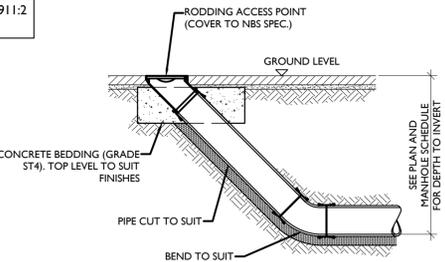


TYPICAL TYPE 'E' MANHOLE SECTION
DEPTH FROM GROUND LEVEL TO SOFFIT OF PIPE 1.0m-1.5m
(SCALE 1:20)

SCHEDULE OF CHAMBER DIAMETERS	
DIA. OF LARGEST PIPE IN MANHOLE	INTERNAL DIA. OF MANHOLE
LESS THAN 3750	1200
375-700 (incl)	1500
750-900 (incl)	1800
>900	2100+

NOTE: CHAMBER SIZES OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED AN INCREMENT TO ACCOMMODATE.

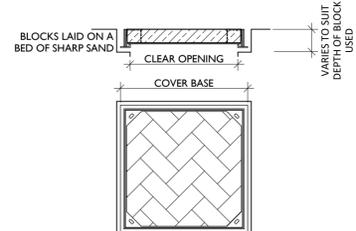
ALL PRECAST CONCRETE TO BS 5911:2 & BS 8301 KITEMARKED.



TYPICAL RODDING EYE DETAIL

LATERAL (dia. in mm)	PUBLIC SEWER DIAMETER (mm)									
	100	150	225	300	375	450	525	600	675	750
100	JN	JN	JN	SA						
150		JN	JN	JN	SA	SA	SA	SA	SA	SA
225			JN	JN	JN	SA	SA	SA	SA	SA
300				JN	JN	JN	SA	SA	SA	SA
375					JN	JN	JN	SA	SA	SA
450						JN	JN	JN	SA	SA

JN = JUNCTION
SA = SADDLE

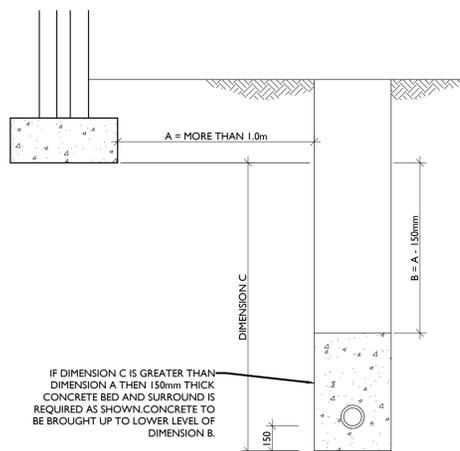


MANHOLE COVER	FACTA	COVER REF.	LOADING
ROAD AND PAVING SUBJECT TO WHEEL LOADS UP TO 11 TONNES	D	600 x 600 (6333) BRIPAVE	HEAVY DUTY
CAR PARKS, ESTATE ROADS NOT OPEN TO FAST MOVING THROUGH TRAFFIC WHEEL LOADS UP TO 5 TONNES	B	600 x 600 (6332) BRIPAVE	MEDIUM DUTY
AREAS SUBJECT TO MAXIMUM WHEEL LOAD OF 1.5 TONNES	AA	600 x 600 (6331) BRIPAVE	LIGHT DUTY

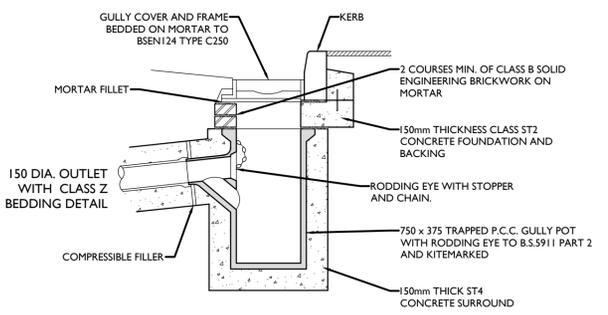
NOTES
1. COVERS QUOTED ARE MANUFACTURED BY STEELWAY BRICKWORK.
2. COVERS BY OTHER MANUFACTURERS MAY BE SUBSTITUTED IF AUTHORIZED BY THE ENGINEER.
3. DOUBLE SEAL DESIGNS (SUFFIX DS) HAVE BASE DIMENSIONS 50mm LARGER THAN LISTED ABOVE.

