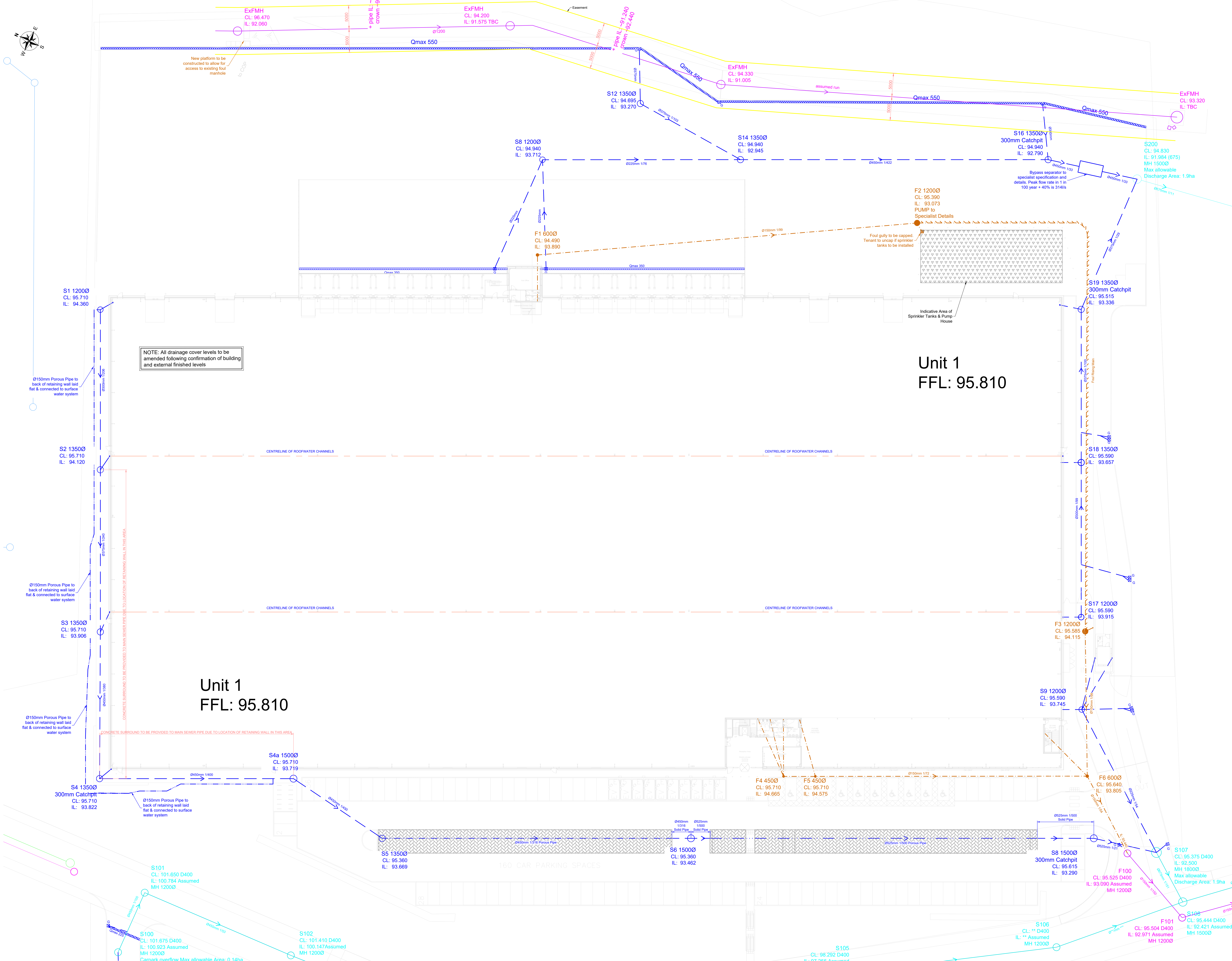




Drainage Legend:

- S 8000mm 1X New Surface Water
- F 8000mm 1X New Foul
- S 8000mm 1X Surface Water by Others
- F 8000mm 1X Foul by Others
- S 8000mm 1X Highway Surface Water by Others
- S 8000mm 1X Private Surface Water by Others
- F 8000mm 1X Private Foul by Others
- G 8000mm 1X New Porous Pipe
- G 8000mm 1X Gully
- Channel Drain
- Permeable Paving Type C
- Indicative Area of Sprinkler Tanks & Pump House

SAFETY, HEALTH & ENVIRONMENTAL HAZARD INFORMATION BOX.

