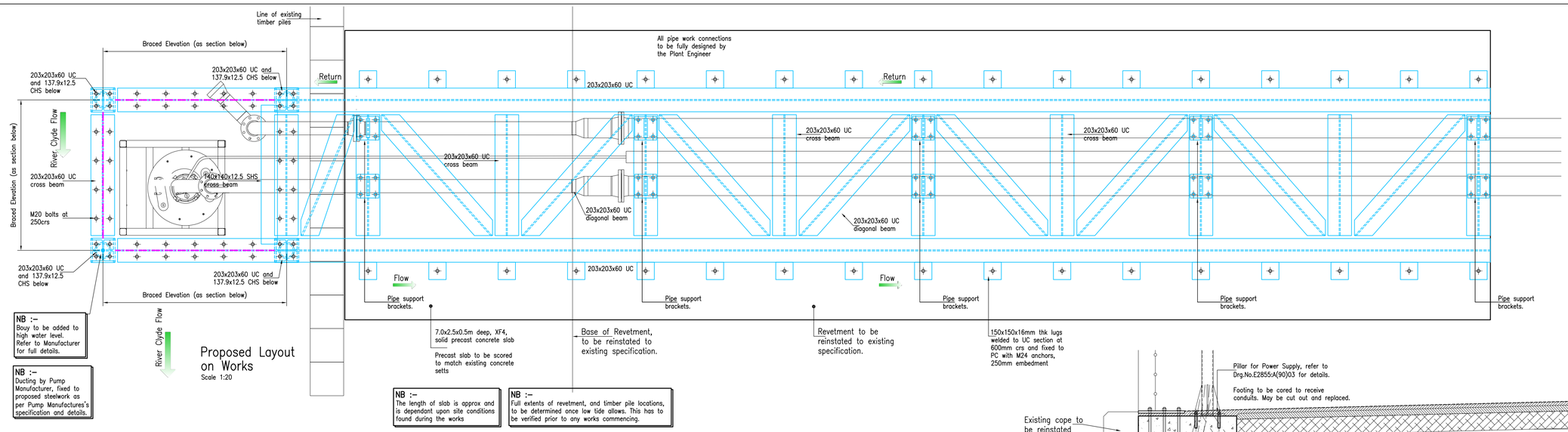



NB :–
Bouy to be added to high water level. Refer to Manufacturer for full details.

NB :–
Ducting by Pump Manufacturer, fixed to proposed steelwork as per Pump Manufactures's specification and details.

## Proposed Layout on Works
Scale 1:20

NB :–
The length of slab is approx and is dependant upon site conditions found during the works

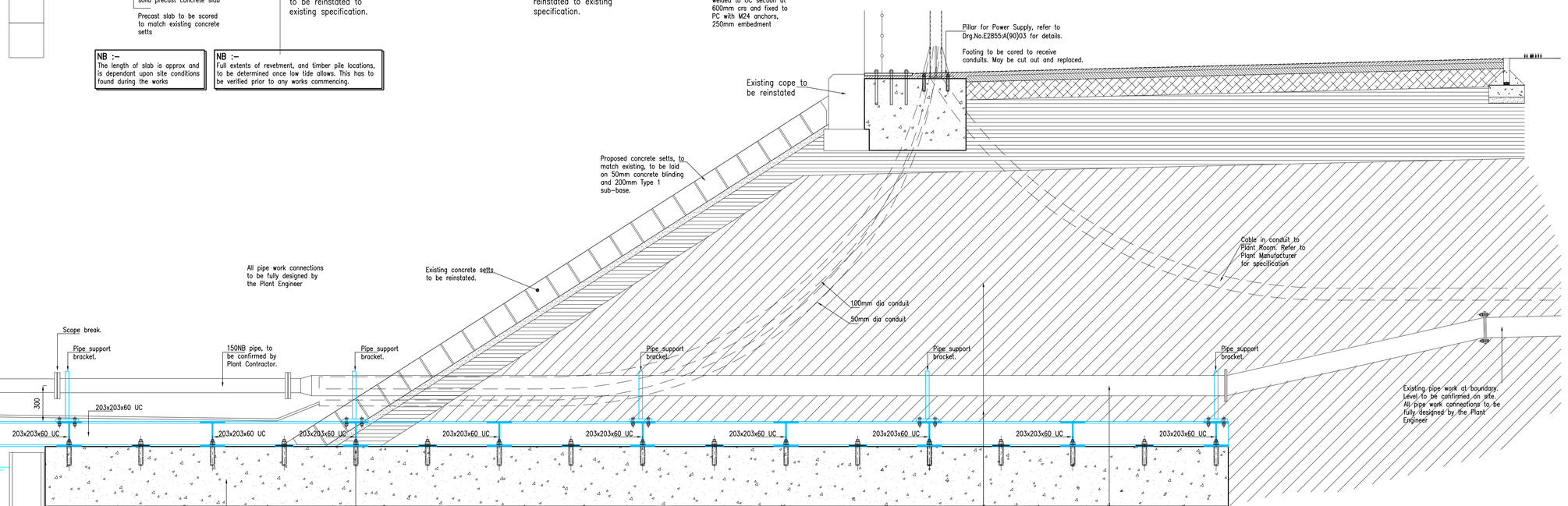
NB :–
Full extents of revetment, and timber pile locations, to be determined once low tide allows. This has to be verified prior to any works commencing.

