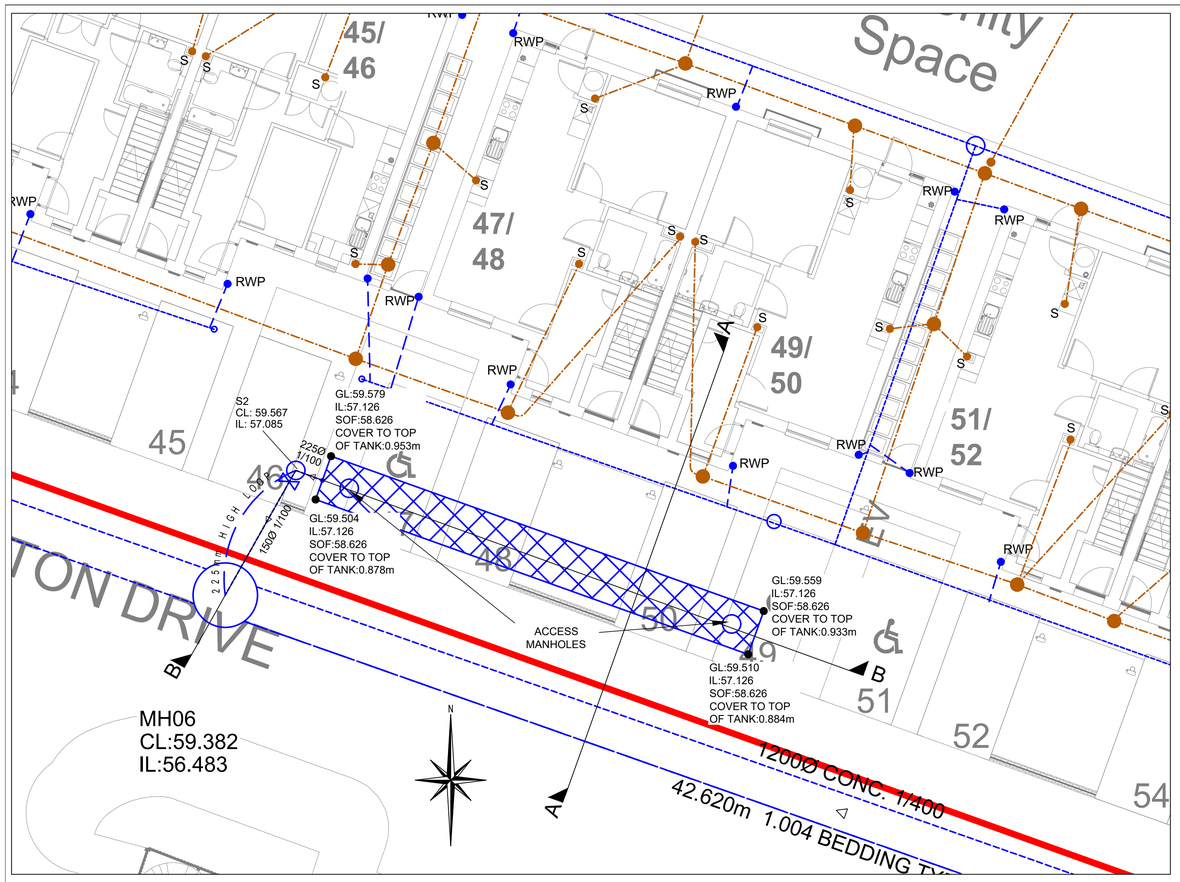
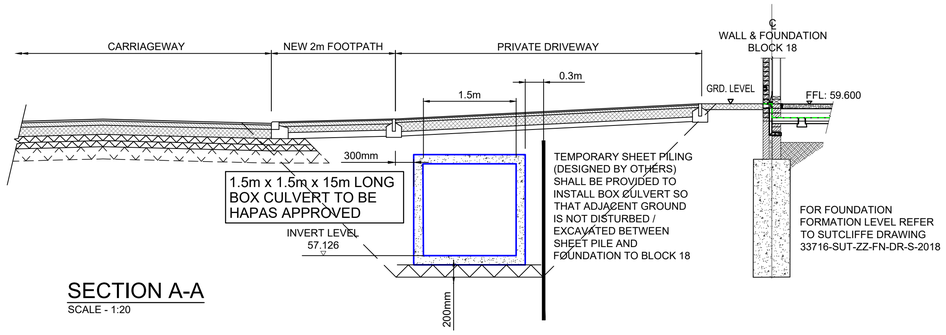