The hazards noted below are in addition to the normal hazards and risks faced by a competent contractor when dealing with the types of works detailed on this drawing.

CONSTRUCTION RISKS:

Deep Excavations

DEMOLITION RISKS:

MAINTENANCE / CLEANING RISKS:

Access to Deep Manholes

Notes:

- DO NOT SCALE FROM THIS DRAWING.
- All dimensions are in millimetres Unless Noted Otherwise (u.n.o.)
- Drawing is to be read in conjunction with all relevant architect's drawings. Any inconsistencies should be reported to PRP immediately.
- All levels and dimensions are to be checked on site before any work commences.
- For more information see PRP drawings: 62954 - 100series - Drainage and External Works 62954 - 200series - Foundations 62954 - 300series - Superstructure
- The Health and Safety at Work act is to be complied with at all times. Attention is drawn to the wearing of hard hats, safety boots, reflective clothing, and the use of any other required safety equipment.

Drainage:

- The position, line, level and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of the works. Any discrepancies should be reported to PRP immediately.
- The connection of foul and surface water drainage to the existing public sewer system shall be subject to the approval of the water authority.
- For positions of all rainwater pipes & foul outlets refer to Architect's drawings.
- All drainage works shall be carried out in accordance with WRC 'Sewers for Adoption - 7th edition'
- All joints between precast manhole components shall have a minimum uncompressed thickness of 10mm of proprietary bitumen or resin mastic sealant.
- Chambers & manholes with outgoing pipes of greater than 600mm shall be filled with removable stainless steel (grade 316) safety chains or polypropylene rope.
- Storm & foul branch connections are to be laid at gradients of between 1:10 & 1:80
- All in-situ concrete shall be minimum grade GEN3.
- Precast concrete cover & reducing slabs to be heavy duty reinforced concrete to BS 5911.
- Rising mains shall be black MDPE SDR11 as WI 4-32-03 & joints & fittings to be in accordance with WI 4-32-04. Other approved pipe materials to be in accordance with their relevant BS.
- Manhole covers & frames shall be manufactured in cast iron or ductile iron & shall comply with requirements of BS EN 124 & shall be kite marked or equivalent.
- Where there is no intermediate manhole between the start of a surface water pipe run and the soakaway the gradient of the run shall be not less than 1:60.
- All completed work shall be suitably protected from damage by construction work. Damaged drainage will not be accepted. It is recommended that no heavy loading or underground work is permitted above or near unprotected drainage, and that dumpers, trucks, fork lifts or other heavy vehicles are not driven along or near pipe runs.
- Inspection chambers, soakaways and flow control units are to be installed strictly in accordance with manufacturer guidance and instructions
- Siphonic Drainage to be designed by specialist third party designers, to be appointed by the client/clients representative. Roof drainage connections are as shown and cannot be adjusted. For drainage catchment areas contact PRP UK Limited.

C04	01/02/2022	ACO and gully in car park near SS removed	GF / HP
C03	23/12/2021	Parking and carpark staircase amended	GF / HP
C02	07/12/2021	ACO at CP entrance moved away from HP gas	ST / HP
C01	01/12/2021	Issued for Construction	GF / HP
P13	03/11/2021	Layout updated to suit comments from Contractor and Siphonic specialist	GF / HP
P12	15/10/2021	Drainage in access road amended	GF / HP
P11	24/09/2021	Layout and Levels amended	GF / HP
P10	10/09/2021	Levels amended	GF / HP
P09	01/09/2021	Existing Foul drainage shown	GAJ / HP
P08	05/08/2021	Layout updated	GF / HP
Rev	Date	Description	By / Chk

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Client: **TUNGSTEN PROPERTIES LTD**

Architect: **HTC Architects**

Project: **Interchange 26
Bradford
BD12 7EZ**

Title: **Drainage Layout
Sheet 1 of 2**

Status: **CONSTRUCTION**

Engineer:	HP	Date:	May 2020
Drawn:	KMV	Scales @ A0:	
Checked:	BMS	1:250	
PRP Ref No:	62954	Software:	2D AutoCAD 2010
Dwg No:	P21025-PRP-EX-00-DR-C-0101	Rev:	C04