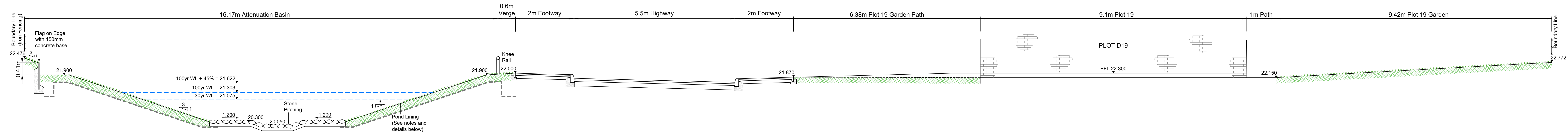
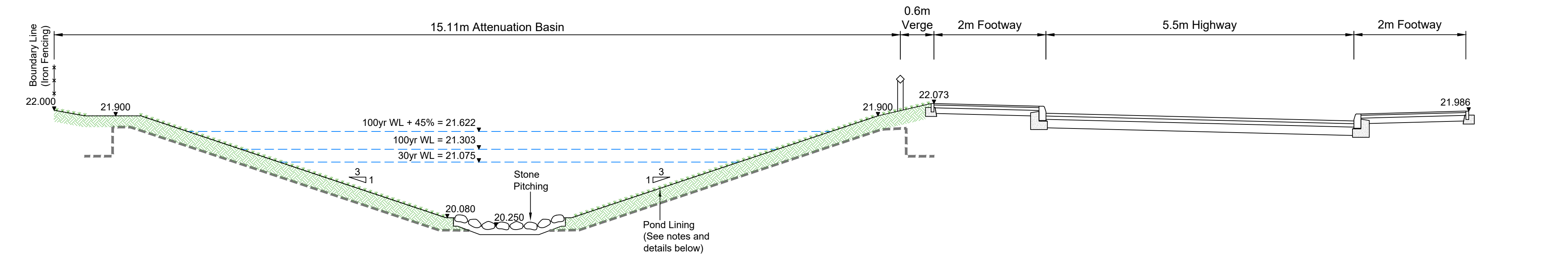


