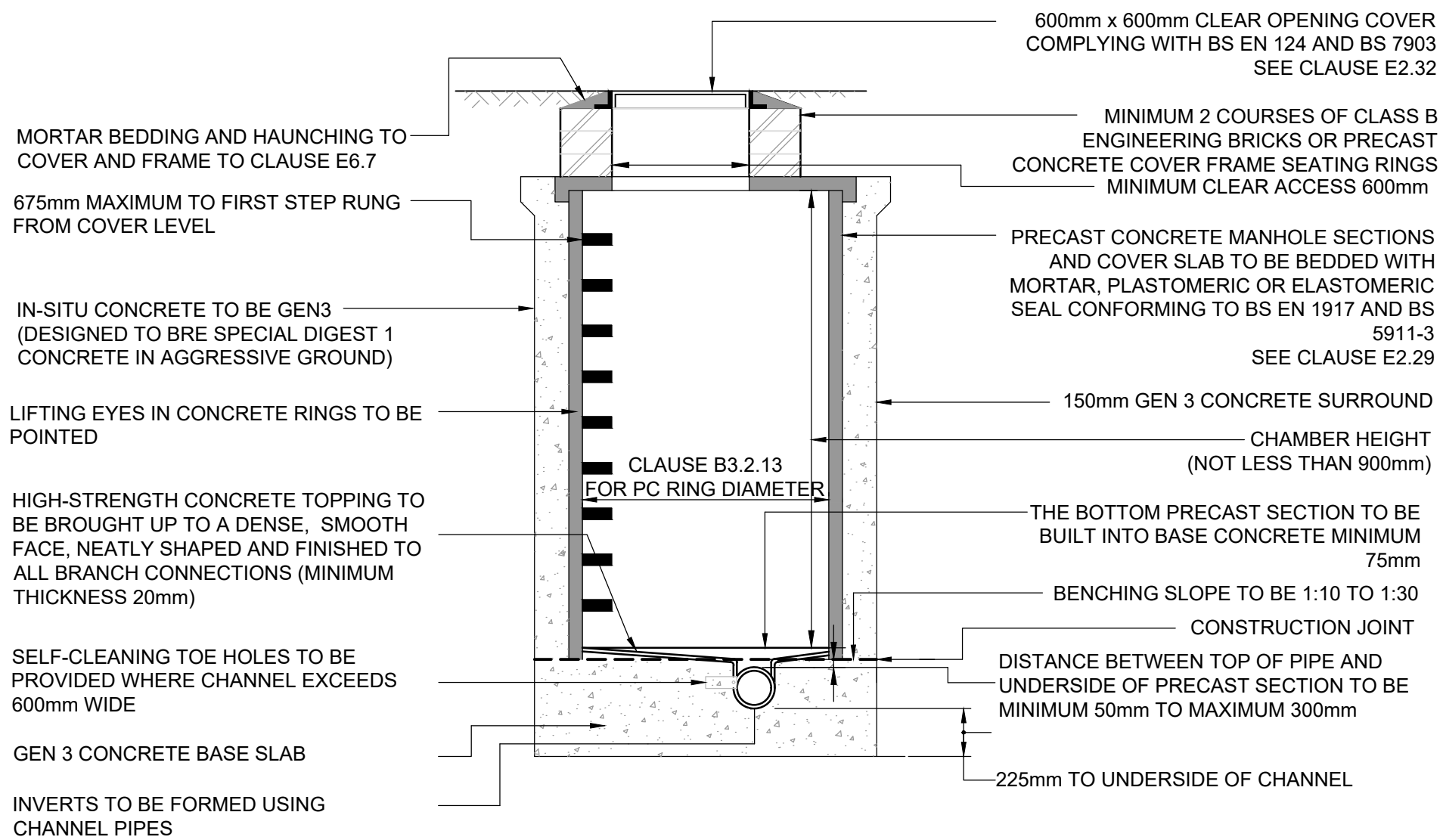
