

DO NOT SCALE



Note:

- Contractor to propose a suitable construction sequence for the soakaway construction and develop a detailed method statement
- Excavation sides to be adequately supported.
- Contractor to work in accordance with best practice ensuring all personnel have adequate PPE and confined space training.
- Excavation / plant to be secure from general public at all times.
- Safe access and egress to be provided.

SW Soakaway Schedule

Ref	Location	Size	Base Level
SA1	Plots 1	2.0m x 2.0m x 0.8mdp	17.00
SA2	Plots 1 and 2	3.0m x 2.0m x 1.2mdp	16.50
SA3	Plot 3 and 4	4.5m x 2.0m x 1.2mdp	16.50
SA4	Plot 5	5.0m x 1.0m x 1.2mdp	17.00
SA5	Plot 6	3.0m x 2.0m x 1.2mdp	17.00
SA6	Plot 7	5.0m x 1.0m x 1.2mdp	17.00
SA7	Plot 8	5.0m x 1.0m x 1.2mdp	17.00
SA8	Plot 9	4.0m x 1.0m x 1.2mdp	17.00
SA9	Plot 10	1.5m x 1.0m x 1.2mdp	17.00
SA10	Plot 11	1.5m x 1.0m x 1.2mdp	17.00
SA11	Plot 12	1.5m x 1.0m x 1.2mdp	17.00
SA12	Plot 13	1.5m x 1.0m x 1.2mdp	17.00
SA13	Plot 14	1.5m x 1.0m x 1.2mdp	17.00
SA14	Plot 15	1.5m x 1.0m x 1.2mdp	17.00
SA15	Shared Parking	7.0m x 1.0m x 1.2mdp	17.00
SA16	Highway	8.5m x 1.0m x 1.2mdp	17.00
SA17	Highway	12.5m x 2.0m x 0.8mdp	17.00

Soakaways to be located entirely within suitable sand strata.

All soakaways to have a silt trap located upstream of inlet pipe

All soakaways to be located a minimum of 5m from foundations.

All soakaways have been designed to accommodate a 100yr + 30%cc storm event

Legend

- Site Boundary
- Adoptable Foul Sewer
- Adoptable Foul Rising Main
- Private Surface Water Drain
- Private Foul Drain
- Surface Water Soakaway Geocellular Tank System (AquaCell Core or similar approved) infiltration device with riser access for future inspections and maintenance
- Aco Drain
- SVP
- RWP
- Rodding Eye
- Highway Gully
- Proposed Ground Level
- Plot Slab Level

FFL 19.00

F101
1.2m Dia
CL = 19.20
IL = 18.50

Proposed gravity connection from manhole F101 to EX MH to Welsh Water requirement. All agreements to be in place prior to commencement any drainage works.

Coopers Drawing List:

- 5986/01 Proposed Drainage Layout
- 5986/02 Proposed Highway Layout and Levels
- 5986/03 Highway Construction Details
- 5986/04 Drainage Details
- 5986/05 Pumping Station Detail
- 5986/06 Pumping Station and Rising Main Details
- 5986/07 Pumping Station Infrastructure Works
- 5986/08 Section 278 Agreement Plan

Notes

- All dimensions are in millimetres unless otherwise shown.
- All adoptable drainage shall be constructed in accordance with 'Sewers for Adoption' 7th Edition, Welsh Ministers Standards and Welsh Water Details and Guidelines.
- All private drainage works are to comply fully with Part H of the Building Regulations.
- All existing invert levels to be checked by the contractor at the start of works and any other discrepancies notified to the Engineer prior to commencing works. All levels are based on topographical survey information provided by others.
- It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works.
- The Contractor shall adhere to the CDM Regulations at all times.
- Only trained personnel shall be permitted to enter confined spaces.
- All materials to bear the relevant B.S. Kitemark and comply fully with the Sewers for Adoption 7th Specification. All concrete & concrete products must use Sulphate resistant cement (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur to withstand a class 3 condition).
- All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or Welsh Water as applicable.
- Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Sewers for Adoption.
- Cover loadings shall be as detailed on the Manhole Schedule.
- Drain trenches should not be excavated lower than the foundations of any building nearby unless either:
a) The trench is within 1m of the foundation, the trench is filled with concrete up to the lowest level of the foundation, or
b) Where the trench is further than 1m from the building, the trench is filled with concrete to a level below the lowest level for the building equal to the distance from the build, less 150mm.
- Soakaways to be constructed a minimum of 5.0m from any proposed buildings or existing structures.
- All SVP and RWP connections are indicative and shall be confirmed by the client.
- Pipe gradients out of the building to connecting manhole to be laid at 1:40 in accordance with Building Regulations, Part H, Table 6.
- Where pipe sizes are not indicated :
1000 to be used for foul
1000 to be used for surface water
unless stated otherwise.
- Minimum surface water gradients shall be:
100 laid at 1:100 with the exception of the first connection which shall be minimum 1:80
1500 laid at 1:150
- Minimum 1000 foul drainage gradient to be 1:80 with the exception of the first connection which shall be minimum 1:40.
- Manhole covers to be marked FWS or SW as appropriate.
- All manhole covers and frames shall comply with BS EN124. All adoptable manholes and chambers shall comply with Sewers for Adoption 7th Edition. Covers in roads to be grade D400 and be 150mm deep. Manhole covers in car parking areas and drives to be grade B125 and covers in landscaping areas to be grade A15. All to be sized in accordance with Building Regulations Part H, Tables 11 & 12.
- Precast concrete rings to be reinforced.
- Backdrops in private manholes / inspection chambers to be internal
- Private drains laid under adopted / private roads to be Class S granular bed and surround with a minimum of 1.2m cover, where this cannot be achieved a Class Z concrete bed and surround shall be provided.
- Private drains located under landscape areas or driveways / car parking bays to be Class B granular bed and surround with a minimum 0.6m cover, where this cannot be achieved a Class Z concrete bed and surround shall be provided.

