

Appendix C

Structural Engineers Drawings

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e - ELECTRONIC ISSUE



- LEGEND**
- DENOTES APPROXIMATE LOCATION OF NETWORK RAIL TUNNEL
 - DENOTES OUTLINE OF PROPOSED BASEMENT EXTENSION
 - DENOTES FOOTPRINT OF EXISTING BUILDING
 - DENOTES SITE BOUNDARY LINE

NOTE:
THIS DRAWING INDICATES OUTLINE OF STRUCTURAL PROPOSALS TO ASSIST THE PLANNING APPLICATION.

P1	30.08.12	FOR PLANNING		DJP	JP
Rev.	Date	Amendment		By	Chk'd

PLANNING

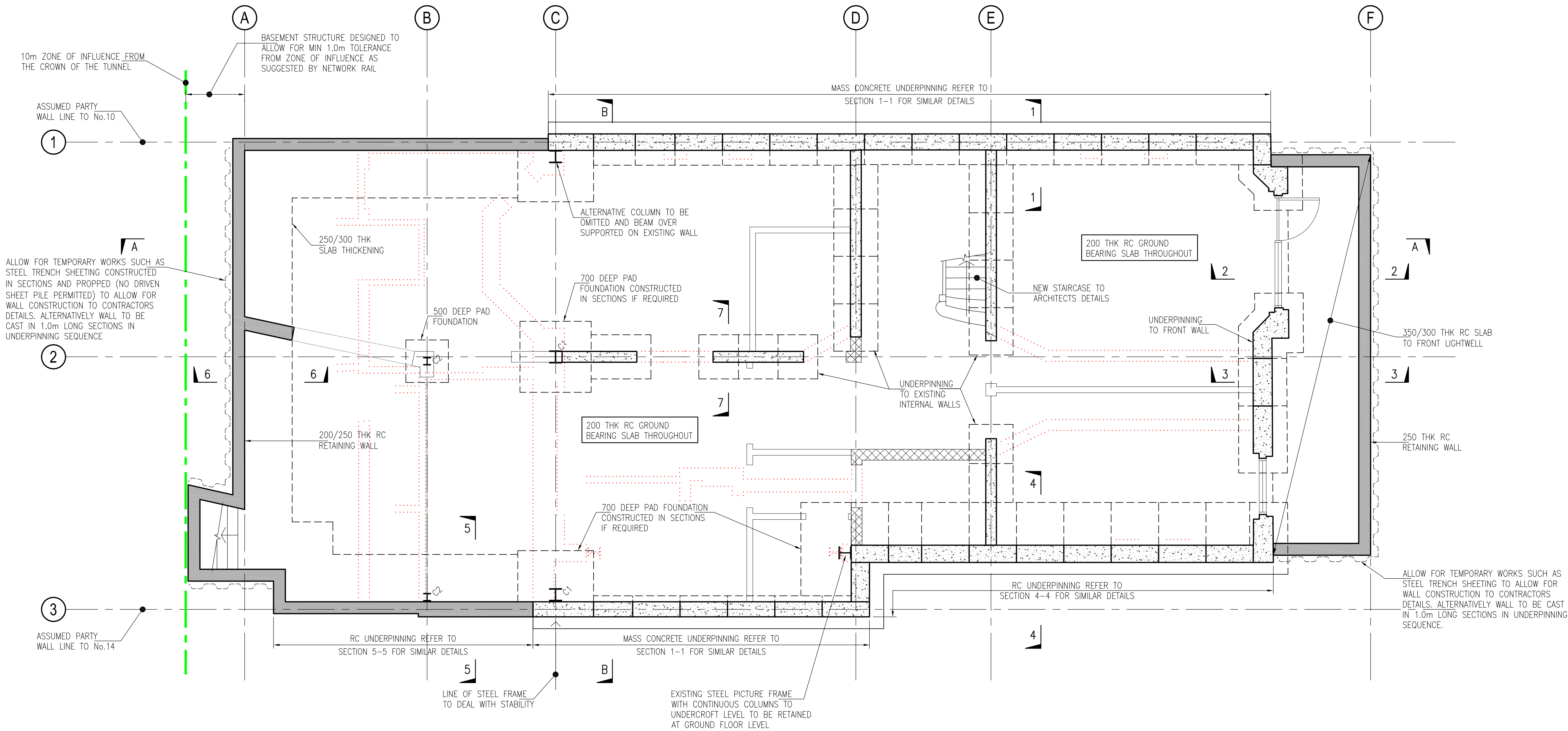
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Project:
12 Elsworthy Road
London
NW3 3DJ

Drawing title:
Outline Scheme Drawing
Site Plan

Date: 20.08.12	Scale at A1: 1:200 Scale at A3: 1:400	Drawn by: DJP
Cad file No. 1031_PL_002.dwg		Chk'd by: JP

Drawing No:	Revision:
1031/PL/01	P1



LEGEND

- DENOTES MASS CONCRETE UNDERPINNING
- DENOTES RC WALLS/ UNDERPINNING
- DENOTES NEW BLOOCKWORK WALLS
- DENOTES EXISTING WALLS TO BE DEMOLISHED
- C1 – 203/254 UC COLUMN
- C2 – 152 UC COLUMN

NOTE:
THIS DRAWING INDICATES OUTLINE
OF STRUCTURAL PROPOSALS TO
ASSIST THE PLANNING APPLICATION.

UNDERPINNING SPECIFICATION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT HIS OPERATIONS DO NOT IN ANY WAY IMPAIR THE SAFETY OR CONDITION OF THE EXISTING STRUCTURE OR THE ADJACENT PROPERTIES. HE SHALL PROVIDE ANY TEMPORARY SUPPORTS REQUIRED FOR THIS PURPOSE, AND SHALL CAREFULLY INSPECT THE CONDITION OF THE STRUCTURE OR THE ADJACENT PROPERTIES. HE SHALL PROVIDE ANY TEMPORARY SUPPORTS REQUIRED FOR THIS PURPOSE, AND SHALL CAREFULLY INSPECT THE CONDITION OF THE STRUCTURE BOTH BEFORE AND DURING THE EXECUTION OF THE WORK AND IMMEDIATELY INFORM THE ENGINEER IF HE CONSIDERS THAT ANY MORE STRINGENT PROCEDURE THAN THAT SPECIFIED IS NECESSARY.
2. UNDERPINNING IS TO BE CARRIED OUT IN SHORT SECTIONS NOT EXCEEDING 1000mm LENGTHS AS SPECIFIED ABOVE, IN A SEQUENCE TO BE APPROVED BY THE CONTRACT ADMINISTRATOR.
3. THE UNDERSIDE OF THE FOOTINGS ARE TO BE CLEANED AND HACKED FREE OF ANY DIRT, SOIL OR LOOSE MATERIAL BEFORE UNDERPINNING.
4. THE BODY OF THE UNDERPINNING IS TO BE CONSTRUCTED IN CONCRETE GRADE C40 SULPHATE RESISTING USING 20MM MAX AGGREGATE, AND IS TO BE CAST TO THE WIDTHS AND DEPTHS SHOWN ON THE DRAWINGS. AS FAR AS PRACTICABLE EXCAVATION AND CONCRETING OF ANY SECTION OF UNDERPINNING SHALL BE CARRIED OUT ON THE SAME DAY. UNCONCRETED SECTIONS SHALL BE KEPT COVERED TO PREVENT THE INGRESS OF WATER.
5. THE MASS CONCRETE IS TO BE STOPPED OFF APPROXIMATELY 75MM BELOW THE UNDERSIDE OF THE EXISTING FOOTING, AND THE FINAL PINNING UP OVER THE WHOLE EXTENT OF THE LATTER IS TO BE CARRIED OUT WITH A SEMI-DRY SAND CEMENT PACKING, WELL RAMMED IN AS SOON AS POSSIBLE AFTER THE FOUNDATION HAS SET HARD. THE PINNING-UP CONCRETE IS TO CONSIST OF 1 PART BY VOLUME OF SULPHATE RESISTANT CEMENT TO 3 PARTS OF SHARP SAND (WELL GRADED FROM 10MM MAXIMUM SIZE DOWN TO FINE SAND) WITH A WATER/CEMENT RATIO BY WEIGHT OF 0.35. EXPANDING ADMIXTURE SUCH AS CEBEX 100 BY FOSROC IS TO BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.
6. EXCAVATION TO ANY SECTION OF UNDERPINNING SHALL NOT BE COMMENCED UNTIL AT LEAST 48 HOURS AFTER COMPLETION OF ANY ADJACENT SECTION OF THE WORK.
7. THE JOINT BETWEEN ADJACENT SECTIONS OF UNDERPINNING IS TO BE FORMED BY CREATING A ROUGH SURFACE AGAINST WHICH THE FIRST SECTION IS CAST INCORPORATING SHEAR KEYS ("JOGGLE JOINTS"). THEN, HAVING THOROUGHLY CLEANED THE EXPOSED CONCRETE FACE, THE ADJACENT SECTION MAY BE CAST.
8. THE CONTRACTOR SHALL PREPARE A SEQUENCE OF WORK AND SUBMIT IT TO THE ENGINEER FOR HIS COMMENTS PRIOR TO THE COMMENCEMENT OF THE WORK.

