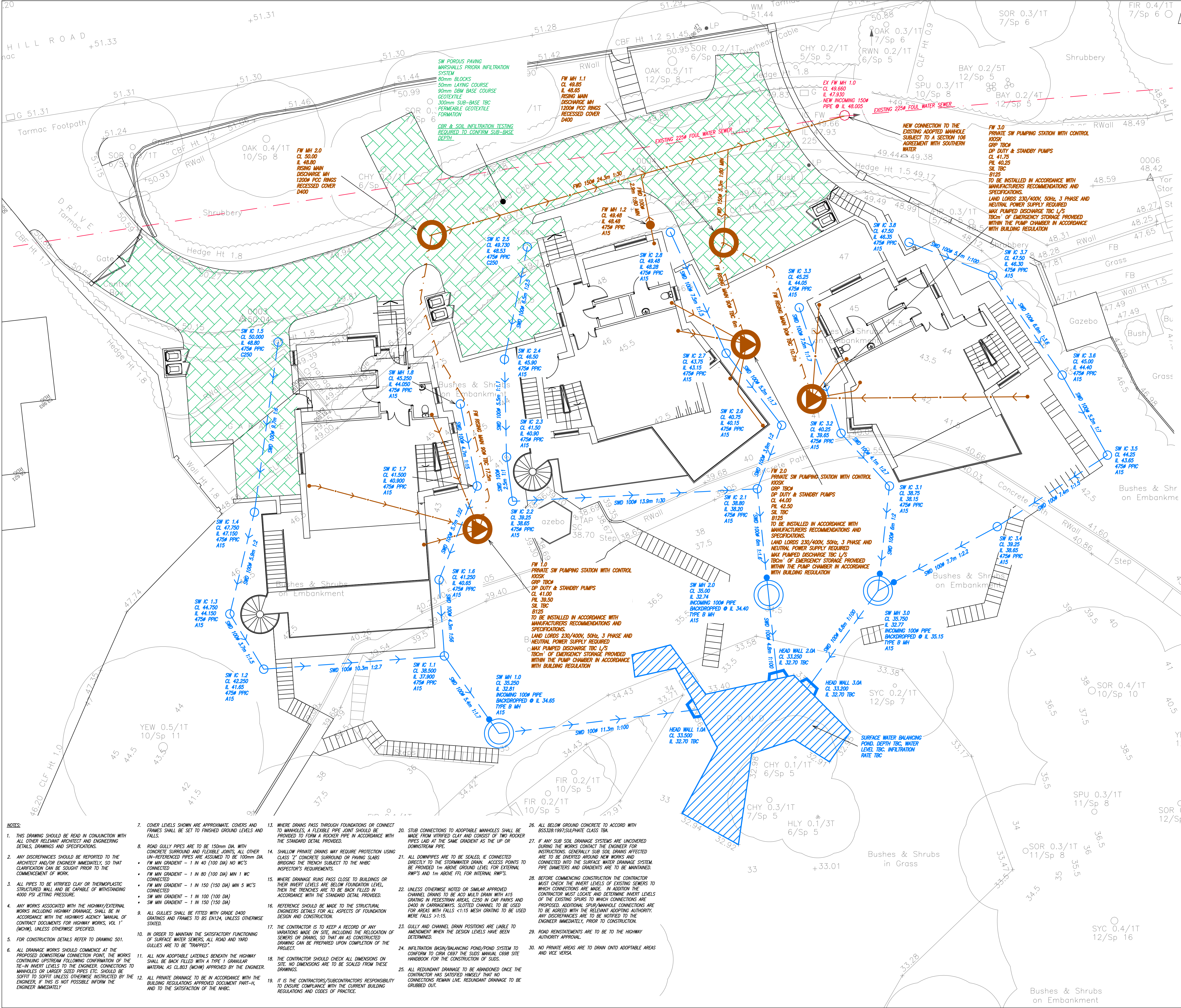


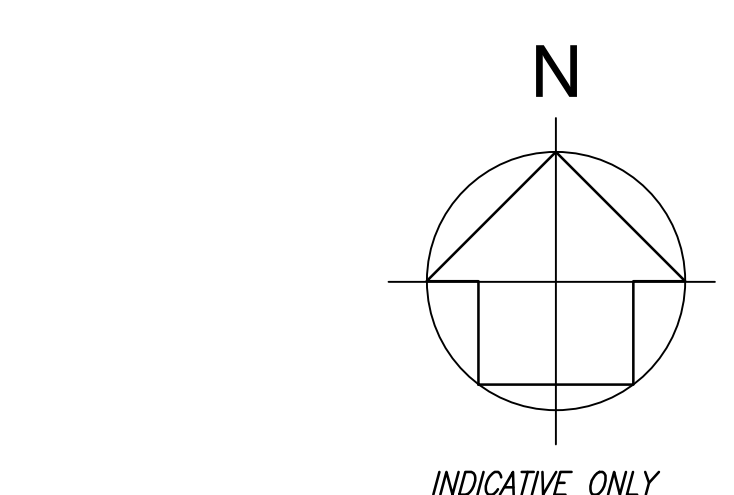


DRAINAGE LEGEND

- EXISTING FOUL WATER SEWER
- SURFACE WATER DRAIN
- RAINWATER PIPE
- 475# PPIC
- 475#(1200) SW UPVC INSPECTION CHAMBER
- MAX NO. OF PIPES 5 (100/150#) MAX COVER GRADE B125
- SW MANHOLE 1200# (TYPE A OR B)
- TYPE B MAX DEPTH FROM COVER TO SOFFIT OF PIPE 3m
- TYPE A DEPTH FROM COVER TO SOFFIT OF PIPE 3m - 6m
- SURFACE WATER BACKDROP
- SURFACE WATER POND
- POROUS PAVING SYSTEM
- FOUL WATER DRAIN
- FOUL WATER RISING MAIN
- SOIL STACK (TYPE TBC BY ARCHITECT/M&E ENGINEER)
- 475# PPIC
- 475#(1200) SW UPVC INSPECTION CHAMBER
- MAX NO. OF PIPES 5 (100/150#) MAX COVER GRADE B125
- FW MANHOLE 1200# (TYPE A OR B)
- TYPE B MAX DEPTH FROM COVER TO SOFFIT OF PIPE 3m
- TYPE A DEPTH FROM COVER TO SOFFIT OF PIPE 3m - 6m
- FOUL WATER PUMP CHAMBER
- PIPE DETAIL: Ø, LENGTH, GRADIENT, MATERIAL & BEDDING TYPE
- MANHOLE DETAIL: COVER LEVEL, INVERT LEVEL, SUMP INVERT LEVEL, MH TYPE, COVER GRADE

NOTES:

- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECT AND ENGINEERING DETAILS, DRAWINGS AND SPECIFICATIONS.
- ANY DISCREPANCIES SHOULD BE REPORTED TO THE ARCHITECT AND/OR ENGINEER IMMEDIATELY, SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
- ALL PIPES TO BE VITRIFIED CLAY OR THERMOPLASTIC STRUCTURED WALL AND BE CAPABLE OF WITHSTANDING 4000 PSI JETTING PRESSURE.
- ANY WORK ASSOCIATED WITH THE HIGHWAY/EXTERNAL WORKS INCLUDING HIGHWAY DRAINAGE, SHALL BE IN ACCORDANCE WITH THE HIGHWAYS AGENCY MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, VOL. 1 (MCHW), UNLESS OTHERWISE SPECIFIED.
- FOR CONSTRUCTION DETAILS REFER TO DRAWING 501.
- ALL DRAINAGE WORKS SHOULD COMMENCE AT THE PROPOSED DOWNSTREAM CONNECTION POINT, THE WORKS CONTINUING UPSTREAM FOLLOWING CONFIRMATION OF THE TE-IN INVERT LEVELS TO THE ENGINEER. CONNECTIONS TO MANHOLES OR LARGER SIZED PIPES ETC. SHOULD BE SOFFIT TO SOFFIT UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. IF THIS IS NOT POSSIBLE INFORM THE ENGINEER IMMEDIATELY.
- COVER LEVELS SHOWN ARE APPROXIMATE. COVERS AND FRAMES SHALL BE SET TO FINISHED GROUND LEVELS AND FALLS.
- ROAD GULLY PIPES ARE TO BE 150mm DIA. WITH CONCRETE SURROUND AND FLEXIBLE JOINTS. ALL OTHER UN-REFERENCED PIPES ARE ASSUMED TO BE 100mm DIA.
 - FW MIN GRADIENT - 1 IN 40 (100 DIA) NO WC'S CONNECTED
 - FW MIN GRADIENT - 1 IN 80 (100 DIA) MIN 1 WC CONNECTED
 - FW MIN GRADIENT - 1 IN 150 (150 DIA) MIN 5 WC'S CONNECTED
 - SW MIN GRADIENT - 1 IN 100 (100 DIA)
 - SW MIN GRADIENT - 1 IN 150 (150 DIA)
- ALL GULLIES SHALL BE FITTED WITH GRADE D400 GRATES AND FRAMES TO BS EN124, UNLESS OTHERWISE STATED.
- IN ORDER TO MAINTAIN THE SAFETY/FUNCTIONING OF SURFACE WATER SEWERS, ALL ROAD AND YARD GULLIES ARE TO BE "TRAPPED".
- ALL NON ADAPTABLE LATERALS BENEATH THE HIGHWAY SHALL BE BACK FILLED WITH A TYPE 1 GRANULAR MATERIAL AS CL.803 (MCHW) APPROVED BY THE ENGINEER.
- WHERE DRAINS PASS THROUGH FOUNDATIONS OR CONNECT TO MANHOLES, A FLEXIBLE PIPE JOINT SHOULD BE PROVIDED TO FORM A ROCKER PIPE IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED.
- SHALLOW PRIVATE DRAINS MAY REQUIRE PROTECTION USING CLASS "Z" CONCRETE SURROUND OR PAVING SLABS BRIDGING THE TRENCH SUBJECT TO THE MH&C INSPECTOR'S REQUIREMENTS.
- WHERE DRAINAGE RUNS PASS CLOSE TO BUILDINGS OR THEIR INVERT LEVELS ARE BELOW FOUNDATION LEVEL, THEN THE TRENCHES ARE TO BE BACK FILLED IN ACCORDANCE WITH THE STANDARD DETAIL PROVIDED.
- REFERENCE SHOULD BE MADE TO THE STRUCTURAL ENGINEER'S DETAILS FOR ALL ASPECTS OF FOUNDATION DESIGN AND CONSTRUCTION.
