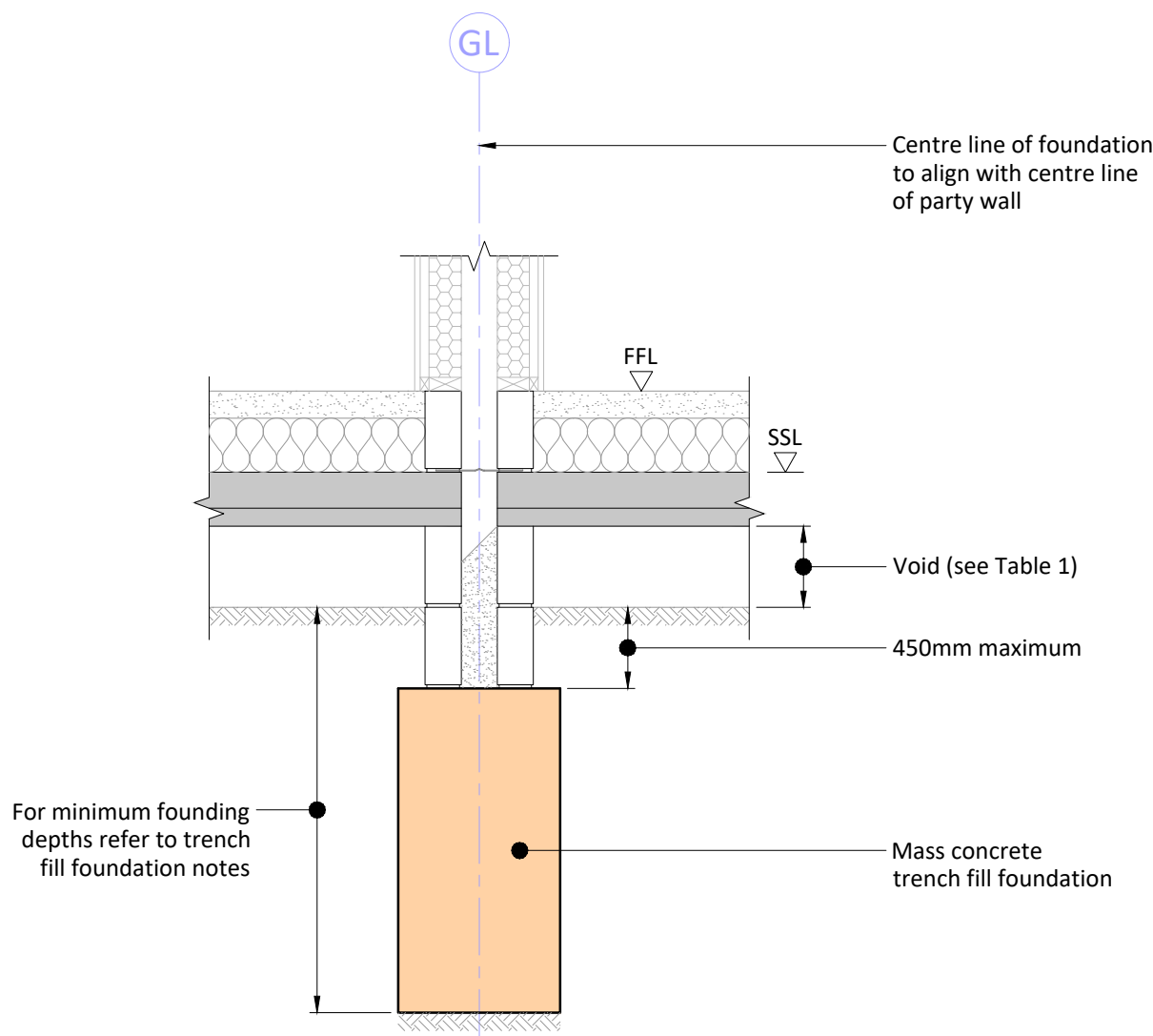
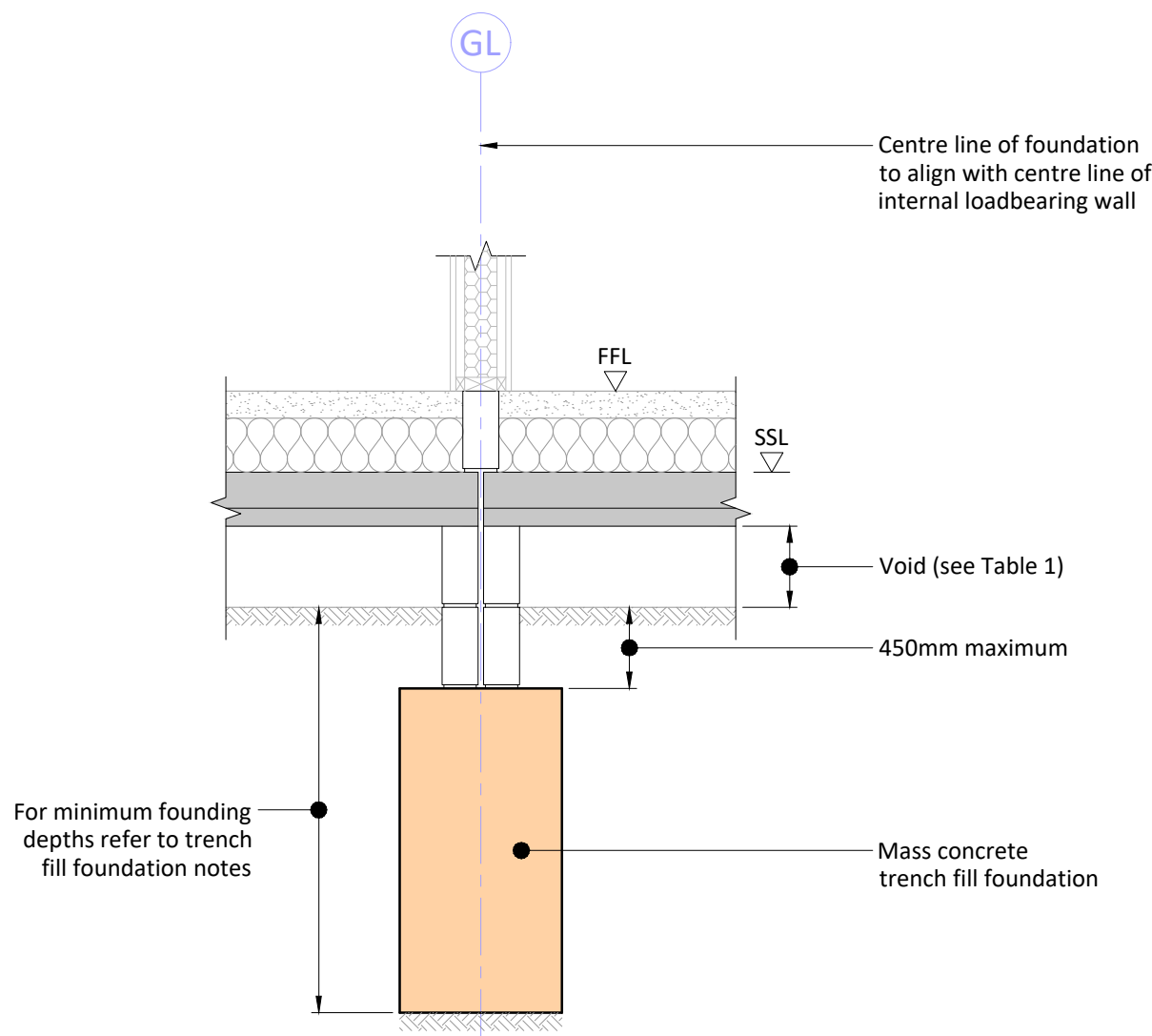


