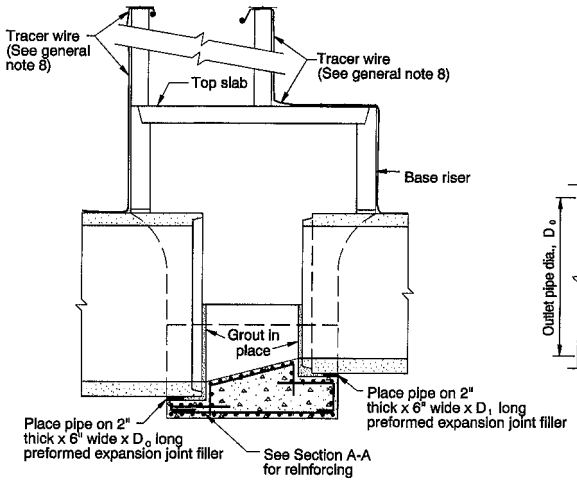
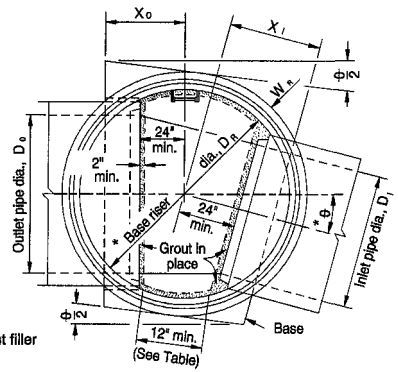
rd346.dgn 06-JAN-2011

RD346



DEVELOPED SECTION ALONG PIPE CENTERLINE

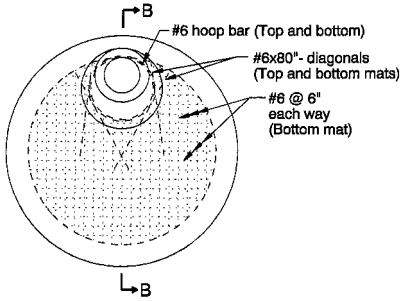


MANHOLE BASE PLAN

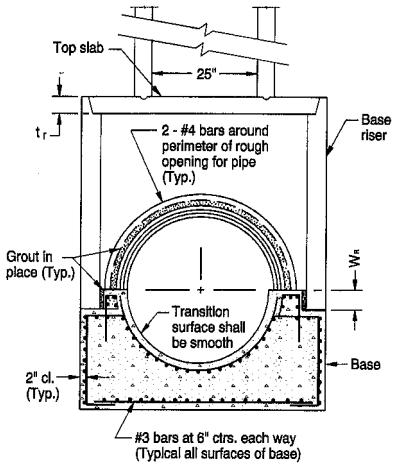
Inlet pipe dia. D_I when $D_I > D_o$

* Base Riser			Outlet pipe dia	*Theta. max when	Base X_o $X_I=X_o$ when	Base X_I when $D_I < D_o$		
D_R	W_R	tr	D_o D_I	$D_I=D_o$	$D_I=D_o$	$D_I=(D_o-6)$	$D_I=(D_o-12)$	$D_I=(D_o-18)$
60"	6"	10"	30"	75°	29"	32"	33"	34⅝"
72"	7"	10"	36"	67°	33"	36"	37¾"	39½"
72"	7"	10"	42"	60°	33"	36"	37¾"	39½"
84"	8"	10"	48"	54°	36"	39"	41"	43⅜"
84"	8"	10"	54"	49°	36"	39"	41"	43⅜"
96"	9"	12"	60"	45°	39"	42"	45⅜"	47⅞"
96"	9"	12"	66"	42°	39"	42"	45⅜"	47⅞"
108"	10"	12"	72"	39°	42"	45"	48¾"	51½"
108"	10"	12"	78"	36°	42"	45"	48¾"	51½"
120"	11"	12"	84"	34°	44"	48"	51¾"	54⅞"
120"	11"	12"	90"	32°	44"	48"	51¾"	54⅞"
126"	11½"	12"	96"	30°	45"	51"	54⅝"	56½"

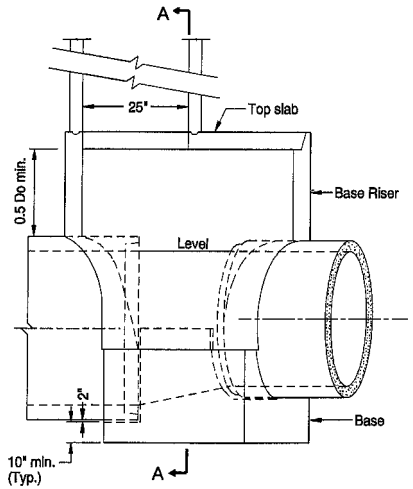
* A special design using a larger Base Riser diameter D may be required to obtain specified 12" min. dimension when ϕ angle exceeds θ_R max.



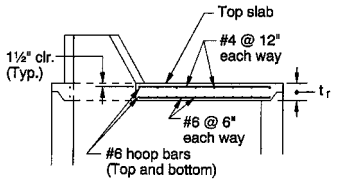
MANHOLE TOP SLAB PLAN
(Bottom reinf. mat shown)
(Manhole I.D. >4', Δ10' 6")



SECTION A-A



MANHOLE BASE ELEVATION



SECTION B-B

GENERAL NOTES FOR ALL DETAILS:

1. All concrete shall be Class 4000. All precast sections shall conform to requirements of ASTM C478.
2. All reinforing steel shall conform to ASTM Specification A706 or AASHTO M31 (ASTM A615), Grade 60. The following splice lengths shall be used (unless shown otherwise):

Bar Size	4	5	6
Uncoated	16"	20"	24"

3. All reinforcement shall be placed 2" clear of the nearest face of the concrete unless shown otherwise.
4. Eccentric reducing cones or eccentric reducing flat slabs designed in accordance with AASHTO M199 shall be placed on top of the base riser as required by the contract plans. Eccentric reducing flat slabs shall be designed to support a load of 120 lb/ft in addition to the dead load of the slab, the risers above the slab, and the earth overburden above the slab.
5. Base riser to be pre-cast unless otherwise shown on the plans.
6. Cast-in-Place concrete, shown thus:
7. See Std. Drg. RD336 for manhole steps details, and flat-top slab orientation.
8. See Std. Drg. RD336 for tracer wire details.
9. Ladder with notched safety rail and removable extention is reqd. for manholes with depths between 24'-0" and 50'-0".

CALC. BOOK NO. _____ BASELINE REPORT DATE _____

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

OREGON STANDARD DRAWINGS

LARGE PRECAST MANHOLE

2008

DATE	REVISION DESCRIPTION
01-2011	REVISED & ADDED NOTES

Effective Date: June 1, 2011 - November 30, 2011

RD346