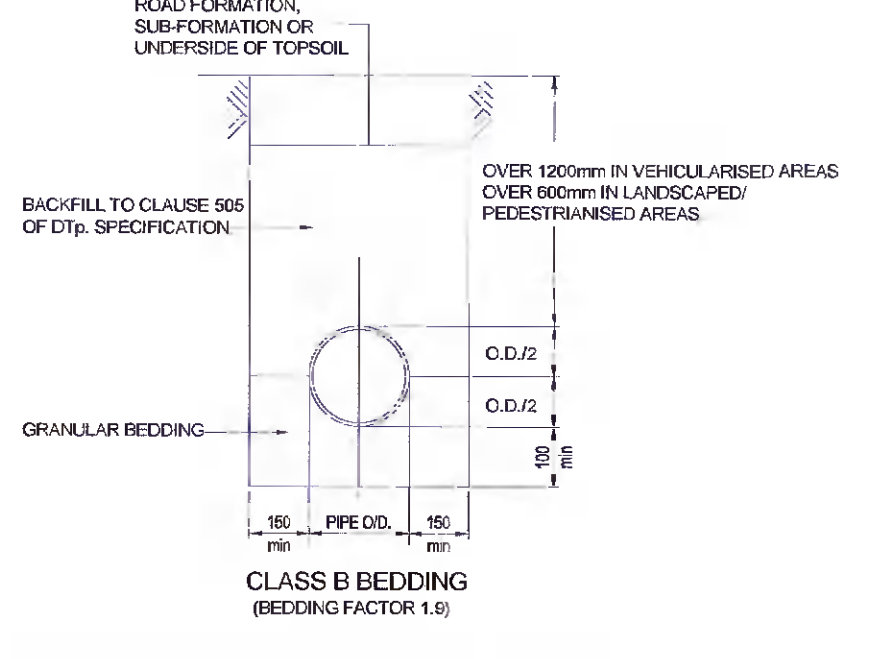


CLASS 2 SULPHATE RESISTING ST4 CONCRETE
PIPE RUNS NEAR BUILDINGS

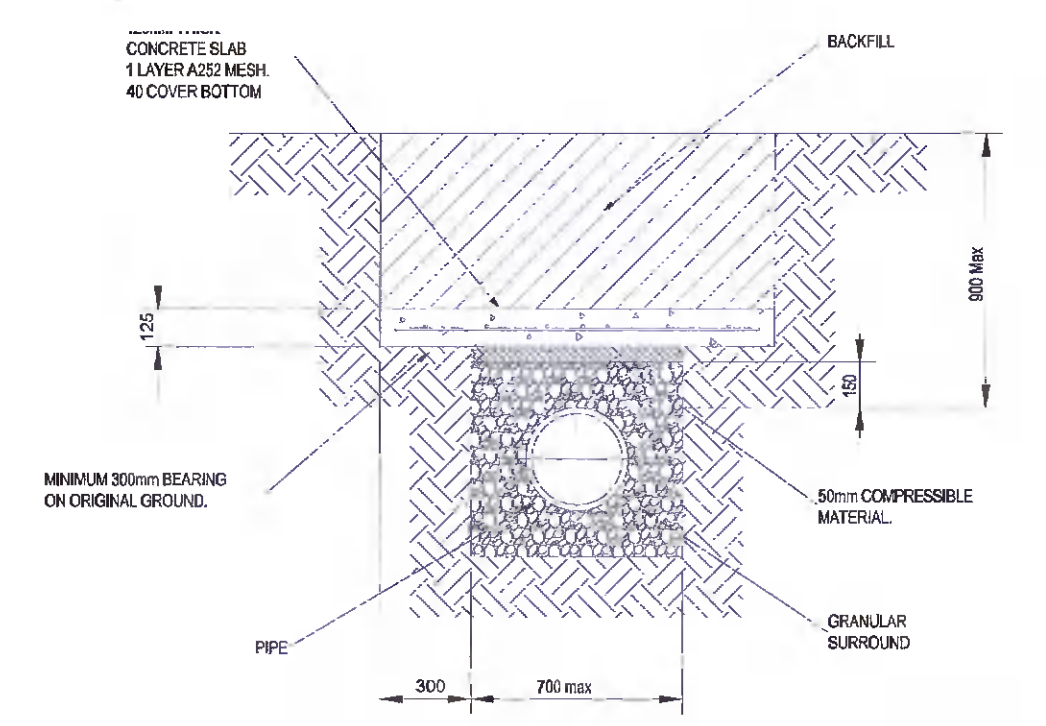
CLASS A CONCRETE BEDDING DETAILS



CLASS B BEDDING (BEDDING FACTOR 1.5)

