



# Agenda item 6

## Appendix 1b

2025/0300/DET

Plans



- NOTES:  
 Key:
- Ownership Boundary
  - Development Boundary
  - Development Boundary with no works proposed
  - Existing Track

Ownership Boundary is outwith the area of the drawing

- Development Area
- Intake 1 - 7m x 5m = 35m<sup>2</sup>
  - Intake 2 - 7m x 3m = 21m<sup>2</sup>
  - Penstock - 782m x 1m = 782m<sup>2</sup>
  - Transfer Pipe - 170m x 1m = 170m<sup>2</sup>
  - Turbine House - 6m x 6m = 36m<sup>2</sup>
  - Outfall - 16m x 1m = 16m<sup>2</sup>
  - Cable Run - 565m x 0.3m = 169.5m<sup>2</sup>
  - Laydown Area - 20m x 10m = 200m<sup>2</sup>
- Total Working Area = 1429.5m<sup>2</sup>
- Total Development Boundary Area (including area with no works) = 83,375m<sup>2</sup>

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Rev.	Drawn	Checked	Description	Date
03	LS	LS	Updated drawing format to display single red line boundary	06/11/25
02	KM	LS	Updated to show location for the detailed site plans and updated turbine house area	17/10/25



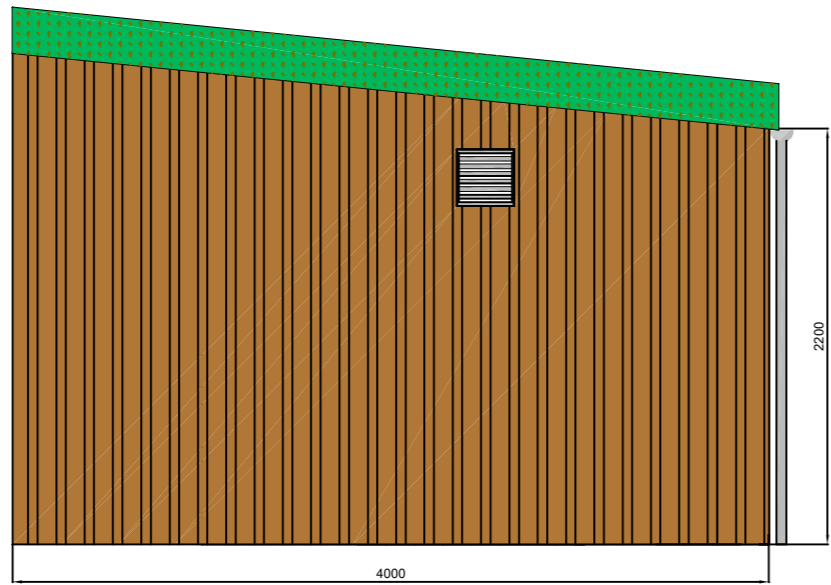
Project  
 283 - Dalmunzie Estate

Drawing Description  
 Development Boundary Plan

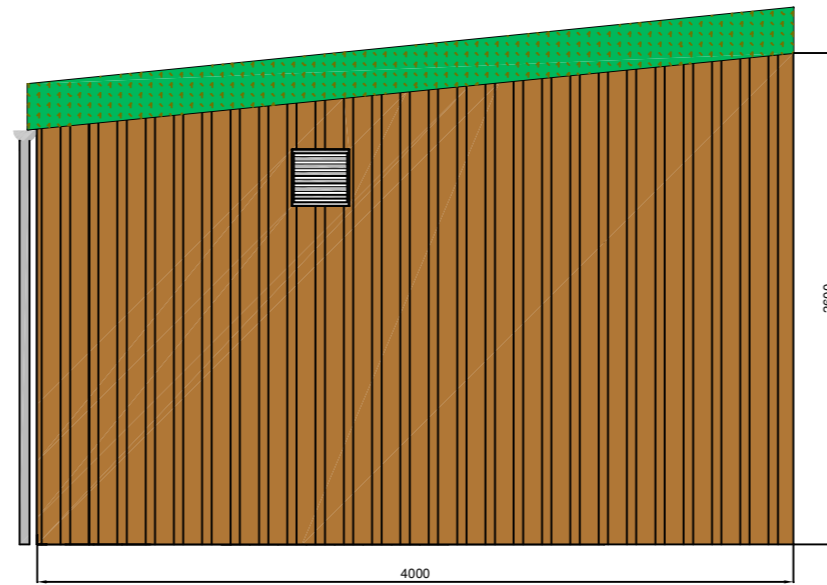
Drawn (init./date) KM 10/10/2025	Checked (init./date) LS 15/10/2025
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Scale & sheet size 1:5000 @A3	Dimensions m
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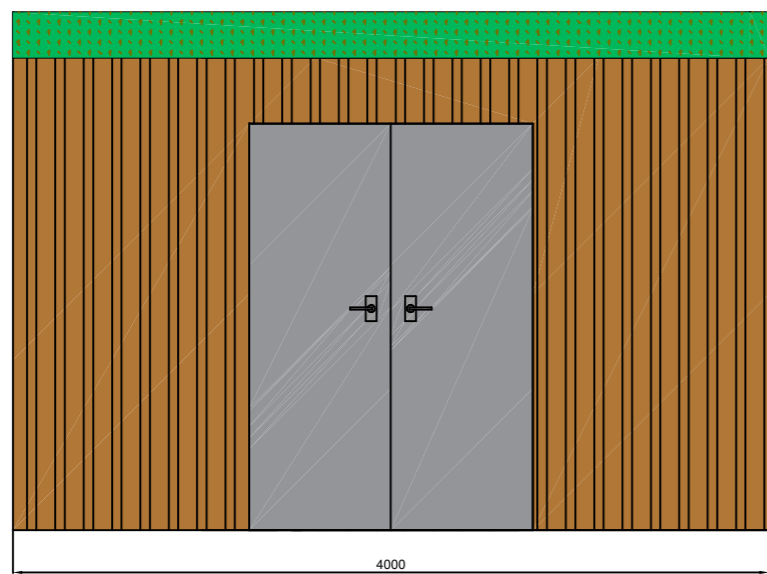
Drawing No. 283-06-DWG03-REV03



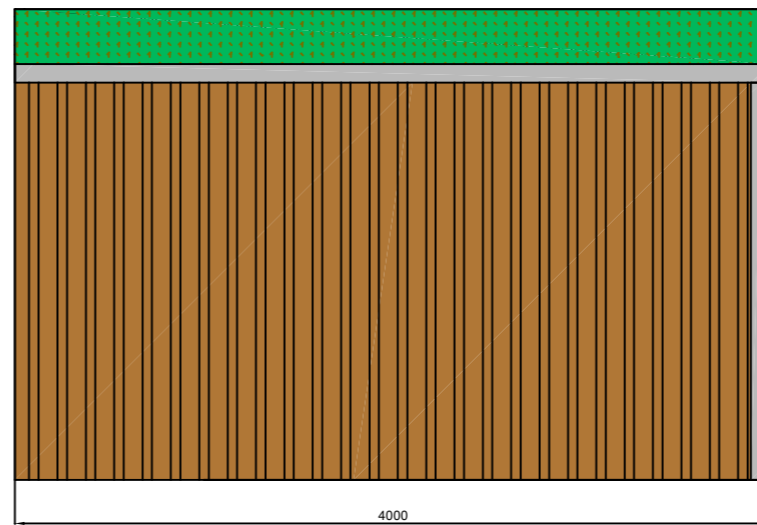
WEST FACING ELEVATION



EAST FACING ELEVATION



NORTH FACING ELEVATION



SOUTH FACING ELEVATION

NOTES:

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**283 - Dalmunzie Estate**

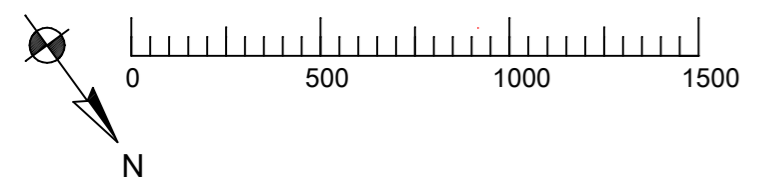
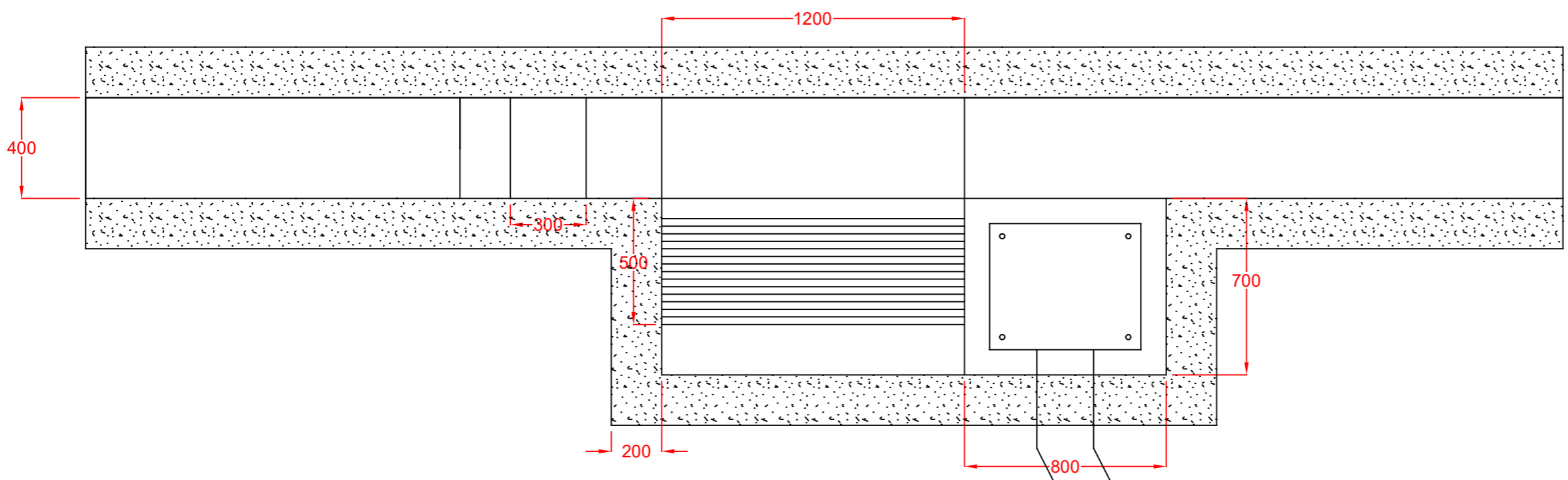
Drawing Description  
**Turbine House Elevations**

Drawn (init./date) KM 29/09/2025	Checked (init./date) LS 15/10/2025
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Scale & sheet size 1:40 @ A3	Dimensions m
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Drawing No. **283-06-DWG09-REV01**





**NOTES:**  
 Plan and Elevation of the proposed abstraction on the Allt Coire a' Ghearraig (NO 08580 70406).

Single wall concrete weir fitted with a stainless steel abstraction box fitted on the downstream face.  
 Stainless steel Coanda screen fitted to the abstraction box.

**HOF Plate**  
 Stainless steel HOF plate with 60° angle and 131mm head to allow for  $Q_{90} = 5$  l/s to pass before abstraction begins.

**Screen Approach Weir**  
 1200mm Width, 100mm Head,  $C_d = 1.7$   
 Weir passes  $Q = 65$  l/s

$Q_{design} = 35$  l/s

**Overflow Weir:**  
 Broad Crested Weir 2.0m x 0.25m  $C_d = 1.7$   
 Weir passes  $Q = 425$  l/s

$Q_{0.1} = 375$  l/s ( $Q_{0.1}$  of the Allt Coire a' Ghearraig) + 18 l/s (Max abstraction of Intake 2) = 393 l/s

