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LTR/P15969/MW

31 October 2024

Simply UK (Ltd)
Stewart House,
Pochard Way,
Bellshill,
ML4 3HB

FAO Mr Neil Dobbie

Uxbridge Care Home

Dear Sir

Ref: Proposed extension to Care Home at 18 Pield Heath Road, Uxbridge UB8 3NF

In response to your request for a basement impact assessment, with regards to the planning application for the care home extension, please see below an outline of the means of construction to be provided for the lower ground floor level accommodation to the care home at the above address. While there is no basement proposed for the extension, we have outlined the construction sequence of the basement in the other part of the care home.

During site investigation, completed by Ardmore Point in July 2024, 6 No. Cable Percussive boreholes were sunk to a maximum depth of 4.00mbgl (BH01 – BH06) to explore the ground conditions, ground bearing capacity, ground, and gas water regime and to retrieve samples for contamination testing.

Made ground was encountered in all exploratory holes across the site, recorded from ground level to a maximum depth of between 0.80mbgl and 1.65mbgl. The superficial deposits underlying the made ground were generally comprised of firm (locally soft) greyish brown slightly gravelly sandy clay with occasional silt laminae. This was recorded from depths of between 0.80mbgl and 1.65mbgl to a maximum proven depth of 20.00mbgl.

As the development extends very close to boundary edges, with neighbouring properties and Pield Heath Avenue to the North and West boundaries respectively, it is not viable to form conventional open batterback excavations along these perimeter edges. We would anticipate that the firm clay material will have a safe angle of repose due to the 1:2 slope, therefore on the southern boundary which runs parallel to Pield Heath Road open batterback excavations can be considered here.

In order to safely form the lower ground floor accommodation required for the care home to the footprint indicated on Simply Develop (UK) Ltd drawings received to date (Appendix A), we would recommend provision of sheet pile walls around two of the perimeter edges of the proposed development, to the approximate alignment shown on the attached Goodson Associates drawings (Appendix B). This method will help create minimal disturbance to the surrounding soil and ensure ground stability during the subsequent excavation work.

The sheet pile retaining wall will be designed and constructed as a cantilever wall to support retained earth and water pressures, as well as any surcharge loading from either neighbouring properties or the traffic on Pield Heath Avenue. Sheet pile clutch sealant should also be applied to provide additional water tightness, and allowance should be made for excavation dewatering throughout construction.

Once the sheet pile walls have been formed, then a traditional bulk excavation can be carried out to the footprint of the proposed lower ground level accommodation. The excavation will commence on the north western edge of the site and be progressively brought through to the south eastern edge of the site in a controlled, phased manner.

As the sheet piled wall will be designed as a cantilever retained construction, this will allow the bulk excavation to be taken through to formation level up to the inner face of the wall, without any further provision for temporary support works within the area of the open bulk excavation.

Across southern/south eastern boundary, a more conventional open batterback slope approach can be adopted where there is a suitable separation distance between the area of working and the Pield Heath Road boundary edge. We don't anticipate that the batterback slopes, set to a nominal 1:2 slope (angle of repose), require any supplementary support measures.

The site investigation indicated the site to be underlain by made ground, sandy clay and boulder clay. The made ground deposits are a variable degree of compaction and not considered to suitable in their current condition. The report recommended raft foundations utilizing the stiff boulder clay to be the most suitable solution, with the boulder clay providing a bearing capacity of 125kPa. The basement floor will be formed using a 450mm thick reinforced concrete raft foundation.

Bearing material at the underside of raft slab foundation to be inspected by engineer and SI contractor, if suitable bearing is not achieved, softer material to be removed and replaced with fully compacted granular material. Plate load testing of compacted material is also required. Test results should then be reported back to engineer prior to continuing with excavation or pouring foundation.

The basement walls will be formed using 325mm thick reinforced concrete retaining walls. The RC walls should then be backfilled using 6F2/6F5, well compacted in layers no greater than 300mm.

Waterproofing for the substructure will be provided by Sika, utilising their Watertight Concrete system.

The above information summarises the means of construction for the main substructure works for the proposed care home, taking account of on site construction requirements and the need to ensure that no damage to the neighbouring properties or adjoining roads occurs.

We trust that this information will meet your requirements at this time in respect to the proposed Planning Submission for the extension to the care home. Should any party require further clarification of matters referred to here or additional information in support of the information in this letter, please let us know.

