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DO NOT SCALE (A1)

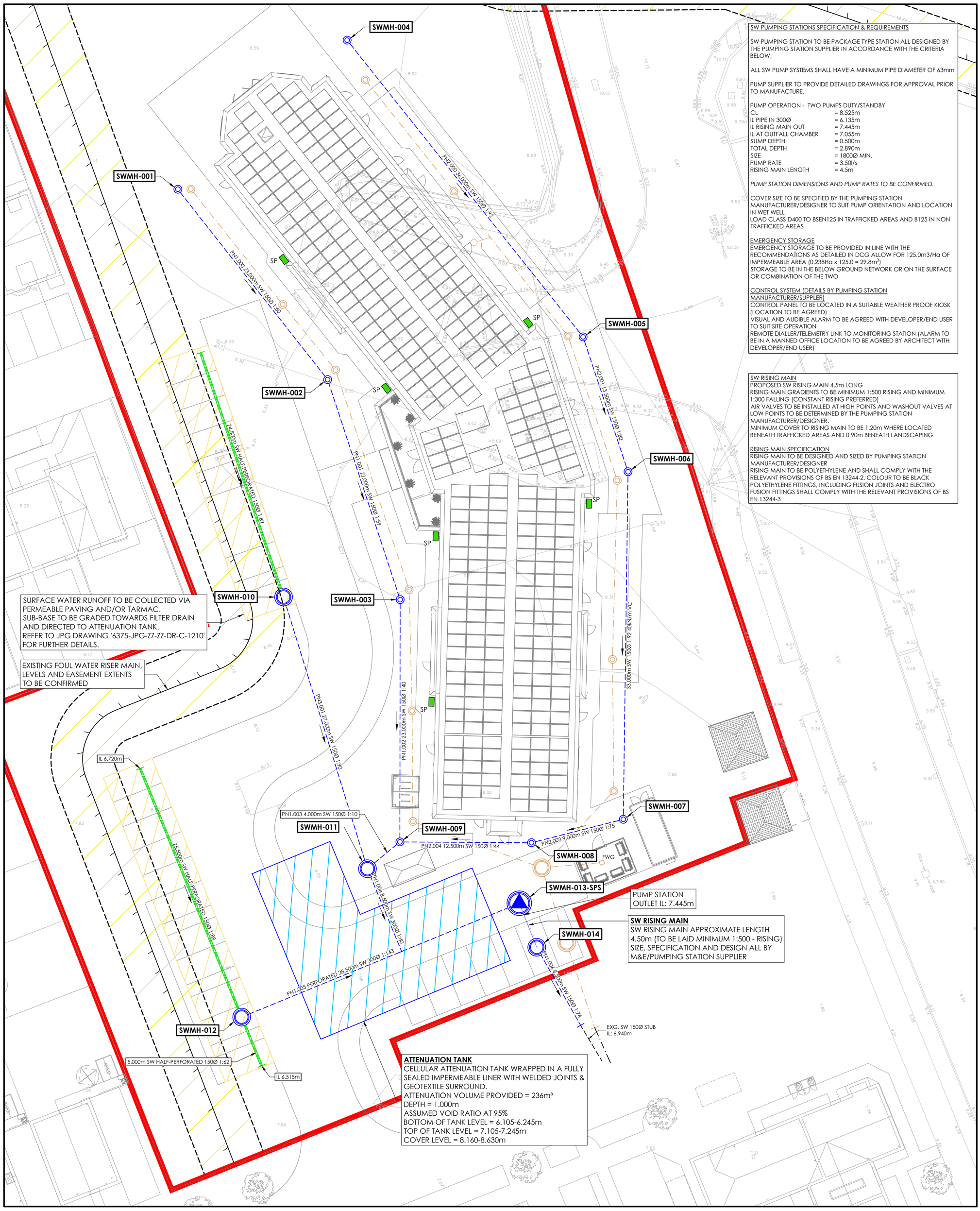
NOTES

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP IS TO COMPLY WITH JPG CONSULTANTS STANDARD SPECIFICATION & ALL RELEVANT BRITISH & EUROPEAN STANDARDS.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, M & E CONSULTANTS AND JPG CONSULTANTS DRAWINGS.
3. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO COMMENCEMENT OF WORKS.