PLAN ON PROPOSED ATTENUATION

SCALE 1:100

KEY

- SITE BOUNDARY
- SURFACE WATER DRAIN / SEWER
- FOUL WATER DRAIN / SEWER
- S104 SURFACE WATER DRAIN / SEWER
- SURFACE WATER ATTENUATION



SECTION A-A

SCALE - 1:20

NOTE:

1. FOUNDATION AND ATTENUATION TANK CONSTRUCTION METHODOLGY TO BE AGREED PRIOR TO WORKS PROGRESSING
2. ALLOW FOR SHEET PILING TEMPORARY SUPPORT TO FACILITATE INSTALLATION OF BOX CULVERT

NOTES:

THE ENGINEER SHALL BE PROVIDED WITH A COPY OF THE DESIGN AND DRAWINGS BY THE TANK MANUFACTURER PRIOR TO THE CONTRACTOR ORDERING OR INSTALLING THE TANK TO ALLOW A REVIEW OF THE DETAILS.

PLASTIC TANKS SHALL ONLY BE INSTALLED IN PRIVATE AREAS AND NOT IMMEDIATELY ADJACENT OR WITHIN THE INFLUENCE ZONE OF A PUBLIC HIGHWAY.

WHERE TANKS ARE PROVIDED UNDER, IMMEDIATELY ADJACENT TO OR WITHIN THE INFLUENCE OF A PUBLIC HIGHWAY THEN THE TANK PROVIDED SHALL BE **HAPAS** APPROVED (HIGHWAY AUTHORITY PRODUCT APPROVAL SCHEME) THE TANK DESIGN AND DETAILS SHALL BE SUBMITTED TO THE ADOPTING AUTHORITY FOR THEIR APPROVAL. IT IS LIKELY THAT A CONCRETE TANK WILL BE REQUIRED.

WHERE TANKS REQUIRE ADOPTING HIGHWAY AUTHORITY APPROVALS NO TANKS SHALL BE ORDERED OR INSTALLED UNTIL FULL TECHNICAL APPROVAL HAS BEEN PROVIDED BY THE ADOPTING HIGHWAY AUTHORITY. THE CONTRACTOR SHALL ALLOW TIME WITHIN THEIR CONSTRUCTION PROGRAMME TO OBTAIN THE NECESSARY TECHNICAL APPROVALS FROM THE ADOPTING AUTHORITY.

ATTENUATION PRODUCT SPECIFICATION

A PRODUCT WITH A VOID RATIO OF 95% IS ASSUMED IN THE DESIGN OF THE ATTENUATION TANK. IF A DIFFERENT VOID RATIO IS USED THEN THE ENGINEER SHALL BE CONSULTED SO THAT A DESIGN CHECK CAN BE CARRIED OUT.

TANKS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS AND DETAILS.

NO TEMPORARY MOUNDING OF EARTH OR OTHER CONSTRUCTION MATERIALS SHALL BE PLACED OVER OR WITHIN INFLUENCE ZONE OF THE TANK ONCE INSTALLED.

CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY WORKS TO ENSURE STABILITY OF ALL EXCAVATIONS REQUIRED TO INSTALL THE TANK SYSTEM.

ATTENUATION TANK DESIGN LOADING REQUIREMENTS.

THE FOLLOWING DESIGN LOADS SHALL BE ALLOWED IN THE DESIGN OF THE TANK.

A MINIMUM LIVE LOADING OF 10kN/m² SHALL BE ALLOWED IN THE TANK DESIGN.

A MINIMUM BACK FILL LOADING OF 25kN/m^2 SHALL BE ASSUMED IN THE TANK DESIGN.

A MINIMUM LATERAL COMPRESSIVE STRENGTH OF 33kN/m^2 SHALL BE ALLOWED IN THE TANK DESIGN.

CONSTRUCTION PLANT SHALL NOT BE ALLOWED TO CROSS OVER OR CROSS WITHIN THE INFLUENCE ZONE OF THE TANK UNLESS SPECIFICALLY DESIGNED FOR BY THE CONTRACTOR / TANK DESIGNER.

NO CRANES SHALL BE ALLOWED TO SET UP OVER OR WITHIN THE INFLUENCE ZONE OF THE TANK UNDER ANY CIRCUMSTANCE.

GROUND WATER.

NO GROUND WATER HAS ASSUMED IN THE DESIGN OF THE TANK.