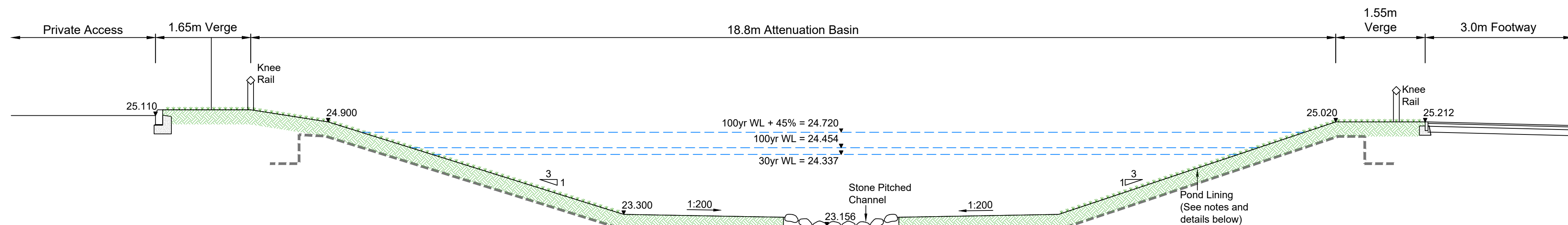
SECTION A-A - SECTION THROUGH SOUTHERN ATTENUATION BASIN
Scale 1:50



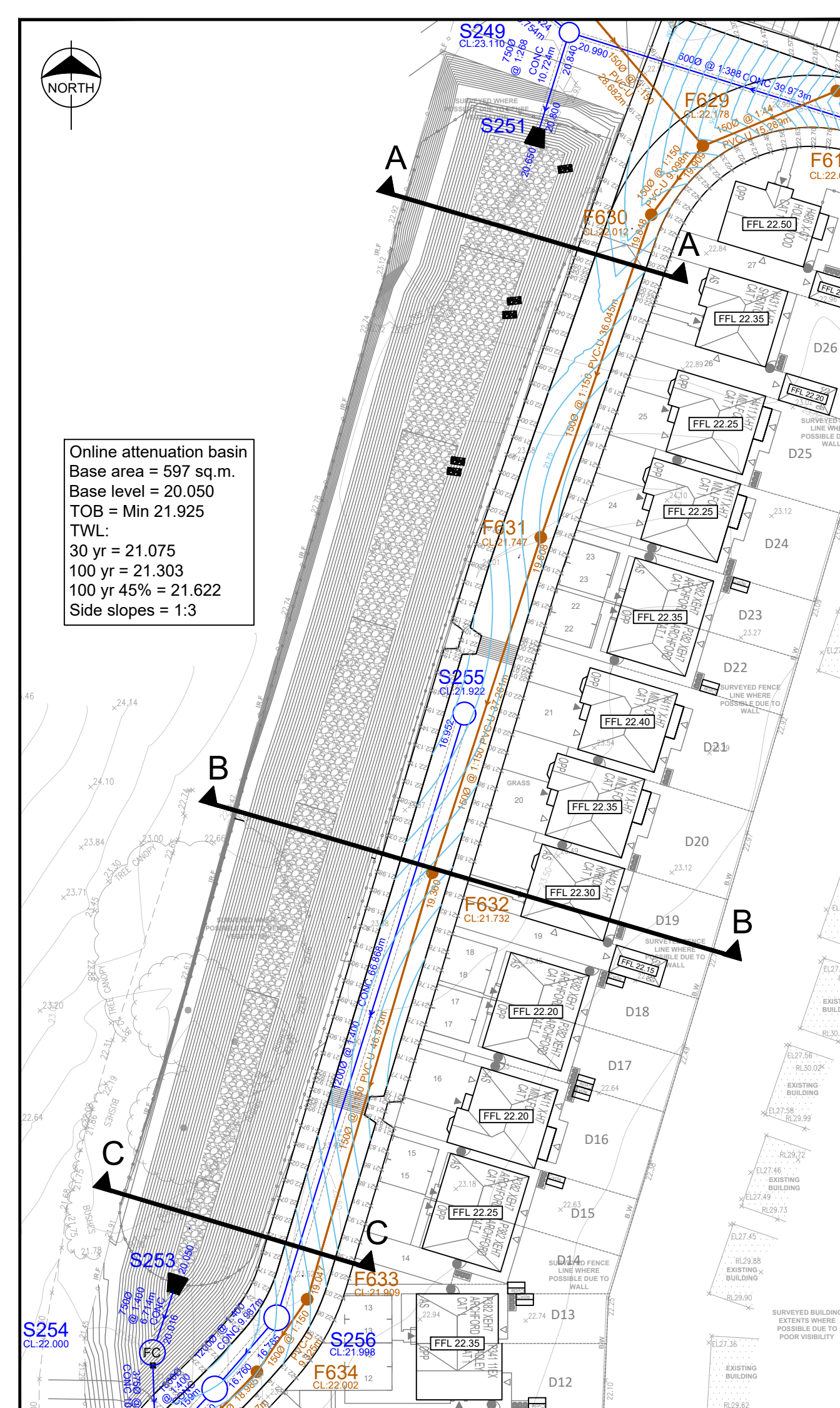
SECTION B-B - SECTION THROUGH SOUTHERN ATTENUATION BASIN
Scale 1:50



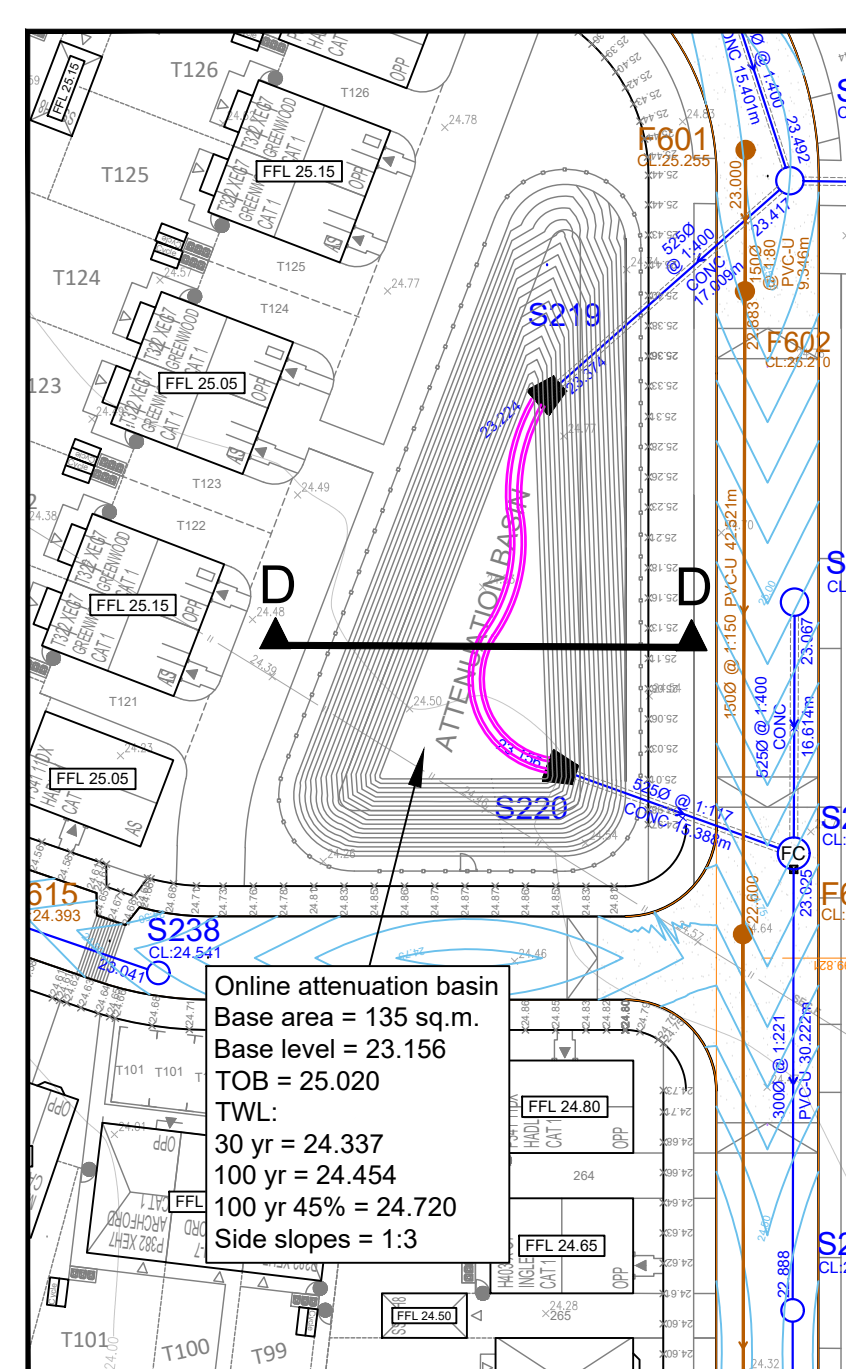
SECTION C-C - SECTION THROUGH SOUTHERN ATTENUATION BASIN
Scale 1:50



SECTION D-D - SECTION THROUGH NORTHERN ATTENUATION BASIN
Scale 1:50



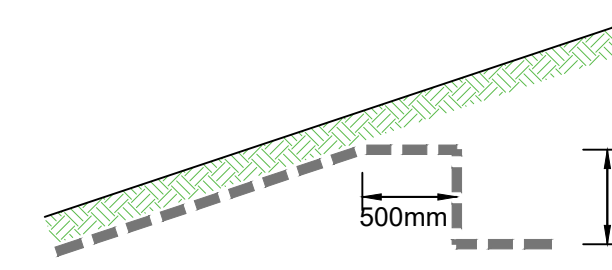
SECTIONS A-A, B-B, & C-C - LOCATION PLAN
Scale 1:500



