4/20 COARSE GRADE	D AGGREGATE GRADING TABLE	
SIEVE SIZE (mm)	PERCENTAGE PASSING (%)	
40	100	
31.5	98 - 100	
20	90 - 99	
10	25 - 70	
4	0 - 15	
2	0 - 5	

CLASS Z CONCRETE BEDDING DETAIL

SLEEVE JOINTED PIPES, MIN, 50mm OR 1/6Bc, WHICHEVER IS THE GREATER, SOCKETED

PIPE, MIN. 100mm OR 1/6Bc, WHICHEVER IS THE GREATER UNDER BARRELS, NOT LESS THAN 50mm UNDER SOCKETS. FOR ROCK OR MIXED SOILS CONTAINING ROCK BANDS,

BOULDERS, STONES OR OTHER IRREGULAR HARD SPOTS: SLEEVE JOINTED PIPES, MIN. 150mm OR 1/4Bc, WHICHEVER IS THE GREATER, SOCKETED PIPE, MIN. 200mm OR 1/4Bc.

WHICHEVER IS THE GREATER UNDER BARRELS, NOT LESS THAN 150mm UNDER SOCKETS.

EXCEED 5m) USING COMPRESSIBLE FILLER. COMPRESSIBLE FILLER TO BE 18mm THICK FOR

PIPEWORK UPTO 450mm DIAMETER, FOR PIPES OVER 450mm FLEXCELL JOINTS TO BE 36mm

CONCRETE BED AND SURROUND TO BE DISCONTINUED AT EVERY PIPE JOINT (NOT TO

Bc +300 MIN

(EXTERNALLY AS PER NOTE 15 OF DRAINAGE NOTES) SCALE 1:20

A) Bc = OUTSIDE DIAMETER OF PIPE BARREL

B) Y = FOR UNIFORM SOILS:

NOMINAL PIPE DIA	SINGLE SIZED	GRADED
(mm)	(mm)	(mm)
100 OVER 100 TO 150 OVER 150 TO 300 OVER 300 TO 525 GREATER THAN 525	10 10 OR 14 10,14 OR 20 14 OR 20 14,20 OR 40	N/A 14 TO 5 14 TO 5 OR 20 TO 5 14 TO 5 OR 20 TO 5 14 TO 5,20 TO 5 OR 40 TO 5

CLASS S BEDDING DETAIL

GRANULAR BEDDING MATERIAL TABLE (ALL AGGREGATES TO BS EN 13242, PD 6682-6:2003 & BS EN 13055-2)

PIPE BEDDING DETAIL KEY SELECTED BACKFILL - SEE NOTE B2. BACK FILL - TO STRUCTURAL ENGINEERS SPECIFICATION UNDER BUILDING & NOTES B3, B4 ELSEWHERE GRANULAR MATERIAL - REFER TO GRANULAR BEDDING MATERIAL TABLE & NOTE B1

- SEE NOTE B5.

GEN 1 - SEE NOTE B5.

CONCRETE BEDDING - DESIGNATION GEN 3

CONCRETE BLINDING - DESIGNATION

BEDDING NOTES:

B1. PIPE BEDDING MATERIALS TO COMPLY GENERALLY WITH SHW - SERIES 500 - CLAUSE 503. GRANULAR BEDDING MATERIALS TO ALSO COMPLY WITH BS EN 13242 & THE GRANULAR BEDDING MATERIAL TABLE ON THIS DRAWING.

B2. SELECTED BACKFILL MATERIAL TO BE PROVIDED ABOVE THE PIPE SURROUND TO A HEIGHT OF 300mm MINIMUM ABOVE THE TOP OF THE PIPE. SELECTED BACKFILL MATERIAL TO BE CLASS 8 - LOWER TRENCH FILL MATERIAL IN ACCORDANCE WITH SHW -SERIES 600 TABLE 6/1 & TO COMPRISE OF UNIFORM SOIL, FREE FROM STONES LARGER THAN 40mm, LUMPS OF CLAY OVER 100mm. TIMBER, FROZEN MATERIAL & VEGETABLE MATTER, SELECTED BACKFILL MATERIAL TO BE PLACED & COMPACTED IN LAYERS NOT EXCEEDING 150mm IN THICKNESS. SHOULD THE MATERIAL BE UNSUITABLE OR WEATHER CONDITIONS AFFECT THE MATERIALS STABILITY, THEN A SUITABLE HARD GRANULAR MATERIAL SHALL BE USED.

