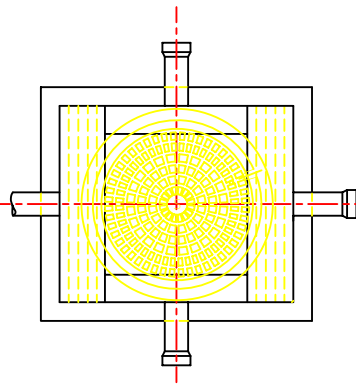
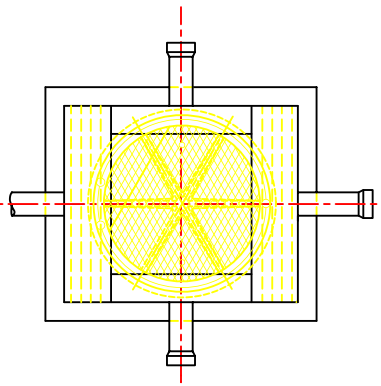


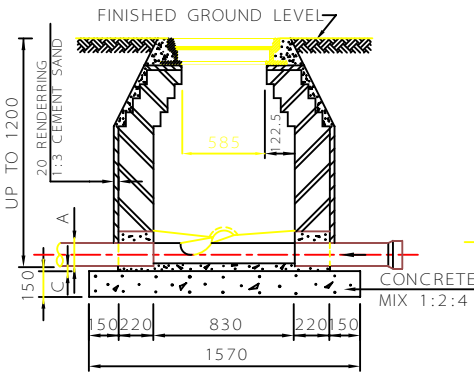
PLAN



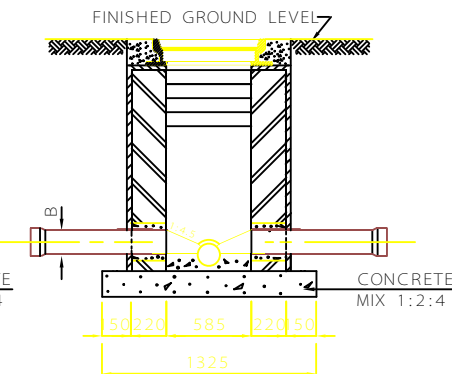
PLAN VIEW
HEAVY M.H. COVER



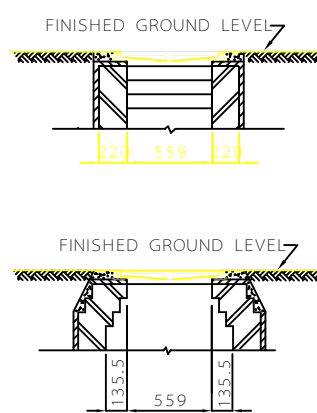
PLAN VIEW
LIGHT M.H. COVER



SECTION A - A



SECTION B - B



SECTIONAL CORBELLING DETAILS
FOR LIGHT M.H. COVER

NOTES

GENERAL NOTES

- 1- ALL DIMENSIONS ARE IN MM.
- 2- INVERT CHANNEL TO BE ACCURATELY FORMED IN CONCRETE AND TROWELLED TO A SMOOTH SURFACE.
- 3- BENCHING TO RISE VERTICALLY FROM THE EDGE OF CHANNEL TO THE LEVEL OF THE SOFFIT OF THE OUTGOING SEWER AND TO SLOPE UPWARD FROM THENCE TO THE WALL OF THE MANHOLE AT A GRADIENT OF ABOUT 1:4 1/2
- 4- BRANCHES TO BE FORMED IN THE CONCRETE OF THE BENCHING WITH THE INVERT LEVEL OF THE OUTGOING SEWER (UNLESS OTHERWISE SPECIFIED).
- 5- CONCRETE 1:2:4 MIX.
- 6- BRICK WORK:
 - 6-1- IF WATER TABLE BELOW THE INVERT ELEVATION OF THE OUTGOING PIPE , BUILDING BRICKS CAN BE USED.
 - 6-2- IF WATER TABLE ABOVE THE INVERT ELEVATION OF THE OUTGOING PIPE , DENSE BUILDING BRICKS OR LIME-SAND BRICKS CAN BE USED , SEE IPS-M-CE-345
- 7- HEAVY COVERS SHOULD BE USED UNDER CARRIAGE WAYS ONLY. LIGHT COVERS ARE NORMALLY USED IN HOUSE MANHOLES AND UNDER FOOTPATHS THAT ARE FREE FROM VEHICLE TRAFFIC. (SEE IPS-D-CE-252).
- 8- BRICK ARCHES OR RINGS TO BE BUILT AT PIPE ENTRIES OF 200MM AND ABOVE.
- 9- OUTER SURFACE OF ALL MANHOLES TO BE COATED WITH APPROPRIATE BITUMEN GRADE COMPATIBLE TO ENVIRONMENTAL CONDITION IN TWO LAYERS BEFORE BACKFILLING
- 10- TYPE "A" MANHOLE DEPTH UP TO 1200MM.
- 11- INTERNAL SURFACES SHALL BE POINTED.

