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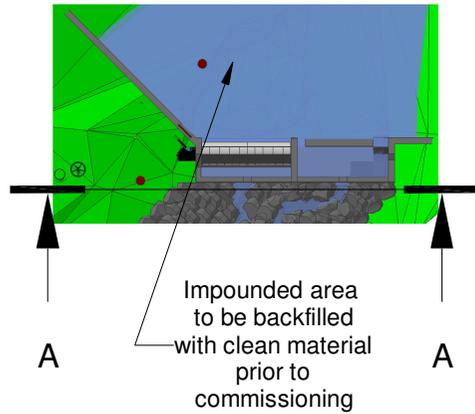
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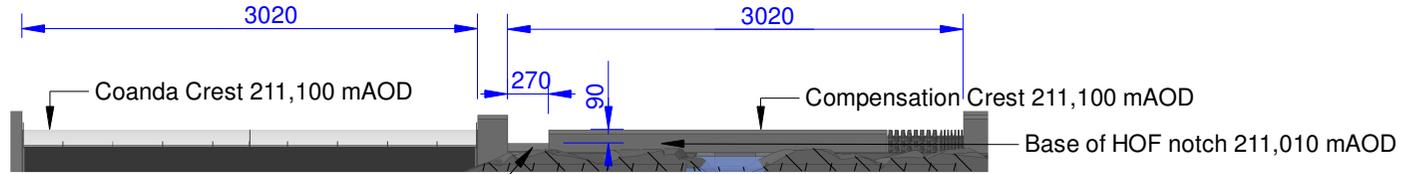
Dylan Jones Intake Front Elevation, Levels and Take Calculations

Point	Level
Top Peg A	211,000
Top Peg B	212,660
Crest	211,100
Base of Screen	210,650
Reference X1	215,354
Reference X2	213,755

Plan View
Scale 1 : 250



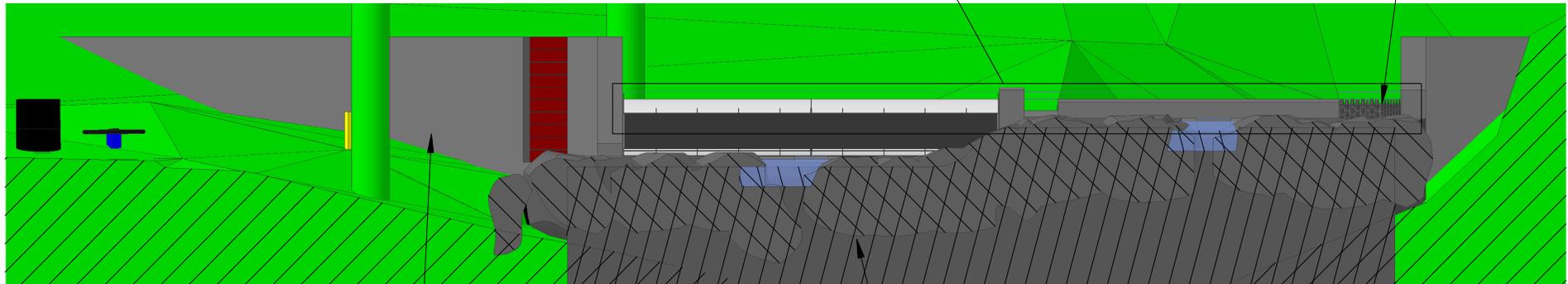
Detail A



Section A-A

Eel substrate passes up ramp and over crest through dedicated notch
Strip of polycarbonate bolted to side of ramp to ensure water retained over full length

Chamfered edges on HOF notch



Mortared Rocky Ramp downstream of fishpools

Take

Total Crest Width : 3020mm + 3020mm = 6040mm
Screen Width : 3020mm
Take : 3020/6040 = 50%

Note on Hands-off-flow

No water will be abstracted until the watercourse's flow exceeds 13.0l/s. Both the HoF notch (11.5l/s) and the eel pass notch (2.5l/s) have to be satisfied before water flows over the coanda's crest

Hands-off-flow

Calculation of flow over rectangular broad notch in stop log:

Discharge coefficient, Cd = 1.6
Notch depth, h = 0.090m
Notch width, w = 0.270m

$$Q = Cd * w * h^{1.5}$$

$$= 1.6 * 0.270 * 0.090^{1.5}$$

$$= 0.01166 \text{ m}^3 / \text{sec}$$

$$= 11.7 \text{ lps}$$

0 1000 2000mm

All levels relative to Newlyn. All dimensions in mm.

Client : Dylan Jones
Address : Ty Mawr, Mallwyd
Machynlleth, SY20 9HS
Drawn By : MJP

Date : 30/12/22
Scale : 1 : 50 @ A4
Drawing No : 22123001
Version : 2

Revision Details
v2 : Fish and eel passage
and HoF notch revised



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MCS Hydro Transition Installer 123

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