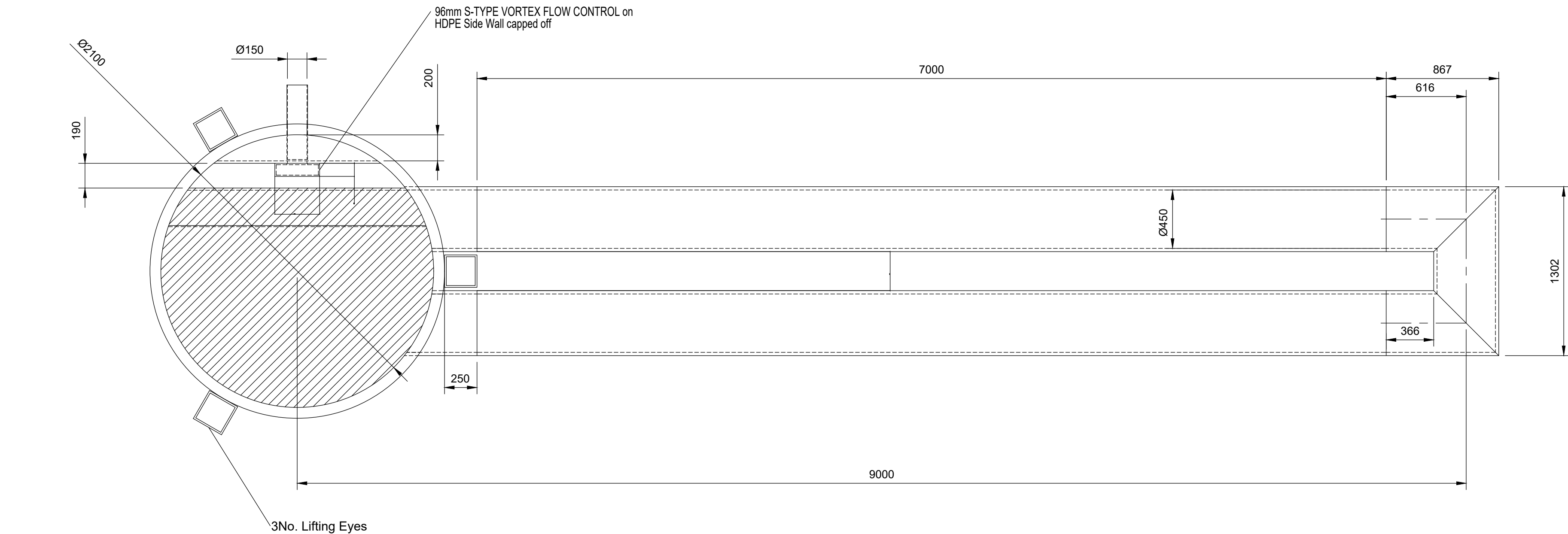




