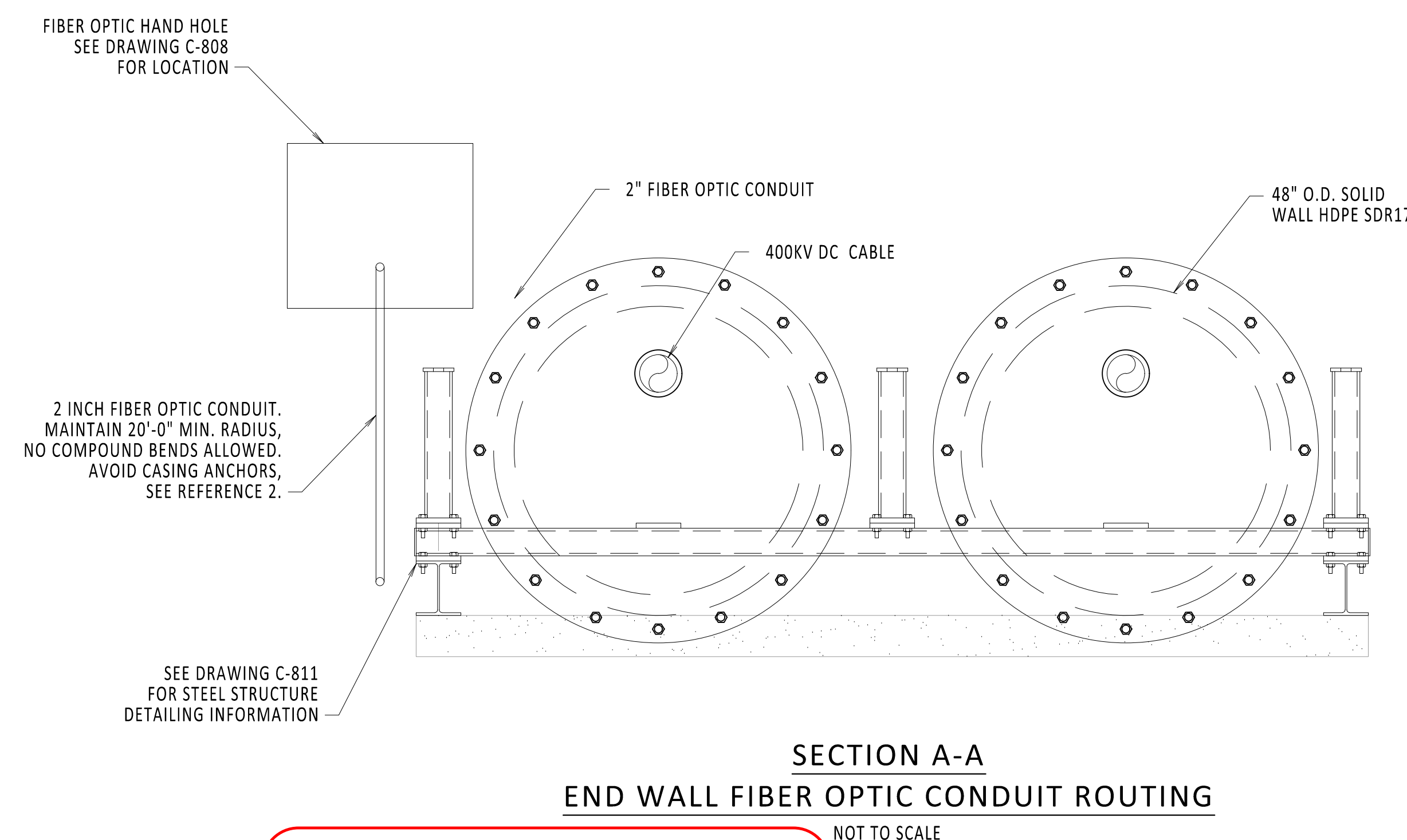
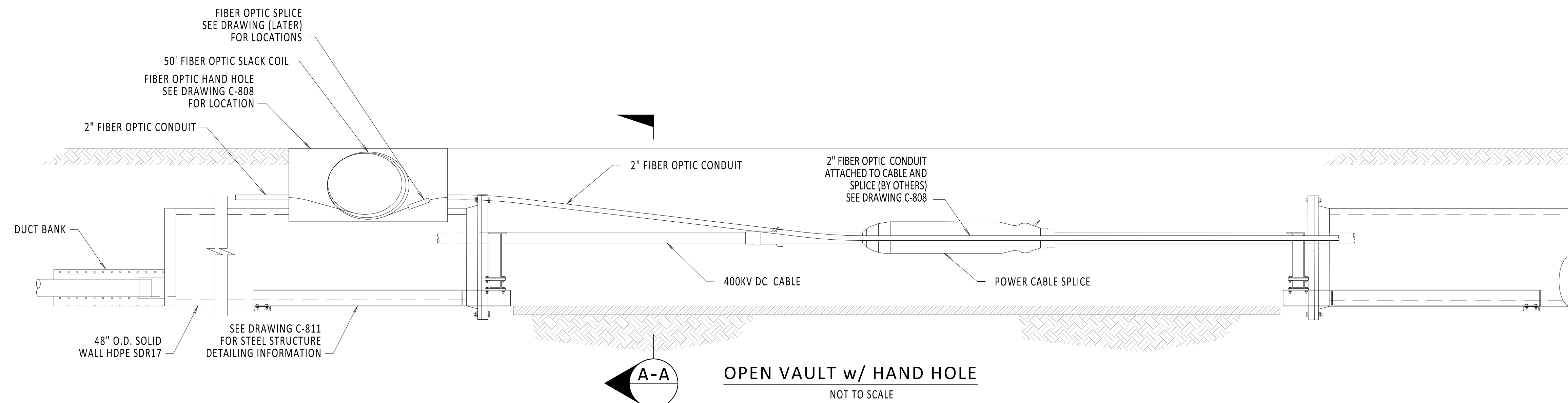


1. ADD HAND HOLE TO ALL OPEN VAULT LOCATIONS.
2. FIBER OPTIC SPLICE CLOSURE ONLY AT SPECIFIC LOCATIONS.

REFERENCE DOCUMENTS

LIST NO.	DOCUMENT NAME	DOCUMENT NO.
1	FRP FIBER COMMUNICATION HAND HOLE	S-771
2	TYPICAL OPEN PIT SPLICE CASING DETAILS	C-808
3	STEEL SUPPORT DETAILS	C-811



