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Registered as an:	Upper Tier Carrier Dealer
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Address of principal place of business:	EUROPA PARK LONDON ROAD, GRAYS, ESSEX, RM20 4DB
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Date of registration:	17/02/2014
Date of expiry of registration (unless revoked):	11/02/2017

Signature of authorised officer
of the regulation authority:

Date: 17/02/2014



307609

100 AVENUE, SWISS COTTAGE

Outline Basement Construction Method Statement/ Approach to basement Construction

July 2016
60469727 /

Prepared for
Essential Living (Swiss Cottage) Ltd

Issue	Date	Details	Prepared by	Checked by	Approved by
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The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken and is based on the conditions encountered and the information available during the said period of time. The scope of this Report and the services are accordingly factually limited by these circumstances.

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TABLE OF CONTENTS

- 1. **BACKGROUND** 1
- 2. **METHOD STATEMENT**..... 1
 - 2.1 **General**..... 1
- 3. **SEQUENCE OF WORKS** 1
- 4. **TEMPORARY PROPPING CONDITIONS**..... 3
 - 4.1 **Typical Arrangement**..... 3
 - 4.2 **Typical Arrangement, with retained existing basement wall acting as temporary support** 4
 - 4.3 **Typical Arrangement, props supported by existing piles and two stage excavation**..... 5
- 5. **DRAWING 2140** 8

1. BACKGROUND

AECOM act as Structural Consultants for Essential Living (Swiss Cottage) Ltd in respect of the 100 Avenue Road Swiss Cottage development. The proposed development is sited in close proximity to the Swiss cottage London Underground Ltd's (LUL) demise. Full details of the development and its interface with the LUL demise is set out in a separate report produced by Aecom titled "Impact Assessment Report for Interface with LUL" Ref: LORP0013.

This document is intended to provide a conceptual basement construction method statement and provide an understanding of the basement construction sequence. The particulars of this report will be further developed with the appointed main contractor and LUL.

All proposals will be subject to agreement with LUL.

2. METHOD STATEMENT

2.1 General

The outline basement construction method statement is the conceptual sequence of work is associated with temporary works, demolition and sequence of basement construction .

3. SEQUENCE OF WORKS

A Temporary Sheet pile retaining wall will be installed around the perimeter of the proposed basement prior to the basement excavation. Drawing 2140 in section 5 of this report indicated the existing and proposed basement outlines and their proximity to the LUL demise. Also indicated on this drawing is the line of proposed sheet piling.

The following sequence of operations is proposed for forming the basement.

Situation 1 – Wall of Existing Basement in Proximity of LUL Demise, Single Stage Excavation

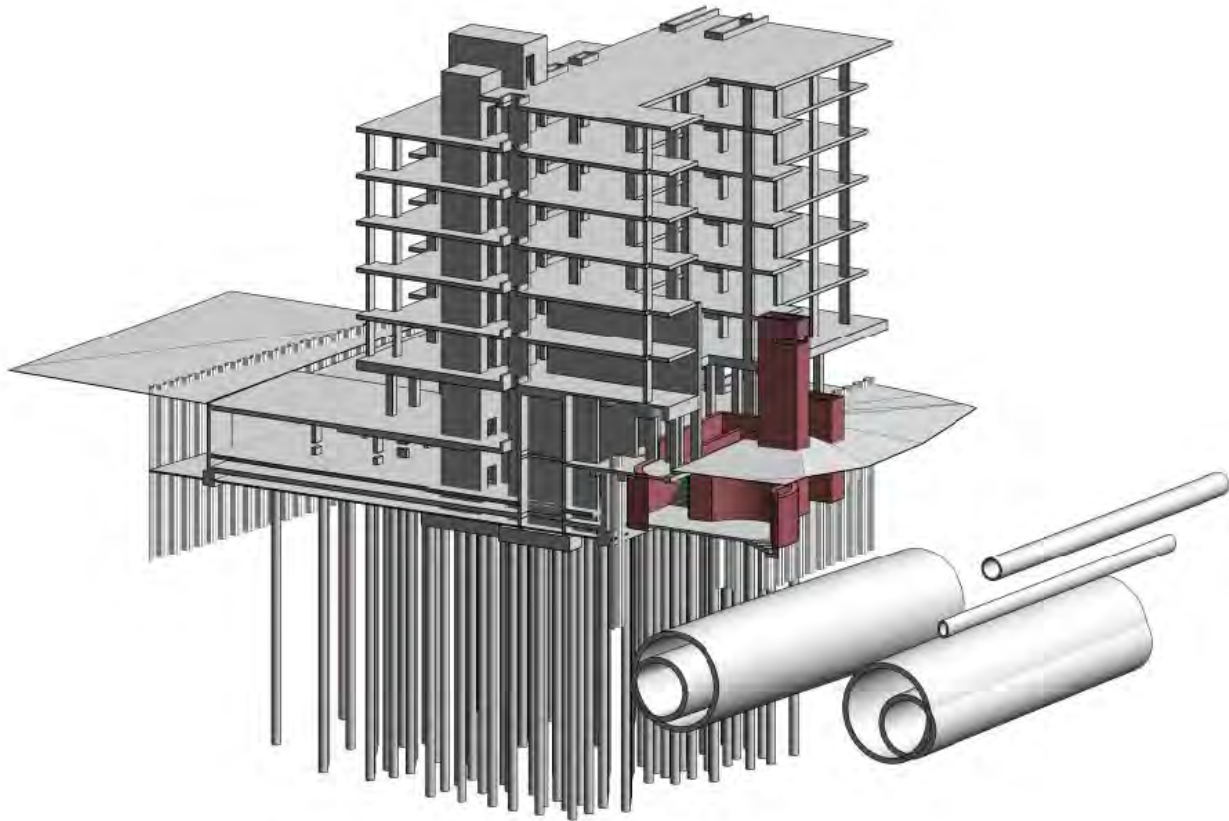
1. Undertake a pre-construction condition survey of LUL assets as set out in separate documentation produced by Aecom and agreed with LUL.
2. Part demolition and infilled profile for sheet piling construction platform as Section 1-1 below.
3. Installation of non-vibrating sheet piles adjacent to the LUL assets/ basement wall boundaries. The sheet piles will be installed by use on noise and vibration limiting methods to the line indicated on drawing 2140 below.
4. The existing structure is to remain in place to provide temporary support to initial excavation during the first phase of earthworks where practical.
5. Undertake bulk excavation around perimeter leaving a bund of soil against sheet pile to provide restraint to the sheets until props are installed.
6. Excavated the bund locally to enable installation of temporary props to sheet piles, as Section 1-1 below. Where practical the props will be supported from existing piles as indicated on Section 3-3 below.
7. Demolition of any existing basemen structures that remain.
8. Remove perimeter bunding material to provide a fully excavated basement area.
9. Undertake piling from low level within the excavated basement area
10. Undertake the construction of the basement floor structure and perimeter retaining walls within the excavation using traditional construction techniques.
11. Construction of the core walls and columns up to Ground Floor Level using traditional construction techniques.
12. Construction of the ground floor slabs using traditional construction techniques.
13. Props only to be removed when sufficient new works are constructed to support the excavation perimeter.
14. Undertake a post sub-structure construction condition survey of LUL assets as set out in separate documentation produced by Aecom and agreed with LUL.

