NOTE:
FOUL GULLIES PROVIDED FOR BIN STORE WASH DOWN - GULLY TO BE KESSEL ODOUR STOP TYPE.

FOUL GULLIES TO BE PROVIDED IN BASE OF EACH WEIGHBRIDGE AND CONNECT INTO FUEL/OIL INTERCEPTOR - DETAILS TBC UPON RECEIPT OF WEIGHBRIDGE DETAIL DRAWINGS.

FOUL DRAINAGE PROVIDED ADJACENT TO VEHICLE MAINTENANCE UNIT FOR CONNECTION TO VEHICLE PITS - ALL DETAILS TBC.

FOUL DRAINAGE MAY BE REQUIRED TO BE DEEPER TO ACCEPT DRAINAGE FROM THE WEIGHBRIDGES AND VEHICLE PITS - THIS CAN ONLY BE CONFIRMED UPON RECEIPT OF DETAILED INFORMATION CONFIRMING DEPTHS AND LOCATIONS.

DIT TYPE 3 SUB-BASE TO CENTRAL BAYS OF CARPARK BAYS TO CONTINUE UNDER CENTRAL FOOTWAY.

PROPOSED SPEL VEHICLE WASHCLASS 2 FULL RETENTION PETROL/OIL SEPARATOR MODEL WDS200/2000. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM MOUNTED WITHIN THE MAINTENANCE BUILDING OR FIXED TO THE YARD SLAB. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 157.823
INLET IL
OUTLET IL

PROPOSED SPEL VEHICLE WASH SILT SEPARATOR MODEL ST800/12. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 157.800

PROPOSED 2.00m DEEP ATTENUATION BASIN TO ACHIEVE A VOLUME OF 357.0m³ REQUIRED TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE, SLOPE SIDES TO BE AT A GRADIENT OF 1 IN 3. ATTENUATION BASIN FINISH/VEGETATION TO BE ADVISED BY LANDSCAPER.
Top of Basin = 158.00 Base of Basin = 156.00
Water Level (1 IN 100YR + 40%CC) = Water Level (1 IN 2YR) =

PROPOSED PACKAGE SURFACE WATER PUMPING CHAMBER IN ACCORDANCE WITH BS EN 12050 REQUIRED REQUIRED TO PUMP A PEAK FLOW RATE OF 1L/s ON A DUTY STANDBY ARRANGEMENT. ALLOW FOR A 250mm THICK C28/35 CONCRETE BASE AND SURROUND ON 450mm THICK DIT TYPE 1 SUB-BASE. PUMP STATION TO BE COMPLETE WITH AN INTEGRAL HIGH LEVEL AUDIBLE AND VISUAL ALARM ON THE CONTROL PANEL. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 154.730
IL TBC BY MANUFACTURER
OUTGOING IL: (OUTGOING PUMP MAIN BY MANUFACTURER)
SUMP IL: (PUMP SUMP BY MANUFACTURER)

Ex. HIGHWAYS DRAIN OUTFALL PIPE DIA AND INVERTS TAKEN FROM TIER ENVIRONMENTAL TRIAL HOLE INVESTIGATIONS.

PROPOSED SPEL PURACEPTOR FULL RETENTION SEPARATOR MODEL P500 1C/SC. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND 250mm THK SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM SECURED TO A 7505Q x 150mm THK GRADE C28/35 CONCRETE BASE ON 300mm THK DIT TYPE 1 SUB-BASE. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 155.035

NOTE: CELLULAR ATTENUATION SYSTEMS.
ALL CELLULAR ATTENUATION SYSTEMS TO BE FULLY ENCAPSULATED WITH A 1mm THICK IMPERMEABLE MEMBRANE WITH ALL JOINTS TO BE FULLY WELDED. VENT PIPES TO BE LOCATED IN SOFT LANDSCAPED AREAS (EXACT NUMBER TO BE AGREED WITH SYSTEM MANUFACTURER). ACCESS POINTS AND INSTALLATION TO BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