GRANULAR PIPE BEDDING DETAILS FOR RIGID PIPES

PROTECTION FOR PIPES LAID AT SHALLOW DEPTHS

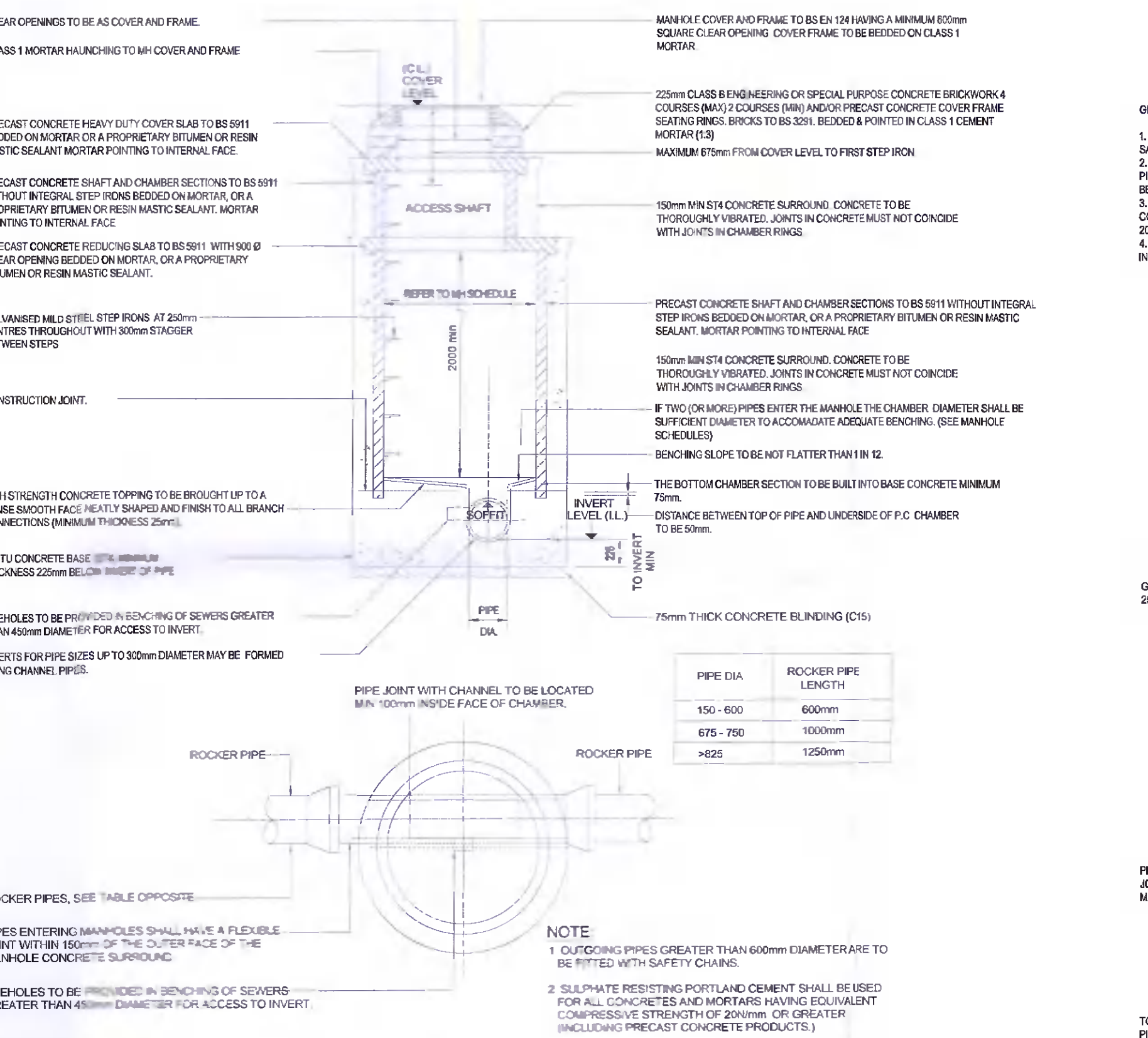


PIPE DIAMETER	CLASS OF BEDDING	IMPORTED GRANULAR MATERIAL (NOTE 1)
100	S B	10mm nominal size
OVER 100 TO 150	S B	10 or 14mm nom. single size or 14 to 5mm graded
OVER 150 TO 500	S B	10, 14, 20mm nom. single size or 14 to 5mm graded or 20 to 5mm graded
OVER 500 (note 2)	S B	10, 14, 20mm nom. single size crushed rock or 14 to 5mm graded or 20 to 5mm graded or 40 to 5mm graded