TEMPORARY WORKS NOTES

1. THE CONTRACTOR WILL HAVE FULL RESPONSIBILITY FOR ALL TEMPORARY WORKS DESIGN.
2. THE CONTRACTOR IS TO PROVIDE ADEQUATE TEMPORARY WORKS AND SUPERVISION TO ENSURE THAT THE STABILITY OF THE EXISTING STRUCTURE IS MAINTAINED AT ALL TIMES.
3. THE CONTRACTOR IS TO APPOINT A TEMPORARY WORKS CO-ORDINATOR FOR THE DURATION OF THE CONTRACT IN ACCORDANCE WITH THE SPECIFICATION.
4. THE CONTRACTOR IS TO SUBMIT TO ENGINEERS HRW FOR COMMENT DETAILS OF ALL TEMPORARY WORKS REQUIRED BY THE METHOD OF CONSTRUCTION AS SPECIFIED IN THE SPECIFICATION. THESE ARE TO BE CHECKED BY A COMPETENT QUALIFIED ENGINEER PRIOR TO SUBMITTING THEM FOR REVIEW.
5. ALL WORKS SUBJECT TO PARTY WALL AWARDS.

FOUNDATION NOTES

1. ALL CONCRETE FOUNDATIONS TO BE FOUNDED ON UNDISTURBED NATURAL STRATA BROWN FIRM SILTY CLAY. FOOTINGS MUST FULLY PENETRATE ANY MADE GROUND FOR ANY OTHER GROUND CONDITION REFER TO ENGINEER.
2. BOTTOM OF ALL TRENCHES TO BE CLEANED IMMEDIATELY PRIOR TO POURING OF CONCRETE. UNLESS TRENCH FILL IS TO BE POURED IMMEDIATELY. THE BOTTOM OF TRENCHES TO BE BLINDED WITH CONCRETE AT LEAST WITHIN 2 HOURS OF EXCAVATION. BLINDING CONCRETE TO BE DESIGNATED MIX GEN1. THE ENGINEER TO BE NOTIFIED 48 HOURS IN ADVANCE OF EXCAVATION AND BE GIVEN THE OPPORTUNITY TO INSPECT PRIOR TO CONCRETE POUR.
3. FOUNDATIONS ARE TO BE LOCATED CENTRALLY ON ALL WALLS AND COLUMNS U.N.O.
4. NEW FOOTINGS MUST NOT UNDERMINE EXISTING FOUNDATIONS.

METHOD STATEMENT / SEQUENCE OF WORKS ASSUMED IN DESIGN

1. THE EXISTING REAR PATIO IS TO BE DEMOLISHED AND GROUND LEVEL THROUGHOUT THE HOUSE IS TO BE REDUCED / LEVELLED TO APPROXIMATELY 200MM ABOVE THE SHALLOWEST EXISTING FOUNDATION. THE EXISTING FOUNDATIONS WILL NOT BE UNDERMINED AT ANY LOCATION.
2. THE EXTERNAL AND INTERNAL WALLS ARE TO BE UNDERPINNED IN UNDERPINNING SEQUENCE IN MAXIMUM LENGTHS 1.0-1.2M. WHERE STRUCTURALLY REQUIRED THE UNDERPINS ARE TO BE BACKFILLED WITH COMPACTED ARISINGS OR BACK-PROPPED ON COMPLETION.
3. RC RETAINING STRUCTURE TO THE REAR PART OF THE BASEMENT IS TO BE CONSTRUCTED IN UNDERPINNING SEQUENCE OR USING TEMPORARY WORKS TO ALLOW FOR FULL EXCAVATION.
4. WHEN UNDERPINNING OF THE FRONT WALL COMPLETED RC RETAINING STRUCTURE TO THE FRONT LIGHTWELL IS TO BE CONSTRUCTED.
5. WHEN ALL EXISTING STRUCTURE IS UNDERPINNED AND RE-SUPPORTED ON PERMANENT OR TEMPORARY STRUCTURE THE GROUND ACROSS THE SITE IS TO BE SEQUENTIALLY REDUCED TO BASEMENT SLAB FORMATION LEVEL. TEMPORARY WORKS TO THE PERIMETER WALLS ARE TO BE INTRODUCED AS REQUIRED.
6. THE PAD FOUNDATION UNDER THE NEW COLUMNS AND RC BASEMENT SLAB IS TO BE CAST, PERMANENT STRUCTURE COMPLETED AND TEMPORARY WORKS REMOVED.

PLANNING

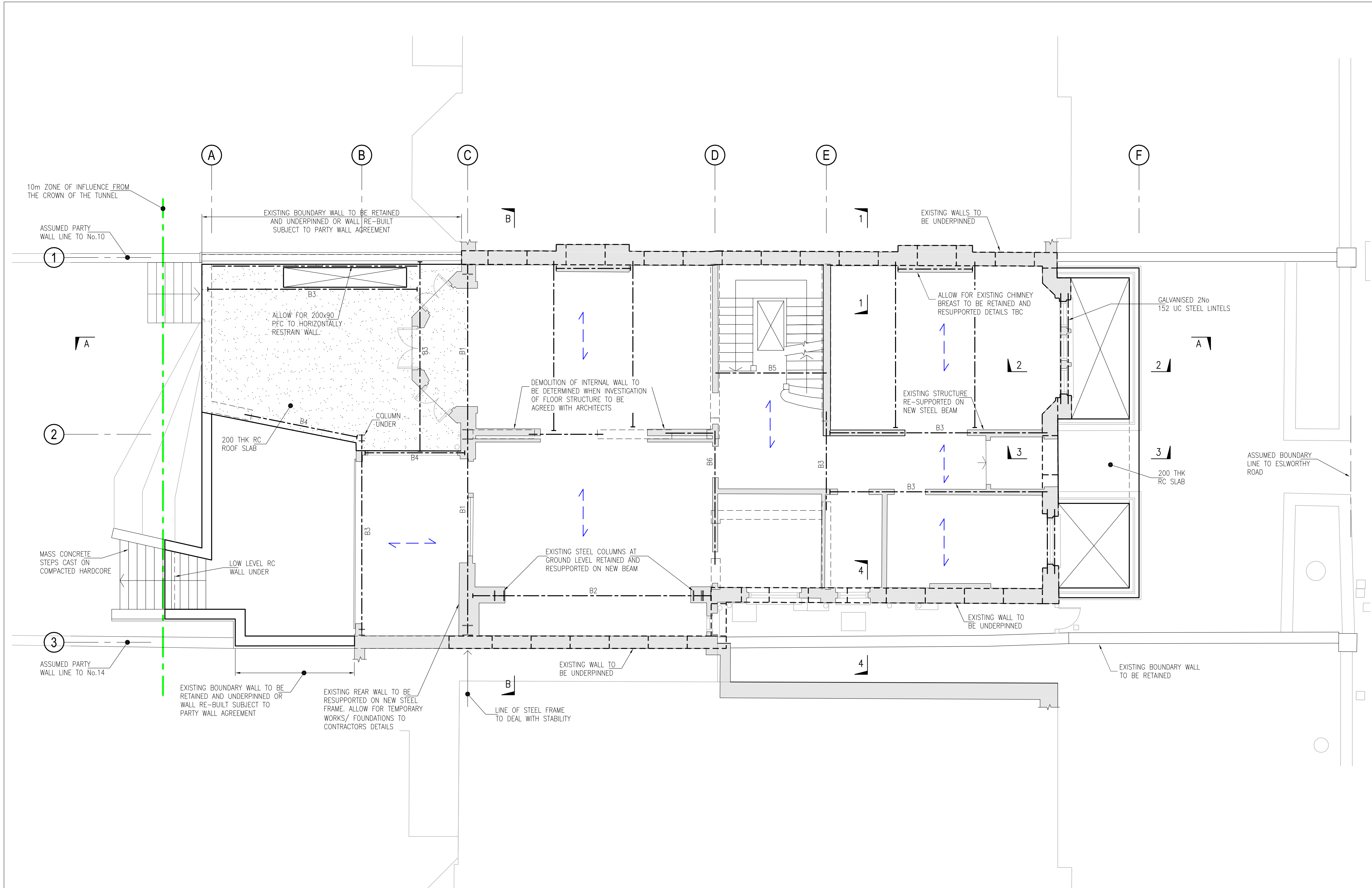
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Project:
12 Elsworthy Road
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NW3 3DJ