C		
B		
A		
REV	DESCRIPTION	DATE

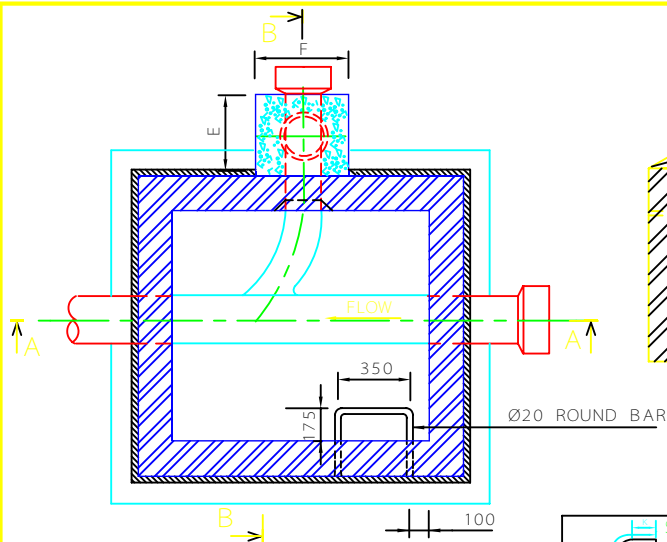
IRANIAN PETROLEUM STANDARDS
NO REVISION PERMITTED UNLESS APPROVED BY STANDARD ORGANIZATION

BRICK SANITARY MANHOLE
(TYPE A)

DATE	DRAWING No.	SHEET	REV.
	IPS-D-CE-250	1/3	

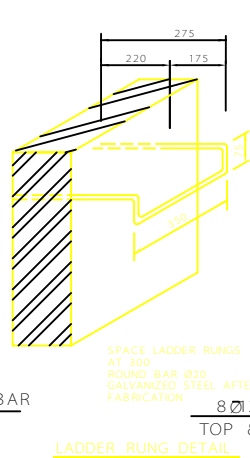
MAIN SEWER DIA - METER "A"	100	150	230	300	380	460
HEIGHT OF INVERT ABOVE BASE "C"	50	65	75	80	90	100