CONSTRUCTION

Foul Manhole Schedule

Manhole Number	Coordinates	Cover Level	Pipe In	Pipe Out	Pipe Diameter	Manhole Size	Manhole Type	Manhole Cover
IC F1	E. 358621.542 N. 367725.383	16.50	17.00	17.00	100	225	Type 4 PFC	B125
IC F2	E. 358625.627 N. 367716.885	16.00	15.00	15.00	100	225	Type 4 PFC	B125
IC F3	E. 358614.947 N. 367736.717	16.20	15.70	15.70	100	450	Type 3 PFC	D400
IC F4	E. 358633.629 N. 367714.489	16.00	15.70	15.70	100	450	Type 4 PFC	D400
IC F5	E. 358616.096 N. 367704.383	16.00	15.80	15.80	100	450	Type 4 PFC	D400
IC F6	E. 358622.477 N. 367708.898	16.00	15.00	15.00	100	450	Type 4 PFC	D400
IC F7	E. 358616.099 N. 367681.310	16.00	16.00	16.00	100	450	Type 4 PFC	B125
IC F8	E. 358626.305 N. 367687.255	16.00	16.10	16.10	100	450	Type 4 PFC	B125
IC F9	E. 358633.249 N. 367687.206	16.00	16.10	16.10	100	450	Type 4 PFC	D400
IC F10	E. 358611.306 N. 367682.987	16.00	16.00	16.00	100	450	Type 4 PFC	D400
IC F11	E. 358622.391 N. 367685.515	16.00	15.80	15.80	100	450	Type 3 PFC	B125
IC F12	E. 358614.925 N. 367647.477	16.00	16.10	16.10	100	450	Type 4 PFC	D400
IC F13	E. 358627.023 N. 367681.786	16.00	15.80	15.80	100	450	Type 4 PFC	B125
IC F14	E. 358635.140 N. 367641.503	16.00	15.60	15.60	100	450	Type 3 PFC	B125
IC F15	E. 358616.099 N. 367681.783	16.00	16.00	16.00	100	450	Type 4 PFC	D400
IC F16	E. 358614.924 N. 367682.877	16.00	16.00	16.00	100	450	Type 4 PFC	D400
MH F1	E. 358625.786 N. 367689.291	16.00	17.40	17.40	150	1500	Type 2 Concrete	D400
MH F2	E. 358648.088 N. 367685.131	16.00	16.70	16.70	150	1200	Type 2 Concrete	D400

NOTE
ALL MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION

Rev.	Date	Revision	By	Appd.
D	08.05.15	Revised to DCWW comments	AJ	A.J
C	21.04.15	Revised to DCWW comments; soakaways updated to accommodate 100yr + CC storm	PJN	A.J
B	02.02.15	Revised to DCWW comments; pumping station and rising main colours revised	J.H	A.J
A	05.11.14	Layout amended drawing revised accordingly, pumping station invert level lowered to 16.70	J.H	A.J

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Client
Mytton Homes

Project
Burton Hall Road Rossett, Wrexham

Title
Proposed Drainage Layout

DRAWING NUMBER	SCALE at A1	1:250	DATE	Aug 2014	REVISION
5986 / 01			DRAWN	AJ	D
			CHECKED	AJ	