

Joint to be as close as practicable to Face of Manhole to Permit Satisfactory Joint & Subsequent Movement

Pipe Diameter	Rocker Pipe Length
150 - 450	500 - 750
450 - 750	750 - 1000
> 750	Seek Guidance

NB. Toe Holes to be Provided in Benching of Sewers Greater than 450mmØ for Access to Invert

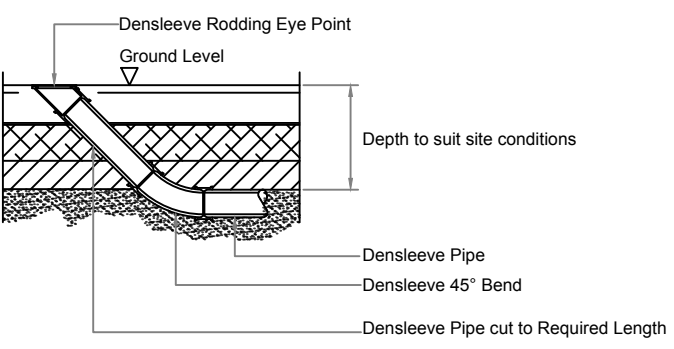
Pipe Joint with Channel to be Located (min) 100mm Inside Face of Chamber

NB. Chambers with Outgoing Pipes Greater than 600mmØ Shall be fitted with Guard Bars, Safety Chains or other Safety Devices

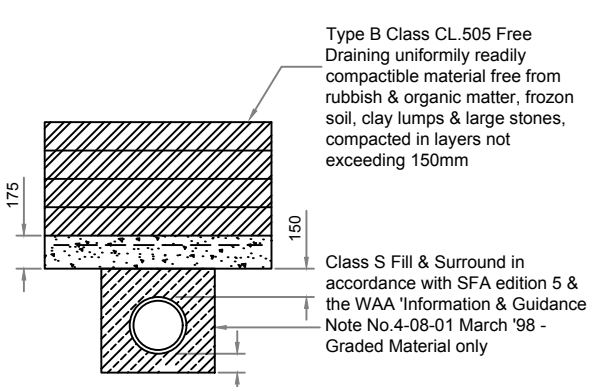
Short Length Pipe to be Similar Length to Rocker Pipe  
Rocker Pipe

NB. THE SAFETY POLICY OF INDIVIDUAL SEWERAGE UNDERTAKERS MAY REQUIRE A LARGER MINIMUM CLEAR OPENING INTO MANHOLES AND THE FITTING OF GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES. IN MANHOLES WITH OUTGOING PIPES OF LESS THAN 600mm.

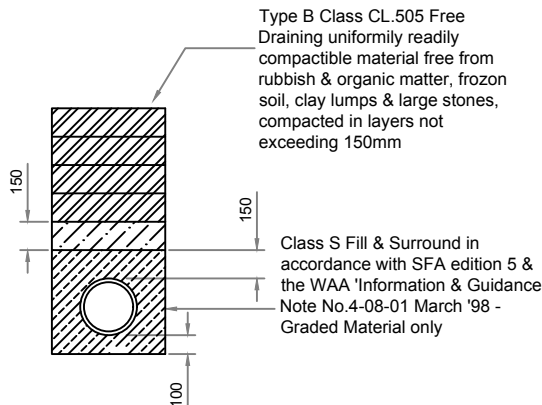
**TYPICAL MANHOLE DETAILS** Depth to suit Soffit 1.35 - 3.0m  
Scale 1:20