Situation 2 – Wall of Existing Basement in Proximity of LUL Demise, Two Stage Excavation

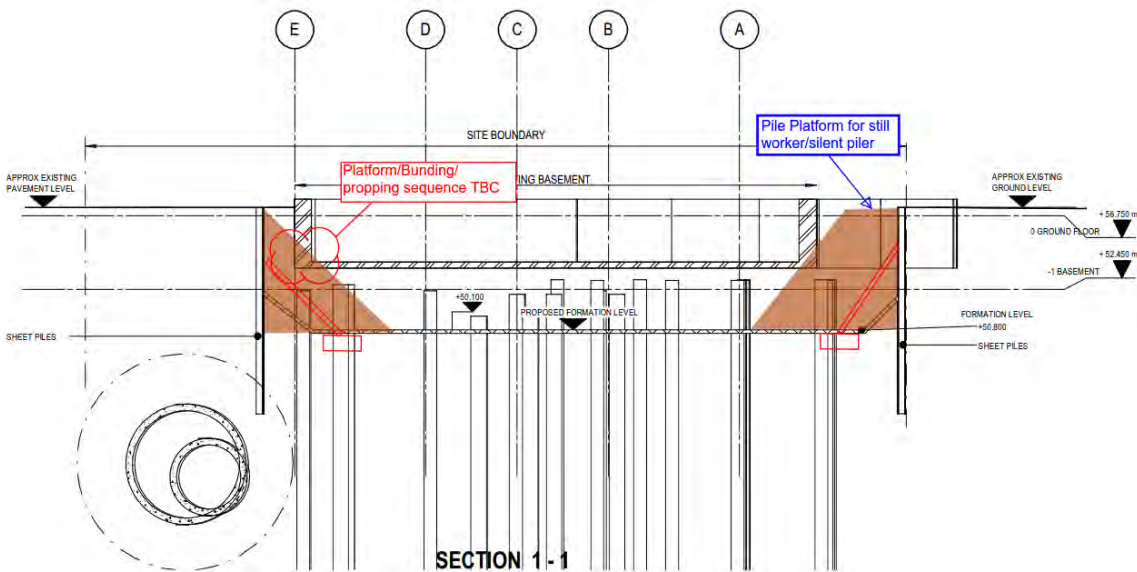
The sequence of construction would be similar to situation 1 however propping would be more extensive as indicated on Section 3-3 and 4-4 below.

