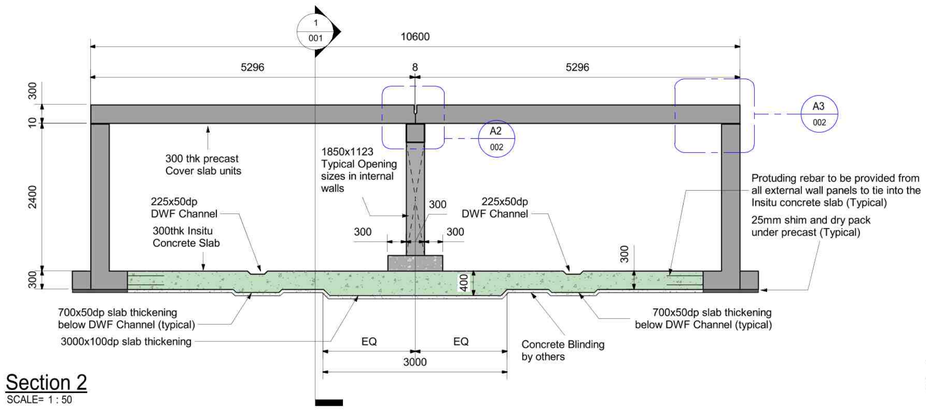
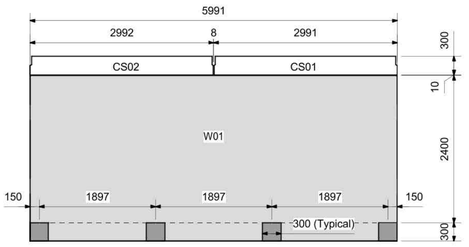
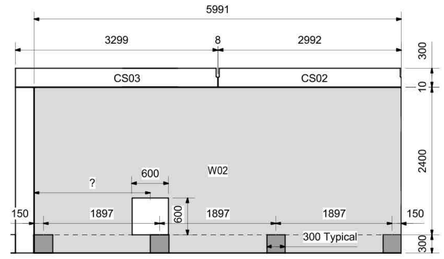
DO NOT SCALE, IF IN DOUBT PLEASE ASK.



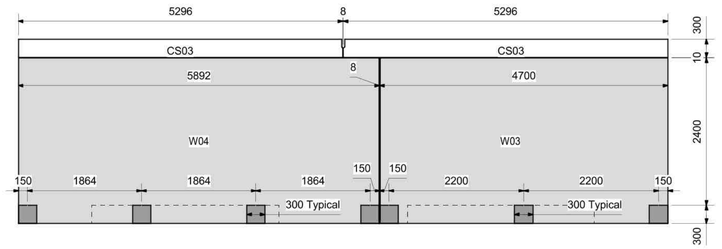
Section 2
SCALE= 1 : 50



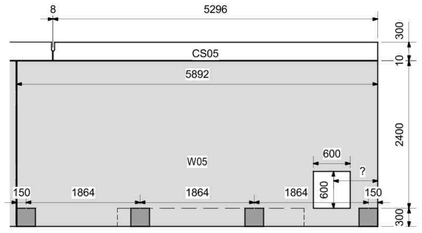
Typical Elevation - W01
SCALE= 1 : 50



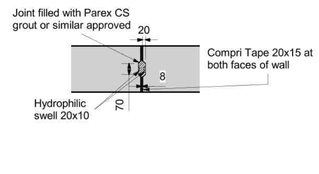
Typical Elevation - W02
SCALE= 1 : 50



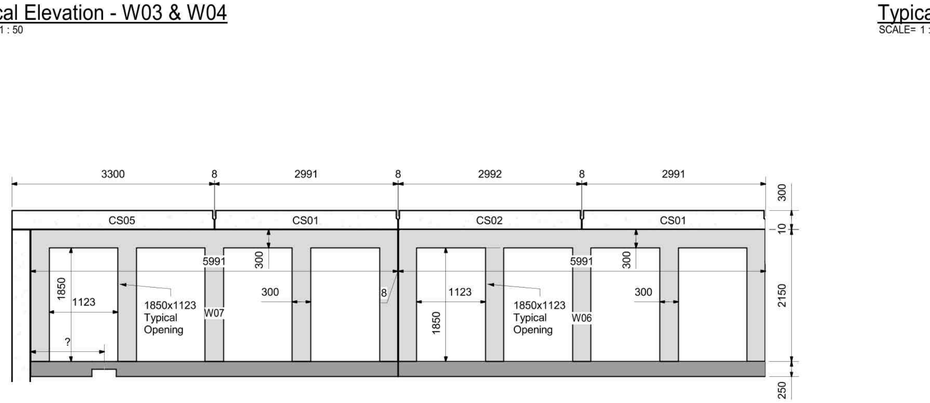
Typical Elevation - W03 & W04
SCALE= 1 : 50



