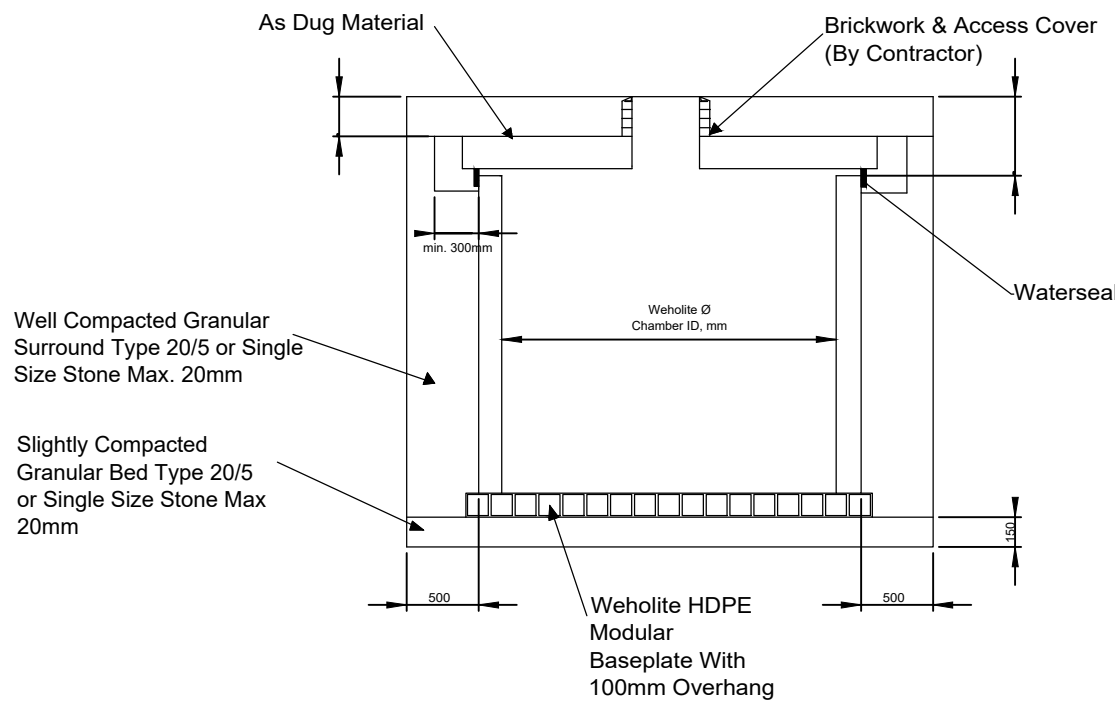
