



GENERAL NOTES

- DO NOT SCALE FOR CONSTRUCTION PURPOSES.
- THE CONTRACTOR IS TO CHECK AND VERIFY ALL BUILDINGS AND SITE DIMENSIONS AND LEVELS, INCLUDING SEWER INVERT LEVELS, BEFORE WORKS START ON SITE. THE CONTRACTOR IS TO COMPLY IN ALL ASPECTS WITH THE CURRENT BUILDING LEGISLATION, BRITISH STANDARDS ETC.
- POSITIONS OF EXISTING SERVICES/STATIONARY UNDERTAKERS APPROPRIATE TO OR CROSSING PROPOSED EXCAVATIONS ARE TO BE CHECKED BY THE CONTRACTOR PRIOR TO STARTING WORK.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH AND CHECKED AGAINST ALL OTHER DRAWINGS ENGINEERING DETAILS, SPECIFICATIONS AND ANY STRUCTURAL, GEOTECHNICAL OR OTHER SPECIALIST DOCUMENT PROVIDED. ANY ANOMALY OR CONTRADICTION BETWEEN ANY OF THE ABOVE IS TO BE REPORTED TO THE DEVELOPERS ENGINEER.
- ALL LEVELS ARE IN TERMS OF THE OS DATUM.

ENGINEERING & PHASE 2 KEY

- PROPOSED FINISHED FLOOR LEVEL
- RETAINING WALL (HEIGHT SHOWN IS REQUIRED UNLESS STATED OTHERWISE (DOWN ADAPTABLE) HEIGHT OF BOUNDARY WALLS OR FENCES)
- LANDSCAPED BATTER MAXIMUM 1:2
- TANKED WALL
- UNDERBELD (ADDITIONAL BELOW DPC LEVEL)
- STEPPED ACCESS (PART 1)
- SPOT LEVEL
- PROPOSED CONTOURS
- GRAVEL BEARD
- SURFACE WATER MANHOLE & SENDER (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm UNLESS STATED OTHERWISE (SAB ADAPTABLE)
- SURFACE WATER CHAMBER & LATERAL TO BE 150mm (PRIVATE)
- ROOFING DYE (PRIVATE) INVERT LEVEL TO BE MINIMUM 450mm BELOW GROUND LEVEL
- FOUL WATER MANHOLE & SENDER (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm UNLESS STATED OTHERWISE (DOWN ADAPTABLE)
- FOUL WATER CHAMBER & LATERAL TO BE 100mm (PRIVATE)
- ALL ADAPTABLE MANHOLES IN THE HIGHWAY TO HAVE (DOWN ADAPTABLE)
- ALL CHAMBERS IN SHARED DRAINS TO BE MINIMUM 600mm DEEP
- ALL CHAMBERS IN PRIVATE DRAINS TO HAVE MINIMUM 750mm DEEP
- ALL CHAMBERS USED TO LATERAL DRAINS ARE TO BE EITHER TYPE 3 OR 4
- HIGHWAY ADAPTABLE ROAD GULLY
- STONE GRIP - 150mm TO REAR GARDENS AROUND PATIOS
- STONE GRIP - 225mm TO HIGH SIDE OF RETAINING WALL (OR LOW SIDE WHERE SHOWN)
- LINEAR DRAINAGE CHANNEL
- ADAPTABLE STREET LIGHTING
- TANKED BIO-RETENTION AREA WITH PROPOSED DETENTION GULLY
- ALTON PRECAST HEADWALL
- SEL ENVIRONMENTAL DIPSER UNIT
- ADAPTABLE RAIN GARDEN OVER FLOW GULLY
- ADAPTABLE WATER BREAK INLET
- PERMEABLE PAVING (SAB ADAPTABLE)
- PRIVATE PERMEABLE PAVING

