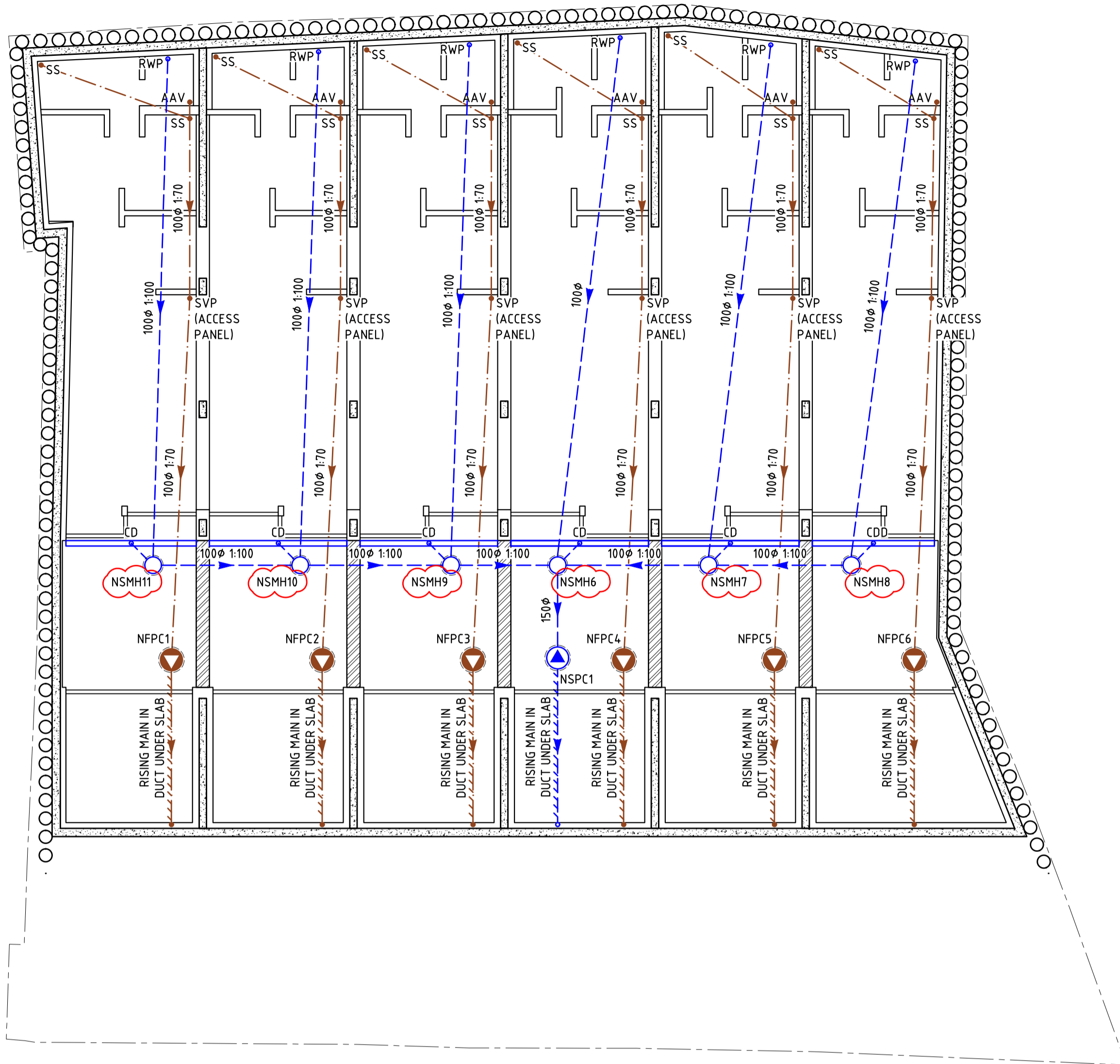


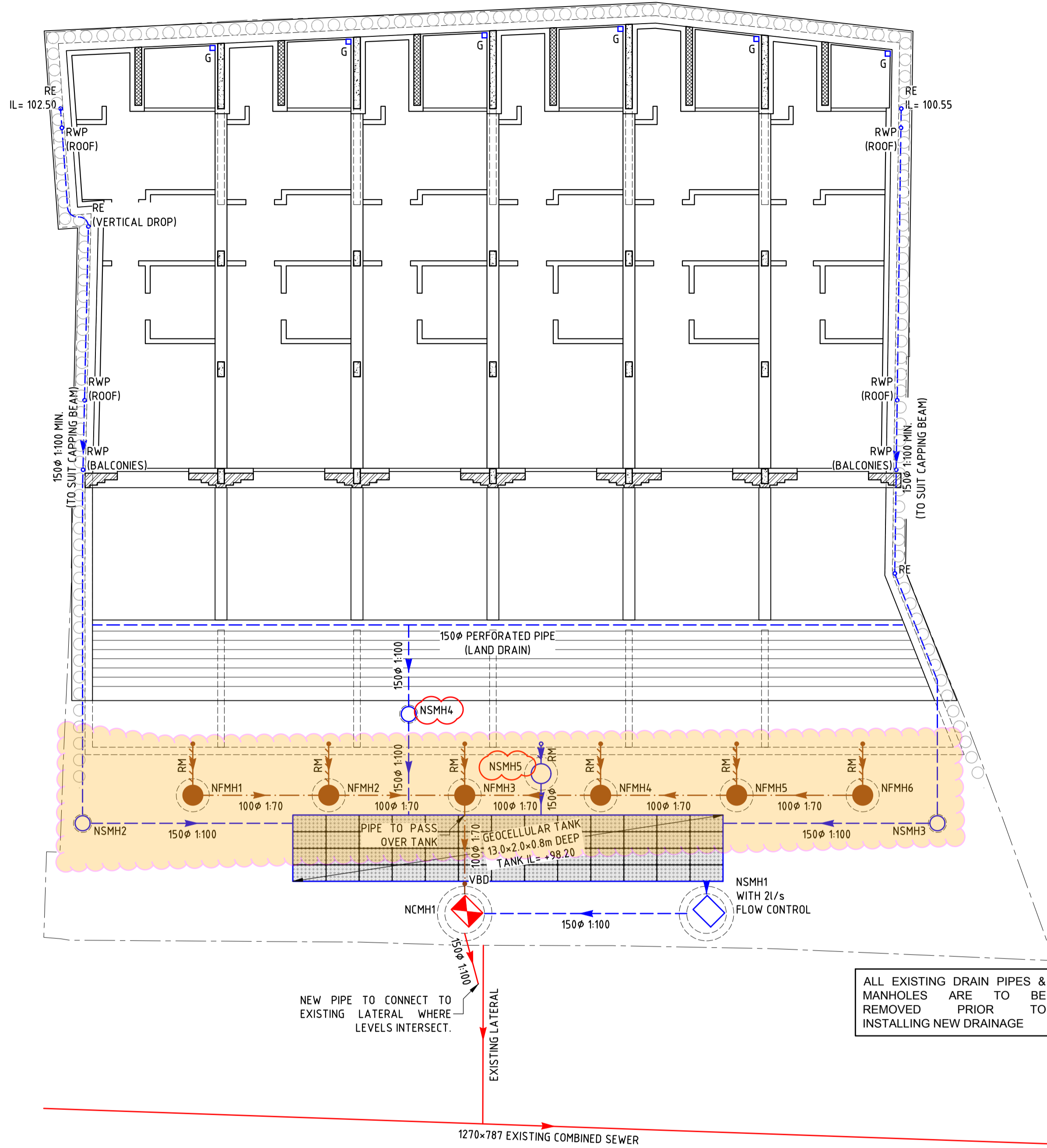
**BASEMENT FLOOR DRAINAGE**

1:25 @ A1/150 @ A3



**LOWER GROUND FLOOR DRAINAGE**

1:25 @ A1/150 @ A3



**MANHOLE SCHEDULE**

MANHOLE No.	APPROX. COVER LEVEL	INVERT LEVEL IN	INVERT LEVEL OUT	DEPTH (mm)	PIPE SIZE OUT (mm)	GRADIENT OUT	TYPE/COMMENT		COVER
							SIZE/DIA.	TYPE	
NCMH1	100.53	98.05	98.05	2480	150φ	1:100 MINIMUM	1200φ	P.C. RING (DETAIL 1)	750x600 DUCTILE IRON 'C250'
NSMH1	100.53	98.15	98.15	2380	150φ	1:100	1200φ	P.C. RING WITH FLOW CONTROL (DETAIL 1a)	750x600 DUCTILE IRON 'C250'
NSMH2	100.64	100.00	100.00	640	150φ	1:6	450φ	UIC (DETAIL 3)	450φ PLASTIC 'B125'
NSMH3	100.64	99.70	99.70	940	150φ	1:100	450φ	UIC (DETAIL 3)	450φ PLASTIC 'B125'
NSMH4	100.00	98.85	98.85	1150	150φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NSMH5	100.53	99.33	99.33	1200	150φ	1:2	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NSMH6	96.16	95.26	95.26	900	150φ	1:100	450φ	UIC CATCHPIT (DETAIL 4)	450φ PLASTIC 'B125'