B3. GENERAL BACKFILL TO DRAINAGE TRENCHES [OTHER THAN FILTER DRAINS] IN VEHICULAR TRAFFICKED AREAS ABOVE THE PIPE BEDDING & SELECTED BACKFILL SHALL BE CLASS 1, 2 OR 3 GENERAL FILL MATERIAL IN ACCORDANCE WITH SHW - SERIES

B4. GENERAL BACKFILL UNDER NON-VEHICULAR TRAFFICED AREAS TO BE SUITABLE AS-DUG MATERIAL COMPACTED IN ACCORDANCE WITH SHW - SERIES 600 IN LAYERS NOT EXCEEDING 225mm. EACH LAYER COMPACTED TO FORM A STABLE TRENCH BACKFILL, SHOULD THE MATERIAL BE UNSUITABLE OR WEATHER CONDITIONS AFFECT THE MATERIALS STABILITY, THEN A HARD GRANULAR MATERIAL SHALL BE USED UP TO FORMATION LEVEL.

B5. ALL CONCRETE TO BE DESIGNATED CONCRETE TO CONFORM TO BS 8500-2.

SUBGRADE LAYER, SAND OR -

GRAVEL MIN. DEPTH 100mm

BY OTHERS

TYPICAL ATTENUATION TANK DETAIL

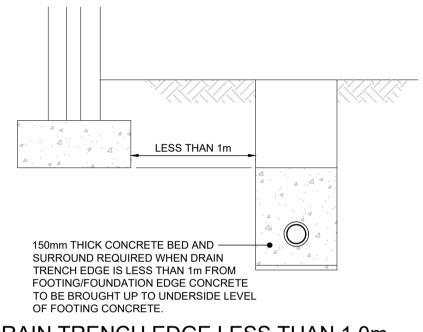
SCALE 1:20

100mm at A1

A = MORE THAN 1m IF DIMENSION C IS GREATER THAN DIMENSION A THEN 150mm THICK CONCRETE BED AND SURROUND IS REQUIRED AS SHOWN. CONCRETE TO BE BROUGHT UP TO LOWER LEVEL OF DIMENSION B.

DRAIN TRENCH EDGE MORE THAN 1.0m FROM FOOTING/FOUNDATION EDGE

SCALE 1:20



DRAIN TRENCH EDGE LESS THAN 1.0m FROM FOOTING/FOUNDATION EDGE SCALE 1:20

HEALTH & SAFETY RISKS

IN ADDITION TO THE STANDARD HAZARDS AND RISKS NORMALLY ASSOCIATED WITH THE TYPE OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING RESIDUAL HEALTH AND SAFETY RISKS

CONSTRUCTION RISKS

CR01. SERVICES ASSOCIATED WITH PREVIOUS USE

EXISTING SERVICES PRESENT WITHIN THE CONSTRUCTION SITE. M&E CONSULTANT TO ADVISE ON STATUS (LIVE OR DEAD) OF ABOVE AND BELOW GROUND SERVICES. EXCAVATIONS TO BE COMPLY WITH HSG47 (AVOIDING DANGER FROM UNDERGROUND SERVICES). CONTRACTOR TO OBTAIN PERMIT TO DIG, UNDERTAKE TRIAL HOLES AND CAT SCAN OF WORK SITE PRIOR TO EXCAVATION. HAND DIG WHERE NECESSARY. LIVE SERVICES TO BE DIVERTED AND/OR PROTECTED WHERE THEY ARE TO REMAIN AND BE BUILT INTO THE PROPOSED WORKS. CARE TO BE TAKEN WHILST WORKING AROUND LIVE

CR02. EXCAVATION SUPPORT AND TEMPORARY WORKS

GROUND INVESTIGATIONS UNDERAKEN IDENTIFY POTENTIALLY UNSTABLE GROUND AND HIGH GROUND WATER LEVELS. DUE TO THE NATURE OF THE GROUND, EXCAVATIONS WILL REQUIRE TEMPORARY SUPPORT AND EDGE PROTECTION. CONTRACTOR TO UTILISE APPROPRIATE TEMPORARY WORKS, DESIGNED BY A TEMPORARY WORKS DESIGNER, AS NECESSARY TO ENSURE THE SAFETY OF ALL OPERATIVES.