Drawing title:
Outline Scheme Drawing
Lower Ground Floor Plan

Date: 20.08.12 Scale at A1: 1:50 Scale at A3: 1:100 Drawn by: DJP
Cad file No. 1031_PL_002.dwg Chk'd by: JP

Drawing No: **1031/PL/02** Revision: **P1**



LEGEND

- DENOTES EXISTING STRUCTURE
- DENOTES NEW STEEL BEAMS
- DENOTES SPAN OF EXISTING 50x225 DEEP @ 400crs TIMBER JOISTS
- B1 - 203/254 UC
- B2 - 254 UC
- B3 - 203 UC
- B4 - 203x133 UB 30
- B5 - 152 UC
- B6 - 152/203 UC

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Rev.	Date	Amendment	By	Chk'd

PLANNING

engineers

Haskins Robinson Waters

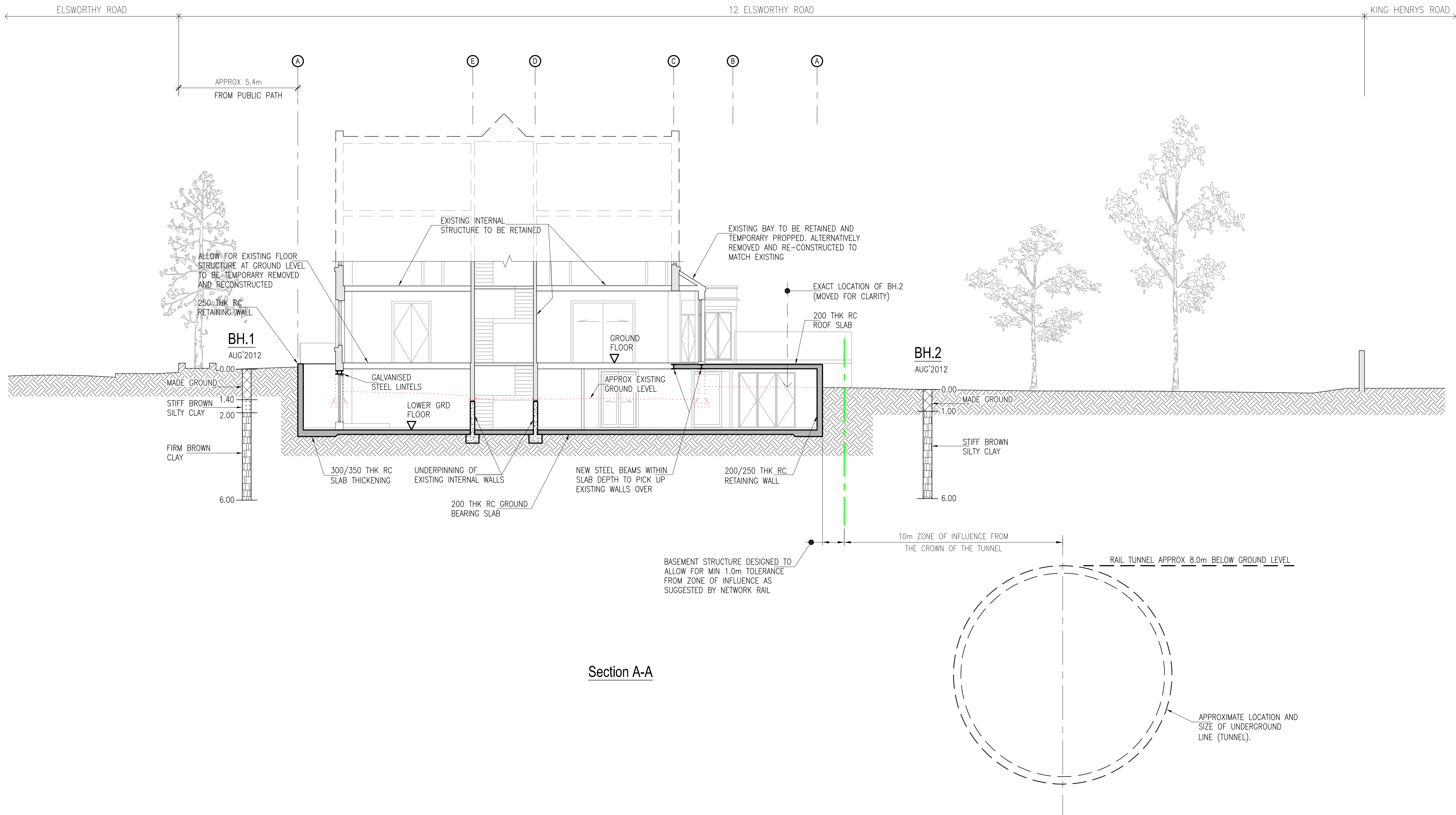
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Project:
12 Elsworthy Road
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Drawing title:
Outline Scheme Drawing
Ground Floor Plan

Date: 20.08.12	Scale at A1: 1:50 Scale at A3: 1:100	Drawn by: DJP
Cad file No. 1031_PL_003.dwg		Chk'd by: JP

