RESIDUAL HAZARD REGISTER
HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL RELEVANT PROJECT TEAM MEMBERS.

HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
3.01	UNDERGROUND SERVICES	EXISTING LIVE SERVICES (SITEWIDE)
5.05	DEEP EXCAVATIONS	DEEP EXCAVATION MORE THEN 3M NEAR EXISTING CULVERT/ NEAR EXISTING FOUNDATION WALL/ ATTENUATION TANK

DESIGN PHILOSOPHY SURFACE WATER

EXISTING BUILDING
SIPHON ROOF SYSTEM WITH RAINWATER HARVESTING TANK AND FLOW RESTRICTION BY STORMSAVER
FLOW LIMITED TO 18.1L/S 1 IN 30 YEAR STORM EVENT FOR ALL STORM EVENTS
TABLE 3 EXISTING AND PROPOSED CALCULATIONS

GROUND FLOOR YARD/CAR PARK
TO DISCHARGE TO WATERCOURSE,RESTRICTED RATE
COMBINATION OF BROWNFIELD RUNOFF (50% REDUCTION) & GREENFIELD RUNOFF.

SURCHARGE LEVEL FOR 1 IN 100+40 CC ON CULVERTED WATERCOURSE: 61.85 (1m ABOVE SOFFIT LEVEL)

LOWER GROUND CAR PARK
REUSING EXISTING CONNECTION TO COMBINED SEWER
GREATER REDUCTION THAN 50%, 7L/S FOR ALL STORM EVENTS

SURCHARGE LEVEL FOR 1 IN 100+40 CC ON PUBLIC SEWER: 59.14 (AS AGREED WITH UU)

WASHDOWN AREA
TO DISCHARGE TO FOUL WATER SEWER FLOW LIMITED TO 5L/S AS REQUESTED BY UU

FOUL WATER
4.9L/S

DRAWING BASED ON:
TOPOGRAPHICAL SURVEY BY SEP S15724-T

GPR SURVEY BY SEP S17480-U DEC 2018 JUNE 2018

CCTV SURVEYS BY SEP/ NRC:
- DEC 2018
- AUG 2020
- MAY, AUG 2021
- JAN 2022
- SEP, NOV 2023

UU RECORDS UUPS-ORD-76950

PROPOSED SITE PLAN
HRD-FRA-00-XX-DR-A-90-0207 REV C06 EXTERNAL WORKS SETTING OUT SHEET 1
HRD-FRA-00-XX-DR-A-90-0208 REV C08 EXTERNAL WORKS SETTING OUT SHEET 2

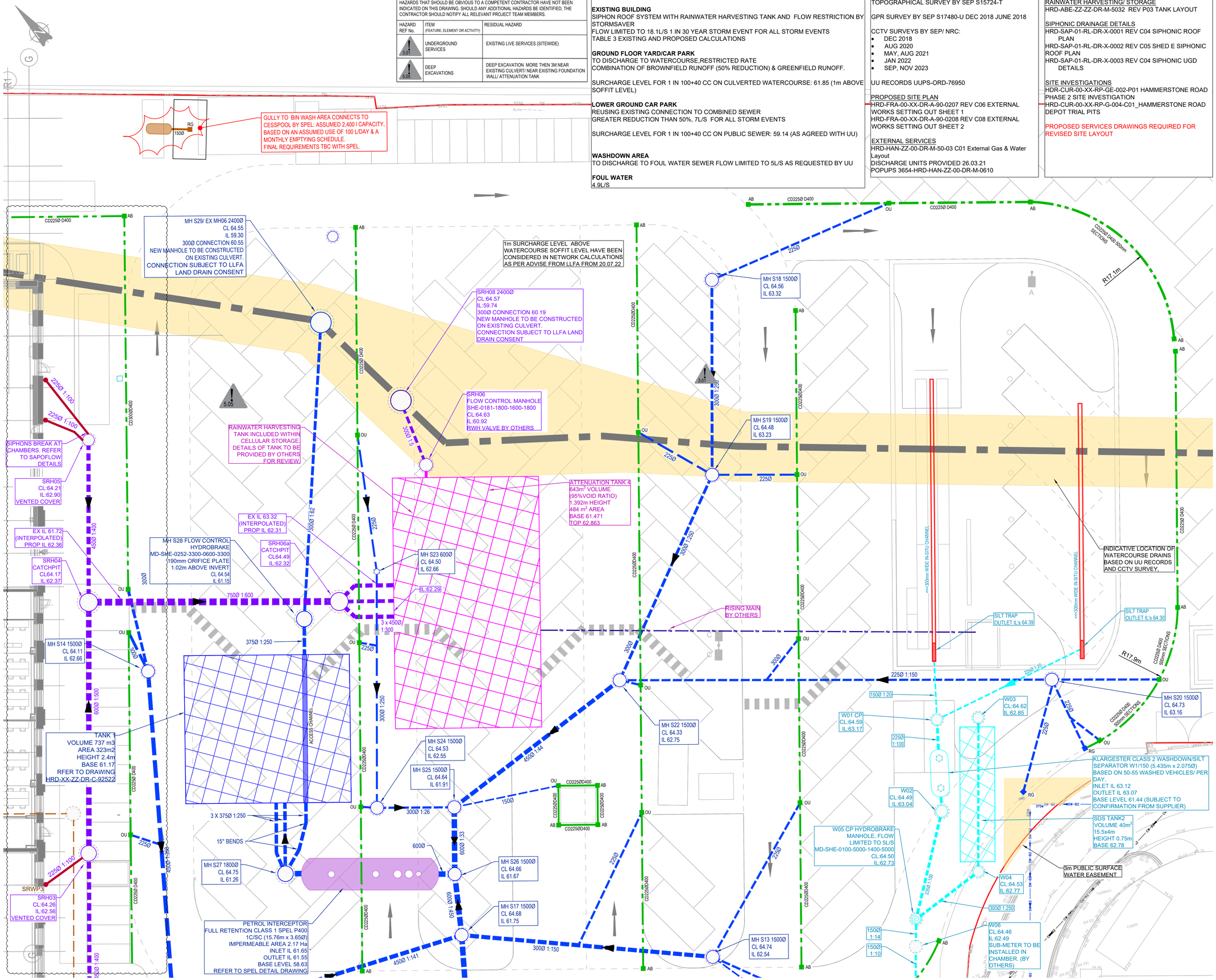
EXTERNAL SERVICES
HRD-HAN-ZZ-00-DR-M-50-03 C01 External Gas & Water Layout
DISCHARGE UNITS PROVIDED 26.03.21
POPUPS 3654-HRD-HAN-ZZ-00-DR-M-0610