## Notes:

### 1. General

1. Refer to Drawing Number N(00)01 for General Specification Notes.
2. Drawings to be read in conjunction with CDP structural design philosophy and specifications.
3. Grontmij Consulting Engineers were commissioned by Glasgow City Council to carry out a Desktop Study, Ground Investigation Report and Inspection and Assessment of the Revetment and Quay wall between Water Row and Warlock Street.
   The purpose of which was to provide remedial options to the Revetment that will provide a structurally stable construction to allow the currently disused walkway, supported by the Revetment, to be reopened.
   The Boreholes and trial Pit locations shown opposite were instructed by Grontmij and the Contractor should familiarise themselves with the contents of this report and all other reports carried out by Grontmij on behalf of Glasgow City Council.
4. Drawing to be read in conjunction with all other Architects and Engineers drawings and specifications.
5. Do not scale from drawings.
6. All Setting out is to be in accordance with the Architects drawings.
7. All dimensions in millimetres unless noted otherwise.
8. Any discrepancies between structural and architectural setting out dimensions must be brought to the attention of the Architect and Engineers.

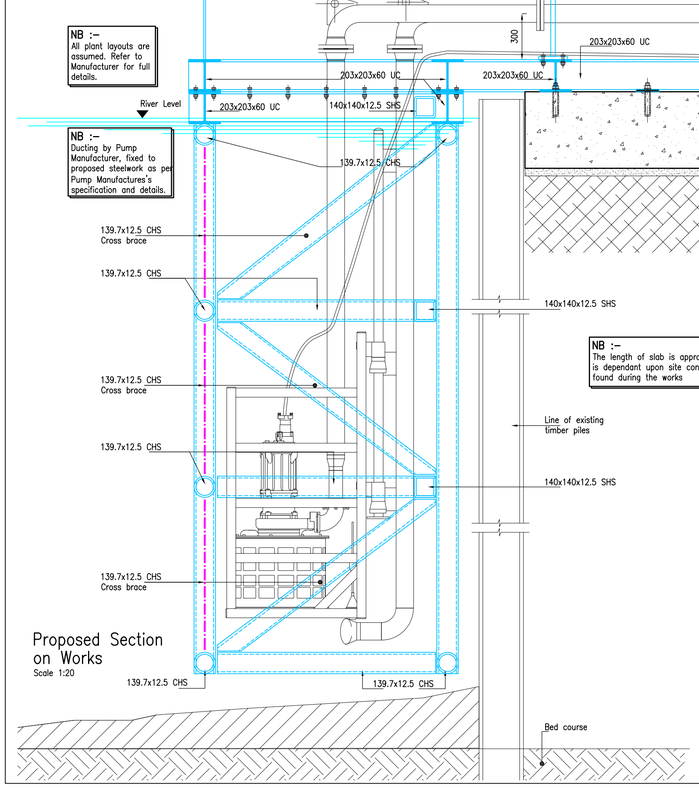
| | Environment Category C5 | | | | | |
|---|---|---|---|---|---|---|
| System Number | E8 | | E9 | | E11 | |
| Anticipated durability of the coating system in years (notes 1 & 2) | 15 | | 20 | | 20+ | |
| Nearest equivalent BS EN ISO 12944 | – | | S5.06 | | – | |
| Surface Preparation (BS 7079: Part A1) | Blast clean to Sa 3 | | Blast clean to Sa 2½ | | – | |
| Shop applied Coatings (note 4) | Sprayed aluminium to BS EN 22063 (note 7). | 150µm | Zinc rich epoxy primer (note 8). | 40µm | Hot dip galvanized to BS EN ISO 1461 (note 9).Mordant wash. | |
| | Zinc phosphate epoxy sealer coat | 50µm | High build epoxy MIO (one or two coats) | 200µm | Epoxy primer | 40µm |
| | High build epoxy MIO | 100µm | | | High build epoxy MIO | 100µm |
| Site applied Coatings | Recoatable polyurethane finish | 60µm | High solid aliphatic polyurethane finish | 80µm | Recoatable polyurethane finish | 60µm |
| Approximate cost £/m² (note 5) | 30.00 | | 15.00 | | 24.00 | |




