

AGENDA ITEM 7

APPENDIX I

PLANS AND ILLUSTRATIONS



NOTES:

Plan showing development and ownership boundaries, including key items of infrastructure.

- Ownership Boundary
- Development Boundary
- - - Work Corridor

Development Area

Abstraction Construction Area:
= 10 x 5 m
= 50m²

Penstock Excavation (within 3m works corridor)
= 640 x 1 m
= 640m²

Turbine House Construction Area:
= 6 x 6 m
= 36m²

Electrical Cable (within 1m works corridor):
= 70 x 0.3 m
= 21m²

Laydown Area:
= 10 x 8 m
= 80m²

Temp Construction Track (4m works corridor):
= 2 x 85 m
= 170m²

Total Development Area = 997m²

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Rev.	Drawn	Checked	Description	Date
02	LS	TFS	Updated to include extended working corridor as discussed with Planning Officer	13/07/16



Project

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Drawing Description
Development and Ownership Boundaries

1:2500

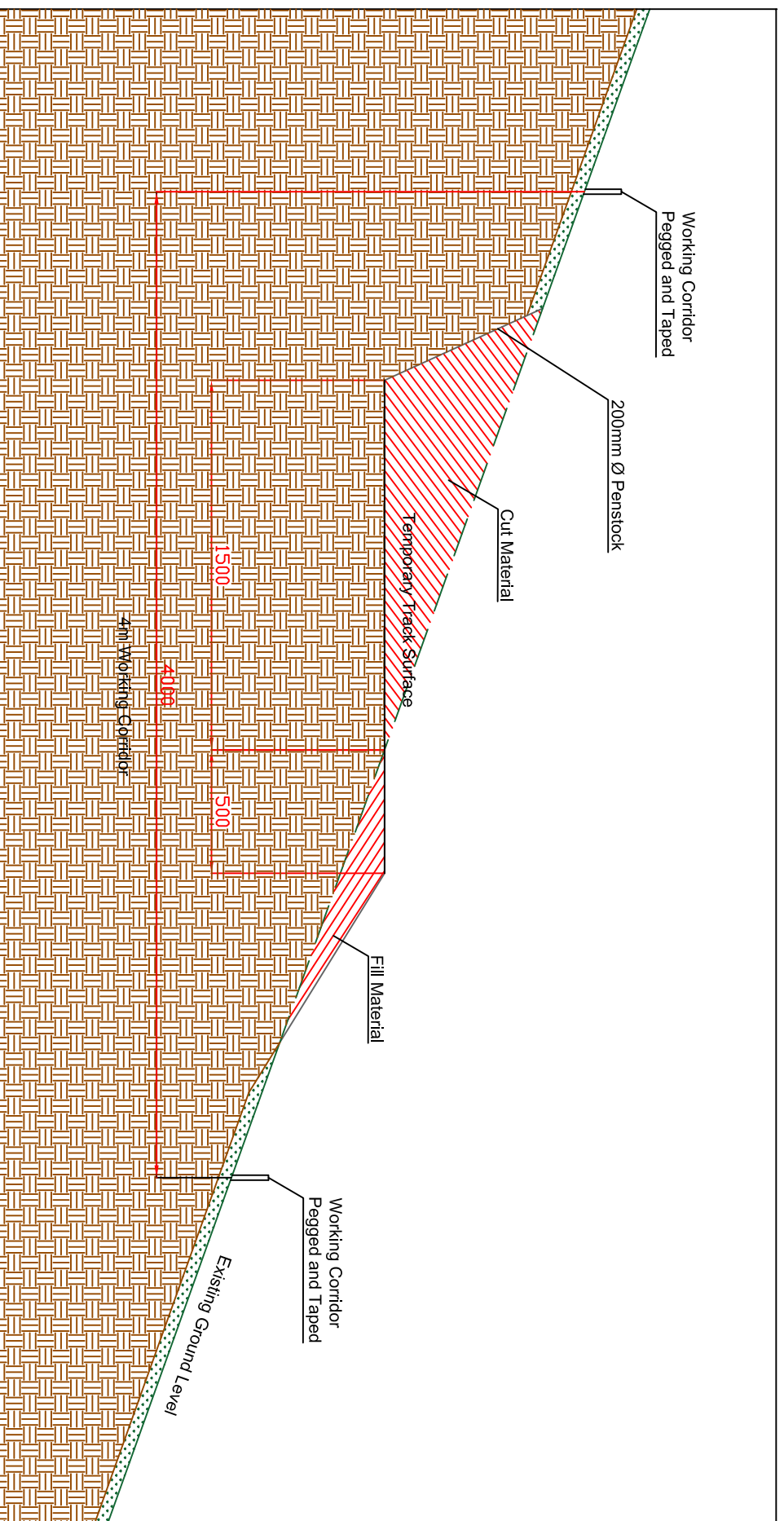
Drawn (Inlt./date)	Checked (Inlt./date)
LS 14/04/16	TFS 14/04/16