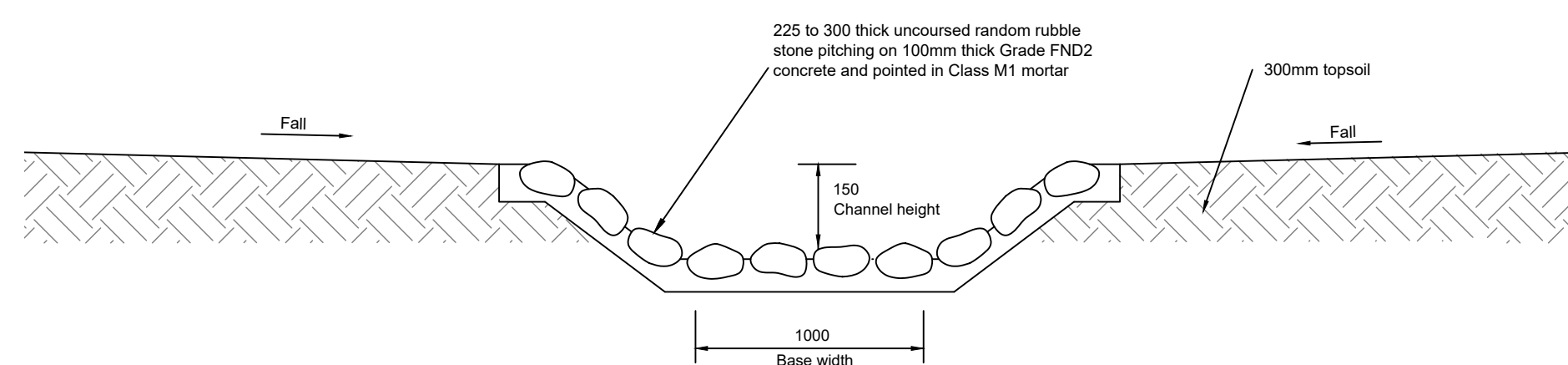
SECTION D-D - LOCATION PLAN
Scale 1:500

Pond to be lined from base to top water level (100yr+40CC).
Option 1:
Heavy-duty impermeable membrane with welded joints (eg. 1.5mm thick Exceller)
Option 2:
Geosynthetic clay liner - GCL (eg. Bentomat SS100).
Contractor to liaise with manufacturer.

Contractor to ensure impermeable liner is not damaged during construction and should consider a protective geotextile with high puncture resistance. Manufacturer to advise on final products.



