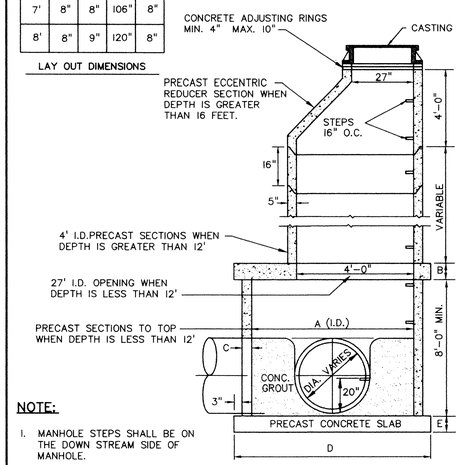
RECORD DRAWINGS

PRIME CONTRACTOR/UTILITIES: C.W. HOULE, INC.
CURB & GUTTER: SCHMIDT CURB CO.
STREETS: BAUERLY BROS., INC.
INSPECTION: RALPH BADER, HOWARD R. GREEN CO.
SURVEY: JOHN OLIVER & ASSOCIATES, INC.
EARTHWORK: NORTH PINE AGGREGATE, INC.
RECORD DRAWINGS: FRED FRITSCHEL, JOA
CONSTRUCTED: UTILITIES 1996, STREETS 1997

LARGE DIAMETER MANHOLE – STORM SEWER (D-02)

A	B	C	D	E
5'	8"	6"	78"	8"
6'	8"	7"	92"	8"
7'	8"	8"	106"	8"
8'	8"	9"	120"	8"

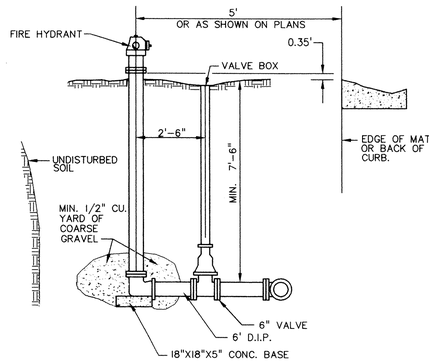
LAY OUT DIMENSIONS



NOTE:

1. MANHOLE STEPS SHALL BE ON THE DOWN STREAM SIDE OF MANHOLE.
2. MANHOLE JOINTS TO BE MADE BY CEMENT MORTAR INSIDE AND OUTSIDE.
3. WALLS TO BE CONSTRUCTED PREFERABLY OF PRECAST SECTIONS BUT CONCRETE SEWER BLOCKS MAY BE USED TO GET ABOVE LARGEST PIPE IN MANHOLE.
4. MANHOLE SLAB(S) SHALL BE CRETEX TYPE II OR APPROVED EQUAL, DESIGNED FOR AASHTO HS 20 HIGHWAY LOADING PLUS DEAD LOAD.

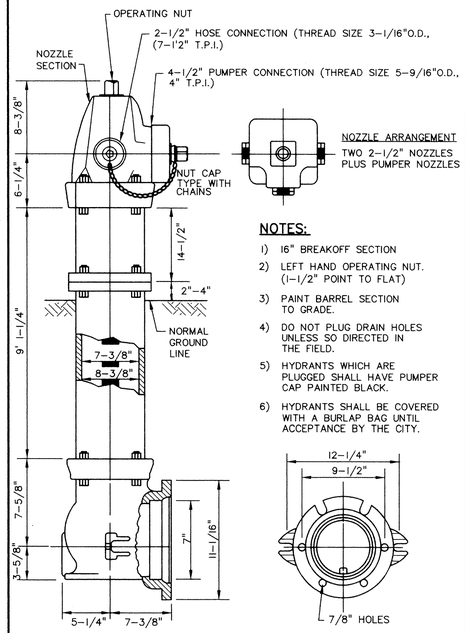
TYPICAL HYDRANT AND VALVE BOX (W-02)



NOTES:

1) HYDRANTS TO BE ORDERED FOR 8'-6" BURY. IN AREAS OF EXTRA DEPTH ON THE WATERMAIN, HYDRANT EXTENSIONS MAY BE REQUIRED.
2) HYDRANT AND VALVE SHALL TIED TO THE TEE AT MAIN WITH 2-3/4" DIAMETER TIE RODS. ALL TIE RODS TO BE COAL TAR COATED AFTER INSTALLATION.
3) PROVIDE 4' HIGH FLEX STAKE WITH EACH HYDRANT.