NB :–
Bouy to be added to high water level. Refer to Manufacturer for full details.

NB :–
All plant layouts are assumed. Refer to Manufacturer for full details.

NB :–
Ducting by Pump Manufacturer, fixed to proposed steelwork as per Pump Manufactures's specification and details.




## Proposed Section on Works
Scale 1:20

NB :–
The length of slab is approx and is dependant upon site conditions found during the works

NB :–
Full extents of revetment, and timber pile locations, to be determined once low tide allows. This has to be verified prior to any works commencing.

| Class Designation | Class Description | Information examples applicable in the United Kingdom |
|---|---|---|
| >XF4< | High water saturation with de-icing agent or sea water | Concrete surfaces subjected to frequent splashing with water and exposed to freezing.<br>Horizontal concrete surfaces, such as roads and pavements, exposed to freezing and de-icing salts either directly or as spray or run-off.<br>Concrete surfaces subjected to frequent splashing with water containing de-icing agents and exposed to freezing. |

| Corrosion Induced by Chlorides From Sea Water (XS Classes). (where concrete containing reinforcement or other embedded metal is subject to contact with sea water or airborne salt originating from sea water). | | |
|---|---|---|
| XS1 | Exposed to airborne salt but not in direct contact with sea water. | External reinforced and prestressed concrete surfaces in coastal areas. |
| XS2 | Permanently submerged. | Reinforced and prestressed concrete surfaces completely submerged or remaining saturated, e.g. concrete below mid-tide level. |
| >XS3< | Tidal, splash and spray zones. | Reinforced and prestressed concrete surfaces in the upper tidal zones and the splash and spray zones, including exposed soffits above sea water. |

## Revetment Ground Stabilisation–(If Required) Construction sequence

1. Prepare a level foundation as required by the Contract.
2. Cut and position the base layer of grid. Adjacent lengths of grid are butt jointed at the slope face. In general, the grid reinforcement should not be folded up the face on slopes inclined up to 45° to the horizontal. Grids should be installed to the levels, lengths and orientations as shown on the drawings.
3. Place and compact the fill in layers to the Contract's specification incorporating primary reinforcement and secondary reinforcement as appropriate. Generally the vertical spacing between reinforcement layers should not exceed 0.5m. Fill should be placed by plant such as an excavator bucket or a dozer with an opening bucket which causes the fill to cascade onto the grids. A 150mm thick cover of fill must be maintained between the tracks of any plant and the grid to avoid damage.
4. Compaction plant may operate to the edge of the fill and the embankment may be overfilled and the face trimmed back in a conventional manner.
5. On completion of the filling operation the slope surface shall be covered in compliance with the landscaping requirements.
6. Surface protection for vegetated slopes shall then be provided by one of two methods.
   Either:
   Tensar Mat is rolled down the slope face lapping adjacent 4.5m wide rolls by a minimum of 100mm. Tensar Pegs shall be used to fix the mat at 1.0m centres along the laps. Roll ends shall be buried at the shoulder and toe respectively in shallow trenched approximately 450mm wide by 250mm deep. The Tensar Mat shall then be filled with a friable topsoil brushed into the mat and either sown with selected grass seed mix, or planted with ground cover species.