PHASE 1 DRAINAGE KEY

- PROPOSED ADAPTABLE SURFACE SEWER - Subject to SAB Approval
- PROPOSED ADAPTABLE FOUL SEWER - Subject to SDA Approval
- NEWPORT CITY COUNCIL HIGHWAY ADAPTABLE ROAD GULLY DISTRIBUTOR CELL SERVING TANKED PERMEABLE SURFACING
- TANKED BIO-RETENTION AREA - See construction details
- TANKED PERMEABLE PAVING - See construction details
- MACRO PERVIOUS DRIVE - See construction details
- TYPICAL STEEPER GRADIENT SWALES WITH CHECK DAMS
- ACTIVE STORAGE SWALE
- SWALE MAINTENANCE STRIP - 0.3m wide, providing a level hard to the top of the swale to protect against erosion where levels will not allow greater width
- CELLULAR (PLASTIC) SURFACE WATER ATTENUATION TANK
- ALTON CONCRETE HEADWALL - SEE SCHEDULE FOR DETAILS
- OUTLET HEADWALL - SEE SCHEDULE FOR DETAILS
- FILTER STRIP DRAINAGE SERVING SHARED DRIVES - SEE CONSTRUCTION DETAILS - CHEAPER CONSTRUCTION AREA SHOWN BY RED OUTLINE
- PERMEABLE PAVING OVERFLOW YARD GULLY
- PRIVATE PERMEABLE CELL WITHIN PRIVATE DRIVEWAYS
- LINEAR DRAINAGE CHANNEL (150mm WIDE AT THRESHOLD OF GARAGE)
- CHANNEL DRAIN

DRAINAGE NOTES

- ALL PRIVATE DRAINAGE SHALL BE IN ACCORDANCE WITH BS8301 AND RELEVANT SECTIONS OF APPROPRIATE DOCUMENT H OF THE BUILDING REGULATIONS.
- THE CONTRACTOR IS TO CHECK THE LEVEL OF EXISTING SEWERS BEING USED TO CROSS OR BE SURROUNDED BY PROPOSED DRAINAGE RUNS PRIOR TO LAYING ANY PIPES. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.
- PRIVATE HOUSE DRAINAGE WILL BE FLEXIBLY JOINTED PLASTIC OR CLAY PIPEWORK, DIAMETER 100mm UNLESS SHOWN OTHERWISE.
- ALL CONNECTIONS FOR HOUSE DRAINAGE SHALL BE 100mm UNLESS NOTED OTHERWISE AND MUST EXTEND 500mm BEHIND THE BACK OF FOOTWAY/VERGEE ROAD. ALL CONNECTIONS WHEN LAD SHALL BE PLUGGED, PROTECTED AS NECESSARY AND MARKED WITH A STAKE FOR FUTURE USE. ALL PM DRAINAGE LATERALS FROM THE ADAPTABLE DRAINAGE SYSTEM TO BE 100mm. FOR PRIVATE DRAINS WHERE COVER TO PIPES IS LESS THAN 300mm IN VEHICULAR AREAS OR 600mm IN OTHER AREAS PROTECTION IN THE FORM OF A 100mm THICK CONCRETE SURROUNDING SCREEN WALLS, FOOTINGS OR RETAINING WALLS UNITS ARE TO BE PROVIDED OVER UNDER BUILDINGS. ALL FITTINGS MINIMUM 225mm SHALL BE USED. ELSEWHERE PROPRIETARY PLASTIC OR PRECAST CONCRETE INSPECTION CHAMBERS SHALL BE USED.
- WHERE PIPES PASS THROUGH SCREEN WALLS, FOOTINGS OR RETAINING WALLS UNITS ARE TO BE PROVIDED OVER UNDER BUILDINGS. ALL FITTINGS MINIMUM 225mm SHALL BE USED. ELSEWHERE PROPRIETARY PLASTIC OR PRECAST CONCRETE INSPECTION CHAMBERS SHALL BE USED.
- WHERE DRAINS DO NOT EXCEED 600mm DEEP, PLASTIC OR CLAY GULLIES MINIMUM DIAMETER 225mm SHALL BE USED. ELSEWHERE PROPRIETARY PLASTIC OR PRECAST CONCRETE INSPECTION CHAMBERS SHALL BE USED.
- ALL GULLIES AND RANWATER DOWNPIPES CONNECTED DIRECTLY TO DRAINS ARE TO BE ROUGHABLE.
- LEVELS AT DRAINAGE ACCESS POINTS ARE INVERTS.
- WHERE POSSIBLE, DRAINAGE RUNS SHOULD BE LAID AT A MINIMUM OF 3.0m FROM THE REAR OF PROPERTIES WHERE PRACTICAL TO ALLOW FOR FUTURE EXTENSIONS.
- ALL DRAINAGE SHALL BE LAID UPSTREAM AND EACH RUN BETWEEN MANHOLES SHALL BE LAID COMPLETE PRIOR TO BACKFILLING. WHERE THIS IS NOT PRACTICAL, TRAP HOLES OR OTHER MEANS OF IDENTIFYING THE LINE AND LEVEL OF SERVICES SHALL BE CARRIED OUT PRIOR TO WORKS COMMENCING.
- ALL BRANCH DRAINS, OR CONNECTIONS, ARE TO DISCHARGE TO THE COLLECTORS ORIGINALLY, AND IN THE DIRECTION OF THE MAIN FLOW.
- ALL LOW SPOTS ON HARDSTANDING AREAS TO HAVE HARD GULLIES/ADS.
- ALL ADAPTABLE SURFACE WATER LATERALS ARE TO BE 150mm UNLESS NOTED OTHERWISE.
- ALL ADAPTABLE FOUL LATERALS ARE TO BE 100mm UNLESS NOTED OTHERWISE.
- ALL PRIVATE FOUL CHAMBERS IMMEDIATELY OUTSIDE THE PROPERTY ARE TO BE A MINIMUM OF 750mm FROM THE FFL OR 600mm FROM THE EXTERNAL LEVEL.
- ALL DRAINAGE TO BE ADAPTED UNDER A SECTION 104 AGREEMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH 'SEWERS FOR ADOPTION 7TH EDITION' INCLUDING THE DOWN ADDENDUMS.
- REFER TO MANHOLE SCHEDULES FOR FURTHER INFORMATION.
- ALL MANHOLE USED TO LATERAL DRAINS ARE TO BE EITHER TYPE 3 OR 4.
- ALL LATERALS OF 100mm DIAMETER ARE TO HAVE A MINIMUM GRADIENT OF 1 IN 80 AND A MAXIMUM GRADIENT OF 1 IN 5.
- ALL PIPE CONNECTIONS ARE TO BE SOFFIT TO SOFFIT CONNECTIONS UNLESS OTHERWISE SPECIFIED.

