

PACKAGE UNDERGROUND PUMP STATION

Below ground packaged pump station incorporating dual pumps (service & standby) capable of handling surface water runoff from 260m² of roof & patio areas.
Inlet below F.G.L = 1900mm
Lift height = 0.98m
Distance, pump to receiver M/H = 13.0m

Pump station to have minimum 200mm GEN3 concrete surround along with riser piece and cover & frame supplied by installer.

Position of control panel, electric supply, alarms, battery backup to alarms & emergency generator socket all to be agreed by others. Pump station shall be installed & commissioned strictly in accordance with the manufacturers instructions & recommendations, and with appropriate maintenance agreement.

Separate kiosk required for control panel - position to be agreed.

ACO HexDrain Brickslot, or similar, polypropylene threshold drainage channel laid level. Channels to drain via accessible ACO corner units, ref 19560, fitted over ACO plastic sump unit, ref 19558, & connected to drain using 110ø PVC-U pipework. All to be installed fully in accordance with manufacturers recommendations.

Silt Trap
Inlet IL 82.140

Inlet invert = 82.100

Inlet invert = 81.675

PACKAGE UNDERGROUND PUMP STATION

Below ground dual pump packaged pump station incorporating 2No Vortex pumps (service & standby) capable of handling 4No 2 bed flats & 4No 1 bed flats while providing minimum 24 hour storage
Inlet below F.G.L = 2225mm
Lift height = 1.405m
Distance, pump to receiver M/H = 8.0m

Pump station to have minimum 200mm GEN3 concrete surround along with riser piece and cover & frame supplied by installer.

Position of control panel, electric supply & alarms all to be agreed by others. Pump station shall be installed & commissioned strictly in accordance with the manufacturers instructions & recommendations, and with appropriate maintenance agreement.

Separate kiosk required for control panel - position to be agreed.

Existing foul outfall is blocked & filled with old drain rods. Clear blockage & re-survey to confirm condition

Existing 150mm dia vitrified clay lateral drain

IL at bend = 82.450

IL at bend = 82.550

IL = 82.625

IL at bend = 82.425

ACO HexDrain Brickslot, or similar, polypropylene threshold drainage channel laid level. Channels to drain via accessible ACO corner units, ref 19560, fitted over ACO plastic sump unit, ref 19558, & connected to drain using 110ø PVC-U pipework. All to be installed fully in accordance with manufacturers recommendations.

NOTES

- Do not scale from this drawing. If in doubt ask.
- Dimensions are in millimetres unless noted otherwise.
- These drawings shall be read in conjunction with the Architect's drawings.
- Setting out is to be in accordance with Architect's drawings.
- Underground drainage:-
Drains to be 100mm diameter Hapworth Plastidrain or equivalent PVC-U pipes to BS EN 1401 unless noted otherwise
- Foul drains to fall at minimum 1:40 & surface water drains to fall at 1:80 unless noted otherwise or where invert levels are not indicated.
- External drains with less than 600 cover to have special protection. See bedding details on drawing 201016 / 101.
- Drains alongside buildings and below formation level to have concrete bed and surround up to formation level.
- Drains passing under the building with less than 300mm cover beneath the slab are to have concrete surround integral with the slab or tied to the slab with nominal steel reinforcement.
- All underground drains to be laid with min. 150mm granular bed and surround, unless noted above. See also bedding details on drawing 201016 / 101.
- For exact locations of svp's, ss's, rwp's, etc. refer to Architect's drawings.
- Redundant drains to be removed or plugged & filled with gROUT.
- For drainage, bedding & manhole details see drawing 201016 / 101.
- All RWP's to discharge into roddable trapped access gullies.
- Level information taken from Greenhatch Group drawing 21052_01_P dated 17/11/14.
- Where an air admittance valve (aav) is fitted:
a) adequate ventilation should be provided, ie air grill to be installed to ventilate any void
b) they shall be accessible for maintenance & rodding purposes.

Construction Issue
Last Issue

FORTUNE GREEN ROAD

Foul Water Manhole Schedule

REF	SIZE / TYPE	COVER LEVEL	INVERT LEVEL	DEPTH	COVER TYPE
F1	475ø polypropylene	83.460	82.270	1190	A15 #
F2	475ø polypropylene	83.460	82.160	1300	A15 # RA
F3	475ø polypropylene	83.460	82.080	1380	A15 # RA
F4	475ø polypropylene	83.460	81.905	1555	A15 # RA
EF1	Existing*	84.410	83.080*	1330*	Existing

indicates a recessed double sealed bolt down cover & frame

RA indicates a reduced access manhole with a clear opening restricted to 350mm diameter

* assumed level of existing manhole on existing lateral drain, to be checked & confirmed on site

Surface Water Manhole Schedule

REF	SIZE / TYPE	COVER LEVEL	INVERT LEVEL	DEPTH	COVER TYPE
S1	300ø polypropylene	86.300	85.700	600	A15
S2	475ø polypropylene	86.250	85.370	880	A15 #
S3	475ø polypropylene	83.460	82.515	945	A15 #
S4	475ø polypropylene	84.150	82.265	1885	A15 RA
S5	475ø polypropylene	83.460	82.270	1190	A15 #
S6	475ø polypropylene	83.800	82.160	1640	A15 RA
S7	475ø polypropylene	86.200	84.500	1700	A15 # RA
S8	475ø polypropylene	83.460	82.530	930	A15 #
S9	475ø polypropylene	83.460	82.550	910	A15 #

Drainage Key

