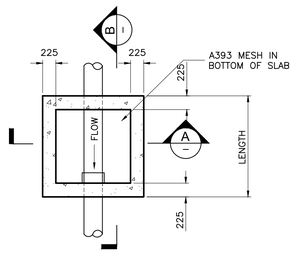
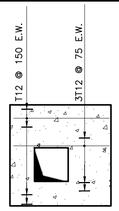
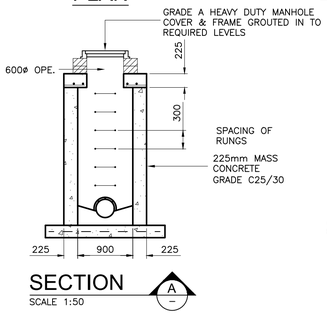


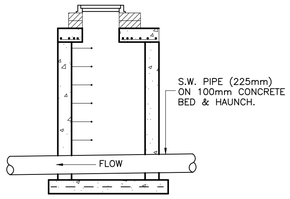
PLAN



PLAN OF ROOF SLAB



SECTION
SCALE 1:50



SECTION
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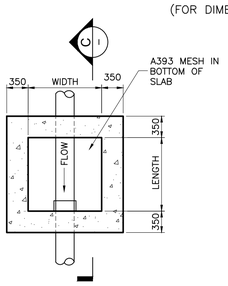
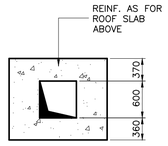
DETAILS OF STANDARD MANHOLE UP TO 3000 DEEP

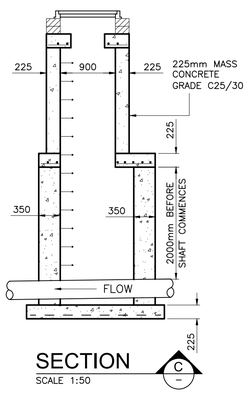
(FOR DIMENSIONS ETC. SEE TABLE 1)



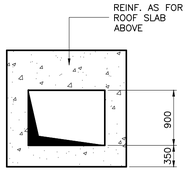
PLAN



PLAN OF ROOF SLAB



SECTION
SCALE 1:50



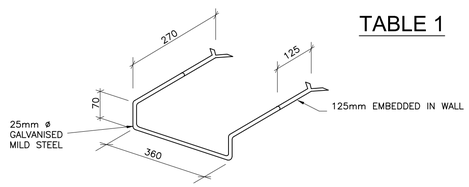
PLAN OF CHAMBER SLAB

DETAILS OF STANDARD MANHOLE 3000-6000 DEEP

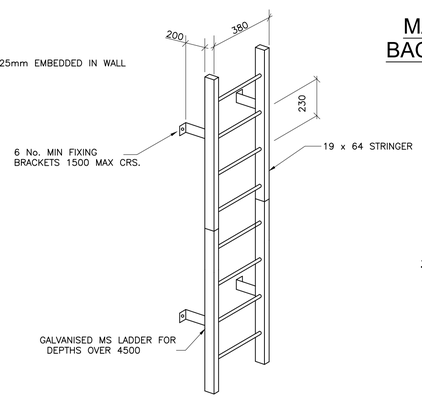
(FOR DIMENSIONS ETC. SEE TABLE 1)

