



DRAINAGE LEGEND

-  COMBINED WATER DRAINAGE
 SURFACE WATER DRAINAGE
 FOUL WATER DRAINAGE
 EXISTING DRAINAGE TO BE ABANDONED/REMOVED
 EXISTING COMBINED DRAINAGE
 PROPOSED RAINWATER PIPE
 OVERFLOW PIPE
 PROPOSED STUB STACK
 ACO / SLOT DRAIN
 PERFORATED PIPE
 DIFFUSER UNIT (PERMAVOID OR SIMILAR)

PERCOLATION TESTS
PERCOLATION TESTS TO BRE365 UNDERTAKEN BY VALE
CONSULTANCY, REPORT REF: 16263_SR01. THE LOWEST INFILTRATE
ENCOUNTERED AND USED IN DESIGN IS 2.04×10^{-5} m/s.

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 RWP• PROPOSED RAINWATER PIPE
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 DU• DIFFUSER UNIT (PERMAVOID OR SIMILAR)

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 2. ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 3. DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
 4. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
 5. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
 6. EXISTING SERVICES HAVE NOT BEEN SHOWN BUT ARE PRESENT - THE CONTRACTOR IS TO UAISE WITH ALL STATUTORY AUTHORITIES PRIOR TO THE COMMENCEMENT OF ANY WORKS.

DRAINAGE NOTES

1. MH COVERS AND FRAMES TO CONFORM TO BS EN 124- HIGHWAYS AND PUBLIC CAR PARKS (D400)
- LIGHTLY TRAFFICKED ROADS AND PRIVATE CAR PARKS (C250)
- DOMESTIC DRIVEWAYS (B125)
2. TYPE 3 BEDDING AND SURROUND TO ALL PIPES EXCEPT IN THE FOLLOWING CIRCUMSTANCES, IN WHICH TYPE 2 BEDDING AND SURROUND ARE TO BE USED:
 - DOMESTIC DRIVEWAYS, PARKING AREAS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS, 0.35m;
 - DOMESTIC DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.5m;
 - DOMESTIC DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G., MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 0.9m;
 - AGRICULTURAL LAND AND PUBLIC OPEN SPACE, 0.9m;
 - OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES, 1.2m
3. ALL EXISTING MANHOLE INVERTS TO BE CHECKED AND REPORTED TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF DRAINAGE WORKS. EXISTING PIPE CONNECTIONS ARE TO BE CCTV SURVEYED AND INSPECTED. IF THE PIPE CONNECTION IS FOUND TO BE DAMAGED OR IN DISTRESS, THE CONTRACTOR IS TO CARRY OUT REMEDIAL WORKS OR PROVIDE A NEW CONNECTION TO THE EXISTING SEWER (PIPE SIZE AND GRADIENT TO BE DETERMINED BY THE ENGINEER).
4. THE CONTRACTOR SHALL INSTALL DRAINS TO THE INVERT LEVELS SHOWN ON THE MANHOLE OR OTHER INDICATED POSITION.
5. ALL FOUL DRAINAGE TO BE MINIMUM 100mm DIAMETER AND LAID TO THE INVERT LEVELS SHOWN OR A MINIMUM 1 IN 80 FALL, UNLESS OTHERWISE NOTED.
6. ALL STORM WATER DRAINAGE TO BE A MINIMUM OF 150mm DIAMETER AND LAID TO THE INVERT LEVELS SHOWN OR A MINIMUM 1 IN 150 FALL, UNLESS OTHERWISE NOTED.
7. ALL ADAPTABLE THERMOPLASTIC STRUCTURED WALL SEWER PIPE SHALL COMPLY WITH THE RELEVANT PROVISIONS OF BS IN 3476- 4 AND WMS 4-35.01 AND BS EN 3476/2 OR BS EN 3476/3. PIPES SHALL BE BSI KITEMARKED OR HAVE EQUIVALENT THIRD PARTY CERTIFICATION. PIPES LESS THAN OR EQUAL TO 500mm DIA. SHALL HAVE A SHORT-TERM RING STIFFNESS OF NOT LESS THAN 3N/ (SM³).
8. ALL JOINTING IN ACCORDANCE WITH MANUFACTURERS TECHNICAL ADVICE & SPECIFICATION.
9. ALL NON ADAPTABLE DRAINAGE TO BE THE STANDARD UPVC 110mm, 160mm DRAINAGE AND MANUFACTURED TO BS-EN 1401 AND BS 4660 UNLESS NOTED OTHERWISE.
10. SOIL & VENT PIPE LOCATION AND NUMBER TO BE CONFIRMED WITH ARCHITECT.
11. THIS DRAWINGS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERING DRAWINGS TOGETHER WITH THEIR LATEST SPECIFICATIONS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER AS SOON AS POSSIBLE.
12. FIGURED DIMENSIONS ONLY TO BE USED. ANY QUERIES OR DISCREPANCIES TO BE REFERRED TO THE ENGINEER.
13. PRIOR TO ORDERING ANY MATERIALS THE CONTRACTOR IS TO CONFIRM MANUFACTURER/PIPE MATERIAL AND GRADE PROPOSED WITH WATER AUTHORITY.
14. DESIGN RISK ASSESSMENTS AND METHOD STATEMENTS ARE TO BE PROVIDED TO THE PRINCIPLE CONTRACTOR PRIOR TO THE COMMENCEMENT OF ANY WORKS.
15. THE CONTRACTOR SHALL VERIFY AND CERTIFY THAT THE DESIGN CRITERIA, MATERIAL STANDARDS AND WORKMANSHIP SPECIFICATIONS FOR THE PROPOSED ADAPTABLE SEWERS ARE IN ACCORDANCE WITH SEWERS FOR ADOPTION 7TH EDITION, THE REQUIREMENTS OF CDWM AS THE STATUTORY SEWERAGE UNDERTAKER AND THE WELSH MINISTERS BUILD STANDARDS.

DRAWING STATUS
A - Approval, AB - As-Built, C - Construction, D - Draft, P - Preliminary, T - Tender