

**CURRENT DESIGN ASSUMPTIONS**

DESIGN BASED ON ESS PLUVIAL CUBE MODULE 500X500X1075(D) BASED ON APPROXIMATE MINIMUM BURIAL DEPTH OF APPROX. 2.3m.

TANK IS LOCATED IN AN AREA SUBJECT TO OCCASIONAL LIGHT VEHICLE LOADING.

THE MANUFACTURER WILL NEED TO CONFIRM THAT THE TANK HAS SUFFICIENT STRENGTH FOR THIS LOCATION IN ACCORDANCE WITH CIRIA C680.

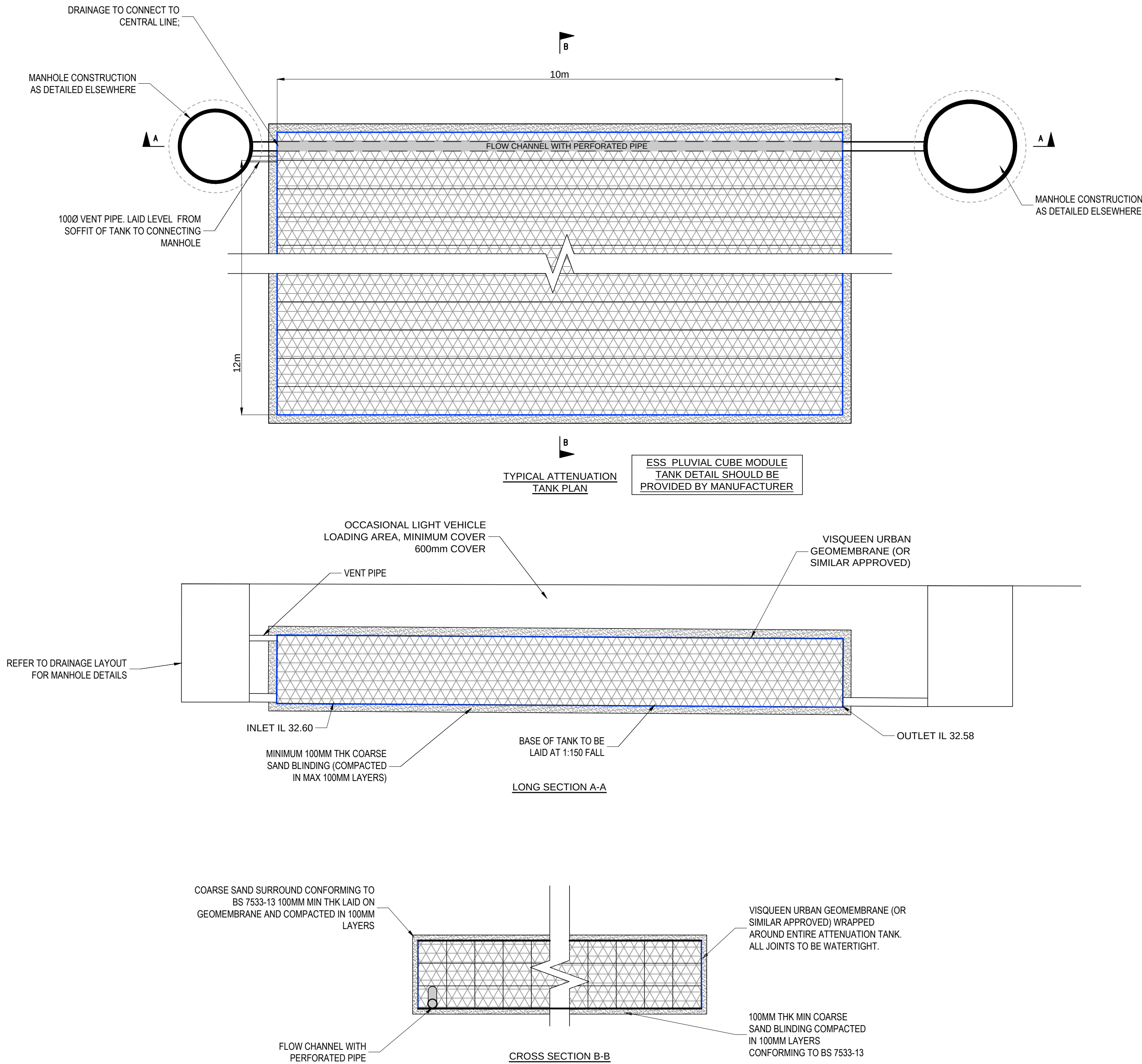
MINIMUM GROUND LEVEL IS APPROX. 34.85, BASED ON LANDSCAPE ARCHITECT'S LEVEL DESIGN. (MIN 1.2m COVER).