CELLULAR ATTENUATION SYSTEM 1 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 1600.0m³ x 0.70m DEEP TO PROVIDE 1064.0m³.
CL 154.988 (Min. - Varies)
IL 154.204 (Top of Unit)
IL 153.504 (Base of Unit)

CELLULAR ATTENUATION SYSTEM 2 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 2350.0m³ x 1.00m DEEP TO PROVIDE 2232.50m³.
CL 154.995 (Min. - Varies)
IL 154.346 (Top of Unit)
IL 153.346 (Base of Unit)

FILLING STATION AREA TO BE DESIGNED IN ACCORDANCE WITH: APEA Guidance for Design, Construction, Modification, Maintenance and Decommissioning of Filling Stations. (Blue Book 5th Edition)

PROPOSED 1.8m DEEP ATTENUATION BASIN TO ACHIEVE A VOLUME OF 638.70m³ REQUIRED TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE. SLOPE SIDES TO BE AT A GRADIENT OF 1 IN 3. ATTENUATION BASIN FINISH/VEGETATION TO BE ADVISED BY LANDSCAPER.
Top of Basin = 154.995
Base of Basin = 153.168
Water Level (1 IN 100YR + 40%CC) =
Water Level (1 IN 2YR) =

INLET HEADWALL 1 - ALTHON PRECAST HEADWALL WITH ANTI SCOUR PROTECTION TO EMBANKMENT.
IL: 153.240

OUTLET HEADWALL 2 - ALTHON PRECAST HEADWALL WITH ANTI SCOUR PROTECTION TO EMBANKMENT.
IL: 153.168

PROPOSED SPEL PURACEPTOR CLASS 1 FORECOURT SEPARATOR MODEL FP1C. ALLOW FOR A 250mm THK GRADE C28/35 CONCRETE BED AND SURROUND ON 450mm THK DIT TYPE 1 SUB-BASE TOGETHER WITH A SOLAR POWERED AUDIBLE AND VISUAL SEPARATOR ALARM SECURED TO A 7505Q x 150mm THK GRADE C28/35 CONCRETE BASE ON 300mm THK DIT TYPE 1 SUB-BASE. EXACT LOCATION OF SEPARATOR ALARM AND SEPARATOR VENT PIPE TO BE AGREED. INSTALLATION TO BE IN ACCORDANCE WITH THE MANUFACTURES REQUIREMENTS.
CL 154.883

PRIVATE PACKAGE PUMP STATION.
CL 156.555
INCOMING IL 148.692
REQUIRED TO PUMP A PEAK FLOW RATE OF 1L/s ON A DUTY STANDBY ARRANGEMENT.

SPEL VEHICLE WASH CLASS 2, FULL RETENTION, PETROL/OIL SEPARATOR MODEL WDS200/2000.

CELLULAR ATTENUATION SYSTEM 3 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 280.0m³ x 1.50m DEEP TO PROVIDE 339.0m³.
CL 155.183 (Min. - Varies)
IL 154.000 (Top of Unit)
IL 152.500 (Base of Unit)

CELLULAR ATTENUATION SYSTEM 5 TO CATER FOR THE 1 IN 100 YEAR EVENT +40% FOR CLIMATIC CHANGE 160.0m³ x 1.00m DEEP TO PROVIDE 152.0m³.
CL 155.500 (Min. - Varies)
IL 153.292 (Top of Unit)
IL 152.292 (Base of Unit)