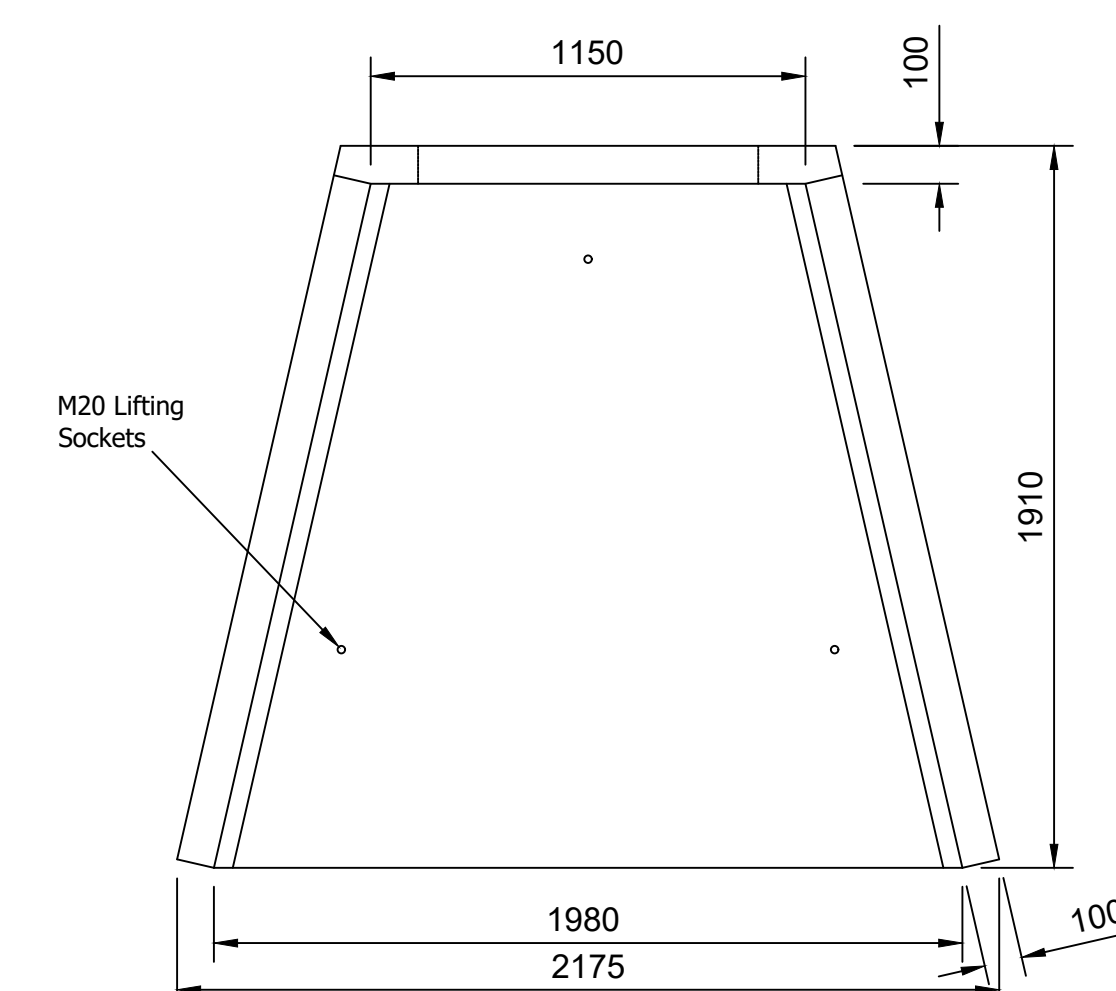
IMPERMEABLE LINER ANCHOR DETAIL
(set above top WL)



