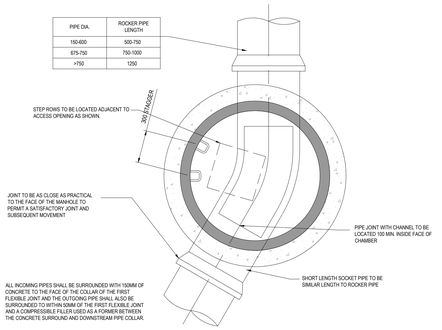
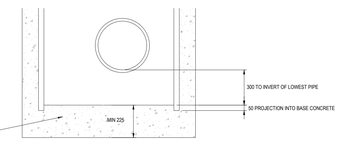


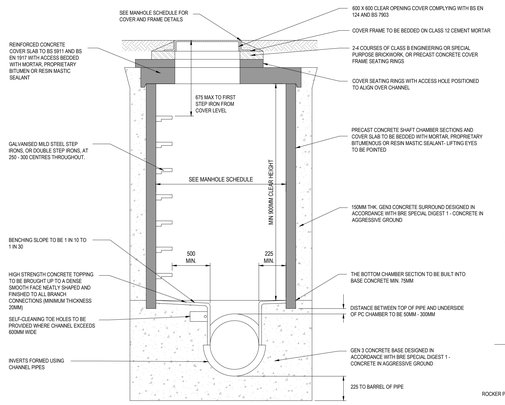
TYPICAL MANHOLE PLAN

(SCALE 1:20)



CATCH PIT DETAIL

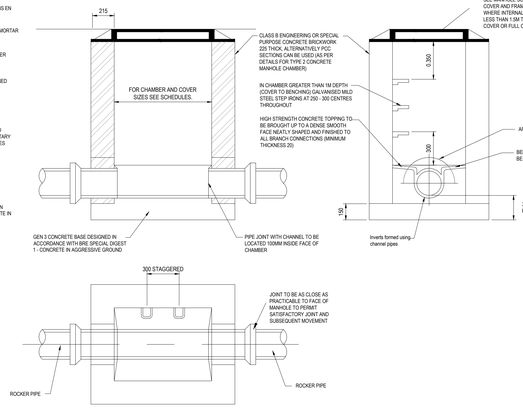
(SCALE 1:20)



TYPICAL TYPE 2 CONCRETE MANHOLE (PCC) DETAIL

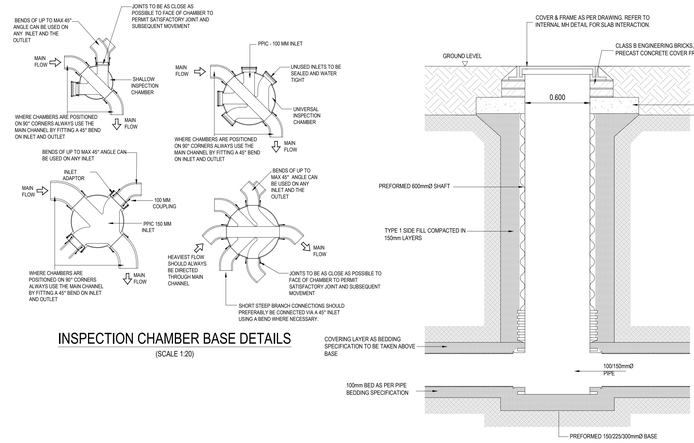
MAX. DEPTH FROM COVER LEVEL TO SOFFIT OF PIPE 3.0m

(SCALE 1:20)



TYPICAL RECTANGULAR BRICK (BRK) OR PRECAST CONCRETE (PCC) MANHOLE DETAIL

(SCALE 1:20)



INSPECTION CHAMBER BASE DETAILS

(SCALE 1:20)

COVERING LAYER AS BEDDING SPECIFICATION TO BE TAKEN ABOVE BASE

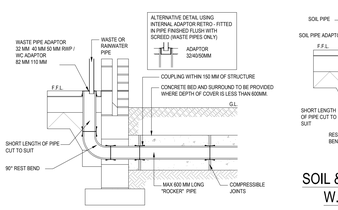
600Ø POLY-PROPELENE INSPECTION CHAMBER

GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. 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.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.

