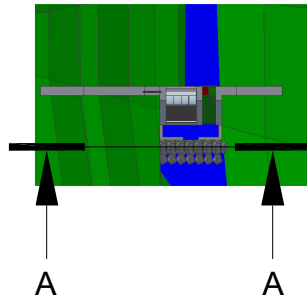
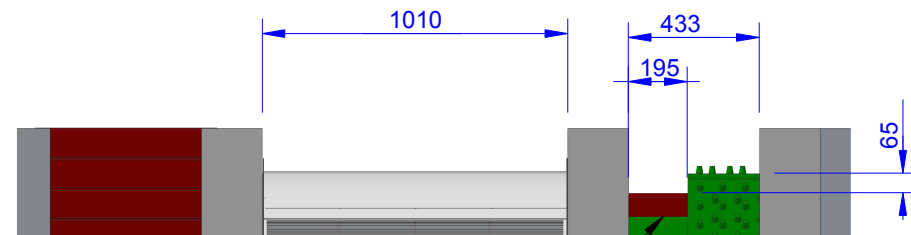


Aled Jones Intake Front Elevation, Levels and Take Calculations

Plan View : Scale 1 : 250

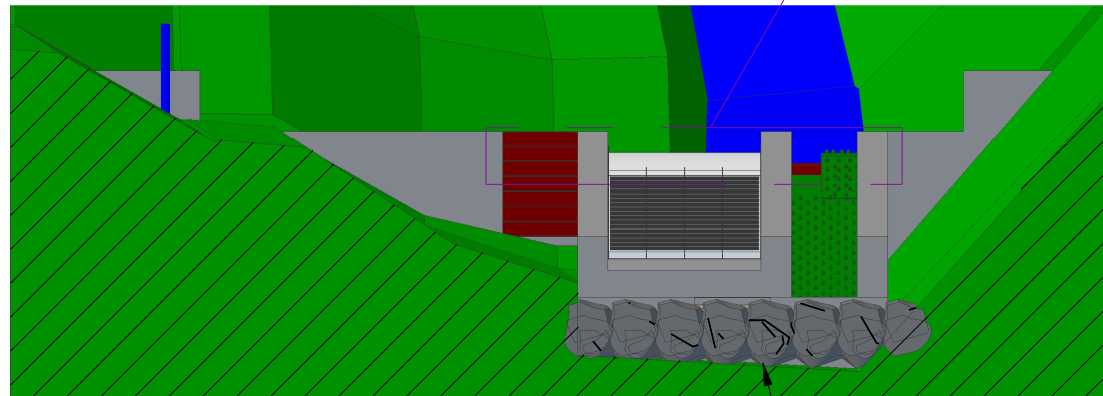


Detail A



No eel substrate immediately below notch to allow nappe to be aerated

Section A-A
Scale 1 : 50



Rocky Ramp downstream of fishpool

Point	Level
Top Peg A	259,541
Top Peg B	260,779
Crest	259,091
Base of Screen	258,391
11m Upstream Water Level	262,883
Downstream Water Level	257,464

Take

Total Crest Width : 1010mm + 433mm = 1443mm
Screen Width : 1010mm
Take : 1010/1443 = 70%

Hands-off-flow

Calculation of flow over rectangular broad notch in stop log:

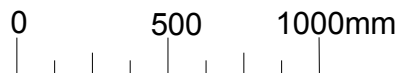
Discharge coefficient, $C_d = 1.6$
Notch depth, $h = 0.065m$
Notch width, $w = 0.195m$

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

$$= 1.6 * 0.195 * 0.065^{1.5}$$

$$= 0.00517 \text{ m}^3 / \text{sec}$$

$$= 5.17 \text{ lps}$$



All levels relative to Newlyn. All dimensions in mm.

Client : Aled Jones
Address : Ty'n y Braich
Dinas Mawddwy, Machynlleth, SY20 9LX
Drawn By : MJP

Date : 13/10/18
Scale : 1 : 25 @ A4
Drawing No : 18101301
Version : 1

Revision Details

Greenearth
Hydro

Greenearth Hydro Limited
PO Box 68, Aberdovey, LL36 6AJ
Tel: 07980 670046 www.greenearthhydro.co.uk
Company Registration Number 7417466
MCS Hydro Transition Installer 123