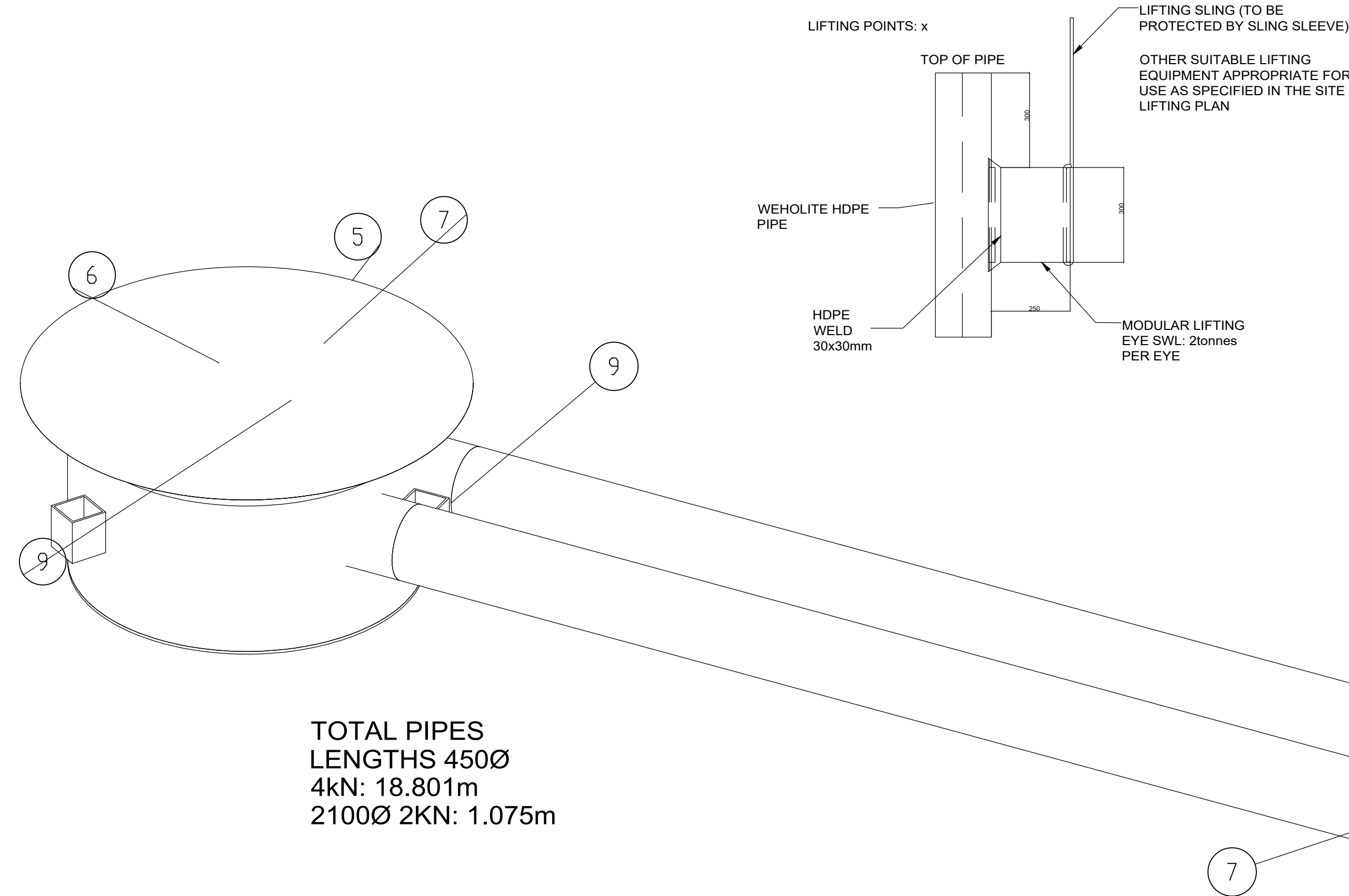