Contact Tensar International Limited if more specific advice is required.

## Compaction of 6F2

The site should be cleared to formation level and the material adjacent to the retaining wall should be battered back at a safe angle of repose (approx. 30 degrees) and kept 1m away from the walls foundation. The Engineer should be invited to site to identify any weak zones or hard spots in the formation. The formation should be proof rolled and only once the Engineer has inspected and approved the entire formation level, can the embankment be constructed.

A layer of Tensar reinforcement should be installed on the subgrade to the manufacturers recommendations, if required. Subsequently 6F2 should be laid in 150mm layers and compacted by a smooth wheeled roller in accordance with the Manual of Contract Documents for Highway Works Volume 1 Specification for Highway Works (please see table below). Primary and secondary Tensar reinforcement should be laid at 300mm c/c in the manner indicated and in accordance with the manufacturers guidelines.

Extract – Table 6/4: Method of Compaction for Earthworks Materials: Plant and Methods. This table is to be read in conjunction with the Manual of Contract Documents for Highway Works Volume 1 Specification for Highway Works – Sub-Class 612.10.

| Type of Compaction Plant | Ref No. | Category | Method 6 | | |
|---|---|---|---|---|---|
| | | | N for D=110mm | N for D=150mm | N for D=250mm |
| Smoothed wheeled roller (or vibratory roller operating without vibration) | 1 | Mass per metre width of roll: over 2100kg up to 2700kg | Unsuitable | Unsuitable | Unsuitable |
| | 2 | over 2700kg up to 5400kg | 16 | Unsuitable | Unsuitable |
| | 3 | over 5400kg | 8 | 16 | Unsuitable |

D = Maximum depth of compaction layer, N = Minimum number of passes

## Paint Specification

1. Coating system durability given in the table is based on practical experience. It is the expected life, in years, before first major maintenance (see maintenance below). this is taken as degradation level R13 from ISO 4628 Part 3 (1% of surface area rusted). It should be noted that this does not imply a guarantee of life expectancy.
2. The durability of galvanized steelwork is derived from figures in BS EN ISO 14713.
3. Where painting of galvanized steelwork is required for aesthetic or other reasons: suitable systems from BS EN ISO 12944 may be used.
4. The thickness values given for primers are the total thickness used and may include a pre-fabricated primer. For example – 80µm can be in one coat or as 20µm pre-fabrication primer plus 60µm post-fabrication primer.
5. Costs given here are for guidance only. There will be considerable variation that may typically be ±50% for a variety of reasons. Quotations should be obtained before making the final selection of the protective treatment. The indicative costs given are for 2004. They include estimates for material and labour but exclude taxes. The average surface area / tonne is assumed to be 25m²/tonne.
6. It should be noted that the colour range of micaceous iron oxide (MIO) is limited. In some counties, the use of sprayed zinc or alloys of zinc and aluminium may be preferred (BS EN 22063).
7. The zinc rich primer applied at 80µm would increase the durability of the system by approximately 5 years and increase the cost by £2.00/m².
8. For steelwork 6mm thick or greater, the minimum average coating thickness is 85µm.

This drawing is to be read in conjunction with the following Star Refrigeration Ltd drawings:
- 100796–011 Rev A (Received on 12/07/2022)

| Rev. | Description | Int. | Date |
|---|---|---|---|
| B | Client's Title Amended to Suit | RTH | 01/02/23 |
| A | Drawing updated to reflect comments from Main Contractor | RTH | 24/01/23 |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Glasgow ■ Dunblane □


Client
Govan Heritage Trust

Job Title
Govan Walkway
River Source Heat Pump

Drawing Title
Revetment Replacement Details
Option 1

| Scale | Drawn | Date |
|---|---|---|
| 1:20 | RTH | 08/12/2022 |
| | Checked | Date Checked |
| | TM | 08/12/2022 |

A B C D E F G H J K L M N P Q R S T

E 2855 : A(90)10

ISO 9001 REGISTERED FIRM

This is one of the Drawings referred to in the Application.
[Redacted]
Signed . . . . . pp CDP
Date . . 07 02 2023 . . . . .

FILE A1