**Not for Construction,
for EMCP approval only**



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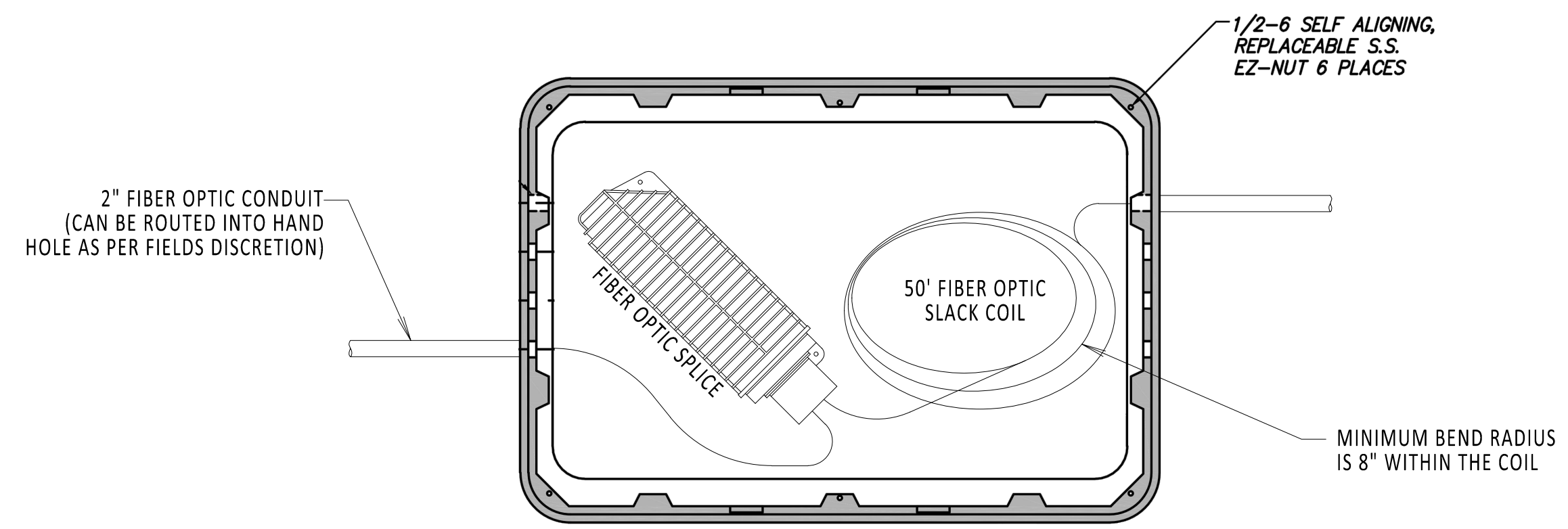
ISSUED FOR PERMITTING

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	09/16/2022	EM&CP REGULATORY RE-SUBMISSION	DM	MK

