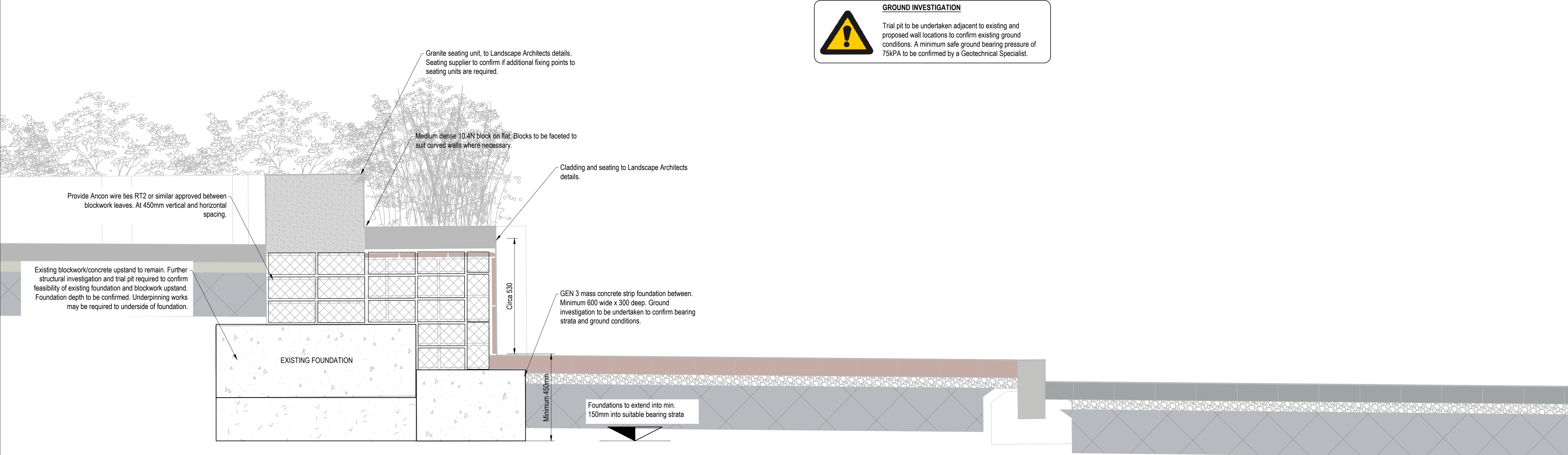


S1-S1: TYPICAL SECTION THROUGH RETAINING WALLS  
Scale 1:10



S2-S2: TYPICAL SECTION THROUGH RETAINING WALLS  
Scale 1:10

**MASONRY RETAINING WALLS**

**BRICKS AND BLOCKS**

Minimum density and strength for bricks and blocks:

Bricks -

Density: 1500 kg/m³

Blocks -

Density: 1700 kg/m³

Strength (min): 10.5 N/mm²

Mortar - M12(i) - External Walls Below DPC, below cappings and copings and sills.

Normally, calcium silicate bricks of Class 3 or stronger to BS 187, and dense concrete blocks and concrete bricks to BS 6073 are sufficiently frost resistant for use in most UK locations.

Use type MN or ML clay bricks to BS 3921 between the dpcs, but only if the coping/capping and high level dpc provide adequate protection to avoid saturation.

Use type FL or FN clay bricks (or calcium silicate bricks of Class 4 or stronger) throughout the wall if it is difficult to provide rain protection or where there is a high risk of frost attack – for example, in areas with a high driving rain index (see Climate and brickwork construction notes).

Use frost resistant clay bricks (or calcium silicate bricks of Class 4 or stronger) above a high-level dpc, and from the top of the foundation to 200mm above finished ground level in front of the wall.

The sizing of walls given assumes a moderate degree of adhesion between the mortar and the bricks or blocks. Do not use bricks or blocks which do not provide moderate adhesion. See BS 5628-Part 3 for advice on adjusting the moisture content of the mortar to achieve the required adhesion. Check after 7 days that using strong hand force only cannot dislodge the units from the wall.

**MOVEMENT JOINTS**

Movement joints are required in all retaining walls and must be continuous through the dpc, and capping and coping.

Clay Brickwork - 10-12m and not more than 6.0m from a corner.  
Calcium Silicate Brickwork - 6-7m and not more than the lesser of 4.5m or 3x wall height from a corner.

Concrete Blockwork - 5-6m and not more than the lesser of 3.0m or 3x wall height from a corner.

**WATERPROOFING**

2 Layers of RIW to be applied to the rear of the wall (or similar approved system - specialist advise to be sought).

IF YOU HAVE A QUERY CALL US  
SCALING FROM THIS DRAWING OR OBTAINING DIMENSIONS ELECTRONICALLY MAY NOT PROVIDE ACCURATE INFORMATION AND SHOULD BE AVOIDED. WORK ONLY FROM FIGURED DIMENSIONS.

**GENERAL NOTES**

DRAWINGS AND SPECIFICATIONS: This drawing is to be read in conjunction with all relevant Architects, Engineers and Specialists drawings together with the specification.

BUILDING REGULATIONS AND WARRANTY PROVIDER APPROVALS: Please note that it is the responsibility of the Client/Main Contractor to ensure that Building Regulations and warranty provider (e.g. NHBC) approval of all design and construction details is achieved prior to construction on site.

**C D M : SIGNIFICANT HAZARDS**

THE FOLLOWING HEALTH AND SAFETY HAZARDS ARE IDENTIFIED BY THE DESIGNER AS ABNORMAL IN PURSUANCE OF THE CURRENT CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS.

**RISKS DURING CONSTRUCTION:**

- No abnormal risks have been identified relating to this design element.

**OPERATION / MAINTENANCE RISKS:**

- No abnormal risks have been identified relating to this design element.

**RISKS DURING DEMOLITION / DECOMMISSIONING / DISMANTLING / ALTERATIONS:**

- No abnormal risks have been identified relating to this design element.

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY COMPETENT & ADEQUATELY RESOURCED CONTRACTOR(S) WORKING TO SAFE SYSTEMS OF WORK.

P03	SECTION 2-2 ADDED	MTN	08.03.24
P02	AMENDED SECTION THROUGH	MTN	05.03.24
P01	1ST ISSUE	MTN	01.03.24
REV	REVISION DETAILS	BY	DATE

**CRADDYS**  
Consulting Civil and Structural Engineers  
www.cradrys.co.uk

THIS DRAWING IS THE COPYRIGHT OF CRADDY PITCHERS LTD AND MUST NOT BE COPIED, REPRODUCED OR SUBMITTED TO OTHER PARTIES WITHOUT THEIR PERMISSION.

PROJECT TITLE  
**WESTBURY ROTUNDA  
HIGH STREET, WESTBURY**

DRAWING TITLE  
**RETAINING WALL SECTION  
THROUGH, STRUCTURAL DETAILS**

CLIENT  
**WESTBURY TOWN COUNCIL**

STATUS  
**FOR APPROVAL**

SCALE AT A1	DRG SIZE	DRAWN	CHECKED	APPROVED
1:10	A1	MTN	CS	AMR
JOB NO.	DRAWING NUMBER			REV
13486	WEST-CDY-XX-XX-SR-S-0100			P03