Scale & sheet size
1:2500 @ A3

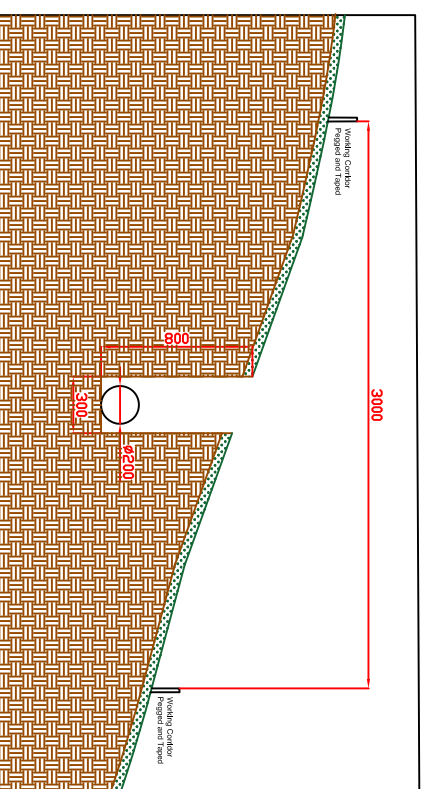
Dimensions
m

Drawing No. 049-06-DWG06-REV02

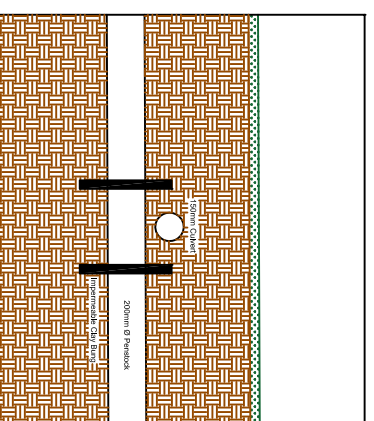
NOTES:
Additional Cross Sections and Details as requested.



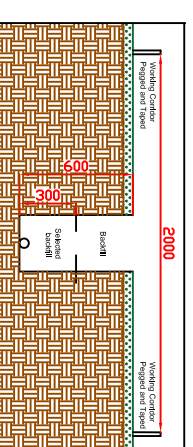
Temporary Track and Working Corridor 1:25 @ A3



Penstock Route and Working Corridor
1:40 @ A3



Culvert Cross Section
1:40 @ A3



Cable Route and Working Corridor
1:40 @ A3

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Rev.	Drawn	Checked	Description	Date
03	LS	TFS	Updated to show working corridor on penstock and cable routes	27/07/16
02	LS	TFS	Updated to show working corridor	26/07/16



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Drawing Description
Cross Sections

Drawn (Inlt./date)
LS 05/07/16

Checked (Inlt./date)
TFS 05/07/16

Scale & sheet size
As Stated

Dimensions
mm

Drawing No.
049-06-DWVG08-REV03

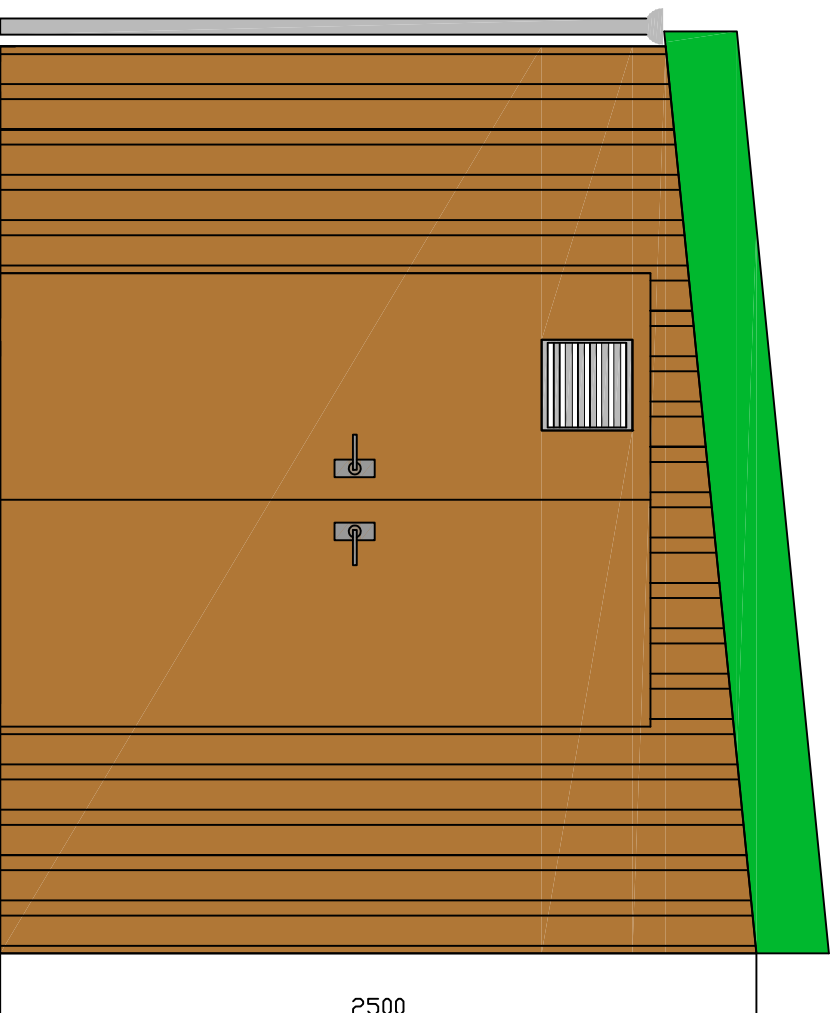
NOTES:

Set of elevations showing external finish of proposed turbine house:

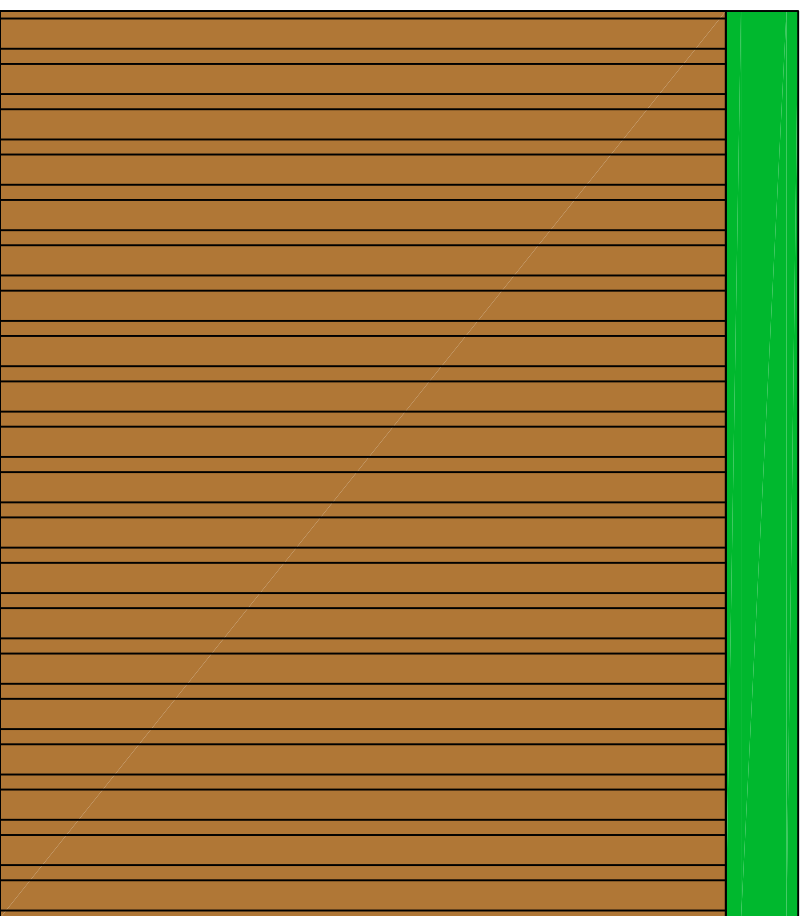
1. Batten on board timber wall construction
2. 2 No. 300x300mm fixed ventilation grills.
3. 200mm flashing to roof edges.
4. Gutter fitted to low side.
5. Double personnel door with lock.
6. Profile sheet roofing in RAL 6009 Fir Green or RAL 7016 Anthracite Grey as per planning condition.