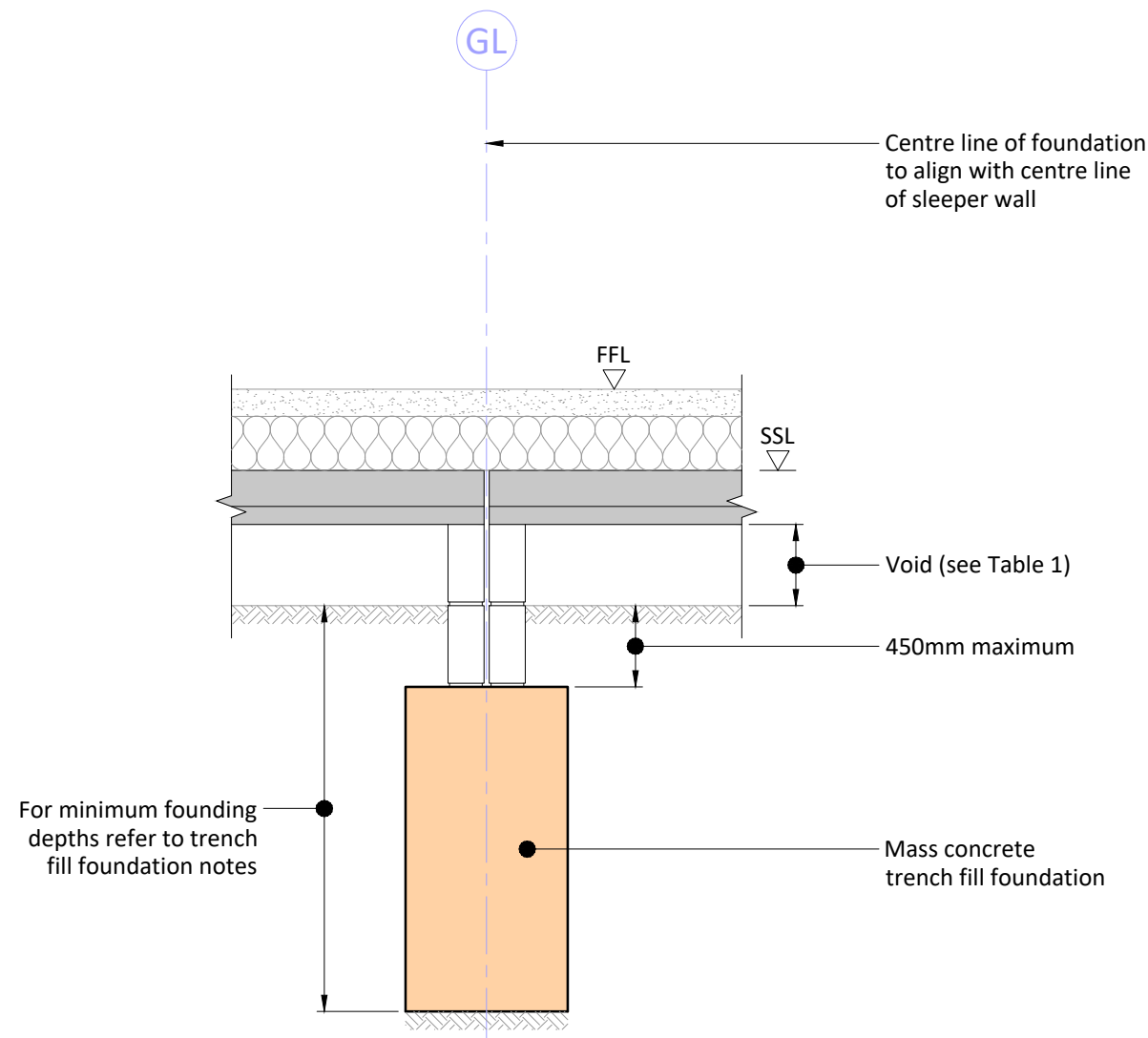
Typical Section Through External Wall Foundation  
(Scale 1:20)



