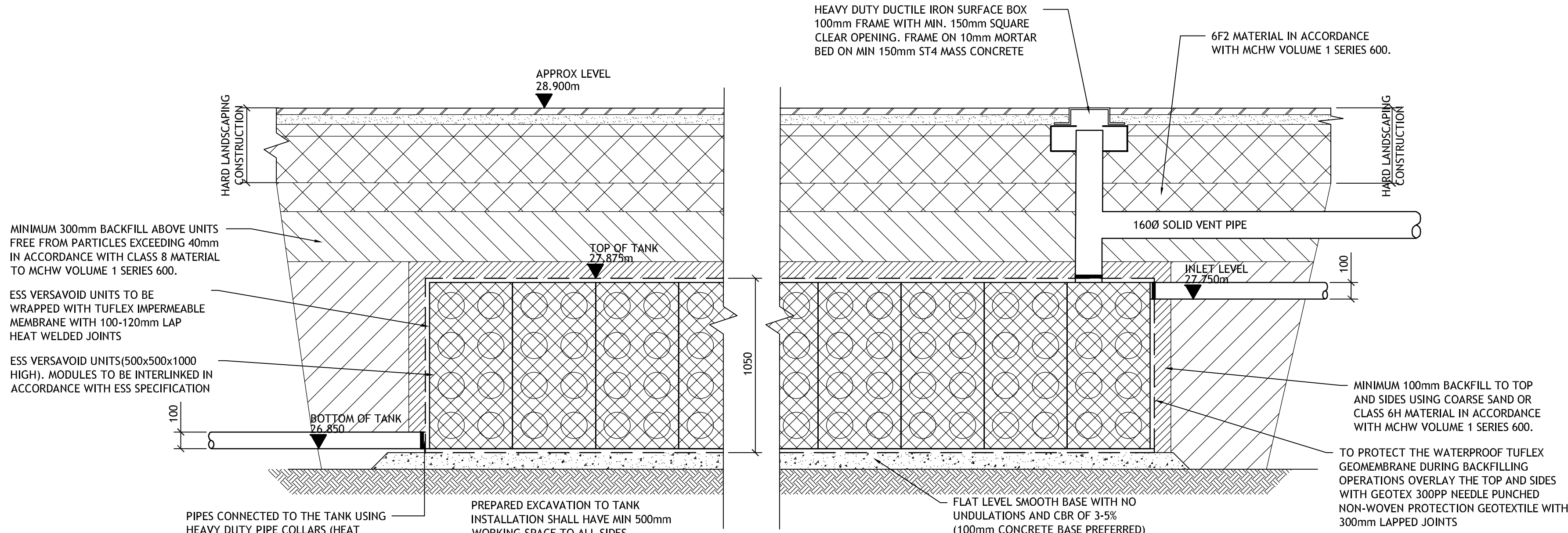


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TYPICAL OUTLET CONNECTION
SCALE 1:20

TYPICAL INLET CONNECTION
SCALE 1:20

ESS TANK INSTALLATION

- ALL STORAGE TANK DRAINAGE WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS, METHOD STATEMENTS AND RECOMMENDATIONS OF ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED, LITTLEBOROUGH.
- 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.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY PRECAUTIONS IN LINE WITH CURRENT LEGISLATION WHEN WORKING IN / NEAR CONFINED SPACES, DEEP EXCAVATIONS AND MACHINERY.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY SAFETY TO PROTECT PEDESTRIANS AND VEHICLES FROM THE WORKING AREAS.
- TO PROTECT THE ESS PLUVIAL CUBE & MODULAR 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.
- NUMBER OF VENT UNITS DEPENDS ON THE SIZE OF THE TANK (REFER VENT DRAWING)
- REFER SEQUENCE OF WORK DOCUMENT FOR DETAILED INSTALLATION METHODOLOGY (CONTACT ENVIRONMENTAL SUSTAINABLE SOLUTIONS (ESS) LIMITED)

BACKFILL & BEDDING MATERIALS SPECIFICATION

MATERIAL	CLASS	PERMITTED CONSTITUENTS
GENERAL FILL	6F2	ANY MATERIAL OR COMBINATION OF MATERIALS OTHER THAN UNBURNT COLLIERY SPOIL AND ARGILLACEOUS ROCK
IMMEDIATE SURROUND	6H	NATURAL GRAVEL, NATURAL SAND, CRUSHED GRAVEL, CRUSHED ROCK OTHER THAN ARGILLACEOUS ROCK, CRUSHED CONCRETE, WELL-BURNT COLLIERY SPOIL OR ANY COMBINATION THEREOF
ADDITIONAL SURROUND	6N	NATURAL GRAVEL, NATURAL SAND, CRUSHED GRAVEL, CRUSHED ROCK, CRUSHED CONCRETE, WELL-BURNT COLLIERY SPOIL OR ANY COMBINATION THEREOF. NONE OF THE CONSTITUENTS SHALL INCLUDE ANY ARGILLACEOUS ROCK
ALTERNATIVE SURROUND	6P	NATURAL GRAVEL, NATURAL SAND, CRUSHED GRAVEL, CRUSHED ROCK, CRUSHED CONCRETE, SLAG, CHALK, WELL-BURNT COLLIERY SPOIL OR ANY COMBINATION THEREOF. NONE OF THE CONSTITUENTS SHALL INCLUDE ANY ARGILLACEOUS ROCK
LOWER BACKFILL OVER TANK	8	ANY EXCEPT THERE SHALL NOT BE ANY STONES OR LUMPS GREATER THAN 40mm NOMINAL DIAMETER