Drawing No: **1031/PL/03** Revision: **P1**



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PLANNING

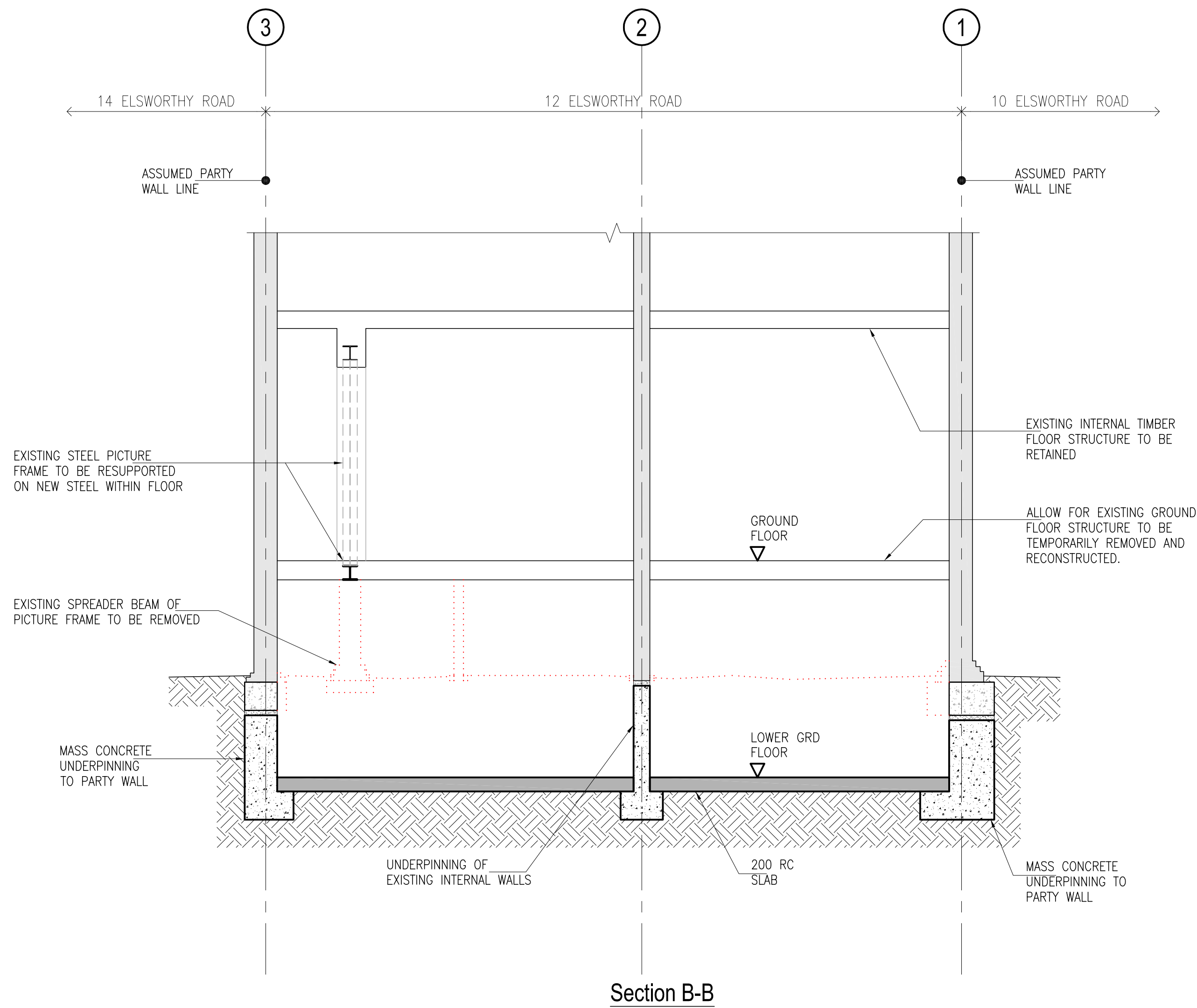
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Drawing title:
Outline Scheme Drawing
Section A-A

Date: 20.08.12	Scale at A1: 1:100 Scale at A3: 1:200	Drawn by: DJP
Cad file No. 1031_PL_004.dwg		Chk'd by: JP

Drawing No: **1031/PL/04** Revision: **P1**



Section B-B

NOTE:
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P1	30.08.12	FOR PLANNING	DJP	JP	
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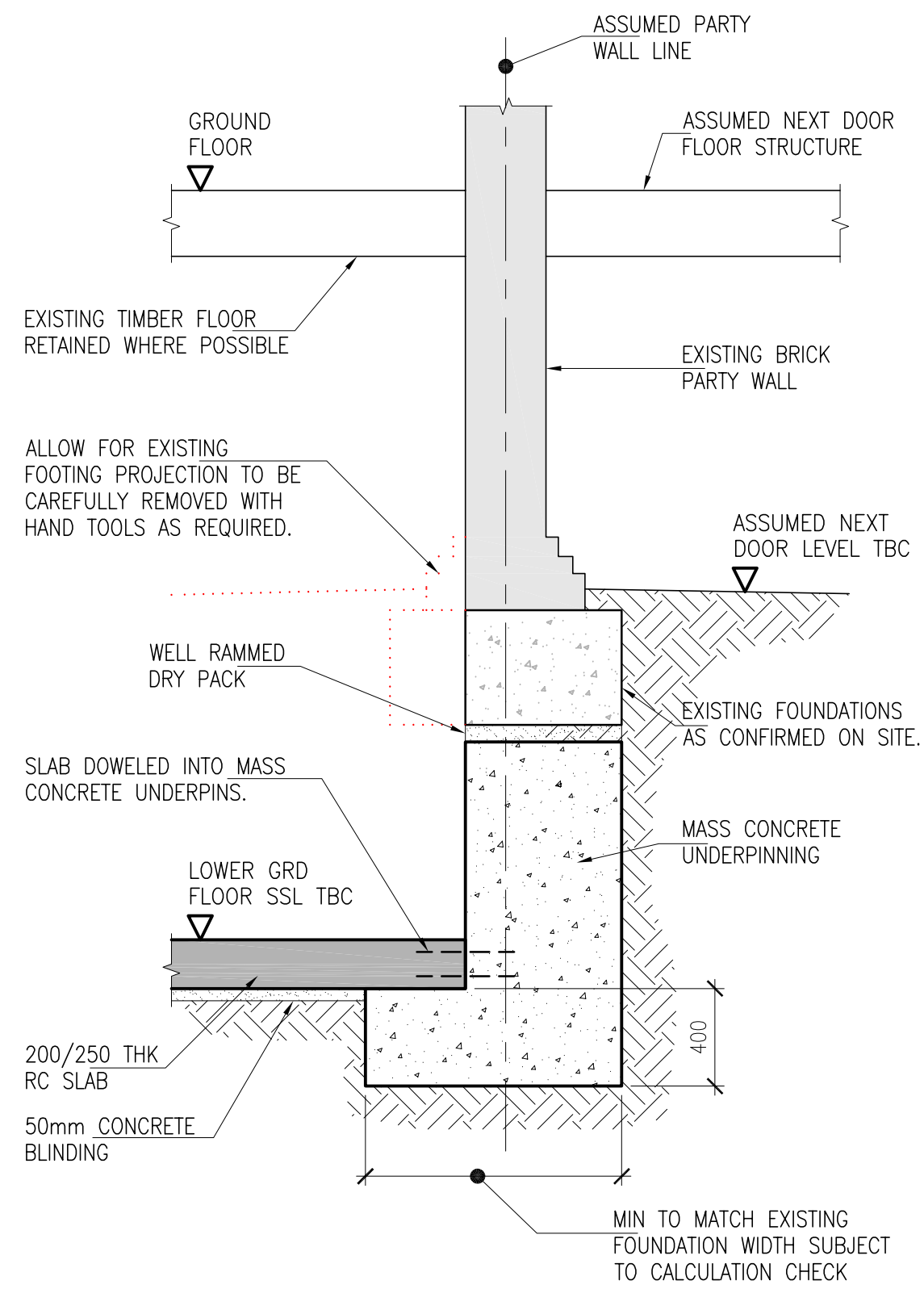
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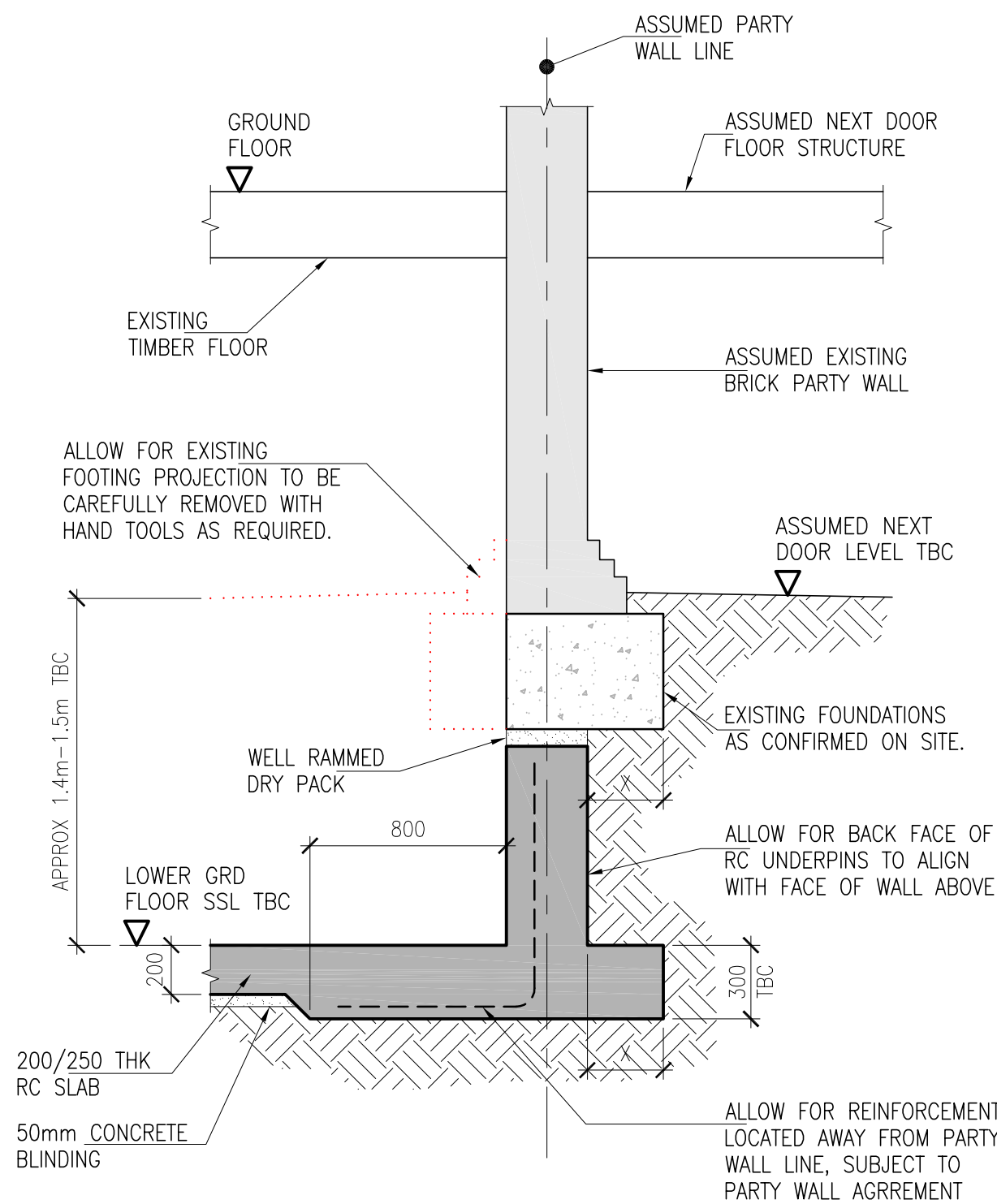
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Section B-B