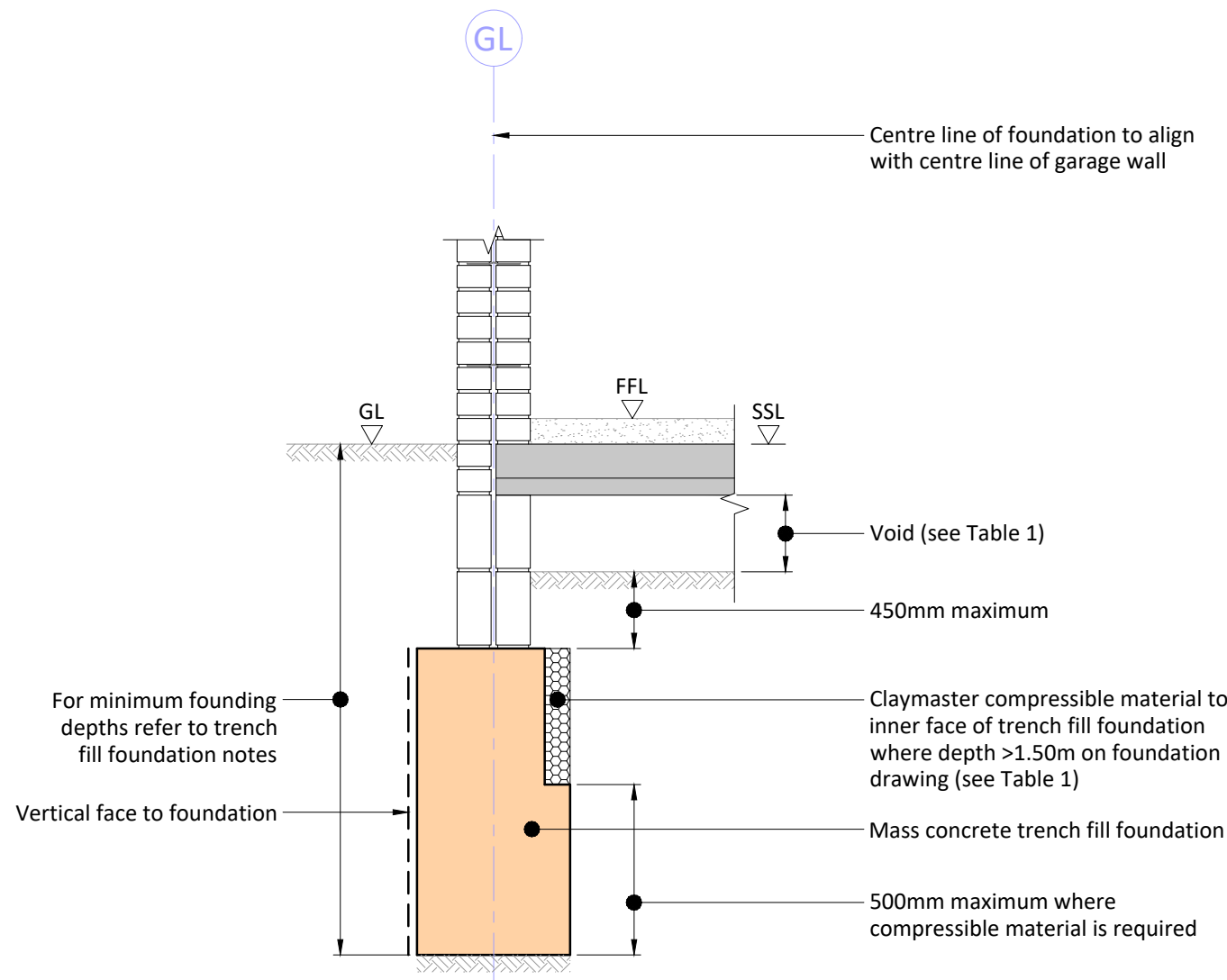
Typical Section Through Party Wall Foundation  
(Scale 1:20)