CHAMPLAIN HUDSON POWER EXPRESS
**OPEN VAULT w/ FIBER OPTICS
HAND HOLE**

KIEWIT PROJECT NO.	21162
CHA PROJECT NO.	066076
DRAWING NO.	C-853
DATE	09/16/2022
SH.NO.	OF XXX

DRAWN BY: TJMG DESIGNED BY: MK APPROVED BY: XX SCALE: REV. NO. DATE: 09/16/2022 SH.NO.: OF XXX

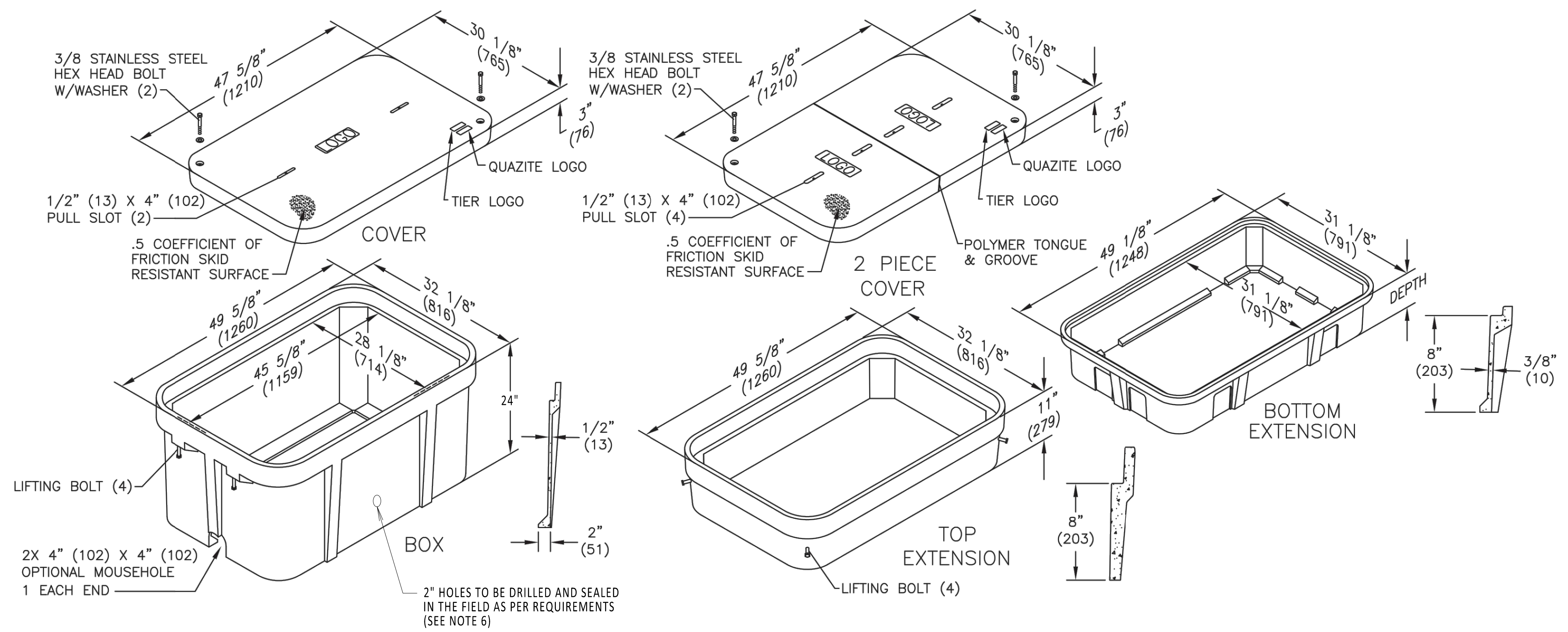


**HAND HOLE
TOP VIEW**
NOT TO SCALE

1. FIBER OPTIC COIL TO BE PLACED IN BOTTOM OF HAND HOLE. OBSERVE MINIMUM BEND RADIUS.
2. SPLICE ALL FIBERS STRAIGHT THROUGH.
3. FIBER OPTIC SPLICE CLOSURE ONLY AT SPECIFIC LOCATIONS. SEE PLAN AND PROFILE FOR DETAILS.
4. GROUNDING REQUIREMENTS TO BE DETERMINED.
5. HAND HOLE AT ALL OPEN SPLICE LOCATIONS. SEE REFERENCE DOCUMENTS 1 AND 2 FOR DETAILS ON HAND HOLE PLACEMENT IN OPEN PIT.
6. DRILLED HOLES ARE INTENDED TO ROUTE FIBER OPTIC CONDUIT AND CAN BE DRILLED AND SEALED ON ANY SIDE OF HAND HOLE AS REQUIRED BY THE FIELD.

REFERENCE DOCUMENTS

LIST NO.	DOCUMENT NAME	DOCUMENT NO.
