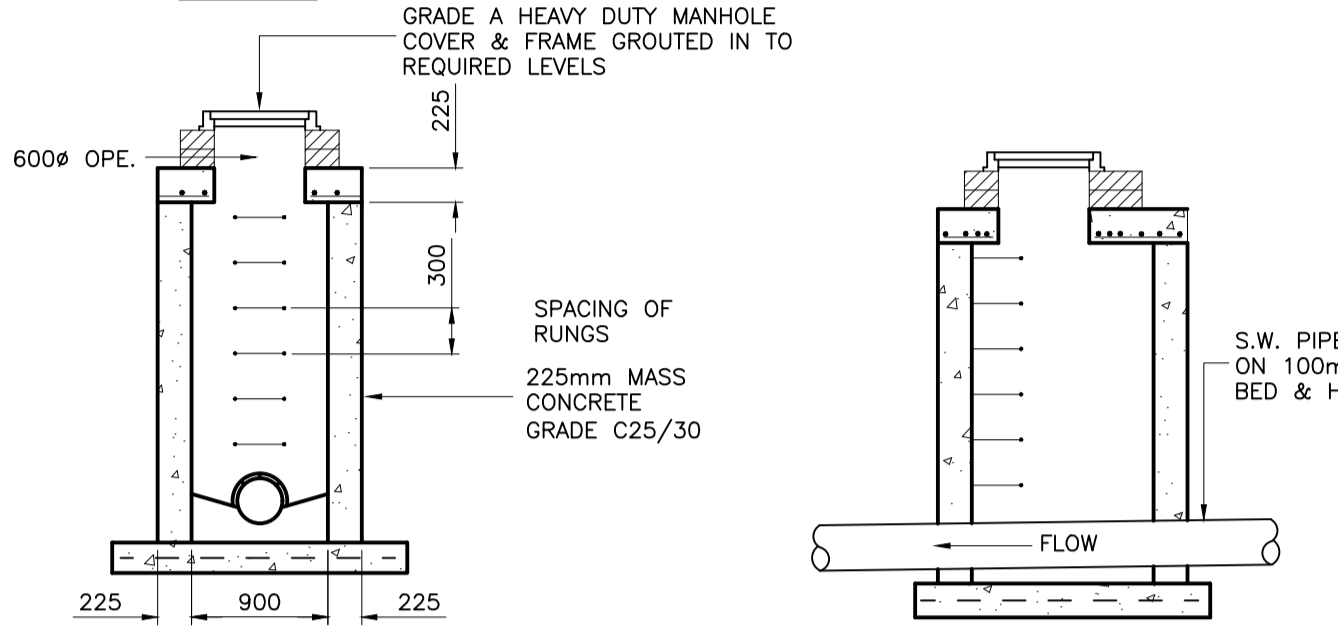


PLAN OF ROOF SLAB

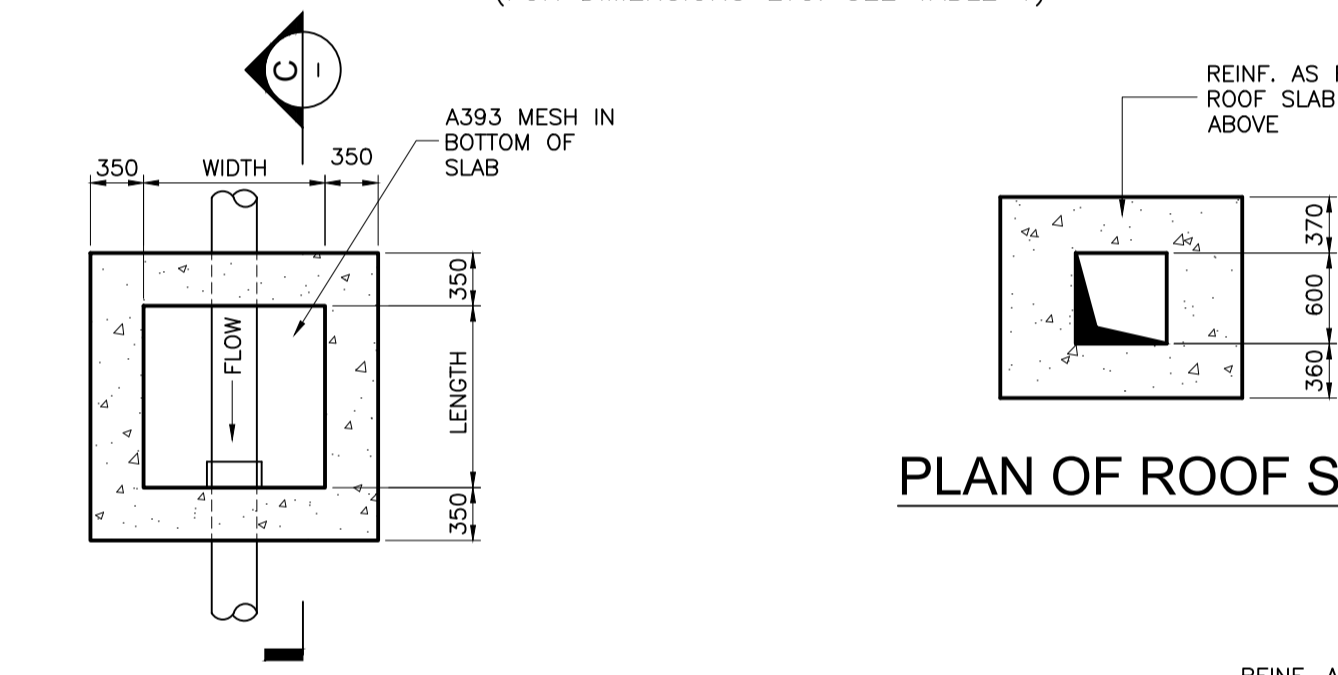


SECTION A SCALE 1:50

