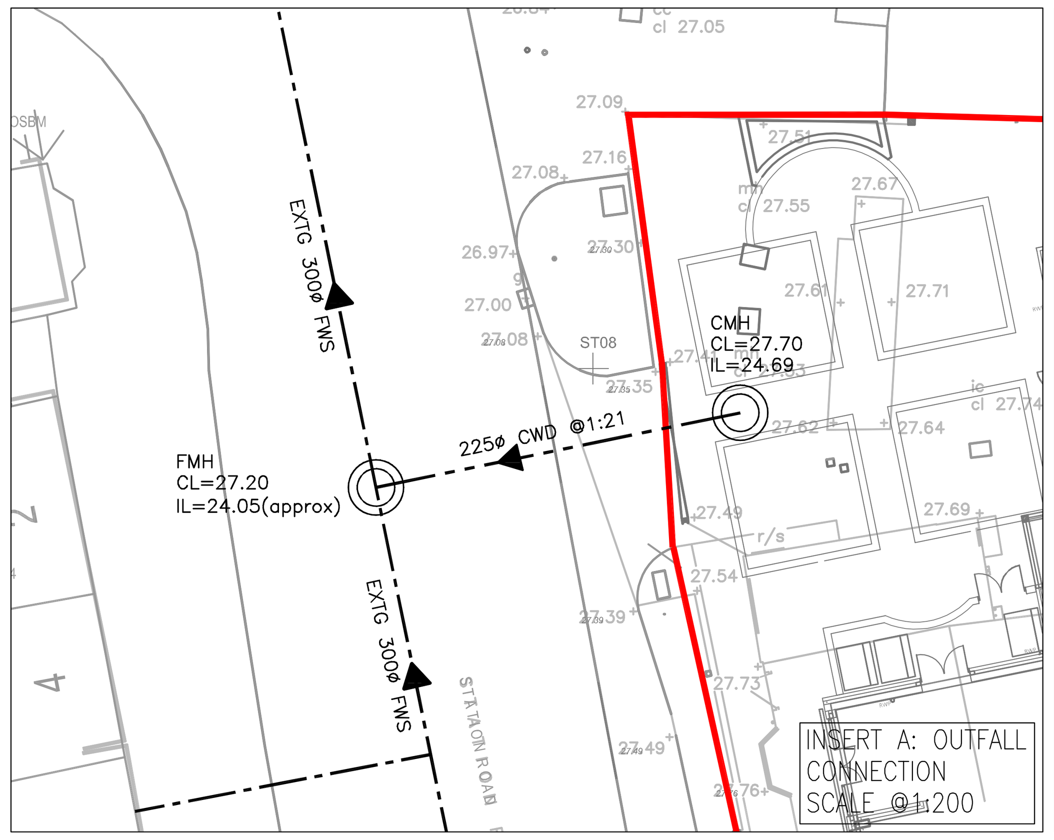

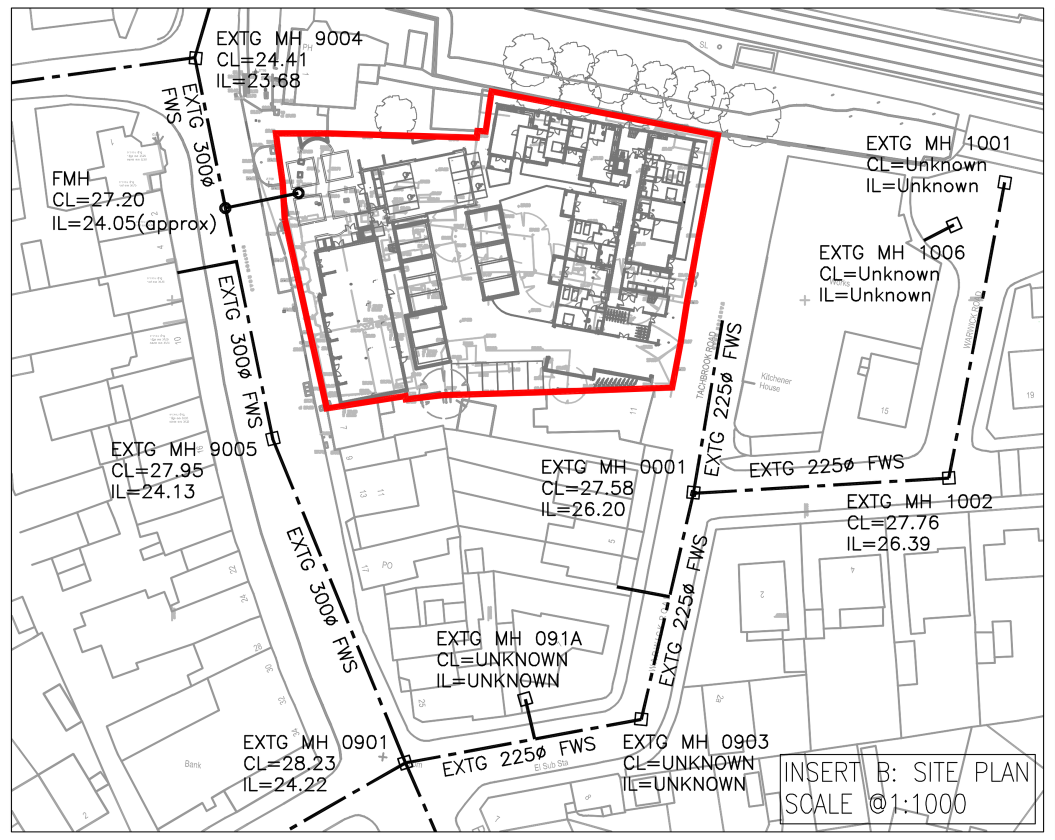

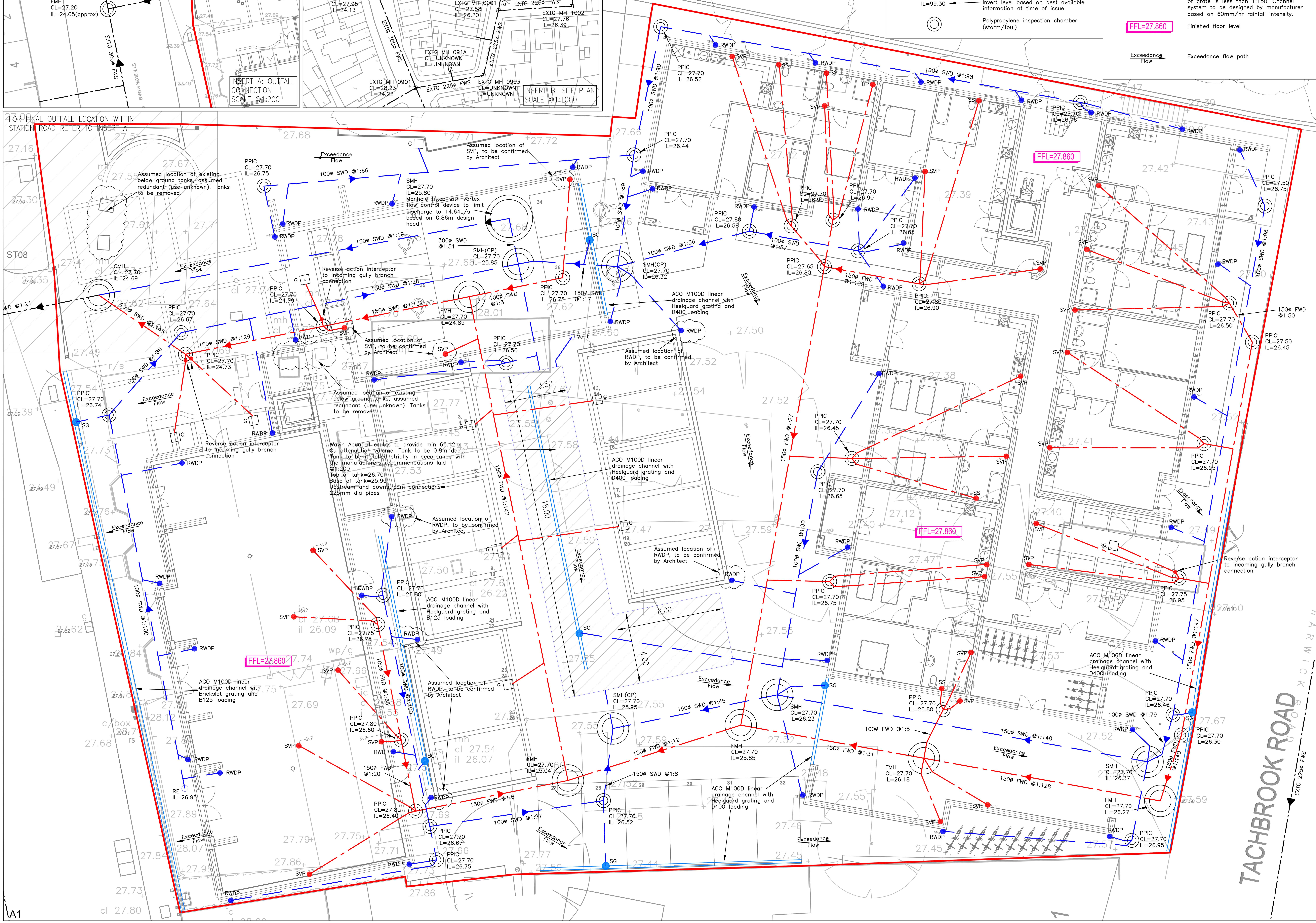

DO NOT SCALE

IMPORTANT WARNING

The information concerning the location and/or depth of the public utility apparatus is provided on this drawing as an indicative guide only. No guarantee as to their correctness is given nor implied.
These drawings should not be relied upon in the event of excavations or other works made near to the apparatus, which may exist at various depths and may deviate from the marked route. It should also be noted that a single line shown on the plan may indicate the presence of more than one service.

The Contractor is required to ensure that the locations of below ground services are established/confirmed on site prior to any excavations or other works which may effect the existing service.