NOT TO SCALE



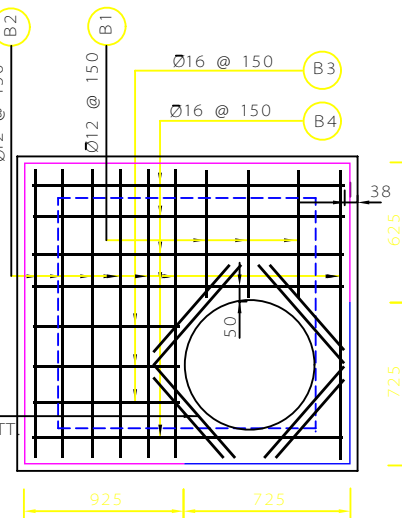
SECTIONAL PLAN D-D

TYPE OF M.H. COVER	CLEAR OPENING (a)	DEPTH (b)	DIMENSION (c)
HEAVY	585	153	110.5
LIGHT	559	38	51

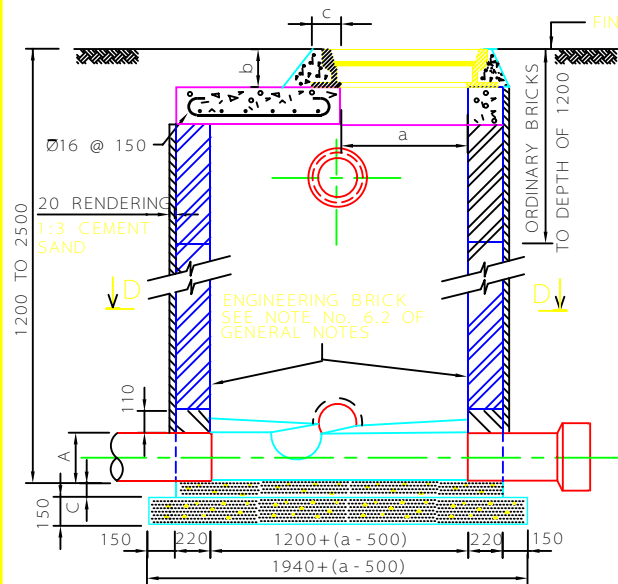


LADDER RUNG DETAIL

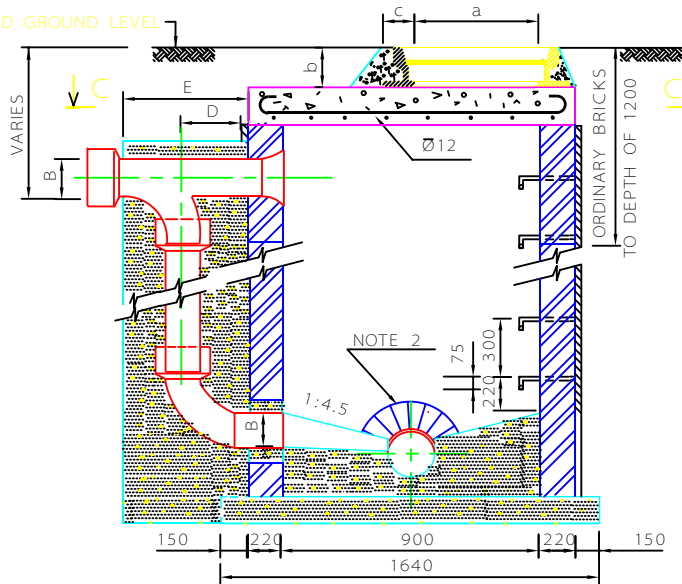
POSITION	DIA	H	K	L	No.
B1	12	50	50	790	4
B2	12	50	50	1525	6
B3	16	50	64	1160	4
B4	16	50	64	1590	4



SECTIONAL PLAN THROUGH ROOF SLAB C-C



SECTION A-A



SECTION B-B

NOT TO SCALE

NOTES

- 1- GENERAL NOTES: SEE DWG. NO. IPS-D-CE-250 SHEET 1/3
- 2- BRICK ARCHES OR RINGS TO BE BUILT AT PIPE ENTRIES OF 200 MM AND ABOVE.
- 3- OUTER SURFACE OF ALL MANHOLES TO BE PAINTED WITH 90/15 BITUMEN IN TWO COATS BEFORE BACKFILLING.
- 4- FOR SHOP DRAWINGS OF CIRCULAR COVER AND FRAME REFER TO IPS-D-CE-252
- 5- NET CONCRETE COVER FOR REBAR 50MM.
- 6- FOR DIMENSIONS OF VARIABLES (A,B,C and a,b,c) SEE TABLE ON DWG. No. IPS-D-CE-250 SHEET 3/3 AND IPS-D-CE-250 SHEET 2/3 RESPECTIVELY.
- 7- TYPE "B" MANHOLE. DEPTH FROM 1200MM. TO 2500MM.

REV	DESCRIPTION	DATE

IRANIAN PETROLEUM STANDARDS
NO REVISION PERMITTED UNLESS APPROVED BY STANDARD ORGANIZATION

BRICK SANITARY MANHOLE
(TYPE B)

DATE	DRAWING No.	SHEET	REV.
	IPS-D-CE-250	2/3	

NOTES

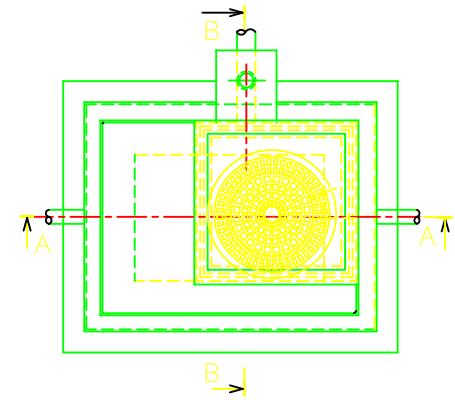
- 1 - FOR GENERAL NOTES: SEE DWG. No. IPS - D - CE - 250 SHEET 1/3
- 2 - WHERE THE INVERT LEVEL OF AN INCOMING SEWER IS MORE THAN 600MM. ABOVE THE JUNCTION MANHOLE INVERT LEVEL A BACK-DROP CONNECTION SHALL BE USED.
- 3 - WHERE TWO OR MORE BRANCHES HAVE TO HAVE BACKDROP A MULTI-BACKDROP IS TO BE USED.
- 4 - FOR M.H. COVERS AND FRAME SEE DRAWINGS No. IPS - D - CE - 252
- 5 - NET CONCRETE COVER FOR REBAR 50MM.
- 6 - TYPE "C" MANHOLE DEPTH 2500MM. AND OVER
- 7 - FOR DIMENSIONS OF VARIABLES a,b,c SEE IPS - D - CE - 250 SHEET 2/3

