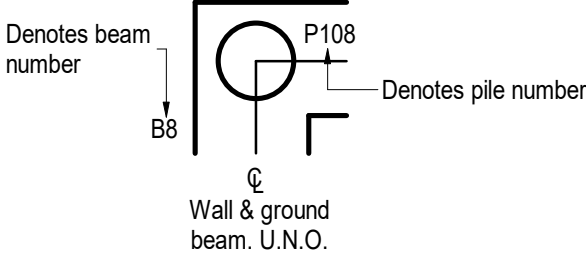


Slab to Beam Detail
Scale 1 : 10

Ground Beam, Pile Cap and Slabs cast on Grade Notes:

- Nominal Concrete Cover to all reinforcement to be:
 - Shuttered faces: 35mm minimum.
 - Blinding: 50mm minimum.
 - Earth faces: 75mm minimum (RSK to be informed).
- All ground beams to be **500mm x 450mm** deep unless noted otherwise. Tie beams to be 300mm x 300mm.
- Beam centrelines are centrelines of walls U.N.O.
- If required, all construction joints (or day-work joints) are to be placed at 1/3 span and to be agreed with the engineer. Preparation for such joints is to comply with the specification.
- The largest diameter longitudinal bar is to be placed nearest to the outside face of the beam.
- Pile & Ground Beam Nomenclature:



- Minimum bar laps (mm) to be:-
 - B12 500
 - B16 650
 - B20 800
 - B25 1000
 - B32 1300
- Clay Heave protection for high volume change potential clay (Allowing 150mm compression).
Grade of Cellcore to be as below:-
 - 225mm thick HX S Grade 9/13 under 250 mm thick RC slabs.
 - 220mm thick HX B Grade 18/24 under 600mm thick R.C. ground beams.
 - 220mm thick HX B Grade 24/32 under R.C. double and triple pile caps.
 - 220mm thick HX B Grade 30/40 under R.C. quadruple pile caps and lift pits.
 - 300mm thick HG Grade 40/50 under R.C. core pile caps and lift pits over 900mm deep.
- Cordek Claymaster and Cellcore is only required for plots within the tree influence zone. Refer to General Arrangement drawings for location.

Masonry Wall Openings

Scale 1 : 20

General Foundation Notes:

- This drawing is to be read in conjunction with all relevant Engineer's, Architect's, Civil Engineering, M&E Designer's and Specialist Subcontractor and drawings and specifications.
- RSK details are indicative, refer to the Architects drawings for:
 - General sections and details.**
 - Incoming service penetration setting out.**
 - Sub-wall setting out.**
 - Floor span direction.**
 - Airbrick locations.**
 - DPC, DPM and cavity tray arrangement.**
 - Floor finishes.**
 - Brickwork and blockwork coursing.**
 - Gas and radon protection membrane details.
- Refer to the following RSK Specifications:
 - 134215-PIL-01: NBS Specification for Piling and Associated Works dated Mar 2022**
 - 134215-LOW-01: Specification for Low Rise Housing dated Mar 2022.**
- Refer to the following geo-environmental technical reports for ground conditions and recommendations:
 - Reference: Phase 2 Geo-environmental and Geotechnical Site Investigation: Parcel B, St James Place, Whittington Way, Bishops Stortford**
 - Title: Phase 2 Geoenviromental Assessment**
 - Reference: 1921564-R01 (00)**
 - Dated: March 2022**
 - By: RSK Group.**
- For site levels refer to RSK drawing
 - 134195-RSK-ZZ-XX-DR-C-2001-2004 Site Levels.**
- All subwalls to be constructed using blocks of either:
 - Minimum 7.3 N/mm² strength.**
 - Minimum dry density of 1500 kg/m³.
- Site is identified as being underlain by clays of high volume potential change. All new external landscaping planting must be designed so as to not adversely affect foundations (Using lower water demand varieties located suitably remotely from new properties as necessary).
- Shed and similar ancillary foundations are not indicated on RSK drawings.
- Concrete mix (satisfying design class **DC-1** for design sulphate class **DS-1** and AEC class of **AC-1** of BRE Special Digest 1 (2005) "Concrete in Aggressive Ground") (concrete mix subject to lad results) to be:
 - Reinforced Trench Fill Foundations: **RC25/30.**
 - Ground Beams: Grade **RC28/35.**
 - Pile Caps: Grade **RC28/35.**
 - Piles: Grade **RC28/35.**
 - Slabs: Grade **RC28/35.**
 - Lift pits: Grade **RC28/35** waterproof concrete in strict accordance with waterproof concrete producer's details and instructions. A secondary form of waterproofing will be required by the warranty provider - refer to Architect's or Specialist waterproofing design/supplier's details and specification. (Refer to drawing **134215-RSK-ZZ-DR-S-1303** for details).
- Ready mixed concrete: (UKAS accredited) this may be used subject to approval of the source of supply and of production facilities. In all other respects, ready mixed concrete and it's constituents shall comply with the RSK LDE Ltd specifications. The groundworks contractor shall be responsible for ensuring that ready mixed concrete meets the requirements of this specification. The suppliers depot must be approved by the BSI Kitemark or quality scheme for ready mixed concrete. If a mix has been found not to conform to the specification then the supplier must inform the specifier and user.
- Legend:
 - TOC = Top of Concrete foundation.
 - FFL = Finished Floor Level.
 - ▲ = Indicates house entrance.