PACER TRAFFIC FLANGE HYDRANT (W-01)

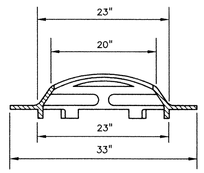


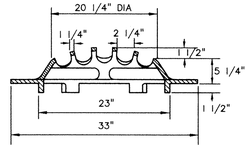
NOTES:

1) 16" BREAKOFF SECTION
2) LEFT HAND OPERATING NUT. (1-1/2" POINT TO FLAT)
3) PAINT BARREL SECTION TO GRADE.
4) DO NOT PLUG DRAIN HOLES UNLESS SO DIRECTED IN THE FIELD.
5) HYDRANTS WHICH ARE PLUGGED SHALL HAVE PUMPER CAP PAINTED BLACK.
6) HYDRANTS SHALL BE COVERED WITH A BURLAP BAG UNTIL ACCEPTANCE BY THE CITY.

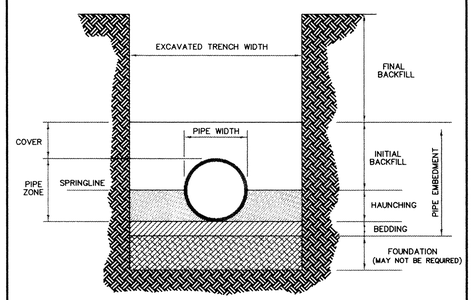
STANDARD INLET CASTING – STOOL TYPE (C-07)

NEENAH No. R-4342 STOOL TYPE CASTING OR APPROVED EQUAL





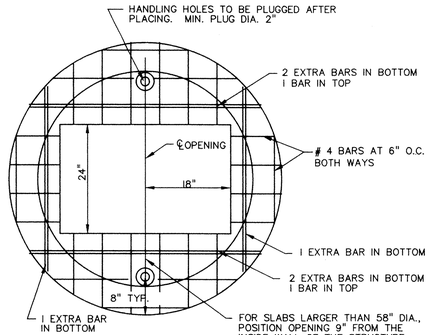
PLASTIC PIPE BEDDING (S-SP-06)



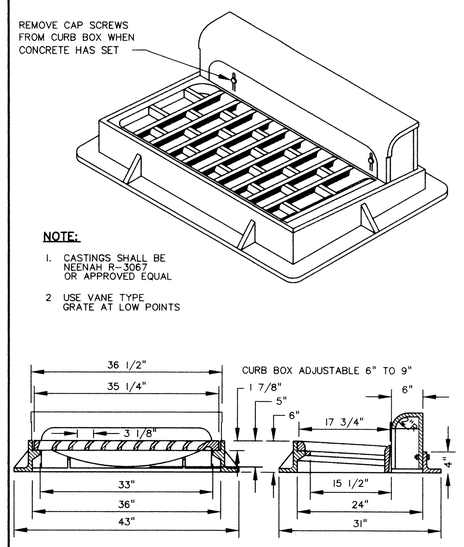
NOTE:
BACKFILL SHALL CONFORM TO ASTM D-2321 "RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE"

PIPE EMBEDMENT MATERIAL SHALL BE CLASS I OR CLASS II WITH 100% PASSING A 3/4 INCH SIEVE AND NOT MORE THAN 10% PASSING A No. 200 SIEVE

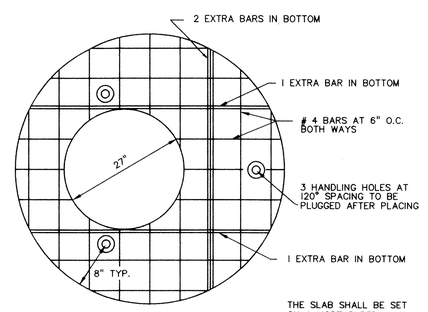
H.S. 20 DESIGN MANHOLE SLAB-TOP – RECTANGULAR (D-05)



STANDARD INLET CASTING



H.S. 20 DESIGN MANHOLE SLAB-TOP – CIRCULAR (D-04)



REV NO.	DATE	DESCRIPTION
1	1/29/98	RECORD DRAWINGS

DATE: 9/4/96
DESIGN BY: DC
DRAWN BY: BG
CHECKED BY: TM
DWG FILE: CC3DET3.
TEXT FILE:
FILE NO.: 6719.40

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Signed: [signature]
Date: 10/3/96 Reg. No. 20383

John Oliver & Associates, Inc.
Civil Engineering, Land Surveying, Land Planning
580 Dodge Avenue
Elk River, MN 55330
(612)441-8072 (FAX)441-5665
201 W. Travelers Trail, Suite 200
Burnsville, MN 55337
(612)894-3045 (FAX)894-3049

COUNTRY CROSSING
THIRD ADDITION
DETAILS

SHEET NO. 8 OF 8

1247