Yours sincerely



Mandy Wardrop

Lead Project Engineer

APPENDIX A – SIMPLY DEVELOP (UK) LTD DRAWINGS



PLANNING

Project
PROPOSED 81 BEDROOM CARE HOME
18 FIELD HEATH ROAD, LYBURN

SITE PLAN AS PROPOSED

Project Nr.	Drawing Nr.	Revision
SDU-104	201	D
Date 25.06.2024	Drawn	Scale 1:200@A1
Simply Develop		



1 -00-BASEMENT

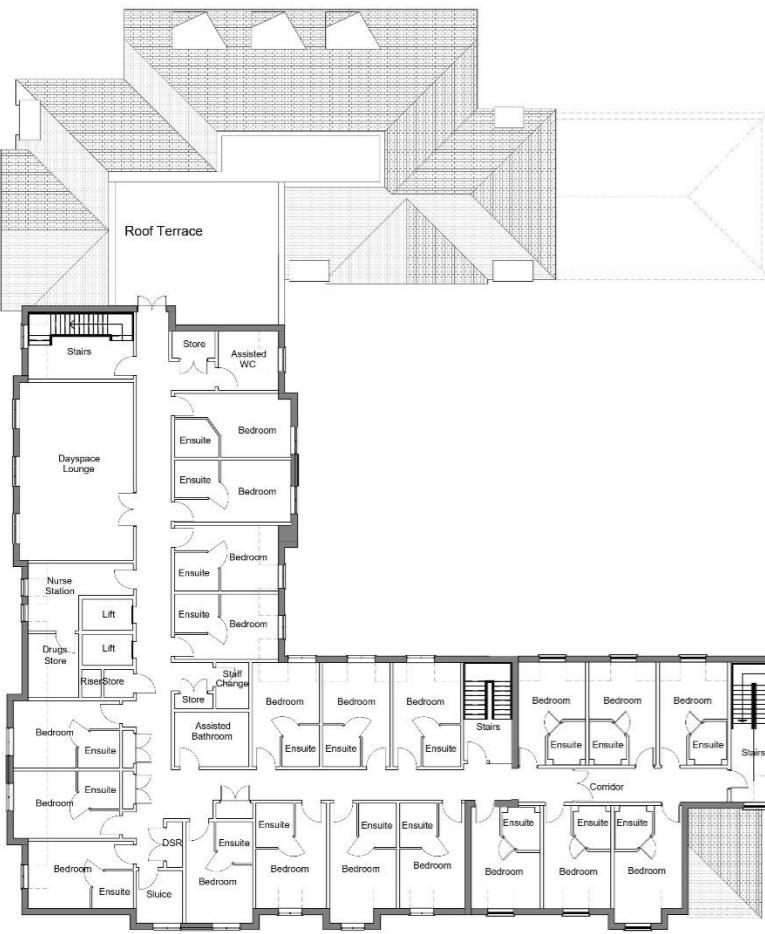


2 00-GRD - 31 Bedrooms

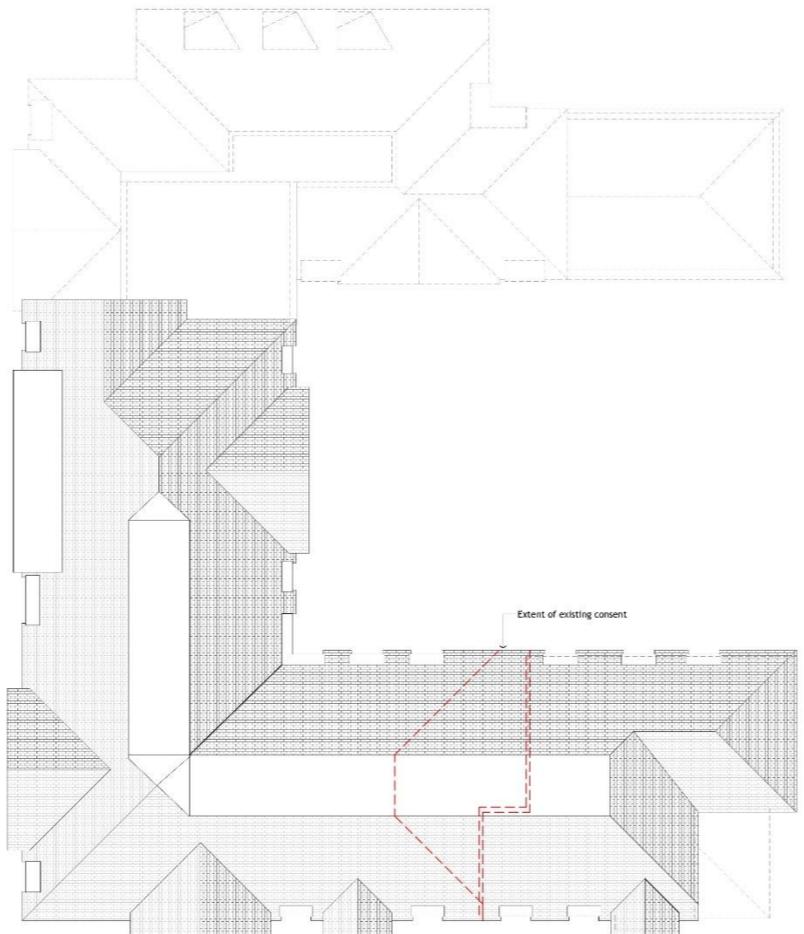


3 01-1ST - 30 Bedrooms

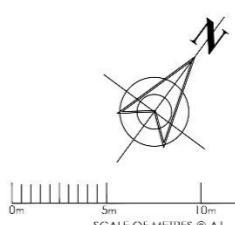