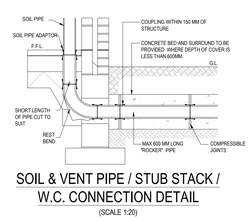
INFORMATION REQUIRED SCHEDULE

1. UPDATED CCTV DRAINAGE SURVEY WITH CONFIRMATION OF EXISTING WELSH WATER DRAINAGE ASSET LEVELS.
2. UPDATED TOPOGRAPHICAL SURVEY TO INCLUDE CAR PARK TO WEST.
3. INFILTRATION TESTING TO BRE 365



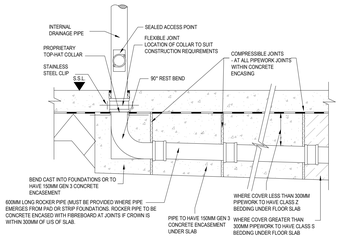
INTERNAL WASTE PIPE CONNECTION DETAIL

(SCALE 1:20)



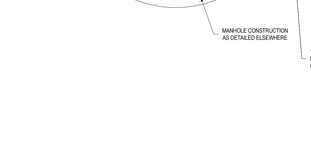
SOIL & VENT PIPE / STUB STACK / W.C. CONNECTION DETAIL

(SCALE 1:20)



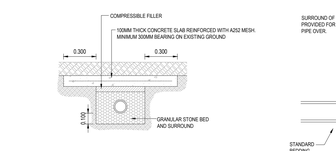
DRAINAGE UNDER BUILDINGS

(SCALE 1:20)



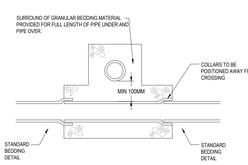
RWP CONNECTION DETAIL

(SCALE 1:20)



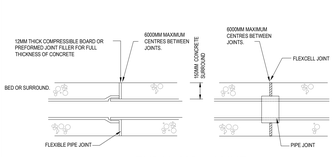
PIPE PROTECTION DETAIL (TRENCH WIDTH VARIES)

(SCALE 1:20)



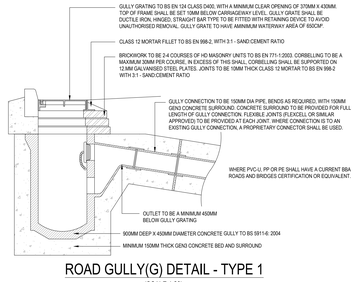
PIPE CROSSINGS DETAIL

(SCALE 1:20)



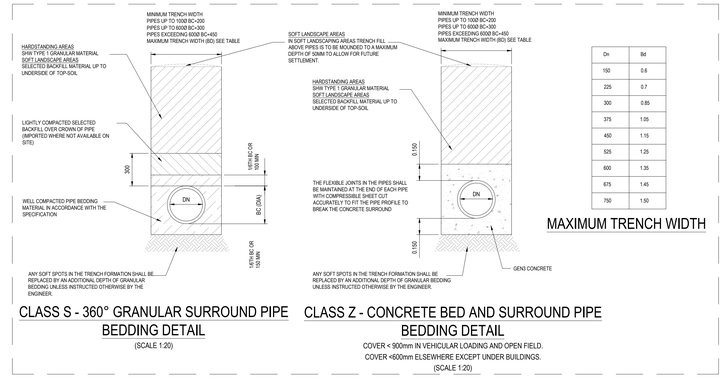
EXPANSION JOINT FOR CONCRETE BED AND SURROUND

(SCALE 1:20)



ROAD GULLY(G) DETAIL - TYPE 1

(SCALE 1:20)



CLASS S - 360° GRANULAR SURROUND PIPE BEDDING DETAIL

(SCALE 1:20)

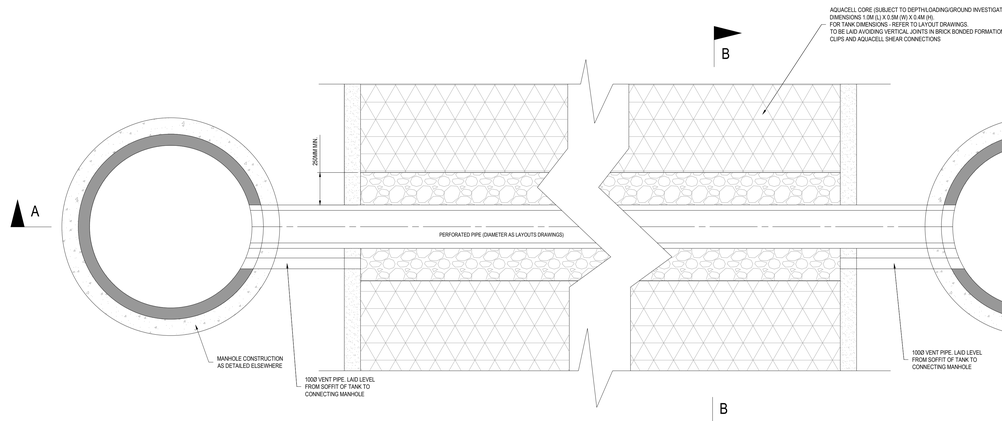
CLASS Z - CONCRETE BED AND SURROUND PIPE BEDDING DETAIL

COVER < 900mm IN VEHICULAR LOADING AND OPEN FIELD.
COVER <600mm ELSEWHERE EXCEPT UNDER BUILDINGS.

