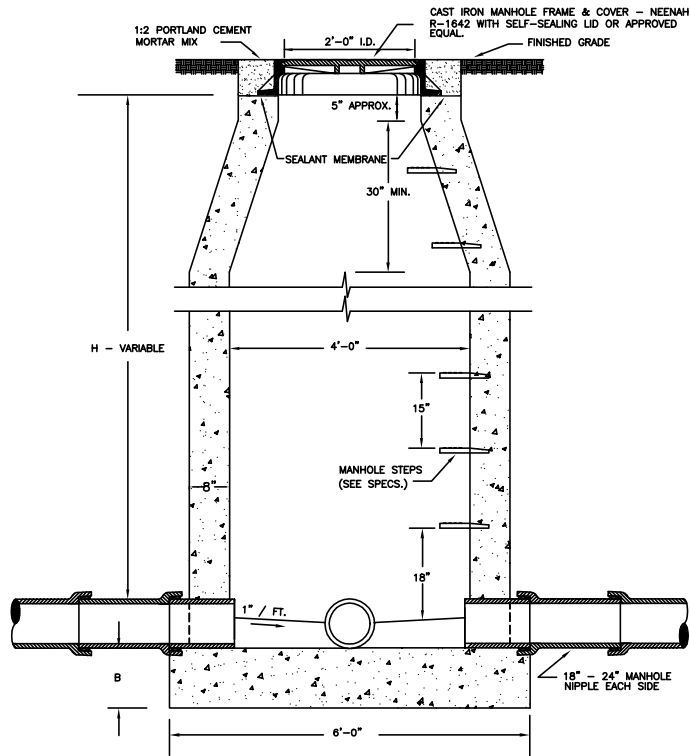
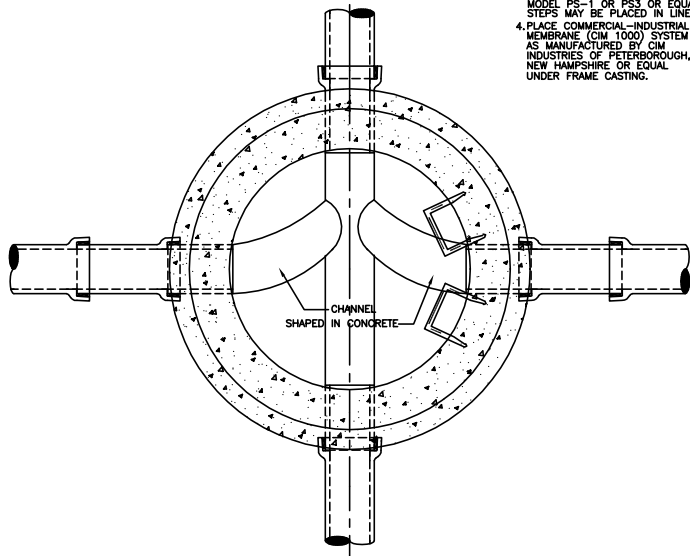


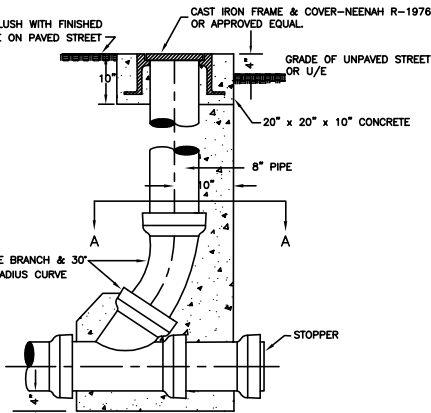


HALF SECTION

- NOTES:
1. CONCRETE IN WALLS & BOTTOM SHALL BE 3,500 P.S.I. CONCRETE.
 2. CASTINGS SHALL CONFORM TO A.S.T.M. A48 FOR GRAY CAST IRON. SEE SPECIFICATIONS.
 3. STEPS SHALL BE M.A. INDUSTRIES, MODEL PS-1 OR PS3 OR EQUAL. STEPS MAY BE PLACED IN LINE.
 4. PLACE COMMERCIAL-INDUSTRIAL MEMBRANE (CIM 1000) SYSTEM AS MANUFACTURED BY CIM INDUSTRIES OF PETERBOROUGH, NEW HAMPSHIRE OR EQUAL UNDER FRAME CASTING.