81 Beds over three floors



4 02-2ND - 20 Bedrooms



5 03-ROOF



0m 5m 10m 15m
SCALE OF METRES @ A1

DATE	REVISION	INITIALS
#	#	#

PLANNING

Project
PROPOSED 81 BEDROOM CARE HOME
18 PIEDMONT ROAD, UXBRIDGE

Description
FLOOR PLANS AS PROPOSED

Project Nr. SDU-104 Drawing Nr. 300 Revision F
Date 25.06.2024 Drawn Scale 1:250@A1

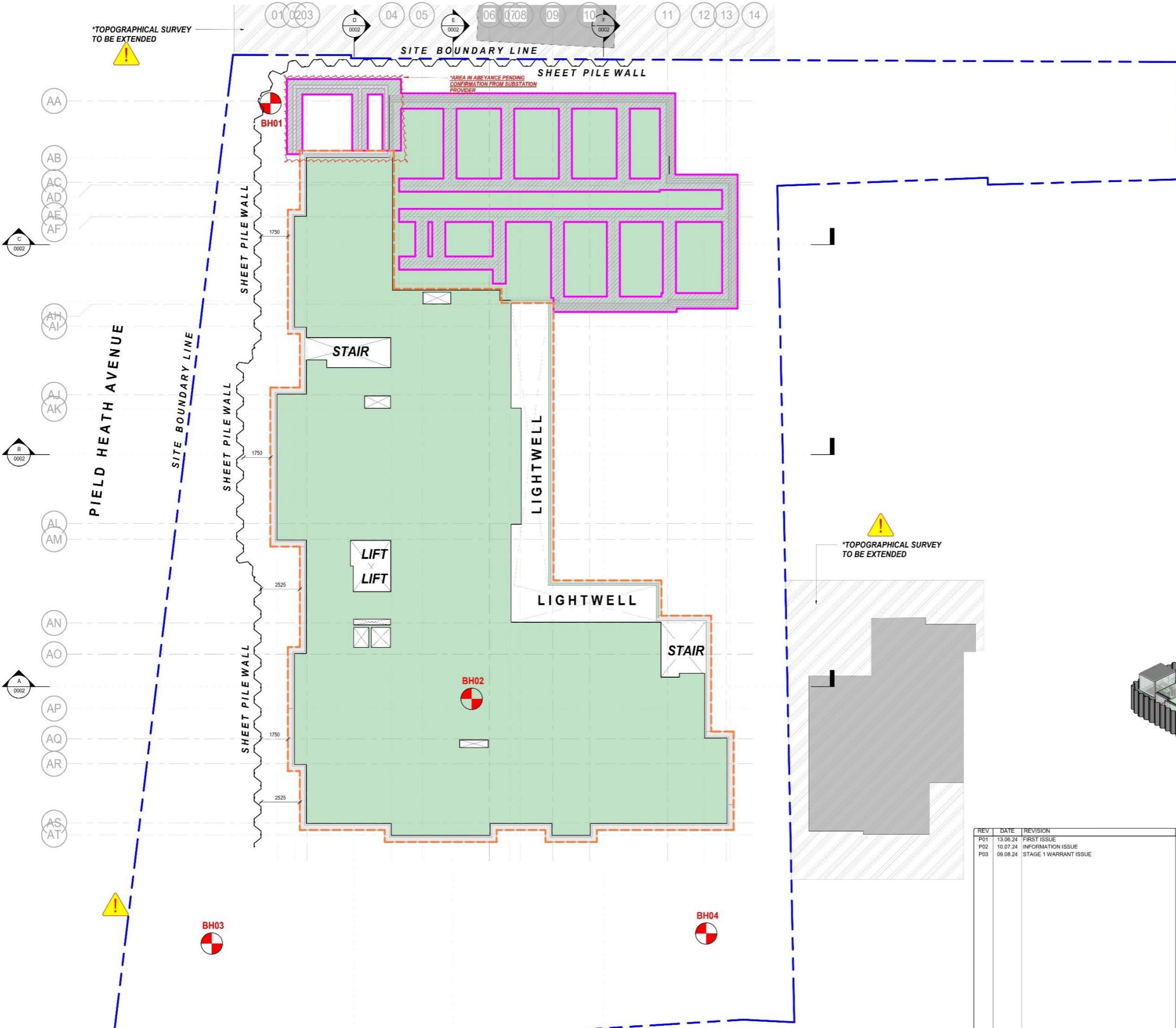
Simply Develop
Stewart House,
Pochard Way,
Bellenden, E3B
Tel: 0141 333 1495
Web: www.simplyuk.co

