



SPECIALIST DESIGN ITEM (1):
TT PUMPS, MERCURY DUAL PACKAGED PUMP
STATION OR SIMILAR APPROVED
INLET I.L – 31.000m TBC
FLOW RATE 2.5 L/S TBC
COVER LEVEL – 32.200
RISING MAIN – 63mmø TBC
PUMPED DISTANCE– 4m (TBC)
PUMPED HEIGHT (INLET TO OUTFALL) – TBC



EXISTING RAILWAY ARCHES ARE TO BE LINED /
TANKED WITH A CAVITY DRAINAGE SYSTEM WHICH
IS TO BE DESIGNED BY OTHERS. WSP TO PICK UP
OUTLETS FROM THIS SYSTEM INTO THE NEW
BELOW GROUND SURFACE WATER DRAINAGE
SYSTEM AS SHOWN. EXACT LOCATION OF OUTLETS
TO BE CONFIRMED BY DESIGNER / SUPPLIER OF
CAVITY DRAINAGE SYSTEM.



EXISTING RWP'S & BELOW
GROUND DRAINAGE
CONNECTIONS WHICH DRAIN
THE ARCHES TO BE
RETAINED AS EXISTING.



ANY NEW EXCAVATIONS FOR DRAINAGE PIPEWORK
EITHER WITHIN OR IN CLOSE PROXIMITY TO THE
EXISTING NETWORK RAIL ARCH STRUCTURE OR
FOUNDATIONS TO BE AS SHALLOW AS POSSIBLE &
TO BE HAND-DUG WHEREVER POSSIBLE. ALL
NECESSARY APPROVALS FOR EXCAVATIONS TO BE
SOUGHT BY CONTRACTOR FROM NETWORK RAIL.

FW AND SW
CONNECTIONS TO U/S
DRAINAGE WITHIN VOIDED
AREA SUBJECT TO
COORDINATION WITH M&E
DESIGNER. CONNECTIONS
TO BE MADE AT 750mm
BELOW PROPOSED FFL



CARE TO BE TAKEN NOT TO
DAMAGE EXISTING DRAINAGE
RUNS BENEATH PROPOSED
BUILDINGS. CONTRACTOR TO
PROTECT EXISTING DRAINAGE
RUNS DURING CONSTRUCTION

GREY DASHED LINES
INDICATE PROPOSED
DRAINAGE CHANNELS CAST
INTO CONCRETE SLAB. TO
BE DESIGNED BY OTHERS.

EXISTING MANHOLE WHICH CLASHES
WITH NEW CONSTRUCTION
FOUNDATIONS TO BE PIPED THROUGH
AND RELOCATED TO NEW SW MH 1

NEW SW MH 1
1200ø MANHOLE TO BE CONSTRUCTED
ON EXISTING 150ø SW SEWER
C.L: 32.22 I.L: TBC ON SITE TO
MATCH LEVEL OF EXISTING SEWER

NEW SW MH 2
1200ø MANHOLE TO BE CONSTRUCTED
ON EXISTING 225ø SW SEWER
C.L: 32.22 I.L: TBC ON SITE TO MATCH
LEVEL OF EXISTING SEWER

EXISTING MANHOLE WHICH
CLASHES WITH NEW
CONSTRUCTION FOUNDATIONS TO
BE PIPED THROUGH AND
RELOCATED TO NEW SW MH 1

INVERT LEVEL OF EX MH 1 CURRENTLY
UNKNOWN AND TO BE CONFIRMED BY SURVEY
REQUIREMENT FOR PACKAGED PUMP STATION
AND RISING MAIN TO BE CONFIRMED ONCE
INVERT LEVEL OF EX MH 1 IS KNOWN.

INDICATIVE LOCATION OF FOUL
MANHOLE WITHIN HOME
BUILDING. TBC VIA SURVEY

FOR DETAILS OF PROPOSED PACKAGED PUMP
STATION REFER TO WSP's DRAINAGE DETAIL
DRAWING HAP-WSP-B01-00-DE-C-0001

SPECIALIST DESIGN ITEM (1):
PROPOSED MERCURY PACKAGED
PUMP STATION BY TT PUMPS
OR SIMILAR APPROVED.
PUMPING STATION INLET I.L.
31.000m

