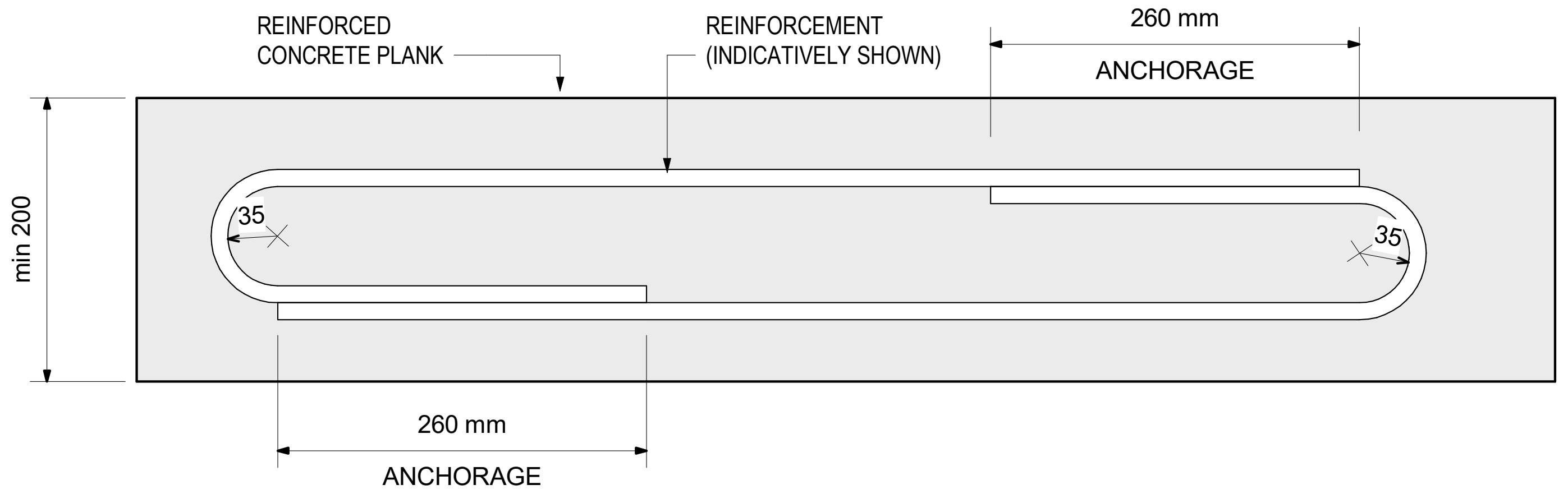
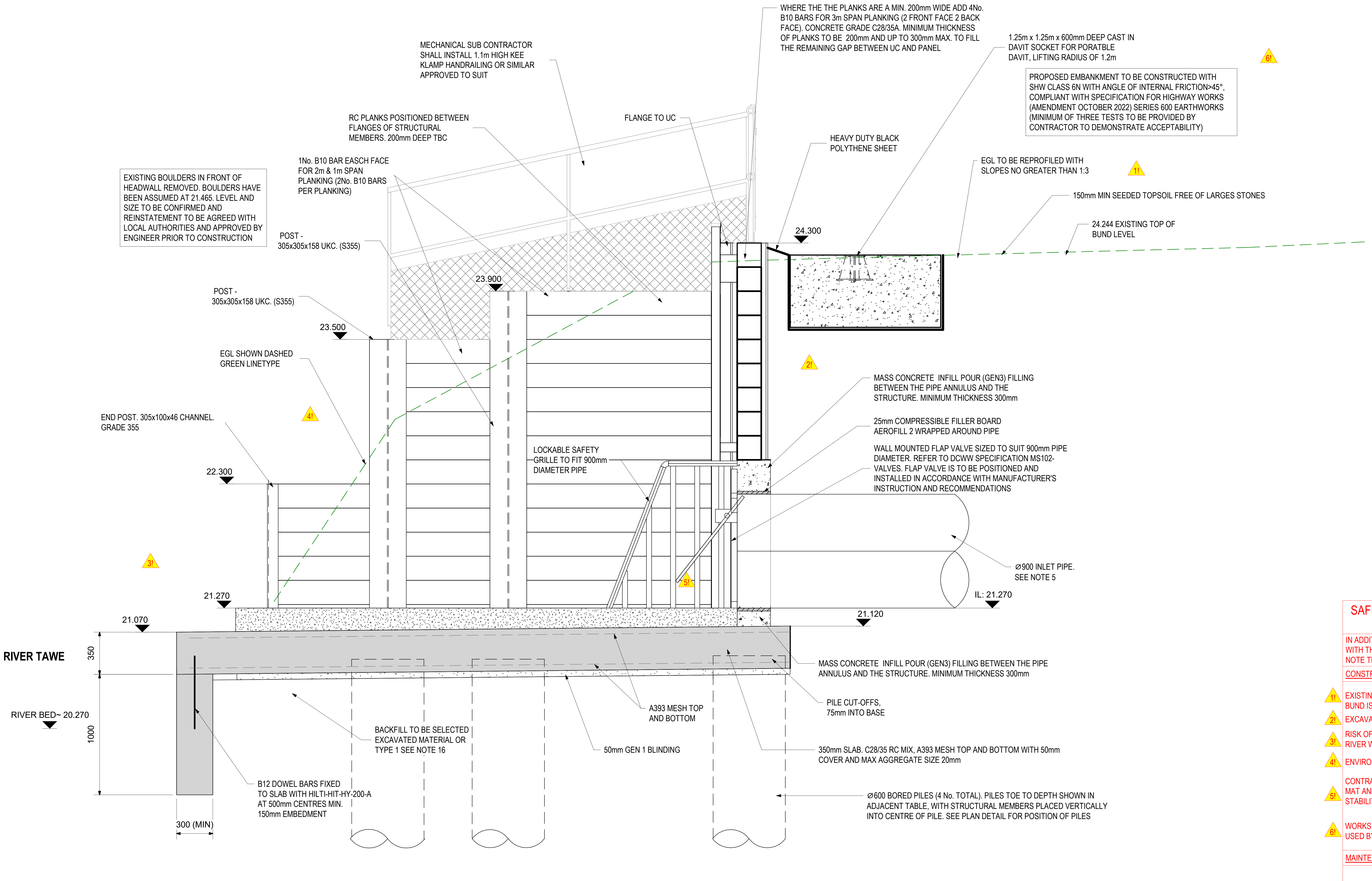