CDM NOTES

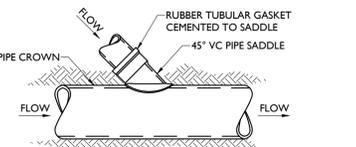
- ACCESS AND EGRESS TO THE SITE FROM BUSY ROAD.
- POTENTIAL GROUND INSTABILITY IN DEEP EXCAVATIONS
- EXISTING SERVICES IDENTIFIED ON SITE
- ADEQUATE SEGREGATION HOARDING REQUIRED TO SEPARATE PUBLIC FROM THE CONSTRUCTION SITE.
- ADEQUATE MEASURES REQUIRED TO CONTROL NOISE, DUST, FUMES & VIBRATION.



DRAIN TRENCH EDGE MORE THAN 1m FROM FOOTING/FOUNDATION EDGE



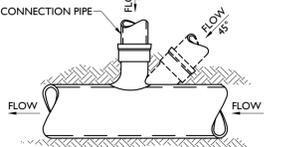
TYPICAL ROAD GULLY



TYPICAL SADDLE CONNECTION DETAIL

SADDLE CONNECTION INTO PUBLIC SEWER IS ACCEPTABLE WHEN SEWER DIAMETER IS THREE INCREMENTS LARGER THAN CONNECTION DIAMETER. SADDLE CONNECTIONS MUST BE POSITIONED AT 10 O'CLOCK OR 2 O'CLOCK AND AT AN ANGLE OF 45°. SADDLES SHALL BE THE SAME MATERIAL AS EXISTING SEWER.

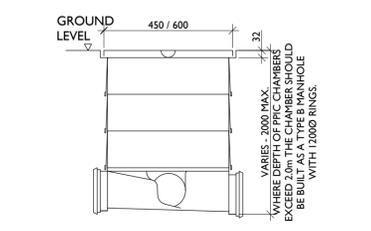
THE TABLE BELOW SHOWS IF A JUNCTION OR SADDLE MAY BE USED FOR VARIOUS PUBLIC SEWER AND LATERAL COMBINATIONS



TYPICAL JUNCTION CONNECTION DETAIL

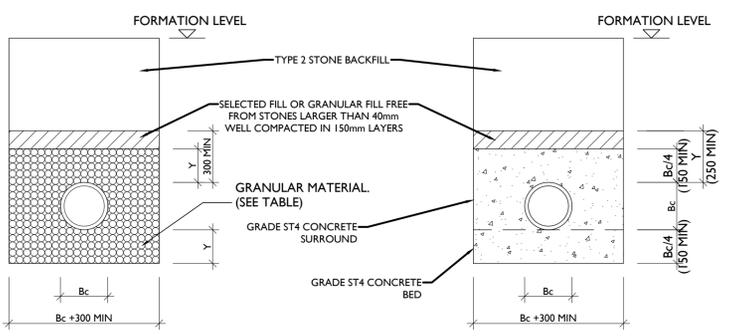
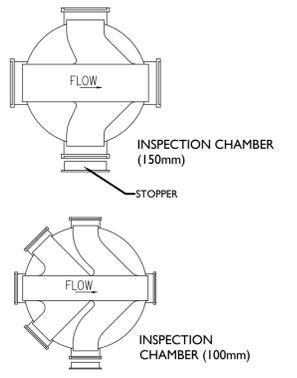
OBLIQUE OR SQUARE CURVED JUNCTION CONNECTION TO BE USED WHEN PUBLIC SEWER IS NOT 3 PIPE SIZES LARGER THAN THE LATERAL (CONNECTION) TO BE CONNECTED

BLOCK PAVING DETAIL



- NOTES
- CAST IRON COVER AND PLASTIC FRAME ARE SUITABLE FOR USE WHERE WHEEL LOADS DO NOT EXCEED 1.5 TONNES.
 - FOR VEHICLE LOADING INSTALLATIONS, CHAMBER TO BE SURROUNDED WITH 250mm THICK CONCRETE AND COVER REPLACED WITH APPROPRIATE LOADING CLASSIFICATION COVER.
 - WHERE SIDE BRANCHES ARE NOT TO BE USED STOPPER TO BE INSERTED TO BLANK OFF CONNECTION
 - ACCESS TO CHAMBER RESTRICTED TO 350mm FOR CHAMBER DEPTHS GREATER THAN 1.2m