NSMH7	96.16	95.29	95.29	870	100φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NSMH8	96.16	95.32	95.32	840	100φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NSMH9	96.16	95.29	95.29	870	100φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NSMH10	96.16	95.32	95.32	840	100φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NSMH11	96.16	95.35	95.35	810	100φ	1:100	450φ	UIC (DETAIL 3a)	450φ PLASTIC 'B125'
NFMH1	100.57	99.70	99.70	870	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NFMH2	100.57	99.65	99.65	920	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NFMH3	100.57	99.60	99.60	970	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NFMH4	100.57	99.65	99.65	920	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NFMH5	100.57	99.70	99.70	870	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'
NFMH6	100.57	99.75	99.75	820	100φ	1:70	600φ	BACKWASH DISCHARGE CHAMBER (DETAIL 2)	600φ PLASTIC 'B125'

**ANNOTATIONS**

		MANHOLE COVERS TO BS EN 124		
UIC	UNIVERSAL INSPECTION CHAMBER	CLASS A	LIGHT DUTY	PEDESTRIAN ONLY
NEIC	NON-ENTRY INSPECTION CHAMBER	CLASS B	MEDIUM DUTY	LIGHT VEHICLES
TRAD./P.C. RING	TRADITIONAL BRICK OR PRECAST CONCRETE CHAMBER CONSTRUCTION	CLASS C	HEAVY DUTY	CARRIAGEWAY <0.5m FROM KERB
		CLASS D	HEAVY DUTY	CARRIAGEWAY & HARD SHOULDERS

**NOTE:** ALL CATCHPIT MANHOLES ARE 200mm DEEPER THAN INVERT LEVELS SHOWN TO ALLOW FOR SILT PIT

**PUMP CHAMBER SCHEDULE**

TANK N°	STORAGE CAPACITY (l)	PUMP CAPACITY (l/s)	APPROX. RISE (m)	LOCATION	CONSTRUCTION TYPE
NFPC1	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NFPC2	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NFPC3	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NFPC4	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NFPC5	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NFPC6	1000	3.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a
NSPC1	1000	6.0	4.5	BURIED IN COURTYARD	SIMILAR TO DETAIL 3a