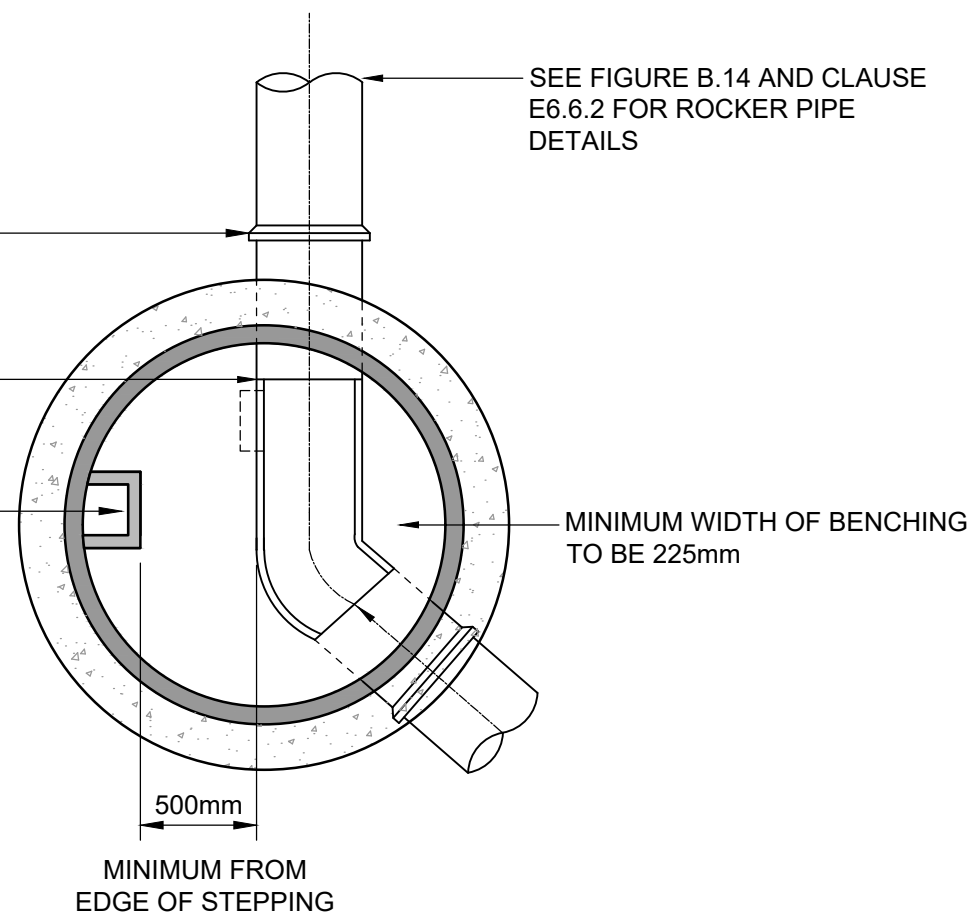
TYPICAL MANHOLE DETAIL - TYPE 2
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m
SCALE 1:25