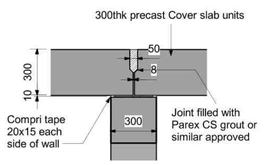
Typical Elevation - W05
SCALE= 1 : 50



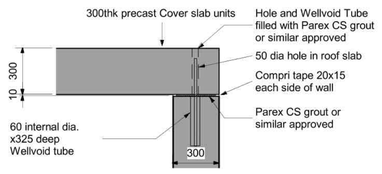
Detail A1 (Typical Wall Butt Joint Detail)
SCALE= 1 : 20



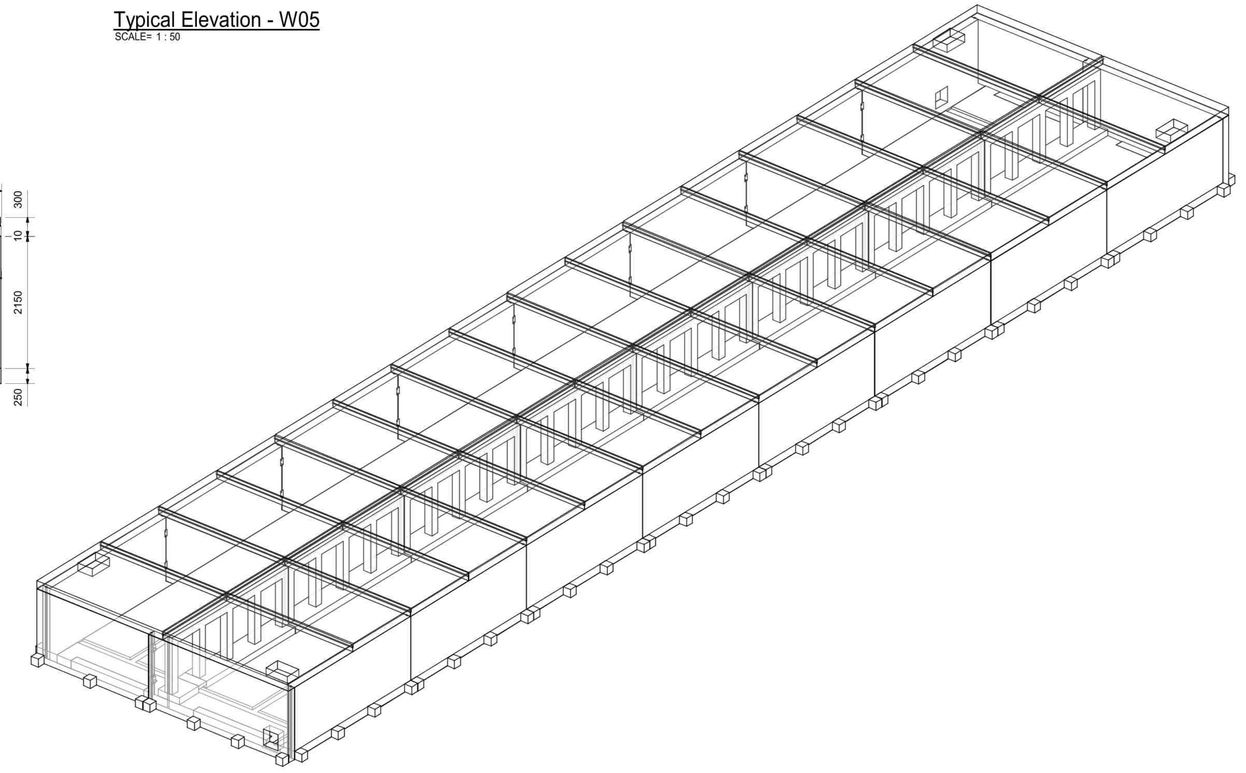
Typical Elevation - W06 & W07
SCALE= 1 : 50



Detail A2 (Typical Roof Slab Joint Detail)
SCALE= 1 : 20



Detail A3 (Typical External Wall/ Roof Slab Detail)
SCALE= 1 : 20



3D View of Attenuation Tank

Notes:

The Construction (Design & Management) Regulations 2015

a. If you are unsure of your responsibilities please refer to the HSE Website.
b. The notes below and design details (5) should be read by all CDM duty holders alongside the Tank layout, section details and additional notes. Whilst we do not go into specifics such as working at heights, working over excavations, slips and trips etc, where is shown in the notes and on the drawing some potential hazard / risk are identified and should be assessed accordingly by the main contractor and his design team prior to any site works commencing.
c. The FP McCann GA should be read in conjunction with all other relevant drawings from the contract design team e.g. Engineers, M&E sub-contractors.

Installation

The units should be lifted using only the lifting equipment noted in (1) and all elements must be lifted in accordance with the installation method (RAMS) provided by FP McCann.

Voids & Openings

Where pre-formed voids and holes are provided the position of a suitable edge protection or temporary cover should be supplied, installed and maintained by others. The provision and installation of covers and frames, and any insitu pipe connections are to be by others.

1. Handling ⚠
a) Volume / Weight *(based on a concrete density of 2.5T/m³)*:
See individual unit drawings.
+5% is recommended for sizing lifting equipment.
b) All lifting points shall be used as specified.
Also refer to Lifting & Handling Instructions Diagram on drawing
Anchor recesses to be filled by others on site.
c) Refer to individual unit drawings for anchor quantities & setting out.

2. Concrete (Precast)
a) Lifting strength based on 2 cubes = 25 N/mm²
b) Characteristic 28 day cube strength = 55 N/mm²
c) Concrete provides Design Chemical Class 4 (DC4) to Special Digest 1, Table F2.

3. Reinforcement
a) Reinforcement (500B or C) to BS4449
b) Scheduling, dimensioning, bending and cutting to BS8666.
c) Cage to be tack welded and or tied with 17 gauge annealed tying wire.

4. Manufacture
a) Manufactured to BS EN 13369:2013
b) Tolerances to BS EN 13389:2013 & BS EN 13670:2009
c) Precast and in situ finishes

Cast Side	Shutter side steel mould	Shutter side wood mould
U2 Steel Float	F2	F1

d) Marking. Units shall be indelibly marked to show:
- Contract Number or Name
- Unit reference and date of manufacture
- Unit weight +5%

5. Design
a) Concrete design to BS EN 1992-1-1 +A2:2014.
b) Loading to BS EN 1991-2:2003
c) Fill over slab: 880mm
d) Design Life: >100 years to BS8500
e) Cover to Reinforcement & Exposure:

Face	Block	Min Cover	Max Cover	Exposure		
Insitu slab	55mm	45mm	60mm	XC3/4	XD1	XF2
Precast General	40mm	35mm	45mm	XC3/4	XD1	XF2

6. Installation
a) Refer to site specific installation guide.

7. Sealing (supplied by & fitted by others)
a) As shown on General Arrangement drawing.

8. Insitu concrete (by others).
a) Min. required characteristic 28 day cube strength = 37N/mm².
b) Concrete mix specification to incorporate min. cement content = 360kg/m³ max. w/c ratio = 0.45 and material specification to achieve class DC3.

9) Temporary Works
a) The Main Contractor is responsible for the provision of required temporary works to ensure a stable excavation is maintained for the full period of the tank installation.
b) The design of the tank has assumed that the backfill material has an Angle of Internal Friction = 30° and a Unit weight of = 20kN/m³. Due consideration is required with regard to the nature of the backfill material and type/size of plant used.
c) Protection of precast units during temporary works (backfilling) is the responsibility of others.
d) Any plant used for backfilling or subsequent works, around or over tank, should be suitably sized to ensure that the net applied loads are no greater than the permanent design loads.
e) Any temporary works should be designed/installed/removed to ensure that the net applied loads are no greater than the permanent design loads.

Rev	Date	Revision detail	By
P3	19.09.18	Insitu Slab thickening added	ABD
P2	14.09.18	Updated to suit latest requirements	ABD
P1	07.09.18	First Issue	ABD

Status: **PRELIMINARY**

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Client: Story Homes

Project: Henthorn Road, Clitheroe

Title: Attenuation Tank GA (2 of 2)

Drawn:	Checked:	Approved:
ABD	SH	SH

Date: Sep 2018 Scale: As indicated

Drawing no: 18-3470 - 002 Rev: P3

A1 1cm