

**Sub: Construction Management System - Circular No. - 72.**

**Ref: Guidelines for reduction in cover for DI Pipe lines in hard rock in for Water Supply and PVC-U pipes in narrow streets for Waste Water.**

**A. Guidelines for reduction in cover for DI Pipe lines in hard rock for Water Supply :**

Ordinarily, all types of pipes are required to be laid with a clear cover of 1.0m. However, it has been observed that the rock excavation in some areas is very difficult and it becomes very time consuming to fully excavate to desired depth causing major inconvenience to the public. In such circumstances, the depth of excavation may be reduced keeping the following in consideration:

- Only DI pipes should be used in such situations.
- The depth of cover shall be maintained 60 cms or height of spindle of sluice valve/butterfly valve that may be required to be installed plus 100 mm, whichever is more.
- It should also be ensured that the cover of the valve chamber is clear of the spindle to avoid any impact of the traffic on the valve.

**B. Guidelines for reduction in cover for PVC-U pipe lines in narrow streets for Waste Water :**

It has been observed that laying sewers in narrow lanes (upto 3.0m) at the required depths has been very difficult and also causes a long period of inconvenience to the public. There is generally no heavy vehicular traffic in such narrow lanes. It is also found that sewers in initial reaches do not perform properly on account of less flow. In both cases, it is desirable that we may lay shallow sewers in such areas and connect them to the main system at a suitable point. The shallow sewers can be in PVC-U pipes of 160 mm diameter laid at shallow depths at suitable gradient (generally following the profile of the land) with about 60 cm cover. Shallow manholes (Z-type manhole/ property chamber) can be constructed wherever required for giving connections. Special care should be taken to compact and refill the trenches.

This circular is equally applicable to all members of PMU, IPIU, IPMC & DSC.

**Annexure - 'A' - Drawing of Z type manhole**

  
(Dr Prithvi, IAS)  
Project Director

Dated: 26.02.2013

F3 (106) (13) (1)/RUSDIP/PMU/RSM/WS-03/2008/ 18170-16

Copy to following for information and necessary action:

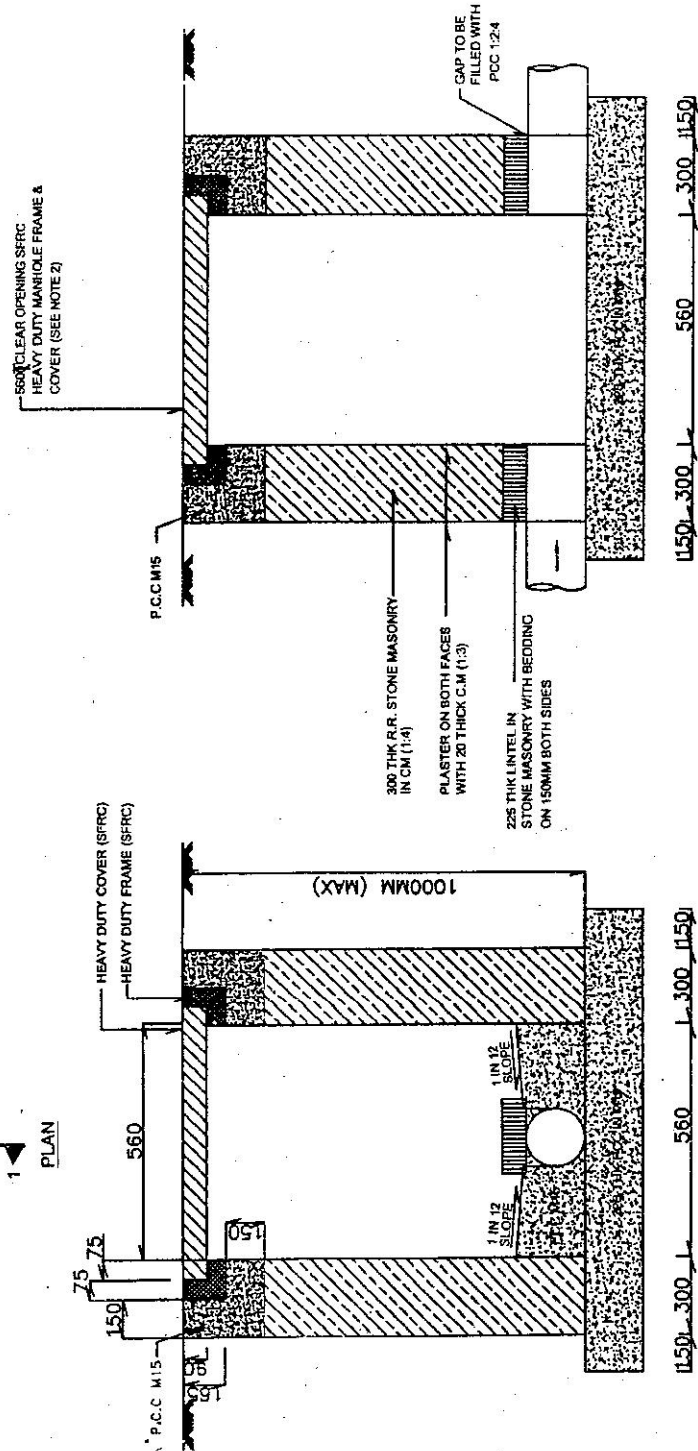
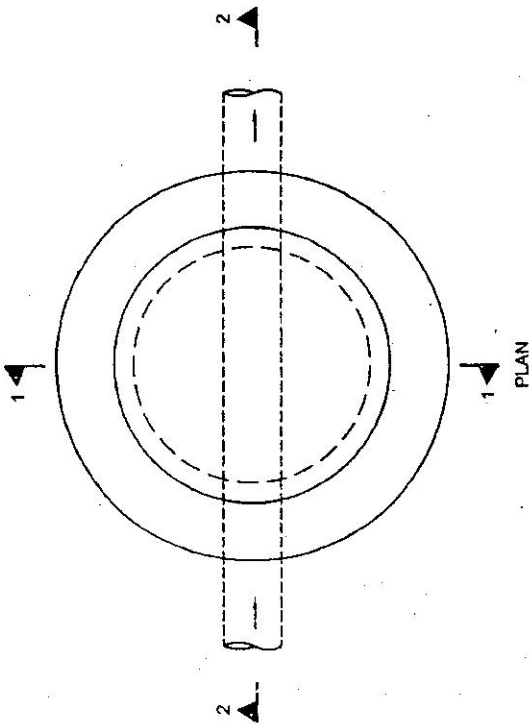
- Addl. PD / FA/ Dy. PD (T)/ Dy. PD (Adm.)/ SE-I/ II / III, PO (all)/ Sr. AO / All APOs / AAO/ PA to PD PMU, RUIDP, Jaipur.
- SE, RUIDP, Zone- Jaipur/ Jodhpur/ Kota
- Executive Engineer IPIU, RUSDIP (Concerned), Alwar, Baran-Chhabra, Barmer, Bharatpur, Bundi, Chittorgarh, Churu, Dhaulpur, Jaisalmer, Jhalawar-Jhalarapatan, Karauli, Nagaur, Rajsamand, Sawai Madhopur and Sikar.
- Team Leader IPMC/ Team Leader, DSC-I, Jaipur, DSC-II, Jodhpur, DSC-III, Kota, RUSDIP.
- DSC-I, Alwar/ Dholpur/ Karauli/ Sawai Madhopur, DSC-II, Churu/ Jaisalmer/ Barmer/ Sikar and DSC-III, Chittorgarh/ / Rajsamand/ Bundi/ Baran, RUSDIP.
- ✓ ACP, RUIDP, Jaipur to send by e-mail and put up the Guidelines on the website.