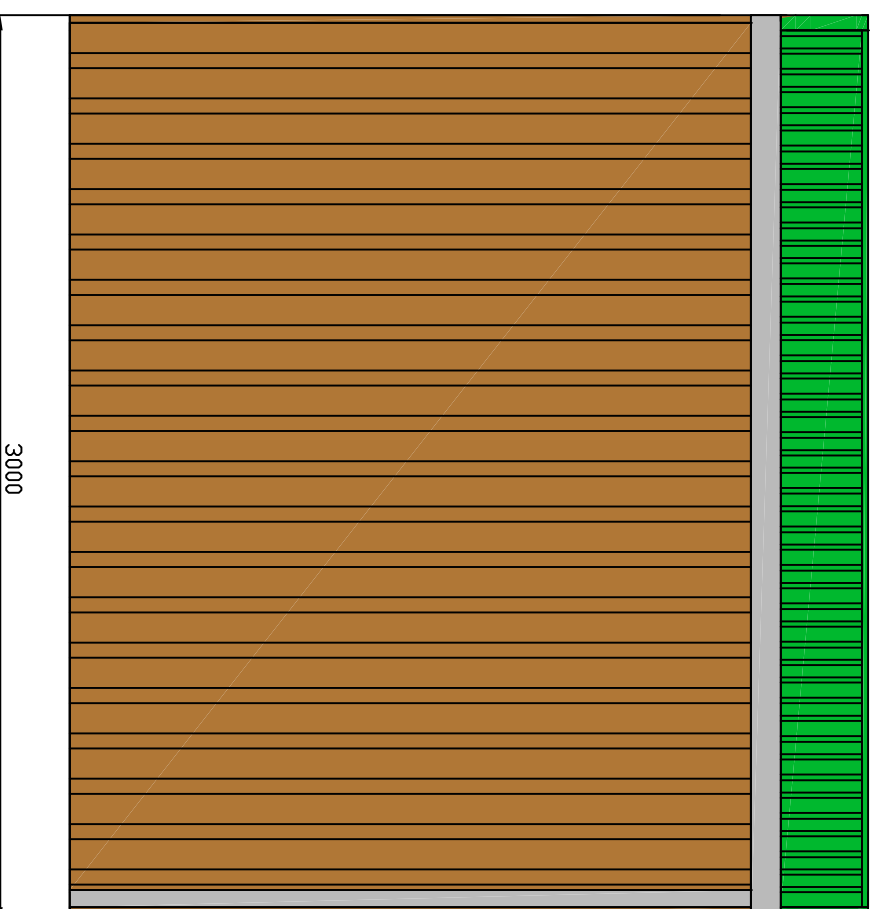
END ELEVATION



END ELEVATION



REAR ELEVATION



FRONT ELEVATION

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Rev.	Drawn	Checked	Description	Date
02	LS	TFS	Notes updated to reflect planning condition on roof material	13/07/16