JOINT TO BE AS CLOSE AS POSSIBLE TO FACE OF MANHOLE TO PERMIT SATISFACTORY JOINT AND SUBSEQUENT MOVEMENT

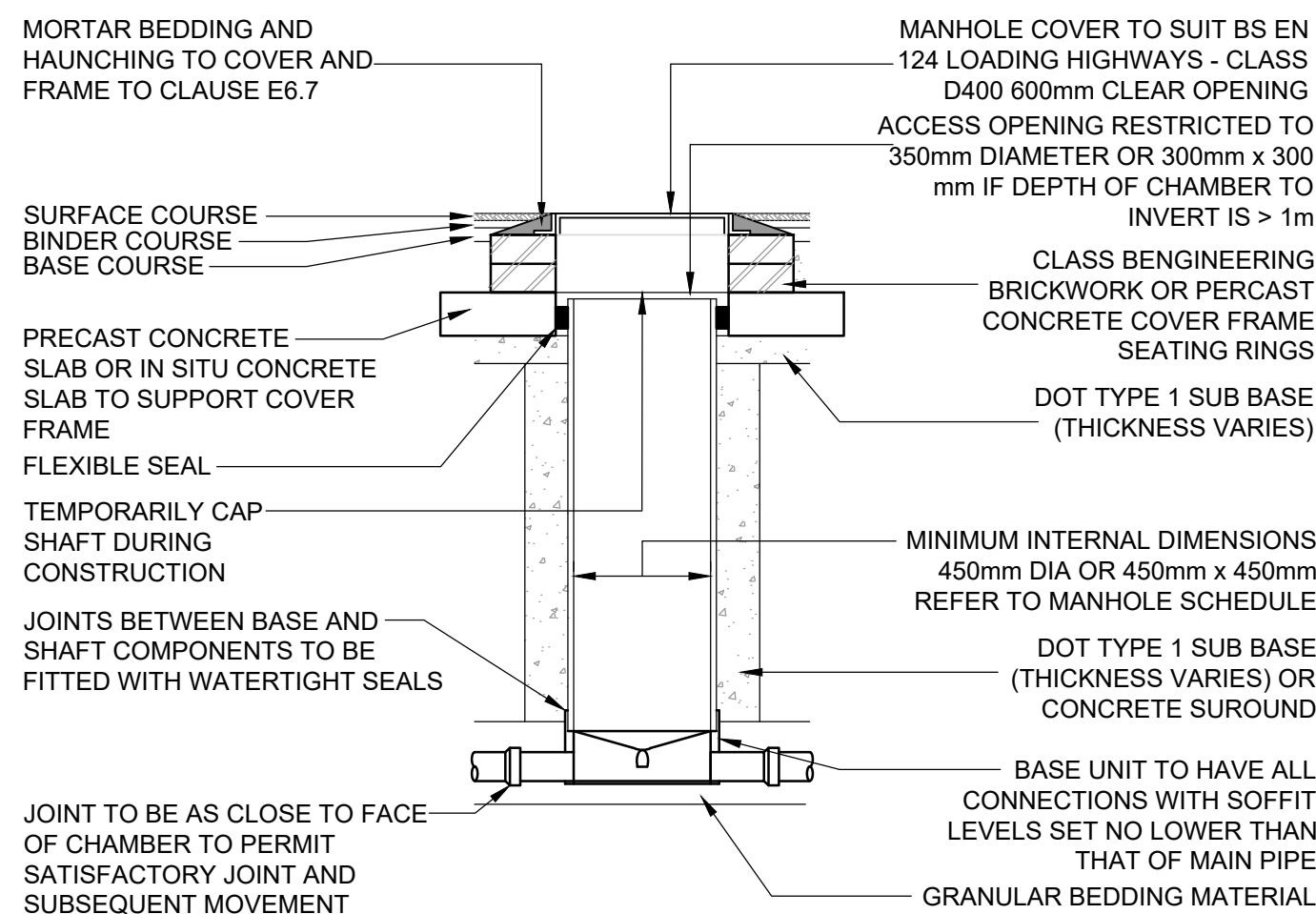
PIPE JOINT WITH CHANNEL TO BE LOCATED MINIMUM 100mm INSIDE FACE OF MANHOLE

DOUBLE STEP RUNGS IN ACCORDANCE WITH BS EN 13101 SEE CLAUSE E2.33 FOR DOUBLE STEP DETAILS

NOTE: OPENING TO BE LOCATED CENTRALLY OVER 900mm SHAFT AND OFFSET APPROXIMATELY 200mm FOR 1200mm DIAMETER SHAFT WITH LADDER



PLAN
SCALE 1:25



INSPECTION CHAMBER TYPE 3 (flexible material)
MAXIMUM DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3m NON ENTRY
SCALE 1:25

INSTALLATIONS GUIDELINES SINGLE LEG:-

1. BEDDING AND BACKFILL AS SPECIFIED BY WEHOLITE LTD.
2. ENSURE NO VOIDS IN SURROUND UNDER HAUNCHES.
3. BALANCE FILL EITHER SIDE AS FILL COMMENCES
4. BACKFILL IN 250MM LAYERS PARRALLEL TO STRUCTURE, WITH CORRECT COMPACTION IF COMPACTION IS REQUIRED.
5. CARE SHOULD ALWAYS BE TAKEN WHEN REMOVING TRENCH BOXES/SHEETING. REFERENCE SHOULD BE MADE TO DESIGN MANUAL FOR ROADS AND BRIDGES, VOLUME 4, SECTION 2, PART 5 HA 40/01 FOR THE RECOMMENDED PROCEDURE.
6. DO NOT ALLOW CONSTRUCTION EQUIPMENT OVER THE STRUCTURE, WITHOUT ADEQUATE PROTECTION FOR MINIMUM 800MM OF COVER OVER THE CROWN OF THE PIPE AND BACKFILL area.

