

Manhole Ref.	Cover Level (m)	Invert Level (m)	Backdrop Invert Lvl (m)	Manhole Depth (m)	Manhole Type	Manhole Ø (mm)	Cover/Frame Grade	Remarks
MHF1.0	9.250	8.650	-	0.600	Type 4	300	A15	-
MHF1.1	9.250	8.404	-	0.846	Type 3	450	A15	-
MHF1.2	9.250	7.745	-	1.505	Type 3	450	B125	Built on line of existing public foul sewer
MHF2.0	9.250	8.650	-	0.600	Type 4	300	A15	-

Pipe Ref.	Pipe Length (m)	Pipe Ø (mm)	Pipe Material	Gradient (1 in ?)	Bedding	Remarks
PNF1.0	4.83	100	UPVC	19.6	Class S	-
PNF1.1	3.14	100	UPVC	5.2	Class S	-
PNF2.0	7.82	100	UPVC	40	Class S	-

Manhole Ref.	Cover Level (m)	Invert Level (m)	Backdrop Invert Lvl (m)	Manhole Depth (m)	Manhole Type	Manhole Ø (mm)	Cover/Frame Grade	Remarks
MHS1.0	9.250	8.650	-	0.600	Type 4	300	A15	-
MHS1.1	9.250	8.583	-	0.667	Type 3	450	A15	-
MHS1.2	9.250	IN=8.402 OUT=8.402 SL=7.952	-	IN=0.848 OUT=0.848 SL=1.298	PCC RECT Catchpit	600x450	B125	-
MHS2.0	9.250	8.750	-	0.500	Type 4	300	A15	-

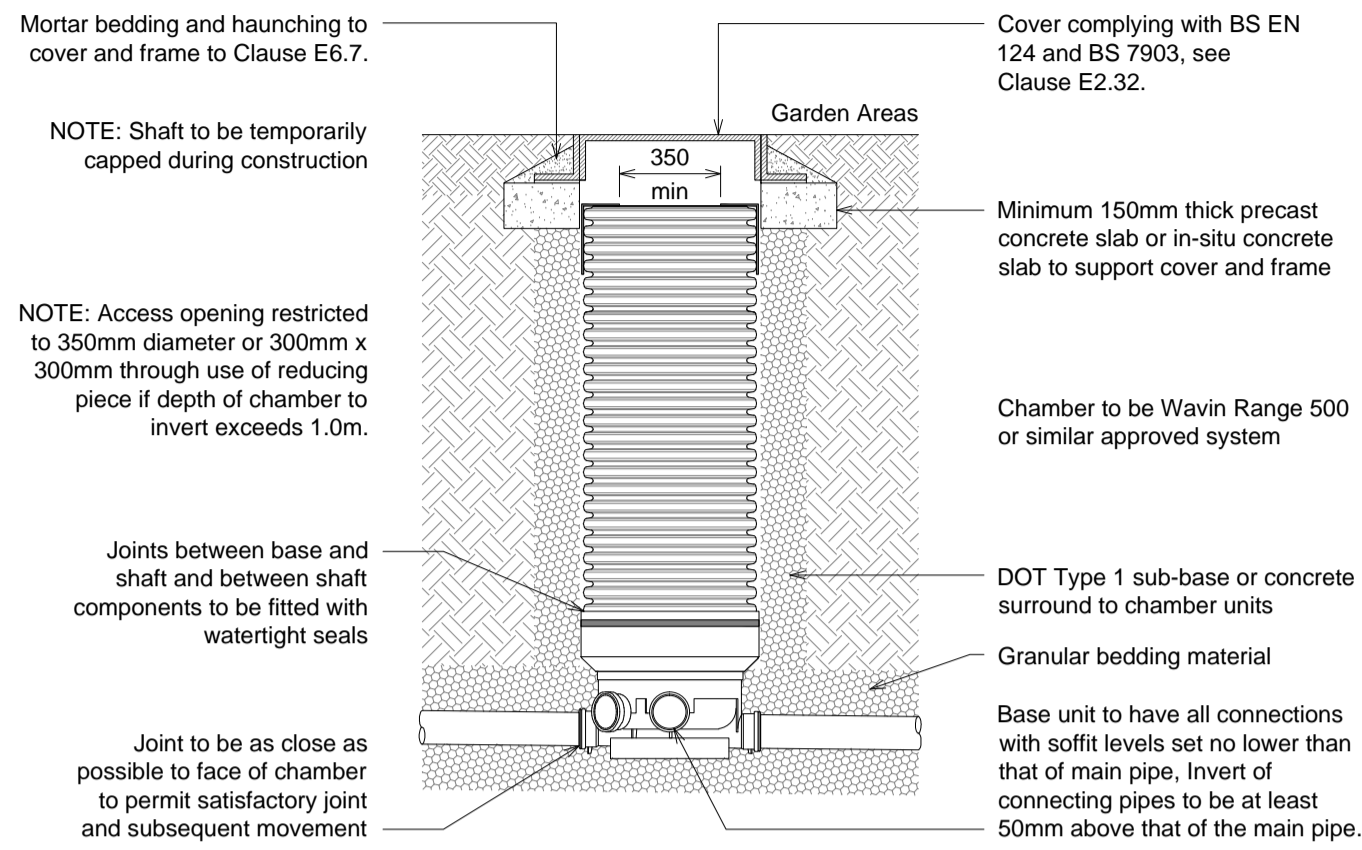
Pipe Ref.	Pipe Length (m)	Pipe Ø (mm)	Pipe Material	Gradient (1 in ?)	Bedding	Remarks
PNS1.0	4.00	100	UPVC	60	Class S	-
PNS1.1	10.82	100	UPVC	60	Class S	-
PNS1.2	4.08	150	UPVC	60	Class S	-
PNS2.0	8.5	100	UPVC	24	Class S	-

