Quintas™	BASEMENT CONSTRUCTION AND UNDERPINNING METHOD STATEMENT	Quintas Homes Ltd, Unit 5, Hurricane Trading Estate, Avion Crescent NW95QW info@quintas.co.uk

PROJECT	7 Wolsey Road, HA6 2HN
CONTRACTOR	Quintas Homes Ltd
SITE ADDRESS	7 Wolsey Road, HA6 2HN
PROJECT START DATE	August 2021
EXPECTED DURATION	18 Months
PROJECTED COMPLETION DATE	February 2023

	NAME	TITLE	DATE
Document Author	Harish Halai	MR	26.05.21
Authorised by:			

EMERGENCY CONTACT DETAILS			
Contact	TBC	TBC	TBC
Position	CDM Coordinator	Project Manager	Site Foreman
Mobile			

CONTENTS

1. INTRODUCTION

1.1. A planning application has been submitted and approved with conditions for the described proposal (Planning application reference: 18/1007/FUL). Planning approval was granted on 31 Aug 2018.

1.2. The proposed development is a Two-story rear extension, extension to basement and alterations to fenestration detail.

1.3. This Construction Method Statement has been produced by Quintas Homes Ltd in response to Condition 7 of the Decision Notice. The full wording of Condition 7 is extracted below for ease of reference:

i. No development or other operation shall commence on site until a construction method statement to be approved in writing by the Local Planning Authority. This Construction Method shall include details of how the development, including extension of the basement, can take place whilst retaining existing walls shown on approved plan 4668-PL001 D and 4668-PL002 C. The development shall only be implemented in accordance with the approved Construction Method Statement.

REASON: To ensure that the original pre-1958 dwelling is retained in accordance with the policies CP1 and CP12 of the Core Strategy (adopted October 2011), Policy DM3 of Development Management Policies LDD (adopted July 2013) and the Moor Park Conservation Area Appraisal (adopted 2006).

1.4 The approved plans include a two-story rear extension, which includes the demolition of the existing external walls to the rear elevation. Also, the approved basement extension is to be built partly under the existing rear building. This means that the existing side elevation walls to the rear of the building are to be retained intact while built under.

See highlited plans below

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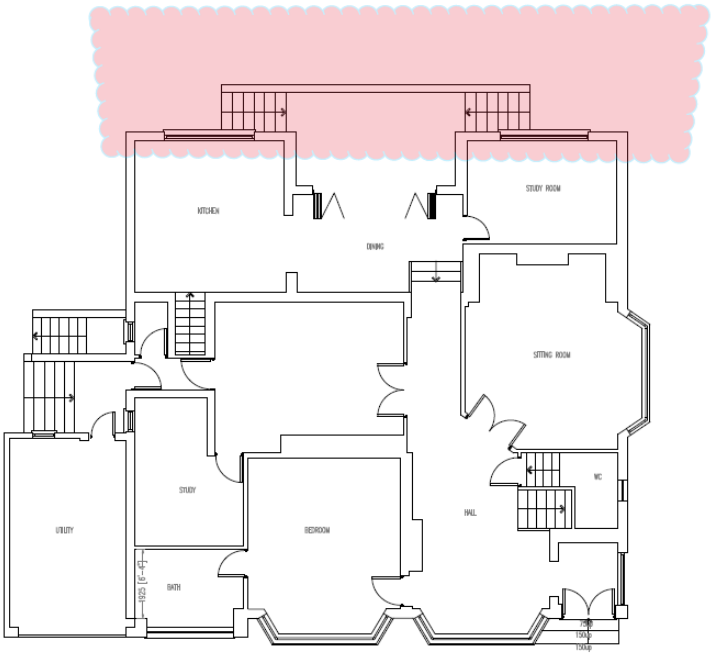
Existing Rear Elevation to be demolished



EXISTING GROUND FLOOR PLAN
1:100

Existing Rear Elevation to be demolished

EXISTING FIRST FLOOR PLAN
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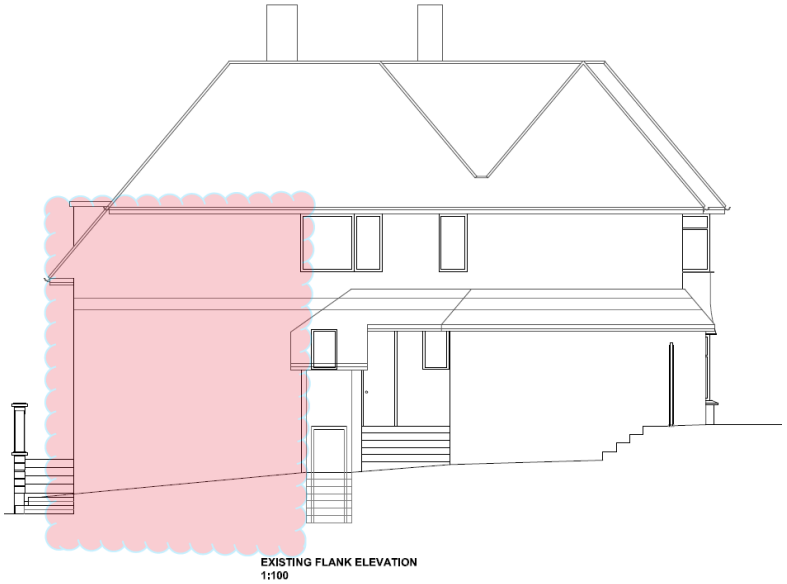
Both Existing Side Elevation walls to be Kept intact while basement built under.