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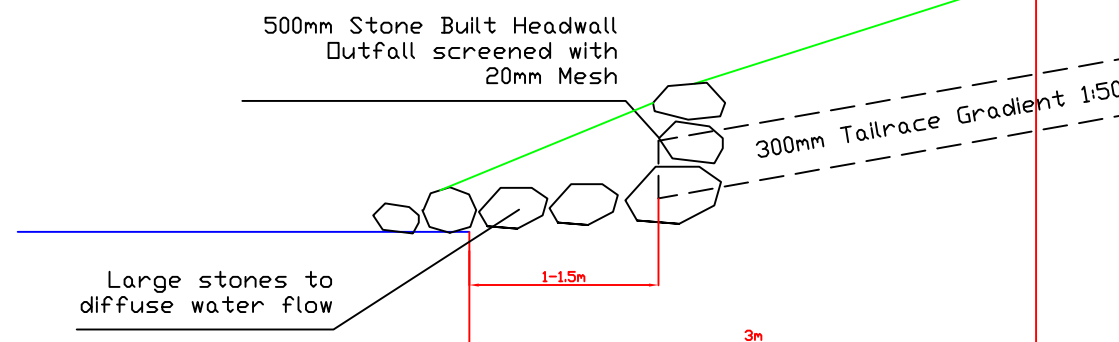
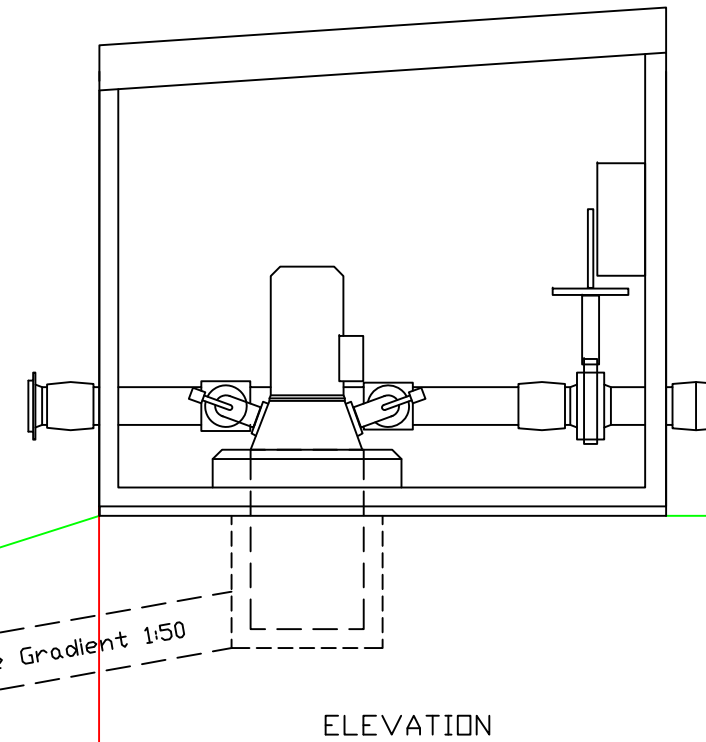
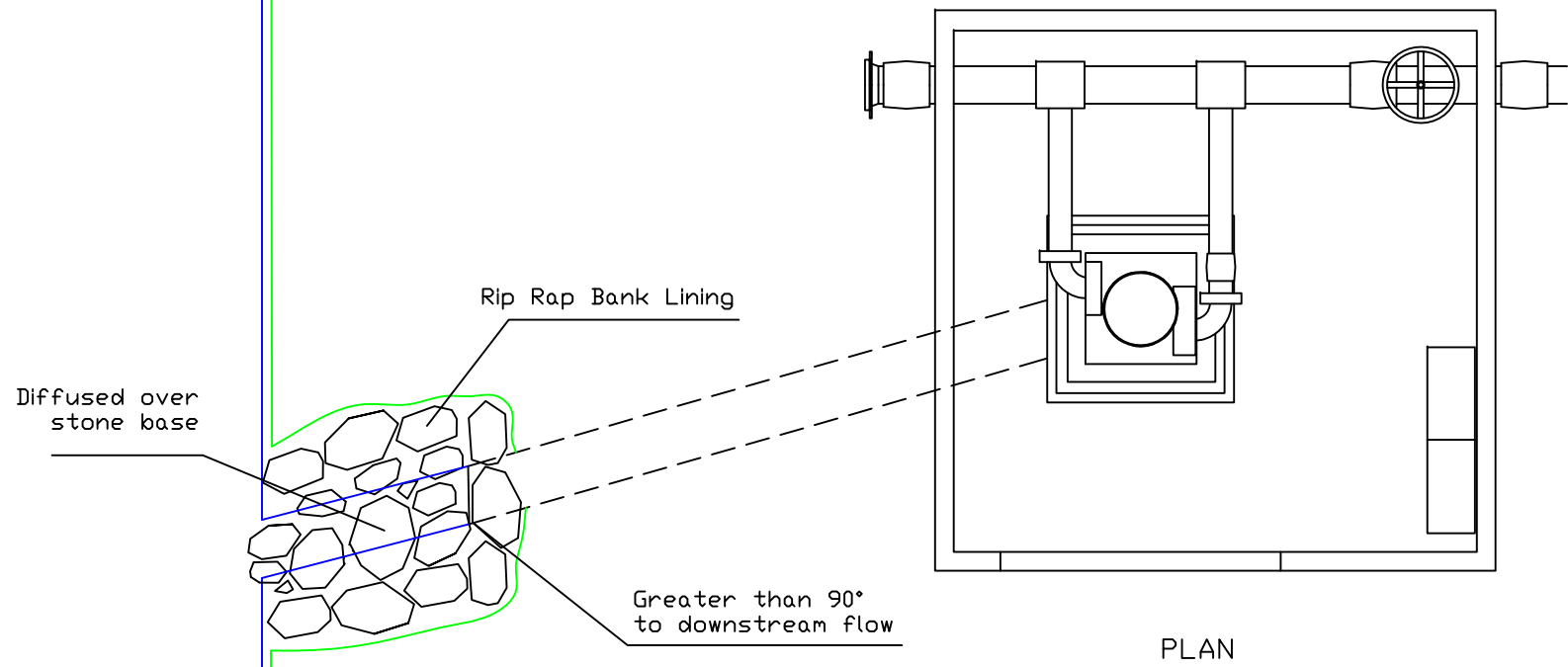
Drawing Description

Proposed Turbine House

Drawn (Init./date)	Checked (Init./date)
LS 10/10/3/16	TFS 10/03/16

Scale & sheet size	Dimensions
1:25 @ A3	mm

Drawing No. 049-06-DWVG03-REV02



NOTES:

Constructed in line with SEPA's Guidance on Intakes and Outfalls.

