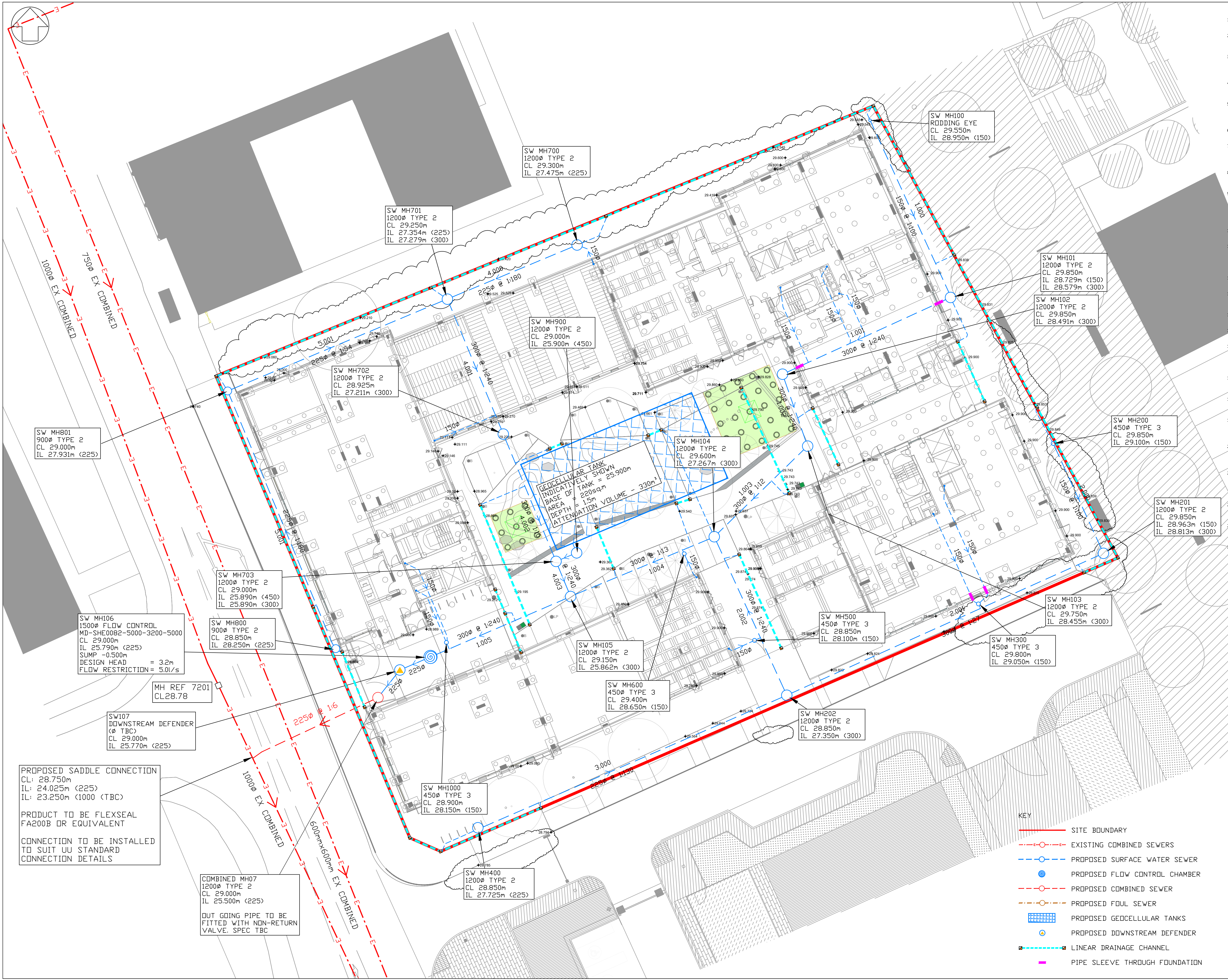




Drainage notes

- This drainage drawing is to be read in conjunction with all relevant Architect's, Engineer's drawings and specifications.
- Do not scale this drawing. Any ambiguities, omissions and errors on the drawings shall be brought to the Engineer's attention immediately. All dimensions must be checked and verified on-site before construction commences.
- All external underground drainage works are to be constructed in accordance with the Civil Engineering Specification for the Water Industry 7th Edition (CESWI), Sewers for Adoption 7th Edition (SFA) and any site-specific details provided on the contract drawings.
- All internal underground drainage works are to be constructed in accordance with the Building Regulations Approved Document H (2015 Edition) and any site-specific details provided on the contract drawings.
- The contractor must survey any retained drainage on-site and report the line, level and condition of the existing drainage to the engineer. We would recommend that the existing drainage is cleaned before any surveying and that these works are undertaken before the contractor commences on-site.
- Any redundant manholes are to be broken out to at least 600mm below formation level and backfilled with an approved compacted granular material.
- Any redundant pipes up to and including 300mm diameter are to be filled with a 10:1 PFA/cement mix or broken out and backfilled with an approved compacted granular material. Any redundant pipes over 300mm diameter are to be broken out and backfilled with an approved compacted granular material.
- Adoptable Drainage Pipes:- All foul and surface water pipes up to and including 300mm diameter are to be Vitrified Clay in accordance with BS EN 295-1. All pipes greater than 300mm diameter are to be Concrete Class 120 in accordance with BS EN 1916:2002.
- Private Drainage Pipes:- All foul and surface water pipes up to and including 100mm diameter are to be Vitrified Clay in accordance with BS EN 295-1 or Solid Walled PVC-U in accordance with BS EN 1401. All foul and surface water pipes greater than 100mm diameter are to be Vitrified Clay in accordance with BS EN 295-1. Concrete Class 120 in accordance with BS EN 1916:2002 or Structural Walled PVC-U in accordance with WIS 4.35-01 and BS EN 13476.
- All concrete manholes are to be in accordance with BS EN 1917. All plastic inspection chambers are to be in accordance with BS EN 13358.
- All pipes laid within vehicle trafficked areas with less than 900mm of cover shall be surrounded in Class 2 bedding. All pipes less than 300mm below the underside of a ground floor slab shall be surrounded in Class 2 bedding. Where Class 2 bedding is used as a surround a compressible material must be placed at every pipe joint to provide flexibility. All other pipes are to be laid in a Class 5 bedding.
- All underground drainage must be protected during the construction phase where intermediate cover is less than 900mm.
- Where four foul and surface drains and/or sewers cross within 100mm of each other then concrete protection (Class 2 bedding) may be required to prevent any potential cross-contamination.
- All cover levels shown are approximate only. All manhole covers are to be set at the proposed finished pavement or floor level provided by the Architect.