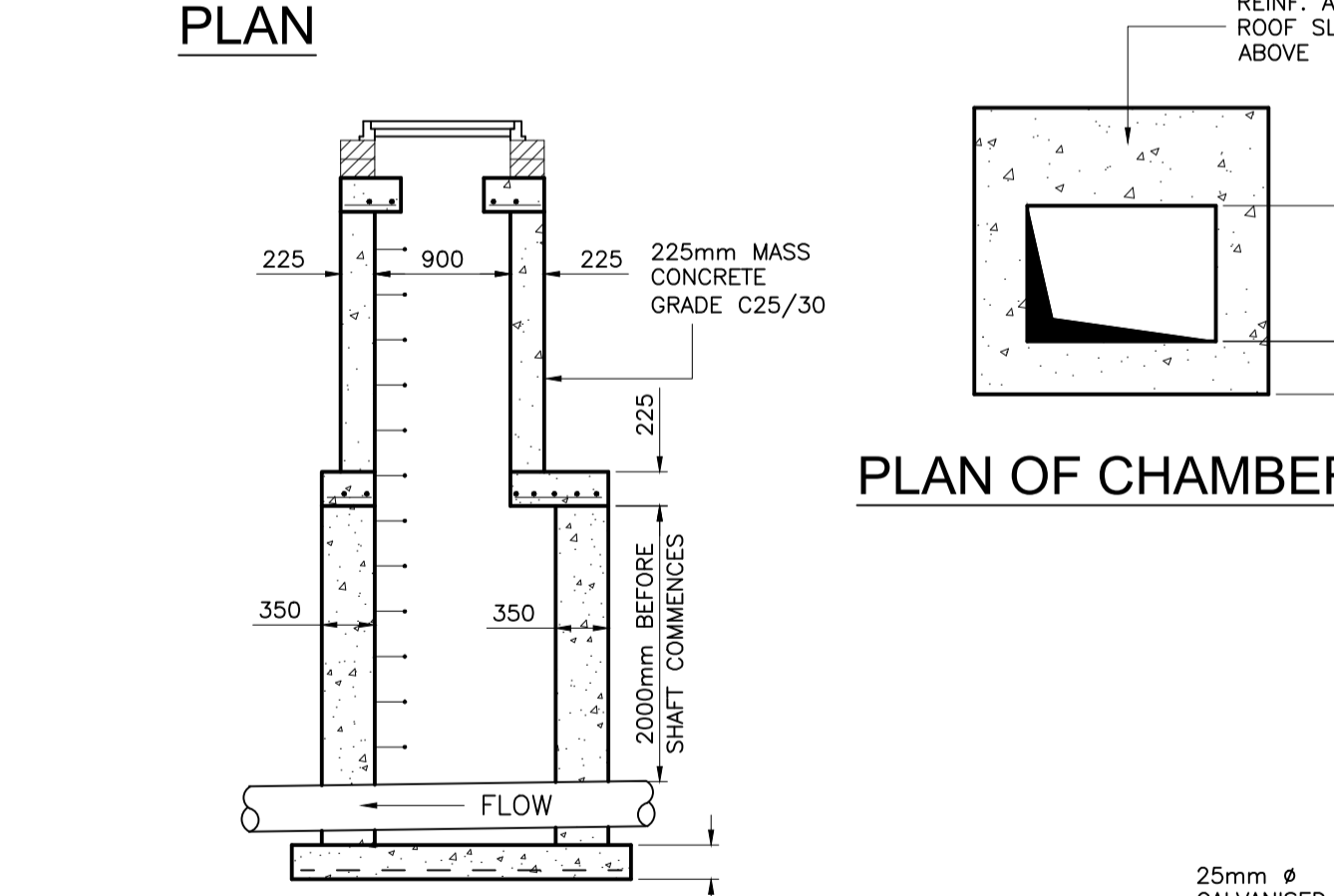
SECTION B SCALE 1:50

DETAILS OF STANDARD MANHOLE UP TO 3000 DEEP

(FOR DIMENSIONS ETC. SEE TABLE 1)