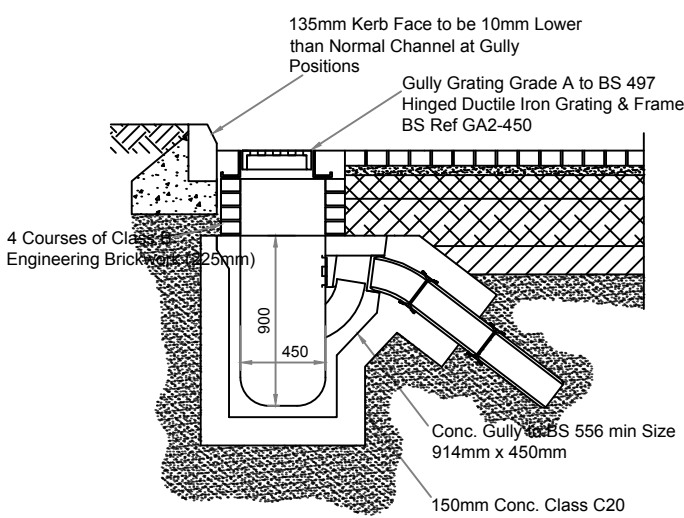
**RODDING POINT DETAIL**  
Scale 1:20



**CONCRETE PROTECTION DETAIL**  
Scale 1:20



**STANDARD BEDDING DETAIL**  
Scale 1:20



**TYPICAL GULLY DETAILS**  
Scale 1:20

**Hardstanding notes:**

- 1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND BAILEY JOHNSON HAYES DRAWINGS AND SPECIFICATIONS
- 2 ALL TOPSOILS, SUBSOILS AND DELETERIOUS MATERIAL IS TO BE STRIPPED FROM BENEATH THE BUILDING ZONE FOR FORMATION LEVELS. THE EXPOSED FORMATION TO BE PROOF ROLLED WITH A TWIN WHEELED VIBRATORY ROLLER WITH A STATIC LOAD OF NOT LESS THAN 35KG/25MM WIDTH. ROLLING IS TO CONTINUE UNTIL THERE IS NO NOTICABLE DEFORMATION UNDER THE ACTION OF THE ROLLER, (MINIMUM OF 8 NO. PASSES)
- 3 ANY SOFT SPOTS ARE TO BE EXCAVATED OUT AS INSTRUCTED BY BJH AND FILLED/ROLLED WITH ACCEPTABLE SAND/GRAVEL FROM SITE EXCAVATIONS IN LAYERS NOT EXCEEDING 150MM THICK
- 4 SLABS TO BEAR UPON 1200 GAUGE VISQUEEN WHICH IS TO BE FULLY LAPPED/SEALED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
- 5 ALL CONCRETE IS TO BE GRADE C35 TO BS8110, MIN CEMENT CONTENT 330KG/M3 OPC MAXIMUM FREE WATER CEMENT RATIO 0.6 MAXIMUM AGGREGATE SIZE 20MM + 5% AIR ENTRAINED.
- 6 THE SLAB IS TO BE LAID IN LONG BAY FASHION IN ASSOCIATION WITH THE CONCRETE SOCIETY RECOMMENDATIONS TO RECEIVE A LIGHT BRUSH FINISH
- 7 MINIMUM MESH LAPS 300MM SIDE AND ENDS: MINIMUM VISQUEEN LAP 300MM
- 8 IT IS ESSENTIAL THAT ALL TRANSVERSE JOINTS ARE CUT WITHIN 24 HOURS OF CASTING
- 9 ALL JOINTS ARE TO BE SEALED USING THIOFLEX 600 OR SIMILAR APPROVED
- 10 SLAB POURING PROGRAMME SHOULD ALLOW 72 HOURS CLEAR BETWEEN CASTING ADJACENT BAYS

**Drainage notes:**

- 1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS.
- 2 DRAINS TO BE HEPWORTH SUPERSLEEVE OR NAYLOR DENSLEEVE: LAID ON CLASS N GRANULAR BEDDING TO BS 882: TABLE 4 OR TO BS 8301: 1985 APPENDIX D. CONCRETE ENCASED PIPES IDENTIFIED ON BJH DRAWINGS.
- 3 ALL TRENCHES WITHIN TRAFFICKED AREAS TO BE BACKFILLED WITH 75MM DOWNGRADED STONE FILL, PLACED & COMPACTED IN LAYERS OF 150MM. ALL PIPES IN ROADWAYS / PARKING, LESS THAN 900MM DEEP TO BE ENCASED IN CONCRETE. PROVIDE FLEXIBLE JOINTS AT 3000MM CENTRES.
- 4 MANHOLES TO BE CONSTRUCTED OF PRECAST CONCRETE RINGS TO BS 5911-PART 1. RINGS TO BE BEDDED IN SEALANT STRIPS.
- 5 MANHOLES BENEATH ROADS & PARKING AREAS TO BE CASED IN 150MM CONCRETE SURROUND.
- 6 ALL CONNECTIONS TO RAIN WATER PIPES TO BE PROVIDED WITH RODDING ACCESS.
- 7 ROAD GULLIES TO BE HEPWORTH ROAD GULLIES REF: 213 WITH 150MM DIAMETER OUTLET OR SIMILAR APPROVED. GULLIES TO BE ENCASED IN 150MM MINIMUM CONCRETE.
- 8 DRAWINGS TO BE ISSUED TO NRA & LOCAL AUTHORITY WELL IN ADVANCE OF COMMENCEMENT OF DRAINAGE CONSTRUCTION.
- 9 EXISTING MANHOLES IN ROADS TO HAVE INVERT LEVELS CONFIRMED PRIOR TO DRAINAGE CONSTRUCTION.
- 10 ROADS TO BE REINSTATED TO STANDARD REQUESTED BY LOCAL AUTHORITY WHERE DRAINAGE CROSSES CARRIDGEWAY.

- Allow for all Soft Spots.
- Allow for all Removal if existing Hedges / Trees & Additional Construction Depth as necessary.
- All Earth Batters Remaining to be not steeper than 1 in 2.5.
- Allow for use of Terram as Necessary in softer areas.

**TENDER**

**PLOT 1, Skimmingdish Lane, Link 9 - Bicester**

CLIENT:  
**ALBION LAND (2013) LTD**

**PLOT 1 Drainage Details**

**BAILEY JOHNSON HAYES**  
Consulting Engineers

ST.ALBANS: Suite 4, Phoenix House, 63 Campfield Rd, ST.ALBANS, Herts AL1 5FL  
MANCHESTER: Grange House, John Dalton Street, MANCHESTER, M2 6FW

Scale as shown  
Date 16.04.18  
Drawn DJC  
**S1344-E-03**