EXISTING FLANK ELEVATION
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EXISTING FLANK ELEVATION
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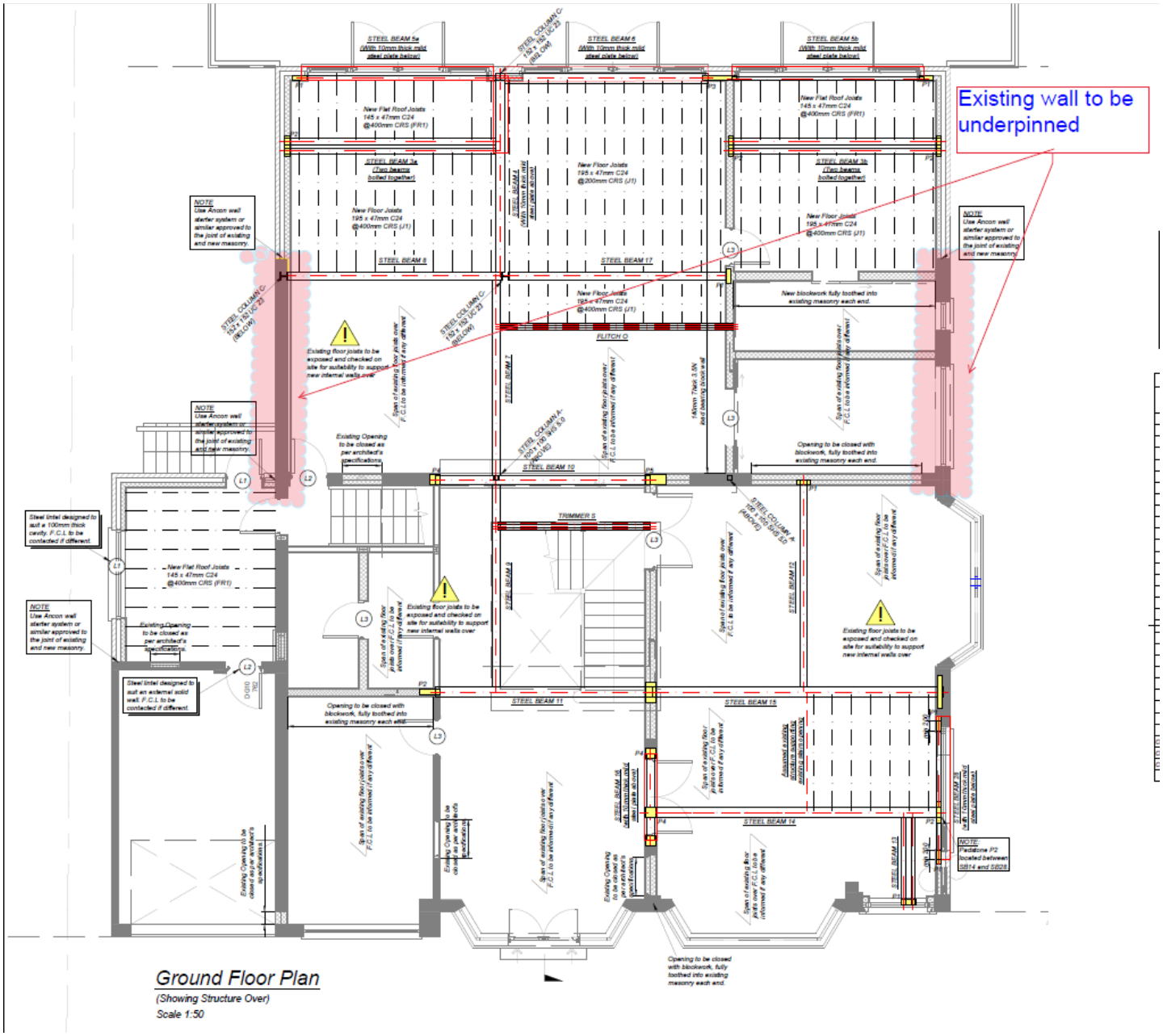

2.0 The following is the temporary works sequence and sketch drawings including Structural Engineer's drawings.

1. The Demolition works to the rear elevation and internals must only commence once the Underpinning to the retained Side elevation walls has been completed. This is to ensure the structural stability of the retained walls is maintained.
2. Remove the floor structure on the existing ground floor where the Basement is to be excavated.
3. Create access from the rear to the proposed basement by demolishing the rear stairs and landing.
4. Carry out underpinning in **1-meter sections** as per sequence described in Appendix A attached and method statement and Risk assessment.
5. Erect Scaffolding support structure to both Flank Elevation walls and tie the retained walls with the scaffold.
6. Proceed with all other internal and rear external wall demolition.
7. Complete basement and foundations construction.
8. Build new external internal load bearing walls, internal intermediate floors, and new roof structure all fully restrained to the new and existing retained walls
9. Remove scaffolding on completion of all works.

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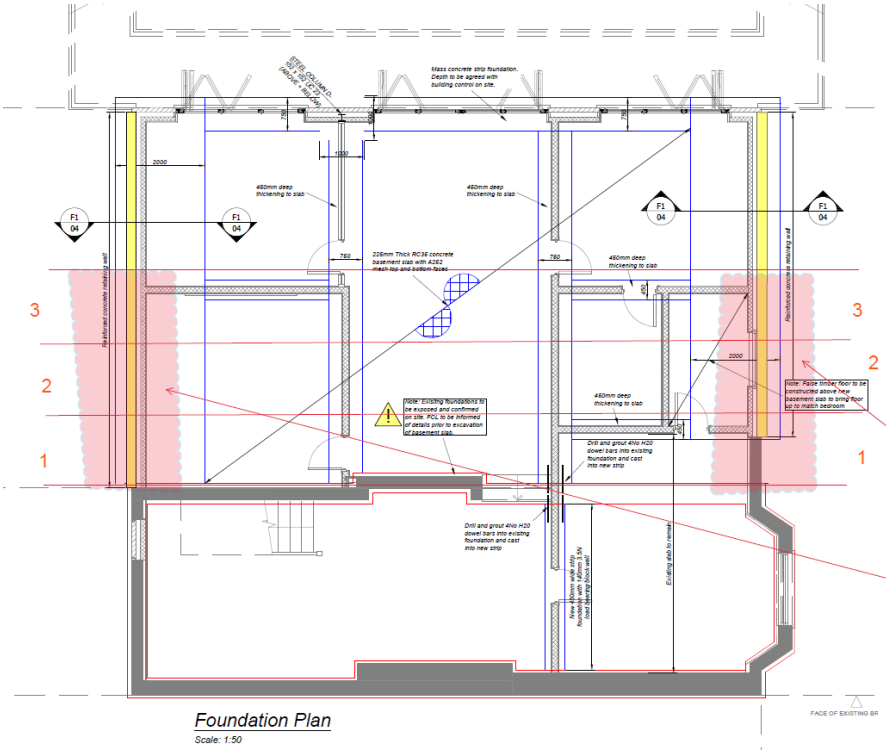

Foundation Plan
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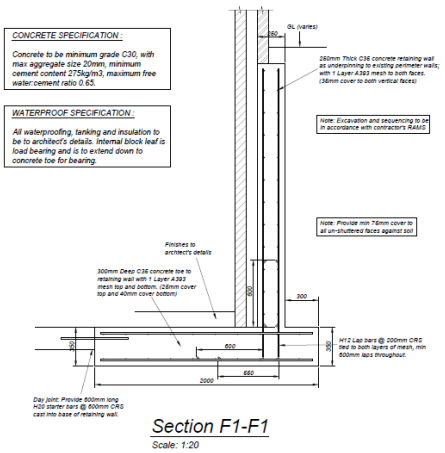