(SCALE 1:20)

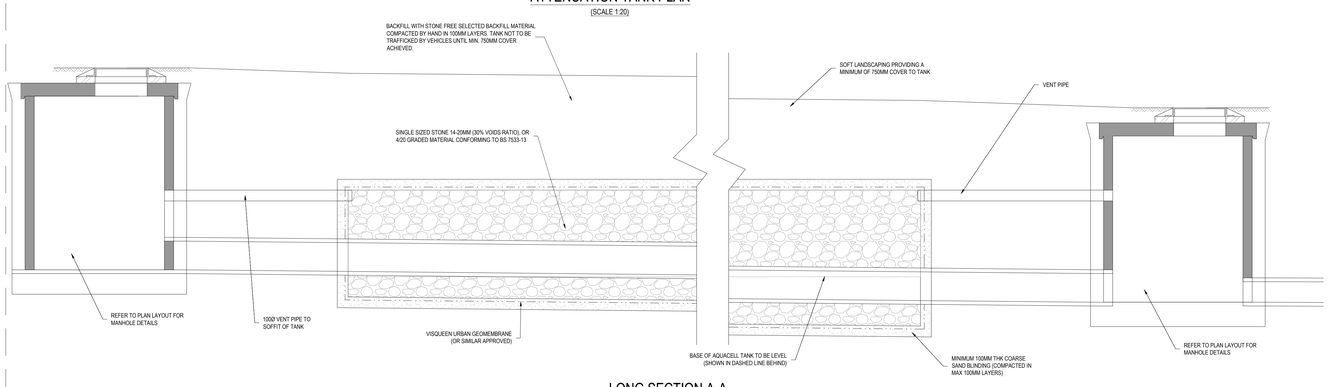
Dn	Bd
150	0.6
225	0.7
300	0.85
375	1.05
450	1.15
525	1.25
600	1.35
675	1.45
750	1.50

MAXIMUM TRENCH WIDTH



ATTENUATION TANK PLAN

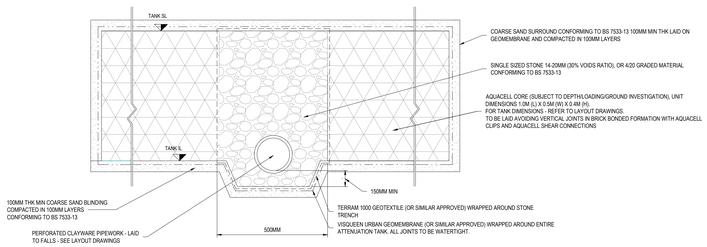
(SCALE 1:20)



LONG SECTION A-A

(SCALE 1:20)

RESIDUAL HAZARD REGISTER (RELATES TO CIVIL/STRUCTURAL MATTERS ONLY)		
MUST BE READ IN CONJUNCTION WITH CURTINS RESIDUAL HAZARD REGISTER NDCH-CUR-XX-XX-HA-Z-00_10-001.. HAZARDS THAT SHOULD BE OBVIOUS TO A COMPETENT CONTRACTOR HAVE NOT BEEN INDICATED ON THIS DRAWING. SHOULD ANY ADDITIONAL HAZARDS BE IDENTIFIED, THE CONTRACTOR SHOULD NOTIFY ALL		
HAZARD REF No.	ITEM (FEATURE, ELEMENT OR ACTIVITY)	RESIDUAL HAZARD
1.1	Services wtihin existing highway	Damage to or striking of existing services. Concrete protection may be required.
1.2	Drainage connections	Unable to connect SW and FW on site drainage to Welsh Water sewers.
2.1	Existing structures	Damage to existing listed building.
2.2	Varying ground conditons	Potential for unexpected ground conditions such as unstable ground.
2.3	Groundwater	Attenuation tank may require weighting to resist floatation.
3.1	Buried Services	Operatives exposure to live services during excavation works.
4.1	Earthworks & excavations	Potential for undermining of existing structure due to excavation works.
5.1	Ground contamination	Operatives exposure to ground contamination.



CROSS SECTION B-B

(SCALE 1:20)

TANK DETAIL SHOWN IS FOR AQUACELL PRODUCT. ALTERNATIVE PRODUCT TO BE APPROVED BY THE ENGINEER.

Rev:	Description:	Date:	By:	Chkd:
P01	STAGE 3 (S4)	03/04/20	JDB	AF

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Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Status: SUITABLE FOR STAGE APPROVAL — S4

Project: ROYAL ALEXANDRA HOSPITAL, RHYL

Drg Title: DRAINAGE DETAILS

Size:	Date:	Drawn By:	Designed By:	Checked By:
A0	03/04/2022	JDB	JDB	AF

Scale: AS SHOWN

Project No:	Originator:	Volume:	Level:	Type:	Role:	Category / Number:	Rev:
NDCH	CUR	ZZ	XX	DR	C	50_10-2001	P01

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