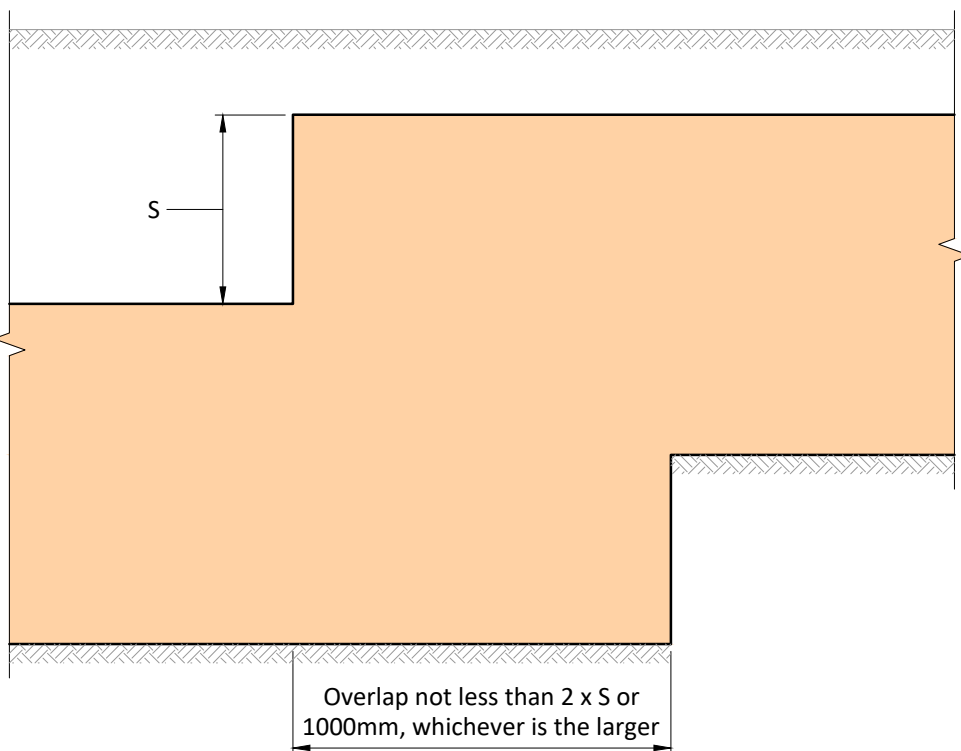
Typical Section Through Internal Load Bearing Wall Foundation  
(Scale 1:20)