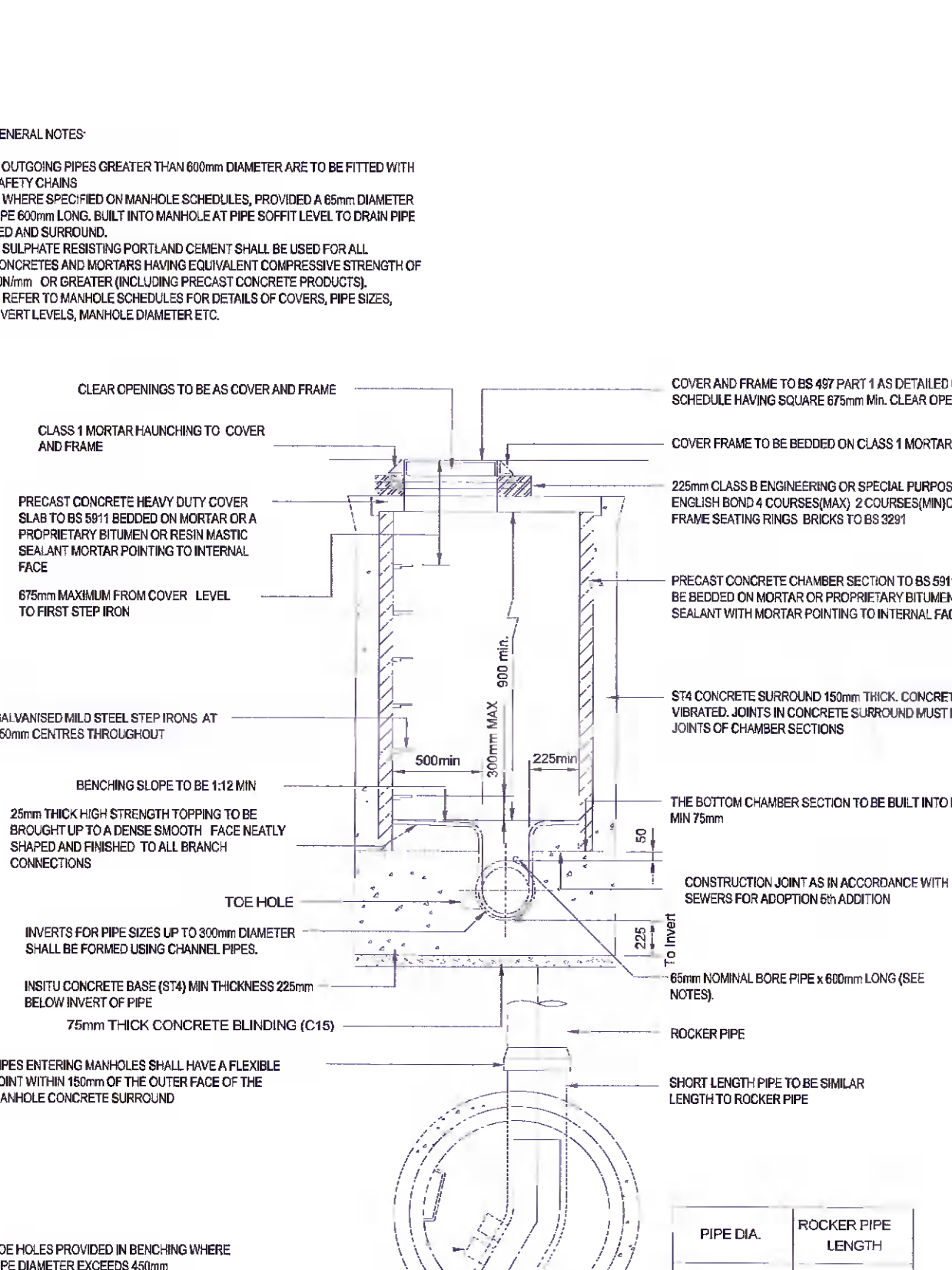
GRANULAR BEDDING & SIDEFILL MATERIALS FOR RIGID + FLEXIBLE PIPES

PIPE DIAMETER	Y minimum		MAXIMUM TRENCH WIDTH	L
	Y1 min.	Y2 min.		
100	100	200	700	18
150	100	200	750	18
200	100	200	800	18
225	100	200	825	18
250	100	200	850	18
300	100	200	925	18
350	100	200	1000	18
375	100	200	1080	18
400	150	200	1025	18
450	150	200	1175	36