CHAMBER BEDDING & BACKFILL DETAILS



MODULAR LIFTING EYE SAFE LIFTING GUIDELINES

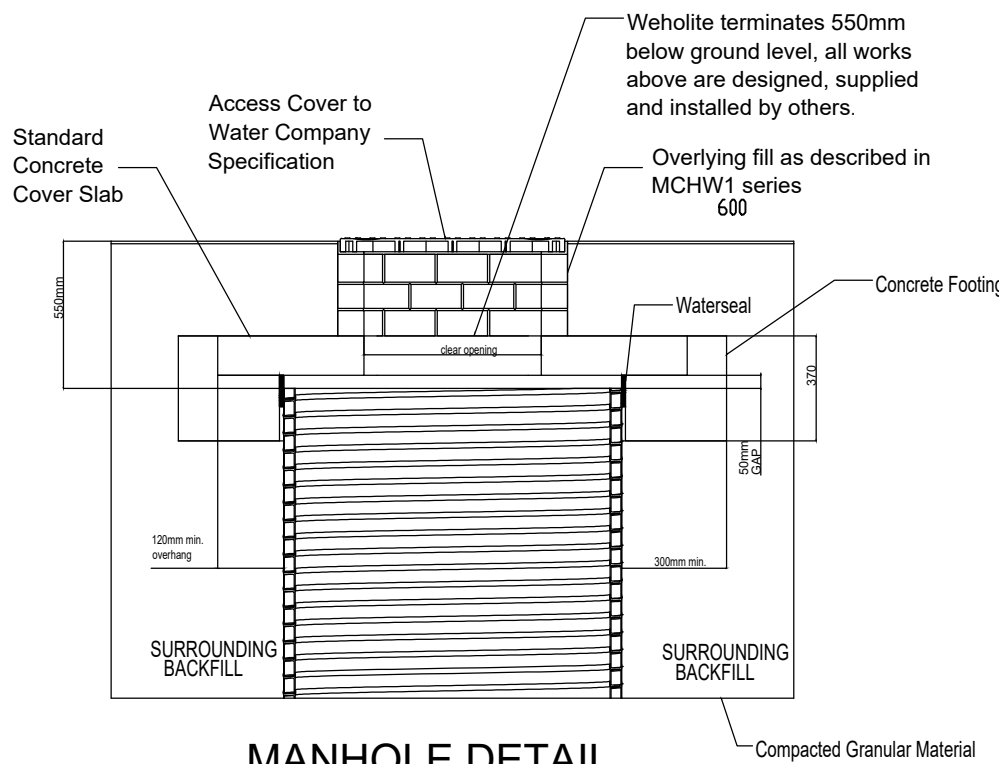


TOTAL PIPES
LENGTHS 450Ø
4kN: 18.801m
2100Ø 2KN: 1.075m

BILL OF MATERIALS

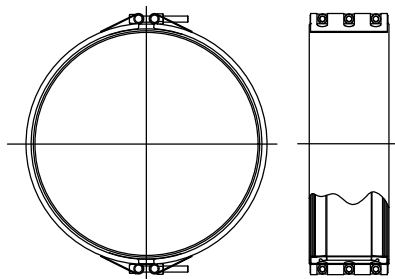
ITEM NO.	DIAMETER	DESCRIPTION	LENGTH	QTY.
1		Flow Control Unit		1
2		HDPE 20mm Base Plate		1
3		HDPE Side Wall		1
4	ID Ø2100 OD (Ø2268)	Lifting Eyes	3 No.	1
5	ID 450 (OD 501)	Manifold	2033	1
6	ID 2100 (OD 2268)	Oversize Chamber	1075	1
7	ID 450 (OD 501)	Straight Pipe	7000	2
8	ID 150 (OD 160)	Stub	574	1
9	ID 450 (OD 501)	Stub	1384	2
10	Ø2100ID x 500mm Height	Weholite HDPE Benching		1

MANHOLE DETAIL



FLEXSEAL COUPLING

Refer to manufacturers Installation Guidelines



NOTES:

- THIS DRAWING AND ASSOCIATED DETAIL INCLUDING ANY DOCUMENTS OR FILES, PROPOSAL DRAWINGS, CALCULATIONS AND SPECIFICATION HEREIN, CONTAIN PROPRIETARY INFORMATION AND MAY CONTAIN PRIVILEGED AND/OR CONFIDENTIAL INFORMATION AND ARE INTENDED ONLY FOR THE PERSON FOR WHOM THE DRAWING HAS BEEN PREPARED. THE DRAWING AND ALL ASSOCIATED DETAIL PREVIOUSLY MENTIONED ARE THE EXCLUSIVE CONFIDENTIAL PROPERTY OF ASSET INTERNATIONAL LIMITED. COPYING, DISCLOSURE TO OTHERS OR OTHER USE IS PROHIBITED WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF ASSET INTERNATIONAL LIMITED. ANY THIRD PARTY IS STRICTLY PROHIBITED FROM READING, USING, DISCLOSING, DISTRIBUTING OR COPYING THE DRAWING AND ALL ASSOCIATED DETAIL WITHIN IT.
- ALL CALCULATIONS, DRAWINGS, DESIGNS AND TECHNICAL INFORMATION PRODUCED BY ASSET INTERNATIONAL LIMITED IS BASED AND RELIES UPON THE INFORMATION AND COMMUNICATIONS PROVIDED BY THE CUSTOMER, OR ON THE CUSTOMER'S BEHALF, TO ASSET INTERNATIONAL LIMITED. ASSET INTERNATIONAL LIMITED ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR SUCH INFORMATION AND COMMUNICATIONS PROVIDED BY THE CUSTOMER. THE CUSTOMER REMAINS RESPONSIBLE FOR ENSURING THAT PRODUCTS SUPPLIED BY ASSET INTERNATIONAL LIMITED ARE SUITABLE FOR ANY GIVEN APPLICATION.
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELATED DOCUMENTATION AND STANDARD DETAILS.
- DIMENSIONS SHALL NOT BE SCALED FROM THIS DRAWING. ALL DIMENSIONS AND LEVELS TO BE CHECKED AND APPROVED IN WRITING BY THE CONTRACTOR BEFORE MANUFACTURE. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- ALL EXTRUSION WELDING TO DVS 2209.
- PIPES BECOME THE RESPONSIBILITY OF THE CONTRACTOR AS OFFLOADING COMMENCES.