4. TEMPORARY PROPPING CONDITIONS

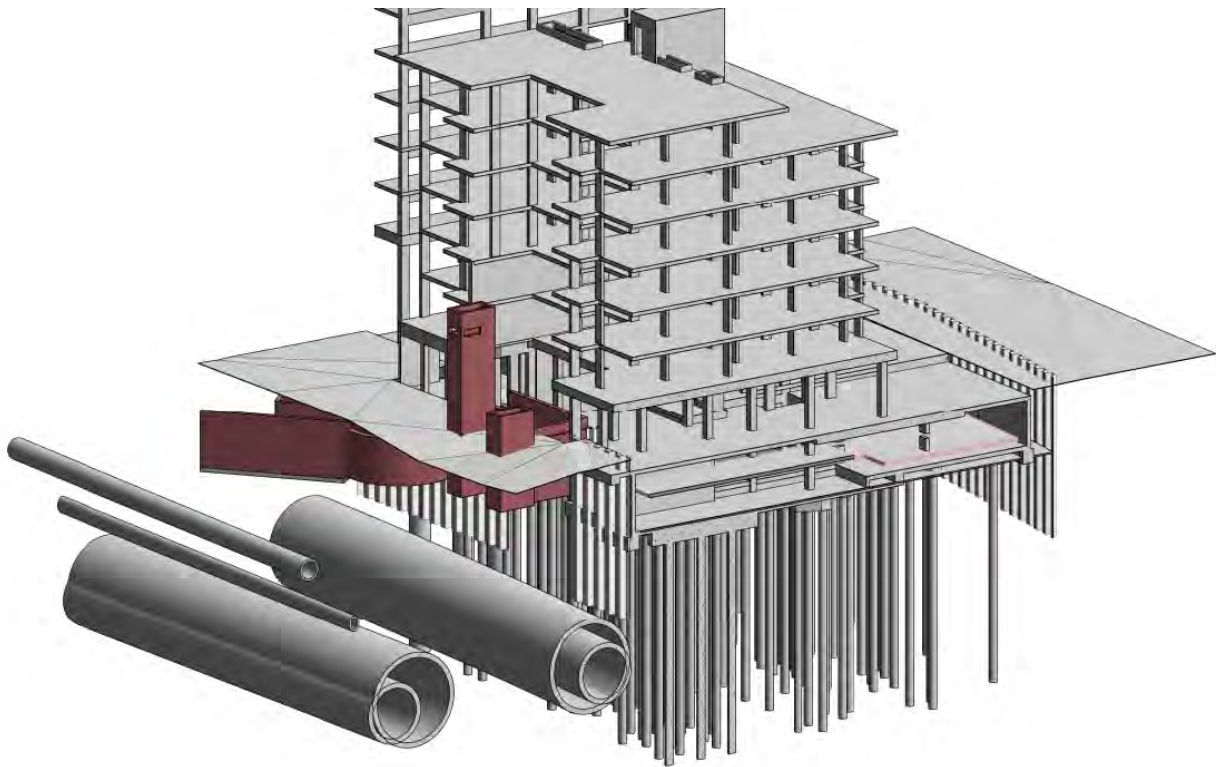
4.1 Typical Arrangement



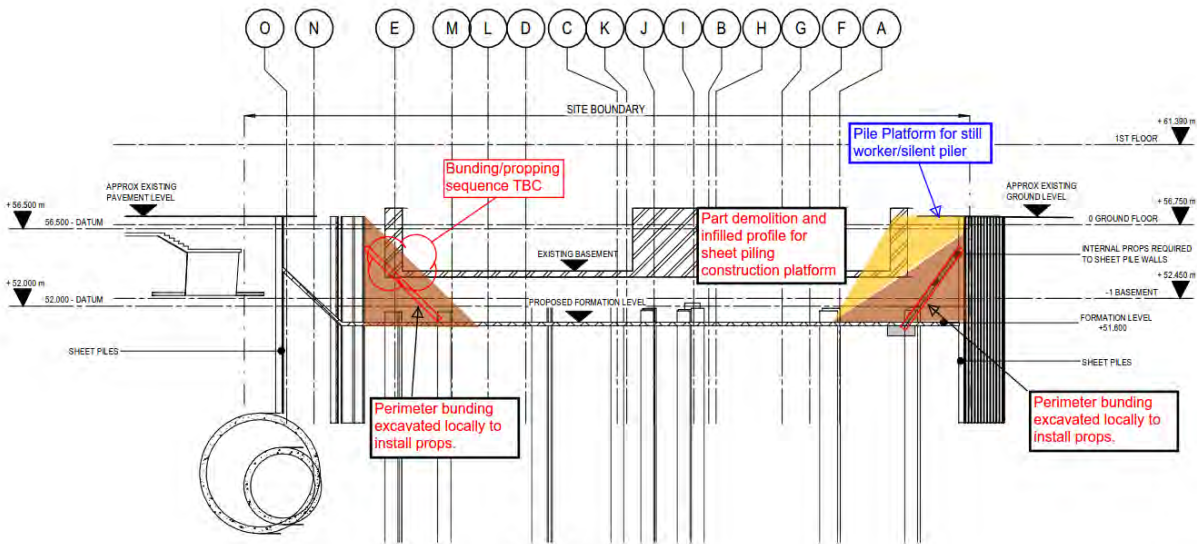
SECTION 1 - 1



4.2 Typical Arrangement, with Retained Existing Basement Wall Acting as Temporary Support

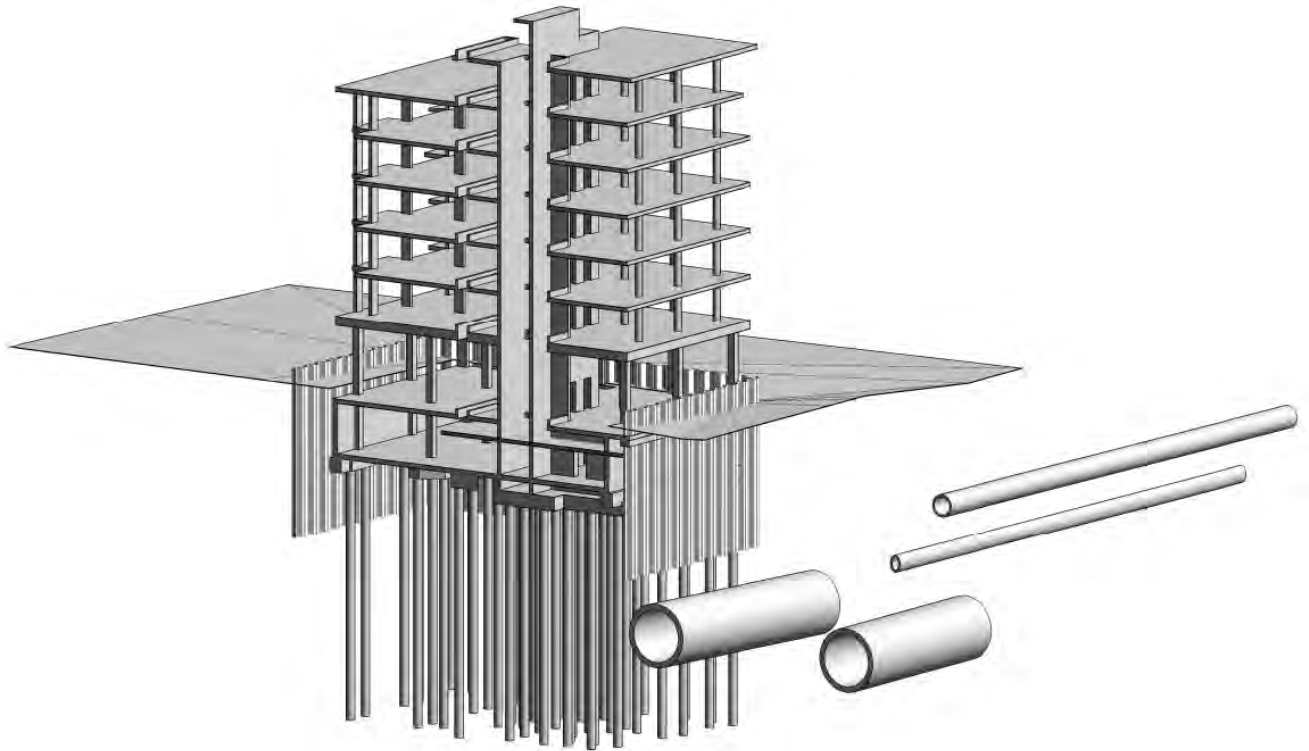


SECTION 2 - 2

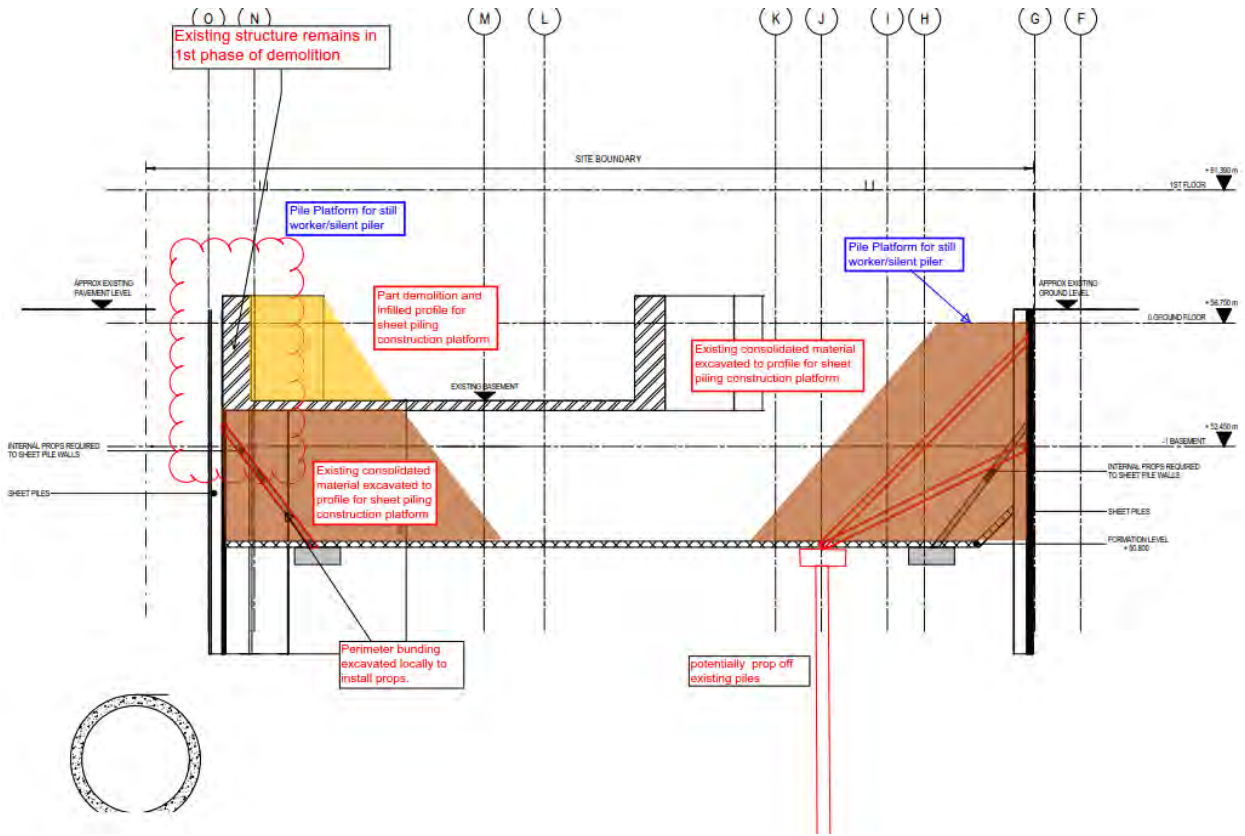


SECTION 2 - 2

4.3 Typical Arrangement, props supported by existing piles and two stage excavation



SECTION 3 - 3



SECTION 4 - 4

5. DRAWING 2140

INFORMATION ON THIS DRAWING IS INDICATIVE ONLY AND SUBJECT TO APPRAISAL AND FULL DESIGN BY TEMPORARY WORKS CONTRACTOR.

- DETAILED DESIGN OF ALL TEMPORARY WORKS (INCLUDING SHEET PILING DESIGN) TO BE UNDERTAKEN BY TEMPORARY WORKS ENGINEER.
- DEMOLITION REQUIREMENTS TO BE DEVELOPED.
- TEMPORARY WORKS TO BE INSTALLED PRIOR TO DEMOLITION OF EXISTING BASEMENT WALLS, OTHER RETAINING WALLS OR SUPPORTING STRUCTURE.
- CONTRACTOR TO ALLOW FOR DEWATERING, PENDING DETAILED GROUND INVESTIGATION.
- PILING AND DEMOLITION SEQUENCE AND PILING PLATFORM LEVELS TO BE DEVELOPED BY CONTRACTOR. TEMPORARY WORKS TO BE SUITABLE TO PROPOSED SEQUENCING AND SUBJECT TO ASSESSMENT OF STRUCTURAL CAPACITY OF EXISTING STRUCTURES WHERE TEMPORARY LOADING IS APPLIED WITH STRENGTHENING AS NECESSARY.
- ALLOW FOR 2No. TOWER CRANES WITH FOUNDATIONS, ALL TO CONTRACTOR'S DESIGN AND DETAIL.
- WITHIN HIS TENDER, MAIN CONTRACTOR TO CONFIRM PROPOSED SEQUENCE AND METHOD FOR CONSTRUCTING THE BASEMENT BOX.