1. Outfall screened with 20mm mesh.
2. Angle of discharge greater than 90° to downstream flow.
3. Rock Rip Rap bank lining around outfall.
4. Stone built headwall around end of outfall pipe.
5. Flow discharged over large rocks to diffuse flow prior to entering burn.

Rev.	Drawn	Checked	Description	Date



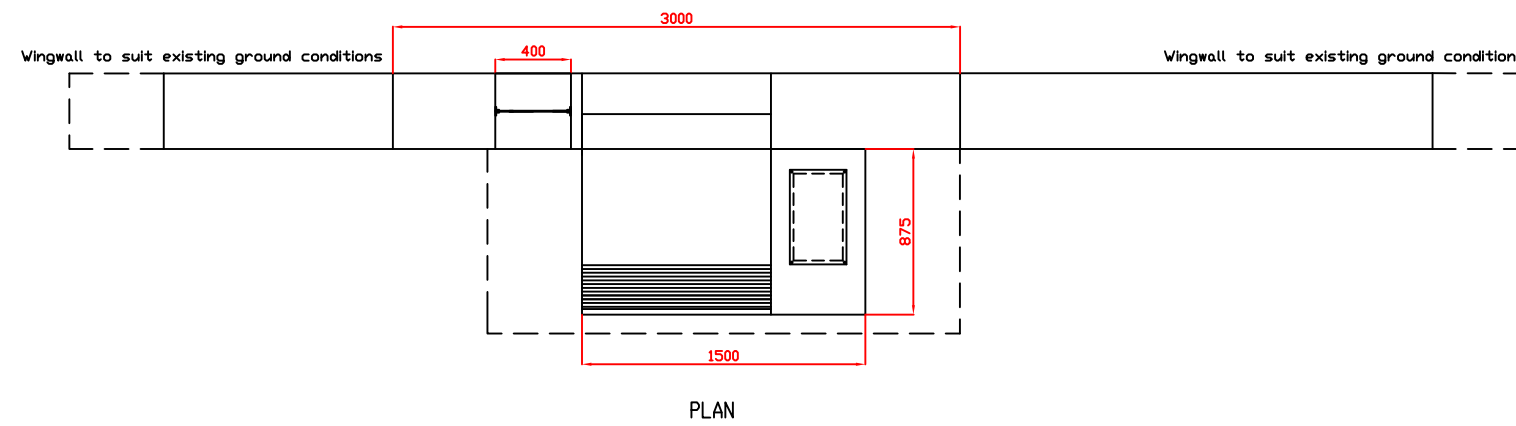
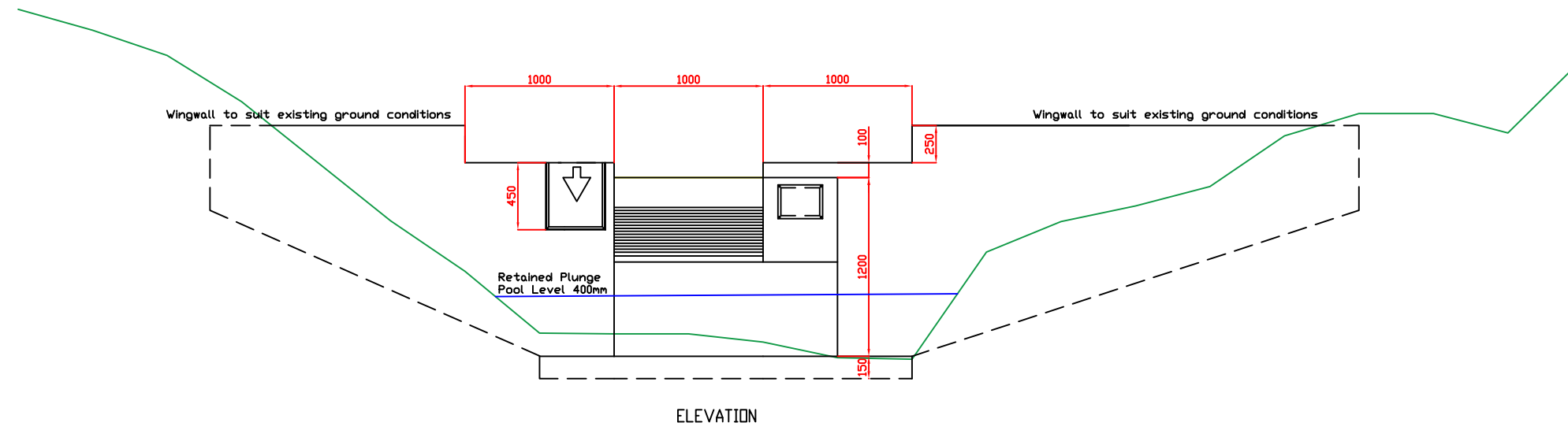
Project
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Drawing Description
Proposed Outfall Arrangement