MULTI LEG:-

1. BULK EXCAVATION TO FORMATION.
2. BEDDING TO BE SPECIFIED BY WEHOLITE LTD.
3. WEHOLITE LTD. RECOMMENDS INSTALLATION FROM INTERCONNECTING SECTION FIRST. PIPE PLACEMENT CAN THEN COMMENCE.
4. PLACE LINE AND LEVEL PIPES TIGHTENING HDPE BANDS AS YOU PROGRESS.
5. COMMENCE THE BACKFILL OPERATION STARTING AT THE INTERCONNECTING END PROGRESSING AS EVENLY AS POSSIBLE ALONG THE STRUCTURE.
6. BACKFILL AS PER RECOMMENDING METHOD IN PIPE LAYING SECTION OF MANUAL.
7. BACKFILL OF SUITABLE MATERIAL TO FINAL FORMATION CAN THEN TAKE PLACE.
8. DO NOT ALLOW CONSTRUCTION EQUIPMENT OVER THE STRUCTURE, WITHOUT ADEQUATE PROTECTION OR MINIMUM 800MM OF COVER OVER THE CROWN OF THE PIPE AND BACKFILL AREA.

NOTE:

FURTHER ADVICE CAN BE OBTAINED FROM WEHOLITE LTD.'S ENGINEERING DEPARTMENT.

RESIDUAL RISKS

1. THE TRENCH SHOULD BE EXCAVATED TO THE SPECIFIED LINE AND LEVELS AND THE CONTRACTOR SHOULD TAKE ALL PRECAUTIONS REQUIRED BY STATUTORY REGULATIONS, OR DICTATED BY ACTUAL CIRCUMSTANCES, TO ENSURE THE SAFETY OF THE PUBLIC AND THE PIPE LAYERS. THE CONTRACTOR SHOULD ALSO AVOID INTERRUPTING OR DAMAGING PUBLIC OR PRIVATE UTILITIES ENCOUNTERED DURING THE COURSE OF THE WORK.
2. PIPES SHOULD ALWAYS BE HANDLED USING NYLON SLINGS OF THE APPROPRIATE SAFE WORKING LOAD. REFERENCE SHOULD ALWAYS BE MADE TO THE HEALTH & SAFETY GUIDELINES MANUAL FOR INFORMATION ON DELIVERIES AND STORAGE ON SITE.
3. WHERE GROUND WATER LEVELS ARE EXPECTED TO BE ABOVE THE PIPE INVERT, MEASURES SHOULD BE TAKEN TO MAINTAIN STRUCTURAL INTEGRITY AND COUNTER POTENTIAL FLOTATION.
4. WHERE CONSTRUCTION TRAFFIC MAY IMPOSE LOADING, TEMPORARY OR PERMANENT MEASURES SHOULD BE TAKEN TO ENSURE THAT THERE IS NO DETRIMENTAL EFFECT ON THE PIPE.
5. A PERMIT TO WORK PROCEDURE SHOULD ALWAYS BE IN USE FOR INTERNAL WELDING ON SITE. REFERENCE SHOULD ALWAYS BE MADE TO THE H&S GUIDELINES MANUAL FOR INFORMATION.
6. ADVICE ON SITE SPECIFIC REQUIREMENTS SHOULD ALWAYS BE SOUGHT FROM WEHOLITE LTD. USING THE CONTACT DETAILS BELOW.

MODULAR FABRICATIONS

1. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
2. ALL DIMENSIONS AND LEVELS TO BE CHECKED AND APPROVED IN WRITING BY THE CONTRACTOR BEFORE MANUFACTURE.
3. MODULAR WEHOLITE PANELS ARE SUBJECT TO A TOLERANCE OF +/- 15MM.

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
2. ALL LEVELS ARE IN METRES, RELATIVE TO ORDNANCE DATUM SURVEY
3. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ANY DISCREPANCIES SHOULD BE REPORTED TO THE ENGINEER IMMEDIATELY.
6. THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS TOGETHER WITH THEIR SPECIFICATIONS.
7. DO NOT SCALE FROM THIS DRAWING, ONLY WRITTEN OR CALCULATED DIMENSIONS TO BE USED.
8. FOR GRID SET-OUT COORDINATES REFER TO ARCHITECTS DRAWINGS.