**Total Flow accommodated by the intake:**

- = HOF + Intake Weir + Overflow Weir
- = 5 + 65 + 425
- = 495 l/s

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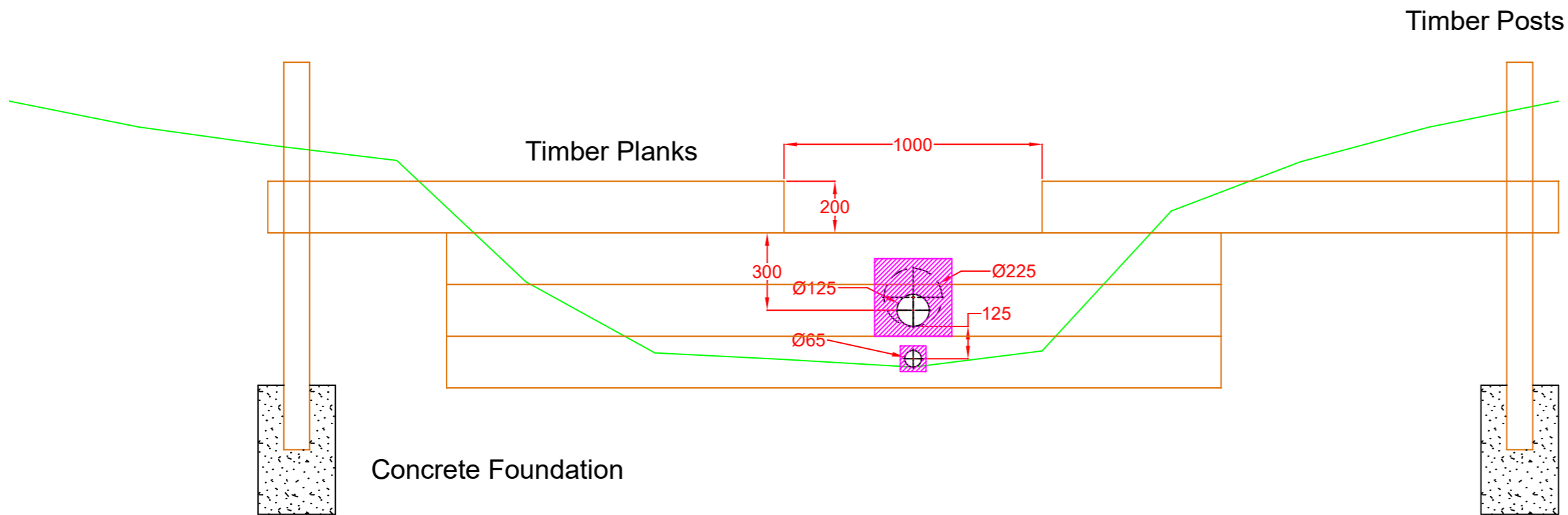
Drawing Description  
**Intake 1 Plan -  
 Allt Coire a' Ghearraig**

Drawn (init./date) KM 17/09/2025	Checked (init./date) LS 15/10/2025
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Scale & sheet size 1:20 @ A3	Dimensions mm
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Drawing No. **283-06-DWG11-REV01**

# North East Facing Elevation



**NOTES:**  
Proposed abstraction on an unnamed tributary of the Allt Coire a' Ghearraig (NO 08668 70268)

Interlocking timber sleepers construction  
Apertures cut out for HOF orifice plate and transfer pipe.

HOF Plate  
Stainless steel plate with 65mm Ø orifice.

65mm Ø orifice, 125mm head (centre of orifice to bottom of transfer pipe), Cd = 0.6

$Q = 3.118 \text{ l/s}$                        $Q > Q_{90} = 3 \text{ l/s}$

Transfer Pipe  
Material: 225mm Ø Twinwall Pipe  
Length: 175m

Orifice plate fitted to the upstream end.  
125mm Ø Orifice, 300mm Head, Cd = 0.6

$Q = 17.86 \text{ l/s}$

Max Abstraction =  $1.3 \times Q_{30} = 1.3 \times 14 = 18.2 \text{ l/s}$

$Q < 1.3 \times Q_{30}$

Overflow Weir:  
Broad Crested Weir 1.0m x 0.20m

$Q = 152 \text{ l/s}$

Total Flow accommodated by the intake:

= HOF + Transfer Pipe + Overflow Weir  
= 3 + 18 + 152  
= 173 l/s

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02	KM	LS	Updated to show elevation orientation	17/10/25
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Rev.	Drawn	Checked	Description	Date
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Project  
**283 - Dalmunzie Estate**