RAINWATER HARVESTING/ STORAGE
HRD-ABE-ZZ-ZZ-DR-M-5032 REV P03 TANK LAYOUT

SIPHONIC DRAINAGE DETAILS
HRD-SAP-01-RL-DR-X-0001 REV C04 SIPHONIC ROOF PLAN
HRD-SAP-01-RL-DR-X-0002 REV C05 SHED E SIPHONIC ROOF PLAN
HRD-SAP-01-RL-DR-X-0003 REV C04 SIPHONIC UGD DETAILS

SITE INVESTIGATIONS
HDR-CUR-00-XX-RP-GE-002-P01 HAMMERSTONE ROAD PHASE 2 SITE INVESTIGATION
HRD-CUR-00-XX-RP-G-004-C01_HAMMERSTONE ROAD DEPOT TRIAL PITS

PROPOSED SERVICES DRAWINGS REQUIRED FOR REVISED SITE LAYOUT



LEGEND

SITE BOUNDARY BASED ON HRD-FRA-00-XX-DR-A-90-0200

EXISTING SERVICES BASED ON CCTV SURVEY AUG 2020

- EXISTING SURFACE WATER PIPE
- EXISTING COMBINED WATER PIPE
- EXISTING UNSURVEYED BUILDING DRAINAGE (ASSUMED ROUTE SHOWN)

UNITED UTILITIES RECORDS UUPS-ORD-76950
ALL UU ASSETS ARE SHOWN INDICATIVELY

- UU FOUL WATER SEWER
- UU SURFACE WATER SEWER
- UU COMBINED WATER SEWER
- WATERCOURSE
- 8M EASEMENT BASED ON SEWER FOR ADOPTION 6TH EDITION

PROPOSED DRAINAGE

- PROPOSED FOUL WATER DRAIN
- PROPOSED RISING MAIN FROM RH TANK
- PROPOSED SURFACE WATER DRAIN
- PROPOSED SURFACE WATER FOR WASHDOWN
- PROPOSED SURFACE WATER FROM SIPHON BY SAPOFLOW
- PROPOSED SURFACE WATER GRAVITY DRAINAGE FROM SIPHON
- PROPOSED SURFACE WATER BY STORMSAVER
- GATIC CHANNEL
- DP FOUL WATER DOWN PIPE
- FG FLOOR GULLY
- SRWP SIPHON RAIN WATER PIPE
- AB ACCESS BOX
- OU OUTLET BOX
- CP CATCHPIT
- FLOW CONTROL CHAMBER
- PROPOSED ATTENUATION TANK
- PETROL INTERCEPTOR OR SIMILAR
- PROPOSED SERVICES
- EXISTING BUILDING FOOTPRINT

Rev:	Description:	Date:	By:	Chkd:
C07	LINEAR DRAINAGE CHANNEL AMENDED	22.10.24	JC	ATL
C06	UPDATED IN LINE WITH DISCUSSIONS	21.10.24	JC	ATL
C05	STAGE 5 ISSUE	23.09.24	JC	ATL
P08	UPDATED IN LINE WITH COMMENTS	13.02.24	ATL	MW
P07	UPDATED FOR NEW TENDER	02.02.24	ATL	MW
C04	CAR PARK DRAINAGE REMOVED	20.04.23	ATL	MW
C03	DRAINAGE FLOWS, COVER LEVELS AND, WASHDOWN OUTFALL ARRANGEMENT AMENDED	25.11.22	ATL	MW
C02	EX1 TO BE REBUILT, LANDSCAPE PLAN AND SERVICES UPDATED	24.10.22	MW	MW
C01	ISSUED FOR CONSTRUCTION	21.09.22	ATL	MW
P06	UPDATED IN LINE WITH REVISED FOUL POP-UPS. MAIN BUILDING (SIPHONIC DRAINAGE AMENDED).	19.08.22	ATL	MW
P05	UPDATED IN LINE WITH COMMENTS	04.08.22	ATL	ATL

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Status: STAGE 5

Project: HAMMERSTONE ROAD

Drg Title: PROPOSED DRAINAGE 1:200 LAYOUT SHEET 1

Project No:	Size:	Date:	Drawn By:	Designed By:	Checked By:
068065	A1 Scale: 1:200	14.04.21	ATL	ATL	MW

Project Code:	Originator:	Zone:	Level:	Type:	Discipline:	Category / Number:	Rev:
HRD	CUR	XX	00	DR	C	92-504	C07

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