DRAINAGE NOTES

1. ALL BUILDING DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH BS EN 752:2008 DRAINAGE AND SEWER SYSTEMS OUTSIDE BUILDINGS, THE CURRENT BUILDING REGULATIONS AND THE LOCAL AUTHORITY BUILDING CONTROL SPECIFICATIONS AND REQUIREMENTS.
2. ANY DRAINAGE TO BE PUT FORWARD FOR ADOPTION EITHER WITHIN THE SITE OR OUTSIDE SHALL BE CONSTRUCTED TO SEWERS FOR ADOPTION LATEST EDITION AND ANY SPECIFIC REQUIREMENTS OF THE ADOPTING SEWERAGE/WATER AUTHORITY.
3. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINS/SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SHOULD ANY EXISTING LIVE DRAINAGE BE FOUND WITHIN THE SITE BOUNDARY SERVING ADJACENT PROPERTIES.
5. ALL EXISTING DRAINAGE WITHIN THE SITE NOT REQUIRED FOR THE NEW DEVELOPMENT SHALL BE ABANDONED. DRAINS AND SEWERS LESS THAN 1.500m DEEP WHICH ARE IN OPEN GROUND SHOULD AS FAR AS IS PRACTICABLE BE FULLY REMOVED ALL OTHER PIPES SHOULD BE SEALED AT BOTH ENDS AND AT ANY POINT OF CONNECTION, AND BE GROUT FILLED TO ENSURE THAT RATS CANNOT GAIN ACCESS. LARGER PIPES 225Ø OR ABOVE SHOULD BE GROUT FILLED TO PREVENT SUBSIDENCE OR DAMAGE TO BUILDINGS OR SERVICES IN THE EVENT OF COLLAPSE.
6. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE UTILITY COMPANIES.
7. THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN OFF INTO EXCAVATIONS AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS IN LINE WITH CURRENT LEGISLATION WHEN WORKING IN/NEAR CONFINED SPACES, DEEP EXCAVATIONS AND MACHINERY.
9. THE CONTRACTOR SHALL ALLOW FOR OBTAINING ALL APPROVALS FROM THE RELEVANT AUTHORITIES WHEN WORKING IN THE PUBLIC HIGHWAY AND ON THE SEWERAGE SYSTEM.
10. THE CONTRACTOR SHALL SUITABLY PROTECT PEDESTRIANS AND VEHICLES FROM WORKING AREAS.
11. ALL MANHOLE/CHAMBER COVER LEVELS ARE APPROXIMATE AND SHALL BE ADJUSTED ON SITE TO SUIT THE PROPOSED FINISHED LEVELS.
12. ALL PIPES SHALL BE LAID WITH LEVEL SOFFITS AND ALL MANHOLE/INSPECTION CHAMBER INVERT LEVELS SHOWN ARE FOR THE OUT GOING PIPE UNO. ON THE DRAWING (NOTE THAT ALL PIPE GRADIENTS INDICATED ON THE DRAWING ARE APPROXIMATE ONLY).
13. ALL PIPE CONNECTION FROM DRAINAGE CHANNELS AND GULLIES SHALL BE 150Ø PIPES AT A MINIMUM GRADIENT OF 1:100 WITH CLASS Z BEDDING UNO. ON THE DRAWING.
14. ALL PIPE CONNECTIONS FROM RWP'S TO BE 100Ø AT 1:60 MIN. AND ALL PIPE CONNECTIONS FROM WPC'S TO FIRST CHAMBER SHALL BE 100Ø AT 1:40 MIN. WITH CLASS S BEDDING BENEATH THE BUILDING AND CLASS Z UNDER EXTERNALS WHERE COVER IS LESS THAN 1.20m UNO. ON THE DRAWING (LOCATION OF RWP'S AND WPC'S TO BE CONFIRMED BY THE ARCHITECT AND ARE SHOWN INDICATIVELY ONLY).
15. ALL SYPHONIC RWP SYSTEMS TO BE DESIGNED BY OTHERS. PIPEWORK FROM DOWN PIPE TO FIRST MANHOLE TO BE SIZED/ DESIGNED BY SYPHONIC SYSTEM DESIGNER. THE FIRST MANHOLE TO HAVE AN OPEN GRATE COVER SAINT GOBAIN WATERWAY 2000 - D400 OR SIMILAR APPROVED.
16. SUITABLY SIZED PETROL INTERCEPTORS MUST COMPLY WITH THE REQUIREMENTS OUTLINE IN PPG3 THESE INCLUDE SILT STORAGE CAPACITY AND HIGH LEVEL HYDROCARBON ALARM WIRED BACK TO A MANNED OFFICE.
17. UPON COMPLETION OF THE DRAINAGE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAIN RUNS BY JETTING AND REMOVE ALL DEBRIS FROM SITE. NO DEBRIS SHALL BE PERMITTED TO ENTER THE PUBLIC SEWER AND/OR WATERCOURSE SYSTEM. ONCE THE DRAINAGE SYSTEM HAS BEEN FULLY CLEANED OUT A CCTV CAMERA CONDITION SURVEY SHALL BE UNDERTAKEN TO ALL CONSTRUCTED DRAINAGE AND SEWER PIPES WITH THE FOOTAGE ISSUED TO THE ENGINEER FOR VIEW. THE AS BUILT INVERT AND COVER LEVELS SHALL BE RECORDED BY THE CONTRACTOR AND PASSED ON TO THE ENGINEER FOR REVIEW.



