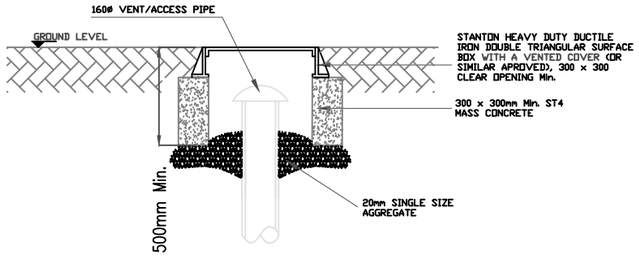
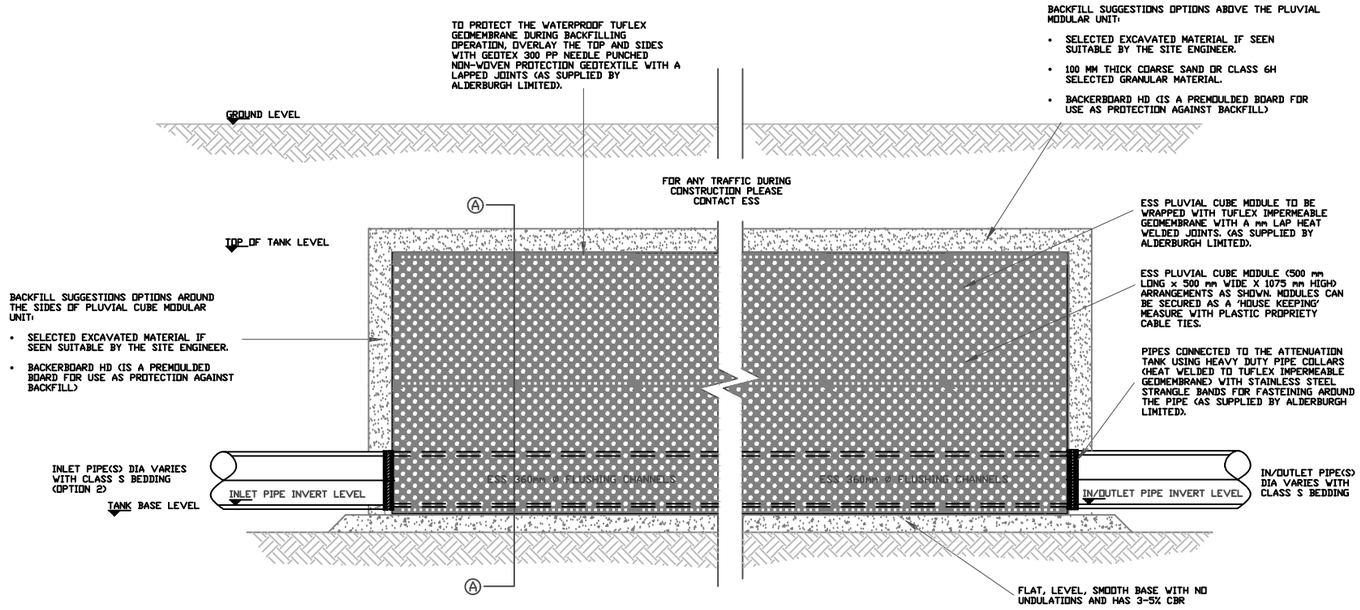


VENT BOX DETAIL
BY OTHERS
(OPTION 2)

A 3 - 5% CBR HAS BEEN ASSUMED AT SUB-BASE LEVEL SHOULD THE CBR BE TESTED AND FOUND TO BE LESS THAN 3% THEN THE ENGINEER SHALL BE NOTIFIED. ALSO, ANY SOFT SPOTS FOUND AT SUB-BASE LEVEL SHALL BE REPORTED TO THE ENGINEER