PLAN OF ROOF SLAB

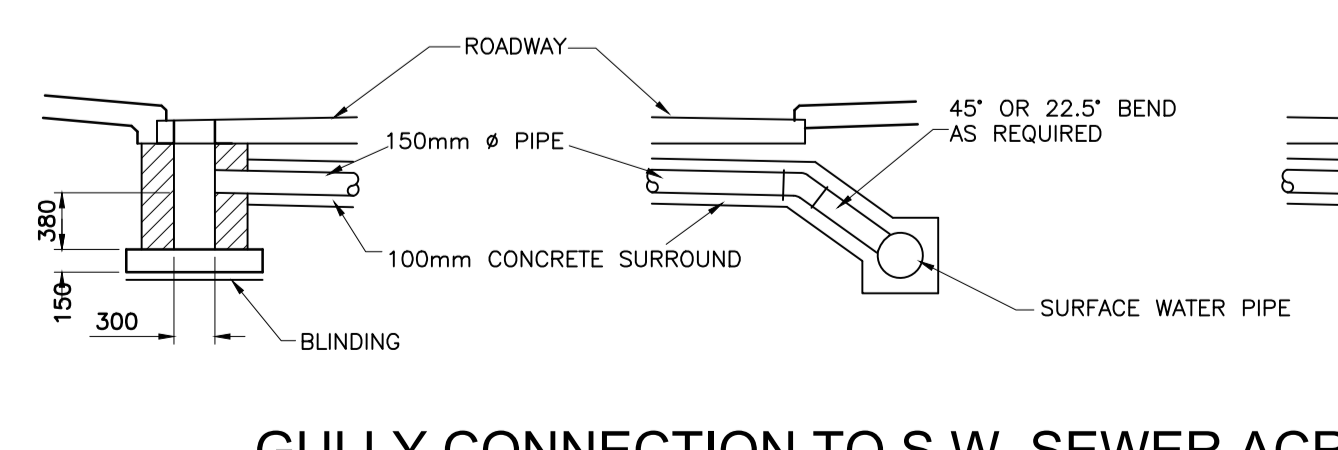


PLAN OF CHAMBER SLAB

SECTION C SCALE 1:50

DETAILS OF STANDARD MANHOLE 3000-6000 DEEP

(FOR DIMENSIONS ETC. SEE TABLE 1)



GULLY CONNECTION TO S.W. SEWER ACROSS ROADWAY

DEPTH	MINIMUM DIMENSIONS			
	DIAMETER OF PIPE	ANGLE	LENGTH	WIDTH
LESS THAN 1200	100	0-90°	1200	750
	150	0-90°	1200	750
	225	0-30°	1200	750
		30°-90°	1200	750
	300	0-30°	1200	750
		30°-90°	1200	900
	375	0-90°	1200	900
	450	0	1200	1050
		0-90°	1200	1200
	525	0	1200	1200
1200-3500	600	0	1200	1200
		0-45°	1200	1350
	750	0-45°	1200	1350
		45°-90°	1350	1350
	900	0-45°	1350	1500
		45°-90°	1500	1500
		0-90°	1200	900
		0-90°	1200	900
3500-6000	225	0-90°	1200	900
	300	0-90°	1200	900
	375	0-90°	1200	900
	450	0	1200	1050
		0-45°	1350	1350
		45°-90°	1200	1200
		0-45°	1200	1350
		45°-90°	1350	1350
	600	0-45°	1200	1350
		45°-90°	1350	1350
6000-12000	750	0-45°	1200	1350
		45°-90°	1350	1350
	900	0-45°	1350	1500
		45°-90°	1500	1500
		0-90°	1200	900
		0-90°	1200	900
		0-90°	1200	900
		0-90°	1200	900