POLYPROPYLENE INSPECTION CHAMBER (PPIC)
TYPE NON ENTRY INSPECTION BY WAVIN OSA TO BS 7158:2001 KITEMARKED



CLASS S DETAIL

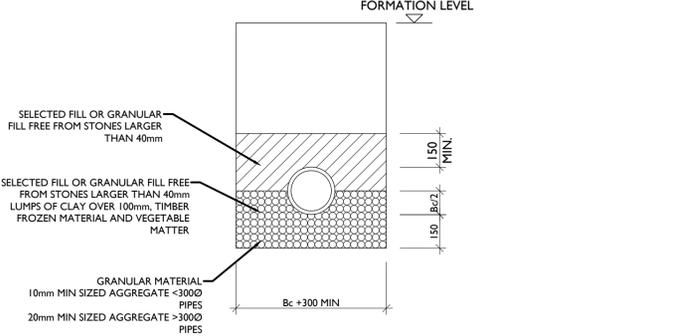
NOMINAL PIPE DIA (mm)	SINGLE SIZED (mm)	GRADED (mm)
150	10 or 14	14 to 5
200 to 300	10,14 or 20	14 to 5 or 20 to 5
375 to 525	14 or 20	14 to 5 or 20 to 5
Greater than 525	14,20 or 40	14 to 5,20 to 5 or 40 to 5

GRANULAR BEDDING MATERIAL
(ALL AGGREGATES TO TABLE 4 OF BS 882:1983)

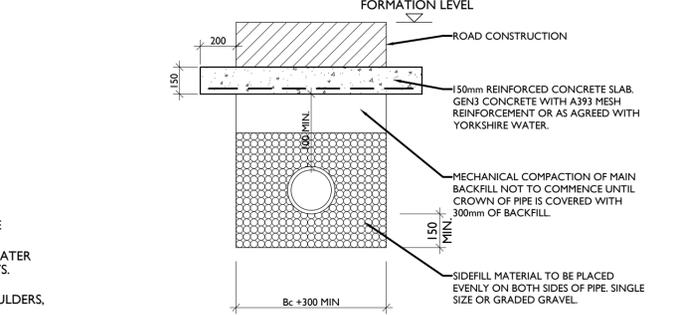
CLASS Z DETAIL

- NOTES
- A) Bc = OUTSIDE DIAMETER OF PIPE BARREL.
- B) Y = FOR UNIFORM SOILS:
SLEEVE JOINTED PIPES, MIN. 50mm OR 1/2 Bc, WHICHEVER IS THE GREATER.
SOCKETED PIPE, MIN. 100mm OR 1/2 Bc, WHICHEVER IS THE GREATER UNDER BARRELS AND NOT LESS THAN 50mm UNDER SOCKETS.

FOR ROCK OR MIXED SOILS CONTAINING ROCK BANDS, BOULDERS, STONES OR OTHER IRREGULAR HARD SPOTS:
SLEEVE JOINTED PIPES, MIN. 150mm OR 1/2 Bc, WHICHEVER IS THE GREATER.
SOCKETED PIPE, MIN. 200mm OR 1/2 Bc, WHICHEVER IS THE GREATER UNDER BARRELS AND NOT LESS THAN 150mm UNDER SOCKETS.



CLASS B DETAIL



CLASS S DETAIL
COVER < 1200mm FOR HIGHWAYS COVER < 900mm FOR NONE VEHICULAR ACCESS

Euro Garages Ltd

Proposed PFS & Drive 'Thru' Restaurant
Centurion Way, Cleckheaton

Drainage Details

Goodson Associates
Tel: +44 (0)113 369 7925
Fax: -
Email: leeds@goodsons.com
Web: www.goodsons.com

Consulting Civil, Structural & Transportation Engineers
Fountain House, 4 South Parade,
Leeds, LS1 5QX
Also at Aberdeen, Edinburgh and Glasgow.

CONSTRUCTION

DATE CREATED: Sept. '23'	SCALE: 1:20 @ A1
CONTRACT No: P15622	DRAWING No: 507
REV: -	