CIVIL / STRUCTURAL DESIGN RISK MANAGEMENT

Abnormal or unusual residual risks associated with the design outcomes shown on this drawing are:-

RSK LDE LTD has followed its Design Risk Management process for Hazard Elimination and Risk reduction in developing the designs shown on this drawing.
Abnormal or unusual residual risks may be shown above where it is considered that such risk may not normally be expected by competent persons engaged on work of this nature or type.

Piling Notes:

- For pile setting out refer to drawings:
 - 134215-RSK-ZZ-DR-S-1100 to 134215-RSK-ZZ-DR-S-1104.**
- For piling foundation details and notes refer to drawing **134215-RSK-ZZ-DR-S-1300.**
- All piles assumed to be **350mm** diameter CFA or **precast driven piles** (to be confirmed by piling contractor) and designed to ground conditions described in the geotechnical reports as listed in general foundation notes.
- 350mm** diameter piles (nominal) are preferred to achieve good construction tolerances with **500mm** wide ground beams. Maximum pile diameter to be 400mm.
- To avoid damage to piles and minimise construction costs all buried obstructions should be removed and site levels regraded where necessary prior to commencement of any piling works.
- Concrete cover to any reinforcement in augered piles is to be 75 mm when cast against earth faces. (If not practicable for 300mm diameter piles a minimum of 55mm cover may be adopted).
- Pile design shall have a minimum factor of safety of 2.2 used in conjunction with a pre-determined testing regime of static preliminary and working load tests. Assume testing to 1.5 x design loads. All to be confirmed by the appointed Building Control authority. Preliminary or working pile load tests may not be required but contractor to provide unit costs for tests in tender.**
- For piles constructed in areas of demolition/fill/made ground, piling design to allow for down-drag. Refer to site investigation report.
- Final pile design calculations are to be submitted to RSK LDE for vetting at least 2 weeks prior to commencement on site.
- 100% of piles to be integrity tested in accordance with The Specification. All integrity testing must be undertaken after reducing the pile lengths down to the cut-off levels. 48 hours should elapse after casting the piles, prior to exposing and carefully breaking piles down to the cut-off levels.
- For concrete grade refer to general foundation notes item 5.

C01	26.05.22	Construction Issue	SJW	VV	VV
T2	26.04.22	Tender Issue	EW	KM	VV
T1	18.03.22	Tender Issue	EW	KM	VV
Rev	Date	Amendment	Drawn	Chkd	Appd



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Client



Project Title

WHITTINGTON WAY PARCEL B

Status

CONSTRUCTION

Drawing Title

PILE FOUNDATION DETAILS

Drawn	Date	Checked	Date	Approved	Date
SJW	26.05.22	VV	26.05.22	VV	26.05.22
Scale	Orig Size		Dimensions		
As indicated	A1		mm/m		
Project No.			File Name		
134215			134215RSK-ZZ-M1-03-V20		
Drawing No.					Rev.
134215	RSK	ZZ	ZZ	DR S	1300 C01
Project No.	Orig.	Vol./Sys.	Lev./Loc.	Type	Role
					Draw. No.