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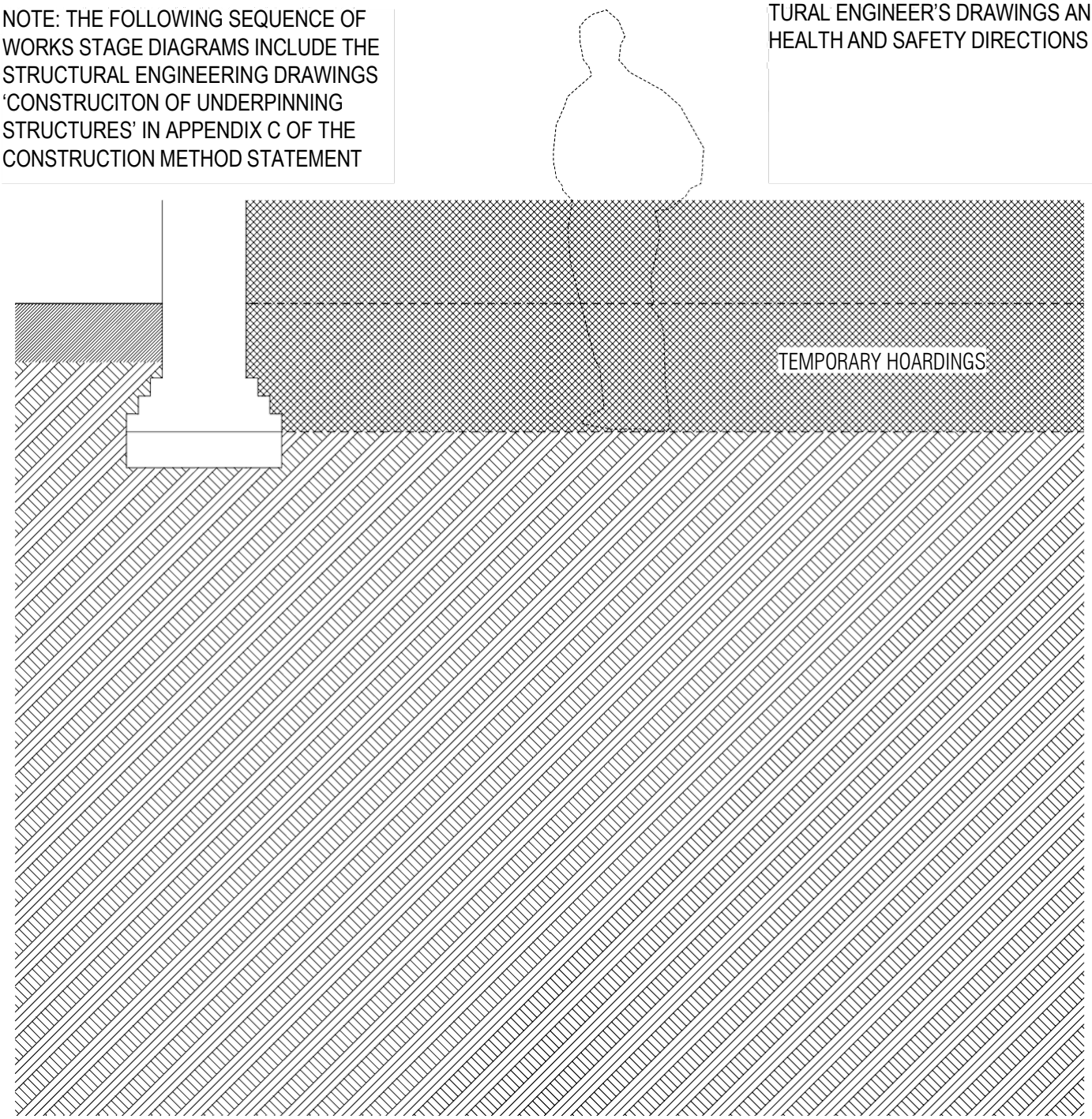
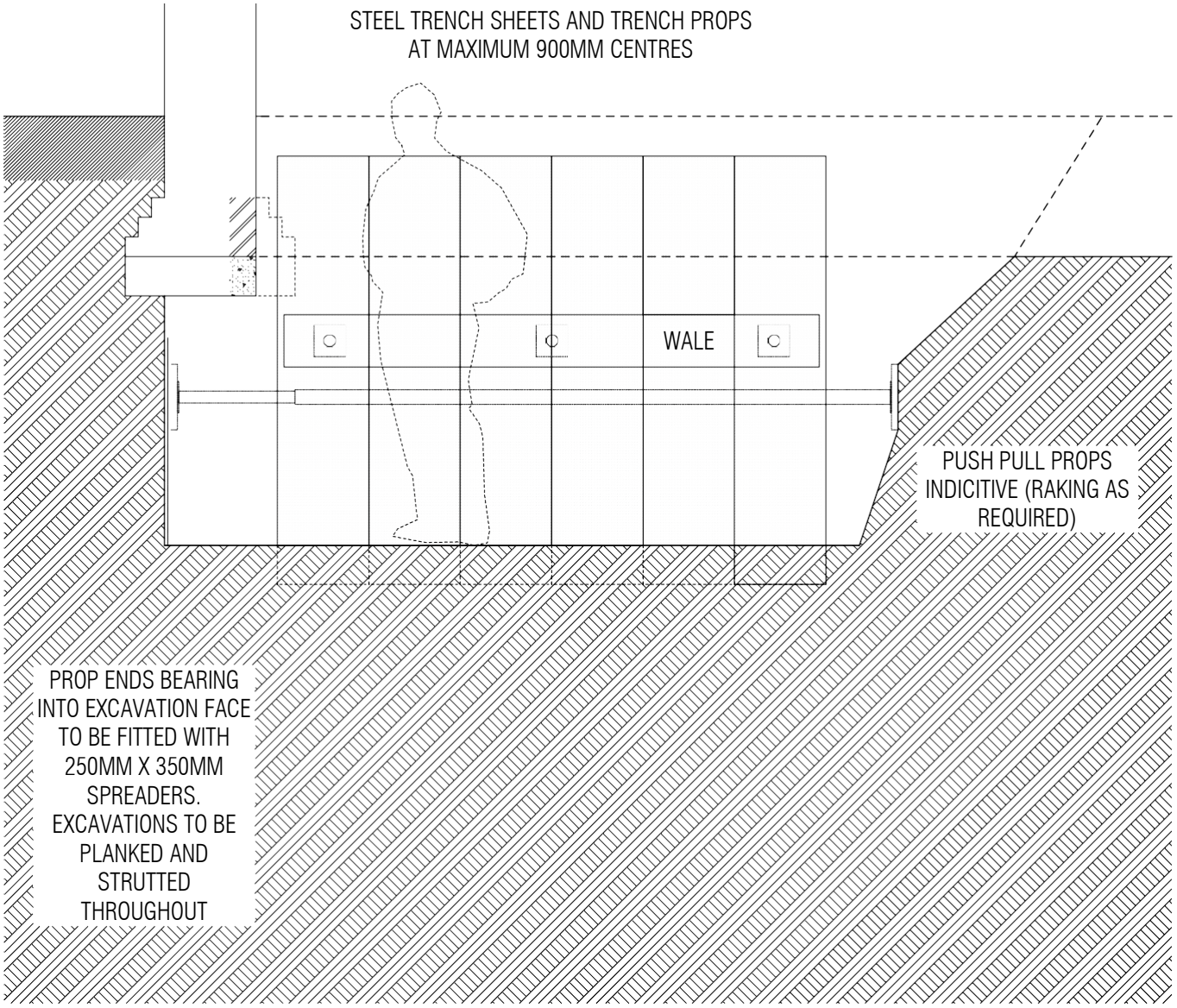
Appendix A - Temporary Works Sequence Drawings
(includes method statement for underpinning works)