## PLAN ON REINFORCED PLANK

1 : 5

BENDING SCHEDULE FOR 3m SPAN CONCRETE PLANK. DIMENSION A IS CUT TO SUIT ON SITE FOR SHORTER PLANKS
MORGAN SINDALL TO DETERMINE FULL ORDER TO SUIT FINAL HEIGHTS OF HEADWALL

| Location | Bar mark | Type and size |  | Number of members | Number in each | Total number | Length of each bar mm | Shape code | All bending dimensions are in accordance with BS 8666 |  |  |  |  | REV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  | type | Ø mm |  |  |  |  |  | A mm | B mm | C mm | D mm | E/R mm |  |
| Concrete plank | 13 | B | 10 | 1 | 4 | 4 | 3350 | 13 | 3300 | 90 | 305 |  |  |  |



MECHANICAL SUB CONTRACTOR SHALL INSTALL 1.1m HIGH KEE KLAMP HANDRAILING OR SIMILAR APPROVED TO SUIT

WHERE THE THE PLANKS ARE A MIN. 200mm WIDE ADD 4No. B10 BARS FOR 3m SPAN PLANKING (2 FRONT FACE 2 BACK FACE). CONCRETE GRADE C28/35A. MINIMUM THICKNESS OF PLANKS TO BE 200mm AND UP TO 300mm MAX. TO FILL THE REMAINING GAP BETWEEN UC AND PANEL