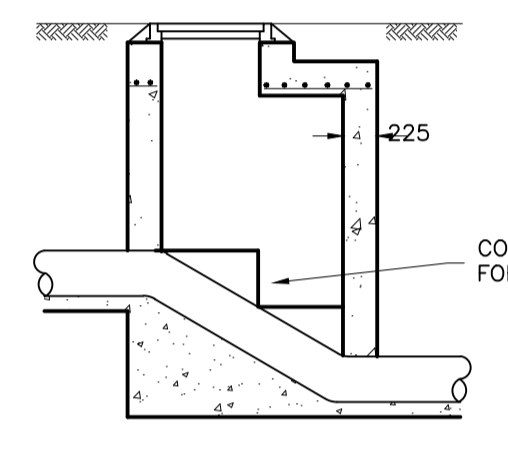
DEPTH	MINIMUM DIMENSIONS			
	DIAMETER OF PIPE	ANGLE	LENGTH	WIDTH
1200-3500	100	0-90°	1200	900
	150	0-90°	1200	900
	225	0-90°	1200	900
	300	0-90°	1200	900
	375	0-90°	1200	900
	450	0	1200	1050
		0-45°	1350	1350
		45°-90°	1200	1200
		0-45°	1200	1350
		45°-90°	1350	1350
3500-6000	600	0-45°	1200	1350
		45°-90°	1350	1350
	750	0-45°	1200	1350
		45°-90°	1350	1350
	900	0-45°	1350	1500
		45°-90°	1500	1500
		0-90°	1200	900
		0-90°	1200	900

TABLE 1

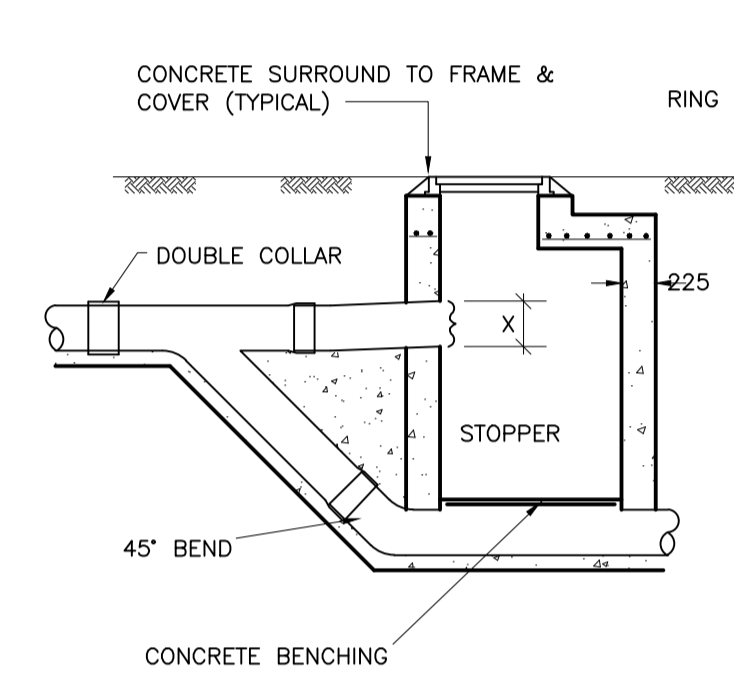
P.C. CONCRETE CIRCULAR SHAFT INTERNAL MH Ø
1050
1050
1050
1050
1050
1050
1050
1050
1200
1200
1200
1200
1200
1350
1350
1350
1350
1350
1350
1350
1350
1350
1350
1350
1800
1800
1800
1800
1800
1800
1800
1800

MANHOLE TYPE	DIA. OF INLET	DROP	DIA. OF DROP	X
TYPE A	225	0-500	225	-
	B	500-1000	225	225
	C	> 1000	225	225
TYPE A	300	0-600	300	-
	B	600-1000	300	300
	C	> 1000	225	300
TYPE A	375	0-750	450	-
	B	750-1200	300	450
	C	> 1200	300	300
TYPE A	450	0-750	450	-
	B	750-1200	300	450
	D	> 1200	300	450
TYPE A	525	0-750	525	-
	B	750-1200	375	525
	D	> 1200	300	375
TYPE A	600	0-750	600	-
	B	750-1500	375	375
	D	> 1500	375	375
TYPE A	750	0-750	600	-
	B	750-1500	450	450
	D	> 1500	375	450