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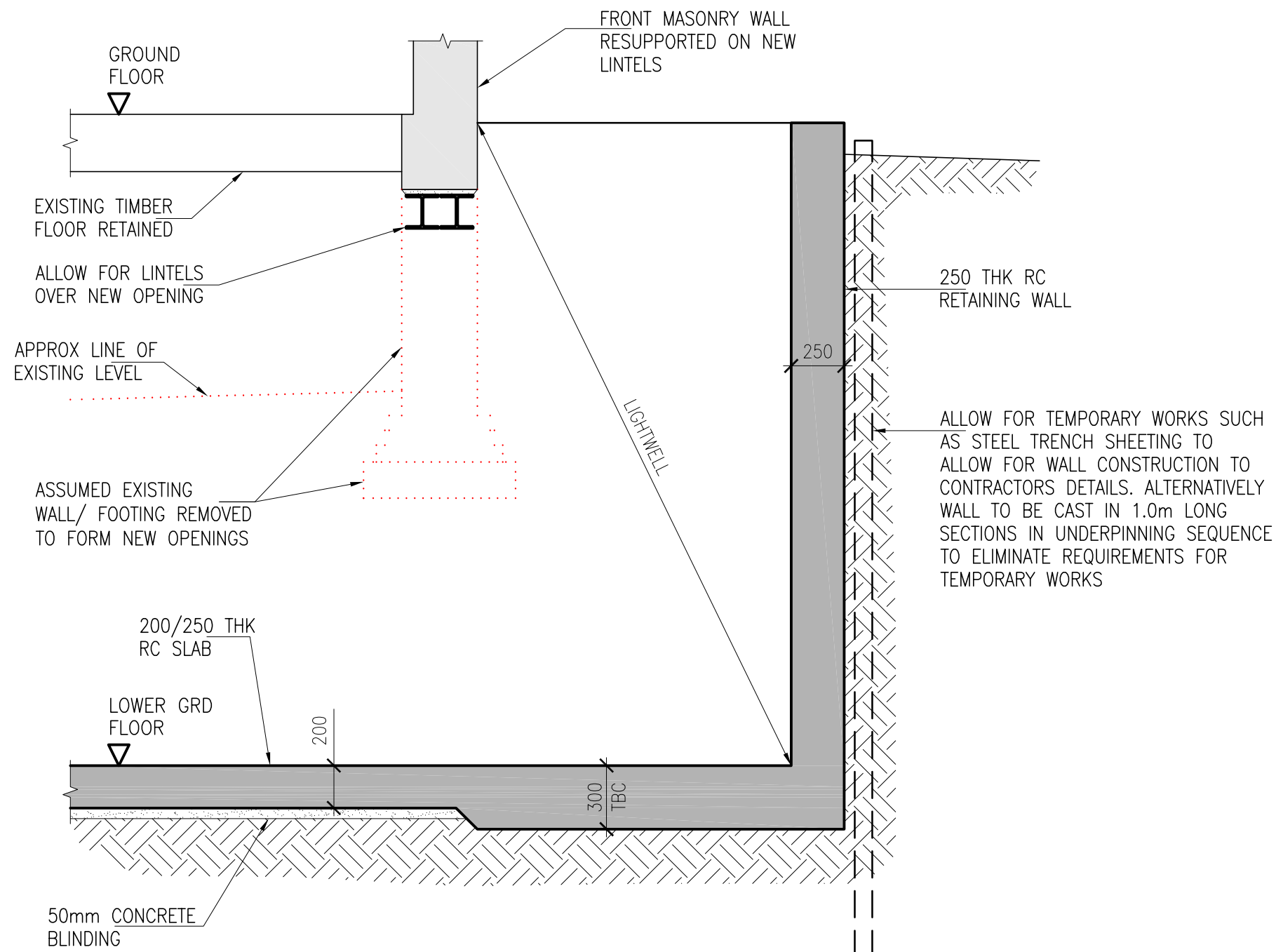
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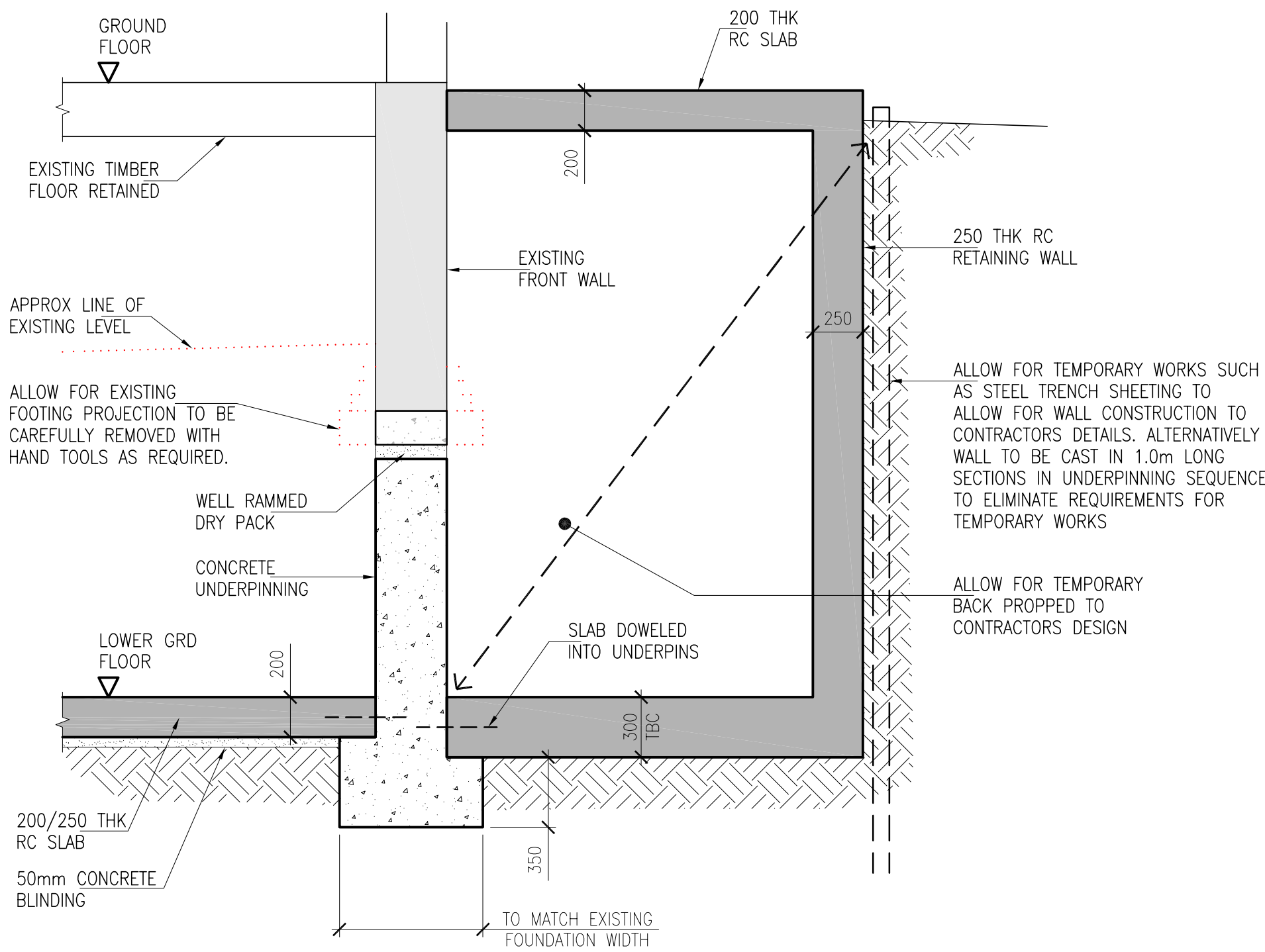
Section 1-1
Typical Section
Through Party Wall