1.25m x 1.25m x 600mm DEEP CAST IN DAVIT SOCKET FOR PORATBLE DAVIT, LIFTING RADIUS OF 1.2m

PROPOSED EMBANKMENT TO BE CONSTRUCTED WITH SHW CLASS 6N WITH ANGLE OF INTERNAL FRICTION>45°, COMPLIANT WITH SPECIFICATION FOR HIGHWAY WORKS (AMENDMENT OCTOBER 2022) SERIES 600 EARTHWORKS (MINIMUM OF THREE TESTS TO BE PROVIDED BY CONTRACTOR TO DEMONSTRATE ACCEPTABILITY)

RC PLANKS POSITIONED BETWEEN FLANGES OF STRUCTURAL MEMBERS. 200mm DEEP TBC

FLANGE TO UC

HEAVY DUTY BLACK POLYTHENE SHEET

1No. B10 BAR EASCH FACE FOR 2m & 1m SPAN PLANKING (2No. B10 BARS PER PLANKING)

EGL TO BE REPROFILED WITH SLOPES NO GREATER THAN 1:3

EXISTING BOULDERS IN FRONT OF HEADWALL REMOVED. BOULDERS HAVE BEEN ASSUMED AT 21.465. LEVEL AND SIZE TO BE CONFIRMED AND REINSTATEMENT TO BE AGREED WITH LOCAL AUTHORITIES AND APPROVED BY ENGINEER PRIOR TO CONSTRUCTION

POST - 305x305x158 UKC. (S355)

150mm MIN SEEDED TOPSOIL FREE OF LARGES STONES

24.244 EXISTING TOP OF BUND LEVEL

POST - 305x305x158 UKC. (S355)

EGL SHOWN DASHED GREEN LINETYPE

MASS CONCRETE INFILL POUR (GEN3) FILLING BETWEEN THE PIPE ANNULUS AND THE STRUCTURE. MINIMUM THICKNESS 300mm

25mm COMPRESSIBLE FILLER BOARD AEROFILL 2 WRAPPED AROUND PIPE

END POST. 305x100x46 CHANNEL. GRADE 355

LOCKABLE SAFETY GRILLE TO FIT 900mm DIAMETER PIPE

WALL MOUNTED FLAP VALVE SIZED TO SUIT 900mm PIPE DIAMETER. REFER TO DCWW SPECIFICATION MS102-VALVES. FLAP VALVE IS TO BE POSITIONED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION AND RECOMMENDATIONS

Ø900 INLET PIPE. SEE NOTE 5

MASS CONCRETE INFILL POUR (GEN3) FILLING BETWEEN THE PIPE ANNULUS AND THE STRUCTURE. MINIMUM THICKNESS 300mm

PILE CUT-OFFS, 75mm INTO BASE

A393 MESH TOP AND BOTTOM

BACKFILL TO BE SELECTED EXCAVATED MATERIAL OR TYPE 1 SEE NOTE 16

50mm GEN 1 BLINDING

350mm SLAB. C28/35 RC MIX, A393 MESH TOP AND BOTTOM WITH 50mm COVER AND MAX AGGREGATE SIZE 20mm

B12 DOWEL BARS FIXED TO SLAB WITH HILTI-HIT-HY-200-A AT 500mm CENTRES MIN. 150mm EMBEDMENT

Ø600 BORED PILES (4 No. TOTAL). PILES TOE TO DEPTH SHOWN IN ADJACENT TABLE, WITH STRUCTURAL MEMBERS PLACED VERTICALLY INTO CENTRE OF PILE. SEE PLAN DETAIL FOR POSITION OF PILES