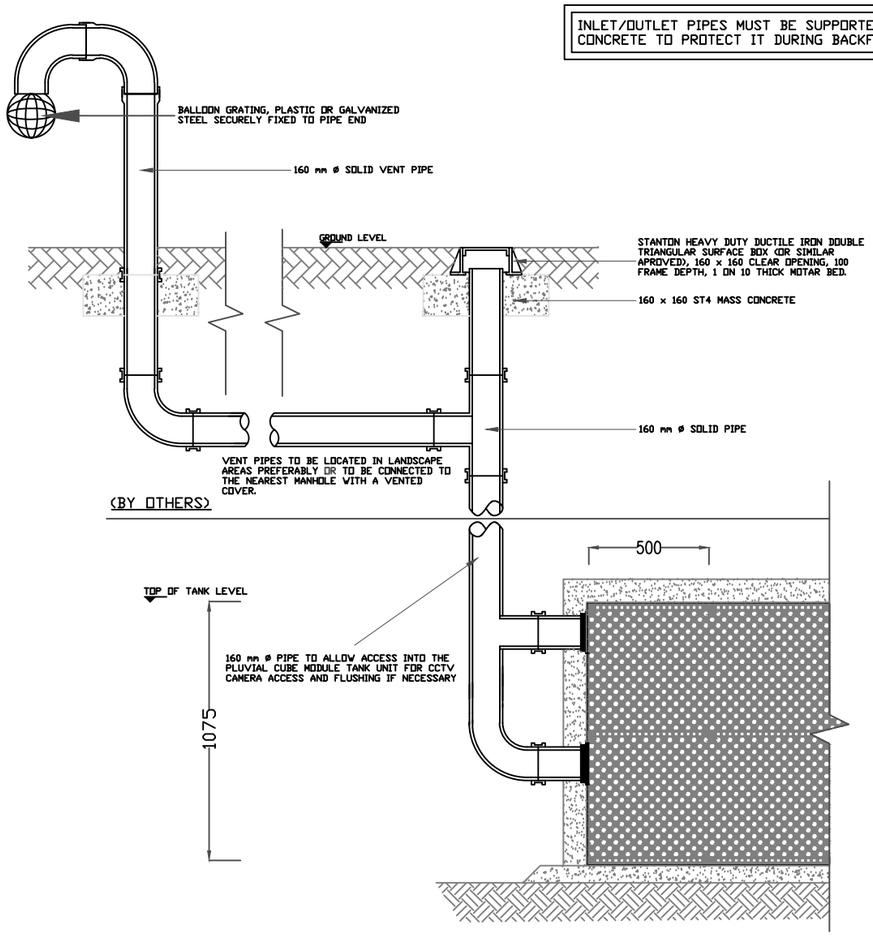
TYPICAL INLET PIPE CONNECTION

TYPICAL IN/OUTLET PIPE CONNECTION

TYPICAL DETAILS OF ATTENUATION TANK USING
PLUVIAL CUBE MODULE UNITS

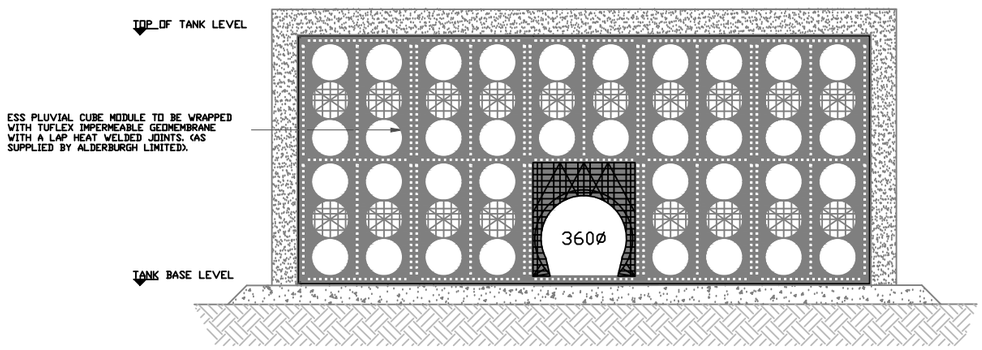
INLET/OUTLET PIPES MUST BE SUPPORTED WITH CONCRETE TO PROTECT IT DURING BACKFILLING

VENT/ACCESS FINISHING DETAILS OPTIONS TO SUIT SITE AND ENGINEER REQUIREMENTS



TYPICAL 160Ø VENT/ACCESS PIPE CONNECTION
OPTION 1

THE CONTRACTOR SHALL PROHIBIT THE MOVEMENT OF CONSTRUCTION PLANT ACROSS THE STORAGE TANK AND WHERE NECESSARY PROVIDE ADDITIONAL SUPPORT AND PROTECTION TO THE STRUCTURE. PARTICULARLY POST CONSTRUCTION. TEMPORARY FENCING CAN BE USED TO PROHIBIT TRADE STOCKS, PILLING MATERIALS, HEAVY PLANTS ETC.,



TYPICAL DETAILS OF ATTENUATION TANK USING PLUVIAL
CUBE MODULE UNITS
SECTION A-A

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Notes :-

1. ALL STORAGE TANK DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS, METHOD STATEMENTS AND RECOMMENDATIONS OF ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED, ROCHDALE.

2. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINS / SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

3. THE CONTRACTOR SHALL ALLOW FOR THE PROTECTION, TEMPORARY AND PERMANENT SUPPORT AND DIVERSION WORKS AS NECESSARY, TO ALL EXISTING SERVICES TO THE SATISFACTION OF THE PUBLIC UTILITIES.

4. THE CONTRACTOR SHALL ALLOW FOR DEALING WITH SURFACE WATER RUN-OFF INTO EXCAVATIONS AND FROM GROUNDWATER BY MEANS OF SUMPS, PUMPING AND DE-WATERING AS APPROPRIATE, IN ORDER TO KEEP THE EXCAVATION AS REASONABLY DRY AS POSSIBLE DURING THE CONSTRUCTION OF THE WORKS.

5. ALL LEVELS AND DIMENSIONS SHALL BE VERIFIED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS. ANY DISCREPANCIES SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

6. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS IN LINE WITH CURRENT LEGISLATION WHEN WORKING IN / NEAR CONFINED SPACES, DEEP EXCAVATIONS AND MACHINERY.

7. THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY TO PROTECT PEDESTRIANS AND VEHICLES FROM THE WORKING AREAS.

8. TO PROTECT THE ESS PLUVIAL CUBE MODULAR ATTENUATION AND SOAKAWAY STORAGE TANK FROM CONSTRUCTION SITE DEBRIS, THE CONTRACTOR SHALL ENSURE THAT STOPPERS ARE SECURELY PLACED IN ALL CONNECTIONS IMMEDIATELY UPSTREAM OF THE TANK UNITS, ONLY TO BE REMOVED ONCE THE FINAL CLEANING OF THE ROADS / DRAINAGE HAS BEEN COMPLETED.

9. UPON COMPLETION OF THE WORKS THE CONTRACTOR SHALL CLEAN ALL DRAINAGE BY JETTING, REMOVING ALL DEBRIS FROM SITE, NO DEBRIS SHALL BE PERMITTED TO ENTER THE TANK STORAGE SYSTEM.

10. NUMBER OF VENT UNITS DEPENDS ON THE SIZE OF THE TANK (REFER VENT DRAWING)

11. REFER SEQUENCE OF WORK DOCUMENT FOR DETAILED INSTALLATION METHODOLOGY (CONTACT ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED)