  
Dy. Project Director (T)

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**NOTES:**

1. ALL DIMENSIONS ARE IN MM.
2. SFRG MANHOLE FRAME & COVER OF HEAVY DUTY AS PER I.S.12592 (PART I & II).
3. THE BENCHING AT THE SIDE OF THE CHANNEL SHALL BE AT LEAST 50mm ABOVE THE CROWN OF THE PIPE AND THEN RISE WITH A SLOPE OF 1 IN 12 TOWARDS THE SIDE OF THE MANHOLE. SEMICIRCULAR PORTION WILL BE ACHIEVED IN CEMENT CONCRETE FINISHING ITSELF.
4. DETAILS FURNISHED HERE ARE AS PER RUIDP STANDARDS.



SECTION 1-1

SECTION 2-2

**TYPE-Z (SHALLOW MANHOLE) DEPTH - 0.6 TO 1.0M**

CLIENT: PUNJ RUIPUN JANGALMER	SCALE: AS SHOWN	DATE: 28/11/2011
JOB: DESIGN & CONSTRUCTION SUPERVISION CONSULTANCY	DESIGNER: PUNJ RUIPUN JANGALMER	DATE: 28/11/2011
DESIGN: PUNJ RUIPUN JANGALMER	DATE: 28/11/2011	DATE: 28/11/2011
TITLE: STANDARD DRAWING OF TYPE 'Z' MANHOLE SHEET 1 OF 2	ISSUE NO: 01	ISSUE NO: 01
RELEASED FOR TENDER: DRAWING NO: RUIPUN/01/01/01/01/01/01	DATE: 28/11/2011	DATE: 28/11/2011
APPROVED: PUNJ RUIPUN JANGALMER	DATE: 28/11/2011	DATE: 28/11/2011
DESIGNED: PUNJ RUIPUN JANGALMER	DATE: 28/11/2011	DATE: 28/11/2011
CHECKED: PUNJ RUIPUN JANGALMER	DATE: 28/11/2011	DATE: 28/11/2011
DATE: 28/11/2011	DATE: 28/11/2011	DATE: 28/11/2011

*Handwritten signature: P. R. Jangalmer*