NOTE: THE FOLLOWING SEQUENCE OF WORKS STAGE DIAGRAMS INCLUDE THE STRUCTURAL ENGINEERING DRAWINGS 'CONSTRUCITON OF UNDERPINNING STRUCTURES' IN APPENDIX C OF THE CONSTRUCTION METHOD STATEMENT

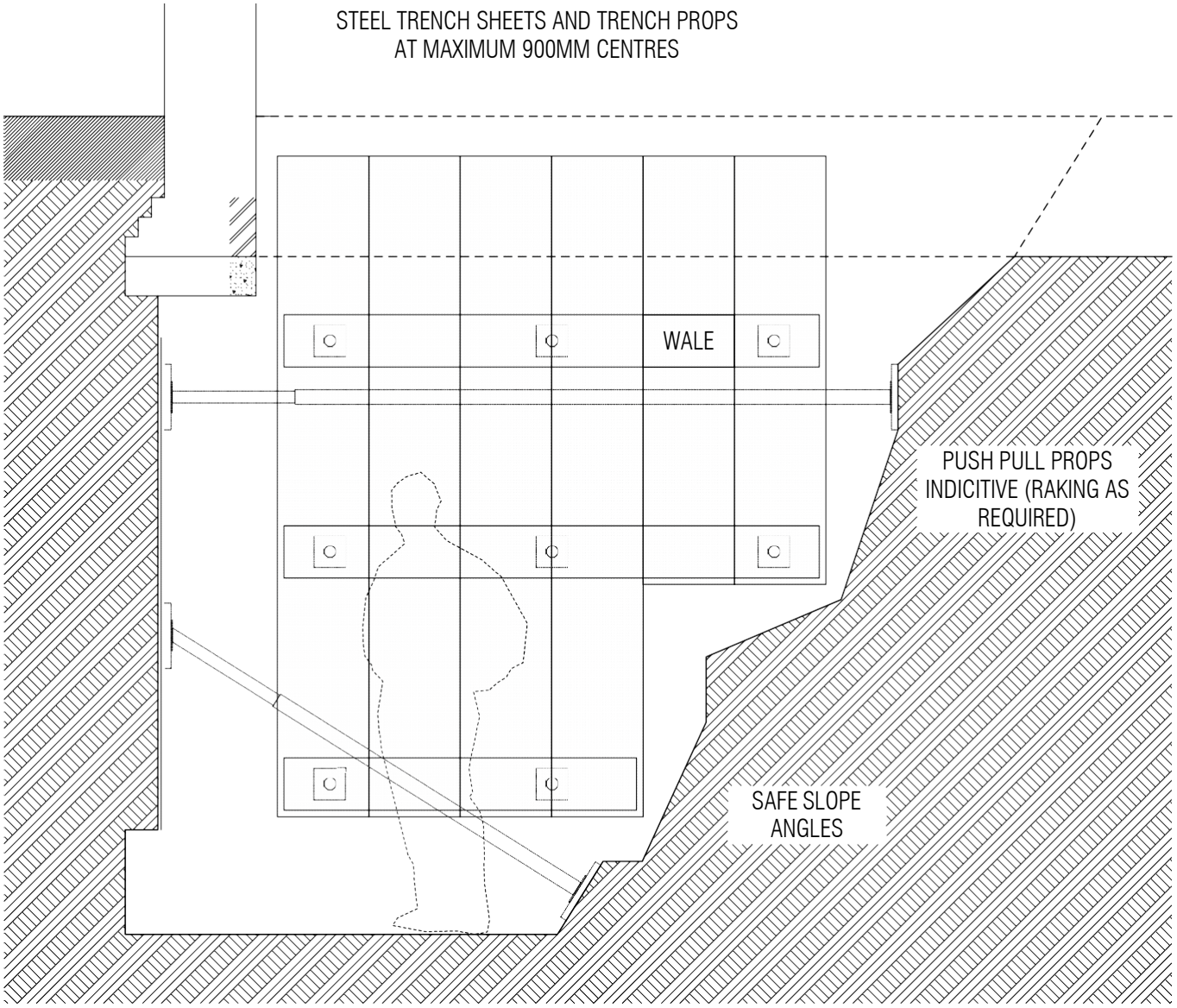
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE STRUCTURAL ENGINEER'S DRAWINGS AND HEALTH AND SAFETY DIRECTIONS



1. The foundations underpinning is to be carried out in a sequential "hit-and-miss" fashion, where individual underpinning/retaining wall bases are constructed in a scattered arrangement around the perimeter of the specified walls, in accordance with the numbered sequence.
2. The excavations of individual pins will be carried out by hand, to profile as shown.
3. The sequence of construction is indicated with the circled numbers shown on the individual underpin base.
4. Note that the underpinning operation is to be carried out in a sequential operation observing the time gaps between the steps as specified.
5. The contractor will provide all necessary shoring, propping, shuttering etc. to ensure that the subject and adjoining properties are fully secured against any movement, slippage or similar, and also that the concrete is cast to the exact profile as indicated.



a. Excavate the individual underpin profile as shown on the typical underpin section.
b. As excavation progresses, apply shuttering ply to the back of the excavation, propped with a raking accrow prop as necessary to hold the excavation.