DIMENSIONS FOR PIPE BEDDING

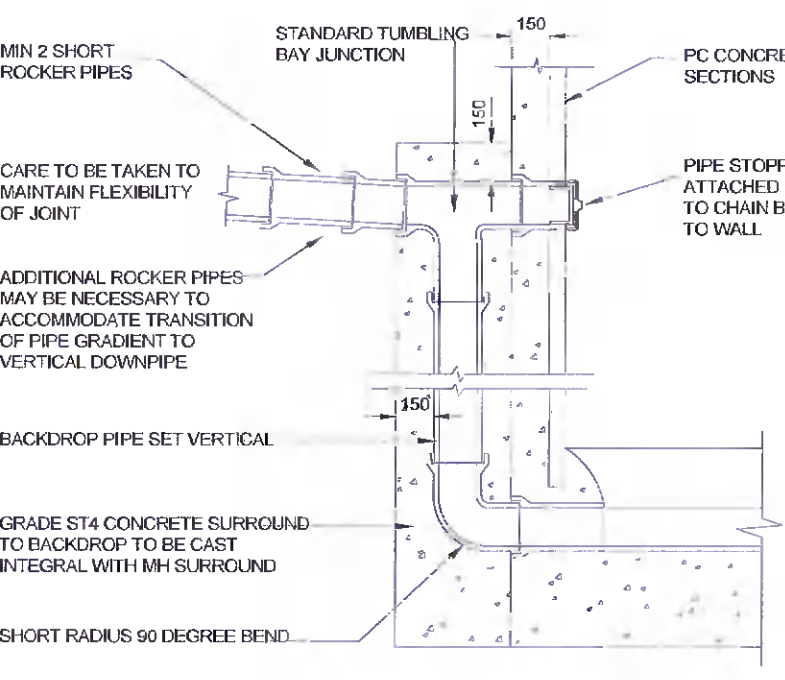


TYPICAL PRECAST RING MANHOLE DETAIL



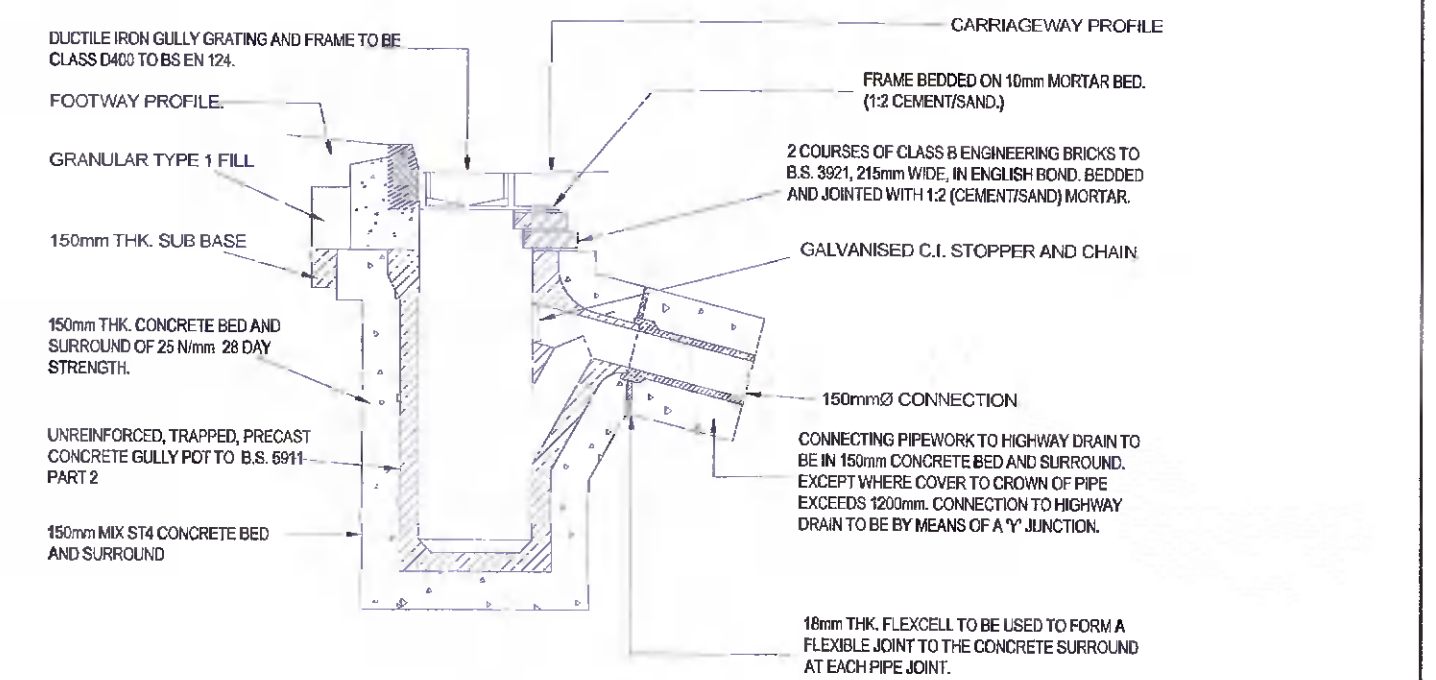
TYPICAL PRECAST RING MANHOLE DETAIL

TYPICAL VERTICAL BACKDROP DETAIL



SECTION THROUGH TYPICAL GULLY

(450mm x 500mm for Road Gully, 375mm x 750mm for car park gully)



SECTIONAL PLAN TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES



0 50mm ON A1 DWG. 50

REV	DESCRIPTION	BY	CHK	DATE

CLIENT
CAPAMI LTD

PROJECT
OLDCOURT
OCIL 4

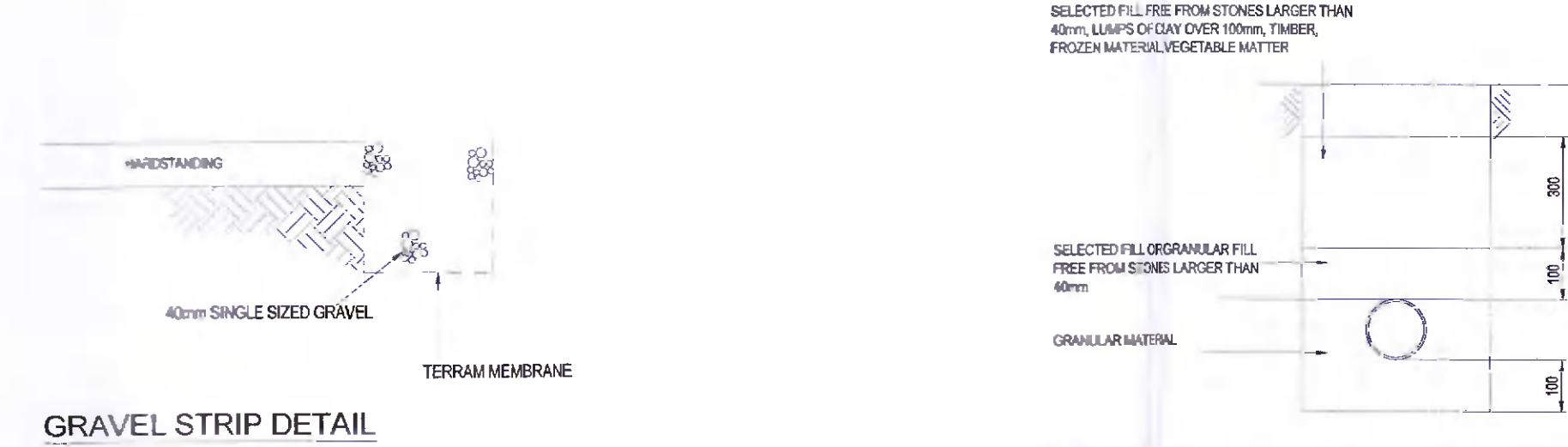
DRAWING TITLE
DRAINAGE DETAILS

PINNACLE
CONSULTING ENGINEERS

GROSVENOR COURT,
67A PATRICK STREET,
DUN LAOGHAIRE,
COUNTY DUBLIN
IRELAND. TELEPHONE: +353 1231 1041
WELWYN GARDEN CITY | NORWICH | LONDON | THE HAGUE