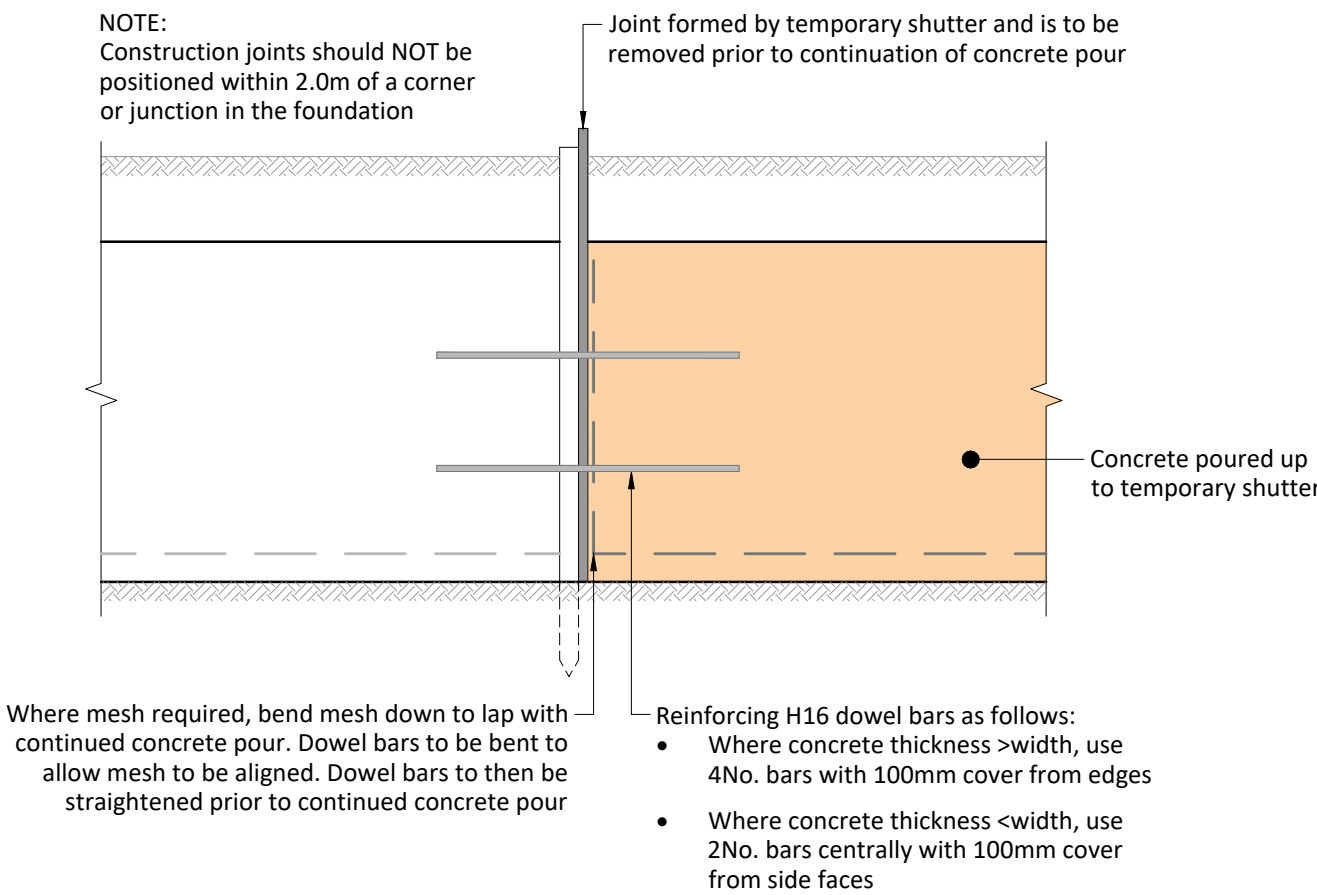
Typical Section Through Sleeper Wall Foundation  
(Scale 1:20)