Drawing Description  
**Intake 2  
Unnamed Burn**

Drawn (init./date) KM 15/10/2025	Checked (init./date) LS 15/10/2025
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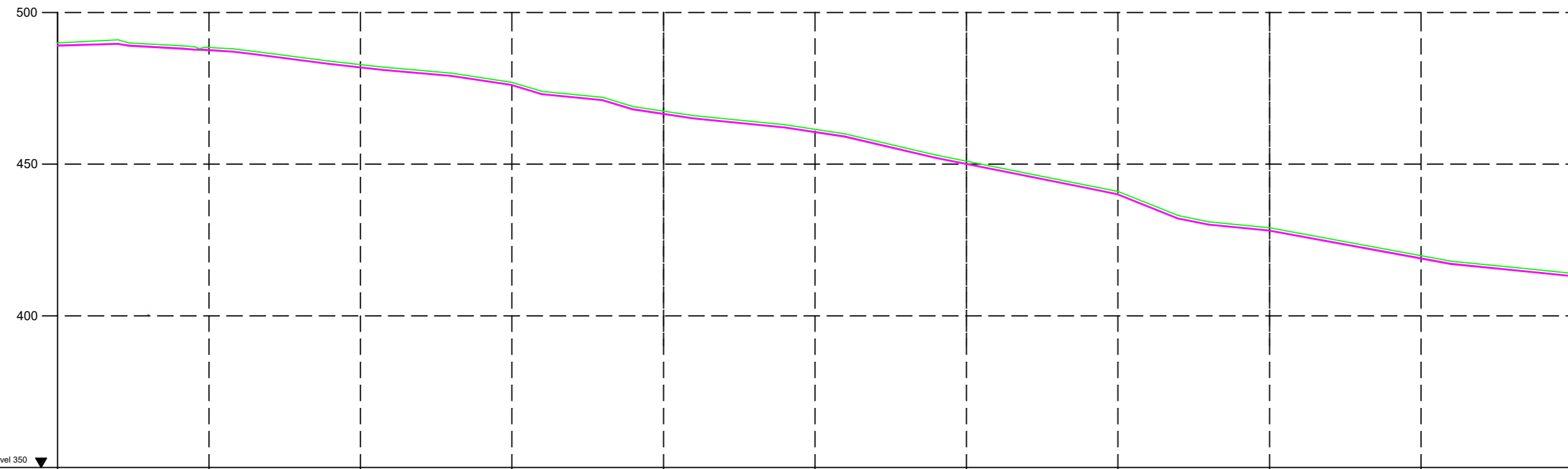
Scale & sheet size 1: 20 @ A3	Dimensions mm
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Drawing No. **283-06-DWG04-REV02**

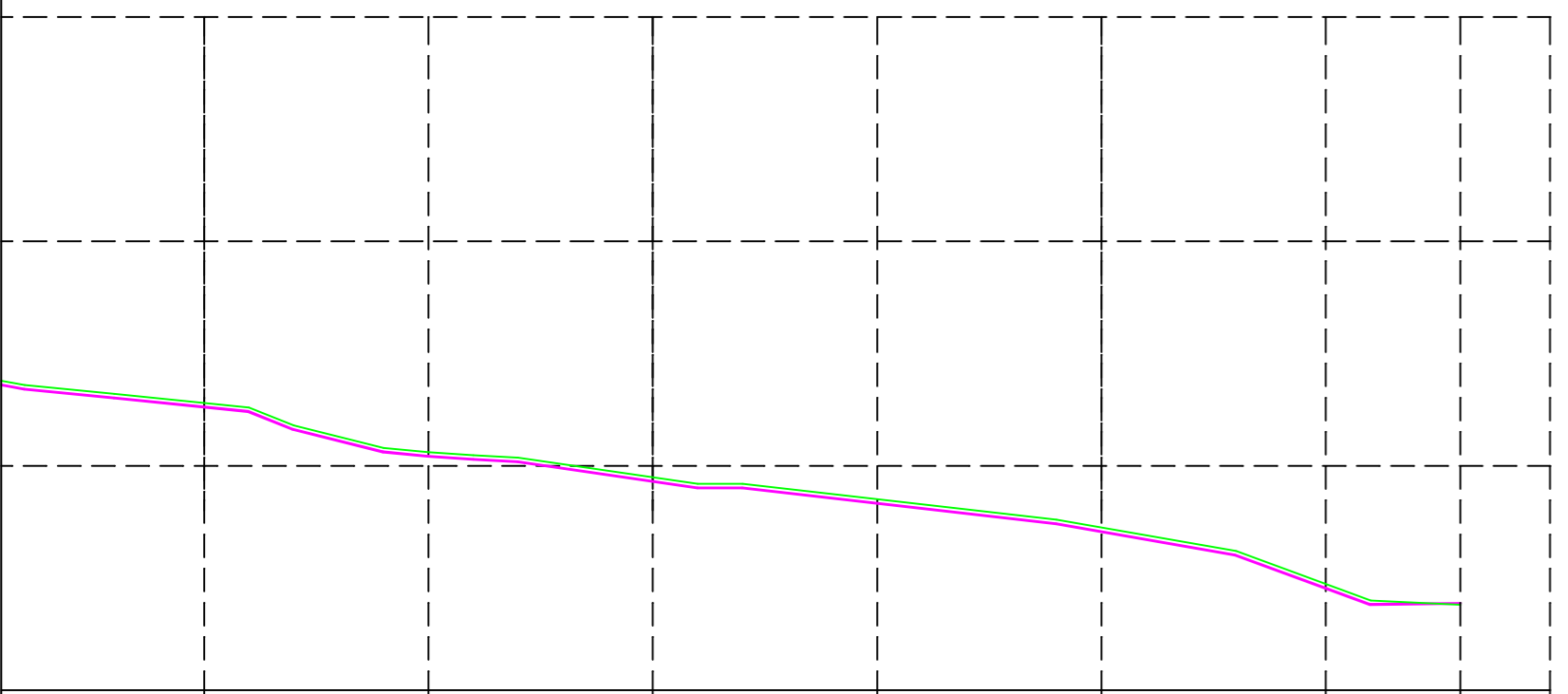
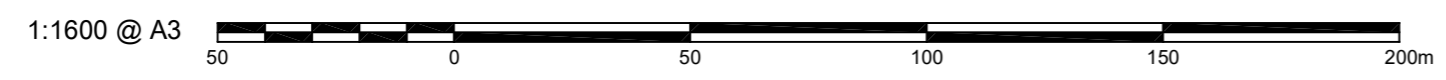