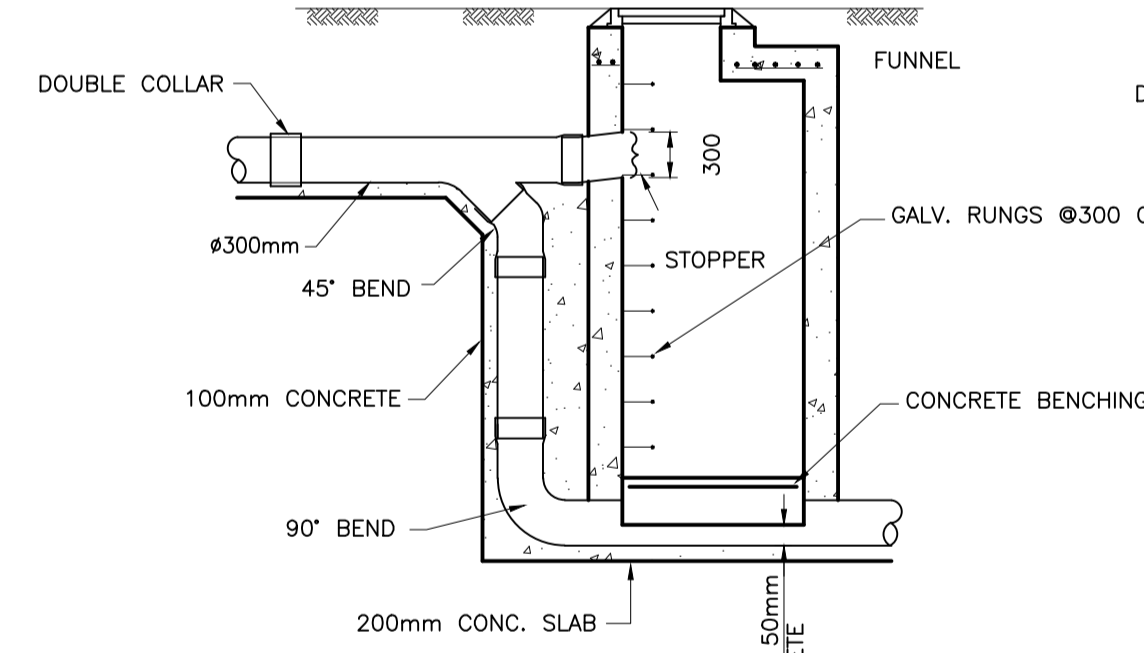
TABLE 2



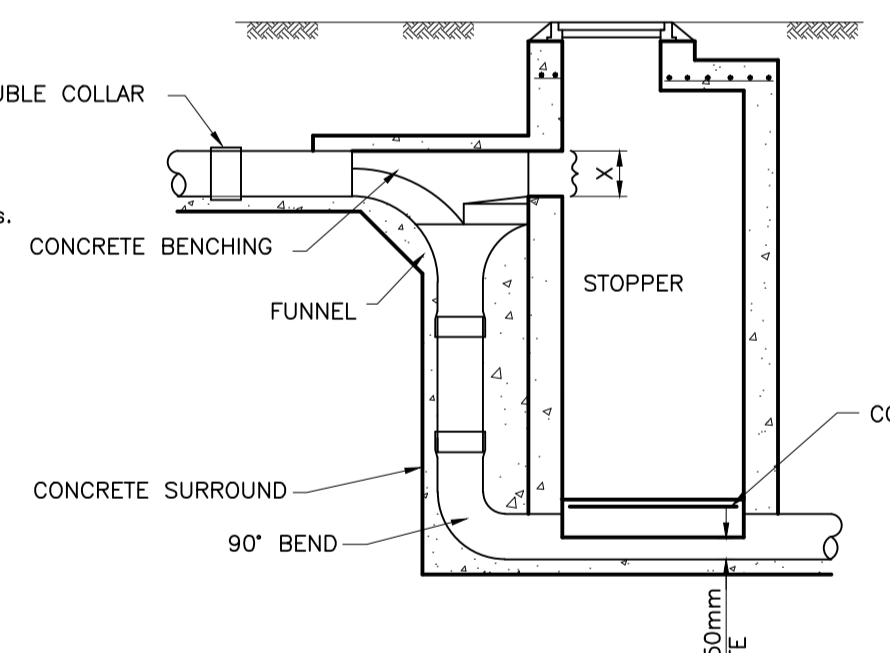
MANHOLE TYPE 'A' RAMP MANHOLE



MANHOLE TYPE 'B' INTERMEDIATE DROP MANHOLE



MANHOLE TYPE 'C' BACK DROP MANHOLE



MANHOLE TYPE 'D' BACK DROP MANHOLE

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THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS, SPECIFICATIONS AND THE PRELIMINARY HEALTH & SAFETY PLAN.