Simply

APPENDIX B – GOODSON ASSOCIATES DRAWINGS

SITE PLAN

1 : 125



REV	DATE	REVISION	BY	CHK
P01	13.06.24	FIRST ISSUE	SJ	GH
P02	10.07.24	INFORMATION ISSUE	SJ	GH
P03	09.08.24	STAGE 1 WARRANT ISSUE	SJ	GH

SCALE	SIMPLY DEVELOP PROPOSED 81 BED CARE HOME, 18 PIELD HEATH ROAD, UXBRIDGE
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SITE PLAN

Goodson Associates		ABERDEEN
civil structural infrastructure transportation		EDINBURGH
www.goodsons.com		GLASGOW
PURPOSE OF ISSUE		INFORMATION
ORIGINATOR'S JOB No.		P15969
DATE CREATED JUN 24		SCALE As indicated @ A1
DRAWING NO.		P15969-GOO-XX-XX-SK-C-0001
REV		P03

LEGEND

- DENOTES LOCATION OF EXISTING HOUSES
- DENOTES SITE BOUNDARY LINE
- DENOTES LOCATION OF EXISTING BUILDINGS TO BE DEMOLISHED. CLIENT TO CONFIRM.
- DENOTES EXTENT OF GEN3 TRENCH FILL BELOW STRIP FOUNDATIONS TAKEN DOWN TO SUITABLE BEARING STRATA. TRENCH FILL TO BE ON HIT & MISS BASIS
- DENOTES LOCATION OF SACRIFICIAL SHEET PILING.
- DENOTES OUTLINE OF BASEMENT

DENOTES LOCATION OF BOREHOLES UNDERTAKEN. DEPTHS NOTED BELOW

- BH...**
- BH01** DEPTH TAKEN TO 20.000m
- BH02** DEPTH TAKEN TO 20.000m
- BH03** DEPTH TAKEN TO 20.000m
- BH04** DEPTH TAKEN TO 20.000m

