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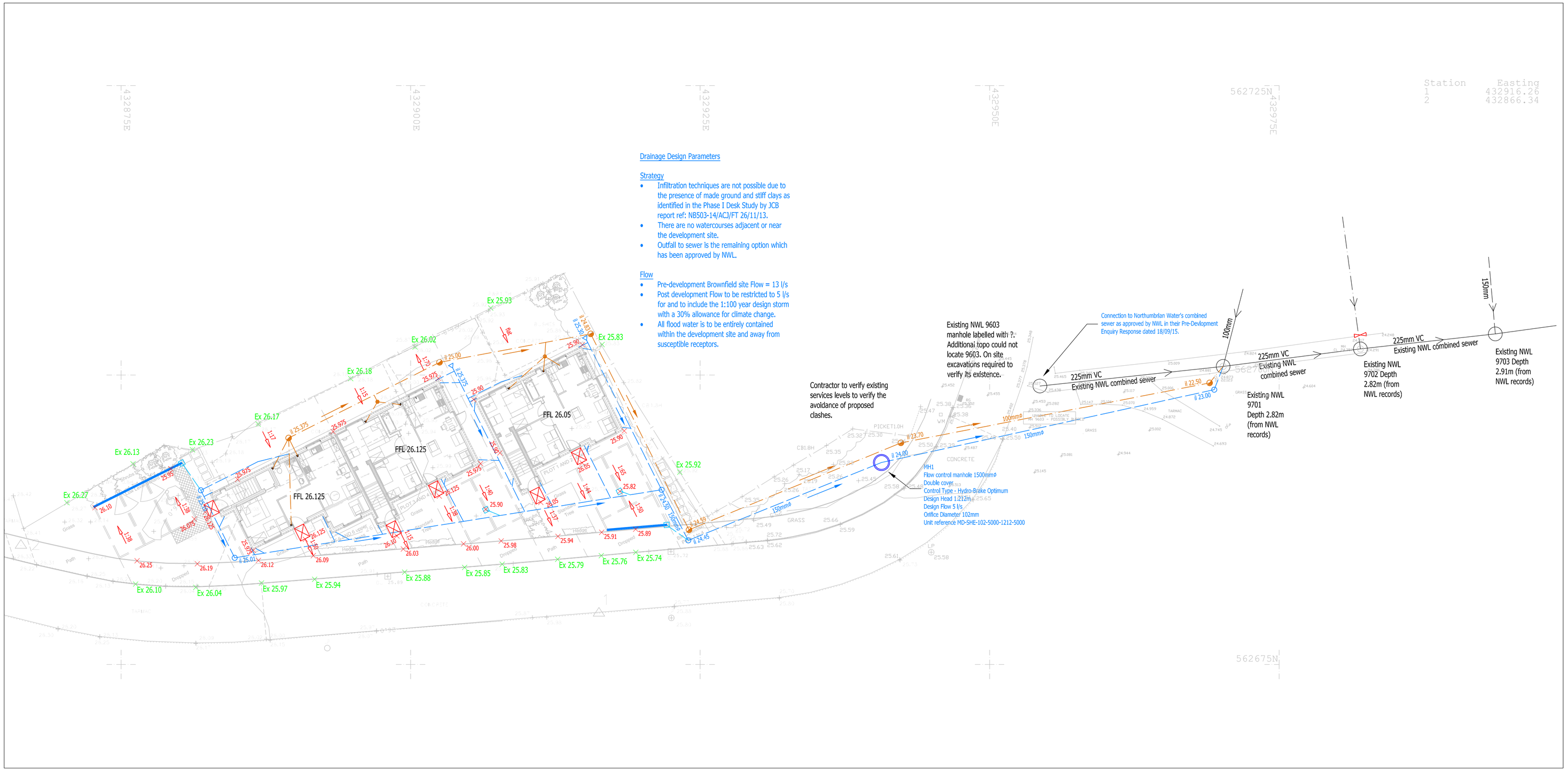

Drainage Design Parameters

Strategy

- Infiltration techniques are not possible due to the presence of made ground and stiff clays as identified in the Phase I Desk Study by JCB report ref: NB503-14/ACJ/FT 26/11/13.
- There are no watercourses adjacent or near the development site.
- Outfall to sewer is the remaining option which has been approved by NWL.

Flow

- Pre-development Brownfield site Flow = 13 l/s
- Post development Flow to be restricted to 5 l/s for and to include the 1:100 year design storm with a 30% allowance for climate change.
- All flood water is to be entirely contained within the development site and away from susceptible receptors.

Layout Key

Ex. 21.66 - Existing level

24.33 - Proposed finished level.

- 1200 x 900mm level access

Highways

1. All excavations below adopted highways to be backfilled with Type 1 and compacted in layers not exceeding 150mm.
2. Highway Authority to be contacted as soon as Contractor is on site to enable early discussions with the Clerk of Works.

General Drainage

3. Manhole/inspespectionchamber covers in trafficked areas to be loading type D400 and B125 in non-trafficked areas.
4. All gullies to be trapped as shown on the details drawings.

Adopted Drainage

5. Position and levels of existing manholes and sewers are to be checked on site as soon as possible and preferably before site activities commence.
6. The sewer connection is to be carried out by an NWL Approved Contractor.
7. This drawing is to be read in conjunction with the drainage details drawings.
8. For proposed adopted drainage pipes with less than 900mm cover in areas not subjected to vehicular loading and less than 1200mm in vehicular loading areas to be concrete protected.
9. Adopted drainage is to comply with 'Sewers for Adoption 6th Edition'.
10. Pipe surround to be granular type 's' unless noted otherwise.

Private Drainage

11. Private drainage is to comply with all statutory requirements and accord with BS EN 752 and Building Regulations Approved Document H.
12. Pipe bedding should granular unless noted otherwise and the granular material to be to BS882:Pt 2 and to Building Regulations Part H.
13. Pipe sizes to be 100mm u.n.o..
14. For drainage pipes to be cast in concrete to have rocker pipes either side of concrete.

Layout Key

- Road and 150mm gully lead (connection of lead to carrier pipe to be at 45° in the direction of surface water flow, where possible). Pipe material to be ultra-rib.

FFL 60.075 - Proposed Finished Floor Level

- Proposed road fall direction

LP/HP - Road longitudinal low or high point

Surface Water Drainage

80.00 - Rodding eye

80.00 - Inspection chamber, 475mmØ. Non man entry (>1.2m)

- Manhole - Concrete Ring (see manhole schedule for further detail).

- Private PVC-U 100mm (unless noted otherwise) drainage pipe.

- Adopted drainage pipe

- Drainage channel with sump/gully. For light vehicle loading with heelguard.

Foul Drainage

80.00 - Shallow inspection chamber. 600mm to invert level, 300mmØ.

80.00 - Inspection chamber, 475mmØ. Non man entry (>1.2m)

- Manhole - Concrete Ring (see manhole schedule for further detail).

- Private PVC-U 100mm (unless noted otherwise) drainage pipe.

- Adopted solid wall PVC-U (BS EN 1401)

Issue	Date	Description	By	Chkd	Appd
P2	24/02/16	Topo extension added.	PL	RH	RH
P1	27/11/15	Initial Issue	PL	RH	RH

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Client
South Tyneside Homes

Job Title
Wark Crescent
Jarrow

Drawing Title
Proposed Engineering Layout

Scale at A1 1:200

Discipline

Drawing Status
Preliminary

Job No	Drawing No	Issue
1529	01	P2

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Do not scale