Prior to any works on site, the Contractor shall refer to;
HSG47 – Avoid Danger from Underground Services (by HSE)
HSG185 – Health and Safety in Excavations (by HSE)
Construction Information Sheet (CIS) 8 – Safety in Excavations (by HSE)
General Series (GS) 6 – Avoidance of Danger from Overhead Electric Lines (by HSE)

Key

Symbol	Description
	Site Boundary
	Proposed storm water drain (SWD)
	Proposed foul water drain (FWD)
	Proposed combined water drain (CWD)
	Existing foul water sewer (FWS)
	Precast concrete manhole (storm/foul)
PPIC–09 / CL=100.48 / IL=99.30	Manhole reference / Cover level based on best available information at time of issue / Invert level based on best available information at time of issue
	Polypropylene inspection chamber (storm/foul)
G	Gully with 150mm diameter branch connection
RE	Rodding eye
RWDP	Rain water down pipe
	Foul water slab penetration
SVP	Soil vent pipe
SS	Stub stack
CP	Catchpit manhole/inspection chamber
SG	ACO M100D or similar approved drainage channel with roddable sump gully outlet and 150mm dia branch connection. Channel to have built in fall where longitudinal gradient of grate is less than 1:150. Channel system to be designed by manufacturer based on 60mm/hr rainfall intensity.
FFL=27.860	Finished floor level
Exceedance Flow	Exceedance flow path

Notes

1. The storm water drainage strategy is subject to the approval of Thames Water. The proposed below ground drainage strategy is as follows:

The development site total area is nom 2707m Sq of which post development nom 2273m Sq is impermeable.