- For typical manhole construction details, pipe bedding/trench details and typical drainage details refer to SGI typical details drawing.
- The internal foul and surface water pop-up positions and sizes shown are indicative only. The internal pop-up positions, pop-up end use and the pop-up size must be confirmed by the architect/M&E consultant. The drawings must be cross referenced by the contractor before the works commence and any errors reported to the Engineer as soon as possible.
- The external gully connections and channel drain connections are to be 150mm diameter unless otherwise stated. All gully and channel drain outlets to be trapped and roddable. All internal gully types and channel drains to be specified by others.
- Channel drains to have a 200mm minimum concrete bed and haunch and be fitted with a 9 heel guard cast iron grating. Gratings to be to load Class D400 specification unless otherwise agreed.
- All foul water stacks and RWP's to have low level rodding access plates unless an alternative means of access or maintenance is agreed. The access plate size must be in accordance with Document H and sited above any connected ground floor appliance spill level.
- All drainage connections passing through foundation bases and/or edge beams to be located within sealed sleeves. With the approval of the Engineer, drainage connections may be cast-in with flexible joints either side. Flexible joints to be no greater than 150mm from face of the concrete.
- All manhole covers located within the road and car parking areas shall be Class D400. Covers within hard and soft landscaped areas with pedestrian traffic only shall be Class B125. Covers located within block/paving areas are to be recessed to suit the proposed paving and of the appropriate grade. All internal covers are to be recessed, double sealed bolt down type such as howe green 5000 series or similar approved.
- Channels within Type 1 & 2 manholes must use pre-formed using clayware sections for pipes up to and including 300mm diameter. All manhole channels to be set at the appropriate level for the incoming and outgoing pipe gradients.
- All manholes connections to be formed at soffit to soffit unless otherwise stated. All internal branch connections to be made with swept bends in the direction of flow in the main pipe.
- The type and size of the separator is specified on this drawing and shall be a class 1 type. It shall be installed in complete accordance with the manufacturer's instructions and vented via 75mm pipe work. The interceptor requires power for the high level oil alarm and the arrangement shall be intrinsically safe and explosion proof. The contractor shall provide the required ducting & cabling to internal monitoring position together with audio and visual monitoring unit all in accordance with bs7671:2008 +a1:2011

P03	Drawing scale added	WC	08.03.2022
P02	Clouded drainage updated to suit architect's comments	WC	17.02.2022
Rev.	Description	Rev. by	Date



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Client	Clarion Housing		
Architect			
Project	Boddingtons Brewery		
Title	Proposed Drainage Layout Surface Water Drainage Sheet 1 of 3		
Date	27.01.2022	Drawn By	WC
Size	A1	Checked By	EAI
Scale	1:200	Approved By	EAI
Dwg. No	DN0107-SGI-ZZ-00-DR-C-2000		Rev
			P03