Stephen Cochrane Intake : Front Elevation and Calculations

Hands-off-flow

Calculation of flow over rectangular broad notch in rock:
Discharge coefficient, Cd = 1.6
Notch depth, h = 0.189m
Notch width, w = 0.321m

Q = Cd * w * h^1.5
= 1.6 * 0.321 * 0.189^1.5
= 0.0422 m^3 / sec
= 42.2 lps

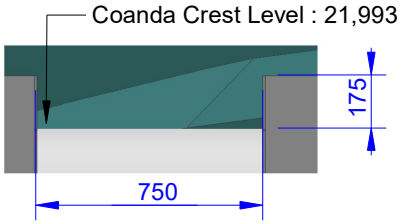
Take

Total Crest Width : 750mm + 321mm = 1071mm
Screen Width : 750mm
Take : 750/1071 = 70%

Notch overall depth provides 144mm flow depth over Coanda crest required for design flow through screen

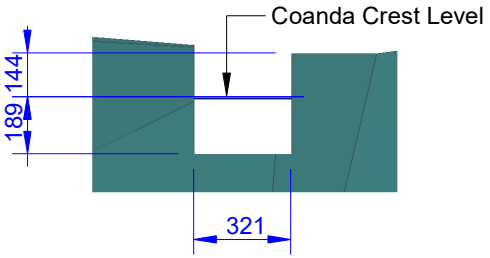
Detail B

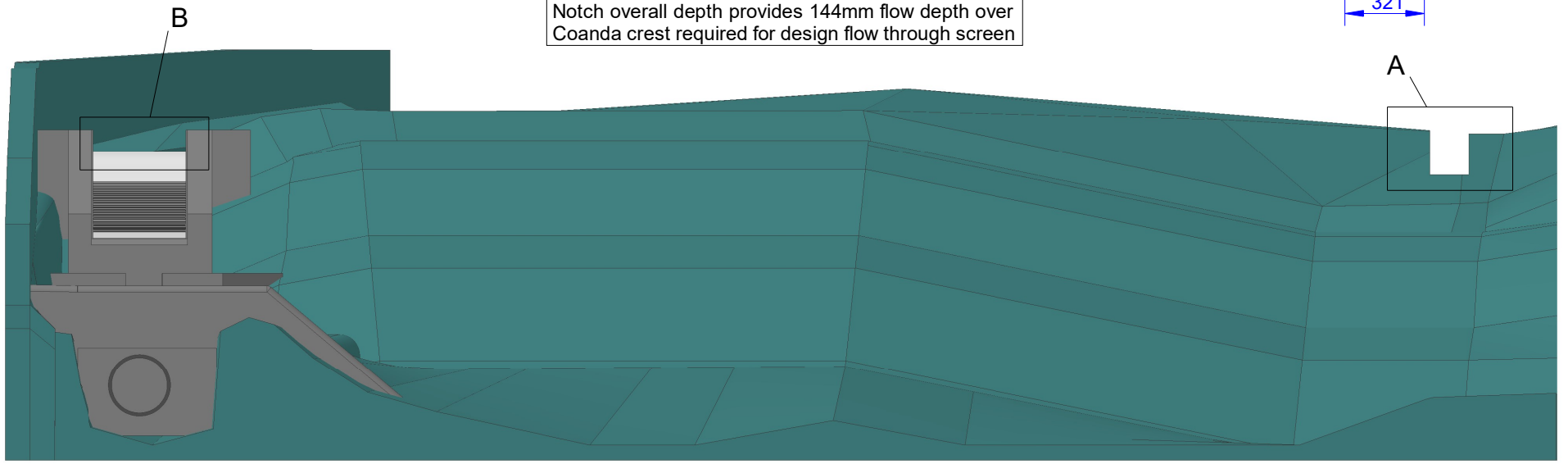
Coanda crest
Scale 1:25



Detail A

Compensation Notch
Chiselled from existing bedrock
Scale 1 : 25





0 1000 2000mm

All levels relative to Newlyn. All dimensions in mm.

Client : Stephen Cochrane Address : Glandwr Mill Gwynedd,LL42 1TG *Drawn By :* MJP	Date : 27/07/21 Scale : 1 : 50 @ A4 Drawing No : 21072701 Version : 1	Revision Details	Greenearth Hydro Limited The Cottage, Rhiw, Pwllheli, LL53 8AE Tel: 07980 670046 www.greenearthhydro.co.uk Company Registration Number 7417466 MCS Hydro Transition Installer 123