**DRAWING NOTES**

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**DRAINAGE NOTES**

- NOTATION KEY**
- SVP: SOIL AND VENT PIPE
  - RWP: RAIN WATER PIPE
  - SS: STUB STACK
  - AAV: AIR ADMITTANCE VALVE
  - YG: YARD GULLY
  - RE: RODDING EYE
  - VBD: VERTICAL BACKDROP
  - NFMH: NEW FOUL WATER MANHOLE
  - NSMH: NEW SURFACE WATER MANHOLE
  - NCMH: NEW COMBINED WATER MANHOLE
  - NFPC: NEW FOUL WATER PUMP CHAMBER
  - NSPC: NEW SURFACE WATER PUMP CHAMBER
- COMBINED WATER PIPE RUN
  - ↻ COMBINED WATER MANHOLE OR INSPECTION CHAMBER
  - FOUL WATER PIPE RUN
  - FOUL WATER RISING MAIN
  - FOUL WATER MANHOLE OR INSPECTION CHAMBER
  - FOUL WATER PUMPING CHAMBER
  - SURFACE WATER PIPE RUN
  - SURFACE WATER RISING MAIN
  - SURFACE WATER MANHOLE OR INSPECTION CHAMBER
  - SURFACE WATER PUMPING CHAMBER

**SPECIFICATION**

- FOUL DRAINS ARE TO BE 100mm NOMINAL DIAMETER LAID AT A GRADIENT NOT FLATTER THAN 1:70 UNO.
- DRAINS ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS 65 OR FLEXIBLE UPVC PIPES TO BS4660 WITH FLEXIBLE JOINTS BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND BS 8301.
- 100mm RIGID PIPES WITH LESS THAN 300mm COVER OR PIPES OF 150mm OR GREATER DIAMETER WITH LESS THAN 600mm COVER ARE TO BE SURROUNDED BY 150mm OF CONCRETE WITH MOVEMENT JOINTS PROVIDED AT EVERY PIPE JOINT.
- FLEXIBLE PIPES WITH LESS THAN 600mm COVER ARE TO BE SURROUNDED WITH CONCRETE OR TO HAVE CONCRETE PAVING SLABS LAID AS BRIDGING ABOVE THE PIPE. PIPES UNDER BUILDINGS ARE TO BE SURROUNDED WITH 100mm MIN. OF GRANULAR MATERIAL.
- ACCESS TO DRAINS MAY PROVIDED BY VITRIFIED CLAY, GRP OR POLYPROPYLENE INSPECTION CHAMBERS TO BS 7158, OR MANHOLES CONSTRUCTED USING CLASS B ENGINEERING BRICKS TO BS 3921 OR PRECAST CONCRETE SECTIONS TO BS 5911, SURROUNDED WITH 150mm OF CONCRETE MINIMUM DIMENSIONS TO CONFORM TO TABLE 8 OF BS 8301. COVERS AND FRAMES FOR MANHOLES/ INSPECTION CHAMBERS MUST COMPLY WITH THE APPROPRIATE LOADING GRADE OF BS 497 OR BS 5911.
- PROVIDE GULLIES AND RWP'S WITH RODDABLE ACCESS.
- ALL PIPES THAT CONNECT TO MAIN RUN DRAINAGE MANHOLES TO BE FIXED 'CROWNS ADJACENT'
- CONCRETE BEDDING & SURROUND TO BE MIX TYPE GEN 1 TO TABLE 6 OF BS 5328-PART 2 UNO. IF A DIFFERENT GEN MIX IS SPECIFIED IT WILL BE TO THE ABOVE TABLE.
- ALL RWP'S TO CONNECT INTO RODDABLE GULLIES.

**NOT FOR CONSTRUCTION**

REV	DETAIL	DATE
P2	Revised as clouded	15/07/19
P1	Preliminary	08/07/19

Status: PRELIMINARY

Client: Space Free Ltd.

Project: 138-140 Highgate Road, London, NW5 1PB

Title: Drainage G.A. Sheet 1

Project N°:	Drawing N°:	Rev:
18035	D100	P2

Date: Jul 2019  
 Scale @A1: 1:100  
 Drawn: JL  
 Engineer: NK

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