1	TYPICAL OPEN PIT SPLICE DETAILS	C-808
2	OPEN VAULT w/FIBER OPTIC HAND HOLE	C-853
3	FIBER OPTIC SPLICE DETAILS	C-855
4	HUBBELL QUAZITE (HAND HOLE)	MODEL NO. PG3048BA24



ISOMETRIC VIEW
NOT TO SCALE



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ISSUED FOR PERMITTING

No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
0	03/15/2023	ISSUED FOR CONSTRUCTION	DLM	ASM

CHAMPLAIN HUDSON POWER EXPRESS

FIBER OPTIC HAND HOLE DETAILS

KIEWIT PROJECT NO.	21162
CHA PROJECT NO.	066076
DRAWING NO.	C-854
DATE	03/15/2023
SH.NO.	OF

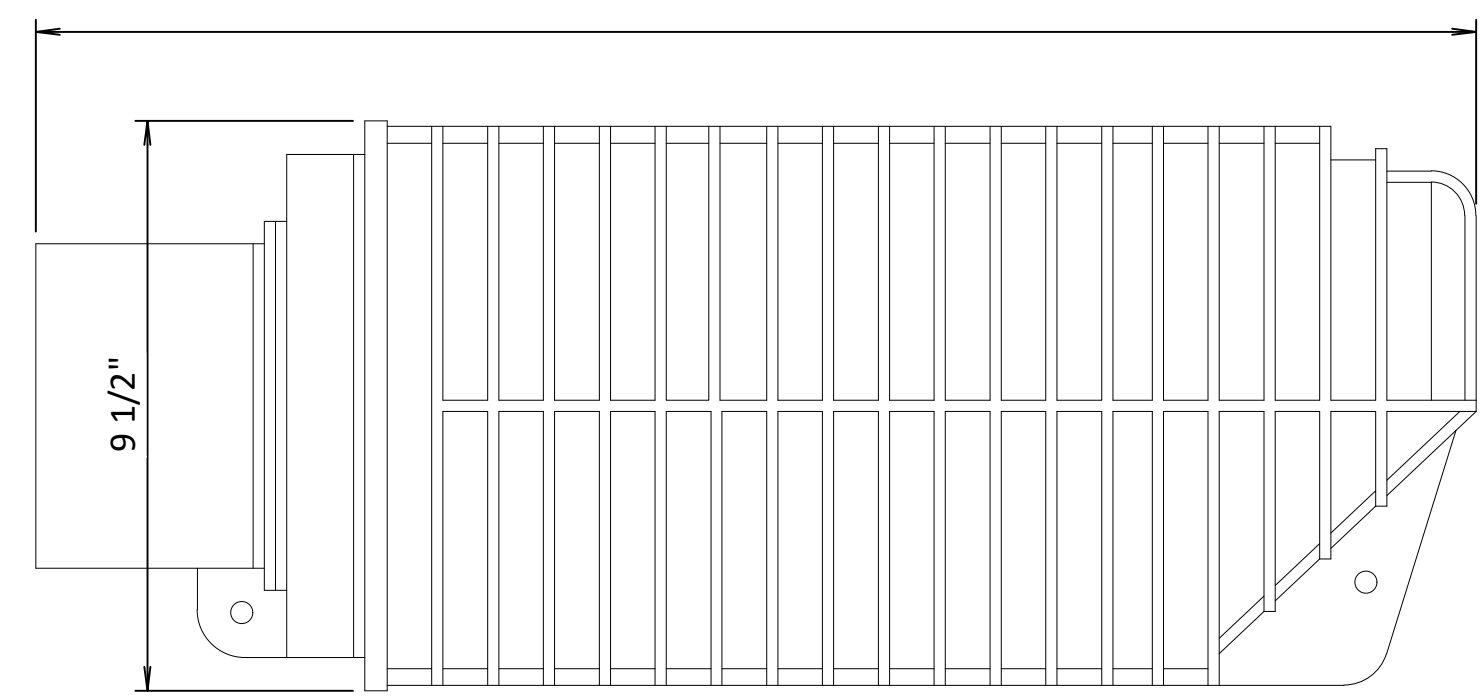
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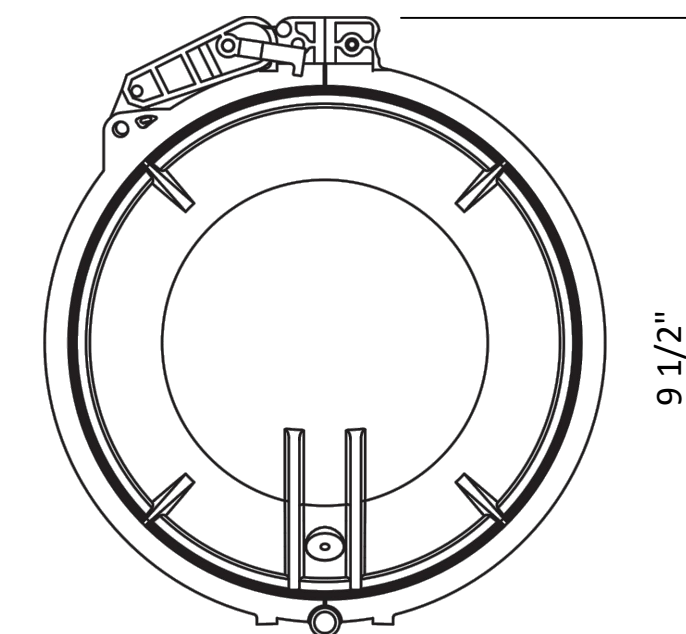
1. MAINTAIN 18" SWEEPS ON ALL CONDUITS.
2. DTS HUT FIBERS WILL SPLICE TO BLUE TUBE FIBER COLORS BLUE, ORANGE, GREEN AND BROWN.
3. SEE REFERENCE DOCUMENTS 2, 3, 4 AND 5 FOR PLACEMENT DETAILS.
4. FIBER OPTIC SPLICE CLOSURE ONLY IN SPECIFIC LOCATIONS. SEE PLAN AND PROFILES FOR DETAILS.

