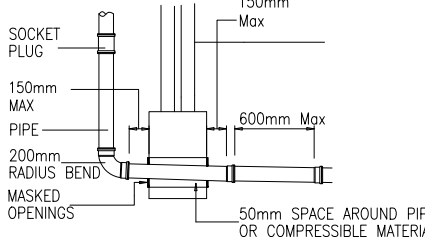
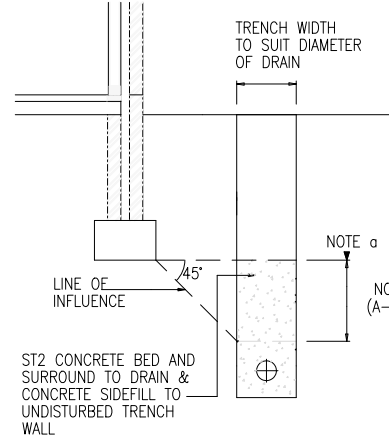


NOTES

- This drawing is to be read in conjunction with all relevant Architects and Engineers drawings and specifications.
- Dimensions are in millimetres unless noted otherwise.
- Original topographic survey undertaken by The Greenhatch Group. For full topographic survey information see drawings by Greenhatch No. 53644-T. All levels based on Ordnance Survey by GPS.
- Existing levels shown thus: $+77.83$
- Before excavation commences, the Contractor shall ascertain the depths, sizes and locations of all services to be crossed. Any conflicts in levels between new works and existing services shall be notified to the Engineer.
- All drainage shall be in accordance with Building Regulations 2015: Part H & W.S.A Sewers for Adoption 7th edition.
- Details of existing sewers & drains shall be confirmed by the contractor on site prior to the commencement of works.
- Sewers of different diameters shall be laid soffit to soffit in manholes, unless backdrops are detailed.
- Private drains passing through walls and footings are to be sleeved and a 600mm length of rocker pipe shall be laid on each side of the wall or footing. Runs under building shall have a type 'S' bed and surround, unless depth below underside of slab is less than 300mm where a 150mm bed and surround of concrete is to be used. Where pipes pass beneath foundations 600mm length rocker pipes shall be laid on each side. Below is shown a typical detail of a pipe sleeved through a foundation:



- Manhole (M.H.) covers and inspection chamber (I.C.) shall be adjusted to suit final surface levels.
- Where trench foundation levels lie above original levels, levels shall be made up with either well compacted layers of D.O.T type 1 or mix ST2 concrete.
- For positions of SVP's stub stacks and rainwater pipes see detailed Architects layouts.
- Minimum gradients for pipes where no gradient is shown shall be 1:80.
- Dimensions of M.H. on private drains and sewers to be in accordance with requirements of the Building Regulations.
- Drainage trenches lower than foundations:
 - Where drainage trench is within 1.0 distance of a building the trench is to be filled with concrete mix ST 2 up to the level of the foundation, in accordance with Building Regulation 2002: Part H, diagram 8.
 - Where drainage trench is distance 'A' from footing and the depth of trench below foundation level is greater than 'A' the lower trench shall be infilled with concrete mix ST 2 such that the top level of concrete infill is no less than 'A' - 150mm below foundation level. Notes a) and b) are represented diagrammatically below:



- Pipe materials shall be:
 - For external private drain runs:
 - Clay pipes, extra strength or super strength in accordance with BS EN 295: 1991
 - UPVC pipes in accordance with BS 4660 & BS 5481: 1989 (flexible pipes)
 - Ductile iron pipe work in accordance with BS EN 598, as Stanton Integral.
 - For extensions to the long crossings under building footprint:
 - Clay pipes, extra strength or super strength in accordance with BS EN 295: 1991
- Definition of 'rigid' and 'flexible' pipes shall be as Building Regulations Part H, table 7.
- Flexible pipes - Where private flexible pipes have more than 900mm cover under vehicular areas and more than 600mm cover under gardens, bedding and backfill shall be Type S as shown on drawing STD 01.85. For special protection where pipes are laid with less cover see notes below.
 - Where private flexible pipes have less than 900mm cover under vehicular areas, a reinforced concrete bridging slab shall be used (as Type 'Y' drawing STD 01.85) Reference Building Regulations 2000: Part H.
 - Where private flexible pipes have less than 600mm cover under gardens, concrete paving slabs laid as bridging slab shall be used (as Type 'X' drawing STD 01.85.) Reference Building Regulations 2002: Part H.
- Rigid pipes - Bedding and backfill shall be Type 'S' as shown on drawing STD 01.85, except on lengths where special protection is required (see notes below).
 - Where $\varnothing$ 100mm private rigid pipes have less than 400mm cover under vehicular areas, a Type 'Z' concrete surround shall be used (see drawing STD 01.85) Reference Building Regulations 2002: Part H.
 - Where $\varnothing$ 100mm private rigid pipes have less than 300mm cover under garden areas, a Type 'Z' concrete surround shall be used (see drawing STD 01.85) Reference Building Regulations 2002: Part H.
 - Where $\varnothing$ 150mm private rigid pipes have less than 600mm cover under any areas, a Type 'Z' concrete surround shall be used (see drawing STD 01.85) Reference Building Regulations 2002: Part H.
- Private storm and foul drainage connections shall be detailed by the Architect.
- All external rainwater down pipes shall discharge through a proprietary bottle gully as shown on drawing STD 01.12.
- Trenches below existing carriageways and parking areas shall be reinstated with D.O.E Type 1 material in accordance with standard detail STD 02.05.
- Channel drains shall be Aco Multidrain MD150 with 0.5% in built gradient, or equivalent. They shall discharge via a sump by Aco or equivalent. Grating shall be Heelguard Class B125. To be installed in accordance with manufacturers instructions.
- Gullies shall be in accordance with the gully schedule.
- All utility covers & frames within the extent of the works shall be adjusted as necessary. The Contractor shall ensure that all services within vehicular areas have appropriate grade covers & frames as shown: Vehicular areas: D400 Pedestrian areas: B125
- Where drains are to be abandoned they shall be removed or infilled by grouting in accordance with The Civil Engineering Specification for the Water Industry - 6th Edition, clause 5.23. Drainage runs shall be CCTV Surveyed prior to being abandoned to ascertain whether any "blind" junctions exist.
- Redundant / abandoned gullies, soakaways and manholes shall be broken out to a depth of 600mm then infilled with Type 1 sub base.
- All internal rain water pipes and foul outlets that do not connect directly to an inspection chamber shall have a rodding access provided above floor level for future maintenance purposes. Pre-formed connections shall be installed for all 'Y' and 'T' junctions.