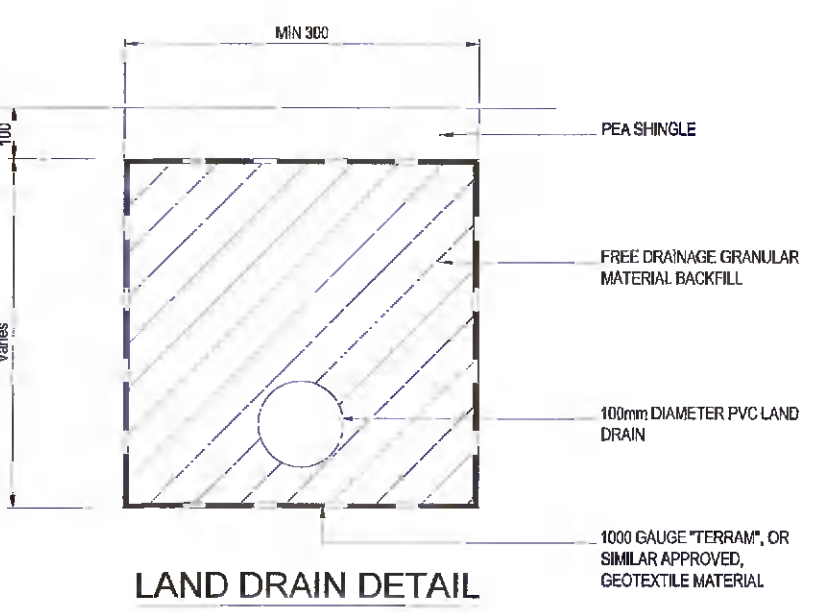
DRAWING STATUS			
IRISH WATER SUBMISSION			
SCALE @ A1	DATE	DRAWN BY	CHECKED
1:500	JAN '22	FJVR	SO'R
DRG NO.	REVISION		
P190302-204			

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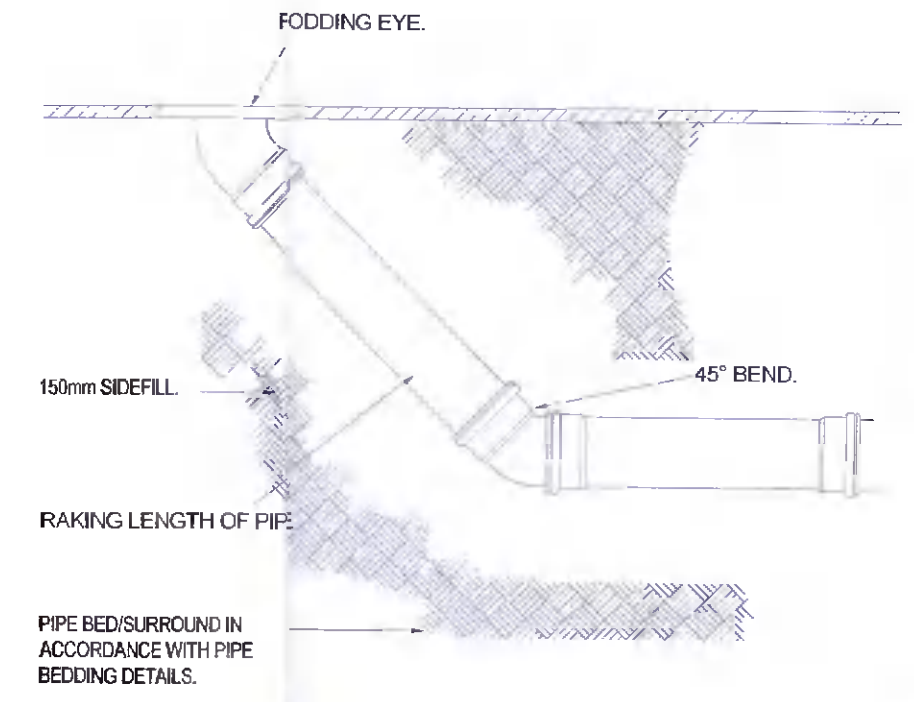


GRAVEL STRIP DETAIL

GRANULAR PIPE BEDDING DETAILS FOR FLEXIBLE PIPES



LAND DRAIN DETAIL



TYPICAL RODDING EYE DETAIL