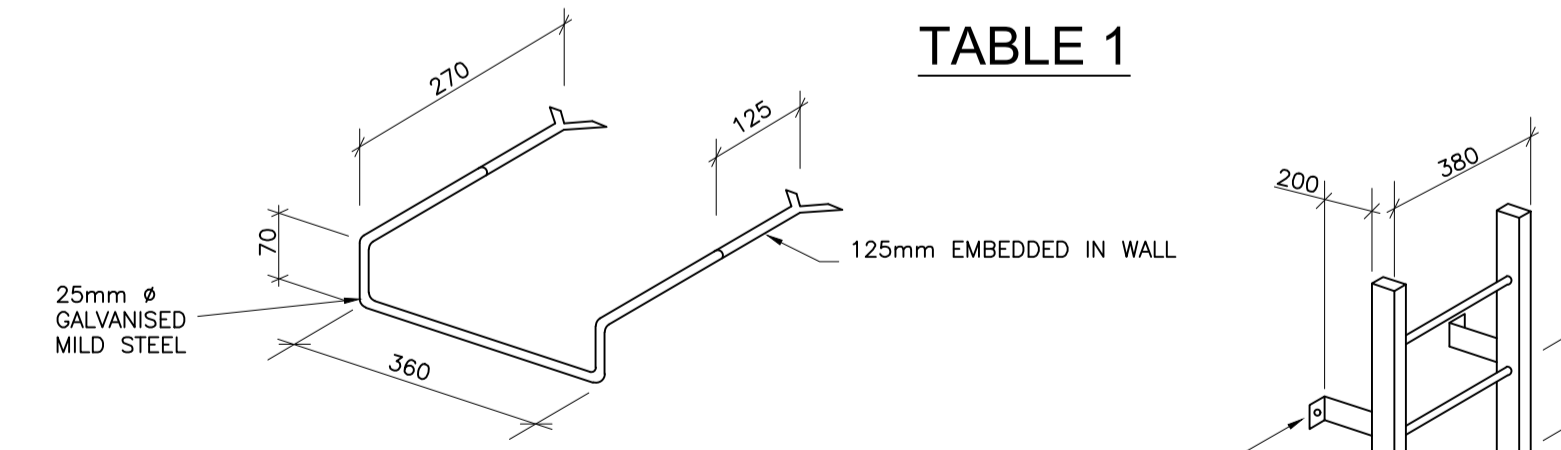
ALL DIMENSIONS ARE IN MM UNLESS NOTED OTHERWISE. DO NOT SCALE DIMENSIONS.

THE CONTRACTOR SHALL CHECK ALL DIMENSIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED TO THIS OFFICE IN WRITING.