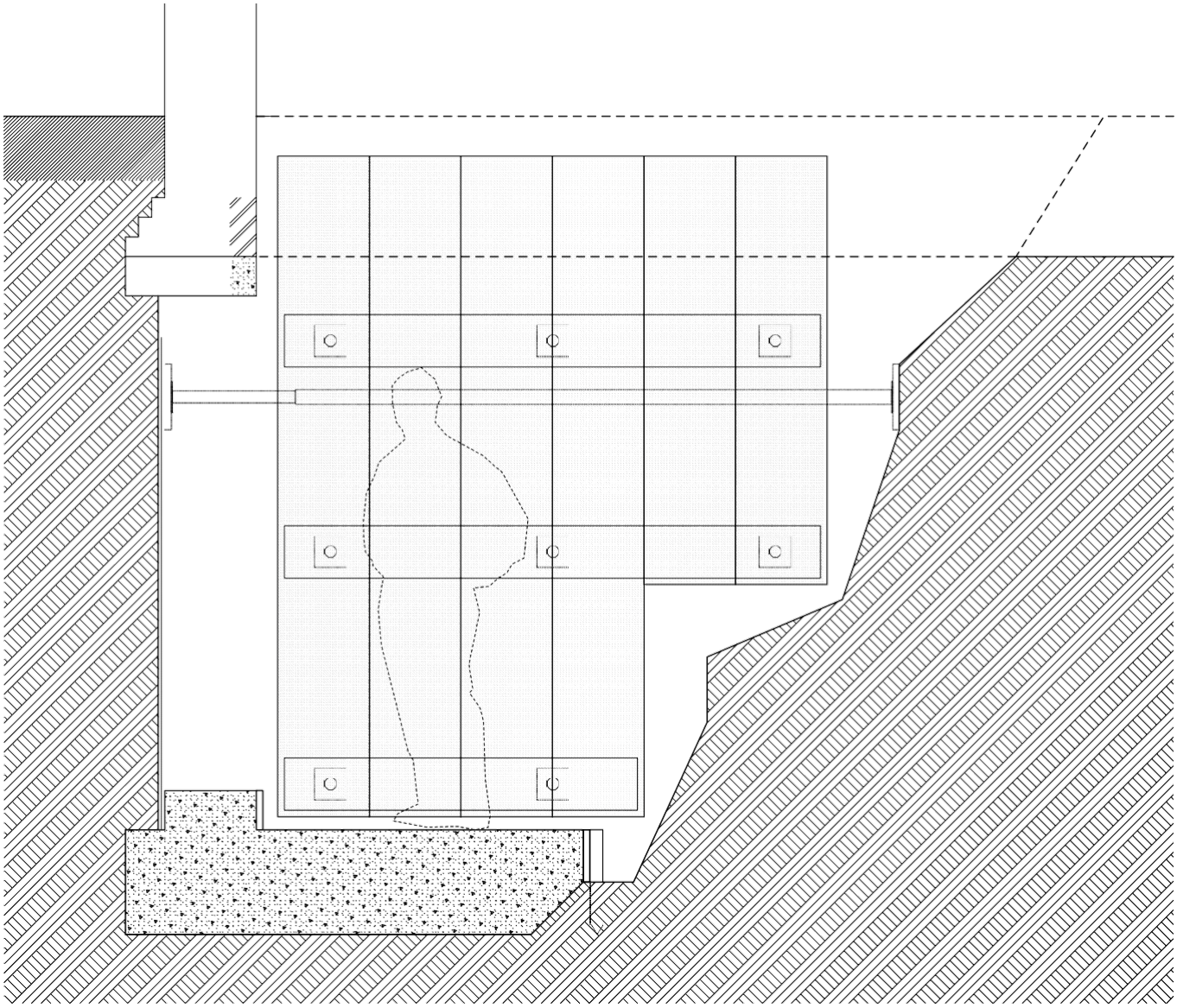


c. After two to three pins review the situation with the Engineer or Party Wall Surveyor and if excavations are holding on their own seek agreement that temporary shoring of the backs of the excavations are not necessary.

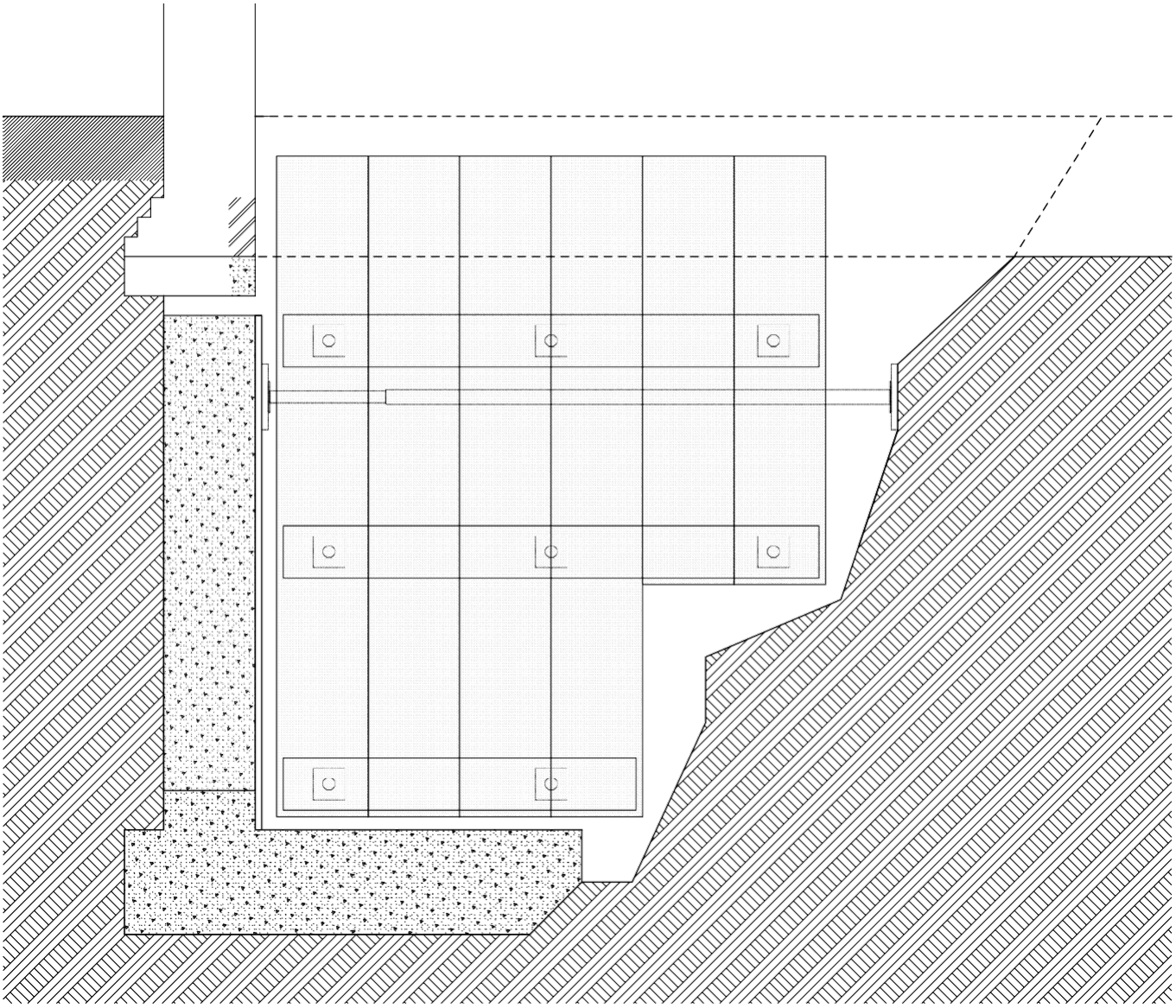
d. Level the bottom of footing and blind, if necessary, with 50-100mm lean mix concrete. Apply reinforcing cage to the bottom of the pit and to the vertical face of the wall.

e. Apply dowel bars to the sides of excavation for continuation into the adjoining bays

f. Apply dowel bars to the front of the excavation for continuation into basement slab.