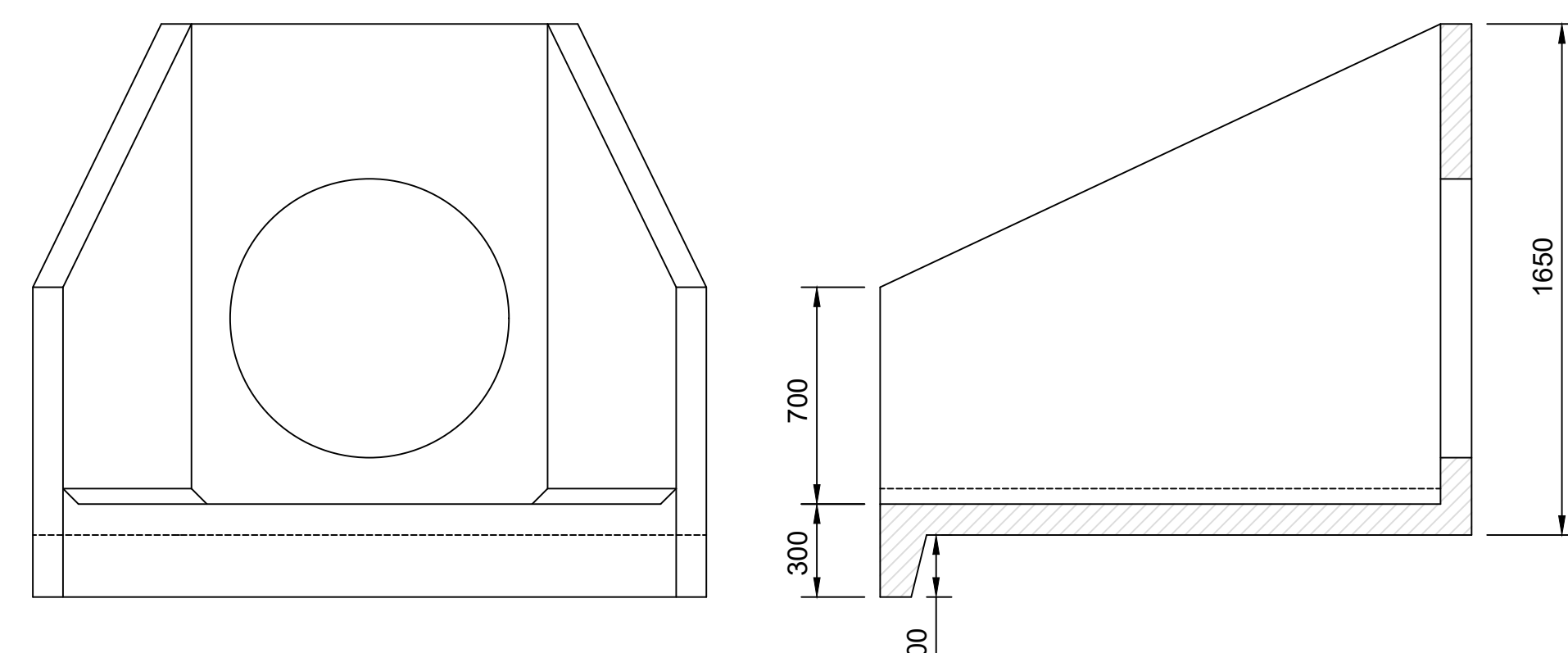
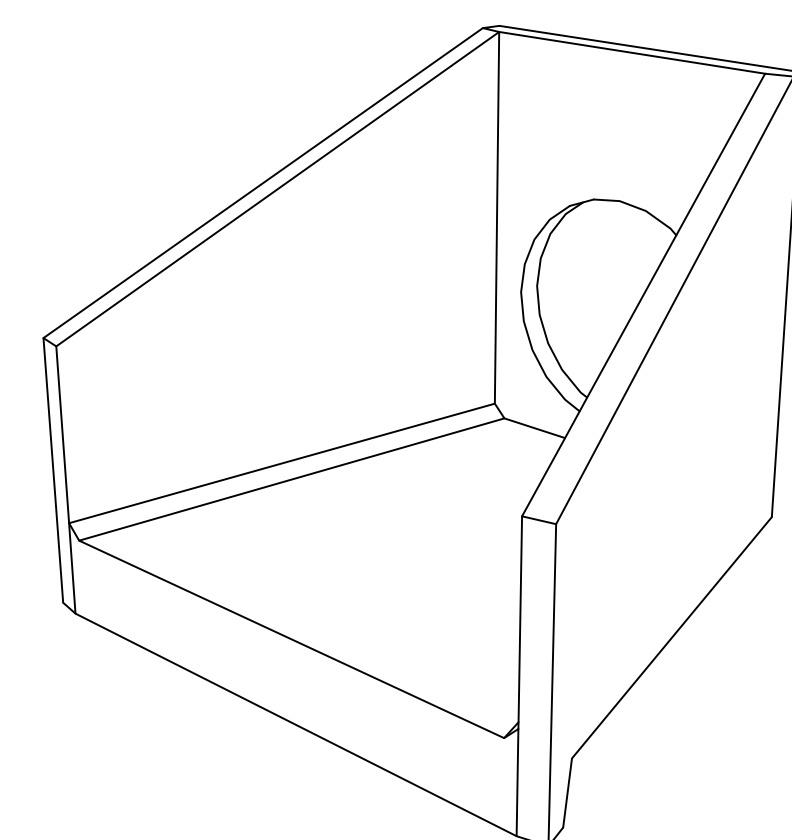
STONE PITCHED CHANNEL