Soakaway Ref.	Cover / Ground Level (m)	Inlet Level(s) (m)	Inlet Depth(s) (m)	Remarks
SA1	9.250	8.330	0.920	Soakaway constructed using Wavin Aquacell blocks or similar approved product (Individual block dimensions: L=1.0m x W=0.5m x D=0.4m)  Soakaway Structure Dimensions Length = 7m (? Blocks) Width = 7m (? Blocks) Depth = 7m (? Layers of Blocks)  Inlet to be located at high level into soakaway structure

### Typical Type 3 Chamber Detail (Non-Entry)

scale 1:25

- Maximum depth of cover level to soffit of pipe 3.0m
- For individual access cover grades see schedules.



NOTE: Access opening restricted to 350mm diameter or 300mm x 300mm through use of reducing piece if depth of chamber to invert exceeds 1.0m.

NOTE: Plastic chambers and rings in areas subject to vehicle loading shall comply with BS EN 13598-2, in all other areas they are to comply with BS EN 13598-1 or BS EN 13598-2 or have equivalent independent approval.

#### Clause E6.6 - Pipes and Joints Adjacent to Structures

- Where rigid pipes are used, a flexible joint (rocker pipe) shall be provided as close as is feasible to the outside face of any structure into which a pipe is built, within 150mm for pipe diameters less than 300mm. The design of the joints shall be compatible with any subsequent movement.
- The recommended length of the next pipe (rocker pipe) away from the structure shall be as shown in Table E.12.

Table E.12 Rocker Pipes

Nominal Diameter (mm)	Effective length of Rocker Pipe (mm)
150	600

#### Text taken from Figure B.14

- Stub pipes into structures shall be of rigid material.
- No incoming branch is to be less than 90° from the outgoing direction of flow, all pipes entering the bottom of the manhole are to have level soffits.

#### Clause E6.7 - Setting Manhole Covers and Frames

- Manhole frames shall be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions.