DEPTH	DIAMETER OF PIPE	ANGLE	MINIMUM DIMENSIONS		P.C. CONCRETE CIRCULAR SHAFT INTERNAL MH ø
			LENGTH	WIDTH	
LESS THAN 1200	100	0–90°	1200	750	1050
	150	0–90°	1200	750	1050
	225	0–30°	1200	750	1050
		30°–90°	1200	750	1050
	300	0–30°	1200	750	1050
		30°–90°	1200	900	1050
	375	0–90°	1200	900	1050
	450	0	1200	1050	1050
		0–90°	1200	1200	1050
	525	0	1200	1200	1050
		0–90°	1200	1200	1200
	600	0	1200	1200	1200
		0–45°	1200	1350	1200
		45°–90°	1350	1350	1350
	750	0–45°	1200	1350	1350
		45°–90°	1350	1350	1350
	900	0–45°	1350	1500	1500
		45°–90°	1500	1500	1800
1200–3500	100	0–90°	1200	900	1200
	150	0–90°	1200	900	1200
	225	0–90°	1200	900	1200
	300	0–90°	1200	900	1200
	375	0–90°	1200	900	1200
	450	0	1200	1050	1200
		0–45°	1350	1350	1350
		45°–90°	1200	1350	1350
	525	0	1200	1200	1200
		0–45°	1200	1350	1350
		45°–90°	1350	1350	1350
	600	0–45°	1200	1350	1350
		45°–90°	1350	1350	1350
	750	0–45°	1200	1350	1350
		45°–90°	1350	1350	1350
	900	0–45°	1350	1500	1800
		45°–90°	1500	1500	1800
3500–6000	100	0–90°	1200	900	1200
	150	0–90°	1200	900	1200
	225	0–90°	1200	900	1200
	300	0–90°	1200	900	1200
	375	0–90°	1200	900	1200
	450	0–45°	1200	1350	1200
		45°–90°	1350	1350	1350
	525	0–45°	1200	1350	1350
		45°–90°	1350	1350	1500
	600	0–45°	1200	1350	1350
		45°–90°	1350	1350	1500
	750	0–45°	1200	1350	1500
		45°–90°	1350	1350	1500
	900	0–45°	1350	1500	1800
		45°–90°	1500	1500	1800

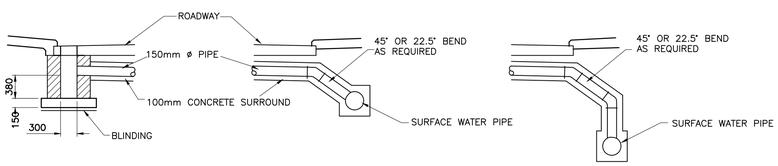
TABLE 1



DETAIL OF STEP RUNG



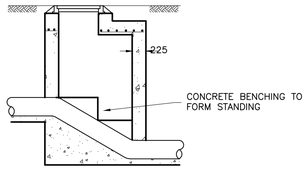
DETAIL OF ACCESS LADDER



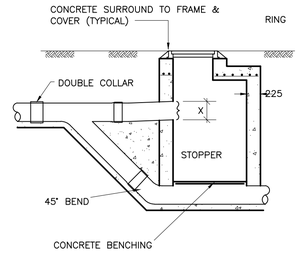
GULLY CONNECTION TO S.W. SEWER ACROSS ROADWAY

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	750–1500	450	450
D		> 1500	375	450

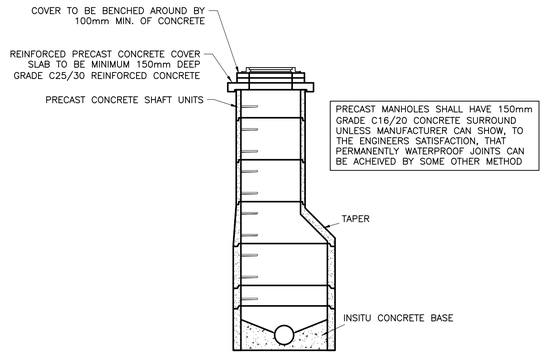
TABLE 2



MANHOLE TYPE 'A'
RAMP MANHOLE

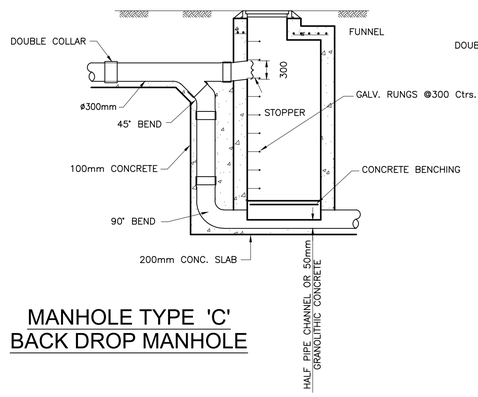


MANHOLE TYPE 'B'
INTERMEDIATE DROP MANHOLE

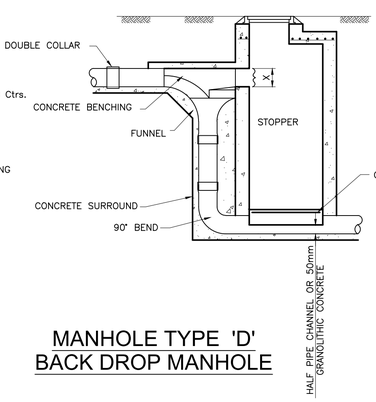


PRECAST MANHOLES SHALL HAVE 150mm GRADE C16/20 CONCRETE SURROUND UNLESS MANUFACTURER CAN SHOW, TO THE ENGINEERS SATISFACTION, THAT PERMANENTLY WATERPROOF JOINTS CAN BE ACHEIVED BY SOME OTHER METHOD