REFERENCE DOCUMENTS

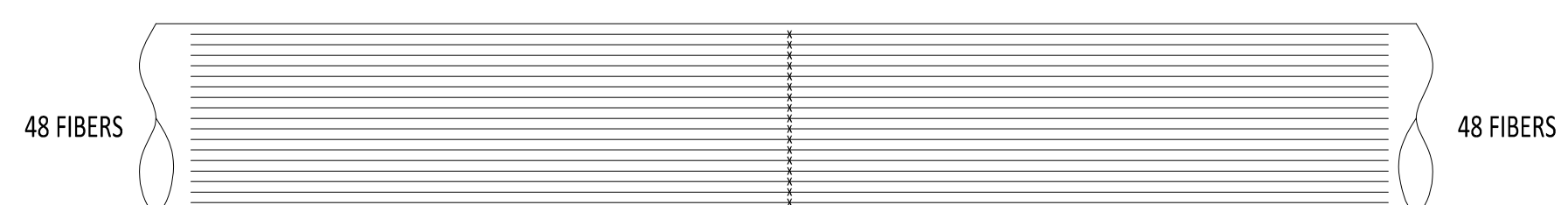
LIST NO.	DOCUMENT NAME	DOCUMENT NO.
1	FIBER OPTIC SPLICE CLOSURE	COMMSCOPE: MODEL NO. FOSC450-B6-6-24-1-B3V
2	TRANSITION VAULT FIBER OPTIC DETAIL	C-850
3	DTS HUT CONNECTION FIBER OPTIC SPLICE AND HANDHOLE	C-851
4	ENCLOSED VAULT w/FIBER OPTICS	C-852
5	OPEN VAULT w/FIBER OPTICS HAND HOLE	C-853



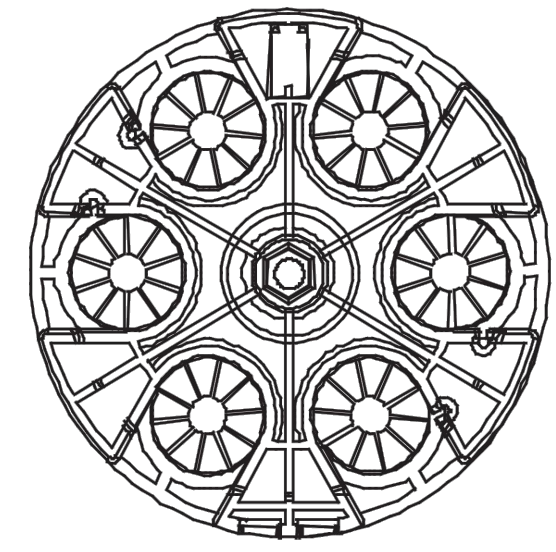
FIBER OPTIC SPLICE CLOSURE
NOT TO SCALE



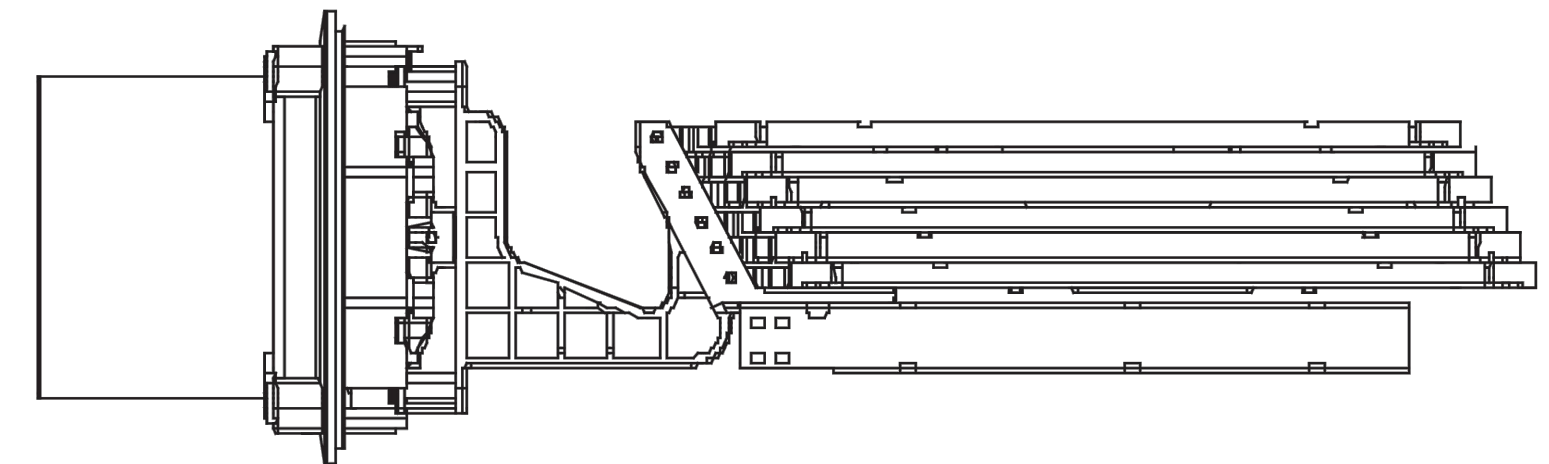
FIBER OPTIC SPLICE CLOSURE
NOT TO SCALE



FIBER OPTIC CABLE SPLICE
DIAGRAM TYPICAL
NOT TO SCALE



FIBER OPTIC SPLICE CLOSURE
GEL-BLOCK PROFILE
NOT TO SCALE



FIBER OPTIC SPLICE CLOSURE
INSIDE DIAGRAM
NOT TO SCALE



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0	03/15/2023	ISSUED FOR CONSTRUCTION	DLM	ASM