## SECTION 1-1

1 : 20

0 0.1 0.2 0.3 0.4 0.5 1.0 1.5 2.0
SCALE 1:20

## NOTES:

1. ALL LEVELS & DIMENSIONS IN METRES UNLESS NOTED OTHERWISE (U.N.O).
2. REFER TO GENERAL NOTES DRAWING FOR DETAILS OF CONCRETE GRADES, COVER, BLINDING, FINISHES ETC.
3. EXISTING SERVICES TAKEN FROM AS BUILT RECORDS AND CANNOT BE RELIED UPON FOR ACCURACY. SERVICES HAVE BEEN OBSERVED ON SITE WHERE NO RECORDS ARE AVAILABLE.
4. LINE & LEVEL OF EXISTING UTILITIES TO BE CONFIRMED AT START OF CONSTRUCTION.
5. PIPE BEDDING TO BE CLASS S AS PER DCWW DETAIL SDC 2003/ 001.
6. TRENCH AND ROAD TO BE REINSTATED AS PER DCWW STANDARD DETAIL SDC 2002 SERIES.
7. ALL PIPEWORK WITHIN GRASSLAND WITH LESS THAN 0.9m COVER TO BE ENCASED IN MIN 150mm CONCRETE SURROUND AS PER SDC DETAIL 2003/ 003.
8. ALL PIPEWORK WITHIN ROAD AND VERGE WITH LESS THAN 1.2m COVER TO BE ENCASED IN MIN 150mm CONCRETE SURROUND AS PER SDC DETAIL 2003/ 003.
9. VEGETATION CLEARANCE REQUIRED FOR THE INSTALLATION OF THE NEW HEADWALL. JAPANESE KNOTWEED HAS BEEN NOTED ON THE RIVER BANKS - APPROPRIATE MANAGEMENT PLAN OF INVASIVE SPECIES IS REQUIRED BY THE NRW.
10. A FRAP IS REQUIRED PRIOR TO ANY CONSTRUCTION WORKS COMMENCING.
11. ANY TEMPORARY OR PERMANENT FOOTPATH DIVERSIONS ARE TO BE ARRANGED BY THE CONTRACTOR.
12. THE PRECISE LOCATION OF THE HEADWALL IS TO BE AGREED ON SITE WITH THE ENGINEER FOLLOWING VEGETATION CLEARANCE. ONCE AGREED, SETTING OUT INFORMATION FOR PILES/APRON CAN BE ADJUSTED.
13. CONCRETE STRENGTH CLASS: C28/35; DC CLASS: DC-2.
14. CONCRETE FOOTPATH SHOULD HAVE SLIP-RESISTANT SURFACES. SURFACES SHALL BE SCREEDED WITH A LIGHTLY BRUSHED MARKED FINISH. DEPTH OF ENGINEERED FILL TO BE DESIGNED SUBJECT TO PREVAILING GROUND CONDITIONS. STEP TO BE ARRANGED TO PREVENT PONDING OF WATER. WHERE APPROPRIATE. DIMENSIONS AND SURFACE FINISH TO MEET THE REQUIREMENTS OF BS5395-1:2010. HANDRAILS TO BE PROVIDED IN ACCORDANCE WITH THE DIMENSIONAL REQUIREMENTS OF BS8300:2009 + A2010 AND BS5395-1:2010
16. UNTIL THE PROPERTIES OF THE EXCAVATED MATERIAL ARE KNOWN, TYPE 1 MATERIAL SHOULD BE ASSUMED FOR ALL BACKFILL.

A1

C:\Users\steve.smith\DC\ACCDocs\ARUP EU Server\275281-00 Trebanos\Project Data\01 WIP Models\01.3 Revit\B16421-102503-ZZ-ZZ-M3-CA-MM6020_Prop Headwall_Planning.rvt

## REFERENCE DRAWINGS:

- B16241-103503-01-ZZ-DR-CA-CI5060 PIPE NETWORK FINAL EFFLUENT TO OUTFALL, PLAN & PROFILE
- B16421-102503-ZZ-ZZ-DR-CA-CI5010 HEADWALL GENERAL NOTES
- B16421-102503-XX-XX-SP-SA-CI5401 CONCRETE PILING SPECIFICATION
- B16241-102503-01-ZZ-DR-CA-CI5062 HEADWALL OUTFALL PLAN & DETAILS
- B16241-102503-01-ZZ-DR-CA-CI5064 HEADWALL OUTFALL SECTION 2-2
- B16241-102503-01-ZZ-DR-CA-CI5065 HEADWALL OUTFALL SECTIONS 3-3 & 4-4

## SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING:

CONSTRUCTION:

1! EXISTING GROUND STABILITY AND MAKE UP OF THE FLOOD BUND IS UNKNOWN.
2! EXCAVATED MATERIAL COULD BE CONTAMINATED.
3! RISK OF DROWNING - WORKING CLOSE TO & WITHIN THE RIVER WITH FLUCTUATING WATER LEVELS.
4! ENVIRONMENTAL RISK OF WORKING NEAR A WATERCOURSE.
5! CONTRACTOR TO DETERMINE REQUIREMENT FOR PILING MAT AND OTHER TEMPORARY WORKS AND ASSESS STABILITY OF RIVERBANK FOR THEIR SELECTED PLANT
6! WORKS LOCATED WITHING CLOSE PROXIMITY OF FOOTPATH USED BY GENERAL PUBLIC

MAINTENANCE / CLEANING / OPERATION:

DECOMMISSIONING / DEMOLITION:

REFER TO THE DESIGN RISK REGISTER FOR FURTHER DETAILS. IT IS ASSUMED THAT ALL THE WORKS ON THIS SRAWING WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WHO HAS CARRIED OUT A COMPREHENSIVE RISK ASSESSMENT.

*DWR CYMRU CYF GIVES THIS INFORMATION AS TO THE POSITION OF ITS UNDERGROUND APPARATUS BY WAY OF GENERAL GUIDANCE ONLY ON THE STRICT UNDERSTANDING THAT IT IS BASED ON THE BEST INFORMATION AVAILABLE AND NO WARRANTY AS TO ITS CORRECTNESS IS RELIED UPON IN THE EVENT OF EXCAVATIONS OR OTHER WORKS MADE IN THE VICINITY OF THE CAOMANY'S APPARATUS AND ANY ONUS OF LOCATING THE APPARATUS BEFORE CARRYING OUT ANY EXCAVATIONS RESTS ENTIRELY ON YOU. IT MUST BE UNDERSTOOD THAT THE FURNISHING OF THE INFORMATION IS ENTIRELY WITHOUT PREJUDICE TO THE PROVISION OF THE NEW ROADS AND STREETWORKS ACT 1991 AND OF THE COMPANY'S RIGHT TO BE COMPENSATED FOR ANY DAMAGE TO ITS APPARATUS.*

*DWR CYMRU CYF HAS NO DUTY TO IDENTIFY PRIVATE APPARATUS AND THE INFORMATION AS TO THE POSITION OF THE PRIVATE APPARATUS IS GIVEN BY WAY OF GENERAL GUIDANCE ONLY ON THE STRICT UNDERSTANDING THAT IT IS BASED ON THE BEST INFORMATION AVAILABLE AND NO WARRANTY AS TO THE CORRECTNESS IS RELIED UPON. NOT ALL PRIVATE APPARATUS IS IDENTIFIED BUT THIER PRESENCE SHOULD BE ANTICIPATED.*

| P01 | FOR PLANNING | SSJ | GS | BMB | 04/06/24 |
|---|---|---|---|---|---|
| Rev. | Description. | Drawn. | Chkd. | Appd. | Issue Date. |

**Capital Delivery Alliance**
**Cynghrair Cyflawni Cyfalaf**
Ty Awen, Spooner Close, Coed Kernew, Newport, NP108FZ

| | | |
|---|---|---|
| Project Name. | TREBANOS WwTW | |
| Drawing Title. | HEADWALL OUTFALL SECTION 1-1 | |
| Suitability. | FOR PLANNING | Suitability Code<br>PL |
| Originator.<br>SSJ | Designer.<br>GS | Date.<br>MARCH 24 |
| Internal Project Number.<br>275281 | Scale.<br>As indicated@ A1 | Rev.<br>P01 |
| Drawing Number. | B16241-102503-01-ZZ-DR-CA-CI5063 | |

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