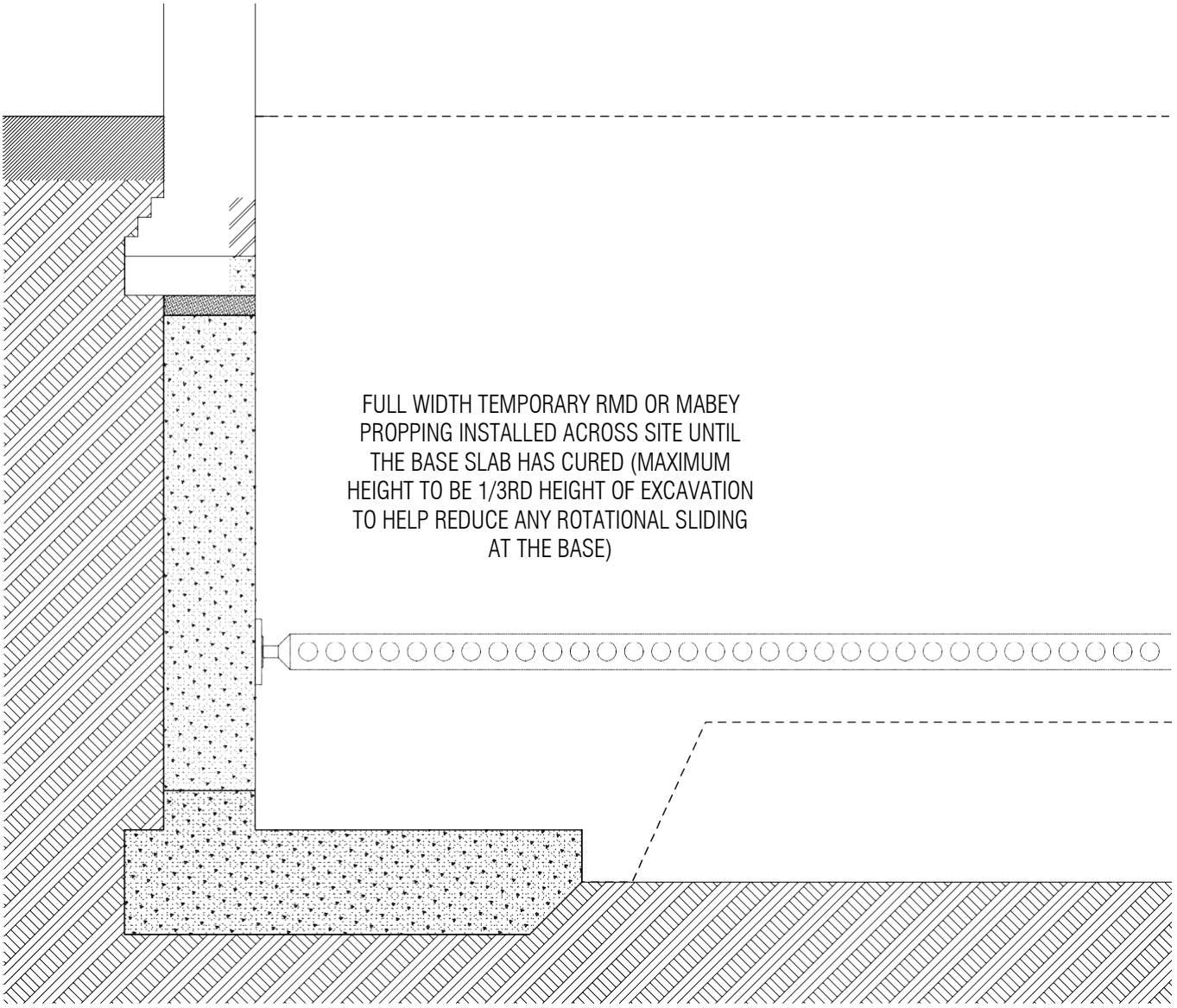


g. Apply concrete to the bottom excavation, with 150mm upstand kicker into the vertical face. Vibrate and compact, as necessary.



h. 24 hours after the base pour, shutter the rest of the section up to underside of existing foundation and apply concrete. Vibrate and compact, as necessary.

*RETAIN TEMPORARY ACCROW (OR RMD OR MABEY) BETWEEN NEW WALLS AND OF EXCAVATION



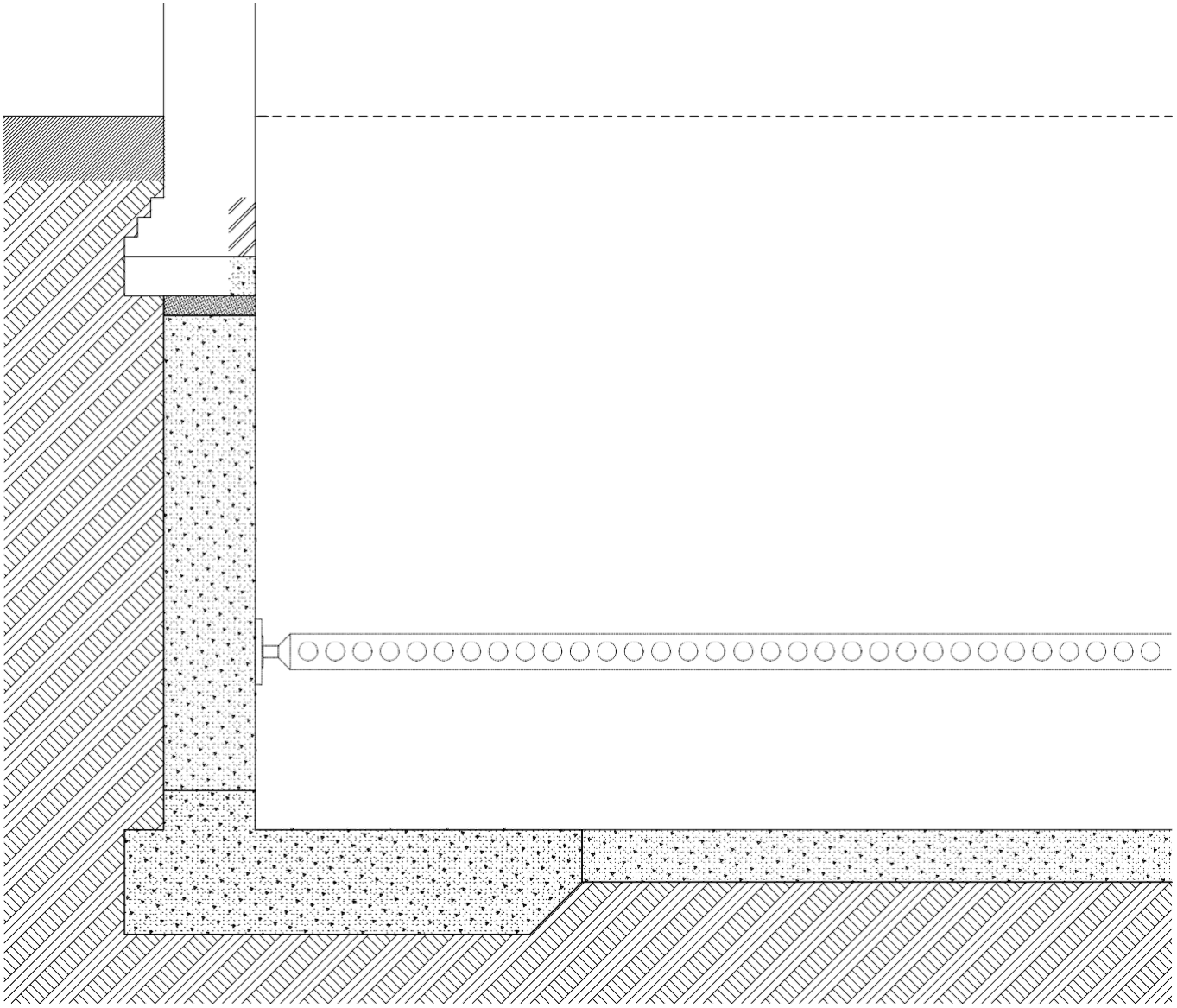
i. 36 hours later, apply dry pack between foundation and top of new concrete.