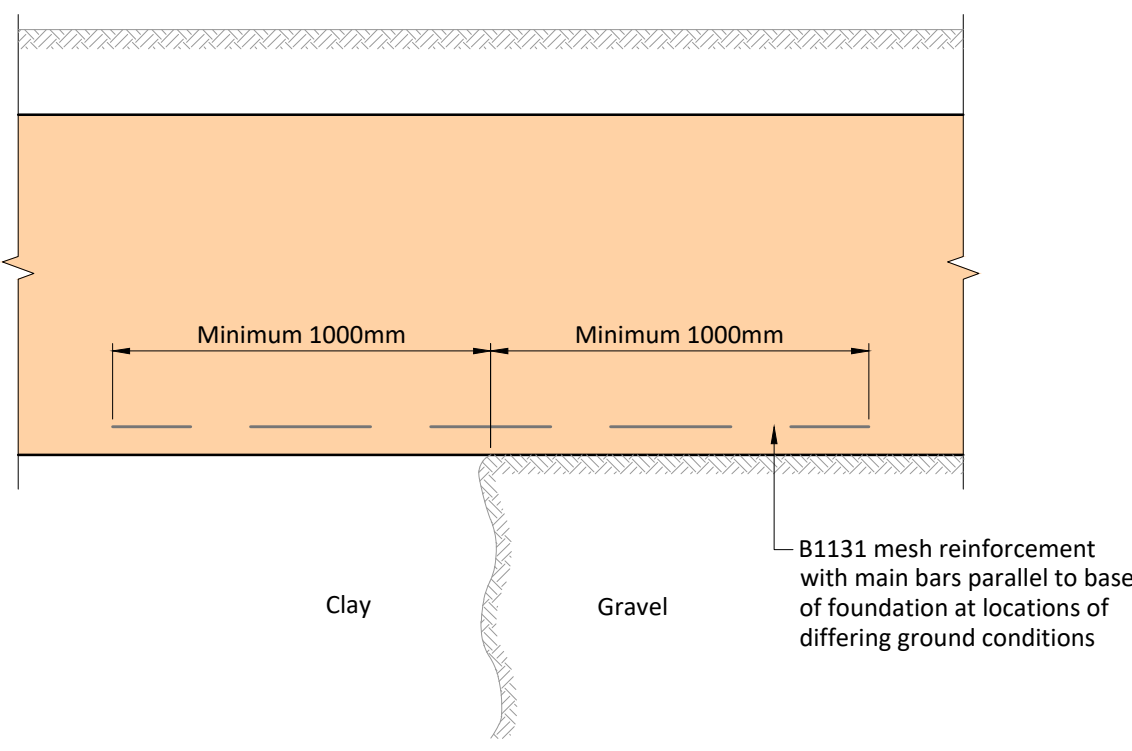
Typical Section Through Garage Wall Foundation  
(Scale 1:20)