APPROVED DWR CMRQ WELSH WATER PLASTIC PIPE SYSTEMS ARE AS FOLLOWS:

- WAKLEY TWINWALL SYSTEM
- UPONOR ULTRARIB SYSTEM
- CSW ULTRARIB SYSTEM
- POLYSEWER TWINWALL SYSTEM
- POLYPIPES - RIGIDSEWER (400mm-600mm AND 750mm-900mm)

PLEASE NOTE THAT THE INSTALLER MUST BE ACCREDITED WITH THE BRITISH PLASTICS FEDERATION (BPF).

A 16.12.2025 Updated to suit latest site layout.

Revisions

Project:	Caerleon Campus Newport
Client:	REDROW
Section:	Section 73 Drainage Plan Sheet 3 of 4
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PHOENIX DESIGN
Partnership Ltd.

Unit 5, Winkley Garage, Mansfield Road, B46 3PA
Unit Three, Main Cragg Business Park, Upper Road, Pontefract, WF8 3BP
Tel: 0191 499 9900 Fax: 0191 499 9901
Email: enquiries@phoenixdesign.co.uk Website: www.phoenixdesign.co.uk

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Org Status: **FOR APPROVAL**

CONSTRUCTION OF DEEP MANHOLES
CONTRACTOR TO PRODUCE DETAILED METHOD STATEMENT TO INSTRUCT SELF ELEVATION WORK.

CONSTRUCTION OF LARGE 1/2 BATTER SLOPES
CONTRACTOR TO PRODUCE DETAILED METHOD STATEMENT TO INSTRUCT SELF ELEVATION WORK.

CDM