FFL 155.945
FFL 157.920

Notes

1. THIS DRAWING IS THE COPYRIGHT OF TIER CONSULT GROUP AND CANNOT BE REPRODUCED IN ANY FORM WITHOUT WRITTEN CONSENT FROM THE COMPANY.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT'S, ENGINEER'S AND SPECIALIST'S DRAWINGS TOGETHER WITH THE APPROPRIATE SPECIFICATION.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNO. FOR THE PURPOSES OF CONSTRUCTION THIS DRAWING MUST NOT BE SCALED AND ONLY WRITTEN DIMENSIONS USED. IT IS THE CONTRACTORS RESPONSIBILITY TO CHECK ALL DIMENSIONS ON SITE PRIOR TO CONSTRUCTION AND ANY DISCREPANCIES TO BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER IN WRITING.
4. ALL LEVELS ARE IN METRES UNO & TO OS DATUM.
5. THE WORKS SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING SPECIFICATION.
6. THE LOCATION LINE & LEVEL OF ALL KNOWN EXISTING DRAINAGE PIPEWORK INDICATED ON THE DRAWINGS ARE APPROXIMATE AND FOR GUIDANCE PURPOSES ONLY.
7. CONNECTION TO THE EXISTING PUBLIC SEWERS WILL BE SUBJECT TO THE RELEVANT APPROVALS FROM THE STATUTORY UNDERTAKER.
8. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THEIR EXACT LINE AND LEVEL, BY WAY OF HAND EXCAVATED TRIAL PITS, PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION WORKS ON SITE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS AND MAINTAIN THE STRUCTURAL INTEGRITY OF ALL ABOVE AND BELOW GROUND SERVICE INSTALLATIONS.
9. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN THROUGHOUT THE DURATION OF THE CONTRACT A FULL TRAFFIC MANAGEMENT SYSTEM TO ENSURE SAFE PASSAGE OF VEHICLES/PEDESTRIANS IN THE VICINITY OF THE WORKS. ALL TRAFFIC SIGNS, SIGNALS, BARRIERS ETC. SHALL BE IN ACCORDANCE WITH CHAPTER 8 OF THE TRAFFIC SIGNS MANUAL.
10. THE CONTRACTOR SHALL MAKE ADEQUATE PROVISION FOR DEALING WITH AND DISPOSING OF GROUND/SURFACE WATER ENCOUNTERED DURING EXCAVATIONS
11. ALL SOFT / HARD PAVED AREAS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED FOLLOWING THE INSTALLATION OF ALL DRAINAGE WORKS. ALL SURFACE MARKINGS AFFECTED BY THE WORKS SHALL BE FULLY REINSTATED.
12. ALL SURPLUS EXCAVATED MATERIAL SHALL BE DISPOSED IN A DESIGNATED AREA ON SITE.
13. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL PROVIDE AS BUILT SETTING OUT CO-ORDINATE AND LEVEL INFORMATION ALONG WITH A FULL CCTV REPORT AND LAYOUT.
14. PIPEWORK WITH LESS THAN 750mm OF COVER IN TRAFFICKED AREAS TO BE CONCRETE ENCASED. (BEDDING CLASS 2)
15. PIPEWORK WITH MORE THAN 750mm OF COVER TO HAVE CLASS S GRANULAR BED AND SURROUND.
16. POLYPROPYLENE INSPECTION CHAMBERS OF 450Ø +1.2m DEEP TO BE FITTED WITH A REDUCED ACCESS FITTING.
17. SOIL STACKS - WHERE SOIL STACKS SERVE MULTIPLE STOREYS THE STACK REST BEND IS TO BE MINIMUM 750mm BELOW THE LOWEST BRANCH CONNECTION. WHERE SEPARATE STACKS ARE PROVIDED FOR GROUND FLOOR, REST BENDS MAY BE 450mm MINIMUM BELOW THE LOWEST CONNECTION.
18. SVP CONNECTIONS TO BE 100mm DIA UNO.
19. ALL FO AND RWP LOCATIONS TO BE TO BE COMPLETE WITH A LOW LEVEL ACCESS PLATE FOR RODDING.
20. WHERE PROPOSED DRAINAGE PIPEWORK RUNS ARE IN CLOSE PROXIMITY TO THE NEW FOUNDATIONS, THE CONTRACTOR SHALL ALLOW FOR EXTENDING THE DEPTH OF NEW FOUNDATIONS IN LEAN MIX CONCRETE DOWN TO THE PROPOSED PIPE BEDDING LEVEL.
21. THE HYDRAULIC DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'CIRIA REPORT C753 THE SuDS MANUAL' AND THE HYDRAULIC DESIGN OF PIPELINES AND OTHER CONDUITS HAS BEEN CARRIED OUT IN ACCORDANCE WITH 'BS EN 16933-2'.

