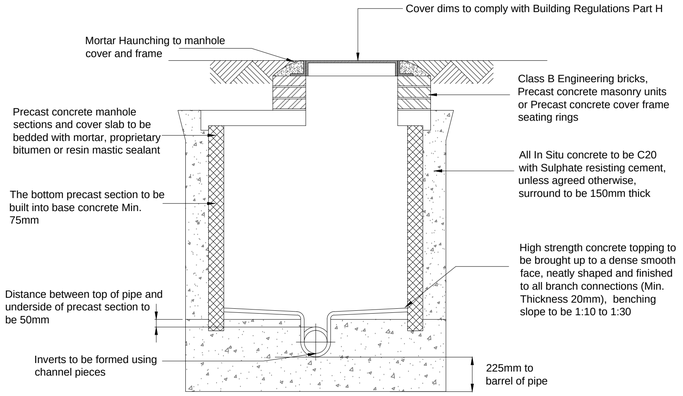
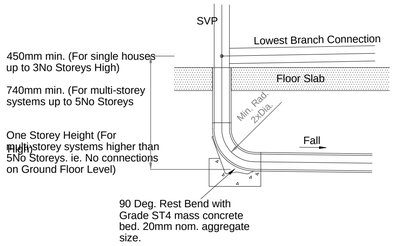
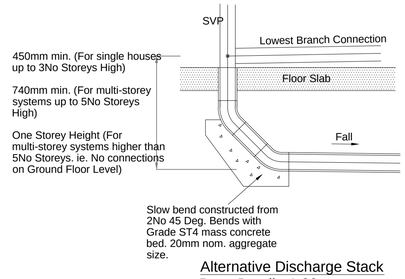


Typical Private Concrete Manhole Specification

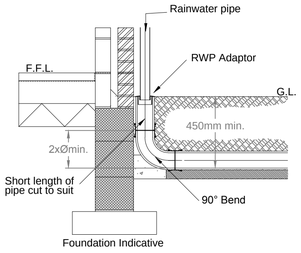
Scale 1:20



Preferred Discharge Stack Base Detail - 1:20

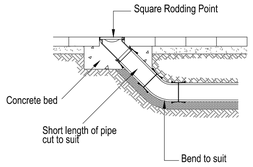


Alternative Discharge Stack Base Detail - 1:20



Typical Rainwater Pipe Detail

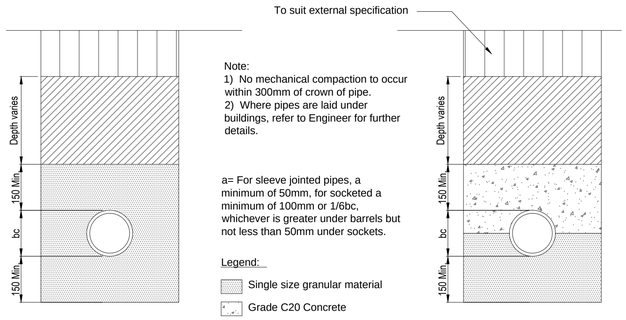
Scale 1:20



Typical Rodding Eye Detail

Scale 1:20

Internal drainage runs under floor void to be laid in standard pea gravel trenches where existing ground levels allow or on lean mix concrete bedding/haunching where pipes are above existing ground level. We assume all topsoil will be scraped off.



Class S Bedding

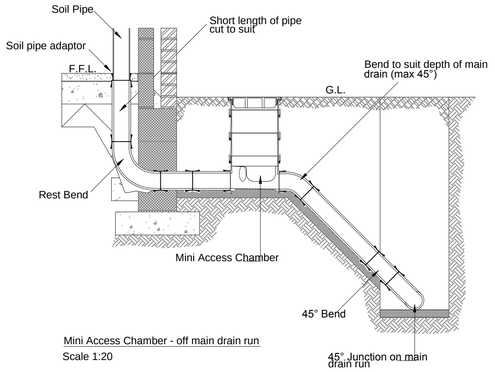
Scale 1:10

Applicable under roads/service yards where drains have more than 1200mm cover (if adopted) or more than 700mm cover (if not adopted) and in soft areas.