NOTES:

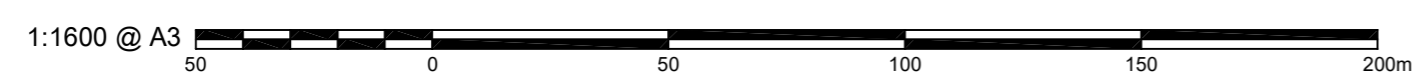
- Ground Level
- Penstock Pipe



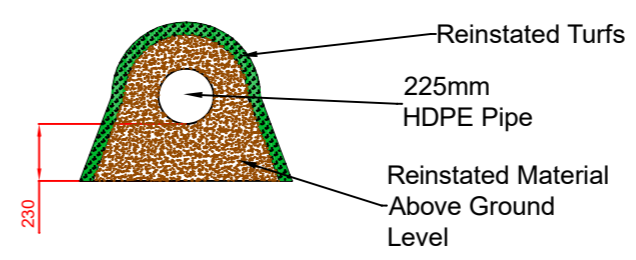
Chainage	0	50	100	150	200	250	300	350	400	450
Ground Level	490.00	488.49	482.82	470.00	467.48	461.50	451.00	441.00	429.00	419.83
Pipe Soffit	498.20	487.69	482.02	469.20	466.68	460.70	450.20	440.20	428.20	419.03
Pipe Invert	497.98	487.47	481.80	468.98	466.46	460.46	449.98	439.98	427.98	418.81



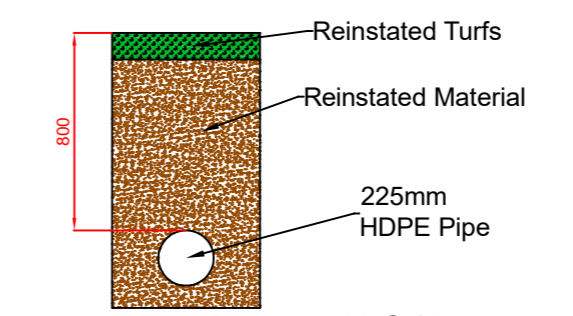
Chainage	50	500	550	600	650	700	750	780
Ground Level	399.83	414.00	403.00	397.75	392.57	386.25	373.67	369.00
Pipe Soffit	409.03	413.20	402.20	396.95	391.77	385.45	372.87	369.45
Pipe Invert	408.81	412.98	401.98	396.73	391.55	385.23	372.65	369.23



Penstock Cross Section at Chainage 780m



Penstock Cross Section at Chainage 100m (typical cross section)



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02	KM	LS	Updated to show annotation of the scale within the inserts	17/10/25
Rev.	Drawn	Checked	Description	Date



Project  
**283 - Dalmunzie Estate**

Drawing Description  
**Penstock Section**

Drawn (init./date) <b>KM 13/10/2025</b>	Checked (init./date) <b>LS 15/10/25</b>
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Scale & sheet size <b>See insert</b>	Dimensions <b>mm</b>
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Drawing No. **283-06-DWG12-REV01**