONE: (312) 853-0870 FAX: (312) 853-0871
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-001308

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PROJ. No. 21-1167

REV	DESCRIPTION	PLD	PE	DATE

COMED DISTRIBUTION CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO HIJINFELD RD.

DETAILS 7

JPK	312-253-1800	LEB	
PROJECT ENGINEER	PHONE NO.	PROJECT DESIGNER	
11/09/21	N.T.S.	1714017.2	
DATE	SCALE	P.I. NO.	PASSPORT #/D
ComEd an Exelon Utility	UIC-40	45 OF 45	
Lines Engineering	DRAWING NO.	PAGE	

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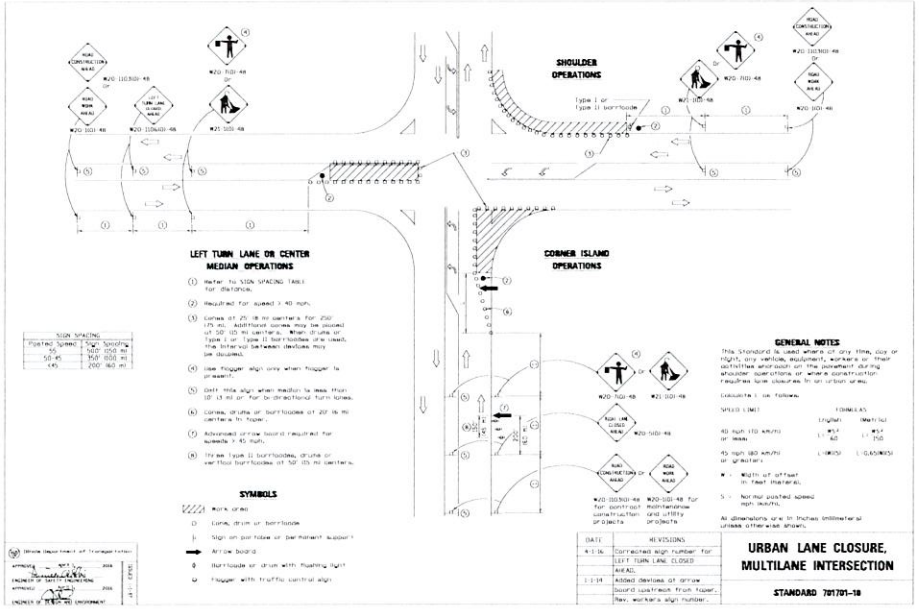

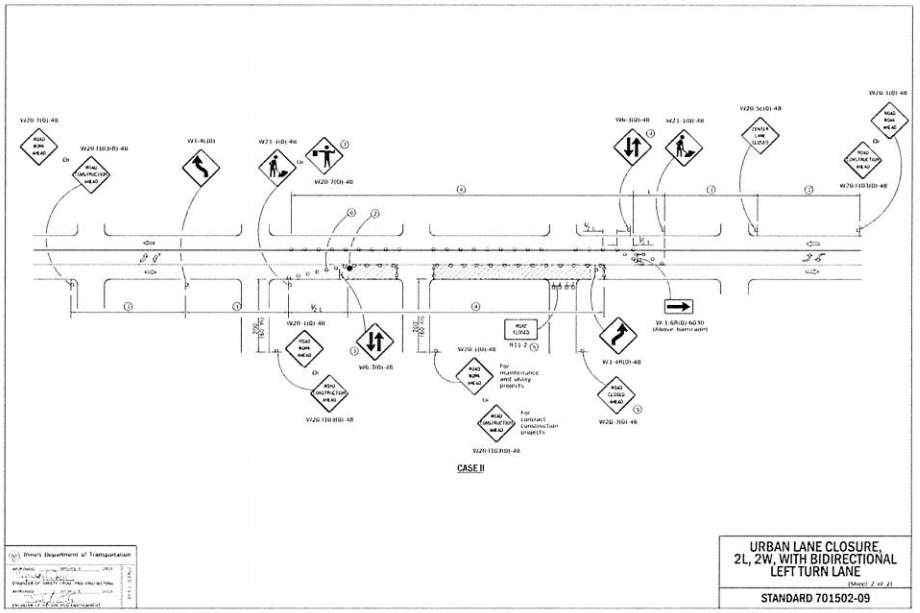

PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PRIMED	REVIEWED	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	NWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
53 WEST JACKSON BLVD, STE 1148
CHICAGO, IL 60604
PHONE (312) 853-0670 FAX (312) 853-0671
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REV	DESCRIPTION	PD	PC	DATE

COMED DISTRIBUTION - CONDUIT INSTALLATION ALONG S. MADISON ST. FROM W. 9TH ST. TO PLAINFIELD RD.
DETAILS - R

JPK	312-253-1800	LEB	
PROJECT ENGINEER	PHONE NO	PROJECT DESIGNER	
11/09/21	N.T.S.	171401.72	
DATE	SCALE	P.I. NO	PASSPORT #/D
ComEd An Exelon Company Distribution Lines Engineering	UIC - 41	44 OF 45	PAGE
	DRAWING NO		