DRAINAGE NOTES

1. ALL NON ADOPTABLE DRAINS UP TO 150 Dia. TO BE 'POLYPIPE uPVC UNDERGROUND DRAIN' MANUFACTURED IN ACCORDANCE WITH BS EN 1401-1 OR EQUAL APPROVED.
2. ALL ADOPTABLE DRAINS UP TO 300 Dia. TO BE EXTRA STRENGTH VITRIFIED CLAY PIPES MANUFACTURED IN ACCORDANCE WITH BS EN 295-1.
3. DRAINS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. BACKFILL AND BEDDING TO AS PER TYPICAL DETAIL U.N.O.
4. ALL DRAINS TO BE LAID SOFFIT TO SOFFIT, AND THE EXACT POSITIONS OF ALL DRAINS MAY BE DETERMINED ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY REVISIONS ARE TO BE SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING INSPECTOR.
5. WORKS TO ANY ADOPTED SERVICES ARE TO BE IN ACCORDANCE WITH 'SEWERS FOR ADOPTION' 7th EDITION AND SHOULD BE APPROVED WITH UNITED UTILITIES PRIOR TO COMMENCEMENT.
6. NEW INSPECTION CHAMBERS (IC) TO BE A MINIMUM OF 450mm DIA. ALL MANHOLES (MH) TO BE A MINIMUM OF 1200mm DIA. REFER TO M.H. SCHEDULE FOR ACTUAL SIZES.
7. REFER TO ARCHITECT'S DRAWINGS FOR INTERNAL DRAINAGE 'POP UP' POSITIONS.
8. FOUL WATER FROM GROUND LEVEL UPWARDS TO BE DRAINED UNDER GRAVITY. REFER TO MECHANICAL ENGINEERS DRAWINGS FOR DETAILS.
9. ANY DRAINS PASSING THROUGH SUBSTRUCTURE WALLS TO HAVE A MINIMUM 50mm CLEAR SPACE, RC LINTEL SUPPORT ABOVE & CEMENT FIBRE COLLARS EITHER SIDE TO PREVENT VERMIN ENTRY
10. ANY DRAINS CAST IN & PASSING THROUGH CONCRETE GROUND BEAMS TO HAVE A FLEXIBLE JOINT NOT MORE THAN 150mm FROM THE FACE OF THE GROUND BEAM. (FLEXIBLE JOINT TO MANUFACTURERS DETAILS) AND A MAXIMUM 600mm LONG ROCKER PIPER EITHER SIDE
11. ALL LINES OF DRAINAGE INDICATED ARE PROVISIONAL ONLY. THE EXACT POSITIONS OF ALL DRAINS MAY BE ALTERED TO SUIT AND DETERMINED ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY REVISIONS ARE TO BE SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING INSPECTOR.
12. WHERE DRAIN IS WITHIN 1M OF A BUILDING, THE TRENCH IS FILLED WITH CONCRETE UP TO THE UNDERSIDE OF THE FOUNDATIONS AND WHERE THE TRENCH IS FURTHER AWAY THAN 1M FROM THE BUILDING, THE TRENCH IS FILLED WITH CONCRETE TO A LEVEL BELOW THE LOWEST LEVEL FOR THE BUILDING EQUAL TO THE DISTANCE FROM THE BUILDING, LESS 150MM.
13. COVER LEVELS SHOWN ARE APPROXIMATE ONLY AND SHOULD BE ALTERED TO SUIT FINISHED SURFACE LEVELS.

C	25.01.22	FINAL ISSUE	MF	MS	MS
B	22.08.19	ATTENUATION TANK UPDATED	GE	JC	MS
A	30.07.19	ISSUED FOR CONSTRUCTION	GE	JC	MS
Rev	Date	Revision Details	By	Chkd	Appd

Client					
KAMANI COMMERCIAL PROPERTY					
Project					
27 DALE STREET					
Title					
TYPICAL DRAINAGE DETAILS					
Drawing No.					Revision
WL_1059_043					C
Scale		1:100	Date		30.07.2018
Drawn	GM	Chk	GE	App	GE
Unit 2.1, 20 Dale Street Manchester. M1 1EZ					Copyright reserved Tel: 0161 236 8203