Notes

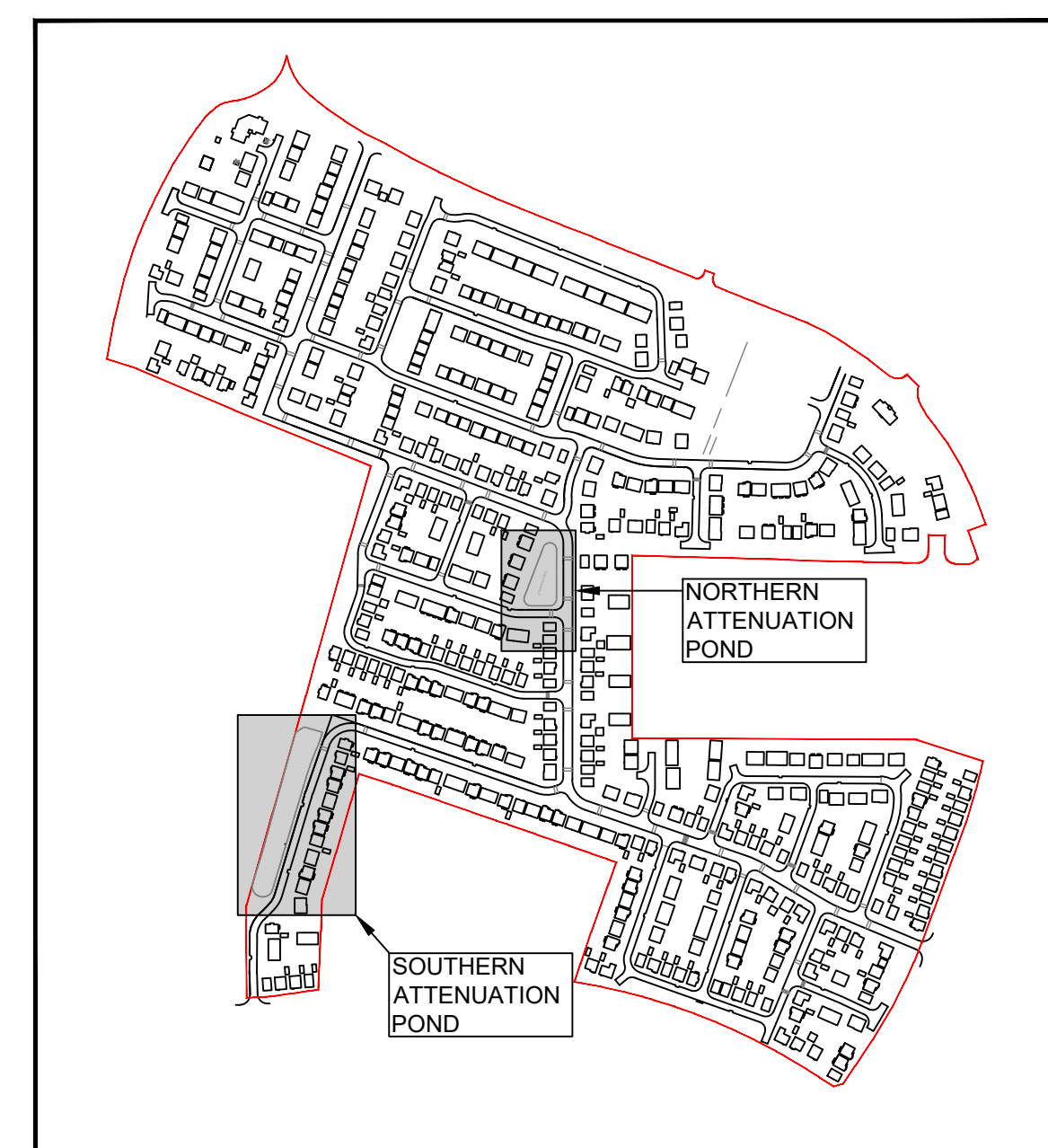
- Setting out shall be undertaken using only the information given. Distances should not be scaled from this drawing.
- All sewers shall be constructed in accordance with Design and Construction Guidance (DCG) Standards and United Utilities Details & Guidelines.
- The minimum gravity pipe diameter under adoptable highways shall be 150mm.
- It is the responsibility of the Contractor to verify all information given with regards to existing services and drainage connections etc. prior to commencing the works. The rates shall include for hand dig around services where necessary. The Contractor shall adhere to the CDM Regulations at all times.
- The outsides of all sewers shall be a minimum of 1.0m from kerb lines and the outside of manholes shall be a minimum of 0.5m from kerb lines.
- Existing flows in watercourses, sewers and land drains shall be maintained at all times.
- Only trained personnel shall be permitted to enter confined spaces.
- All materials to bear the relevant B.S. Kitemark and comply fully with the specifications. All concrete & concrete products must use Sulphate resistant cement to withstand Class 3 condition (unless the site investigation report proves that sulphate attack from soils and groundwater will not occur).
- All opening notices etc. as required under Highways Acts etc. are to be obtained prior to commencement of works. All works are to be inspected by L.A., NHBC or the Network Operator as applicable.
- Where "Structured Wall" UPVC pipes (or similar approved) are used in adoptable drainage they shall be handled and laid in accordance with the manufacturers instructions and will be subject to post installation deformation testing prior to adoption. A Class S Bed and Surround must be used for "Structured Wall" pipes.
- Trench backfill in highways to within 1m of highway shall, as directed by the Highway Authority be a suitable granular material all in accordance with Design and Construction Guidance (DCG) Standards.
- Slab levels shall not be varied without reference to the Engineer for guidance.
- Pipes have not been designed to accommodate construction traffic loading. The contractor is responsible for providing adequate protection to the pipes during construction.



