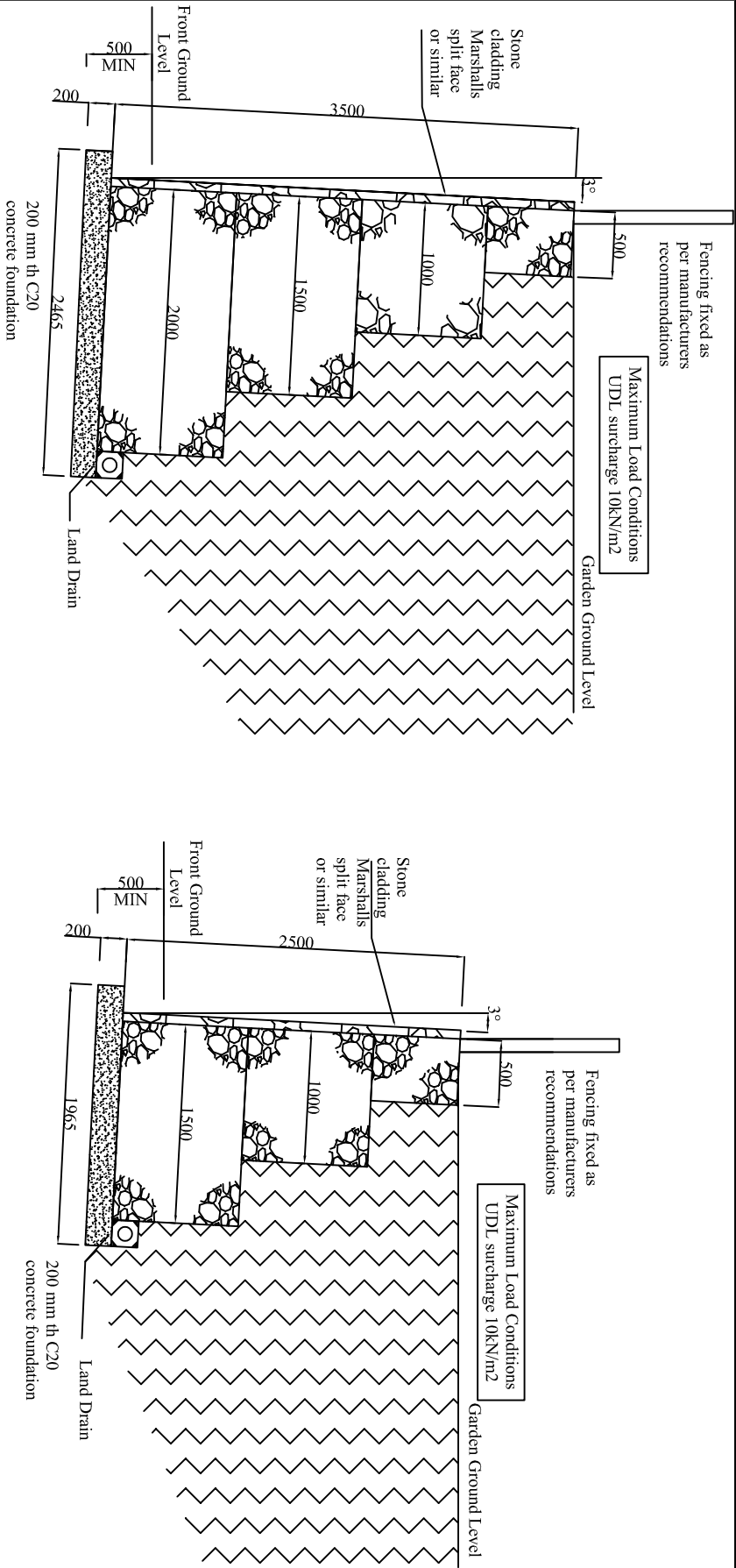




Gabion Retaining Wall

Gabions shall be manufactured in accordance with BS EN 10223-3:1998. Diaphragms to be at nominal 1m centres on the unit length. The mesh openings shall be of a nominal dimension of 80mm x 100mm. The nominal wire mesh diameter for the body of the gabion shall be 2.70mm in diameter and of a nominal 3.40mm for the edge selvage wire. All wire shall be in accordance with BS EN 10218-2:1997. The tensile strength falls within a range of 350 to 575 N/mm². Wire shall be zinc coated to BS EN10244-2: 2001.

Gabions shall be provided with lacing wire or 'C' rings for site assembly. The lacing wire shall be of a nominal wire diameter of 2.2mm (all in accordance with the corrosion protection specified) for final jointing.

Gabion fill shall be a hard durable and non-frost susceptible (rock, stone, broken brick or block type) having a minimum dimension not less than the mesh opening and a maximum dimension of 150mm. All rock fill shall be packed tightly to minimize voids. Angular stone should be placed flat to minimise voids. The in fill shall be hand-picked after placing by machine. Internal windlass bracing wires are to be incorporated at 2 per 1sqm of face at 1/3rd & 2/3 intervals for 1m high units and 1 placed centrally for 0.5m high units. The adjacent gabion units are to be tied together with continuous lacing on the vertical joints as well as horizontally at the front and rear of coursed joints. Alternatively, 'C' rings may be used with a pneumatic tool with one being placed every other mesh space. The units shall be filled such that the mesh lid bears down onto the rock fill. The lid shall be wired down or 'C' ringed as above on all joints and across the diaphragms.