CHAMPLAIN HUDSON POWER EXPRESS

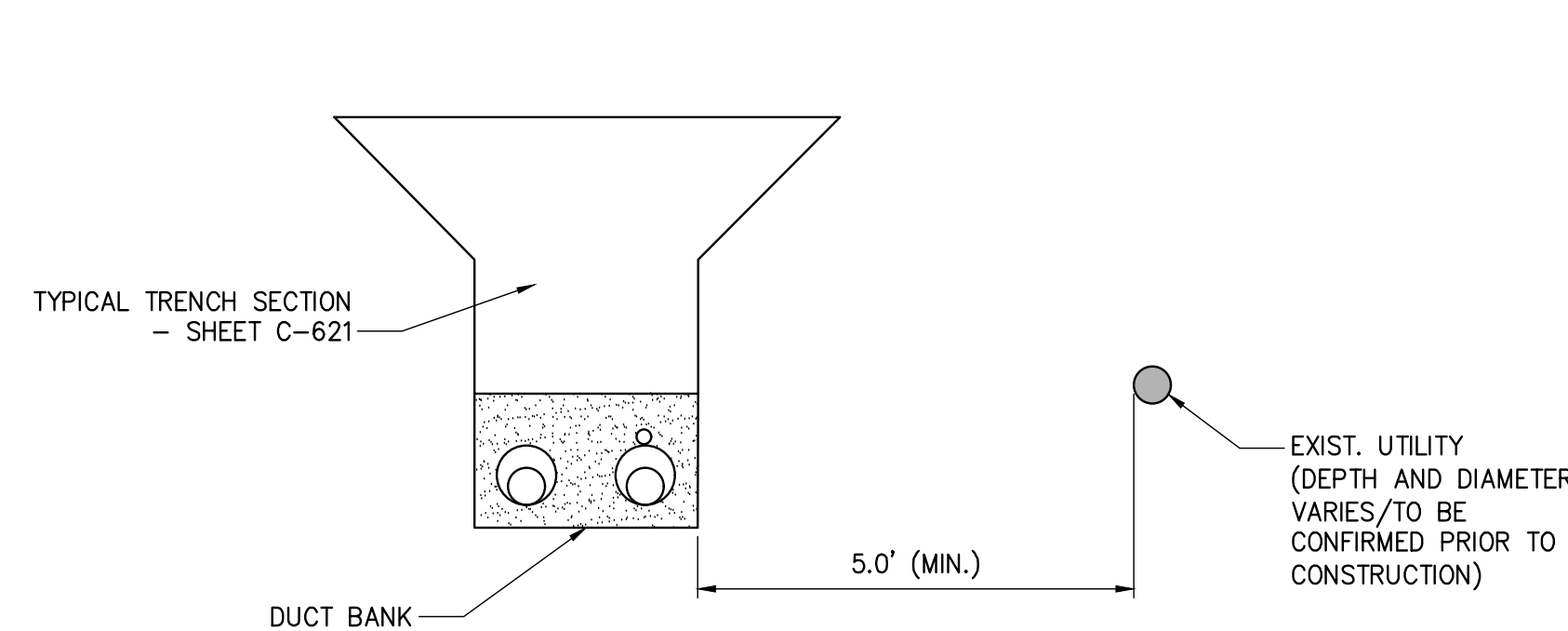
FIBER OPTIC SPLICE DETAILS

DRAWN BY: DLM DESIGNED BY: NM APPROVED BY: MK SCALE: 0

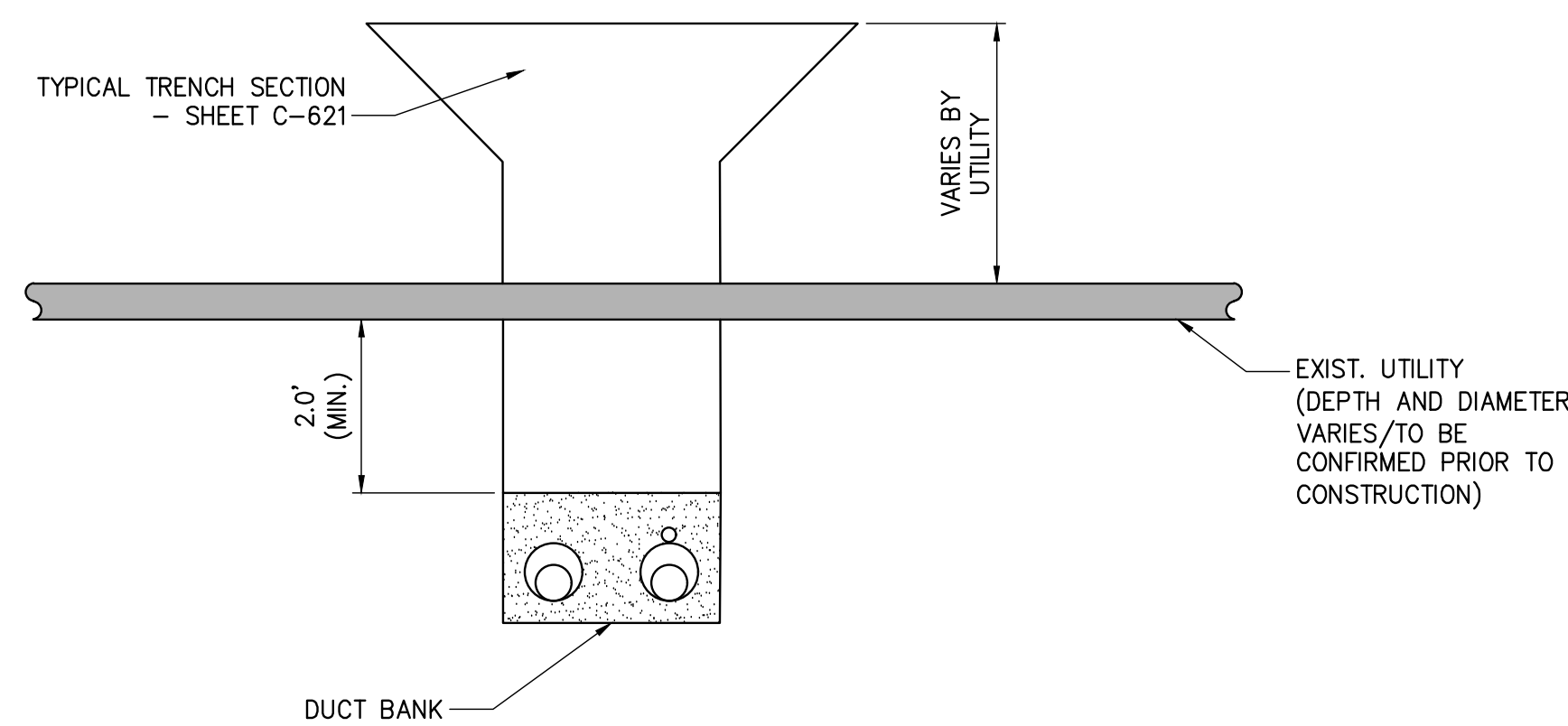
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CHA PROJECT NO.	066076
DRAWING NO.	C-855
DATE	03/15/2023
SH.NO.	OF

