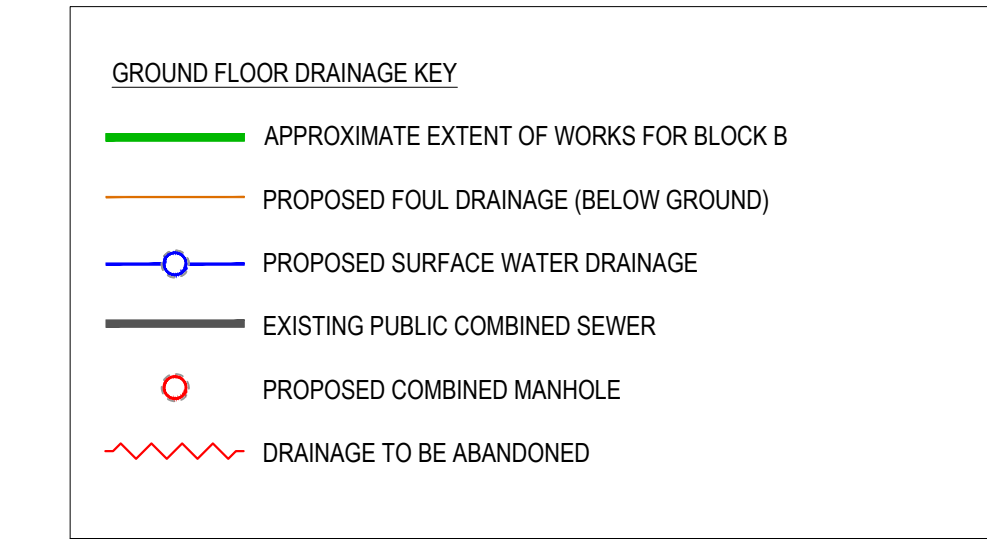
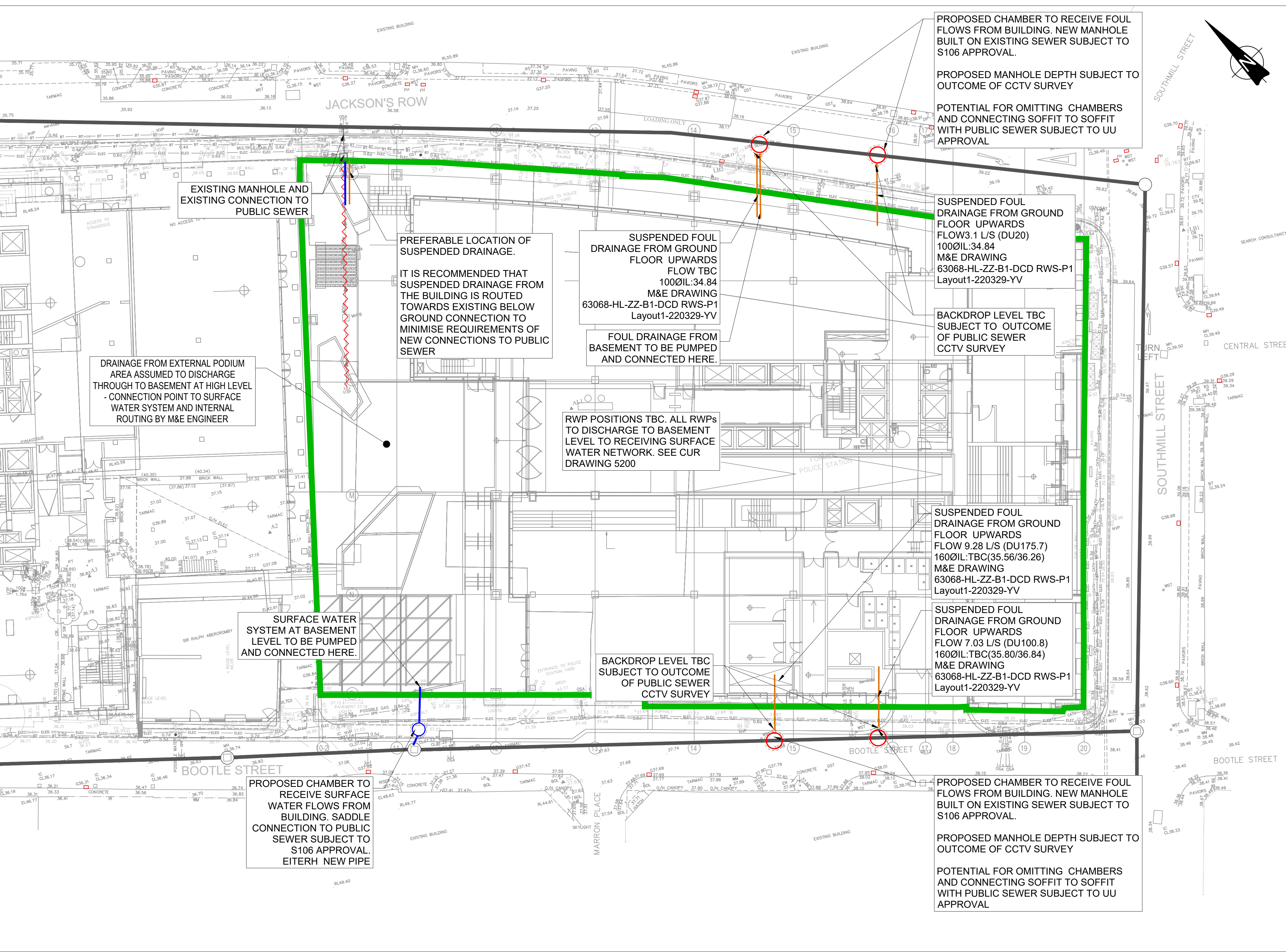