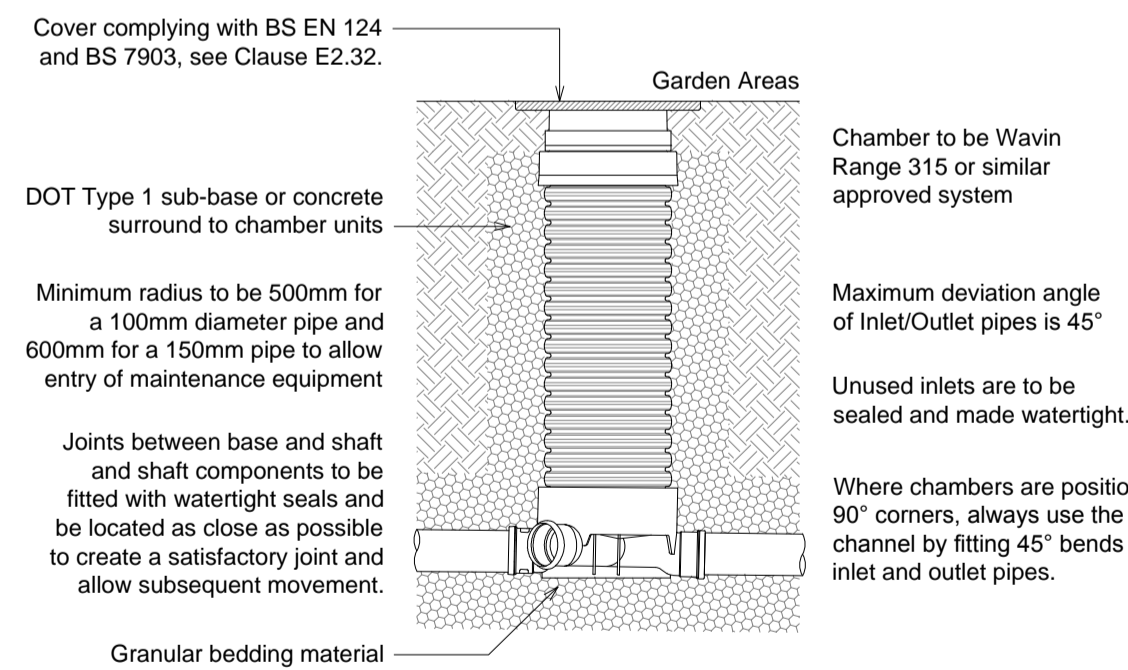
#### Clause: E2.32 Manhole Covers and Frames

- Manhole covers and frames shall comply with the relevant provisions of BS EN124, BS7903 and Highways Agency Guidance Document HA 104/09. They shall be of a non-rocking design which does not rely on the use of cushion inserts.
- Manhole covers on foul-only sewers shall be of low leakage types in order to prevent excessive surface water ingress.
- As a minimum, Class D400 covers shall be used in carriageways of roads (including pedestrian streets), hard shoulders and parking areas used by all types of road vehicles.

### Typical Type 4 Chamber Detail (Non-Entry)

scale 1:20

- Max depth from cover to soffit of pipe 2.0m
- For individual access cover grades see schedules.



- NOTE:
- Plastic chambers and rings shall comply with BS EN 13598-1 or BS EN 13598-2 or have equivalent independent approval.
  - Backfill to be well compacted around shaft of chamber.

#### Clause: E2.32 Manhole Covers and Frames

- Manhole covers and frames shall comply with the relevant provisions of BS EN124, BS7903 and Highways Agency Guidance Document HA 104/09. They shall be of a non-rocking design which does not rely on the use of cushion inserts.
- Manhole covers on foul-only sewers shall be of low leakage types in order to prevent excessive surface water ingress.
- As a minimum, Class D400 covers shall be used in carriageways of roads (including pedestrian streets), hard shoulders and parking areas used by all types of road vehicles.