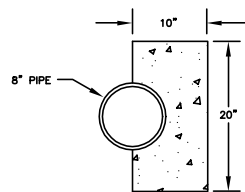


PLAN
STANDARD
MANHOLE DETAIL
NOT TO SCALE



CLEANOUT DETAIL "A"
NOT TO SCALE

NOTE:
TRENCH UNDER CONCRETE COLLAR TO BE COMPACTED TO DENSITY EQUAL TO ADJACENT UNDISTURBED SOIL.



SECTION A-A

MANHOLE HEIGHT IN FT.	DEPTH BELOW PIPE IN IN.	DEPTH OF BASE IN IN.
0' TO 8'	8"	12"
8' TO 12'	10"	14"
12' & ABOVE	12"	16"

The City of End
401 West End
End, Oklahoma 73001
Telephone: (800) 234-8846
Fax: (800) 234-8846

Contacts:

Robert Hitt, Director of Engineering Services, Est. 344
Joan Britney, Civil Engineer, Est. 348



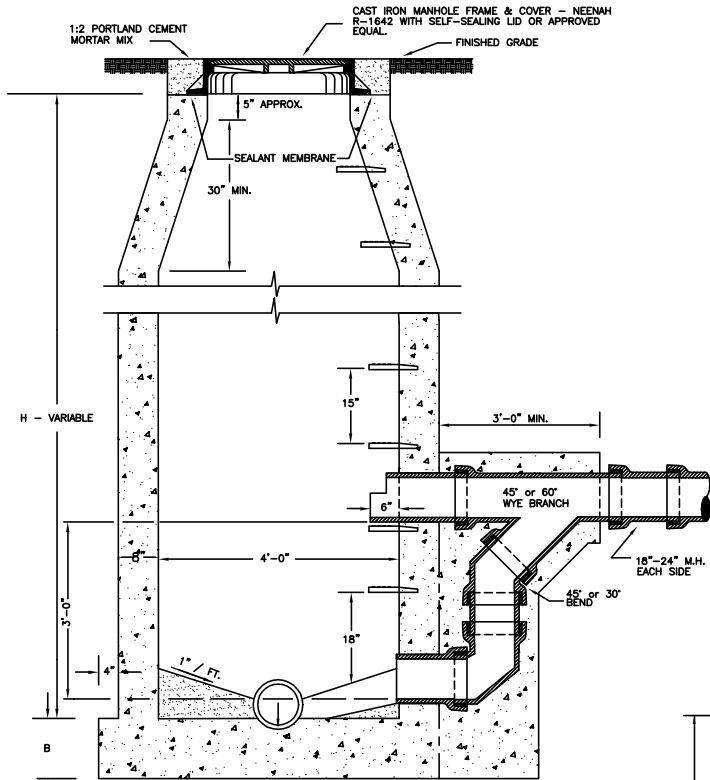
The City of End, Oklahoma

REVISIONS	Date	Description
1	10/10/94	This Sheet

Project Number:	Project Location:
CAST-IN-PLACE CONCRETE MANHOLE & CLEANOUT DETAILS	
Sheet Title:	Project Title:
	SWD - 7



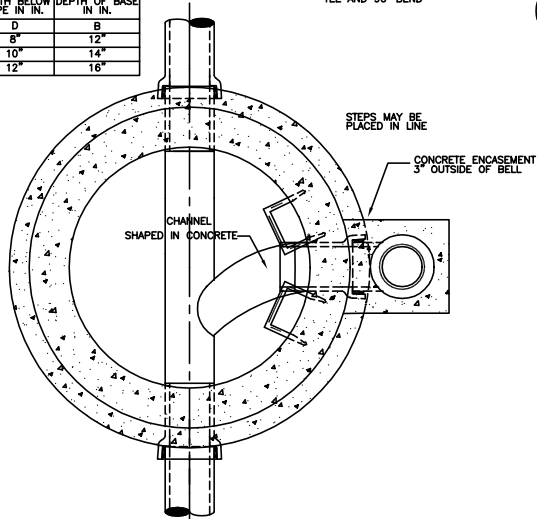
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Drawn By: P.B.
Designed By: R.H.
Approved By: R.H.
Sheet: of