Class A Bedding

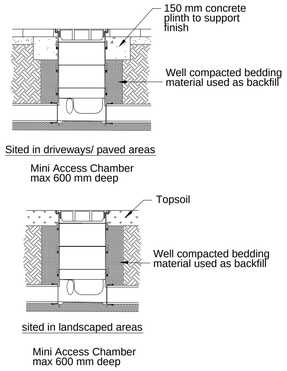
Scale 1:10

Applicable under trafficked areas if drains have less than 700mm cover (if not adoptable).



Mini Access Chamber - off main drain run

Scale 1:20



CDS Standard Drainage Notes

Do not scale this drawing. All dimensions must be checked / verified on site. If in doubt ask.

ALL DISCREPANCIES NOTED ON SITE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise

This drawing to be read in conjunction with all other relevant Engineers and Architects details and CDS Drawings.

All work is to be carried out in accordance with the current British Standards, Codes of Practice and Building Regulations.

The exact position, level, size and use of existing sewers to be confirmed on site. Any discrepancies to be reported to the Engineer PRIOR TO COMMENCEMENT OF WORKS.

All uncovered and shallow pipework to be protected against construction traffic as part of the Contractors temporary works requirements.

Proposed drainage passing through new foundations to be sleeved with cast-in oversized pipework.

Exact location line and level of existing stubs to existing manholes in the road to be confirmed on site prior to construction.

Cover levels shown are approximate only, subject to the finalised external works and landscaping scheme.

The number and location of all RWP's is shown indicative only, all to be confirmed by Architect / M&E Contractor prior to commencement of works.

Pop-up positions for foul water appliances are shown approximate only for the purposes of underslab drainage. Exact locations to Archt's setting out to suit interior layouts etc.

All above ground and internal Surface and Foul Water pipework to specialist's design / detail. Not shown here.

Where no WC's are connected upstream, underslab FW drainage to be laid at 1:40 min. After the connection of at least 1No WC, a min. fall of 1:80 applies.

Water seal on Foul Water traps receiving condensate from freezers and other very low flow appliances, to be maintained on a regular basis to avoid drying out and subsequent passage of foul air to internal premises.

See Architect's details for all setting out dimensions to buildings and boundaries etc

All RWP's and SVP's to be fitted with roddable access plates. All foul drains to have roddable access.

All connections to road gullies and channels shall be 150mm nominal bore pipework. Connections to RWP's to be 100mm nominal bore pipework subject to confirmation of RWP sizes and/or design flow. No pipe work to be downsized in the direction of flow.

Connections to foul terminal fittings to be 100mm nominal bore pipework subject to confirmation of above ground pipe diameters and/or design flow. No pipe work to be downsized in the direction of flow.

All foul connections to be vented to atmosphere. All pop-up's located at the head of drains to be vented above ground. Above ground drainage details to be confirmed by the M+E contractor.

All un-noted buried foul pipework to be 100mm dia. unless subject to the notes above. All un-noted Storm buried pipework to be 150mm dia.

All buried pipework to be U-PVC type in accordance with WIs 4-35-01 unless otherwise noted.

As an alternative to U-PVC, buried pipework up to and including 150mm dia. may be 28KN/m strength clayware to BS EN 295; 1991.

As an alternative to U-PVC, buried pipework above 150mm dia. up to and including 300mm dia. may be 36KN/m strength clayware to BS EN 295; 1991.

As an alternative to U-PVC, buried pipework above 300mm dia. may be Class 120 (SRPC) concrete pipes to BS 5911 with spigot and socket flexible joints.

All new drainage to be constructed adjacent new and proposed tree planting to be protected against root activity using 'Rootcontrol' root barrier material by Green-tech. All in accordance with the manufacturer's recommendations.
Any non-architectural pipework and fittings noted as Cast Iron, to be from the 'Ensign' range by Saint Gobain Pipelines suitable for above or below ground use as appropriate, or similar approved. All to comply with the requirements of BS EN 877.

All pipework entering and exiting manholes to be connected with pipe soffits level.

Pre-formed channels to be used at all manholes.

High strength concrete benching to be steel trowelled to a dense smooth face neatly shaped and finished to all branch connections and laid in accordance with the Specification.

Pipe bends to be provided to suit direction of flow.