7. The concrete is to be Grade C35, with a maximum aggregate size of 20mm. GGBS or PFA can be added to the concrete mix for enhancement of mixture resistance of concrete, to Specialist Concrete Manufacturer's detail specification.

8. The adjoining bays must not be excavated within less than 48 hours after dry packing the most recently constructed adjacent bay.

9. The contractor will provide all necessary shoring, propping, shuttering etc. to ensure that the subject and adjoining properties are fully secured against any movement, slippage or similar, and also that the concrete is cast to the exact profile as indicated.

***FULL WIDTH TEMPORARY RMD OR MABEY PROPPING INSTALLED ACROSS SITE UNTIL THE BASE SLAB HAS CURED**



10. When all the underpins in one underpinning group are completed, the floor slabs inside that area is to be constructed to detail shown; as follows;
11. Excavate central section of the relevant area of site, install reinforcement for the slab.
12. Apply concrete to the basement slab, compact and cure.

Appendix B - Underpinning Risk Assessment

Quintas™	RISK ASSESSMENT	Quintas Homes Ltd, Unit 5, Hurricane Trading Estate, Avion Crescent NW95QW info@quintas.co.uk

Task Description	Underpinning	Location	**7 Wolsey Road**	Date	29/09/15

Hazard / Consequences	**Control Procedures**	**Likelihood (a)**	**Severity (b)**	**Risk Ranking (= a x b)**
Injury from live services underground; contact with live parts causing shock and burns (normal mains voltage, 230 volts AC, can kill)	Follow HSG 47 "Avoiding Danger from Underground Services". Always assume cables will be present when digging in the street, pavement or near buildings. Use up-to-date service plans, cable avoidance tools and safe digging practice to avoid danger. Service plans should be available from regional electricity companies, local authorities, highways authorities, etc. Have the power switched off by the local electricity distributor. Consider all conductors live unless it is positively known they have been de-energized, isolated, and earthed by the local electricity distributor. Workers must be deemed competent to carry out this task.	1	5	5

Hazard / Consequences	**Control Procedures**	**Likelihood (a)**	**Severity (b)**	**Risk Ranking (= a x b)**
Excavation collapse	No machines allowed near excavation All trenches to be braced timber (or metal trench sheets) shuttering, and sandbagged. Barriers to be put around all excavations Foreman to carry out regular inspections on excavations. Access via short timber ladder Banksmen to be placed when work anyone is working in the trench. Evacuation hoist to be provided. Emergency procedures for collapse to be made and in place. Surveillance of trench walls, support systems and excavations should be carried out by a competent person frequently and recorded.	1	5	5

Task Description	Underpinning	Location	7 Wolsey Road	Date	29/09/15

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Inclement weather	All staff have been informed of the greater risk of injury when working in inclement weather, all frost and snow will be cleared from access equipment and roofs if work in these conditions cannot be avoided. Staff to be issued with appropriate PPE including waterproofs, warm jumpers, coats hats and gloves as appropriate to conditions. The site foreman is responsible for suspending work if weather conditions make the task unsafe. Ensure safety of electrical equipment in wet weather as unsuitable equipment can easily become live and make its surroundings live. Take account of weather conditions, wear appropriate clothing and take warm drinks in cold weather, cover up or apply sun block to prevent sunburn.	2	3	6

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Injury from slips trips and falls	All staff will keep the working area tidy and remove trip hazards as and when they occur. All staff will always wear suitable footwear.	1	3	3

Task Description	Underpinning	Location	7 Wolsey Road	Date	29/09/15

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Injury from incorrect manual handling	Staff trained in correct lifting methods Lifting equipment provided where loads are heavy including sack / wheelbarrows or chain hoists or rope hoists where appropriate Dual lifting to be used on awkward lifts	1	3	3

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Illness from exposure from Asbestos	Asbestos is highly dangerous. Any asbestos-containing materials on site should have been identified before work starts. If you come across any hidden or dusty materials which you suspect may contain asbestos, stop work and get advice. A specialist survey will then be carried out to determine the extent and nature of the asbestos risk to your staff. It is strictly forbidden to work near items suspected of containing asbestos	1	5	5

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Injury to other construction workers and members of the public during operations.	It is vitally important that potentially hazardous areas are signposted, barricaded and, where appropriate, covered to avoid possible injury to workers and members of the public. Anyone who may be affected by the works to be informed of site work, especially tenants and other contractors. Site to be secured to prevent un-authorized access. Foreman is to ensure no one access site without permit, or permission. Staff will cordon off work area and ensure tenants do not enter area of danger. Hand tools and power tools will not be left unattended. The site will be made safe at the end of	1	4	4

Task Description	Underpinning	Location	7 Wolsey Road	Date	29/09/15

	each shift. Staff will follow the method statement devised for this task.			

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Injury from power tool hazards and machine hazards	All power tools and machinery must comply with Provision and Use of Work Equipment Regulations 1992. All employees and contractors must have received instruction in the safe use and operation of the equipment they are proposing to use. Eye protection must be worn at all times when there is a risk of flying parts, dust or fragments. All power tools and machinery must be regularly inspected and maintained in good condition.	2	3	6