P5	STAGE 3 SUBMISSION, NOTE WITH EXCLAMATION MARK UPDATED.	-	PF-15-07-25
P4	STAGE 3 SUBMISSION, CANOPY REDUCED TO SHOW 1% POSTS ONLY.	-	PF-14-07-25
P3	STAGE 3 SUBMISSION, CONNECTIONS TO CHAMBERS MH10, 11 & 12 UPDATED.	-	PF-03-07-25
P2	LANDSCAPE ARCHITECTS DETAILS UPDATED, ADDITIONAL CHANNEL DRAINS SHOWN.	-	PF-17-04-25

REV	DESCRIPTION	CHECKED	DATE
-----	-------------	---------	------

Archibald Shaw
Consulting Civil & Structural Engineers
One Little London, Chichester, West Sussex PO19 1PP
Telephone: 01243 786471 www.archibaldshaw.co.uk

CLIENT
Atkins Realis / WSCC

PROJECT
Proposed Extension
St Augustine's School
Drainage General Arrangement

DRAWN BY	CHECKED BY	DESIGNED BY
PF	JL	PF
SCALE @ A1	@ DATE	STATUS
1:125	Apr. 2025	Stage 3
JOB NO.	DRAWING NO.	REVISION
33988	EX.01	P5

SURFACE WATER MANHOLE SCHEDULE

M.H. REF.	INVERT LEVEL, LOWEST PIPE	COVER LEVEL	CHAMBER SIZE INTERNAL DIMS	COVER SIZE CLEAR OPENING	COVER TYPE	M.H. TYPE	COMMENT / DRG.
MHA	72.170	72.860	750 x 675	750 x 600	B125	P2	STD 01.22 - New MH
MH1	72.340	73.000	Existing Chamber	-	-	-	Adjust cover level & location
MH2	72.250	72.910	Existing Chamber	-	-	-	Re-bench / Rebuild Chamber
MH5	72.200	72.860	Remove Chamber	-	-	-	See note No. 27
MH14	71.730	72.630	Remove Chamber	-	-	-	See note No. 27
MH15	71.730	72.630	Existing Chamber	-	-	-	No works required

Manhole references are as for the Sewerworks CCTV Drainage Report

FOUL MANHOLE SCHEDULE

M.H. REF.	INVERT LEVEL, LOWEST PIPE	COVER LEVEL	CHAMBER SIZE INTERNAL DIMS	COVER SIZE CLEAR OPENING	COVER TYPE	M.H. TYPE	COMMENT / DRG.
MH3	72.270	72.930	Existing Chamber	-	-	-	1 No. new connection
MH4	72.090	72.980	Remove Chamber	-	-	-	See note No. 27
MH6	72.310	72.980	Existing Chamber	-	-	-	No works required
MH10	72.160	72.860	Existing Chamber	-	-	-	Re-bench / Rebuild Chamber
MH11	72.100	72.850	Existing Chamber	-	-	-	Re-bench / Rebuild Chamber
MH12	72.00	72.860	Existing Chamber	-	-	-	Re-bench / Rebuild Chamber
MH13	71.590	72.620	Existing Chamber	-	-	-	No works required

Manhole references are as for the Sewerworks CCTV Drainage Report



The Contractor shall take note of the Sewerworks Drainage Report Dated March 2025.
The existing surface water and foul water drainage systems at the school site will be cleaned through by Contractors appointed by the school in the summer of 2025.

OUTSTANDING DESIGN MATTERS :

- Precise Foul Outlet Locations
- Precise RWP Locations
- Full External Works Details
- Foundation Details

KEY

- Topographical Survey
- Proposals
- Proposed Surface Water Drains $\varnothing$ 150 Unless Noted Otherwise
- Surface Water Manhole/ Storm $\varnothing$ 450 Insp. Chamber/ Rodding Eye
- Foulwater Manhole/ $\varnothing$ 450 Insp. Chamber/ Trapped Roddable Gully
- Proposed Foul Drains $\varnothing$ 100 Unless Noted Otherwise
- $\varnothing$ 100/S1.80
- Gradient
- Bed Type (See STD 01.85)
- Pipe Diameter
- Direction of Fall
- Channel Drain (Note 23)
- Existing Chamber / Drain to be Abandoned (See Notes 26 & 27)