! DENOTES EXISTING TREE TO BE CAREFULLY REMOVED

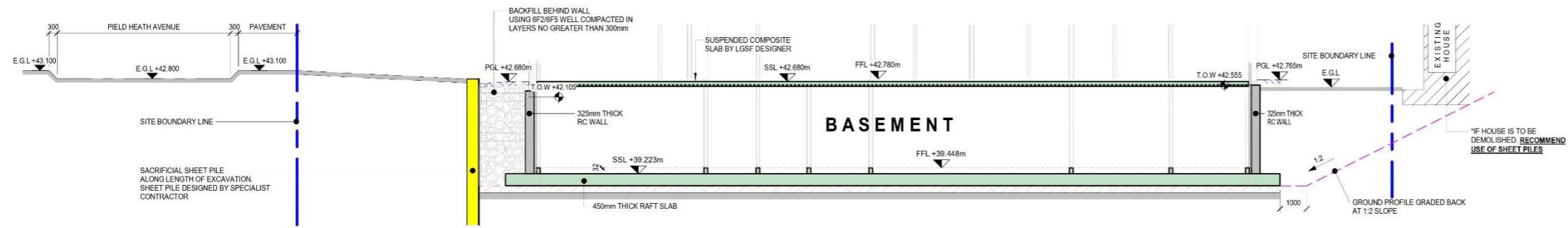
ALL SHEET PILING TO BE CONTRACTOR DESIGNED

REV	DATE	REVISION	BY	CHK
P01	13.06.24	FIRST ISSUE	SJ	GH
P02	10.07.24	INFORMATION ISSUE	SJ	GH
P03	09.08.24	STAGE 1 WARRANT ISSUE	SJ	GH
P04	13.08.24	DRAWING UPDATES	SJ	GH

SIMPLY DEVELOP
PROPOSED 81 BED CARE HOME,
18 PIELD HEATH ROAD, UXBRIDGE

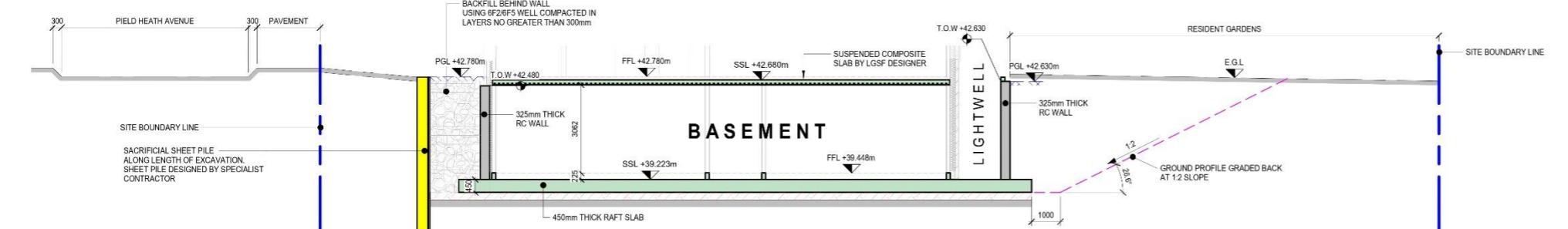
LONGITUDINAL SECTIONS THRO' SITE

Goodson		Associates	ABERDEEN
TIA		EDINBURGH	EDINBURGH
civil structural infrastructure transportation			
www.goodsons.com		glasgow	glasgow
PURPOSE OF ISSUE			
INFORMATION			
ORIGINATOR'S JOB No.			
P15969			
DATE CREATED JUN 24		SCALE As indicated @ A1	
DRAWING No.		REV	
15969-GOO-XX-XX-SK-C-0002		P04	