Legend:

- REDLINE BOUNDARY.
- Ex. FOUL PUBLIC SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER.
- Ex. SURFACE WATER HIGHWAY SEWER TO BE DIVERTED AND GRUBBED UP.
- DIVERTED ROUTE OF Ex. SURFACE WATER HIGHWAY SEWER & ASSOCIATED MANHOLES.
- PROPOSED SURFACE WATER DRAIN. (TYPICALLY 100Ø FROM RWP AND 150Ø FROM RG/SU UNO)
- PROPOSED SURFACE WATER INSPECTION CHAMBER / MANHOLE.
- PROPOSED LINEAR DRAINAGE CHANNEL.
- RG — PROPOSED TRAPPED ROAD GULLY.
- SRWP — PROPOSED SIPHONIC RAINWATER PIPE.
- RWP — PROPOSED RAINWATER DOWN PIPE.
- PROPOSED PERMEABLE SURFACING TO PARKING BAYS - DIT TYPE 3 OR TYPE 1x TANKED WITH AN IMPERMEABLE MEMBRANE WITH UNDER FILTER DRAIN.
- PROPOSED SURFACE WATER CELLULAR ATTENUATION SYSTEM.
- PROPOSED FOUL DRAIN (100Ø UNO).
- PROPOSED FOUL RISING MAIN.
- FO — PROPOSED FOUL INSPECTION CHAMBER / MANHOLE.
- PROPOSED FOUL OUTLET.

NOTE:
- ALL EXISTING DRAINAGE TBC.
- ALL SURFACE WATER CHAMBERS ARE TO BE PCC WITH D400 COVERS UNO.
- ALL FOUL CHAMBERS ARE TO BE MIN 450Ø HD PPIC WITH D400 COVERS (C250 IN SOFT LANDSCAPED AREAS) UNO.
- ALL DRAINAGE WITH LESS THAN 750 COVER IS TO BE ENCASED IN MIN 150THK C32/40 CONCRETE.
- ALL GATIC UNITS TO HAVE ACCESS BOX AT HEAD OF RUNS AND SILT BOX AT OUTLET LOCATIONS SUBJECT TO DESIGN BY ALUMASC WMS.
- VENT PIPES FROM INTERCEPTORS TO BE SITED IN SOFT LANDSCAPED AREAS.

TYPICAL D400 (min 600 x 600) SIPHONIC BREAK CHAMBER MANHOLE COVER.

FOR CONTINUATION REFER TO DRG No: T_24_2757_55_02

Rev	Date	By	Description	Chk	App
P4	13.05.2025	CCF	Client name updated	CCF	PJB
P3	08.05.2025	CCF	Updated to suit latest site plan	CCF	PJB
P2	08.04.2025	CCF	Updated to suit latest site plan	CCF	PJB
P1	02.05.2024	CCF	Preliminary Issue	JH	PJB

Status:
PRELIMINARY

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Client:
Barberry Bardon Ltd

Project Title:
PROJECT EXCELLENCE.

Drawing Title:
PROPOSED DRAINAGE LAYOUT.
SHEET 1.

Drawing Scale:	Drawn By:	Drawing Start Date:
1:500 @ A0	C.C.FITTON	25.01.2024

TIER Project Number: T_24_2757
Drawing No: T_24_2757-55-01
Revision: P4