LEGEND:

- TEMPORARY WORKS ASSUMED TO BE SHEET PILING
- EXCAVATION ADJACENT TO LUL STRUCTURE - REFER TO NOTES
- FOOTPRINT OF CURRENT BASEMENT
- HIGH
- LOW
- PROPOSED LEVELS AND STRUCTURAL DEPTHS

LEGEND:

- DEMOTES EXISTING PILE TO BE ABANDONED, TO BE CUT DOWN TO A LEVEL 300mm BELOW THE SOFFIT OF THE PROPOSED STRUCTURE
- DEMOTES BELL DIAMETER OF UNDERREAMING
- DEMOTES EXISTING PILE TO BE REUSED, EXISTING REINFORCEMENT TO BE LEFT PROJECTING 600mm FROM NEW CUT-OFF LEVEL.
- DEMOTES BELL DIAMETER OF UNDERREAMING
- DEMOTES NEW PILE

Significant hazards relative to the structural design shown on this drawing have been assessed and highlighted with reasonable skill and care using a warning triangle system.

This drawing is to be read in conjunction with all other hazards/risks which have been identified and recorded within the construction phase H&S plan.

It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an approved method statement.

Significant hazards are defined as:

- Those not likely to be obvious to a competent contractor or other designers.
- Those of an unusual nature.
- Those likely to be difficult to manage effectively.

CONSTRUCTION RISKS	MAINTENANCE / CLEANING RISK	DEMOLITION RISKS
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In addition to the hazards/risks normally associated with the types of work detailed on this drawing take note of above. It is assumed that all works on this drawing will be carried out by a competent contractor working, where appropriate, to an appropriate method statement.

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION AND ALL OTHER RELEVANT DRAWINGS ISSUED BY THE ENGINEER AND ARCHITECT.
 - ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF WORK.
 - DO NOT SCALE FROM THIS DRAWING.
 - ALL LEVELS AND DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - CONCRETE GRADES TO BE AS FOLLOWS: SLABS - GRADE C40 VERTICAL ELEMENTS (I.E. COLUMNS AND WALLS) - GRADE C50
 - REFERENCES TO DRAWING NUMBERS (USUALLY 4 DIGITS) SHALL BE PREFIXED WITH 47066169/... UNLESS OTHERWISE NOTED.
 - CONTRACTOR TO CONFIRM ALL LEVELS AND DIMENSIONS ON SITE. ANY DIMENSIONAL VARIATION PROPOSED AS A RESULT OF IRREGULARITIES IN LINE AND LEVEL ENCOUNTERED ON SITE ARE ONLY TO BE MADE AFTER AGREEMENT WITH THE CONSTRUCTION MANAGER.
 - ALL DIMENSIONS AND LEVELS OF EXISTING STRUCTURE ARE AS SHOWN ON SURVEY DRAWINGS AND MAY NOT BE AS CONSTRUCTED ON SITE.

This drawing is for preliminary purposes only and is subject to amendment during design development. UNDER NO CIRCUMSTANCES MUST THIS DRAWING BE USED FOR CONSTRUCTION PURPOSES

DRAFT STAGE C ISSUE	MIC	16.01.14	-
Revision Details	By	Date	Suffix
	Check		

Purpose of issue: PRELIMINARY

Client: ESSENTIAL LIVING (SWISS COTTAGE) LTD.

Project Title: 100 AVENUE ROAD SWISS COTTAGE

Drawing Title: CONCEPTUAL TEMPORARY WORKS LAYOUT

Drawn	Checked	Approved	Date
MIC	RS	AG	DEC 2013
URS Internal Project No.	Subsidiary		