- THE CONTRACTOR IS TO KEEP A RECORD OF ANY VARIATIONS MADE ON SITE, INCLUDING THE REDLOCATION OF SEWERS OR DRAINS, SO THAT AN AS CONSTRUCTED DRAWING CAN BE PREPARED UPON COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHOULD CHECK ALL DIMENSIONS ON SITE. NO DIMENSIONS ARE TO BE SCALED FROM THESE DRAWINGS.
- IT IS THE CONTRACTORS/SUBCONTRACTORS RESPONSIBILITY TO ENSURE COMPLIANCE WITH THE CURRENT BUILDING REGULATIONS AND CODES OF PRACTICE.
- STUB CONNECTIONS TO ADAPTABLE MANHOLES SHALL BE MADE FROM VITRIFIED CLAY AND CONSIST OF TWO ROCKER PIPES LAD AT THE SAME GRADIENT AS THE UP OR DOWNSTREAM PIPE.
- ALL DOWNPIPES ARE TO BE SEALED, IF CONNECTED DIRECTLY TO THE STORMWATER DRAIN. ACCESS POINTS TO BE PROVIDED 1m ABOVE GROUND LEVEL FOR EXTERNAL RWP'S AND 1m ABOVE FFL FOR INTERNAL RWP'S.
- UNLESS OTHERWISE NOTED OR SIMILAR APPROVED CHANNEL DRAINS TO BE ADO MULTI DRAIN WITH A15 GRATING IN PEDESTRIAN AREAS, C250 IN CAR PARKS AND D400 IN CARPARKWAYS. SLOTTED CHANNEL TO BE USED FOR AREAS WITH FALLS <1:15 MESH GRATING TO BE USED WHERE FALLS >1:15.
- GULLY AND CHANNEL DRAIN POSITIONS ARE LIABLE TO AMENDMENT WHEN THE DESIGN LEVELS HAVE BEEN DETERMINED.
- INFILTRATION BASIN/BALANCING POND/POND SYSTEM TO CONFORM TO CIRIA C697 THE SUDS MANUAL C698 SITE HANDBOOK FOR THE CONSTRUCTION OF SUDS.
- ALL REDUNDANT DRAINAGE TO BE ABANDONED ONCE THE CONTRACTOR HAS SATISFIED HIMSELF THAT NO CONNECTIONS REMAIN LIVE. REDUNDANT DRAINAGE TO BE GRUBBED OUT.
- ALL BELOW GROUND CONCRETE TO ACCORD WITH BS5328:1997/SULPHATE CLASS TBA.
- IF ANY SUB SOIL DRAINAGE SYSTEMS ARE UNCOVERED DURING THE WORKS CONTACT THE ENGINEER FOR INSTRUCTIONS. GENERALLY SUB SOIL DRAINS AFFECTED ARE TO BE DIVERTED AROUND NEW WORKS AND CONNECTED INTO THE SURFACE WATER DRAINAGE SYSTEM. PIPE DIAMETERS AND GRADIENTS ARE TO BE MAINTAINED.
- BEFORE COMMENCING CONSTRUCTION THE CONTRACTOR MUST CHECK THE INVERT LEVELS OF EXISTING SEWERS TO WHICH CONNECTIONS ARE MADE. IN ADDITION THE CONTRACTOR MUST LOCATE AND DETERMINE INVERT LEVELS OF THE EXISTING SEWERS TO WHICH CONNECTIONS ARE PROPOSED. ADDITIONAL SPUR/MANHOLE CONNECTIONS ARE TO BE AGREED WITH THE RELEVANT ADOPTING AUTHORITY. ANY DISCREPANCIES ARE TO BE NOTIFIED TO THE ENGINEER IMMEDIATELY, PRIOR TO CONSTRUCTION.
- ROAD REINSTATEMENTS ARE TO BE TO THE HIGHWAY AUTHORITY APPROVAL.
- NO PRIVATE AREAS ARE TO DRAIN ONTO ADAPTABLE AREAS AND VICE VERSA.



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LETTER	REVISION	DATE

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CONTRACT 43 PORTSDOWN HILL ROAD BEDHAMPTON, HAVANT HAMPSHIRE			
DRAWING BELOW GROUND DRAINAGE LAYOUT			
DRAWING No.	C45977/500		REV -
SCALE 1:100	DATE SEPT 2014	DRAWN IES	CHECKED
This drawing is produced using Autocad. Only written dimensions are to be respected			