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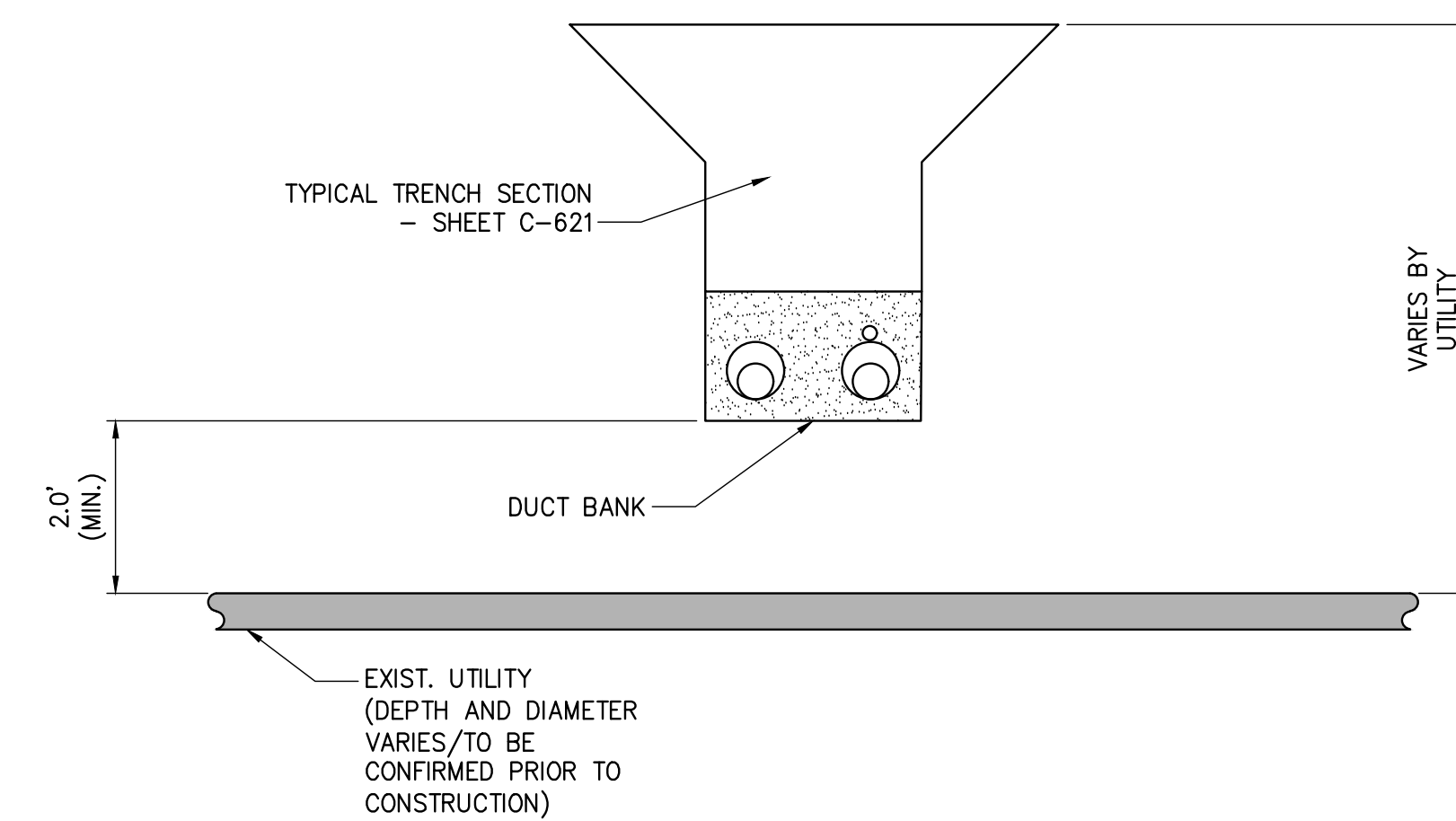
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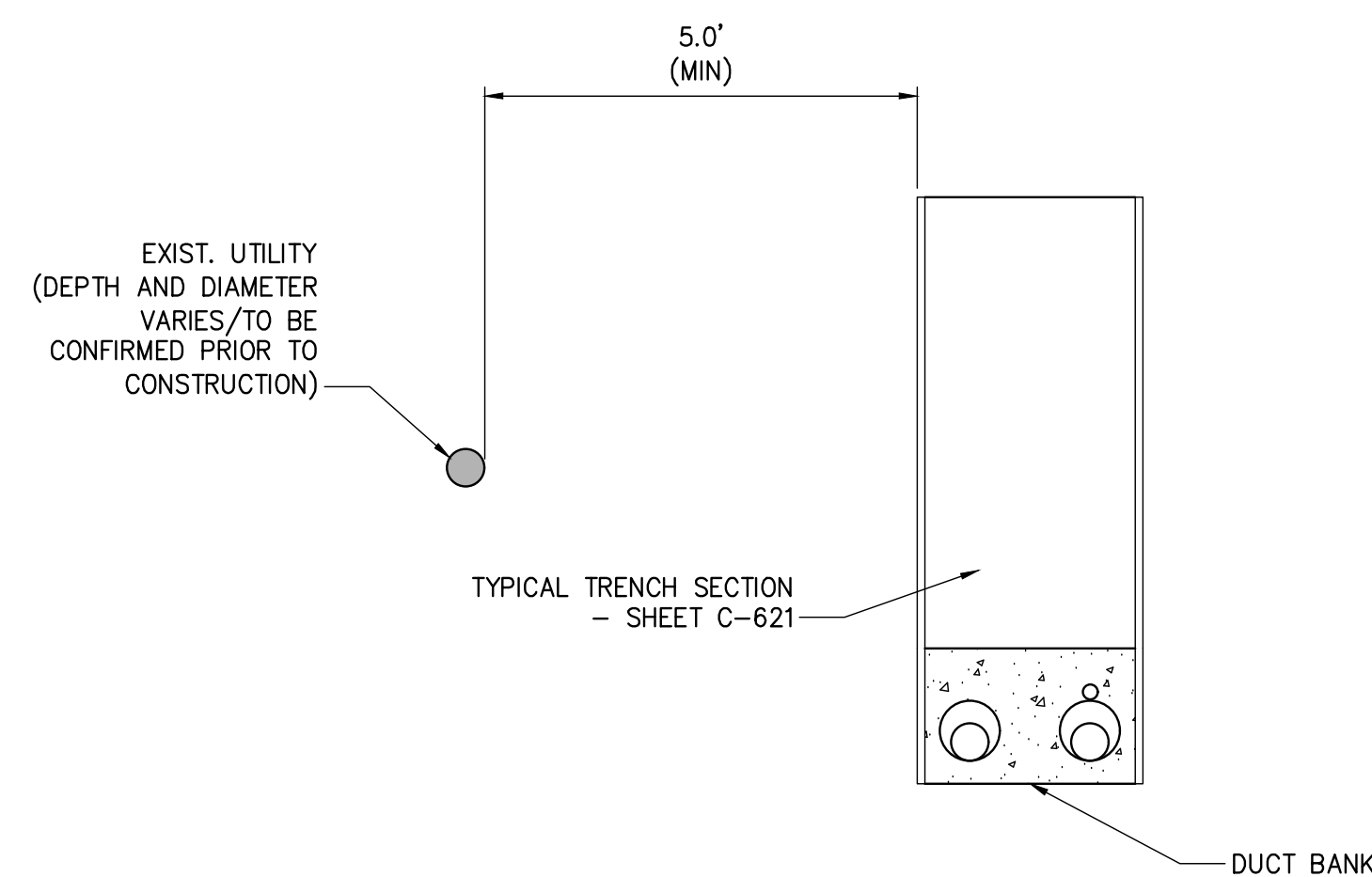
1 OPEN TRENCH - HORIZONTAL SEPARATION NOT TO SCALE