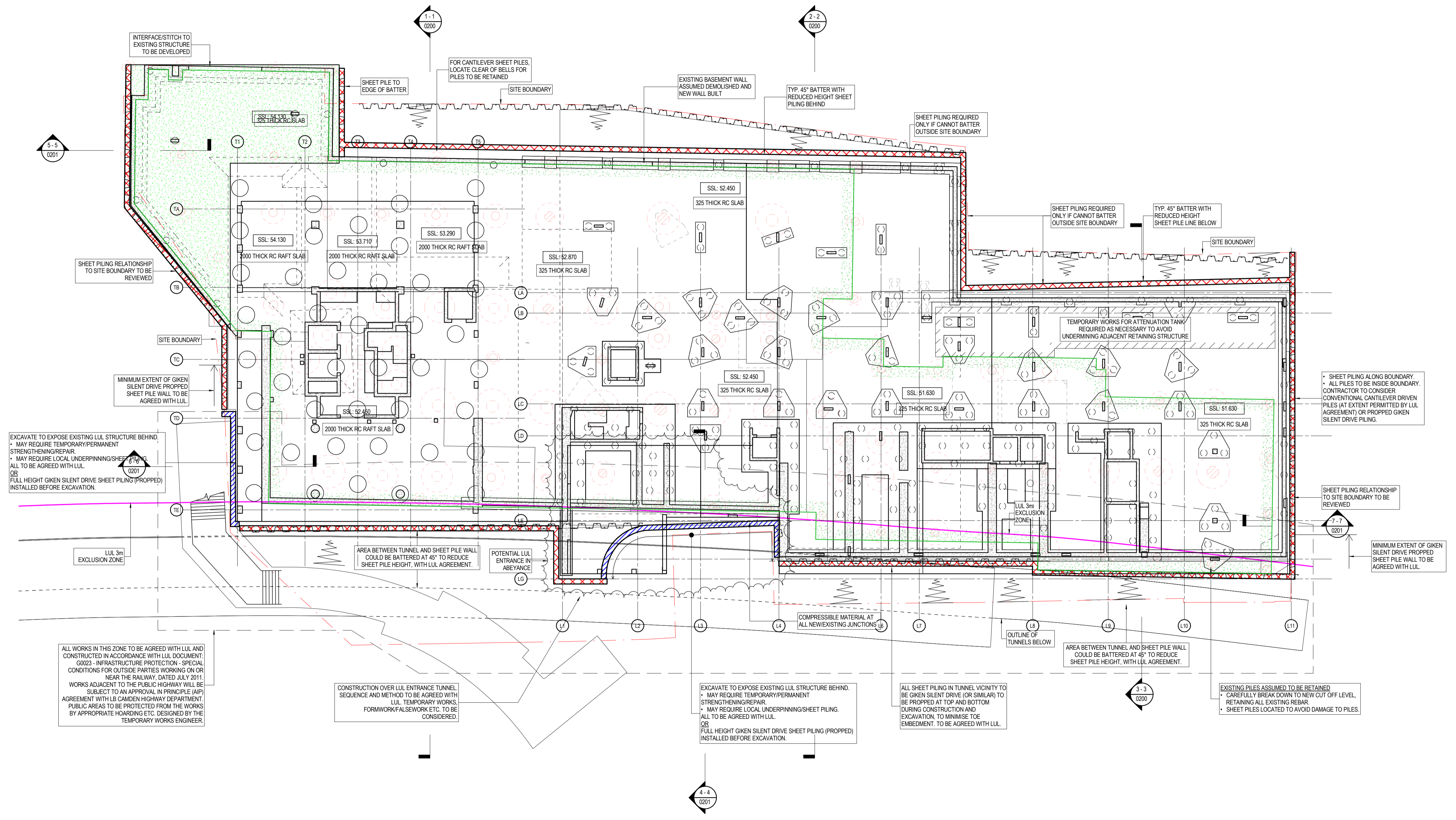
Scale @ A1: 1:200

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 FAX +44 (0)20 8944 3301
 www.ursglobal.com



Drawing Number: 47066169/2140	Rev: -
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EXCAVATE TO EXPOSE EXISTING LUL STRUCTURE BEHIND. MAY REQUIRE TEMPORARY/PERMANENT STRENGTHENING/REPAIR. MAY REQUIRE LOCAL UNDERPINNING/SHEET PILING. ALL TO BE AGREED WITH LUL. OR FULL HEIGHT GIKEN SILENT DRIVE SHEET PILING (PROPPED) INSTALLED BEFORE EXCAVATION.

ALL WORKS IN THIS ZONE TO BE AGREED WITH LUL AND CONSTRUCTED IN ACCORDANCE WITH LUL DOCUMENT: G023 - INFRASTRUCTURE PROTECTION - SPECIAL CONDITIONS FOR OUTSIDE PARTIES WORKING ON OR NEAR THE RAILWAY, DATED JULY 2011. WORKS ADJACENT TO THE PUBLIC HIGHWAY WILL BE SUBJECT TO AN APPROVAL IN PRINCIPLE (AIP) AGREEMENT WITH LB CAENDEN HIGHWAY DEPARTMENT. PUBLIC AREAS TO BE PROTECTED FROM THE WORKS BY APPROPRIATE HOARDING ETC. DESIGNED BY THE TEMPORARY WORKS ENGINEER.

CONSTRUCTION OVER LUL ENTRANCE TUNNEL. SEQUENCE AND METHOD TO BE AGREED WITH LUL. TEMPORARY WORKS, FORMWORK/FALSEWORK ETC. TO BE CONSIDERED.

EXCAVATE TO EXPOSE EXISTING LUL STRUCTURE BEHIND. MAY REQUIRE TEMPORARY/PERMANENT STRENGTHENING/REPAIR. MAY REQUIRE LOCAL UNDERPINNING/SHEET PILING. ALL TO BE AGREED WITH LUL. OR FULL HEIGHT GIKEN SILENT DRIVE SHEET PILING (PROPPED) INSTALLED BEFORE EXCAVATION.

ALL SHEET PILING IN TUNNEL VICINITY TO BE GIKEN SILENT DRIVE (OR SIMILAR) TO BE PROPPED AT TOP AND BOTTOM DURING CONSTRUCTION AND EXCAVATION TO MINIMISE TOE EMBEDMENT. TO BE AGREED WITH LUL.

EXISTING PILES ASSUMED TO BE RETAINED. CAREFULLY BREAK DOWN TO NEW CUT OFF LEVEL. RETAINING ALL EXISTING REBAR. SHEET PILES LOCATED TO AVOID DAMAGE TO PILES.

ASBESTOS AND/OR DELETERIOUS MATERIALS IN EXISTING BUILDING. ASBESTOS SURVEY AND PRE-DEMOLITION SURVEY TO BE UNDERTAKEN.

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE FOLLOWING DOCUMENTS:

- RSK PHASE I DESK STUDY REPORT
- URS REPORT "PROCEDURE FOR INTERFACE WITH LUL DEMISE"
- URS STAGE C STRUCTURAL/CIVIL REPORT

APPENDIX M EMERGING BASEMENT DESIGN

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LEGEND:

- TEMPORARY WORKS POTENTIAL DRIVEN SHEET PILES SUBJECT TO THIRD PARTY AND PARTY WALL AGREEMENTS
- EXCAVATION ADJACENT TO LUL STRUCTURE - REFER TO NOTES
- FOOTPRINT OF PROPOSED BASEMENT
- FOOTPRINT OF EXISTING BASEMENT
- HIGH
- LOW
- BATTER TO EXISTING GROUND
- TEMPORARY WORKS ASSUMED TO BE SHEET PILING BY GIVEN SILENT DRIVE MINIMUM EXTENT BEYOND LUL ASSETS