INSTALLATIONS GUIDELINES Single Leg:-

- BEDDING AND BACKFILL AS SPECIFIED BY ASSET INTERNATIONAL.
- ENSURE NO VOIDS IN SURROUND UNDER HAUNCHES.
- BALANCE FILL EITHER SIDE AS FILL COMMENCES.
- BACKFILL IN 250MM LAYERS PARRALLEL TO STRUCTURE, WITH CORRECT COMPACTION IF COMPACTION IS REQUIRED.
- CARE SHOULD ALWAYS BE TAKEN WHEN REMOVING TRENCH BOXESHEETING. REFERENCE SHOULD BE MADE TO DESIGN MANUAL FOR ROADS AND BRIDGES, VOLUME 4, SECTION 2, PART 5 HA 40/01 FOR THE RECOMMENDED PROCEDURE.
- 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.

NOTE:

FURTHER ADVICE CAN BE OBTAINED FROM ASSET'S ENGINEERING DEPARTMENT.

RESIDUAL RISKS

- 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.
- 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.
- WHERE GROUND WATER LEVELS ARE EXPECTED TO BE ABOVE THE PIPE INVERT, MEASURES SHOULD BE TAKEN TO MAINTAIN STRUCTURAL INTEGRITY AND COUNTER POTENTIAL FLATATION.
- WHERE CONSTRUCTION TRAFFIC MAY IMPOSE LOADING, TEMPORARY OR PERMANENT MEASURES SHOULD BE TAKEN TO ENSURE THAT THERE IS NO DETRIMENTAL EFFECT ON THE PIPE. 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.
- ADVISE ON SITE SPECIFIC REQUIREMENTS SHOULD ALWAYS BE SOUGHT FROM ASSET USING THE CONTACT DETAILS BELOW.

MODULAR FABRICATIONS

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

GENERAL NOTES

- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES, RELATIVE TO ORDNANCE DATUM SURVEY
- 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.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS AND SPECIALISTS DRAWINGS TOGETHER WITH THEIR SPECIFICATIONS.
- DO NOT SCALE FROM THIS DRAWING, ONLY WRITTEN OR CALCULATED DIMENSIONS TO BE USED.
- FOR GRID SET-OUT COORDINATES REFER TO ARCHITECTS DRAWINGS.

DRAINAGE NOTES

- ALL NON ADOPTABLE DRAINS UP TO 150 Dia. TO BE 'POLYPIPE uPVC UNDERGROUND DRAIN MANUFACTURED IN ACCORDANCE WITH BS EN 1401-1OR EQUAL APPROVED.
- ALL ADOPTABLE DRAINS UP TO 300 Dia. TO BE EXTRA STRENGTH VITRIFIED CLAY PIPES MANUFACTURED IN ACCORDANCE WITH BS EN 295-1.
- DRAINS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. BACKFILL AND BEDDING TO AS PER TYPICAL DETAIL U.N.O.
- 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.
- 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.
- 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.
- REFER TO ARCHITECT'S DRAWINGS FOR INTERNAL DRAINAGE 'POP UP' POSITIONS.
- FOUL WATER FROM GROUND LEVEL UPWARDS TO BE DRAINED UNDER GRAVITY. REFER TO MECHANICAL ENGINEERS DRAWINGS FOR DETAILS.
- 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
- 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
- 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.
- 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.
- 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 DETAILS UPDATED	GE	JC	MS
A	30.07.19	ISSUED FOR CONSTRUCTION	GE	JC	MS
Rev	Date	Revision Details	By	Chkd	Appd

						Westlakes Engineering	
Client KAMANI COMMERCIAL PROPERTY							
Project 27 DALE STREET							
Title TYPICAL DRAINAGE DETAILS SHEET 1 OF 2							
Drawing No. WL_1059_042						Revision C	
Scale NTS		Date 30.07.2018					
Drawn GM	Chk GE	App GE					
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