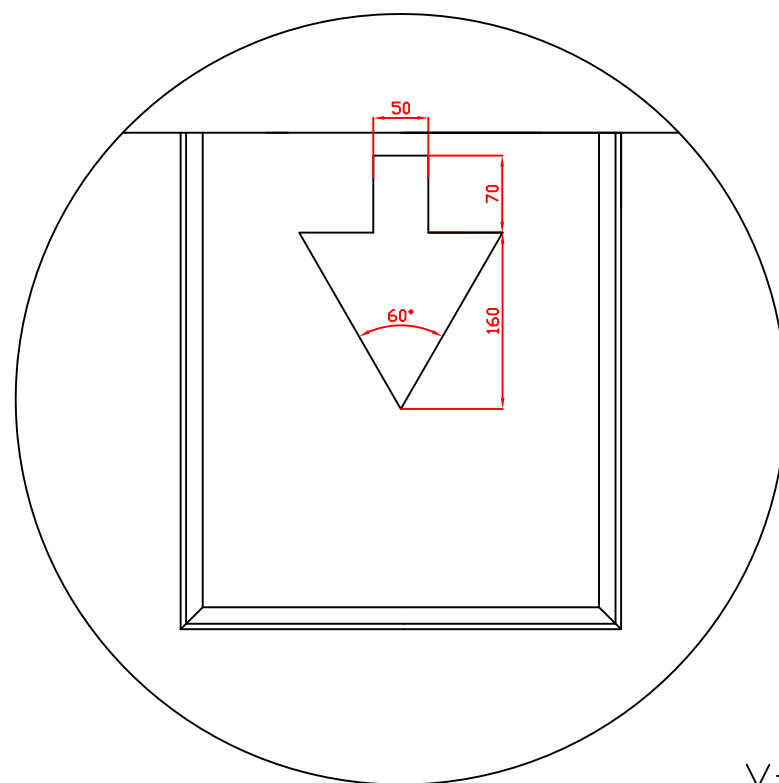
Drawn (init./date) LS 10/03/16	Checked (init./date) TFS 10/03/16
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Scale & sheet size 1:25 @ A3	Dimensions mm
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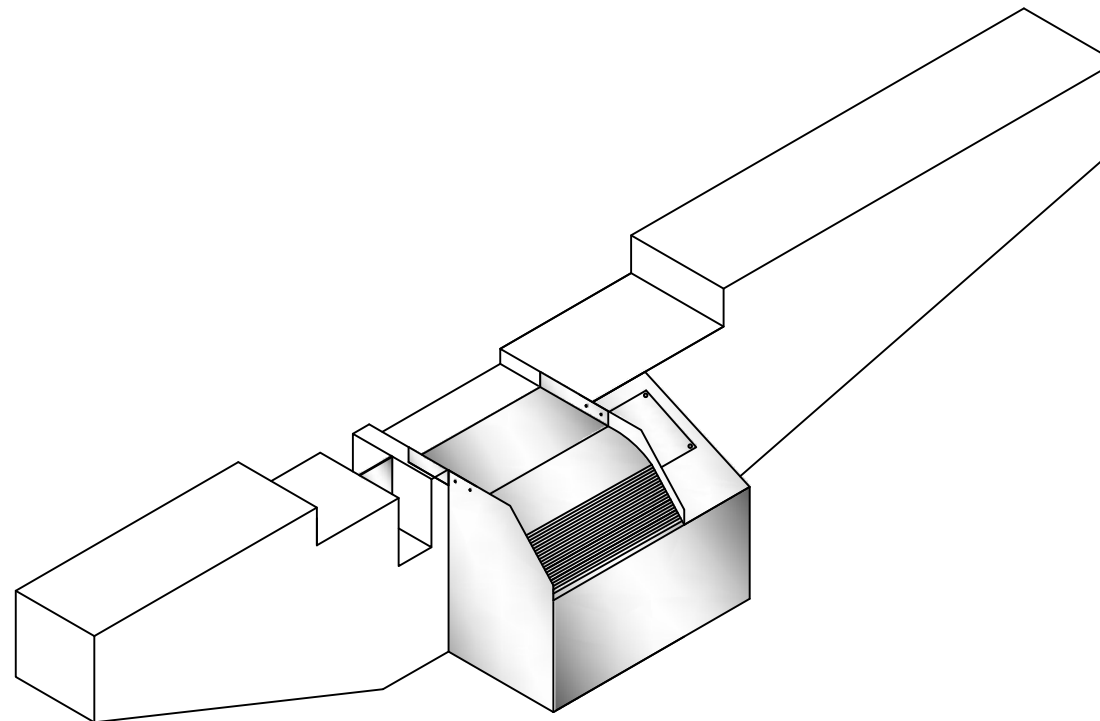
Drawing No. **049-06-DWG04-REV01**



Scale 1:40 @ A3



V-Notch Detail
Not to Scale




3D render for illustrative
purposes, Not to Scale

NOTES:

Plan and Elevation of proposed abstraction. Single wall concrete weir fitted with stainless steel abstraction box on downstream face. Stainless steel Coanda style screen fitted to abstraction box.