Note: Isometric drawing is for reference only, details may not accurately represent actual design - please see detailed views for technical information



TYPIC HEADWALL DETAIL
(ALTHON H10C B HEADWALL OR SIMILAR)
Scale 1:250



KEY PLAN

Design based on Layouts:
Cherryfield Drive, Kirkby, Planning Layout (South Parcel)
Dwg No. 203004, Dated 11 March 2024
Rev: P03

Cherryfield Drive, Kirkby, Planning Layout (North Parcel)
Dwg No. 203005, Dated 11 March 2024
Rev: P03

Grid/Level datum based on Topos:
Cherryfield Drive, Kirkby, Topographical Land Survey.
Dwg No. DWH:TS.04 Sheets 1 to 3, Dated 27.04.21
Rev: -

Topographical Land Survey.
Former All Saints School Cherryfield Drive, Knowsley.
Dwg No. A0 14F063/001 Sheets 1 & 2, Dated July '14
Rev: -

Coopers Drawing List:
7778 / 01 Proposed S104 Drainage Layout
7778 / 02 Proposed Highway Setting Out
7778 / 03 Proposed Highway Layout
7778 / 04 Proposed Highway and Drainage Longsections
7778 / 05 Highway Construction Details
7778 / 06 Proposed Surface Finishes
7778 / 07 S38 Agreement Plan
7778 / 08 External Works Layout
7778 / 09 Private Drainage Layout
7778 / 10 Private Drainage Construction Details
7778 / 11 Manhole Schedules
7778 / 12 Flow Control Manhole Details
7778 / 13 Surface Water Catchment Areas
7778 / 14 Surface Water Attenuation Details
7778 / 15 Proposed Cut and Fill Earthworks
7778 / 16 Plot Setting Out
7778 / 17 Manhole Connection Plan

TENDER

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CHERRYFIELD DRIVE, KIRKBY.

Surface Water Attenuation Details
Sheet 1 of 3

DRAWING NUMBER	SCALE at A0	Various
7778 / 14-1	DATE	30.10.25
	DRAWN	PJN
	CHECKED	AJ
	REVISION	-