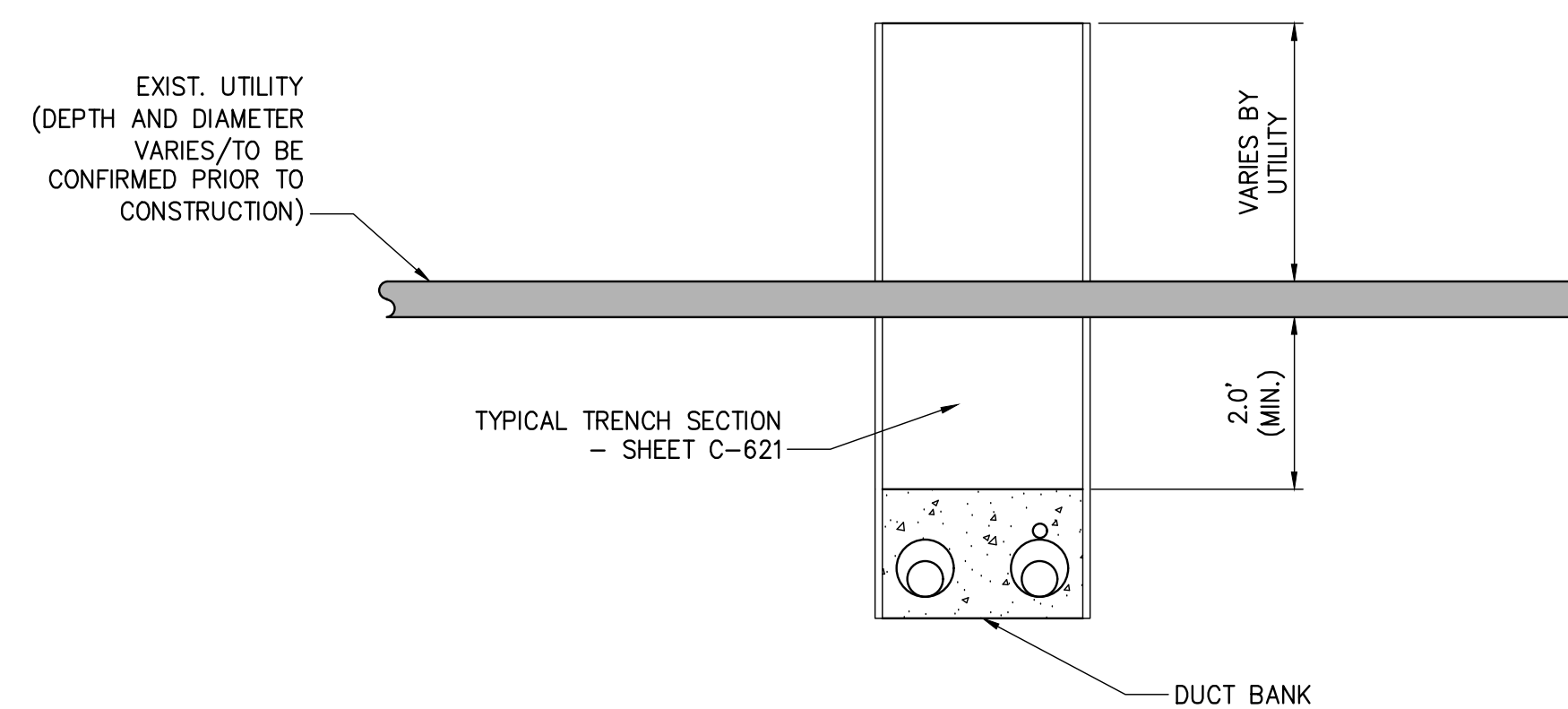
3 OPEN TRENCH - VERTICAL SEPARATION (UNDER) NOT TO SCALE



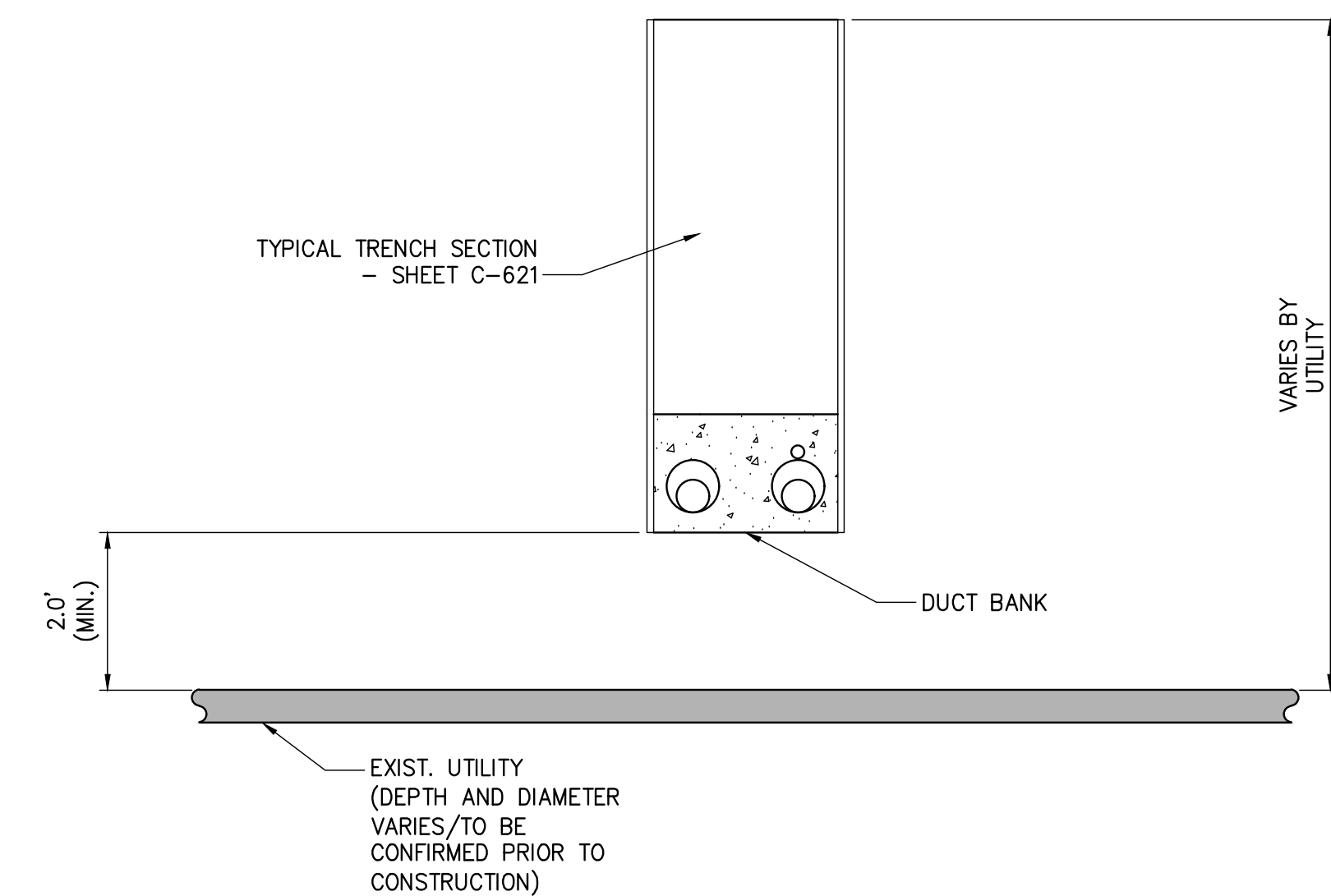
5 OPEN TRENCH - VERTICAL SEPARATION (OVER) NOT TO SCALE



2 TYPICAL DUCTBANK IN ROADWAY - HORIZONTAL SEPARATION NOT TO SCALE



4 TYPICAL DUCTBANK IN ROADWAY - VERTICAL SEPARATION (UNDER) NOT TO SCALE



6 TYPICAL DUCTBANK IN ROADWAY - VERTICAL SEPARATION (OVER) NOT TO SCALE



TETRA TECH ENGINEERING AND SURVEYING P.C. (A NEW YORK PROFESSIONAL CORPORATION)

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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP
F	3/17/2023	FINAL SUBMISSION	BV	TK
E	01/24/2023	DRAFT FINAL SUBMISSION	BV	TK
D	11/16/2022	PRELIMINARY DRAFT FINAL SUBMISSION	BV	TK
C	04/29/2022	60% DESIGN SUBMISSION	BV	TK
B	03/22/2022	PRELIMINARY DESIGN DEVELOPMENT	BV	TK
A	02/14/2022	PRELIMINARY PROGRESS	BV	TK

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 11 (PACKAGE 7A) - CSX: CATSKILL UTILITY TYPICAL SEPARATION DETAILS

KIEWIT PROJECT NO.	21162
TT PROJECT NO.	204-3701
DRAWING NO.	C-901

DRAWN BY:	AR	DESIGNED BY:	BV	APPROVED BY:	TK	SCALE	AS SHOWN	DATE	03/17/2023
						REV. NO.	F	SH.NO.	OF

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