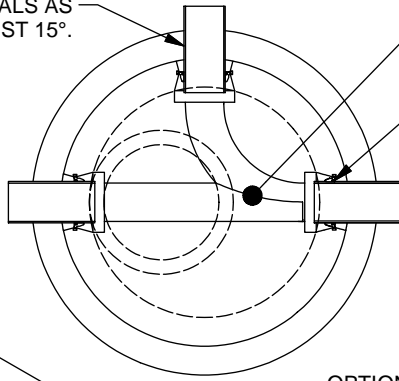


ADDITIONAL MATERIALS AS REQUIRED TO NEAREST 15°.

PRECAST CHANNEL AS REQUIRED.

A-LOK EXCELL OR Z-LOK GASKETS.



MANHOLE FRAME AND COVER PER STANDARD PLAN 210.

OPTIONAL 3.00 GRADE RING

REDUCING RING

12.00 MIN  
24.00 MAX

LANE P-14105 GRADE RINGS

Ø24.00

Ø30.00

6.00

24.00, 27.00  
OR 36.00

LANE P-14850 TYPICAL

EQUALLY SPACED  
16.00 MAX.

SHAFT VARIES  
12.00 - 60.00

18.00  
MAX

30.00

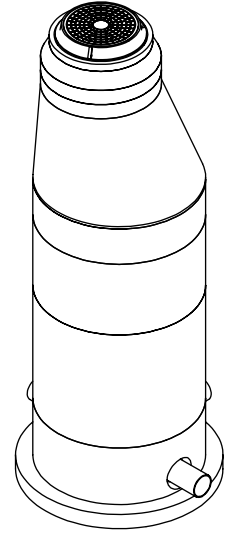
9.00

6.00

6.00

Ø72.00

CONTRACTOR TO FILL ANULAR SPACE AFTER PIPE INSTALLATION.



ISOMETRIC VIEW

**NOTES:** UNLESS OTHERWISE SPECIFIED.

1. ALL DIMENSIONS ARE IN DECIMAL INCHES.
2. PRECAST MATERIALS AND MANUFACTURING METHODS SHALL CONFORM TO ASTM C-478.
3. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH F C= 4000 PSI AT 28 DAYS.
4. THE PORTLAND CEMENT USED IN THE PRECAST SECTIONS SHALL MEET THE REQUIREMENTS OF TYPE II/V HIGH SULFATE RESISTANT CEMENT IN ACCORDANCE WITH ASTM C-150.
5. RING AND COVER SHALL BE GREY CAST IRON CONFORMING TO ASTM A-48 CLASS 35B.
6. RING AND COVER PER SPPWC 210-2.
7. STEEL REINFORCED POLYETHYLENE STEPS SHALL CONFORM TO SPPWC AND APWA 636-1.
8. PRE-CAST JOINTS SHALL BE SEALED USING MASTIC.
9. PIPE TO MANHOLE CONNECTIONS SHALL BE MADE USING X-CEL, A-LOK OR Z-LOK FLEXIBLE CONNECTORS BY A-LOK PRODUCTS. CONNECTORS SHALL MEET THE REQUIREMENTS OF ASTM C-923 AND SSPWC 208-6.1.1.



TITLE MANHOLE, 48 DIA, PRECAST BASE-APWA 200

APPROVED BY	DATE	APPROVED BY	DATE	DRAWN BY	DATE	MODEL NO.	SH 1 OF 1
				F. ANSALDI	11/15/2005	MH4830PB-APWA	