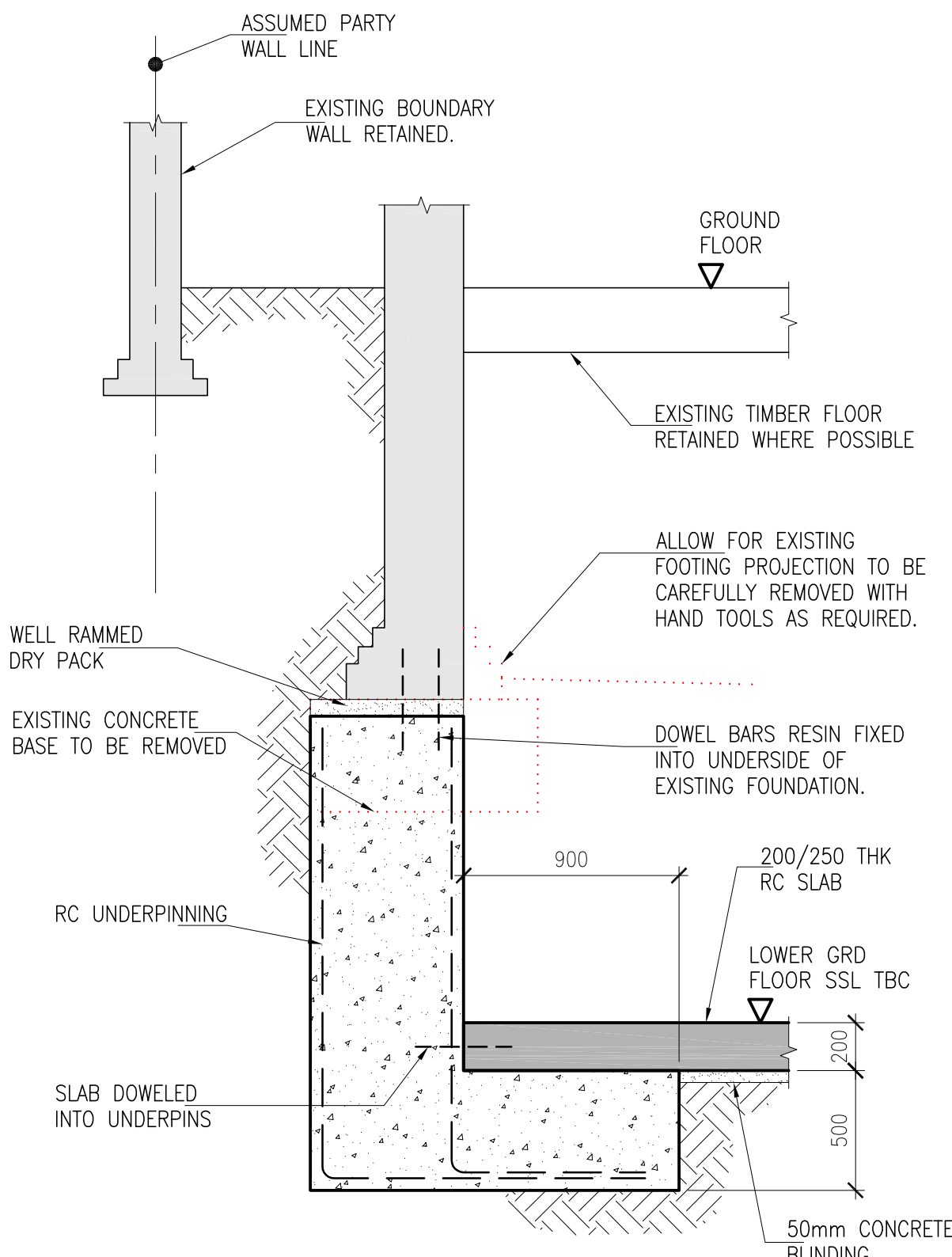
Section 1-1
Alternative Option
Using RC Underpins