PROJECT
100 AVENUE ROAD SWISS COTTAGE

EMEA
 UK & IRELAND
CLIENT
ESSENTIAL LIVING

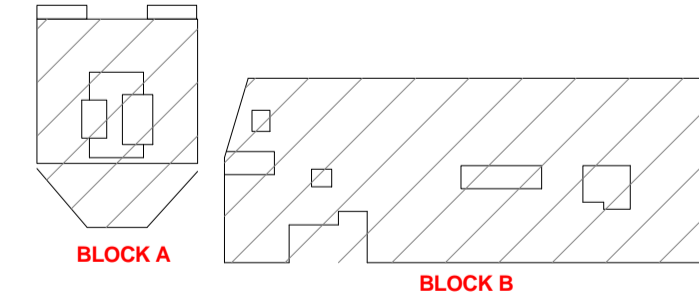
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- NOTES**
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ISSUE/REVISION

P3	19/10/16	UPDATED STAGE 3 INFORMATION FOR BASEMENT TENDER
P2	10/10/16	REVISED STAGE 3
P1	30/09/16	STAGE 3
I/R	DATE	DESCRIPTION

KEY PLAN



PURPOSE OF ISSUE

STAGE 3

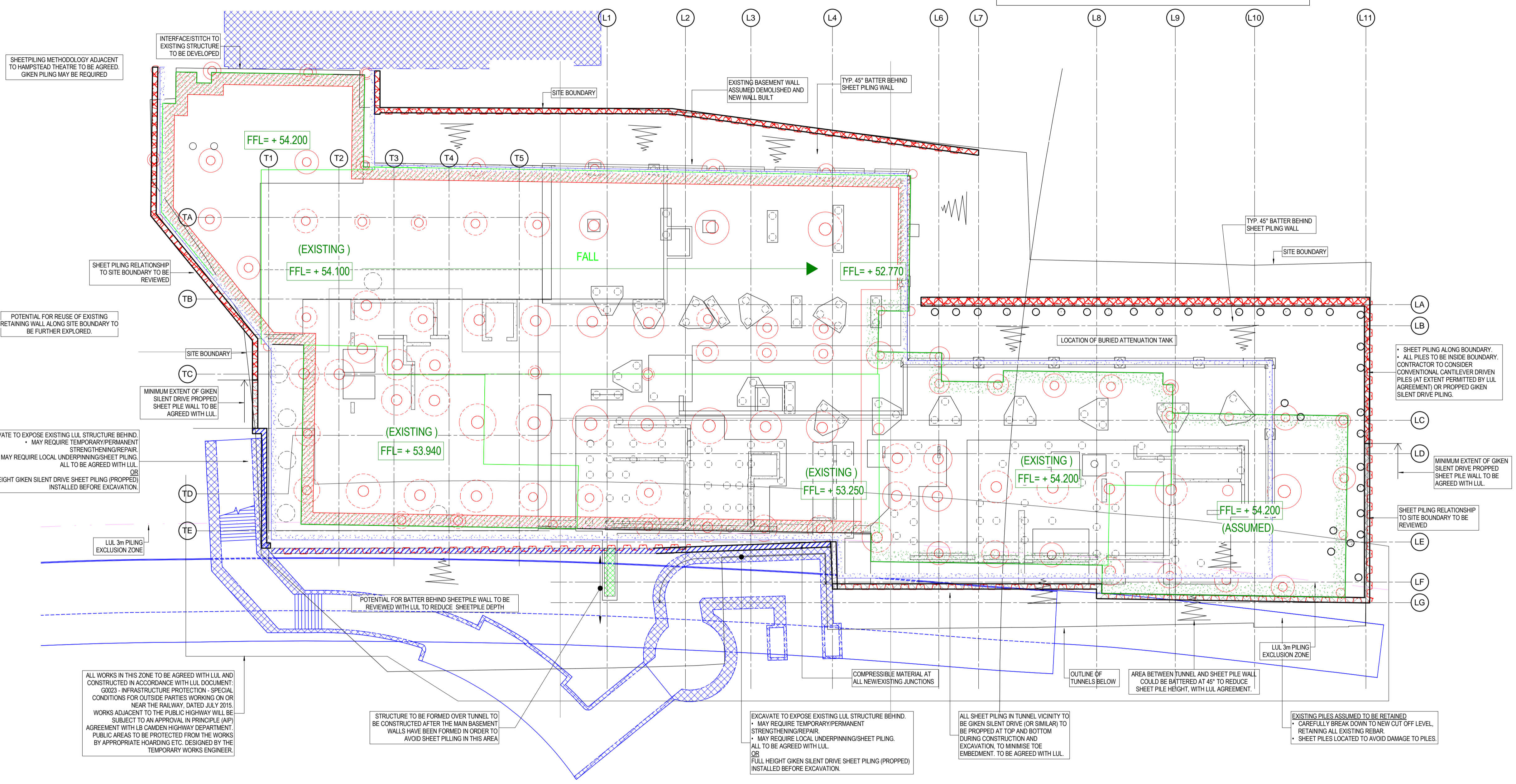
PROJECT NUMBER
 47066169

SHEET TITLE
 BASEMENT DEMOLITION LAYOUT & CONCEPTUAL TEMPORARY WORKS

SHEET NUMBER
 SC-ACS-0-S-00500

REV
 P3

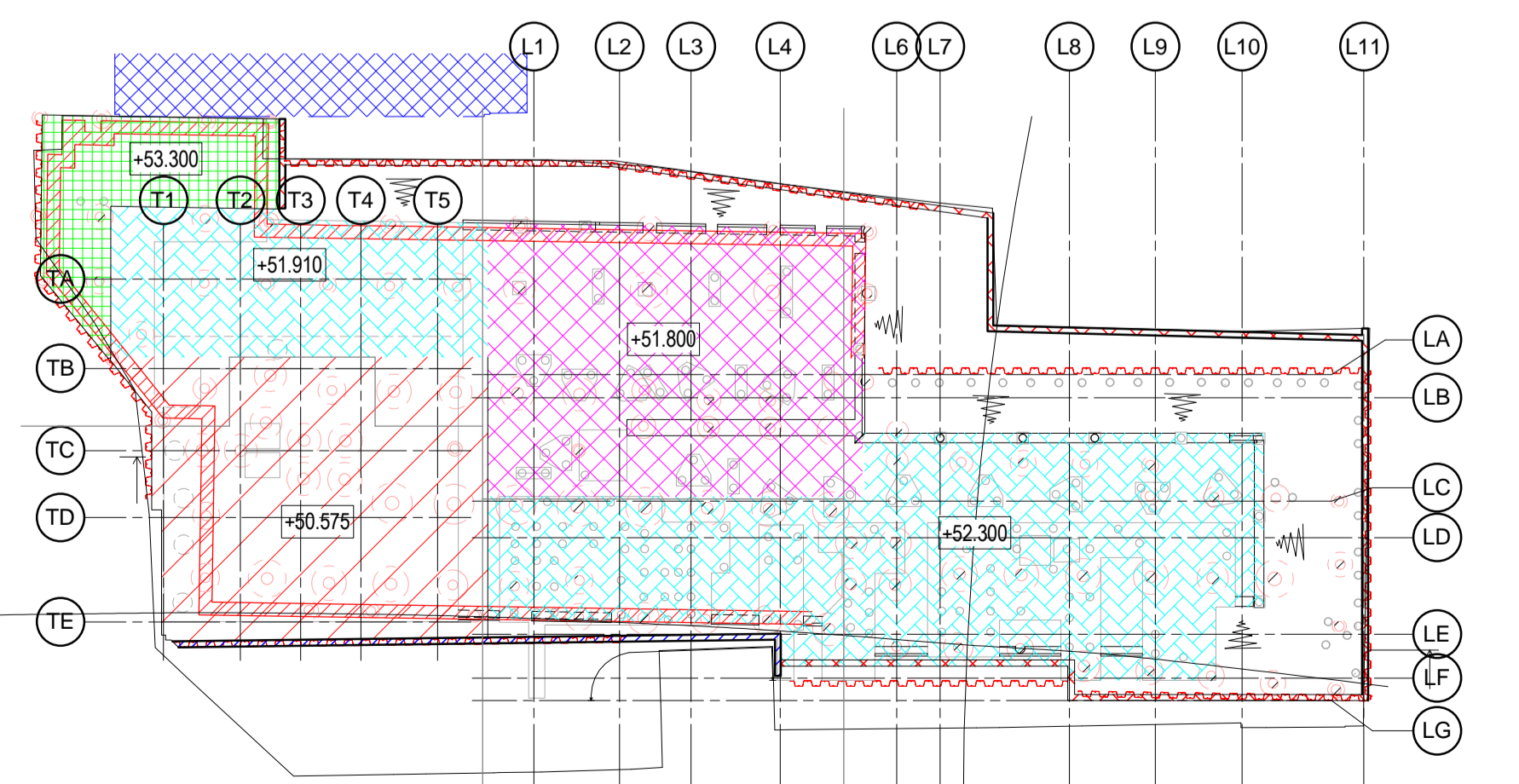
SCALE @A1: As indicated



RESPONSIBILITY MATRIX

	CONCEPT DESIGN	DETAIL DESIGN/WORKS	APPROVAL
DETAILS OF EXISTING STRUCTURE	AECOM	AECOM/DC	-
EXTENT OF DEMOLITION	AECOM	DC	AECOM/PW
DEMOLITION METHOD STATEMENT	AECOM SPEC	DC	AECOM/LUL/PW
TEMPORARY WORKS DESIGN	AECOM (OUTLINE CONCEPT ONLY)	DC	AECOM/LUL/MC/H/P W
PRE & POST DEMOLITION CONDITION SURVEY OF ADJACENT AREAS	DC	DC	AECOM/MC/PW