SW PUMPING STATIONS SPECIFICATION & REQUIREMENTS

SW PUMPING STATION TO BE PACKAGE TYPE STATION ALL DESIGNED BY THE PUMPING STATION SUPPLIER IN ACCORDANCE WITH THE CRITERIA BELOW;

ALL SW PUMP SYSTEMS SHALL HAVE A MINIMUM PIPE DIAMETER OF 63mm

PUMP SUPPLIER TO PROVIDE DETAILED DRAWINGS FOR APPROVAL PRIOR TO MANUFACTURE.

PUMP OPERATION - TWO PUMPS DUTY/STANDBY

CL	= 8.525m
IL PIPE IN 300Ø	= 6.135m
IL RISING MAIN OUT	= 7.445m
IL AT OUTFALL CHAMBER	= 7.055m
SUMP DEPTH	= 0.500m
TOTAL DEPTH	= 2.890m
SIZE	= 1800Ø MIN.
PUMP RATE	= 3.50l/s
RISING MAIN LENGTH	= 4.5m

PUMP STATION DIMENSIONS AND PUMP RATES TO BE CONFIRMED.

COVER SIZE TO BE SPECIFIED BY THE PUMPING STATION MANUFACTURER/DESIGNER TO SUIT PUMP ORIENTATION AND LOCATION IN WET WELL
LOAD CLASS D400 TO BSEN125 IN TRAFFICKED AREAS AND B125 IN NON TRAFFICKED AREAS

EMERGENCY STORAGE
EMERGENCY STORAGE TO BE PROVIDED IN LINE WITH THE RECOMMENDATIONS AS DETAILED IN DCG ALLOW FOR 125.0m3/Ha OF IMPERMEABLE AREA (0.238Ha x 125.0 = 29.8m³)
STORAGE TO BE IN THE BELOW GROUND NETWORK OR ON THE SURFACE OR COMBINATION OF THE TWO

CONTROL SYSTEM (DETAILS BY PUMPING STATION MANUFACTURER/SUPPLER)
CONTROL PANEL TO BE LOCATED IN A SUITABLE WEATHER PROOF KIOSK (LOCATION TO BE AGREED)
VISUAL AND AUDIBLE ALARM TO BE AGREED WITH DEVELOPER/END USER TO SUIT SITE OPERATION
REMOTE DIALLER/TELEMETRY LINK TO MONITORING STATION (ALARM TO BE IN A MANNED OFFICE LOCATION TO BE AGREED BY ARCHITECT WITH DEVELOPER/END USER)

SW RISING MAIN
PROPOSED SW RISING MAIN 4.5m LONG
RISING MAIN GRADIENTS TO BE MINIMUM 1:500 RISING AND MINIMUM 1:300 FALLING (CONSTANT RISING PREFERRED)
AIR VALVES TO BE INSTALLED AT HIGH POINTS AND WASHOUT VALVES AT LOW POINTS TO BE DETERMINED BY THE PUMPING STATION MANUFACTURER/DESIGNER.
MINIMUM COVER TO RISING MAIN TO BE 1.20m WHERE LOCATED BENEATH TRAFFICKED AREAS AND 0.90m BENEATH LANDSCAPING

RISING MAIN SPECIFICATION
RISING MAIN TO BE DESIGNED AND SIZED BY PUMPING STATION MANUFACTURER/DESIGNER
RISING MAIN TO BE POLYETHYLENE AND SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13244-2. COLOUR TO BE BLACK POLYETHYLENE FITTINGS, INCLUDING FUSION JOINTS AND ELECTRO FUSION FITTINGS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS EN 13244-3

