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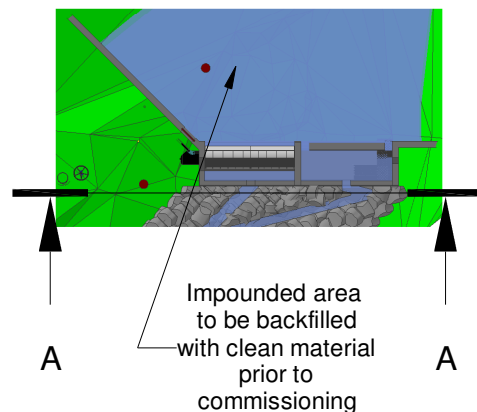
6

Plan View
Scale 1 : 250

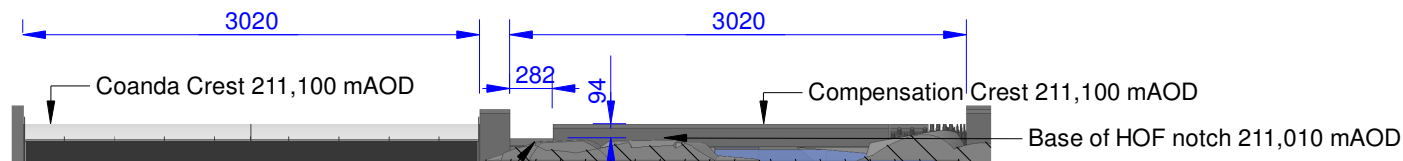
Dylan Jones Intake Front Elevation, Levels and Take Calculations

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

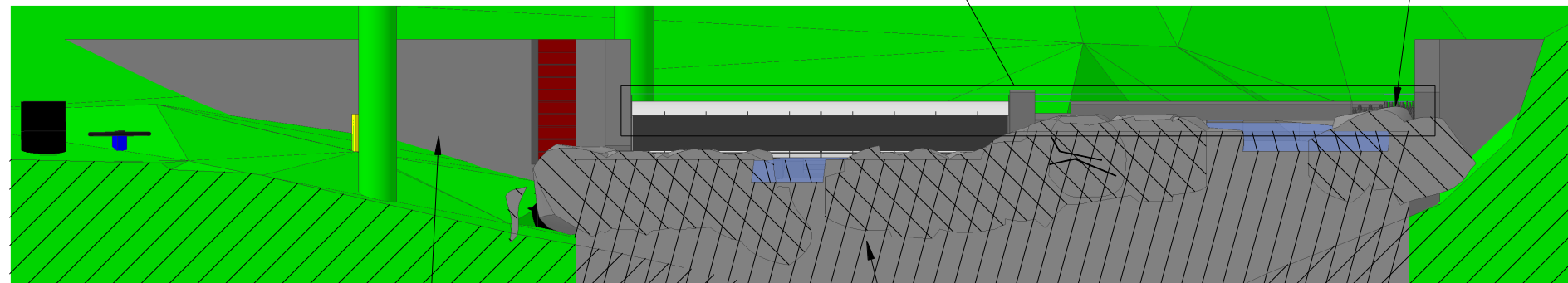
A



Detail A



Section A-A



Areas downstream of the wing walls to be infilled with boulders to reduce visual impact

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 14.25l/s. Both the HoF notch (13.0l/s) and the eel pass notch (1.25l/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:

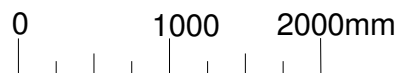
Discharge coefficient, $C_d = 1.6$
Notch depth, $h = 0.094\text{m}$
Notch width, $w = 0.282\text{m}$

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

$$= 1.6 * 0.282 * 0.094^{1.5}$$

$$= 0.01300 \text{ m}^3 / \text{sec}$$

$$= 13.0 \text{ lps}$$



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 : 4

Revision Details

v2 : Fish and eel passage and HoF notch revised
v3 : Fish passage gradient reduced
v4 : Notches revised

Greenearth
Hydro



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MCS Hydro Transition Installer 123

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