PRE & POST DEMOLITION CONDITION SURVEY OF LUL TUNNEL	JPR	JPR	LUL
GAUGING SURVEY OF LUL TUNNEL CLEARANCE	LUL/AECOM	TUBE LINES LTD	LUL/AECOM
GROUND MODEL 2D ANALYSIS FOR LUL TUNNEL	AECOM	AECOM	LUL
GEO TECHNICAL PHASE 2 INVESTIGATION	AECOM/MC & OR PC IF AVAILABLE	GEO TECHNICAL SUB CONTRACTOR	AECOM/LUL

- AECOM = AECOM IN ASSOCIATION WITH CLIENT'S DESIGN TEAM
 DC = DEMOLITION CONTRACTOR
 LUL = LONDON UNDERGROUND Ltd OUTSIDE PARTIES
 MC = MAIN CONTRACTOR FOR CONSTRUCTION OF NEW BUILD
 H = LOCAL AUTHORITY HIGHWAYS
 PW = PARTY WALL SURVEYOR
 GOC = SPECIALIST GEO TECHNICAL ADVISOR (ACTING IN SUPPORT OF AECOM)
 PC = PILING SUB CONTRACTOR/DESIGNER
 JPR = JPR SURVEYORS APPOINTED BY EL



KEYPLAN OF INDICATIVE POST DEMOLITION FORMATION LEVELS (PRIOR TO PILING MAT)

ASBESTOS AND/OR DELETERIOUS MATERIALS IN EXISTING BUILDING. ASBESTOS SURVEY AND PRE-DEMOLITION SURVEY TO BE UNDERTAKEN.

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- AECOM REPORT "PROCEDURE FOR INTERFACE WITH LUL DEMISE"
- AECOM STAGE 3 STRUCTURAL/CIVIL REPORT

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