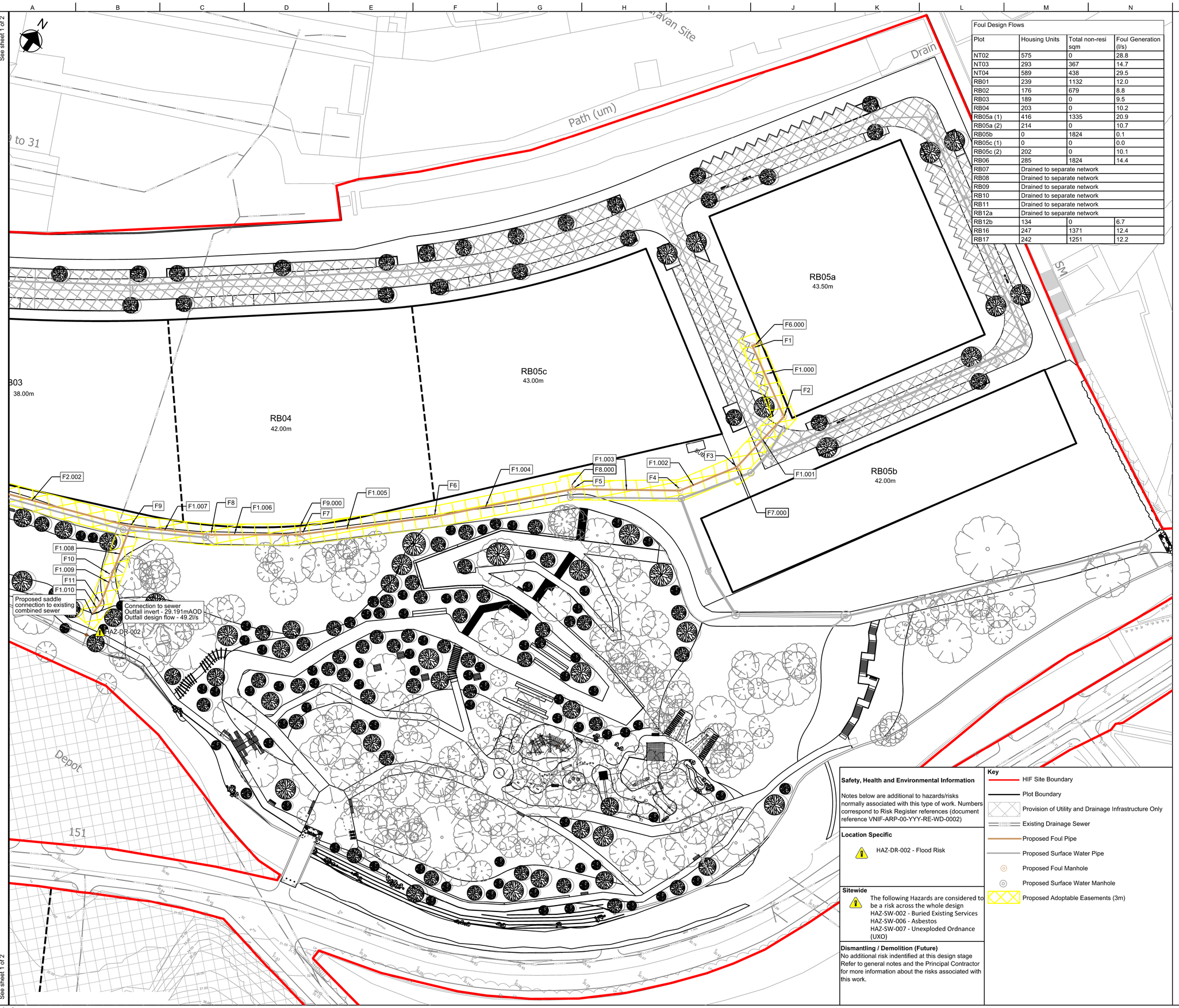

Foul Design Flows			
Plot	Housing Units	Total non-resi sqm	Foul Generation (l/s)
NT02	575	0	28.8
NT03	293	367	14.7
NT04	589	438	29.5
RB01	239	1132	12.0
RB02	176	679	8.8
RB03	189	0	9.5
RB04	203	0	10.2
RB05a (1)	416	1335	20.9
RB05a (2)	214	0	10.7
RB05b	0	1824	0.1
RB05c (1)	0	0	0.0
RB05c (2)	202	0	10.1
RB06	285	1824	14.4
RB07	Drained to separate network		
RB08	Drained to separate network		
RB09	Drained to separate network		
RB10	Drained to separate network		
RB11	Drained to separate network		
RB12a	Drained to separate network		
RB12b	134	0	6.7
RB16	247	1371	12.4
RB17	242	1251	12.2