All manhole covers and frames to be Ductile Iron Heavy Duty Grade D400 double triangular to BS EN 124 unless otherwise noted.

Gully tops and manhole covers to be provided in accordance with BS EN124...

Group 1 (min. class A15).
Areas used and accessible by pedestrians and cyclists only. NO EMERGENCY VEHICLES.

Group 2 (min. class B125).
Footways, pedestrian areas, car parks. NO HGV's.

Group 4 (min. class D400).
All other areas including carriageways and HGV trafficked areas.

All manhole covers located internally, to be recessed, double seal, airtight type, aluminium or steel. Recess depth to Archt's requirements to suit finishes etc.

First flexible joint in pipes adjacent to a manhole shall be 600mm max. from inside face of manhole, connecting to rocker pipe. For pipe diameters 150mm - 450mm the rocker pipe length shall be 500mm - 750mm and for pipe diameters 451mm - 675mm the rocker pipe length shall be 750mm - 1000mm.

Manholes with outgoing pipes greater than 600mm Dia. shall be fitted with guard bars, safety chains or other approved safety devices.

All soft spots encountered in the trench formation to be removed and replaced with graded granular material unless instructed otherwise.

All pipework below road and car parking with less than 700mm cover (private) shall be protected with a 150mm min FND2 concrete surround with flexell isolation joints @ 2.0m max. centres to coincide with pipe joints.

All Specialist attentuation tanks, soakaways and water treatment units to be installed as per manufacturers installation details and specifications. Contractor to liase with specialist suppiers for confirmation of bedding and surround requirements.

All buried concrete must cater for class 2 sulphates conditions in accordance with table 1 of BRE digest 363.

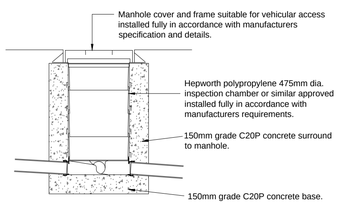
The design of any temporary works required shall be the responsibility of the Contractor.

Tender Note

Please note the Employer's Requirements stipulate ESVC clay pipes only. Please make allowance for ESVC at pricing stage. the use of standard Polypropylene pipes is TBC.

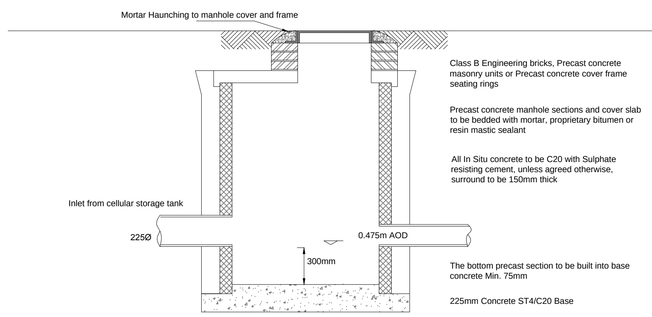
Typical Polypropylene Manhole

1/25



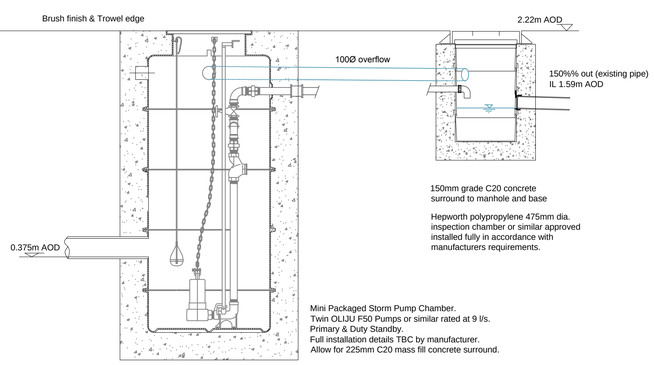
Silt Trap Manhole

S3
1/25



Mini Packaged Pump Chamber

MP1
1/25



Break Chamber

S4
1/25

Rev.	By	Date	Details	Chkd
Drawing Status			Tender	

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Client
Country Court Care Ltd.

Project
Proposed Care Home
Spalding Common

Title
Drainage Details & Specifications

Scale (A1)	Drawn by.	Drg. No.
As Shown	SN	2015.5563.22
Date. Aug 2018	Checked by.	

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