PROPOSED CHAMBER TO RECEIVE FOUL FLOWS FROM BUILDING. NEW MANHOLE BUILT ON EXISTING SEWER SUBJECT TO S106 APPROVAL.

PROPOSED MANHOLE DEPTH SUBJECT TO OUTCOME OF CCTV SURVEY

POTENTIAL FOR OMITTING CHAMBERS AND CONNECTING SOFFIT TO SOFFIT WITH PUBLIC SEWER SUBJECT TO UU APPROVAL

SUSPENDED FOUL DRAINAGE FROM GROUND FLOOR UPWARDS FLOW 3.1 L/S (DU20) 100ØIL:34.84 M&E DRAWING 63068-HL-ZZ-B1-DCD RWS-P1 Layout1-220329-YV

BACKDROP LEVEL TBC SUBJECT TO OUTCOME OF PUBLIC SEWER CCTV SURVEY

SUSPENDED FOUL DRAINAGE FROM GROUND FLOOR UPWARDS FLOW 9.28 L/S (DU175.7) 160ØIL:TBC(35.56/36.26) M&E DRAWING 63068-HL-ZZ-B1-DCD RWS-P1 Layout1-220329-YV

SUSPENDED FOUL DRAINAGE FROM GROUND FLOOR UPWARDS FLOW 7.03 L/S (DU100.8) 160ØIL:TBC(35.80/36.84) M&E DRAWING 63068-HL-ZZ-B1-DCD RWS-P1 Layout1-220329-YV

PROPOSED CHAMBER TO RECEIVE FOUL FLOWS FROM BUILDING. NEW MANHOLE BUILT ON EXISTING SEWER SUBJECT TO S106 APPROVAL.