INVERT LEVEL OF INLET PIPE 32.63  
INVERT LEVEL OF OUTLET PIPE 32.58  
BASE OF TANK TO BE LAID AT 1:150 FALL.

DIMENSIONS OF TOTAL UNIT ARE 12m X 10m.  
TOTAL DEPTH OF TANK IS 1075mm  
ATTENUATION VOLUME, BASED ON 95% VOID RATIO IS 123m³

IMPERMEABLE MEMBRANE, BED AND SURROUND TO BE CONFIRMED WITH THE MANUFACTURER.

REFER TO DRAINAGE LAYOUT BF-CUR-XX-0G-DR-C-90001 FOR TANK & INLET/OUTLET LOCATIONS.



GENERAL NOTES:

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- REFER TO THE DRAINAGE LAYOUT FOR THE LOCATION OF THE ATTENUATION TANK.
- ATTENUATION TANK TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
- WHERE ALTERNATIVE ATTENUATION TANK DEVICE IS PREFERRED, IT WILL BE SUBJECT TO REDESIGN TO CONFIRM WHETHER THE SYSTEM HAS CAPACITY.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
- DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- THE DESIGN OF THE TANK SHOULD BE PROVIDED BY THE MANUFACTURER OR SUPPLIER TO ENSURE THE TANK IS SUFFICIENT FOR THE SITE SPECIFIC CRITERIA.
- THE TANK DESIGN SHOULD INCORPORATE:
  - CRATES SUBJECT TO OCCASIONAL LIGHT VEHICLE LOADING,
  - SUITABLE MAINTENANCE ACCESS; AND
  - VENTING TO PREVENT TRAPPED AIR POCKETS.
- THE STRENGTH OF THE TANK SHOULD COMPLY WITH CIRIA C680 STRUCTURAL DESIGN OF MODULAR GEOCELLULAR DRAINAGE TANKS.
- ACCESS FOR MAINTENANCE SHOULD BE IN ACCORDANCE WITH CIRIA GUIDANCE.
- VENTING TO THE TANK SHOULD BE CONFIRMED BY THE TANK MANUFACTURER. VENTING SHOULD BE LOCATED WITHIN LANDSCAPED AREAS, OR ROUTED BACK TO THE NEAREST MANHOLE ABOVE THE DESIGN WATER LEVEL.
- CONSTRUCTION AND INSTALLATION OF THE TANK SHOULD BE STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
- THE CURRENT DESIGN OF THE TANK IS BASED ON USE OF ESS PLUVIAL CUBE MODULES, TO ALLOW AN ASSUMPTION OF UNIT SIZES WITHIN THE OVERALL DESIGN. HOWEVER, WHERE AN ALTERNATIVE SYSTEM IS PROPOSED, THE DIMENSIONS OF THE UNITS WILL NEED TO BE CHECKED WITHIN THE DESIGN AND MAY RESULT IN A REDESIGN.
- 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.

|      |                                       |          |     |       |
|------|---------------------------------------|----------|-----|-------|
| C02  | ISSUED FOR CONSTRUCTION- TANK UPDATED | 14/10/19 | MW  | MW    |
| C01  | ISSUED FOR CONSTRUCTION               | 19/09/19 | MW  | CG    |
| Rev: | Description:                          | Date:    | By: | Chkd: |



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|                                                  |             |          |           |              |                                     |
|--------------------------------------------------|-------------|----------|-----------|--------------|-------------------------------------|
| Status: CONSTRUCTION                             |             |          |           |              |                                     |
| Project: MMU BIRLEY FIELDS STUDENT ACCOMMODATION |             |          |           |              |                                     |
| Orig Title: DRAINAGE DETAILS SHEET 4             |             |          |           |              |                                     |
| Project No:                                      | Size:       | Date:    | Drawn By: | Designed By: | Checked By:                         |
| 067709                                           | A1          | 19/09/19 | MJ        | MJ           | CG                                  |
| Scale: 1:50                                      |             |          |           |              |                                     |
| Project Code:                                    | Originator: | Zone:    | Level:    | Type:        | Discipline: Category / Number: Rev: |
| BF                                               | - CUR       | - XX     | - ZZ      | - DR         | - C - 90013 -C02                    |