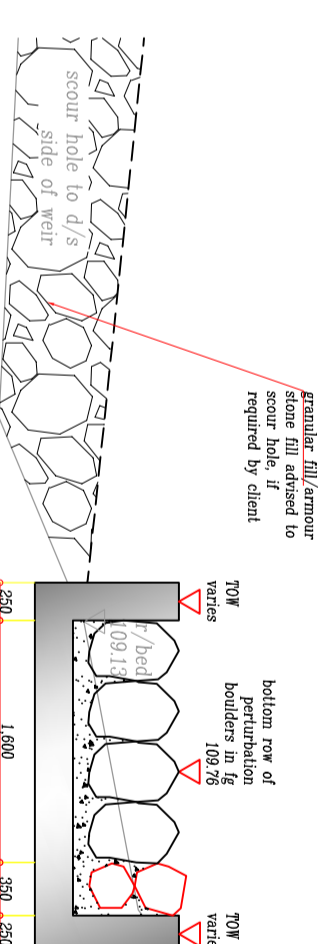
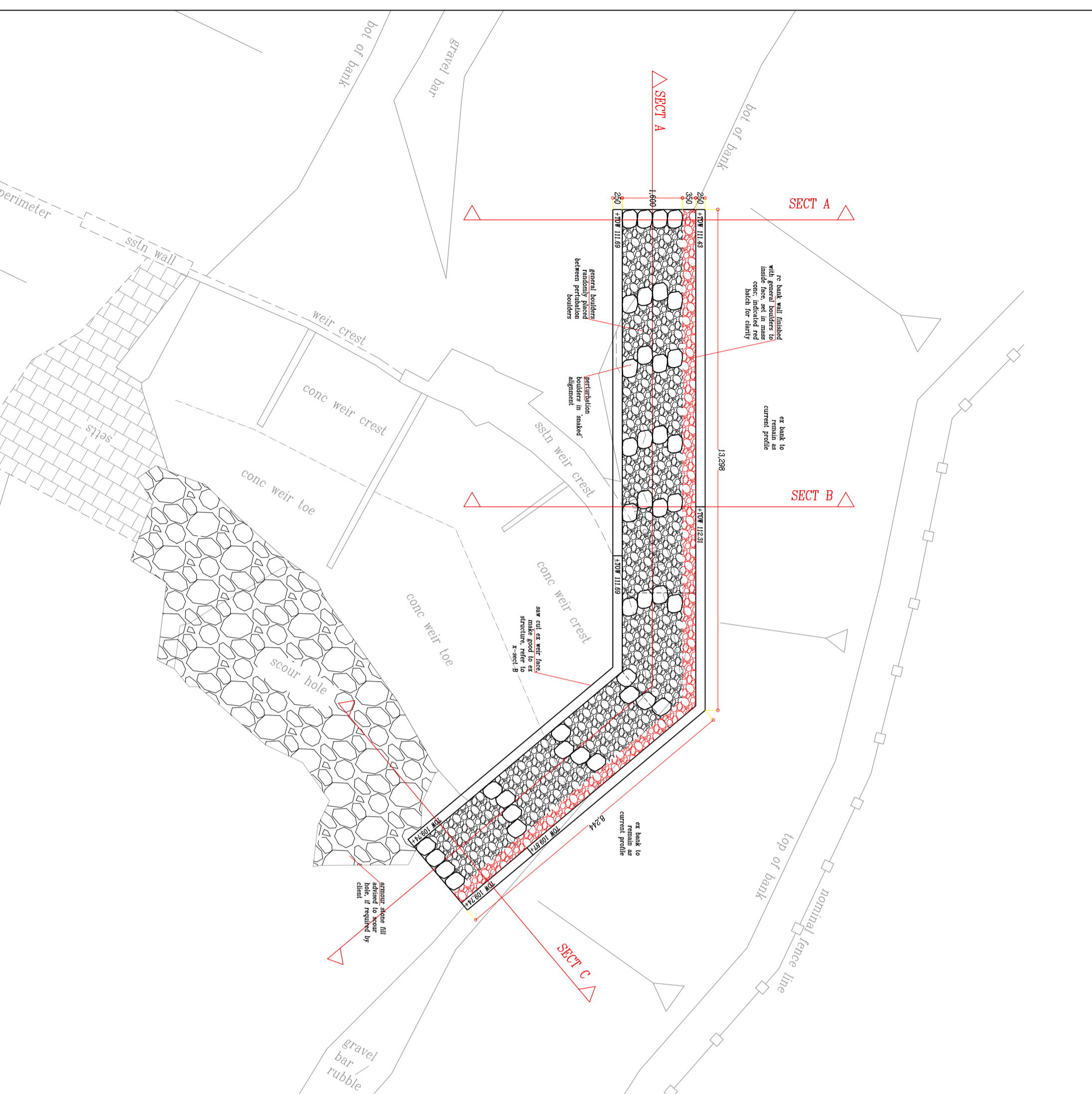
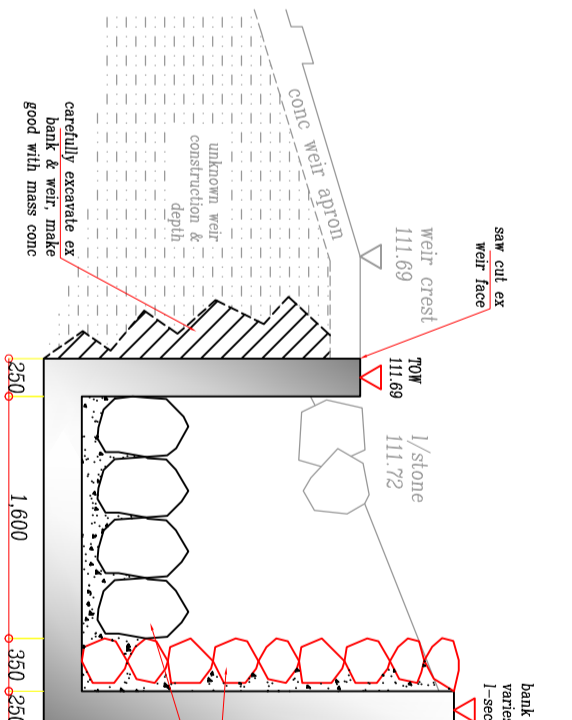