PROPOSED MANHOLE DEPTH SUBJECT TO OUTCOME OF CCTV SURVEY

POTENTIAL FOR OMITTING CHAMBERS AND CONNECTING SOFFIT TO SOFFIT WITH PUBLIC SEWER SUBJECT TO UU APPROVAL

- GENERAL NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
 - ALL ADAPTABLE DRAINAGE WORKS INCLUDING WORKS TO EXISTING PUBLIC SEWERS TO BE UNDERTAKEN IN ACCORDANCE WITH "SEWERS FOR ADOPTION 7th EDITION" AND "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION" AND CONSTRUCTED TO THE RELEVANT STATUTORY UNDERTAKERS DETAILS.
 - ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH CURTINS DRAINAGE SPECIFICATION, "CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY 7th EDITION", BS EN 752 2017 'DRAIN AND SEWER SYSTEMS OUTSIDE BUILDINGS' AND THE BUILDING REGULATIONS APPROVED 'DOCUMENT H'.
 - DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
 - OUTFALL CONNECTION(S) SUBJECT TO AGREEMENT WITH THE APPROVING AUTHORITY.
 - ALL DIMENSIONS ARE IN METRES AND LEVELS IN METRES ABOVE ORDNANCE DATUM UNLESS OTHERWISE NOTED.
 - COVER LEVELS, GULLY POSITIONS, AND BUILDINGS LOCATION ARE APPROXIMATE AND SHALL BE CONFIRMED BY ARCHITECT/ LANDSCAPE ARCHITECT. CONTRACTOR TO ALLOW FOR ADJUSTMENT TO SUIT AGREED POSITIONS AND FINISHED LEVELS, AND CONFIRM ALL COVER LEVELS ON SITE.
 - ALL INTERNAL DRAINAGE CONNECTIONS ARE PROVIDED TO THE PENETRATION POSITIONS SHOWN ON ARCHITECT AND M&E DRAWINGS. REFER TO DIMENSIONED LOCATIONS AND DIAMETERS ON ARCHITECT'S GROUND FLOOR SETTING-OUT PLANS.
 - ALL UNDERGROUND FOUL DRAINAGE SHOULD BE SUITABLY VENTED AT OR NEAR TO THE HEAD OF RUNS.
 - ALL ACCESS FITTINGS, STACKS, RWPS AND GULLIES TO BE RODDABLE. ALL TO HAVE LOW LEVEL RODDING ACCESS PLATES UNLESS AN ALTERNATIVE MEANS OF ACCESS IS AGREED. ACCESS POINT TO BE ABOVE ANY GROUND FLOOR CONNECTED APPLIANCE SPILL LEVEL.
 - LARGE ACCESS FITTING REQUIRED ABOVE GROUND WHERE GREATER THAN 12M UP TO 22M TO A JUNCTION. SMALL ACCESS FITTING REQUIRED UP TO 12M TO A JUNCTION.
 - ALL GULLY AND CHANNEL DRAIN OUTLETS AND TERMINATION POINTS TO BE TRAPPED AND RODDABLE. INTERNAL GULLIES AND CHANNEL DRAINS TO BE SPECIFIED BY OTHERS.
 - WHERE NO W/C'S ARE CONNECTED UPSTREAM, UNDERSLAB FW DRAINAGE TO BE LAID AT 1.40 MIN. AFTER THE CONNECTION OF AT LEAST 1NO W/C, A MIN. FALL OF 1:80 APPLIES.
 - ALL CONNECTIONS FROM POP-UPS TO BE LAID AT A CONSTANT GRADIENT TO JUNCTION/ INSPECTION CHAMBER/ MANHOLE UNLESS NOTED OTHERWISE. ANY ISSUES RELATING TO CLASHES WITH FOUNDATIONS ARE TO BE FORWARDED TO THE ENGINEER, ALLOWING SUFFICIENT TIME FOR AN ALTERNATIVE SOLUTION TO BE PROPOSED.
 - INVERT LEVELS AT MANHOLES/ INSPECTION CHAMBERS TO BE USED TO SET OUT PIPEWORK. PIPE GRADIENTS ARE SHOWN INDICATIVELY ONLY.
 - ALL PIPE DIAMETERS GIVEN ARE NOMINAL INTERNAL PIPE DIAMETERS.
 - ALL SEWERS, UNLESS AGREED OTHERWISE STATED, SHALL BE:
 - 100mm to 300mm DIA TO BE VITRIFIED CLAY.
 - AS AN ALTERNATIVE THE CONTRACTOR MAY USE AN APPROVED UNPLASTICISED POLYVINYL CHLORIDE (PVCU) WITH APPROVAL FROM THE ENGINEER.
 - SEWER PIPES TO BE LAID IN MAXIMUM 3 METRE LENGTHS UNLESS THERE IS A SPECIFIC OPERATIONAL NEED TO LAY LONGER LENGTHS
 - THE FIRST PIPE OUT OF MANHOLES TO BE AS SHORT AS PRACTICABLE SO AS TO PROVIDE A FLEXIBLE JOINT AS CLOSE AS POSSIBLE TO THE OUTSIDE FACE OF THE CONCRETE SURROUND AND CONNECTED TO A LENGTH OF ROCKER PIPE.
 - ALL NEW CONNECTIONS INTO EXISTING MANHOLES (OR INTO