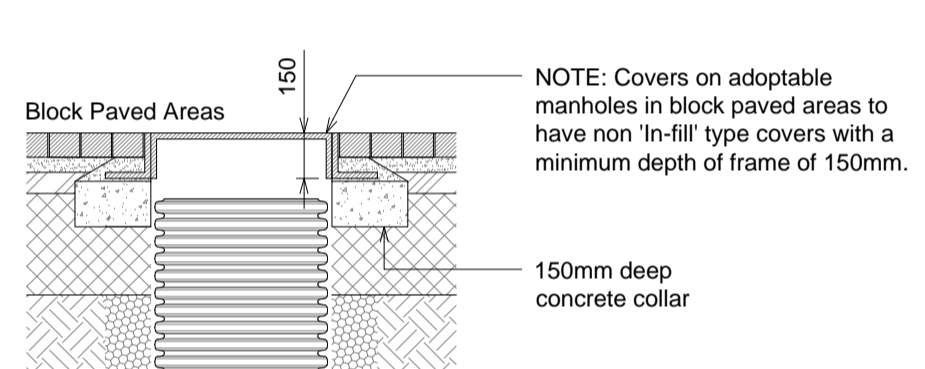
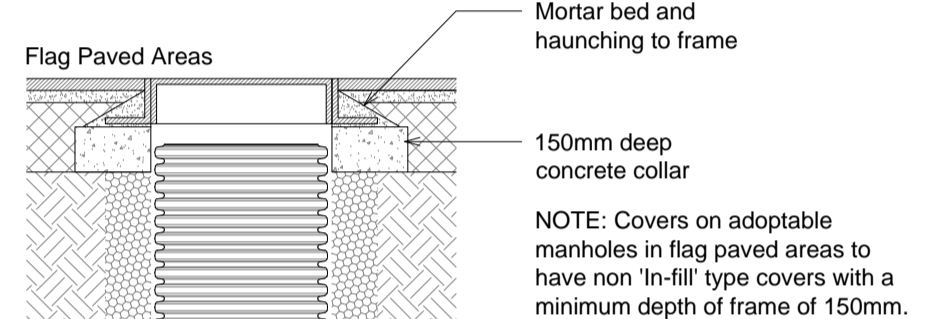
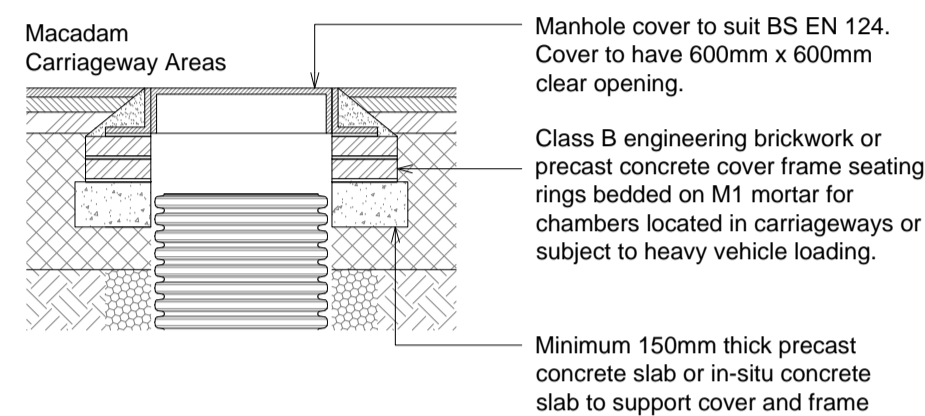
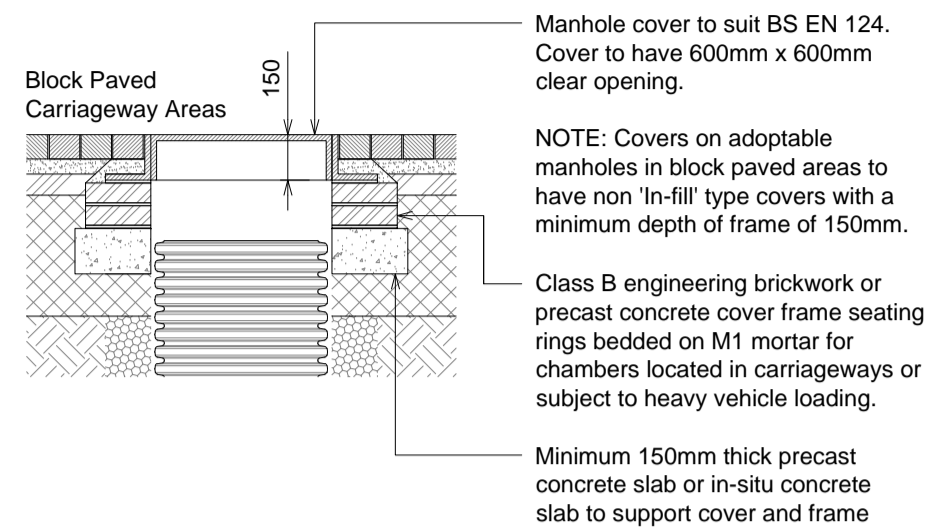
#### Clause: E6.7 Setting Manhole Covers and Frames

- Manhole frames shall be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions.