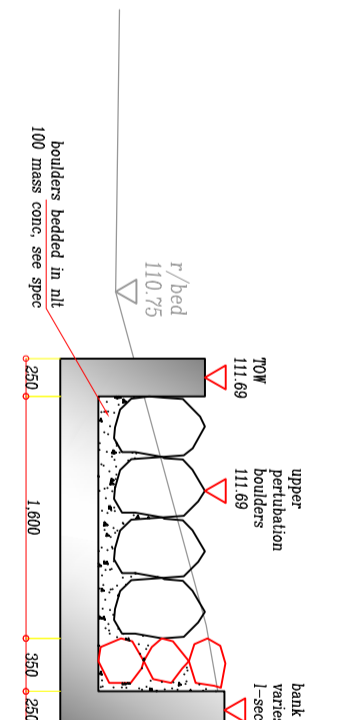
LONG SECTION 1:100



CROSS SECTION C 1:50



CROSS SECTION B 1:50



CROSS SECTION A 1:50

- SPECIFICATION**
- 0.0 This drawing is copyright and is sent to you in confidence. It may not be copied, used or disclosed, in whole or in part, to third parties without written permission. It remains the property of T&A and must be returned on request.
 - 0.1 This drawing is to be read in conjunction with all relevant contractual documents.
 - 0.2 All dimensions in mm, all levels in m a00 unless o/w stated.
 - 0.3 O.S.B.M. refer to SURVEY DINGBY others.
 - 0.4 Site setting-out to be undertaken by Civil Contractor. Setting out dims to be checked on site prior to construction & confirmed with EPN O/TEB.
 - 0.5 Employer: To be advised.
 - 10 MATERIALS & WORKMANSHIP
 - 11 All workmanship & materials to comply with British & European Standards & Codes of Practice. All materials to be stored, mixed and used in accordance with manufacturer's instructions & recommendations.
 - 12 All provisions for temporary means of support & regulations for Health & Safety at Work to be complied with.
 - 13 All works to be carried out to the complete satisfaction of the Employer & Client.
 - 14 All works to be carried out in strict accordance with HSE guidance & CDM regulations.
 - 15 Do not scale the contract or must verify all dimensions prior to commencing stop drayings or work on site.
 - 16 All services above & below ground to be located, identified, de-commissioned, diverted or protected as necessary prior to & during the course of the work & reinstated on completion. Fully in accordance with relevant codes of practice & statutory undertakers requirements.
 - 17 Materials & Workmanship shall comply with the requirements of the Civil Engineering Specification for the Water Industry (EJ 71).
 - 21 Granular fill/aggregate stone material in accord with Department of Transport Specification for Highway Works spec. 64 well graded natural/river crushed rock, for emplacement below water. Spec 64 to comprise particle size distributions:

Sieve	Percentage mass passing test sieve
500mm	100%
10mm	0-100%
5mm	0-85%
600µm	0-45%
63µm	0-5%
 - 22 Boulders to be durable hard rock nominal density 2700kg/m³
 - 23 Perturbation Boulders: nominally 450-500mm dia x 600mm high, situated in mass conc with NI.T 50% stone height embedded in surrounding matrix.
 - 24 General Boulders: nominally 250-300mm dia x 450mm high, situated in mass conc with NI.T 50% stone height embedded in surrounding matrix.
 - 25 Granular Matrix Fill: well graded natural/river crushed granular rock, nominally less than 50mm.
 - 30 CONCRETE (IBC)
 - 31 Reinforced Concrete: Grade C35/40, 35 cover, min OPC 320 kg/cu m, 250 th, B785 roller face, A393 inner; Channel Walls; 250 th, A393 TOP & BOT; Channel Base slab 250 th, A393 TOP & BOT;
 - 32 Mass concrete: Grade C8/20, min cement 260 kg/cu m, max agg 20 mm, max w/c 0.55, to BS 8500.
 - 33 Lean concrete: Grade C10/15, min cement 200 kg/cu m, max agg 10 mm, max w/c 0.6 to BS 8500.
 - 34 Benchmarking granolithic concrete, 1:2 OPC:SAND:AGG:GAIL, max agg 10mm to BS204 pt 2.
 - 35 Rebar: Grade S50 12pt 2 deformed bars / welded fabric to BS 4449.
 - 36 Mesh: 112-200mm, 110-40mm, 10-30mm
 - 37 Formations: SBC min 100 AN/sqm, remove soft spots / deleterious materials, replace with weak concrete OR clean compacted 6%2 where necessary as directed by the EPN O/TEB or indicated in the drawings.
 - 38 Kickers: 100mm & not less than 50mm in any case.
 - 39 Joints: use 'slurry' seal to all 'licker' joints applied to manufacturer's spec.
 - 310 Finish: Steel float TOP / Fair faced shutter FRONT, shuttered or cast in situ REAR as appropriate.
 - 311 Changers: Unless shown otherwise, all exit corners to be chamfered 25mm with 45° fillet.
 - 4.0 RIVER WORKS
 - 4.1 All works in or within 5.0 m of the Watercourse shall be undertaken in accord with the specific requirements of EA guidance for river works.
 - 4.2 The contractor shall take note of the environmental constraints specific to this Site and undertake works in such a way as to protect & prevent harm to the natural habitat.
 - 5.0 O&M
 - 5.1 Working in watercourses: Lifting heavy loads, concreting operations.
 - 6.0 SEQUENCE OF WORKS.
 - 6.1 The Contractor shall sequence the works such that timely removal & installations are undertaken without causing damage or disruption to new works.

ESTIMATING

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RIBBLE RIVERS TRUST/ LOWER DARWEN WEIR
PROPOSED ROCK RAMP
GENERAL ARRANGEMENT PLAN & SECTIONS

AMENDMENTS/ISSUES		
D2	spec updates as per client request	10th 2017
D1	updated in line with R.C. detail	June 2016
D0	original	May 2016
REVISION	REASON/CHANGE	DATE

FILE NAME: dwg-03a-RR1-Lower Darwen Weir-rock ramp-230316.dwg
 SCALE: 1 : 100 @ A2