- GENERAL NOTES:
- EXISTING SEWERS) TO BE 'SOFFITS LEVEL' UNLESS OTHERWISE NOTED.
 - ALL ADAPTABLE DRAINAGE PIPES WILL REQUIRE A MINIMUM OF 1200mm COVER. IN ACCORDANCE WITH SEWAGE UNDERTAKERS REQUIREMENTS. WHERE THIS IS NOT ACHIEVED, IT WILL BE NECESSARY TO AGREE THE BED AND SURROUND DETAIL.
 - ALL PRIVATE DRAINAGE PIPES WITH A COVER OF LESS THAN 600mm IN NON-TRAFFICKED AREAS AND LESS THAN 1200mm IN TRAFFICKED AREAS TO BE BEDDED AND SURROUNDED IN CONCRETE (CLASS Z). COMPRESSIBLE MATERIAL SHALL BE PROVIDED AT EVERY PIPE JOINT. WHERE COVER EXCEEDS THIS DEPTH, PIPES ARE TYPICALLY BEDDED AND SURROUNDED IN CLASS S. REFER TO PIPE EMBEDMENT DETAILS DRAWING FOR SPECIFIC TYPES.
 - WHERE DRAINAGE PIPES ARE LESS THAN 300mm BELOW THE UNDERSIDE OF THE GROUND FLOOR SLAB, CONCRETE ENCASEMENT IS REQUIRED (CLASS Z). COMPRESSIBLE JOINTS ARE TO BE PROVIDED AT EVERY PIPE JOINT WITHIN THE CONCRETE.
 - WHERE PIPES ARE MORE THAN 300mm BELOW THE UNDERSIDE OF THE SLAB, CLASS S BEDDING IS ACCEPTABLE.
 - SULPHATE RESISTANT CEMENT (C20-DC2) AND PRECAST CONCRETE PRODUCTS MUST BE USED OR A LABORATORY REPORT PROVIDED TO PROVE THAT SUCH PRECAUTIONS ARE NOT REQUIRED.
 - WHERE FOUL SEWERS RUN ABOVE SURFACE SEWERS, CONCRETE PROTECTION MAY BE REQUIRED AT CROSSOVERS TO PREVENT ANY POTENTIAL CONTAMINATION.
 - ALL CONNECTIONS PASSING THROUGH BASES OR EDGE BEAMS TO BE IN SEALED SLEEVES. ALTERNATIVELY CONNECTIONS MAY BE CAST-IN WITH FLEXIBLE JOINTS NOT GREATER THAN 150MM FROM FACE OF CONCRETE.
 - THE CHAMBER SIZE OF MANHOLES WITH MORE THAN ONE CONNECTION MAY NEED TO BE INCREASED TO ACCOMMODATE THE CONNECTIONS AND BENDS.
 - ALL MANHOLE COVERS IN BLOCK/SLAB AND EXTERNAL PAVING AREAS TO HAVE RECESSED COVERS OF THE APPROPRIATE GRADE TO ACCEPT ARCHITECT'S PAVING PROPOSAL.
 - ALL INTERNAL COVERS TO HAVE MECHANICALLY JOINTED CORNERS AND DOUBLE SEALED WITH RECESSED TRAY TO ALLOW FOR FINISHES.
 - UNLESS NOTED OTHERWISE IN THE MANHOLE SCHEDULE, ALL MANHOLE, GULLY AND CHANNEL COVERS (IRONWORK) SHOULD BE THE FOLLOWING SPECIFICATION:
 - B125 LOAD CLASS IN PEDESTRIAN AREAS
 - D400 LOAD CLASS IN VEHICULAR AREAS.
 - ALL PROPRIETARY PRODUCTS TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS REQUIREMENTS, INSTRUCTIONS AND RECOMMENDATIONS.
 - THE DESIGN IS BASED ON A GRAVITY RAINWATER SYSTEM.

P02	STAGE 3	04.04.22	MW	MW
P01	STAGE 2	17.09.21	CD	AN
Rev:	Description:	Date:	By:	Chkd:



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Status: STAGE 3				
Project: ST MICHAELS - PHASE 1				
Orig Title: DRAINAGE LAYOUT (GROUND FLOOR)				
Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	15/08/21	CG	CG	CG
Scale: 1:50				
Project No:	Originator:	Volume:	Level:	Type: Role: Category / Number: Rev:
63068 - CUR - XX - GF - DR - C -	5201	-	P02	

DESIGN PHILOSOPHY
SURFACE WATER DESIGN
THE DESIGN PROVIDES CAPACITY UP TO THE 100 YEAR 40% CLIMATE CHANGE EVENT.
SW FLOW RATE: 23.4L/S (BASED ON 50% OF EXISTING AS AGREED PRIOR) STORAGE REQUIREMENT: 131M³
OUTFALL:IL TBC - TO BE AGREED WITH UU (S106 APPLICATION)
LEVELS INDICATE THAT PUMPING WILL BE REQUIRED.
INFILTRATION IS NOT CONSIDERED APPROPRIATE FOR THIS SCHEME.

FOUL WATER DESIGN
ALL FOUL WATER DRAINAGE FROM UPPER FLOORS TO BE SUSPENDED
FOUL WATER PUMP STATION IN BASEMENT SERVES ONLY BASEMENT FACILITIES

PROPOSED 2 PUMP STATIONS:
FOUL WATER PUMP STATION 1
FW PEAK FLOW RATE:3.2LS
24h FOUL WATER STORAGE REQUIRED:9.2 m³
ROUT ABOVE GROUND BY M&E ENGINEER

FOUL WATER PUMP STATION 2
GULLIES IN PLANT ROOM
TBC WASHDOWN FROM SPRINKLER TANK

- DRAWING BASED ON:
- TOPOGRAPHICAL & GRP SURVEY S11741-U
 - ARCHITECT BASEMENT 63068-HOD-ZZ-B1-DR-A-2001-P02-GA Plan - Level B1
 - FOUNDATION 63068-CUR-00-FN-DR-S-20090 22.03.22
- POPOP, RWPS AND ROOF AREA BASED ON:
- 63068-HL-ZZ-B1-DCD RWS-P1 Layout1-220329-YV

REQUIRE INFORMATION
EXISTING DRAINAGE SURVEY
M&E SUSPENDED DRAINAGE FROM PUMP STATIONS

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