### Type 3 Alternate Cover Details

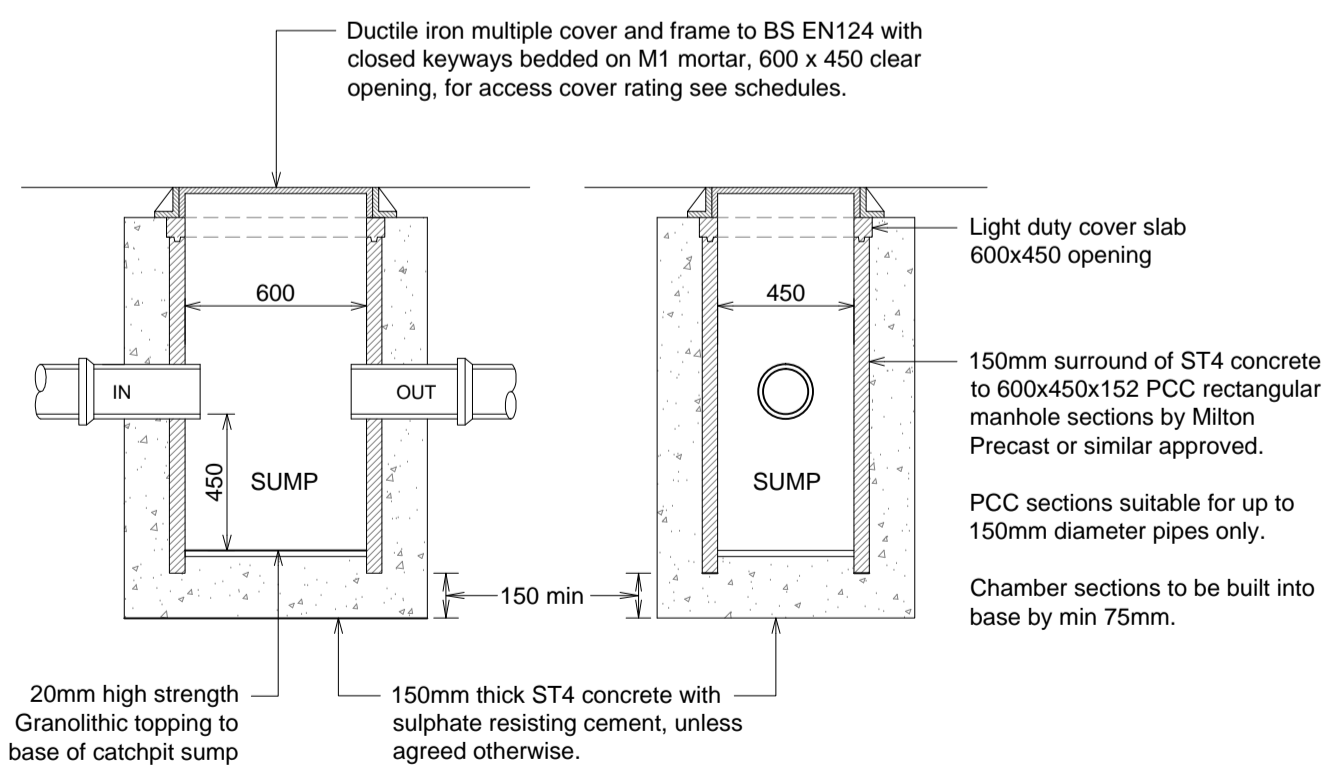
scale 1:25

All covers to comply with BS EN 124 and BS7903, see Clause E2.32. All covers to have mortar bedding and haunching to cover and frame to Clause E6.7



### PCC Catchpit (600x450mm)

scale 1:25



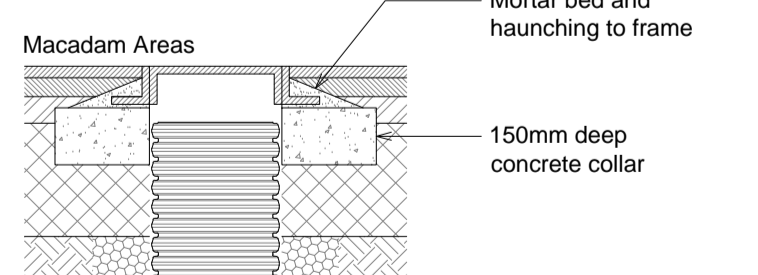
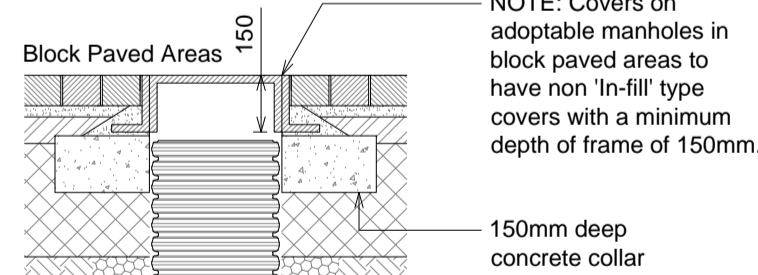
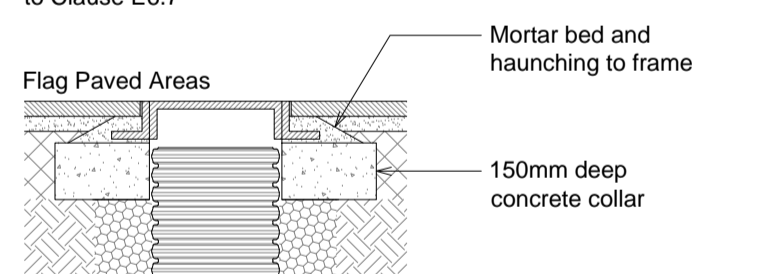
20mm high strength Granolithic topping to base of catchpit sump