Trench Fill Foundation Step Detail  
(Scale 1:20)



Typical Foundation Construction Joint  
(Scale 1:20)



Typical Foundation Reinforcement Detail  
(Only where formation strata differs)  
Scale 1:20)

#### TRENCH FILL FOUNDATION NOTES

- Soil volume change potential is MEDIUM.
- Gas protection measures are to be in accordance with the recommendations of the ground investigation report and regulatory approvals.
- All trench fill foundation widths are shown on the foundation plans. Minimum thickness of concrete shall be half the foundation width or 300mm, whichever is the greater.
- The setting out of the foundations in relation to the masonry is as shown on the relevant sections.
- All trench fill foundation depths to be established as the greater depth from the following:-
  - Minimum 1.00m deep (medium volume change potential soils) with allowance for restricted tree and shrub planting, see notes 11 and 12.
  - Minimum depth due to influence of trees as indicated on the individual plot foundation plans.
  - 300mm below tree root activity and desiccated soils.
  - 250mm into undisturbed natural firm clay.
  - All foundation depths are to be measured from the lower of existing or proposed levels.
  - Foundations adjacent to pipe runs or manholes are to have their formation level set above the invert level no higher than the equivalent of the horizontal distance between the pipe/excavation trench and the foundation minus 500mm.
- The anticipated founding level has been calculated from available information to assist in planning and tendering the works. The actual levels should be determined during excavation based on the above.
- Foundations have been designed using the following information:-
  - Leap Environmental Ltd Site Investigation Report: report No. LP00906, dated 28/04/15.
  - Persimmon Homes drawing No. 634-Con-100 - Site Plan, entitled Site Plan, received 15/12/23.
  - Hook Survey Partnership Site Survey: survey No. S21/8261/01 - S21/8261/03, dated June 2021.
  - PJC Consultancy Ltd Arboricultural Report: report No. PIC/6449/24-01 Rev 01, dated 05/01/24.
  - Soil conditions: Made ground overlying clay. If conditions other than these, or variable formation conditions, are encountered then Engineer shall be informed prior to concreting.
  - Ground water level (anticipated): <1.0m bgl.
  - A safe bearing pressure of 125kN/m<sup>2</sup> for undisturbed natural firm clay.
- Heave protection to be provided where foundations are within the influence zone of trees and where the foundation depths indicated on the foundation drawings are greater than 1.50m, in line with the details and specifications indicated on the foundation sections drawing.
- The Geotechnical Engineer and Building Control/NHBC are to inspect and approve foundation formations prior to the placing of concrete. Inspection of foundation formations by Geotechnical Engineer are to be in accordance with the recommendations of the ground investigation report.
- Where foundations are excavated deeper than 2.50m inform Engineer to allow these foundations to be re-designed.
- Tree planting zones; minimum 1.00m foundation depth excludes the planting of trees from within the following distances from the foundations;
  - High water demand 1.25 x mature height
  - Moderate water demand 0.75 x mature height
  - Low water demand 0.50 x mature height
- Shrub planting zones; minimum 1.00m foundation depth excludes the planting of shrubs from within the following distances from the foundations;
  - Pyracantha (mature height > 1.8m) 1.00 x mature height
  - Cotoneaster (mature height > 1.8m) 1.00 x mature height
  - All other shrubs and climbing varieties (mature height > 1.8m shrubs, > 5m climbers) 0.75 x mature height.
  - All other shrubs and climbing varieties (mature height < 1.8m shrubs, < 5m climbers) no restriction on distance.
- Any existing foundations encountered are to be grubbed out locally at new foundation positions, to 300mm below the depth of the existing formation level, and the new foundation formation level is to be at this depth, with stepping to adjoining foundations accordingly.
- All excavations shall be kept free from water, loose material and rubbish etc. The formation level shall not be exposed until the day of the concrete pour. If concrete pours are delayed the formation shall be protected by minimum 50mm of concrete blinding to prevent deterioration.
- Concrete is specified in accordance with BS 8500-1 and BRE Special Digest No. 1. All concrete is to conform to BS EN 206-1 and BS 8500-2.
  - The Aggressive Chemical Environment for Concrete (ACEC) site classification is: AC-22
  - Concrete strength/durability requirements are as follows:  
Designed Concrete
    - Compressive Strength Class: C28/35
    - Maximum water/cement ratio: 0.5
    - Minimum cement content: 320kg/m<sup>3</sup>
    - Permitted Cements and Combinations: All in Table A6/A12
    - Maximum aggregate size: 20mm
    - Chloride Class: Cl 0,40 (Cl 0,20 for SRPC)Designated Concrete
    - Concrete designation: FND2
  - The Design Chemical Class is: DC-2. Where necessary, the strength/durability requirements indicated above should be enhanced to meet the requirements of BS8500-1 and BRE Special Digest No. 1.
  - The minimum cement contents indicated are based on the stated maximum aggregate size. If a smaller maximum aggregate size is used the cement content is to be increased in accordance with BS 8500-1.
- Concrete sampling and testing shall be carried out in accordance with BS 1881.