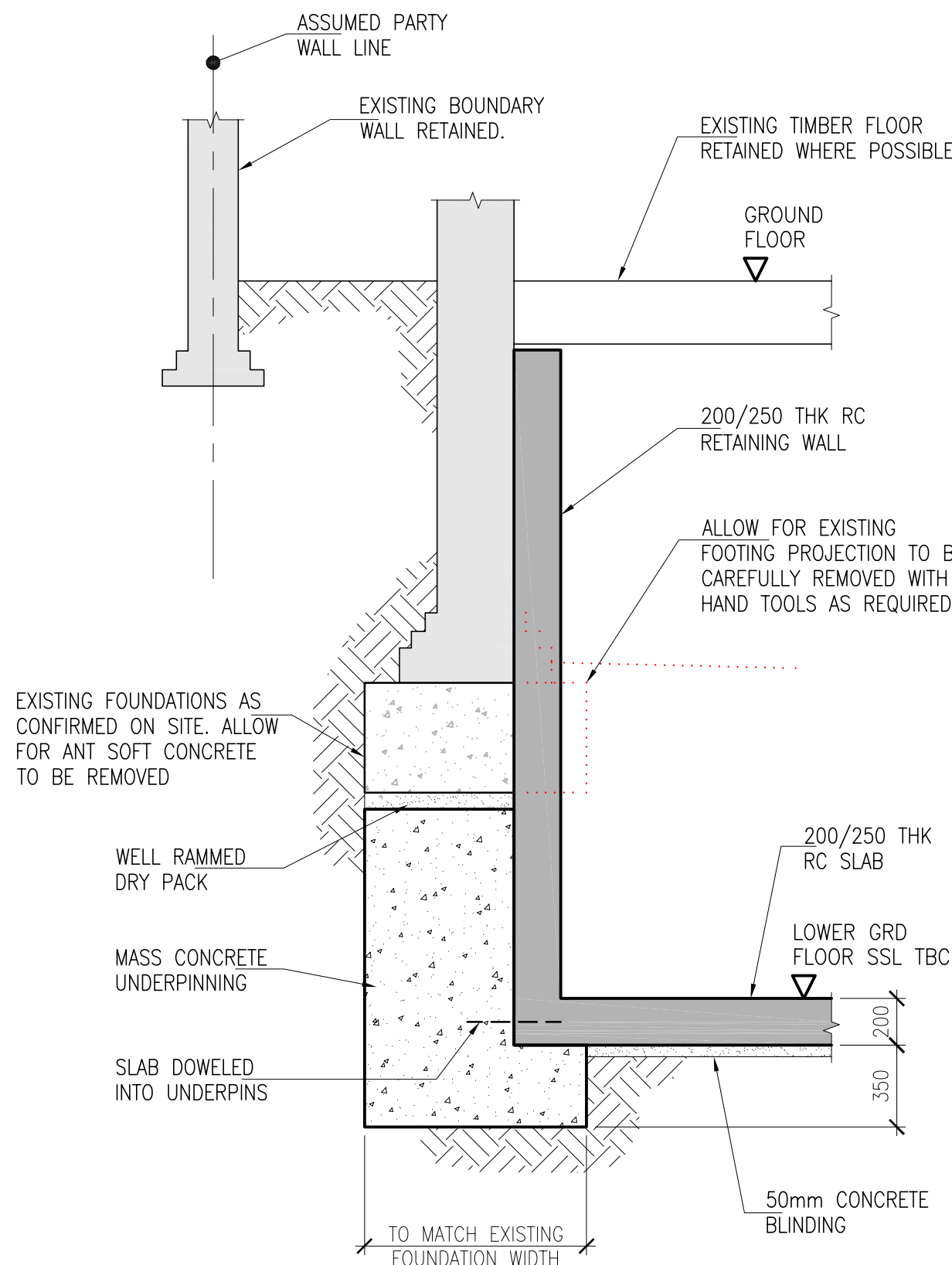
Section 2-2
Typical Section Through
Front Lightwell Retaining Wall



