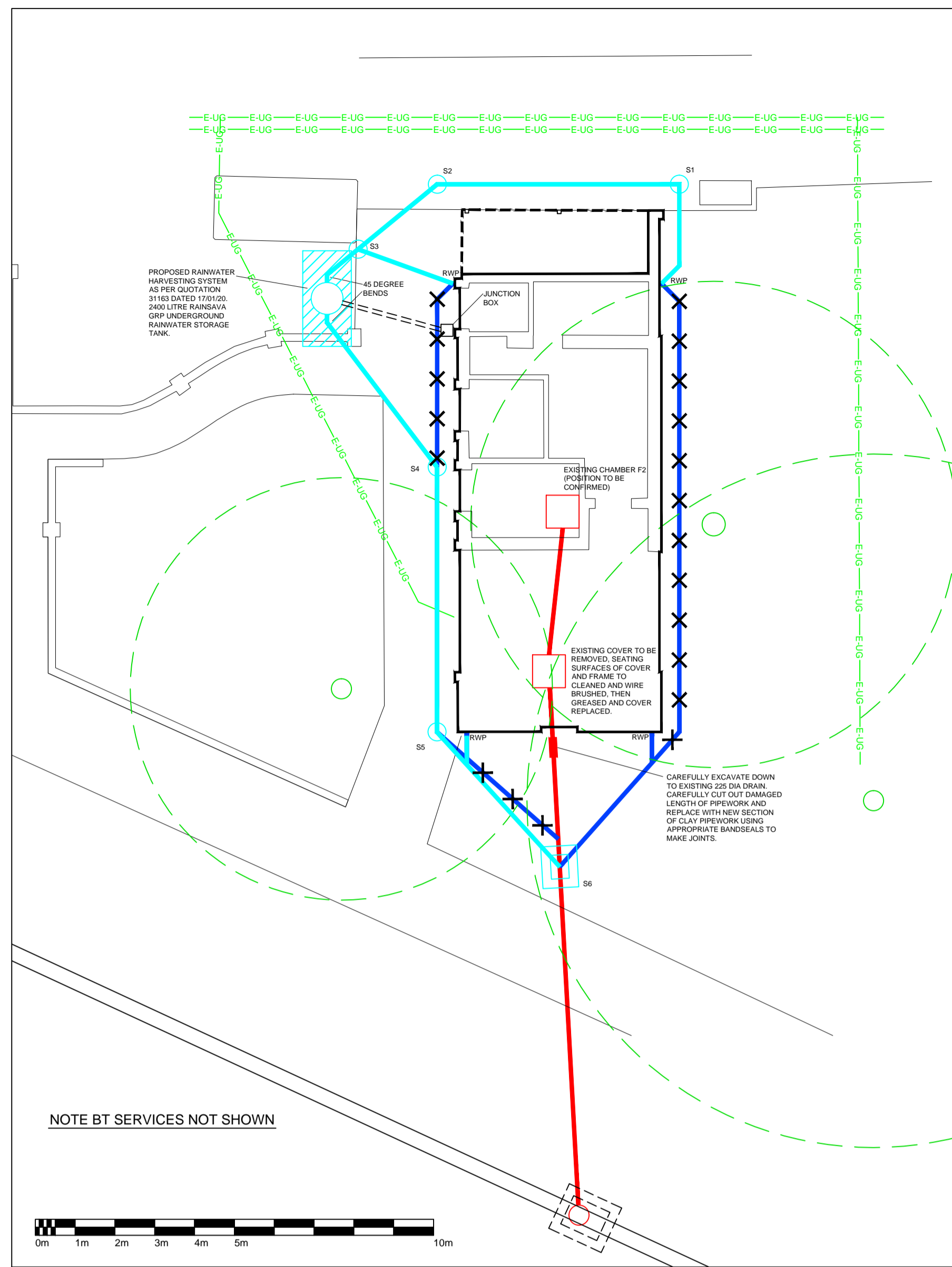


PLAN - EXISTING
SCALE 1:100



PLAN - PROPOSED
SCALE 1:100

NOTE BT SERVICES NOT SHOWN

- KEY**
- EXISTING FOUL WATER DRAIN (WITH PIPE DIA)
 - EXISTING SURFACE WATER DRAIN (ASSUMED ALL 100 DIA)
 - BUILDING OUTLINE (AT GROUND LEVEL - SEE NOTE 10))
 - EXISTING RAIN WATER DOWN PIPE
 - EXISTING TREE SHOWING APPROX EXTENT OF CANOPY
 - PROPOSED SURFACE WATER DRAIN (100 DIA) WITH 450 DIA PPIC.
 - EXISTING DRAIN TO BE ABANDONED
 - PROPOSED 100 DIA DUCT
 - SERVICES - ELECTRICITY (UNDERGROUND)
 - SERVICES - GAS
 - SERVICES - BT (UNDERGROUND)
 - SERVICES - WATER

HEALTH AND SAFETY RISKS

THIS BOX DETAILS THE HEALTH AND SAFETY RISKS WHICH ARE KNOWN TO THE DESIGNERS OF THE CULVERTS. THESE ARE PROJECT SPECIFIC AND CONCENTRATE ON SIGNIFICANT RISKS WHICH ARE NOT LIKELY TO BE OBVIOUS, ARE UNUSUAL OR DIFFICULT TO MANAGE EFFECTIVELY.

THE PRESENCE OF USED SYRINGES CAN BE EXPECTED ON THE SITE WITH THE ATTENDANT RISK OF CUTS TO UNPROTECTED HANDS AND SUBSEQUENT POSSIBLE INFECTION.

NO OTHER RISKS HAVE BEEN IDENTIFIED BEYOND THOSE WHICH WOULD BE EXPECTED BY AN EXPERIENCED CONTRACTOR.