IF GROUND WATER IS ENCOUNTERED DURING THE INSTALLATION OF THE TANK ALL WORKS SHALL STOP AND THE ENGINEER SHALL BE INFORMED AS THE TANK CONSTRUCTION DETAILS WILL REQUIRE TO BE REVIEWED. CONSTRUCTION DETAILS MAY CHANGE.

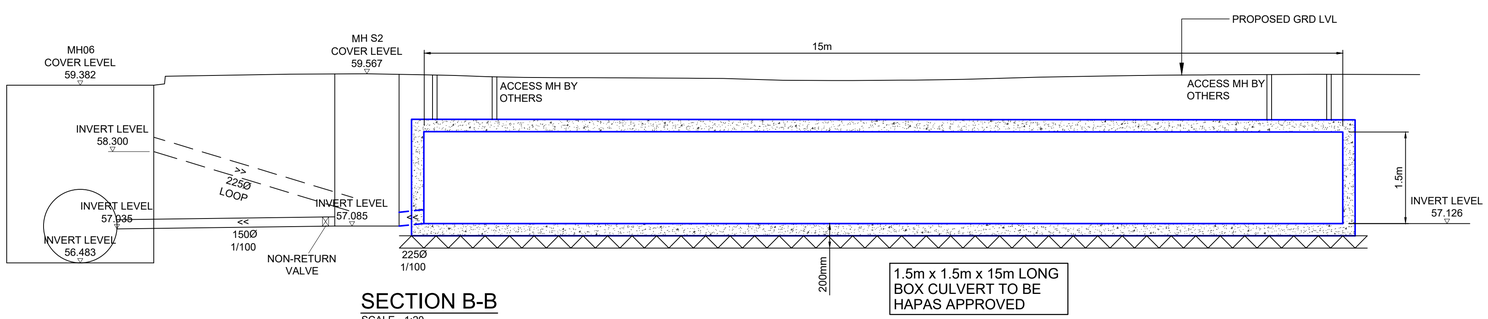
WHERE GROUND WATER IS IDENTIFIED ON SITE A FLOATATION CALCULATION WILL BE REQUIRED TO BE CARRIED OUT ON THE TANK AND WILL LIKELY AFFECT THE INSTALLATION DETAILS / REQUIREMENTS OF THE TANK.

BUILDING FOUNDATIONS.

TANKS SHALL GENERALLY BE LOCATED NO CLOSER THAN 3m TO THE NEAREST POINT OF A BUILDING OR OTHER STRUCTURE.

TANKS THAT ARE LOCATED CLOSE TO BUILDINGS OR OTHER STRUCTURES MAY INFLUENCE THE CONSTRUCTION OF THE FOUNDATIONS. THIS WILL RESULT IN THE FOUNDATIONS BEING EXCAVATED INTO ACCEPTABLE BEARING STRATA DEEPER THAN WOULD NORMALLY BE REQUIRED.

WHERE SLOPING GROUND CONDITIONS EXIST ON SITE THE ENGINEER SHALL BE CONTACTED FOR FURTHER ADVICE AND CONFIRMATION OF FOUNDATION DEPTHS.



SECTION B-B

SCALE - 1:20

DESIGN CONTINGENCY

FOR COST PURPOSES THE CONTRACTOR IS TO INCLUDE THE FOLLOWING CONTINGENCY (% OF PRIMARY CIVILS DESIGN COST) AT THE RELEVANT PROJECT STATUS INDICATED ON THE DRAWING.

RIBA STAGE S2 - CONCEPT DESIGN - 25%
RIBA STAGE S3 - SPATIAL COORDINATION - 15%
RIBA STAGE S4 - TECHNICAL DESIGN - 10%
RIBA STAGE A5 - PRODUCTION INFORMATION - 5%

Rev	Description	Date	By	Chkd
P02	SECTION B-B UPDATED. NOTES ADDED.	13.04.26	AJB	DS
P01	ISSUED FOR COMMENT	10.02.25	KW	DS

Drawing Status: S4 - TECHNICAL DESIGN

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Project: ALDERFORD PARADE
CHEETHAM HILL
MANCHESTER

Drawing Title: ATTENUATION TANK DETAILS
PLOT 18

Date	Drawn By	Checked By
JAN '25	KW	DS

Scale at A1	Project Number	Status	Revision
AS SHOWN	33716	S4	P02

Sheet Number: 33716-SUT-ZZ-XX-DR-C-6700