Notes

1. All dimensions are in mm, all levels in mAOD, unless specified otherwise.
2. This map is reproduced from Ordnance Survey Material with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office (c) Crown Copyright. License Number 100019568 (2021).
3. Layout is based on:
   • Landscape Architect masterplan drawing VNIF-PLA-ZZ-YYY-DR-L-1011 Rev P06 dated 04/08/2022 by Planit.
   • Topographical Survey drawing PS-2158-TS by Paragon Surveys dated September 2021.
4. Existing Drainage layout based on the following information:
   - Utility Search Map drawing 97079 undertaken by Atkins dated 24/06/2021.
5. For the Infrastructure Specification refer to VNIF-ARP-ZZ-YYY-SP-C-0001.
6. This drawing should be read with reference to Arup's full WS4 drawings and specifications.
7. Utilities have been drawn to PAS128 standard. The Located Service Classification table below gives a brief overview. For further details refer to document 'PAS 128:2014 Specification for underground utility detection, verification and location'.

Located Service Classification	Certainty/Risk
Type A Verification - Visual identification	
Type B Detection - Typically GPR and EML techniques are used	
Type C Site reconnaissance - Physical surface features identified	
Type D Desktop utility records search	

Certainty / Risk

Despite Arup's best efforts to accurately display all information, the information is provided for general guidance only and, prior to any construction works being undertaken, site investigation works shall be carried out.

8. A connection point for foul water has been provided for each plot within the HIF Boundary at a minimum depth of 1.5m to plot level (assuming FFL will be 0.5m above plot level) as agreed with WSP.
9. Drainage construction materials, unless otherwise stated:
   - Drainage pipes - Vitrified Clay in accordance with BS EN 295
   - Manholes - Precast Concrete
   - Inspection Chambers - Polypropylene in accordance with BS 7158
10. For pipe abandonments and diversions, refer to drawing VNIF-ARP-00-YYY-DR-CU-1010 - 12 and schedule VNIF-ARP-ZZ-YYY-SH-CU-0001.
11. For all schedules, refer to drawing VNIF-ARP-00-YYY-DR-CD-0017.
12. Foul rates and pipe sizing has been based upon FEC document "Redbank - Incoming Water Flowrates" - dated 12-05-22
13. Foul drainage runs have been designed to not exceed 75% capacity as stated in the DCG to provide capacity for further future provisions.

Safety, Health and Environmental Information

Notes below are additional to hazards/risks normally associated with this type of work. Numbers correspond to Risk Register references (document reference VNIF-ARP-00-YYY-RE-WD-0002)

Location Specific

HAZ-DR-002 - Flood Risk

Sitewide

The following Hazards are considered to be a risk across the whole design
HAZ-SW-002 - Buried Existing Services
HAZ-SW-006 - Asbestos
HAZ-SW-007 - Unexploded Ordnance (UXO)

Dismantling / Demolition (Future)

No additional risk indentified at this design stage
Refer to general notes and the Principal Contractor for more information about the risks associated with this work.

Key

- HIF Site Boundary
- Plot Boundary
- Provision of Utility and Drainage Infrastructure Only
- Existing Drainage Sewer
- Proposed Foul Pipe
- Proposed Surface Water Pipe
- Proposed Foul Manhole
- Proposed Surface Water Manhole
- Proposed Adoptable Easements (3m)

Rev	Date	Description	By	Chkd	Appd	Auth
P01	14/07/22	WS4 Issue to BAM	DH	DH	RG	---
P02	08/08/22	Issued for Technical Approval	ES	DH	RG	---
P03	10/10/22	Full WS4 Issue	ES	DH	RG	---
P04	20/10/22	Issued for Full WS4	ES	DH	RG	---

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Client

MANCHESTER CITY COUNCIL

bam nuttall

Project Title

Victoria North HIF Infrastructure & Enabling Works

Drawing Title

Proposed Foul Water Drainage
Sheet 2 of 2

Scale at A1	1:500	Arup Job No	282022-00
Role	Civil - Drainage		
Suitability	S4 - Issued for Construction Approval		

Rev	By	Chkd	Appd	
P04	ES	DH	RG	---
	Date 19/10/22	Date 20/10/22	Date 20/10/22	---

Name

VNIF	- ARP -	00	- YYY -	DR	- CD -	0023
Project	Originator	Volume	Location	Type	Role	Number

Do not scale

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