CHAMBER REF NO	CL (m AOD)	IL (m AOD)	DEPTH TO INVERT (m)	CHAMBER TYPE	SEE DRAWING NO	COVER GRADE	COMMENTS
S1				TYPE 3	1158/00/011	D OR B (LOCKING)	SEE NOTE 3 ON DRAWING NO 1158/00/011
S2				TYPE 3	1158/00/011	D OR B (LOCKING)	SEE NOTE 3 ON DRAWING NO 1158/00/011
S3				TYPE 3	1158/00/011	D OR B (LOCKING)	SEE NOTE 3 ON DRAWING NO 1158/00/011
S4				TYPE 3	1158/00/011	D OR B (LOCKING)	SEE NOTE 3 ON DRAWING NO 1158/00/011
S5				TYPE 3	1158/00/011	D OR B (LOCKING)	SEE NOTE 3 ON DRAWING NO 1158/00/011
S6				TYPE 4	1158/00/011	D	LOCATED AT JUNCTION OF EXISTING DRAINS

CHAMBER SCHEDULE

PIPE MATERIAL	ADDITIONAL REQUIREMENTS	STRENGTH CLASS
STRUCTURED WALLED PLASTIC	BS EN 13476	NOMINAL SHORT-TERM RING STIFFNESS NOT LESS THAN 8kN/m ² (SN8).
OTHER PLASTIC	BS EN 1401, BS EN 1852 AND BS EN 13476	NOMINAL SHORT-TERM RING STIFFNESS NOT LESS THAN 4kN/m ² (SN4).
VITRIFIED CLAY	BS 65, BS EN 295	CLASS 160

ALLOWABLE PIPE MATERIALS

Notes

1. ALL DIMENSIONS ARE IN METRES AND ALL LEVELS ARE IN METRES ABOVE TEMPORARY DATUM (ATD).
2. THIS DRAWING IS BASED ON THE FOLLOWING DRAWINGS PRODUCED BY KHBT LLP ARCHITECTS AND DESIGNERS:

DRAWING NO 4046_A0100 REV 00, EXISTING GENERAL PLAN
DRAWING NO 4046_A1000 REV 00, GENERAL PLAN (PROPOSED)
3. PLEASE NOTE THAT THE TREES ARE PROTECTED AND EXTREME CARE SHOULD BE TAKEN TO AVOID DAMAGE TO THE TREES AND ESPECIALLY THEIR ROOTS. THERE WILL BE AN ARBOREAL WATCHING BRIEF ON SITE DURING THE DRAINAGE WORKS.
4. PRIOR TO STARTING THE MAJORITY OF THE WORKS A TRAIL HOLE ON THE SITE OF PROPOSED CHAMBER S4 IS TO BE UNDERTAKEN TO LOCATE THE EXISTING DRAIN AND DETERMINE THE DEPTH TO INVERT.
5. FOLLOWING ON FROM THE PREVIOUS NOTE, IF THE EXISTING DRAIN IS IN ROUGHLY THE POSITION SHOWN ON THE DRAWING AND BELOW A LEVEL OF XX.XXm ATD THE PROPOSED PIPEWORK DOWNSTREAM OF CHAMBER S4 SHOULD BE OMITTED PROVIDED THAT IT IS SHOWN THAT THE EXISTING DRAIN IS OPERATING CORRECTLY.
6. THE PROPOSED PIPEWORK MATERIAL SHOULD BE IN ACCORDANCE WITH THE TABLE. NB THIS DOES NOT APPLY TO REPAIR OF EXISTING FOUL DRAIN. ALL PROPOSED PIPEWORK TO HAVE CONCRETE BED AND SURROUND.
7. THE RAINWATER HARVESTING STORAGE TANK IS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS WITH CONCRETE BACKFILL. SEE DRAWING NO 1158/00/011.
8. PIPEWORK TO BE ABANDONED IS TO BE TREATED AS SET OUT IN APPENDIX H1-B OF APPROVED DOCUMENT H.
9. THE FOLLOWING PIPES HAVE BEEN IDENTIFIED FROM A CCTV SURVEY BUT ARE NOT SHOWN ON THE DRAWINGS AND ARE TO BE ABANDONED.

F1 - UPSTREAM, 100 DIA PVC, LENGTH 1.1m
F1 - UPSTREAM, 100 DIA PVC, LENGTH 2.8m
F1 - UPSTREAM, 100 DIA VC, LENGTH 0.9m
- ANY ASSOCIATED INTERNAL BACKDROP PIPEWORK IS ALSO TO BE REMOVED.
10. IT IS NECESSARY TO KEEP THE PROPOSED DRAINAGE PIPES CLOSE TO THE EXISTING BUILDING TO AVOID THE ROOTS OF THE PROTECTED TREES. PLEASE NOTE THAT THE BUILDING'S ROOF HAS A SIGNIFICANT OVERHANG AND CARE SHOULD BE TAKEN NOT TO DAMAGE THE ROOF DURING EXCAVATION WORK.
11. BT SERVICES NOT YET SHOWN.

Rev	Date	Drawn	Description	Chk'd	App'd
'00	'MAR 20	AJB	DRAFT FOR COMMENT		AJB

Morton-Roberts
Consulting Engineers

Morton-Roberts Consulting Engineers Limited
Sophia House, 28 Cathedral Road
Cardiff
CF11 9LJ

Tel: 02920 660283
web site: www.mortonroberts.com
e-mail: enquiries@mortonroberts.com

Client
MAINDEE UNLIMITED

Title
**PUBLIC TOILET BLOCK CONVERSION
MAINDEE TRIANGLE, CHEPSTOW ROAD
PROPOSED DRAINAGE WORKS**

Designed	AJB	Int'face Chk		Des Valid'n	
Drawn		Des Verific'n		Approved	AJB
Scale	AS SHOWN	Drawing No	1158/00/010	Rev	00