Gabions shall be placed on a foundation slab raked back at 3 degree angle. Formation to be proof rolled with a dead weight roller min weight 2 tonnes to identify any soft spots. Soft spots to be excavated and filled with type 1 granular sub base material compacted in layers not more than 150 mm thick.

The size of compaction plant used within a distance of 2.0 meters from the rear of the retaining wall shall have a dead weight not greater than 1000kg.

Masonry

All necessary propping, pinning and temporary bracing to be provided as required by the contractor on site.

All masonry below DPC to be min 7Nin1:1/2:4 mortar.

All blockwork to be 3.5 or 7 N to BS 5628 uno.

All brickwork to be 20 N to BS 5628 uno.

Stonework movement joints to be at 10m min centres, full height of wall.

DPC's to building regulations.

Concrete

All concrete to be to BS8110, BS5328 & BRE publication No.250. Concrete to be dense, fully compacted with aggregate to BS8882 or BS1047. Concrete blinding to be mix designation GEN 20.

Final profiles to be agreed with ER or Building Control. All pipework in concrete to be set before pouring to the satisfaction of Building Control or ER. For internal drainage refer to architects drawings.

Ordinary Portland Cement (OPC) to be used.

General

Copyright of this drawing is vested with Eaton Richards. It shall not be used without permission for any purpose. This drawing is to be read in conjunction with the specification, relevant architects, structural engineers & others' drawings. Any ambiguities/omissions should be reported immediately to Eaton Richards.

Scaled dimensions should be confirmed on site. Dimensions annotated * are approximate. All dimensions to be checked on site. For setting out refer to architects drawings.

The contractor is to perform work in such a manner as to ensure the safety of all operatives and the public and to cause as little disturbance as possible.

The contractor is to be responsible for the design and supply of all temporary propping, shoring and tying in of the works. If the contractor is in any way uncertain as to the extent of temporary works required, seek advice from the engineers. Any advice will not relieve the contractor from ultimate responsibility for the temporary works.

All works to be undertaken to the satisfaction of Building Control or an Approved Officer.

Foundations

Mass fill concrete foundations are to be designated mix Grade 20 GEN3. Walls to be central about foundations.

Some arisings may require tipping at controlled sites. There may be standing water that will require pumping.

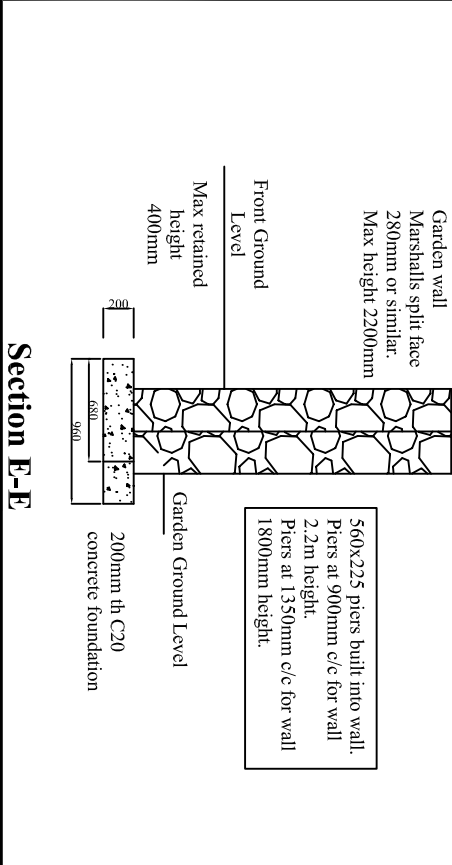
Assumed bearing capacity 100kN/m². Foundations to bear onto firm ground. ER must be notified if there is variation in assumed bearing pressure or ground conditions. Any soft spots in formation should be removed or replaced with suitably compacted granular fill. Layer of lean mix to be placed prior to casting. Foundation type should remain constant & be completed in one pour, or adjacent pours tied with A393 mesh strips lapped 300 mm into each pour, at 500 mm vertical centres.

Existing drainage is to be diverted as necessary.

The size, location, condition and level of existing foundations to be investigated at the commencement of works. If inadequate or likely to be undermined by new foundations, underpinning will be required. Shoring of existing foundations may be required whilst new excavations are undertaken. Do not excavate within a 30 degree line on the horizontal of an existing or new foundation without temporary shoring. All existing redundant footings and sills to be grubbed up prior to new foundations being cast.

Foundations may be stepped: steps should not be greater in height than the thickness of the foundation & should overlap by twice the height of the step or 300 mm (min).

All waterproofing and DPC's to building regulations.



Section C-C

Section A-A

Section B-B

Section D-D

Section E-E

C	10/02/21	IRR	Issued for Construction		SER
REV	ISSUE DATE	BY	DESCRIPTION		CHECKED
			PROJECT	31 Wrexham Rd	DATE
			TITLE	Retaining Wall Sections	DRAWN BY
					ID
			DRAWING REF	2709E/05	SCALE
					1:50@A3



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