REV	DESCRIPTION	DATE
C		
B		
A		

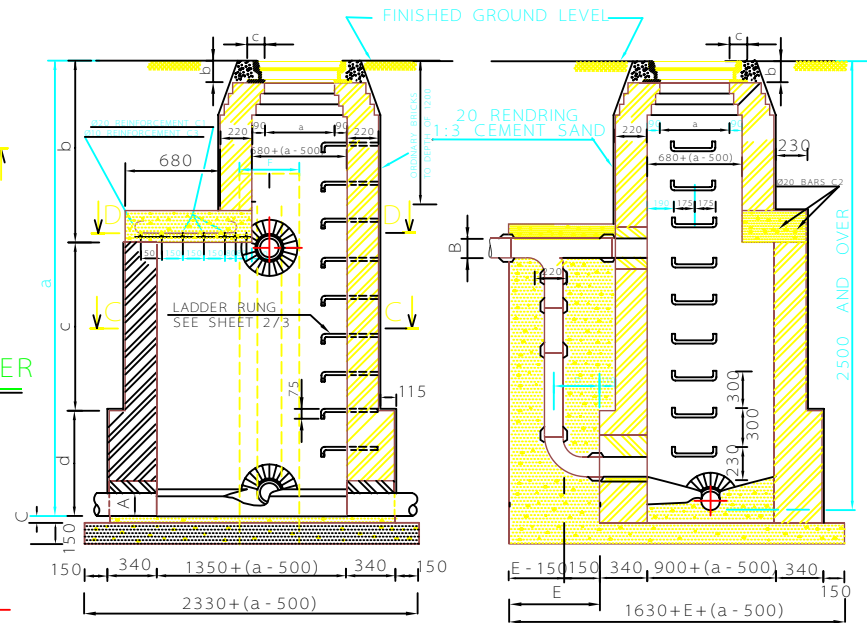
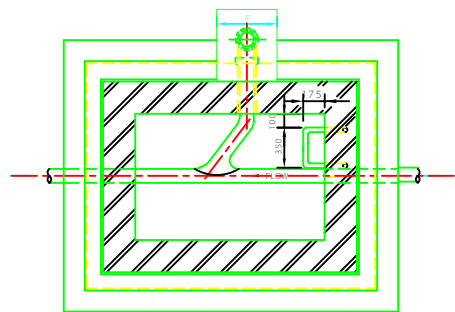
IRANIAN PETROLEUM STANDARDS 
NO REVISION PERMITTED UNLESS APPROVED BY STANDARD ORGANIZATION

BRICK SANITARY MANHOLE (TYPE C)

DATE	DRAWING No.	SHEET	REV.
	IPS - D - CE - 250	3	3



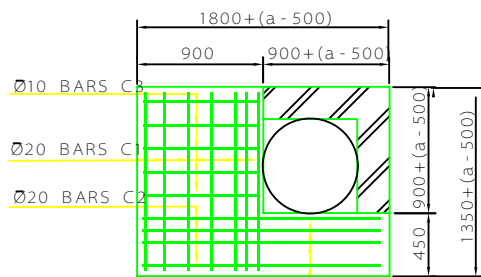
PLAN VIEW HEAVY M.H. COVER



SECTION A - A

SECTION B - B

SECTION C - C



SECTION D - D

POSITION	DIA	OVERALL LENGTH (L)			No.OFF
		H	K	L	
C1	20	75	75	1610	7
C2	20	75	75	2060	4
C3	10	50	50	1050	5

DIMENSIONS				
SEWER DIAMETER (A)	HEIGHT OF INVERT ABOVE BASE (C)	BRANCH DIAMETER (B)	DIST OF C BACKDROP TO WALL (D)	CONCRETE SURROUND TO BACK-DROPS (E)
100	50	100	185	400
150	60	150	225	465
225	60	225	260	545
300	75	300	300	625
375	85			
450	100			

DEPTH TO INVERT a	DEPTH OF SHAFT b	DIMENSION c	DIMENSION d
2550	600	1950	-
2700	750	1950	-
3000	1050	1950	-
3300	1350	1950	-
3600	1650	1200	750
3900	1950	1200	750
4200	2250	1200	750
4500	2550	1050	900
4800	2850	750	1200
5100	3150	450	1500
5400	3450	150	1800

NOT TO SCALE