LEGEND

- PROPOSED SURFACE WATER PIPE
- PROPOSED SURFACE WATER MANHOLE
- PROPOSED HALF-PERFORATED SURFACE WATER PIPE
- PROPOSED FOUL WATER PIPE
- PROPOSED FOUL WATER MANHOLE
- RWP PROPOSED RAINWATER PIPE
- SP PROPOSED SUDS PODS RAINWATER HARVESTING UNITS OR SIMILAR (LOCATION TBC BY ARCHITECT)

NOTE
RAIN WATER PIPE LOCATIONS TO BE CONFIRMED BY OTHERS

NOTE
PERMEABLE TARMAC DESIGN BY OTHERS

0m 5m 10m
SCALE 1:200

SURFACE WATER DRAINAGE STRATEGY

SCALE 1:200

SURFACE WATER MANHOLE SCHEDULE

REF.	COVER LEVEL	INVERT LEVEL	SUMP DEPTH	DEPTH	EASTING	NORTHING	DIAMETER	TYPE	COVER	NOTES
001	8.722m	8.258m - 150Ø OUT	0.300m	0.764m	330900.229	186960.961	450Ø	PPIC	450x450 - CLASS B125	CATCHPIT
002	8.701m	7.875m - 150Ø IN 7.875m - 150Ø OUT	0.300m	1.126m	330914.459	186942.891	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
003	8.559m	7.505m - 150Ø IN 7.505m - 150Ø OUT	0.300m	1.354m	330921.348	186921.998	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
004	8.714m	8.250m - 150Ø OUT	0.300m	0.764m	330916.313	186975.122	450Ø	PPIC	450x450 - CLASS B125	CATCHPIT
005	8.709m	7.860m - 150Ø IN 7.860m - 150Ø OUT	0.300m	1.149m	330938.722	186946.948	450Ø	PPIC	450x450 - CLASS B125	CATCHPIT
006	8.709m	7.695m - 150Ø IN 7.695m - 150Ø OUT	0.300m	1.314m	330942.992	186934.140	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
007	8.843m	7.335m - 150Ø IN 7.335m - 150Ø OUT	0.300m	1.808m	330942.542	186901.144	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
008	8.734m	7.215m - 150Ø IN 7.215m - 150Ø OUT	0.300m	1.819m	330933.820	186898.923	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
009	8.654m	6.930m - 150Ø IN 6.930m - 150Ø IN 6.930m - 150Ø OUT	0.300m	2.024m	330921.320	186898.998	450Ø	PPIC	300x300 - CLASS B125	CATCHPIT
010	8.005m	6.830m - 150Ø IN 6.830m - 150Ø OUT	0.500m	1.675m	330910.274	186922.249	1200Ø	TYPE E	600x600 - CLASS D400	CATCHPIT
011	8.524m	6.530m - 150Ø IN 6.530m - 150Ø IN 6.380m - 300Ø OUT	0.500m	2.644m	330918.237	186896.450	1200Ø	TYPE B	600x600 - CLASS B125	CATCHPIT
012	7.912m	6.435m - 150Ø IN 6.435m - 150Ø IN 6.285m - 300Ø OUT	0.500m	2.127m	330906.292	186882.367	1200Ø	TYPE B	600x600 - CLASS D400	CATCHPIT
013-SPS	8.525m	6.085m - 300Ø IN	0.500m	2.940m	330932.663	186893.178	1800Ø	TYPE B	900x600 (TBC BY M&E DESIGNERS) - CLASS D400	PUMP CHAMBER DESIGNED BY SPECIALIST
014	8.559m	7.055m - 150Ø OUT	0.000m	1.504m	330934.319	186888.993	1200Ø	TYPE E	600x600 - CLASS D400	-

REV	DESCRIPTION	DATE	CHK	BY
P04	TANK UPDATED TO COMMENTS	14.05.25	BT	SMS
P03	UPDATED TO SUIT NEW ARRANGEMENT	12.05.25	BT	SMS
P02	CATCHPITS ADDED IN LINE WITH SABS REQUIREMENTS	13.08.24		SMS
P01	FIRST ISSUE	02.07.24	JDM	SMS

Project
MENDALGIEF ROAD
NEWPORT

Drawing Title
SURFACE WATER DRAINAGE STRATEGY

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