A Flood Risk Assessment prepared by OPUS Caldecotte Consultants ref J–D1132–R03 dated October 2013 has indicated that the proposed development shall discharge at 19.46L/s for the 1:100 year event plus 30% allowance for climate change, providing a betterment of 50%.

Simpson Associates have undertaken further design calculations to determine an existing Brownfield run off rate of 29.27 L/s based on the Modified Rational Method Approach. Suggesting that the proposed development shall discharge at 14.64 L/s for the 1:100 year event plus 30% allowance for climate change, providing a betterment of 50%.

14.64 L/s shall be used as the final storm discharge to provide a worst case scenario. An new manhole constructed on an existing sewer running within Station Road is intended to be the final combined water outfall.

2. The foul water drainage strategy is subject to the approval of Thames Water. The proposed below ground drainage strategy is as follows:

Based on the Unit Discharge Method the proposed development will have a peak discharge of 11.14L/s, not including any potential sources of foul water within the proposed commercial unit.

An new manhole constructed on an existing sewer running within Station Road is intended to be the final combined water outfall.

3. All drainage works to be carried out in accordance with all relevant British Standards, Building Regulations, Sewers For Adoption and any specific requirements of the relevant Statutory Authority.

4. All connections to the existing public sewer are subject to the approval of Thames Water. The Contractor shall seek all necessary approvals prior to any connection to the existing public sewers being made.

5. Where a new connection to the existing private/public drainage system is intended, Contractor to check and confirm invert levels and pipe sizes at points of connection prior to start of drainage works. The Contractor shall report any discrepancies back to the Engineer.

6. Where sections of drains or connections are to be abandoned, the Contractor shall allow for all necessary site inspections to confirm back to Engineer that the system is redundant.

7. Prior to undertaking works near or over any existing services, the Contractor shall seek the approval of the relevant Statutory Authority. the Contractor shall also seek guidance from the Statutory Authority with regards to protection of their existing services and plant. All associated/adjacent works shall be carried out strictly in accordance with the approval of the relevant Statutory Authority.

8. This drawing shall be read in conjunction with all relevant Architects, M&E, Structural and Landscaping drawings.

9. Manhole chamber covers to be installed parallel to kerb, edging, paving joints or building lines as appropriate to location.

10. This drawing details all below ground drainage up to finished floor level. For details of drainage above finished floor level, refer to Architects & M&E drawings.

11. Works within the highway boundary shall be undertaken strictly in accordance with the requirements of the Local Highway Authority

12. Rodding access to all slab penetrations to be provided as part of M&E design. Assume small rodding access 150x100mm in line with Building Regulations.

13. Drainage with less than 1.2m cover below trafficked areas and 0.9m cover below landscaped areas shall receive class Z concrete bed and surround. Class S to be used elsewhere.

14. All foul and storm water drainage shall be 100mm dia unless stated otherwise.

> This drawing is provided to show design intent only and to be used for comment only. Below ground drainage GA is subject to change pending results of network analysis and simulation works.
>
> Connections to existing sewers are subject to approval by Thames Water

MK	REVISION	BY	DATE
P2	Exceedence flow path added	LJK	16.01.17
P1	PRELIMINARY ISSUE	LJ	04.01.17

DRAWING STATUS

PRELIMINARY

DRAWING TITLE

BELOW GROUND DRAINAGE GENERAL ARRANGEMENT

PROJECT — Project Number C21319

5 STATION ROAD, WEST DRAYTON

simpson
Unit B10
Elmbridge Court Business Park
Gloucester GL3 1JZ
T.01452 309 727
London, Henley-on Thames and Gloucester

Drawn	Ch'kd	Scales	Date
LJ	RW	1:100 UNO	JAN 2017

Purpose of Issue: PRELIMINARY

Drawing Number: C21319 - 0500 — Revision: P2