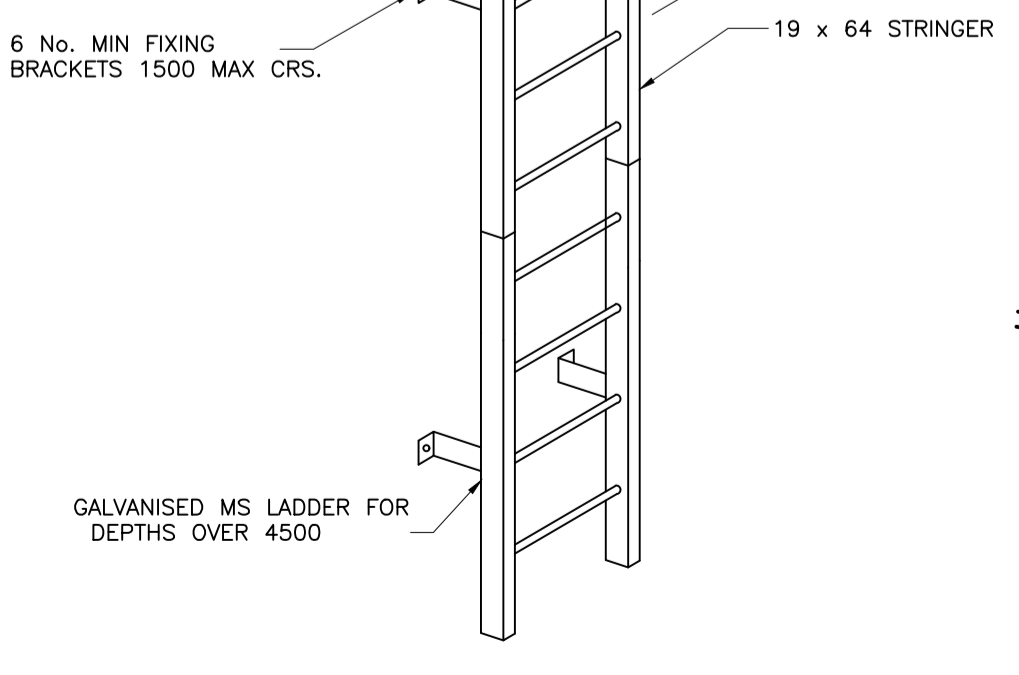
NOTES

1. PRECAST MANHOLES SHALL HAVE 150mm GRADE C16/20 CONCRETE SURROUND UNLESS MANUFACTURER CAN SHOW, TO THE ENGINEER'S SATISFACTION, THAT PERMANENTLY WATERPROOF JOINTS CAN BE ACHIEVED BY SOME OTHER METHOD.
2. FOR 750mm Ø PIPES OR GREATER, USE A SAFETY CHAIN AND PROVIDE 25mm Ø GALVANISED SOLID BAR HANDRAILS AT EDGES OF BENCHING.
3. STEP RUNGS TO BE PROVIDED IN MANHOLES MORE THAN 1m DEEP.
4. MANHOLE COVERS & FRAMES SHALL BE IN ACCORDANCE WITH EN 124. WATERWORKS (SLUICE VALVES, HYDRANTS ETC.) SHALL BE IN ACCORDANCE WITH IS261.
5. IN MANHOLES WHOSE PIPE DIAMETER IS GREATER THAN 375, ONE BENCHING SHOULD BE AT LEAST 400 WIDE.
6. BENCHING TO BE OF CLASS C16/20 CONCRETE FINISHED WITH 2:1 SAND/CEMENT MORTAR.
7. ALL MANHOLE COVERS & GULLIES TO BE LOCKABLE.
8. PRECAST CONCRETE RINGS TO BE ENCASED IN 150mm MIN. MASS CONCRETE.
9. ALL DRAINAGE WORK TO BE IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTE WATER INFRASTRUCTURE AND STANDARD DETAILS AND GREATER DUBLIN REGIONAL CODE OF PRACTICE.