HALF SECTION

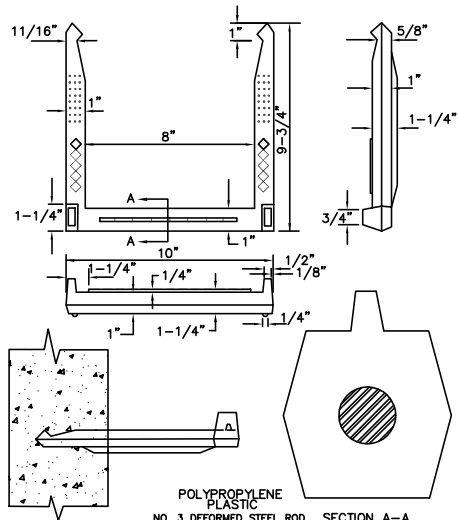
NOTE:
CONCRETE IN WALLS & BOTTOM SHALL BE 3,500 P.S.I. CONCRETE. IF DROP IS LESS THAN 3'-0" USE TEE AND 90° BEND

MANHOLE HEIGHT IN FT.	DEPTH BELOW PIPE IN IN.	DEPTH OF BASE IN IN.
0' TO 8'	8"	12"
8' TO 12'	10"	14"
12' & ABOVE	12"	16"

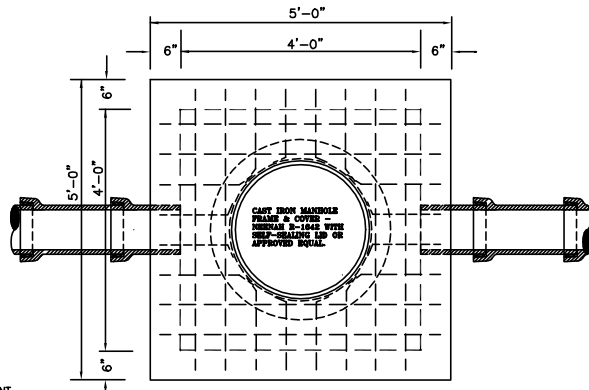


PLAN
DROP
MANHOLE DETAIL
NOT TO SCALE

- NOTES:
1. CIRCULAR, 4' FT. INSIDE DIAMETER, MANHOLE WITH 8 INCH. WALLS AND CIRCULAR FLAT TOP OF THE SAME STRUCTURAL CHARACTERISTICS MAY BE SUBSTITUTED FOR THE RECTANGULAR MANHOLE.
 2. CASTINGS SHALL CONFORM TO A.S.T.M. A48 FOR GRAY CAST IRON.
 3. STEPS SHALL BE M.A. INDUSTRIES, MODEL PS-1 OR PS3 OR EQUAL.
 4. PLACE COMMERCIAL-INDUSTRIAL MEMBRANE (CIM 1000) SYSTEM AS MANUFACTURED BY CIM INDUSTRIES OF PETERBOROUGH, NEW HAMPSHIRE OR EQUAL UNDER FRAME CASTING.



PS-1 OR PS3
MANHOLE STEP
NOT TO SCALE



SHALLOW MANHOLE
FOR UNPAVED AREAS ONLY
NOT TO SCALE

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End, Oklahoma 73001
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Contacts:

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The City of End, Oklahoma

REVISIONS	Date	Description
1	10/10/94	This Sheet

Project Number:	Project Location:
DROP MANHOLE SHALLOW MANHOLE DETAIL MANHOLE STEP DETAIL	
Sheet Title:	Project Title:
	SWD - 8



Date: 8/1/81
Scale: NO SCALE
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Drawn By: P.B.
Designed By: R.H.
Approved By: R.H.
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