1. Coanda screen 1000mm x 400mm, 1.5mm wires, 1mm gaps, 5° wire tilt, 55° inclination.
2. Screen approach weir 1000mm x 100mm to allow turbine design flow to pass. Design flow = 42l/s, weir passes 54l/s to allow for losses.
3. Overflow weir 3000mm x 250mm to allow for spate flows $1.5 \times Q_{0.1} = 580l/s$.
4. Removable stainless steel HOF plate, designed to allow $Q_{90} = 8l/s$ to pass prior to abstraction commencing, increasing to $Q_{80} = 10l/s$ when upstream flow exceeds Q_{30} (32l/s).
5. Wingwalls to be constructed to suit existing ground conditions.

Rev.	Drawn	Checked	Description	Date
				
Project				
049 Glenmuick				
Drawing Description				
Proposed Abstraction				
Drawn (init./date)			Checked (init./date)	
LS 09/03/16			TFS 09/03/16	
Scale & sheet size			Dimensions	
As Stated			mm	
Drawing No.				
049-06-DWG02-REV01				

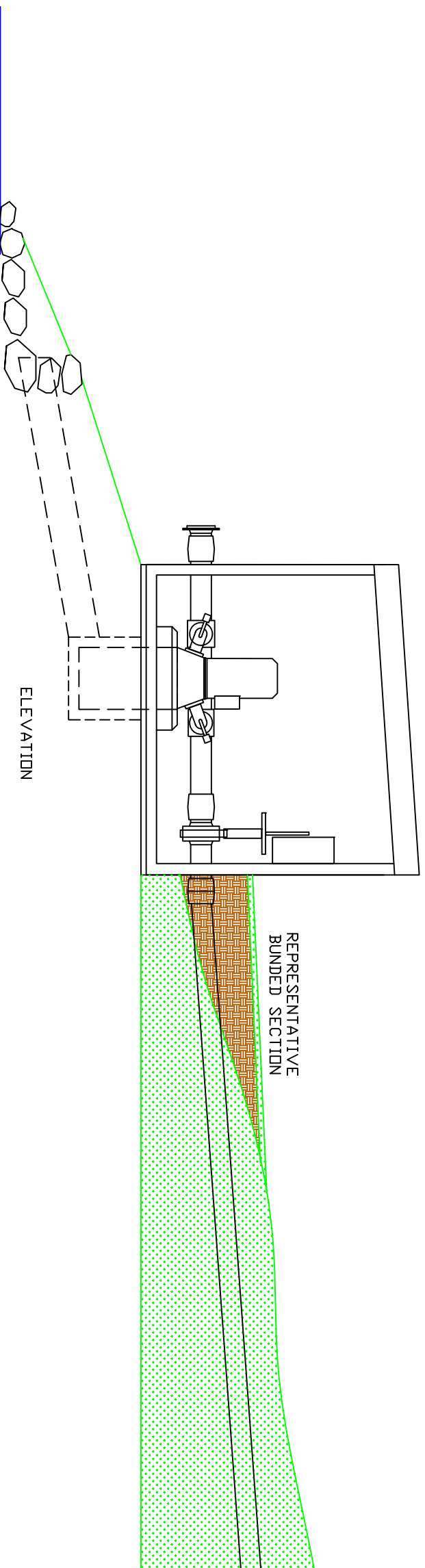
NOTES:

Representative drawing showing example of earth bunding of penstock approaching turbine house.

Length of bunding will be kept to minimum and tied into existing ground levels.

Material excavated during turbine house installation will be used to form bund and turf layer.

Given the topography of the ground in the location of the turbine house, the penstock is likely to exit the bank directly into the turbine house with very little requirement for bunding.



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Rev.	Drawn	Checked	Description	Date



Project

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Drawing Description

Example Bunding

Drawn (Inlt./date)	Checked (Inlt./date)
LS 13/07/16	NS 13/07/16

Scale & sheet size	Dimensions
1:50 @ A3	mm

Drawing No. **049-06-DW/G09-REV01**