150mm thick ST4 concrete with sulphate resisting cement, unless agreed otherwise.

### Type 4 - Alternate Cover Details

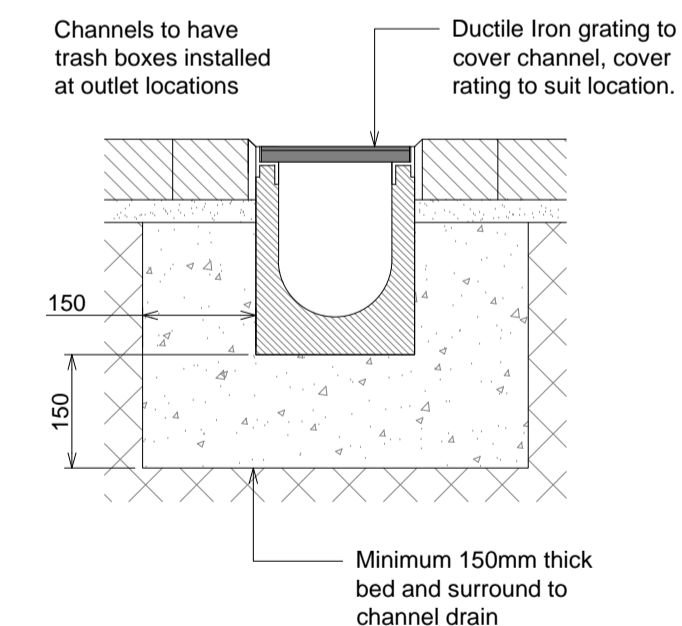
scale 1:20

All covers to comply with BS EN 124 and BS 7903, see Clause E2.32. All covers to have mortar bedding and haunching to cover and frame to Clause E6.7



### Channel Drain Detail

scale 1:10



#### DRAINAGE NOTES

- The location of any existing drains and sewers are to be accurately located and reported prior to any work commencing on site.
- All materials, workmanship and construction to be in accordance with the requirements of 'Sewers for Adoption - 7th Edition' and published addendum and corrigendum.
- Channel drains shown are only to collect surface water run-off from hard paved areas and door thresholds and are not intended to collect groundwater or run-off from gardens and landscaped areas.
- All abandoned pipework to be completely removed or grout filled unless stated otherwise.

#### NOTES

- The Contractor should check all dimensions on site.
- It is the Contractors responsibility to ensure compliance with building regulations and current codes of practice.
- Drawings cannot take into account any drains or underground works not locatable by visual survey of the site.
- Commencement of any building works prior to full building regulation approval is entirely at the clients risk.

Rev	Description	Date
00	First issue to client	03/02/2020

PROJECT: Residential Development rear of 9 Hill Drive, Eastry, CT13 0DU.			
CLIENT: Maplegate Homes Limited			
DRAWING: Proposed Drainage Details Sheet 1			
STATUS: PRELIMINARY	SCALE: As Noted	DATE: 03/02/2020	SHEET: A1
001	002	003	004
00	00	00	00



Design Office, Suite 3, Honeywood House, Whitfield, Dover, Kent, CT16 3EH  
Tel: 01304 820777

Copyright and other intellectual property rights in this document and all related documents, drawings, etc., including calculations, is invested in Tridax Ltd and cannot be used or reproduced for any other purpose than that for which they were created without the express permission in writing by Tridax Ltd. In first instance ring 01304 820777.