CR03. DEEP EXCAVATIONS

NO PERSON TO ENTER ANY UNSUPPORTED EXCAVATION DEEPER THAN 1.20m OR LESS IF GROUND IS UNSTABLE.

CR04. CONTAMINATED GROUND

UNFORESEEN POTENTIAL BURIED HAZARDOUS MATERIALS AND SUBSTANCES INCLUDING ASBESTOS. SIMILAR MATERIALS MAY BE PRESENT IN EXISTING STRUCTURE TO BE DEMOLISHED. CONTRACTOR TO MAKE ALLOWANCE FOR REMOVAL OF SUCH SUBSTANCES.

CR05. CONSTRUCTION ADJACENT TO PUBLIC HIGHWAY

SITE SITUATED NEXT TO PUBLIC HIGHWAY AND FOOPATH WHICH WILL REAMIN IN USE DURING CONSTRUCTION. CONTRACTOR TO ENSURE EXCAVATON AND SITE ARE MADE SECURE SO ACCESS CAN NOT BE ACHIEVED.

OPERATION & MAINTENANCE RISKS

THERE ARE NO UNUSUAL / ONEROUS RESIDUAL HAZARDS ASSOCIATED WITH THE OPERATION AND MAINTENANCE OF THE WORKS HIGHLIGHTED ON THIS DRAWINGS WHICH A COMPETENT USER / MAINTAINER WOULD NOT ORDINARILY BE REASONABLY AWARE OF.

DEMOLITION RISKS

THERE ARE NO UNUSUAL / ONEROUS RESIDUAL HAZARDS ASSOCIATED WITH THE DEMOLITION OF THE WORKS HIGHLIGHTED ON THIS DRAWINGS WHICH A COMPETENT DEMOLITION CONTRACTOR WOULD NOT ORDINARILY BE REASONABLY AWARE OF.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING IN ACCORDANCE WITH THE REQUIREMENTS DEFINED IN THE CDM REGULATIONS.

> P1 FIRST ISSUE 16.11.23 AC BI --Rev Description

Alan Wood & Partners

THESE NOTES ARE INTENDED TO AUGMENT DRAWINGS AND SPECIFICATIONS. WHERE CONFLICT OF REQUIREMENTS EXIST THE ORDER OF PRECEDENCE SHALL BE AS SHOWN IN

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS

CONTRACTOR. ANY DISCREPANCIES TO BE NOTIFIED TO THE ENGINEER AND FURTHER

THE SPECIFICATION. OTHERWISE THE STRICTEST PROVISION SHALL GOVERN.

DRAWINGS NOT TO BE SCALED. ALL DIMENSIONS TO BE CHECKED ON SITE BY THE

4. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE

BUILDING IS FULLY COMPLETED. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO

ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS WHICH MAY BE

NECESSARY, SUCH MATERIAL REMAINING THE THE PROPERTY OF THE CONTRACTOR ON

COMPLETION, AND FOR ENSURING THAT THE WORKS AND ANY ADJACENT PROPERTIES

DETERMINE THE ERECTION PROCEDURE AND SEQUENCE AND ENSURE THAT THE BUILDING AND ITS COMPONENTS ARE SAFE DURING ERECTION. THIS INCLUDES THE

INSTRUCTIONS OBTAINED BEFORE WORK IS COMMENCED.

ARE SAFE IN THE TEMPORARY CONDITION.

AND ARCHITECTS DRAWINGS.

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We Jar It Ltd., Wheldrake, York

Mercer Foods Ltd.

