

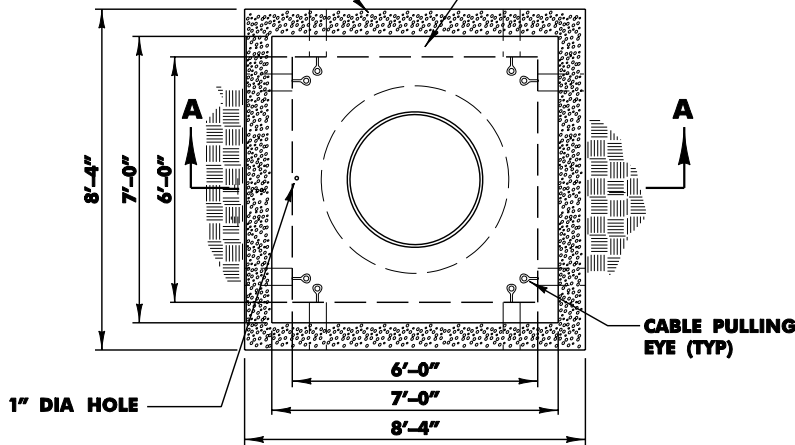
# 6' X 6' PRECAST MANHOLE CUSTOMER INSTALLATION

HS 20 - 44 LOADING  
MAXIMUM CABLE SIZE #10

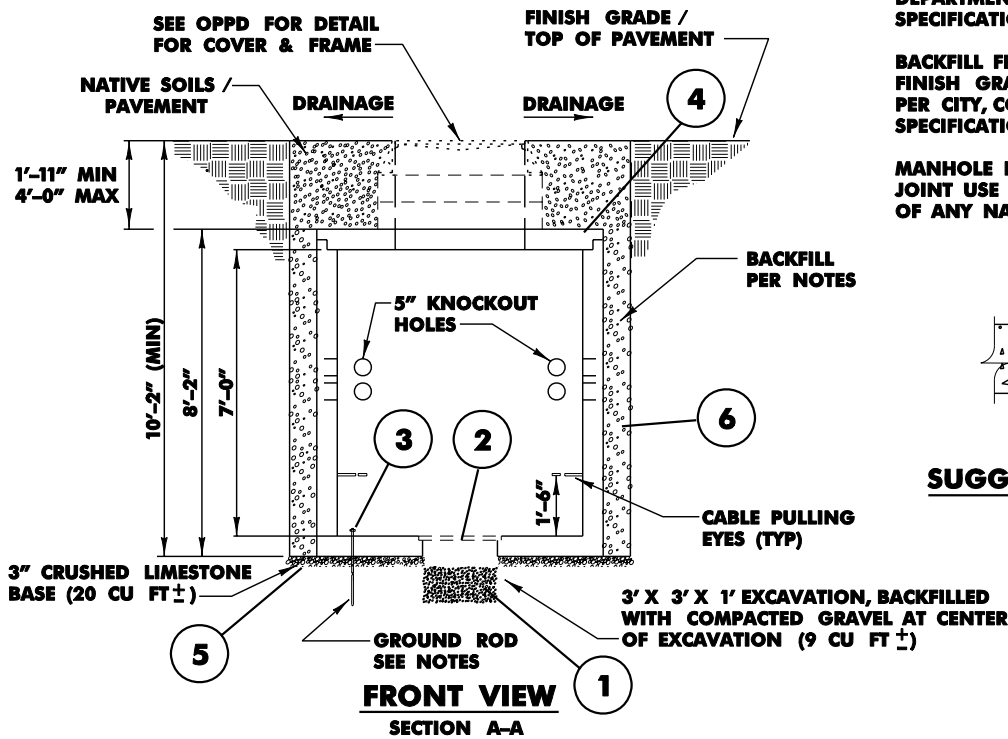
STD 8.08.9

8'-4" X 8'-4" X 10'-2" DEEP (MIN)  
EXCAVATION (706 CU FT ±)

6' X 6' PRECAST  
CONCRETE MANHOLE



**TOP VIEW**



**FRONT VIEW**

SECTION A-A

**NOTES:**

CONTACT ENGINEER IF SOIL MOISTURE / GROUND WATER IS ENCOUNTERED AT DEPTH OF LESS THAN 3'-0" BELOW GRADE.

TOP PORTION OF MANHOLE = 2.42 TONS  
BOTTOM PORTION OF MANHOLE = 8.75 TONS

DRIVE 5/8" X 10' GROUND ROD (000002821) THRU 1" HOLE IN BOTTOM OF PRECAST MANHOLE PRIOR TO THE SETTING OF THE TOP OF MANHOLE. EXTEND GROUND ROD 6" ABOVE MANHOLE FLOOR.

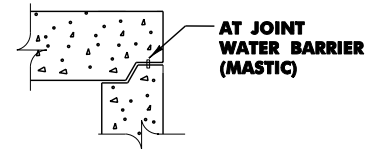
WATER BARRIER (MASTIC) PROVIDED BY MANHOLE MANUFACTURER MUST BE INSTALLED BETWEEN TOP AND BOTTOM PORTIONS.

COLLARS SHALL BE SHIMMED & GROUTED ON MANHOLE ROOF TO ATTAIN REQUIRED SLOPE PER DIRECTION OF ENGINEER.

BACKFILL TO TOP OF MANHOLE WITH "FLOWABLE FILL" PER NEBRASKA DEPARTMENT OF ROADS (NDOR) SPECIFICATIONS.

BACKFILL FROM TOP OF MANHOLE TO FINISH GRADE WITH COMPACTED SOIL PER CITY, COUNTY OR STATE SPECIFICATIONS, WHICHEVER GOVERNS.

MANHOLE IS FOR OPPD'S EXCLUSIVE USE. JOINT USE WITH CUSTOMER EQUIPMENT OF ANY NATURE SHALL NOT BE ALLOWED.



**SUGGESTED TYPICAL JOINT**

BILL OF MATERIAL		
ITEM	DESCRIPTION	REQ'D
1	GRAVEL	1/3 CU YD
2	STEEL GRATING, 2' X 2'	1
3	GROUND ROD, 5/8" X 10'	1
4	MANHOLE, 6' X 6'	1
5	CRUSHED LIMESTONE	3/4 CU YD
6	FLOWABLE BACKFILL	7 CU YDS

FLOWABLE FILL (NDOR)	
MATERIAL	WEIGHT
CEMENT	50 LBS
FLY ASH	200 LBS
WATER	420 LBS
SAND	2700 LBS
AEA	10 OZ/CY

COMPRESSIVE STRENGTH (28 DAYS) 85-175 PSI  
AIR CONTENT FOR ALL MIXES WILL BE IN THE RANGE OF 10.0% TO 16.0%