MANHOLE SCHEDULE					
REFERENCE	C.L	I.L	TYPE	DIAMETER	MH COVER
PPIC S1	32.200	31.150	PPIC	450	B125
PPIC S2	32.200	31.050	PPIC	450	B125
PPIC S3	32.200	31.090	PPIC	450	B125
PPIC S4	32.200	31.025	MH	1200	D400
PPIC S5	32.200	31.230	PPIC	450	B125
PPIC F1	32.200	31.400	PPIC	450	B125
PPIC F2	32.200	31.150	PPIC	450	D400
PPIC F3	32.200	31.025	PPIC	450	D400
PPIC F4	32.200	31.550	PPIC	450	B125

DO NOT SCALE

KEY:

- EXISTING SW SEWER
- EXISTING CHANNEL DRAIN
- PROPOSED SW PIPE AND MANHOLE
- PROPOSED FW PIPE AND MANHOLE
- PROPOSED CHANNEL DRAIN
- PROPOSED RISING MAIN
- PROPOSED CAST-IN DRAINAGE

KEY TO HEALTH AND SAFETY SYMBOLS

- INDICATES A RESIDUAL RISK
REQUIRING A COMPULSORY ACTION.
- INDICATES A RESIDUAL RISK FOR
INFORMATION.
- INDICATES A RESIDUAL RISK
REQUIRING A PROHIBITIVE ACTION.
- INDICATES A RESIDUAL RISK AS A
WARNING.

NOTES:

- ALL EXISTING BELOW GROUND FOUL AND SURFACE WATER
DRAINAGE WHICH IS TO BE RETAINED REQUIRES A CCTV DRAINAGE
SURVEY TO IDENTIFY ANY EXISTING DEFECTS WHICH WILL REQUIRE
REPAIRS OR IF NECESSARY REPLACEMENT OF EXISTING DRAINAGE
RUNS.
- CARE TO BE TAKEN TO PROTECT EXISTING DRAINAGE RUNS WHICH
ARE TO BE RETAINED DURING THE CONSTRUCTION PHASE. A POST
CONSTRUCTION CCTV DRAINAGE SURVEY OF ALL EXISTING AND
PROPOSED BELOW GROUND DRAINAGE SHOULD BE CARRIED OUT.
- ALL INTERNAL MANHOLES / INSPECTION CHAMBERS (EXISTING AND
PROPOSED) TO HAVE DOUBLE SEALED AND LOCKABLE MANHOLE
COVERS AND FRAMES, WITH A RECESSED TRAY TO ACCEPT THE
SURROUNDING INTERNAL FLOOR FINISH.
- FULL COORDINATION OF PROPOSED NEW FOUL AND SURFACE
WATER DRAINAGE RUNS WITH PROPOSED FOUNDATIONS INCLUDING
GROUND BEAMS TO BE CARRIED OUT PRIOR TO FULL
CONSTRUCTION ISSUE OF THIS DRAINAGE LAYOUT.
- FULL COORDINATION OF OPENINGS / RECESSES REQUIRED IN
GROUND FLOOR SLAB FOR INTERNAL INSPECTION CHAMBERS TO
BE CARRIED OUT PRIOR TO CONSTRUCTION ISSUE.
- ALL NEW BELOW GROUND FOUL WATER DRAINAGE RUNS TO BE
100MM DIAMETER AT A MINIMUM GRADIENT OF 1 IN 40 UNLESS
NOTED OTHERWISE.
- ALL PROPOSED SURFACE WATER DRAINAGE RUNS TO BE 100mmø
AT 1 IN 40 UNLESS NOTED OTHERWISE

C01	05/08/2022	DR	FOR CONSTRUCTION APPROVAL	SM	SM
P04	20/07/2022	DR	NOTE RE ARCH 3 SUSPENDED FLOOR REMOVED	SM	SM
P03	19/07/2022	DR	SW MH1, PPIC S5 AND PPIC F4 ADDED. REV CLOUDS AROUND OTHER AMENDMENTS	SM	SM
P02	04/07/2022	DR	SURFACE WATER AMENDMENTS. NEW FW AND SW OUTLETS INSERTED	SM	SM
P01	10/12/2021	JTB	FIRST ISSUE	SM	SM
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS:
S4 - FOR CONSTRUCTION APPROVAL



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CLIENT:

ROBERTSON GROUP LTD

ARCHITECT:

JMA

SITE/PROJECT:

HOME RAILWAY ARCHES

TITLE:

PROPOSED DRAINAGE LAYOUT

SCALE @ A1:	CHECKED:	APPROVED:
1:100	SM	SM
PROJECT NO:	DESIGNED:	DRAWN:
70082168	JB	JB
DATE:	DATE:	DATE:
	August 22	
DRAWING No:	REV:	
HAP-WSP-B01-00-DR-C-0001	C01	
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