



SOUTHERN CAR PARK TO HAVE PERMEABLE BLOCK PAVED SURFACE DRAINED INTO A PERMEABLE TANKED SUB-BASE

- BLOCK PAVED AREA = 1249m²
- PARKING BAY AREA = 975m²
- ASPHALT FOOTWAYS = 364m²
- INTERCEPTION RATIO = 1:2.07

EXISTING RAINWATER DOWNPIPES TO DISCHARGE AT SURFACE LEVEL ONTO PROPOSED PERMEABLE BLOCK PAVING VIA LINEAR CHANNEL DRAINS

DIFFUSER UNITS TO COLLECT SURFACE WATER FROM TANKED PERMEABLE SUB-BASE

DIFFUSER UNITS TO COLLECT SURFACE WATER FROM TANKED PERMEABLE SUB-BASE

BLOCK PAVED SOUTHERN CAR PARK
 AREA = 1249m²
 SUBSTRATE STORAGE VOLUME:
 = 0.32m DEEP (0.53m FULL DETPH) @ 30% V.R.
 = 131.15m³

RAINGARDEN #2
 TOP AREA = 132m²
 BASE AREA = 100m²
 SURFACE STORAGE VOLUME = 15m³
 SUBSTRATE STORAGE VOLUME:
 = 1.2m DEEP @ 30% V.R.
 = 36m³
 150mm SURFACE DEPRESSION WITH 1:3 SIDE SLOPES
 INTERCEPTED CATCHMENT = 633m²
 INTERCEPTION RATIO = 1:4.8

SURFACE WATER DRAINAGE DIVERSION TO FACILITATE CONSTRUCTION OF RAINGARDENS

EXISTING RAINWATER PIPE OUTLETS DIVERTED BELOW RAINGARDEN #2

RAINGARDEN #1
 TOP AREA = 73m²
 BASE AREA = 54m²
 SURFACE STORAGE VOLUME = 8.1m³
 SUBSTRATE STORAGE VOLUME:
 = 1.2m DEEP @ 30% V.R.
 = 19.4m³
 150mm SURFACE DEPRESSION WITH 1:3 SIDE SLOPES
 INTERCEPTED CATCHMENT = 348.5m²
 INTERCEPTION RATIO = 1:4.8

HARD STANDING AREA TO HAVE PERMEABLE SURFACE DRAINED INTO A TANKED PERMEABLE SUB-BASE

PERFORATED PIPE AND DIFFUSER UNITS TO COLLECT SURFACE WATER AT TANKED PERMEABLE SUB-BASE

- NOTES: EXISTING MANHOLES & DRAINS
1. THE POSITIONS AND LEVELS SHOWN FOR EXISTING MANHOLES AND DRAINS ARE APPROXIMATE. AT THE COMMENCEMENT OF WORKS THE CONTRACTOR SHALL UNDERTAKE A FULL SURVEY OF THE EXISTING DRAINAGE TO VERIFY THE DETAILS SHOWN. ANY SIGNIFICANT DISCREPANCIES OR ANY ADDITIONAL DRAINAGE NOT IDENTIFIED SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
 2. IF ANY EXISTING FOUL OR SURFACE DRAIN THAT HAS NOT BEEN IDENTIFIED IS FOUND WITHIN THE SITE, THE CONTRACTOR IS TO INVESTIGATE THE ORIGIN AND STATUS OF THE DRAIN AND REPORT TO THE ENGINEER FOR INSTRUCTION.
 3. REDUNDANT DRAINS ARE TO BE DEALT WITH AS FOLLOWS:
 - 4.1. WITHIN THE FOOTPRINT OF THE NEW BUILDING - DRAINS ARE TO BE REMOVED AND THE RESULTING TRENCH BACKFILLED AND COMPACTED WITH SUITABLE FILL MATERIAL.
 - 4.2. OUTSIDE THE BUILDING FOOTPRINT: DEPTH > 1.0m FROM FINISHED LEVELS TO CROWN OF PIPE - DRAINS ARE TO BE ABANDONED < 1.0m DEPTH ARE TO BE REMOVED TO CROWN OF PIPE - DRAINS TO BE REMOVED AND BACKFILLED.
 - 4.3. ALL ABANDONED DRAIN RUNS SHALL BE SEALED AT EACH END WITH GEN3 CONCRETE.
 4. MANHOLES TO BE REMOVED SHALL BE COMPLETELY BROKEN OUT AND BACKFILLED WITH SUITABLE COMPACTED FILL MATERIAL. UNDAMAGED COVERS AND FRAMES SHALL BE RETAINED ON SITE FOR RE-USE WHERE APPROPRIATE.
 5. WHERE NEW MANHOLES ARE TO BE CONSTRUCTED ON EXISTING DRAIN RUNS, ROCKER PIPES SHALL BE INSTALLED ON ALL ENTRIES, INCLUDING THE EXISTING RUN, IN ACCORDANCE WITH THE SPECIFICATION.