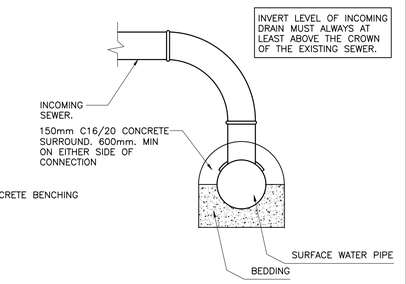
PRECAST CONCRETE MANHOLE



MANHOLE TYPE 'C'
BACK DROP MANHOLE

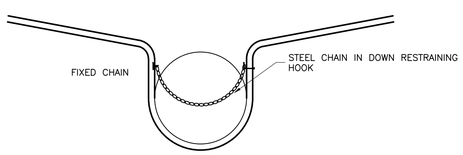


MANHOLE TYPE 'D'
BACK DROP MANHOLE



TYPICAL SADDLE CONNECTION
SCALE 1:20

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



TYPICAL DETAIL OF SAFETY CHAIN

NOTES

1. PRECAST MANHOLES SHALL HAVE 150mm GRADE C16/20 CONCRETE SURROUND UNLESS MANUFACTURER CAN SHOW, TO THE ENGINEERS SATISFACTION, THAT PERMANENTLY WATERPROOF JOINTS CAN BE ACHEIVED 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
6. IN MANHOLES WHOSE PIPE DIAMETER IS GREATER THAN 375, ONE BENCHING SHOULD BE AT LEAST 400 WIDE
7. BENCHING TO BE OF CLASS C16/20 CONCRETE FINISHED WITH 2:1 SAND/CEMENT MORTAR
8. ALL MANHOLE COVERS & GULLIES TO BE LOCKABLE
9. PRECAST CONCRETE RINGS TO BE ENCASED IN 150mm MIN. MASS CONCRETE.
10. 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.

NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR STORED IN ANY RETRIEVAL SYSTEM OF ANY NATURE WITHOUT THE WRITTEN PERMISSION OF MALONE O'REGAN CONSULTING ENGINEERS AS COPYRIGHT HOLDER EXCEPT AS AGREED FOR USE ON THE PROJECT FOR WHICH THE DRAWING WAS ORIGINALLY CREATED.

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

LOCAL AUTHORITY / COUNTY COUNCIL GUIDELINES FOR THE DESIGN AND CONSTRUCTION OF HOUSING MANUAL TO TAKE PRECEDENCE WHERE ANY CONFLICT OCCURS.
GREATER DUBLIN REGIONAL CODE OF PRACTICE TO TAKE PRECEDENCE WHERE ANY CONFLICT OCCURS.

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

REV	DESCRIPTION	DATE	BY	CHK
2	ISSUED FOR PLANNING	23.07.24	KD	DW

STATUS
P3 – PLANNING

MALONE O'REGAN CONSULTING ENGINEERS
Unit 2B Richview Office Park, Clonskeagh, DUBLIN 14 D14 XT57
T: +353 1 260 2655
E: dublin@morce.ie
W: www.maloneoregan.ie
Offices also in:
GALWAY T: +353 91 531 069 E: galway@morce.ie
WATERFORD T: +353 51 876 855 E: waterford@morce.ie

CLIENT
DUBLIN CITY COUNCIL

JOB NAME
SOCIAL HOUSING PPP BUNDLE 4 (SHB4)
COLLINS AVENUE

DRG. NAME
SITE DEVELOPMENT DETAILS
SHEET 1
DRAINAGE DETAILS

JOB REF	SHEET	SCALE	DATE	BY	ENG	APP	REV
23006	A1	SHOWN	MARCH'2024	KD	PB	PB	2

DRG. NO.
SHB4–CAD–DR–MOR–CS–P3–137