CDM SYMBOL KEY

- WARNING OF SIGNIFICANT RISK
- PROHIBITED ACTION
- PARTICULAR ACTION ENCOURAGED
- CDM INFORMATION

GENERAL

- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION
- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL AND STRUCTURAL DRAWINGS.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE IN METRES RELATIVE TO ORDNANCE DATUM.
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

DRAINAGE

- THIS DRAWING USES THE ARCHITECTURAL DRAWING AS A BACKGROUND. THE CONTRACTOR SHOULD USE ARCHITECTURAL DRAWINGS FOR SETTING OUT OF ALL POP-UPS AND ABOVE GROUND DRAINAGE POSITIONS.
- REFERENCE SHOULD BE MADE TO ALL OTHER DRAINAGE DRAWINGS PROVIDED BY SWF CONSULTING WHICH GIVES CONSTRUCTION DETAILS.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE DRAINAGE SPECIFICATION PREPARED FOR THIS PROJECT.
- THE DESIGN OF THE PIPES HAS BEEN BASED ON THE FOLLOWING:
 - a. 1000 FOWL WATER PIPE: WAYVIN OSMADRAIN
 - b. 1500 OR LARGER FOWL WATER PIPE: WAYVIN ULTRARIB
 - c. 1500 OR LARGER SURFACE WATER PIPE: WAYVIN TWINWALL.ALTERNATIVE PRODUCTS MAY BE USED WITH PRIOR APPROVAL FROM SWF CONSULTING.
- THE EXACT LOCATION OF THE OUTFALL PIPE/MANHOLE IS TO BE CHECKED AND CONFIRMED TO SWF CONSULTING PRIOR TO COMMENCEMENT OF ANY DRAINAGE WORKS.
- REFERENCE SHOULD BE MADE TO ANY CCTV SURVEY, SEWER RECORDS WHICH INDICATE THE EXISTING DRAINAGE SYSTEMS.
- ON COMPLETION OF THE CONTRACT, THE PIPES AND OIL SEPARATOR SHALL BE JET CLEANED TO REMOVE ANY SILT OR CONSTRUCTION DEBRIS AND A CCTV SURVEY SHOULD BE UNDERTAKEN.
- ONCE THE AS-BUILT SURVEY HAS BEEN COMPLETED A COPY OF THE SURVEY LOGS SHOULD BE ISSUED TO SWF CONSULTING TOGETHER WITH THE VIDEO FOOTAGE FOR THEIR COMMENT WITH DUPLICATE COPIES BEING ISSUED TO THE CDM CO-ORDINATOR FOR INCLUSION IN THE HEALTH & SAFETY FILES.
- COVER LEVELS ARE INDICATIVE AND MAY NEED TO BE ADJUSTED TO SUIT THE ACTUAL FINISHED LEVELS OF THE EXTERNAL AREAS.
- GRADIENTS INDICATED ON PIPES ARE MINIMUM GRADIENTS REQUIRED. HOWEVER, MANHOLE INVERT LEVELS ARE TO TAKE PRECEDENCE OVER THESE GRADIENTS.
- POSITIONS OF MANHOLES, GULLYS AND DRAINAGE ARE TO BE SET OUT BY THE CONTRACTOR TO AVOID WHITE LINING DELINEATING CAR PARKING AREAS, KERB LINES ETC.

ABBREVIATIONS

- FFL - FINISHED FLOOR LEVEL
- SSL - STRUCTURAL SLAB LEVEL
- TOC - TOP OF CONCRETE
- TOS - TOP OF STEEL
- UOS - UNDERSIDE OF STEEL
- UOR - UNDERSIDE OF RAIL
- WP - WIND POST
- DL - DEAD LOAD
- IL - IMPOSED LOAD

CD1	14/09/21	ISSUED FOR TENDER	MTB	PSS
Rev	Date	Description	By	Chkd

Project
**ALPHA PLACE
JORDAN ST
MANCHESTER**

Client
365 ROOMS MANCHESTER LTD.

Drawing Title
**DRAINAGE
ATTENUATION TANK TYPICAL DETAILS**

Project - Originator - Func. - Spat. - Form - Disc. - Number
9198-SWF-XX-XX-D-C-1403

Scale 1: 20	@ A1	Date JULY 2021	By PSS	Chkd PSS
Suitability Status A1: APPROVED FOR TENDER	Revision C01	Classification PM_40_40		

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NOTE

THE ARCHITECTURAL BACKGROUNDS ARE A VISUAL REPRESENTATION OF THE PROPOSED BUILDING LAYOUT, BUT ARE NOT NECESSARILY DIMENSIONALLY ACCURATE AND THUS MAY NOT RELATE TO THE LOCATION OF THE STRUCTURAL MEMBERS