ALL EXCAVATIONS/FORMATIONS TO BE SUBJECT TO PLATE TESTS AT LOCATIONS TO BE AGREED ON SITE

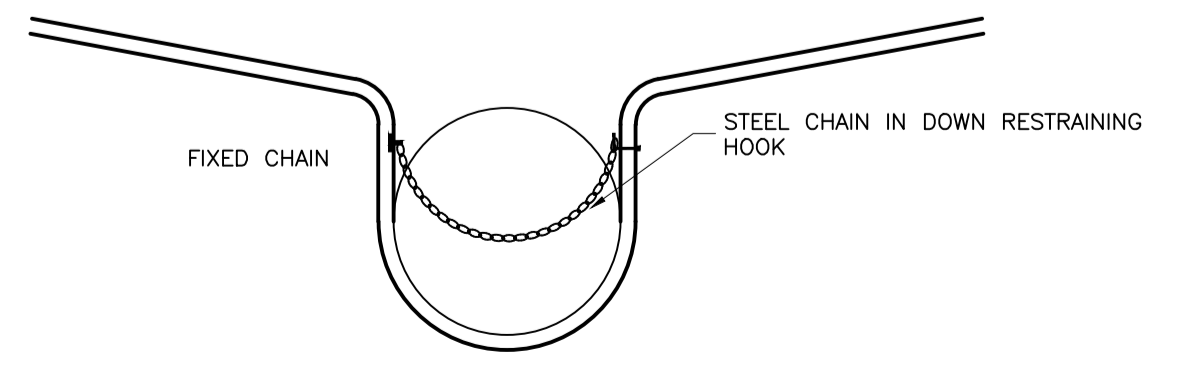


DETAIL OF STEP RUNG

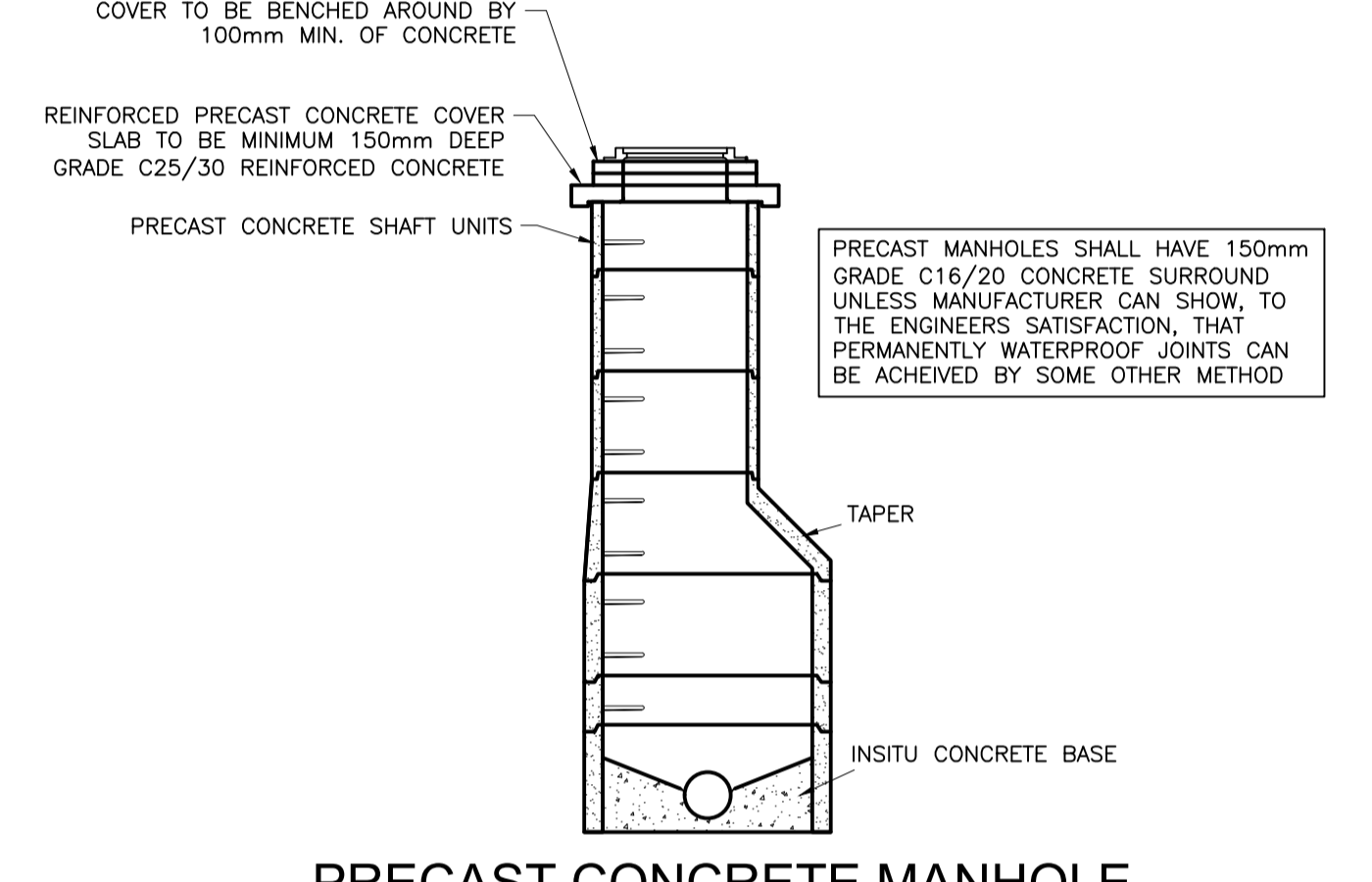


DETAIL OF ACCESS LADDER

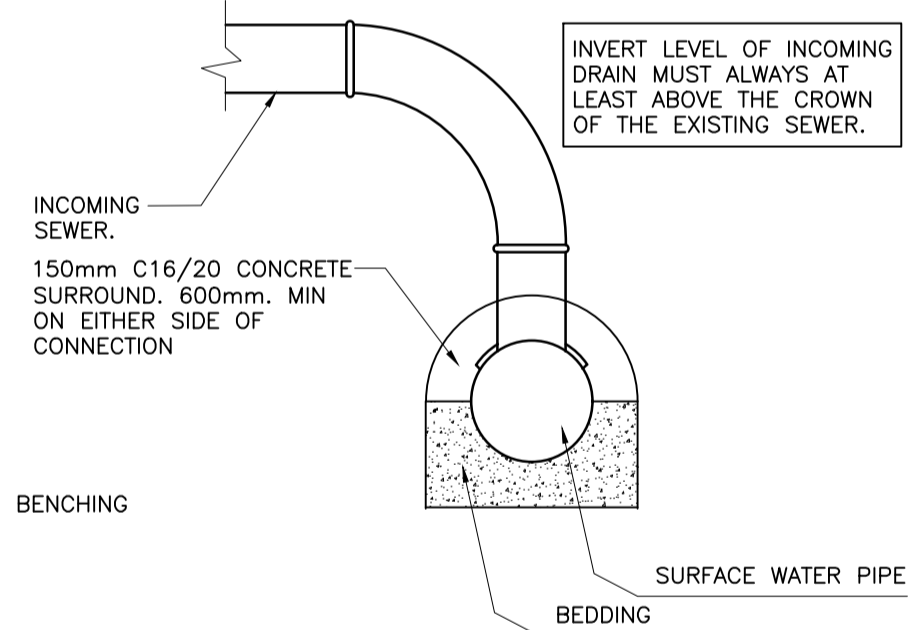
NOTE: FOR DIMENSIONS ETC. TO MANHOLES TYPE 'A', 'B', 'C', & 'D' SEE TABLE 2



TYPICAL DETAIL OF SAFETY CHAIN



PRECAST CONCRETE MANHOLE



TYPICAL SADDLE CONNECTION SCALE 1:20

REV	DESCRIPTION	DATE	BY	CHK
0	ISSUED FOR TENDER	14.03.24	KA	PB

STATUS: P3 - FOR PLANNING

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CLIENT: NDFA ON BEHALF OF KILDARE COUNTY COUNCIL

JOB NAME: SHB 4&5 - OCK - OLD TOWN MILL, CELBRIDGE

DRG NAME: SITE DEVELOPMENT DETAILS MANHOLE DETAILS

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	AS SHOWN	MAR '24	KA	KA	PB	0

DRG. NO. SHB5-OCK-DR-MOR-CS-P3-152