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 DO NOT SCALE FROM THIS DRAWING.
 CONTRACTORS MUST CHECK ALL DIMENSIONS ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE WORKED FROM. DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO CAMBRIA CONSULTING LIMITED BEFORE PROCEEDING.
 THE CONTRACTOR IS TO REFER TO THE SPECIFICATION, FULL SCHEDULE OF RESIDUAL RISKS IN THE CONTRACT DOCUMENTATION AND ALSO TO INFORMATION FROM OTHER DESIGNERS, IN PARTICULAR THE M&E CONSULTANT REGARDING EXISTING LIVE SERVICES.
 THIS SYMBOL IS USED TO HIGHLIGHT INSTANCES OF RISK WITHIN THE CONSTRUCTION PROCESS. ALWAYS CHECK FOR LATER REVISIONS OF THIS DRAWING.

KEY

- EXISTING SURFACE WATER DRAINAGE
- EXISTING TO BE MADE REDUNDANT
- SURFACE WATER DRAINAGE PIPE (CARRIER)
- SURFACE WATER DRAINAGE PIPE (PERFORATED)
- S1/100 SURFACE WATER DRAINAGE CHAMBER
- LINEAR / THRESHOLD CHANNEL DRAIN
- RWP RAINWATER DOWNPIPE
- RE RODDING EYE
- OF ACO SUDS OVERFLOW GULLY
- RAINGARDEN
- PERMEABLE BLOCK PAVING
- PERMEABLE ASPHALT PAVING
- GREEN/BLUE ROOF
- ATTENUATION TANK
- PIPED INLET / OUTLET - SUB SURFACE CONNECTION
- INLET DISCHARGING AT SURFACE LEVEL
- DIFFUSER UNIT AT SUB-BASE FORMATION LEVEL
- FOUL DRAINAGE

- NOTES:
1. PROPOSED DRAINAGE DESIGN IN ACCORDANCE WITH BUILDING REGULATIONS APPROVED DOCUMENT H & SEWERS FOR ADOPTION 7TH EDITION.
 2. DRAINAGE DESIGN SUBJECT TO DETAILED HYDRAULIC MODELLING & CONSULTATION WITH SAB.
 3. DRAINAGE RATES, ATTENUATION STORAGE & EXTENT OF ABOVE GROUND SUDS SUBJECT TO SAB APPROVAL.
 4. ALL DOWNPIPES TO DISCHARGE TO SUDS FEATURES VIA ABOVE GROUND CHANNELS AND BELOW GROUND PIPES.
 5. ALL PIPEWORK Ø150 UNLESS OTHERWISE STATED.
 6. ALL CHAMBER COVERS LOCATED IN VEHICLE TRAFFICKED AREAS TO BE LOAD CLASSIFICATION: D400.
 7. ALL CHAMBER COVERS LOCATED IN NON-VEHICLE TRAFFICKED AREAS TO BE LOAD CLASSIFICATION: B125.
 8. RAINWATER PIPES POSITIONS ARE SHOWN INDICATIVELY AND ARE TO BE CONFIRMED BY THE ARCHITECT.

P02	ISSUED FOR PRE-SAB APPLICATION	GJ	RJ	LKM
				04/03/25
P01	ISSUED FOR RIBA STAGE 3.	JW	RJ	LM
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Rev. Description By Chk App



Project:
CAERLEON SCHOOL
 CB2183

Drawing Title:
PROPOSED SURFACE WATER DRAINAGE SHEET 2 OF 3

Drawing No.
CB2183 CAM XX XX DR C 0503

Project	Originator	Function	Special	Form	Disc	Number
S4	PRELIMINARY	1:200				P02

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