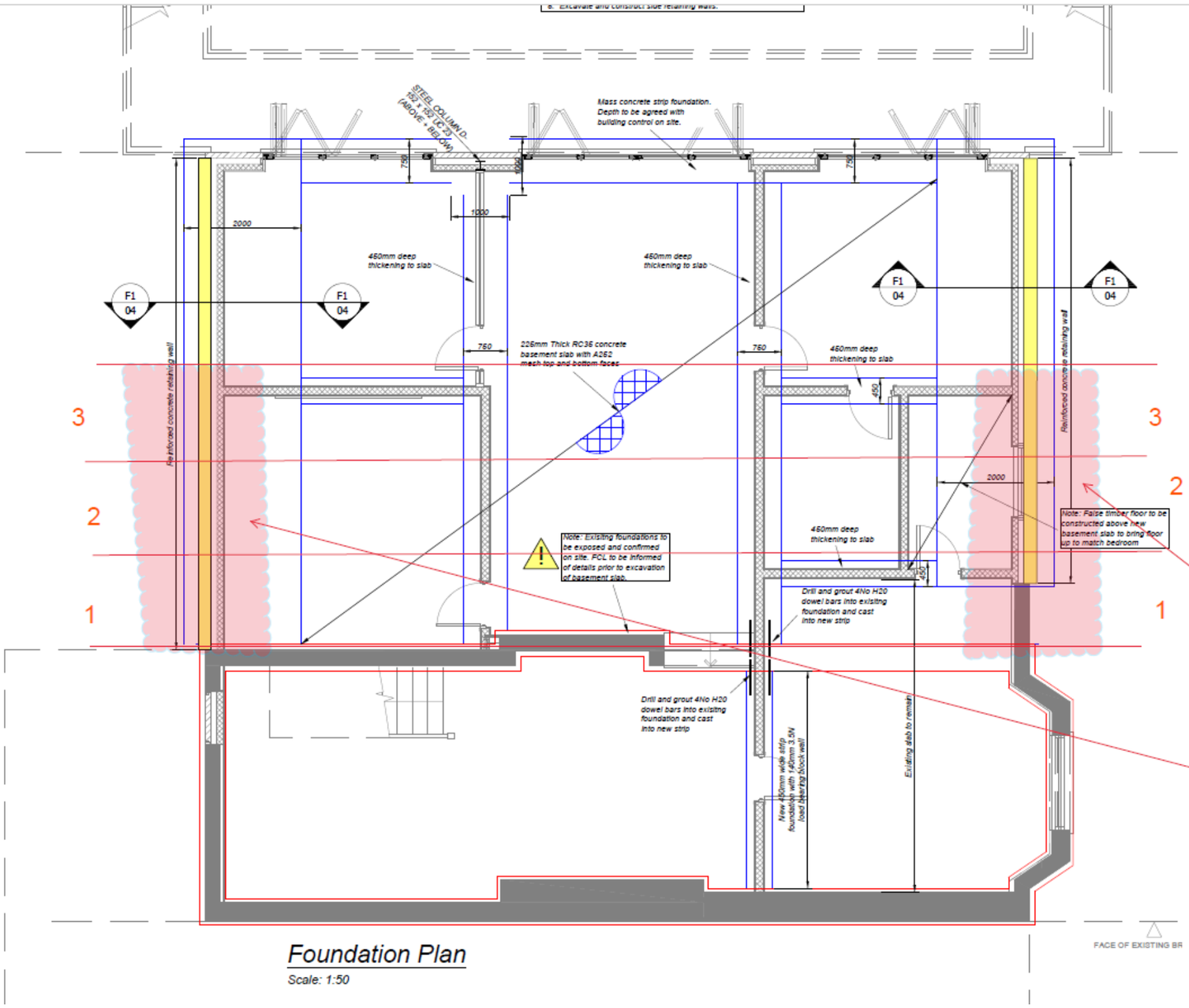
Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Machine and vehicle movement on site	Only fully trained / license holders to use vehicles / machinery on site. Spotters to be used for reversing, vehicles fitted with audible warnings when in operation on site Vehicle movement to be planned and co-ordinated at all times All site workers to wear Hi Vis clothing. Warning whistles issued to allow audible danger warnings All vehicles and machinery to be maintained in correct manner and any required maintenance work to be carried out. Ensure vehicles are not moving in designated working areas, have a separate area for deliveries.	1	5	5

Task Description	Underpinning	Location	7 Wolsey Road	Date	29/09/15

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Contact with wet concrete and dust causing severe burns, dermatitis etc.	Follow HSE guidance from form INDG323 and ensure all employees are aware of this guidance and all appropriate measures are taken to reduce contact and provide appropriate washing facilities and PPE. Regular monitoring to spot early signs of contact dermatitis.	1	1	2

Hazard / Consequences	Control Procedures	Likelihood (a)	Severity (b)	Risk Ranking (= a x b)
Disease from standing/stagnant water can cause Leptospirosis (weils Disease)	Staff will be given information on Leptospirosis and instructed to minimize contact with dirty water, good hygiene procedures will be followed to prevent transmission from hands to mouth etc.	2	2	4

	Likelihood		Severity		Priority
1	Highly Unlikely	1	Trivial	1	Urgent action – (Risk no 15 – 25)
2	Unlikely	2	Minor Injury	2	High Priority – (Risk no 10 – 12)
3	Possible	3	Over 3 day Injury	3	Medium Priority – (Risk no 5 – 9)
4	Probable	4	Major Injury	4	Low Priority – Risk no (2 – 4)
5	Certain	5	Incapacity or Death	5	Very Low Priority– No Action required (Risk no 1)



Foundation Plan

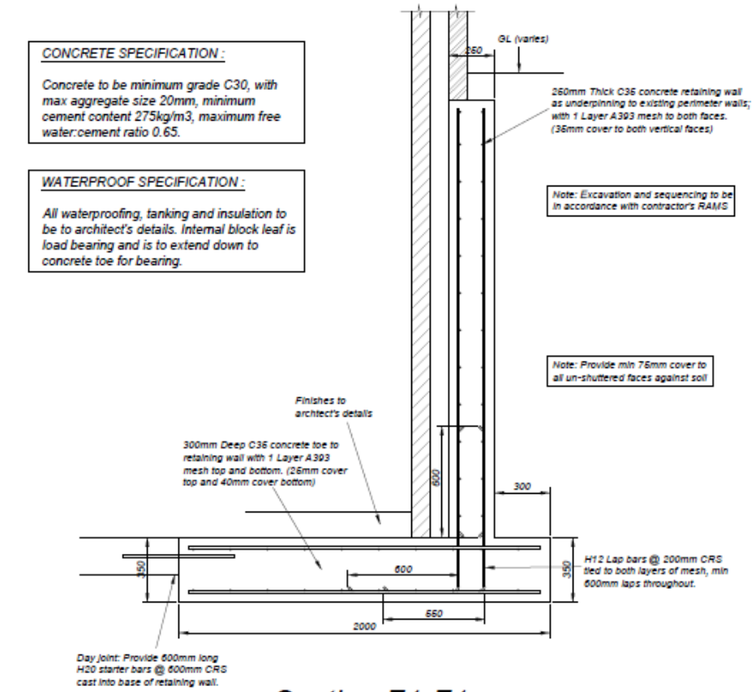
Scale: 1:50

CONCRETE SPECIFICATION :

Concrete to be minimum grade C30, with max aggregate size 20mm, minimum cement content 275kg/m3, maximum free water:cement ratio 0.65.

WATERPROOF SPECIFICATION :

All waterproofing, tanking and insulation to be to architect's details. Internal block leaf is load bearing and is to extend down to concrete toe for bearing.



Section F1-F1

Scale: 1:20

Underpinning required in 3 No. 1m sections

FOUNDATION/EXCAVATION PLAN

Quintas™	Client Quintas Homes Ltd	Project 7 Wolsey Road, HA6 2HN	Title: New Basement Walls Temporary Propping Details Sheet 03	Status: METHOD STATEMENT Date: 26/05/21 Scales: NTS