Section 3-3
Typical Section Through
Front Lightwell Retaining Wall



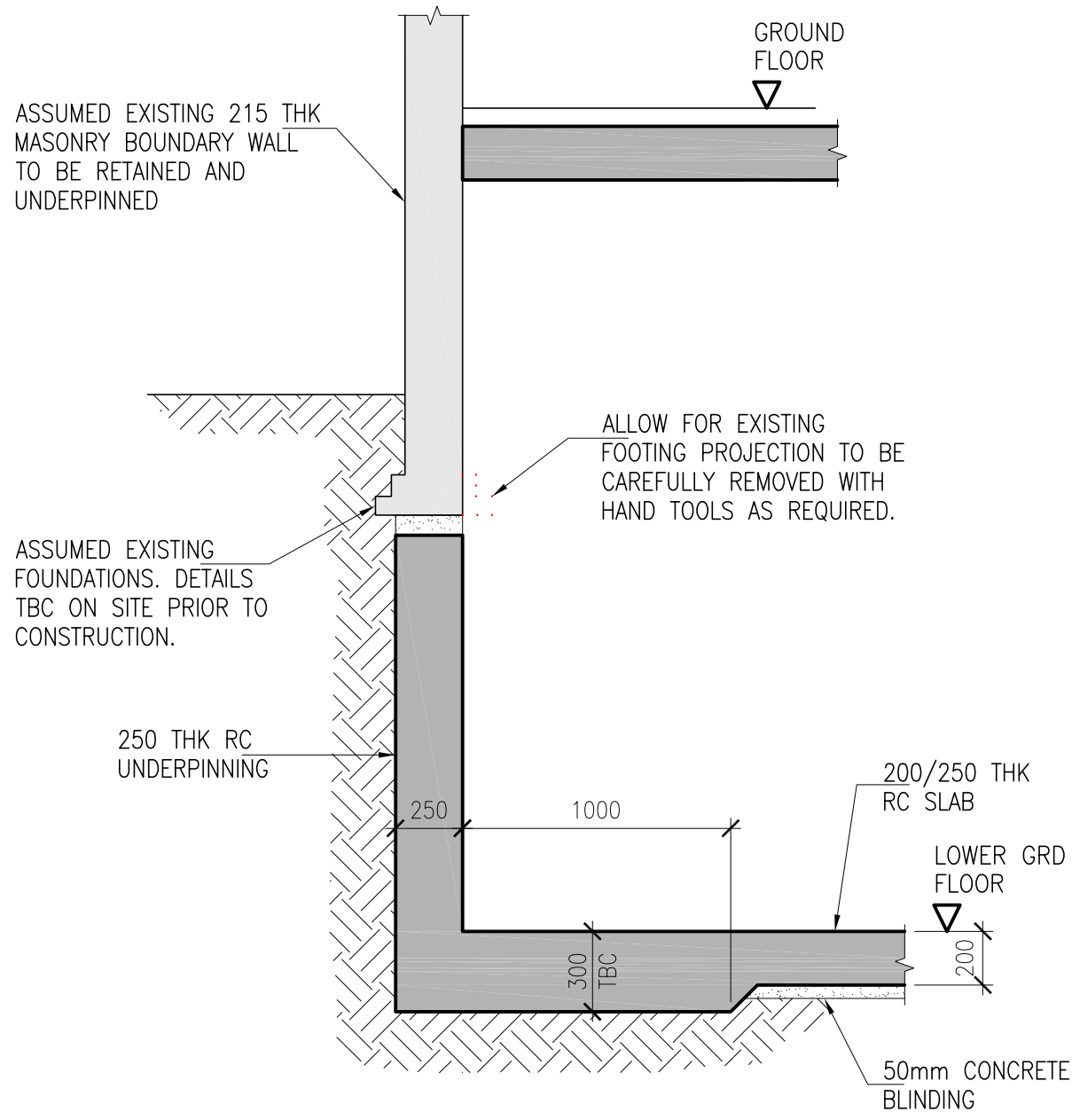
Section 4-4



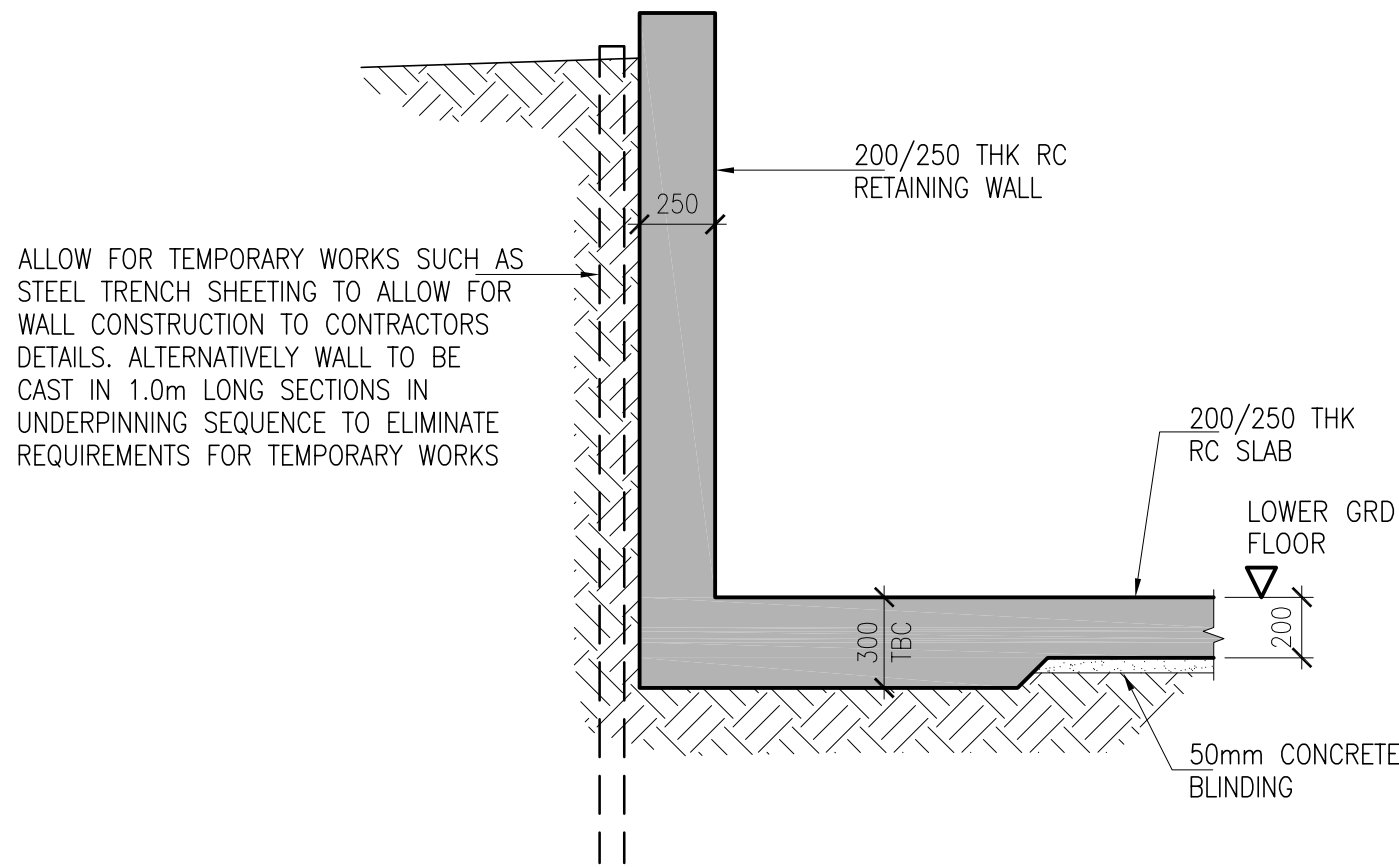
Section 4-4
Alternative Option
Internal RC Lining Wall

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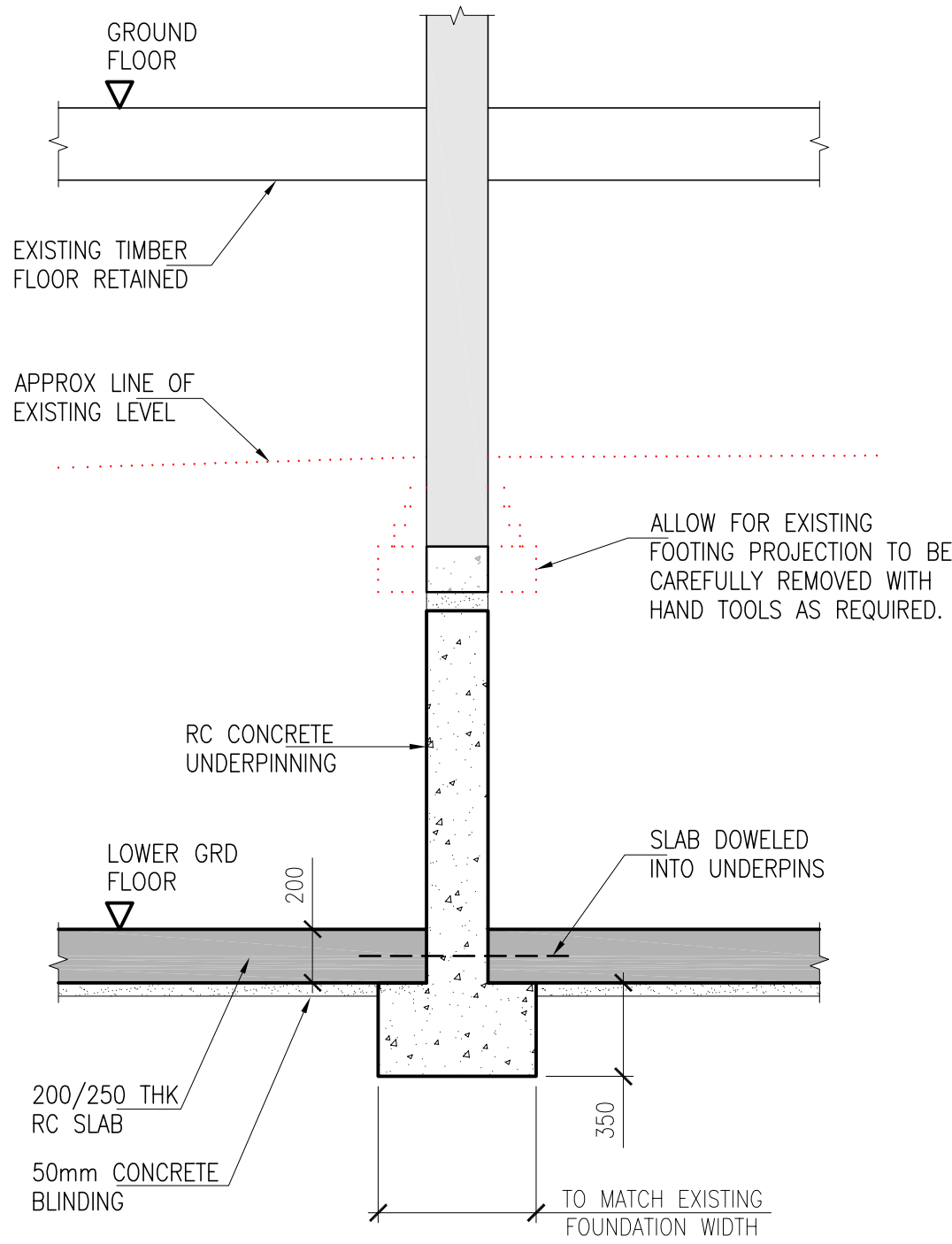
P1	30.08.12	FOR PLANNING			DJP	JP
Rev.	Date	Amendment			By	Chk'd
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Project:						
12 Elsworthy Road						
London						
NW3 3DJ						
Drawing title:						
Outline Scheme Drawing						
Typical Sections (Sheet 1)						
Date: 20.08.12		Scale at A1: 1:25 Scale at A3: 1:50		Drawn by: DJP		
Cod file No. 1031_PL_006.dwg				Chk'd by: JP		
Drawing No:						
1031/PL/06				Revision: P1		



Section 5-5
 Typical Section Through
 Rear Garden Wall



Section 6-6
 Typical Section Through
 Rear Retaining Wall



Section 7-7
 Typical Section Through
 Internal Underpinning

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Rev.	Date	Amendment	By	Chk'd

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NW3 3DJ

Drawing title:
Outline Scheme Drawing
Typical Sections (Sheet 2)

Date: 20.08.12	Scale at A1: 1:25 Scale at A3: 1:50	Drawn by: DJP
Cad file No. 1031_PL_007.dwg		Chk'd by: JP

Drawing No: **1031/PL/07** Revision: **P1**