#### HEALTH, SAFETY & ENVIRONMENT

It is the responsibility of the client to ensure that those undertaking the works are competent and experienced in the type of work to be undertaken.

In addition to the hazards usually associated with the types of work detailed on this drawing, the following specific hazards have been identified through design risk assessment. The planning and execution of the works should take into account all usual and specific hazards.

Hazards should also be taken into account in the maintenance, operation, decommissioning and demolition of the works.

- Live services may be present on site
- Existing ground is/may be contaminated
- Deep excavations necessary
- Ground conditions may be unstable during excavation
- The stability of adjacent foundations will need to be considered during excavation works
- Piling rig and working platform on sloping site

#### NOTES

- All dimensions are in millimetres (mm) and levels in metres Above Ordnance Datum (mAOD) unless noted otherwise.
- Do not scale from this drawing.
- The copyright in this drawing belongs to Structa LLP; the designs and details may not be used on any project other than that indicated in the title block.
- Where AutoCAD or Revit files of the drawing are issued, they are provided for the convenience of others, and shall not be used for construction purposes or relied upon for accuracy or completeness.
- For material and workmanship requirements refer to notes on relevant drawings and structural specification 3902-SS001.

Rev.	Date	Description	Drawn	Checked	Approved
C1	11.12.24	CONSTRUCTION ISSUE	GB	NW	TJS
P1	23.02.24	FIRST ISSUE	GB	NW	TJS

FOR CONSTRUCTION



LAND AT BASSETTS FARM,  
HORSMONDEN, KENT - PHASE 1

TRENCH FOUNDATION SECTIONS, DETAILS AND  
CONSTRUCTION NOTES

- Structural
- Civil
- Geo-environmental

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Drawing No: 3902-2001  
Revision: C1

SCALE 1 : 20 @ A1