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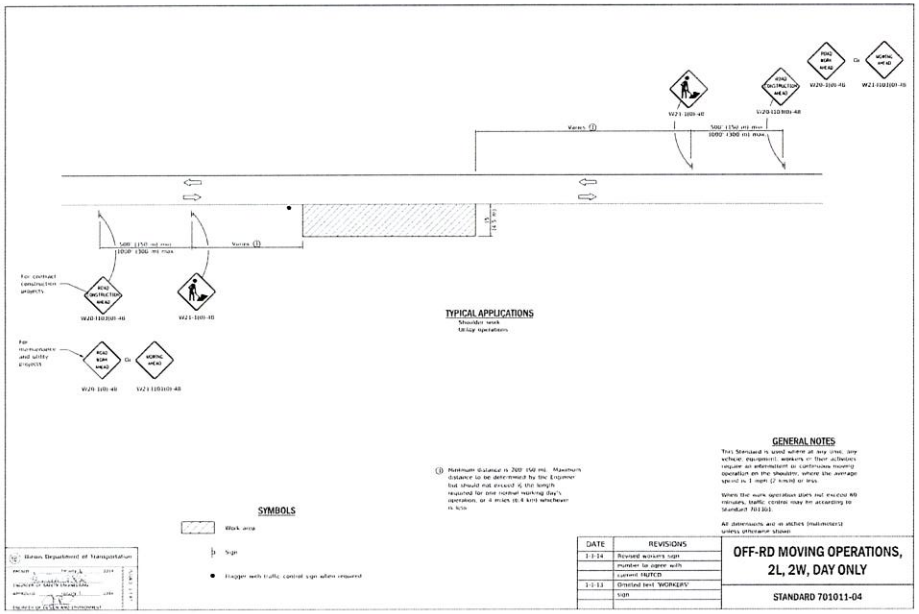
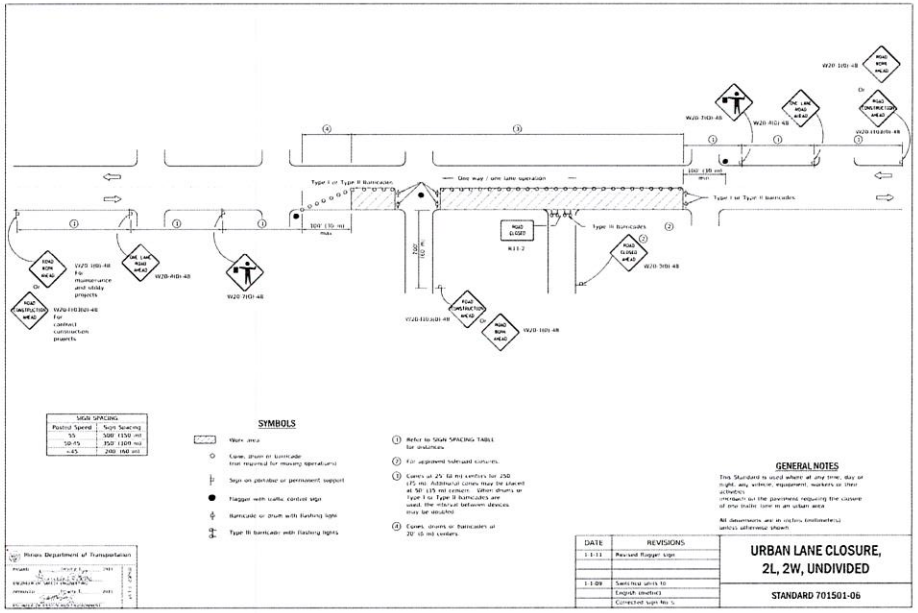
CE-DB-183





PLANS NOT FOR CONSTRUCTION UNTIL PERMITS ARE APPROVED

REV	DATE	DESCRIPTION	PRED	PE	APPROVED
A1	12/22/21	ISSUED FOR CONSTRUCTION	LEB	JPK	JPK
A0	11/09/21	ISSUED FOR APPROVAL	LEB	NWM	JPK

hbk ENGINEERING

HBK ENGINEERING, LLC
53 WEST JACKSON BLVD. STE 1101
CHICAGO, IL 60604
PHONE: (312) 913-0676 FAX: (312) 913-0235
STATE OF ILLINOIS, DEPARTMENT OF PROFESSIONAL REGULATION LICENSE NO. 184-002588

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DETAILS 9

JPK	312-253-1800	LEB
PROJECT ENGINEER	PHONE NO	PROJECT DESIGNER
11/09/21	N.T.S.	17140172
DATE	SCALE	PE NO.	PASSPORT NO
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Distribution Work Engineering	DRAWING NO	PAGE