Notes :- All the Dimensions by Millimeters

ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED
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OL11 4EZ
TEL: 01706 374416
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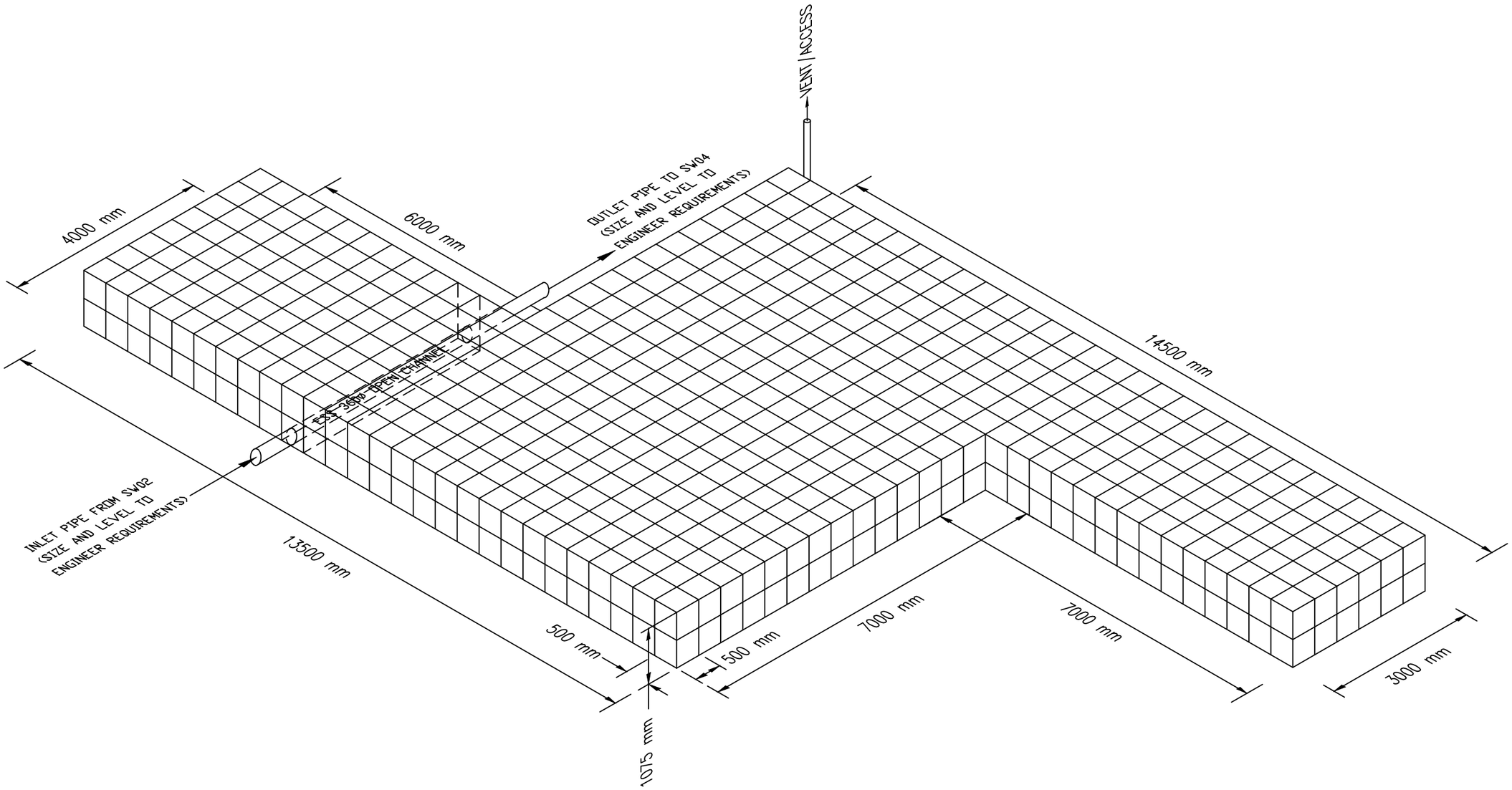
EMAIL: TECHNICAL@Y-ESS.COM

PROJECT
MMU BIRLEY FIELDS, MANCHESTER
ATTENUATION TANK - DETAILS

TITLE
ATTENUATION / STORAGE TANK DETAILS USING PLUVIAL CUBE MODULES UNITS.

Scale	Drawn	Checked
N.T.S.	AY	KD
Date	**Drawing No.**	**Revision**
05/12/2019	PCST - 2.0 Job Ref. (DD/15395)	R0



DIAGRAMATIC TANK LAYOUT (N.T.S)

ATTENUATION TANK
120m³ x 1.075m DEEP = 129m³ GROSS/
123.84m³ NETT (96% VOID RATIO)
(LEVELS TO THE ENGINEER REQUIREMENTS
PLEASE REFER TO THE LATEST DRAINAGE
LAYOUT PRIOR TO INSTALLATION)

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Notes :-

1. ALL STORAGE TANK DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS, METHOD STATEMENTS AND RECOMMENDATIONS OF ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED, ROCHDALE.

2. THE LOCATION, SIZE AND DEPTH OF ALL EXISTING DRAINS / SEWERS AND SERVICES SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORKS ON SITE. ANY DISCREPANCIES FROM THE INFORMATION INDICATED ON THESE DRAWINGS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

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10. NUMBER OF VENT UNITS DEPENDS ON THE SIZE OF THE TANK (REFER VENT DRAWING)

11. REFER SEQUENCE OF WORK DOCUMENT FOR DETAILED INSTALLATION METHODOLOGY (CONTACT ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED)

Notes :- All the Dimensions by Millimeters

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PROJECT

MMU BIRLEY FIELDS, MANCHESTER

ATTENUATION TANK - LAYOUT

TITLE

ATTENUATION / STORAGE TANK DETAILS USING PLUVIAL CUBE MODULES UNITS.

Scale	Drawn	Checked
N.T.S.	AY	KD

Date	Drawing No.	Revision
05/12/2019	PCST - 2.1 Job Ref. (DD/15395)	R0