Drainage Details (Sheet 1)

Civil Engineer

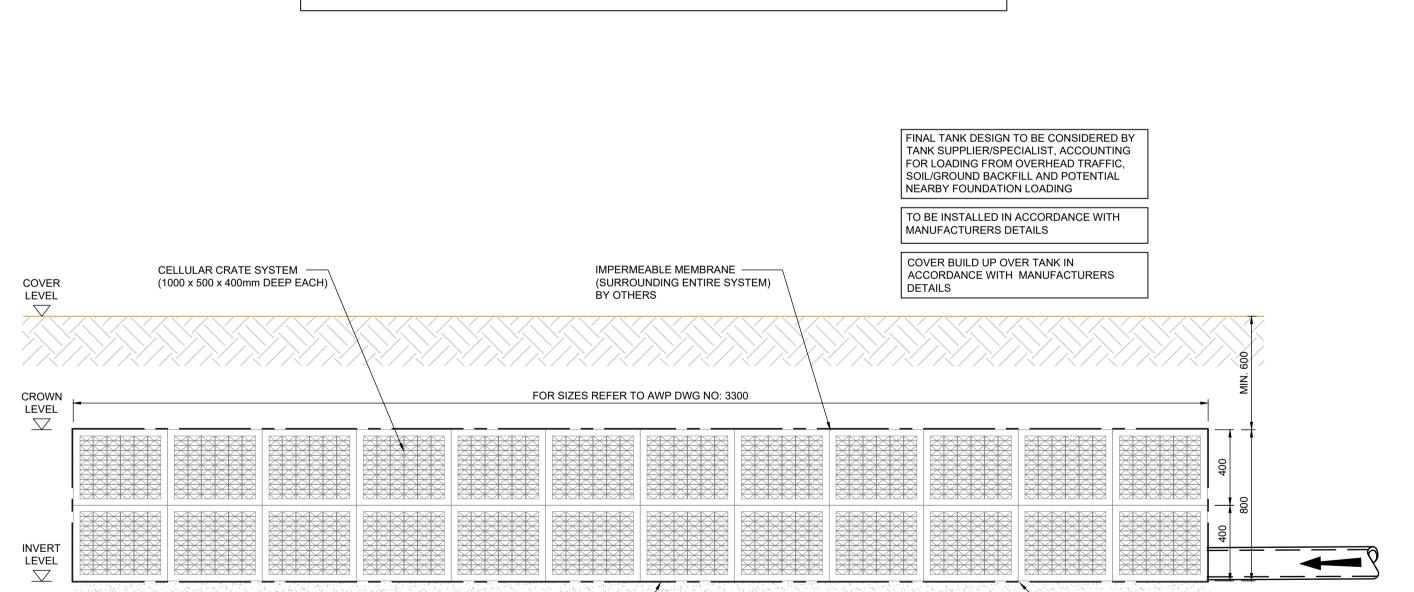
Suitability Code: S1 Work In Progress

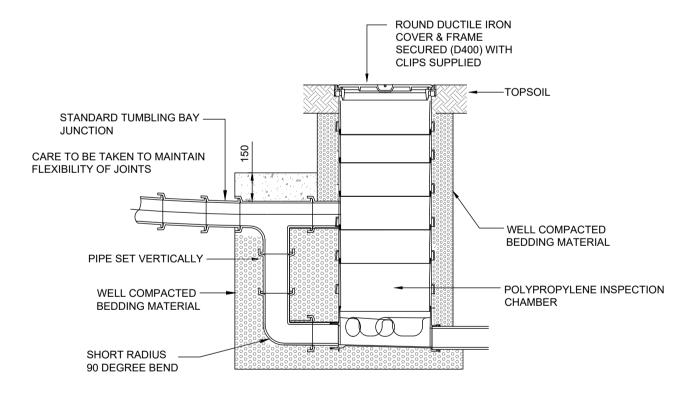
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-IMPERMEABLE MEMBRANE TO BE CUT

AND SEALED IN ACCORDANCE WITH

MANUFACTURER'S RECOMMENDATIONS





BACKDROP SITED IN SOFT LANDSCAPED AREAS WITH STANDARD ROUND COVER (SCALE 1:20)