SECTION A

SCALE 1:100

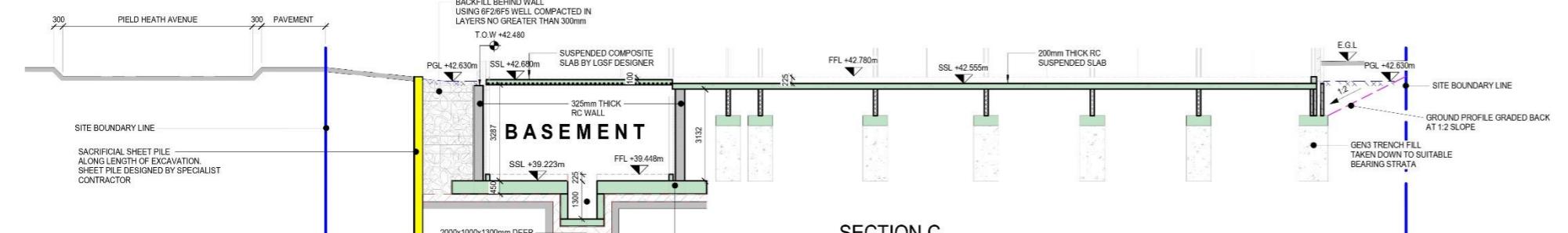


SECTION B

SCALE 1:100

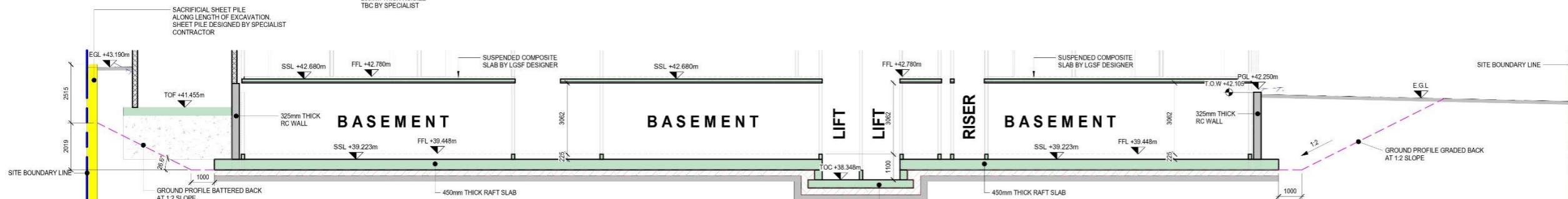
STAGE 1 FOUNDATION TANKING NOTES

- ALL WATERPROOFING/TANKING DETAILS AND SPECIFICATIONS ARE BY OTHERS AND TO BE CONSIDERED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS AND THOSE OF THE ARCHITECT AND BUILDING SERVICES ENGINEER PRIOR TO MATERIAL PROCUREMENT AND CONSTRUCTION.
- ALL PENETRATIONS THROUGH THE REINFORCED CONCRETE WALLS AND SLABS ARE BY OTHERS AND TO BE CONSIDERED IN CONJUNCTION WITH THESE DRAWINGS AND THOSE OF THE ARCHITECT AND BUILDING SERVICES ENGINEER PRIOR TO MATERIAL PROCUREMENT AND CONSTRUCTION. APPROPRIATE REVISIONS OR SUPPLEMENTAL STRUCTURAL DRAWINGS WILL BE PROVIDED IF NECESSARY AT A TIME WHEN TANKING ARRANGEMENTS ARE CONFIRMED BY THE APPROPRIATE APPOINTED SPECIALIST. PENETRATIONS THROUGH REINFORCED CONCRETE WALLS AND SLABS INCLUDE, BUT ARE NOT LIMITED TO, FORM DRRAINAGE, AIR SOURCE HEAT PUMP DUCTS AND ELECTRICAL DISTRIBUTION.
- THE REINFORCED CONCRETE MATERIAL SPECIFICATION IS TO BE CONFIRMED IN CONJUNCTION WITH ANY WATERPROOFING ADMIXTURES THAT MAY BE REQUIRED. THE SPECIFICATION FOR WATERPROOFING ADMIXTURES IS BY THE APPROPRIATE TANKING SPECIALIST.
- CONSIDERATION IS TO BE GIVEN FOR THE EFFECTS OF WATERPROOFING ADMIXTURES ON CONCRETE CURING TIMES AND STRENGTH DEVELOPMENT. THE APPROPRIATE SPECIALISTS ARE TO BE CONSULTED.
- THE REINFORCED CONCRETE STRUCTURE HAS BEEN DESIGNED FOR A MINIMUM FLEXURAL CRACK WIDTH OF 0.3mm. THIS IS TO BE CONFIRMED AS SUITABLE BY THE APPROPRIATE TANKING SPECIALIST.



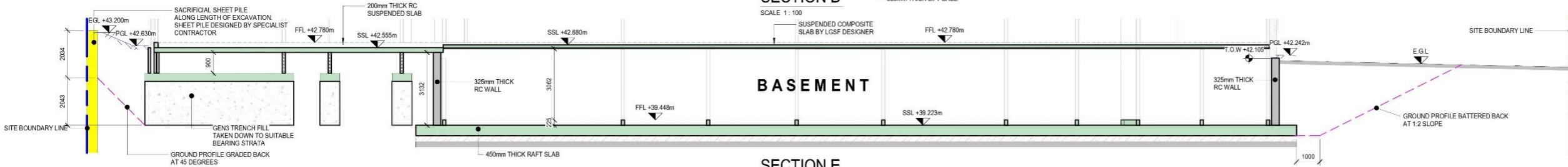
SECTION C

SCALE 1:100



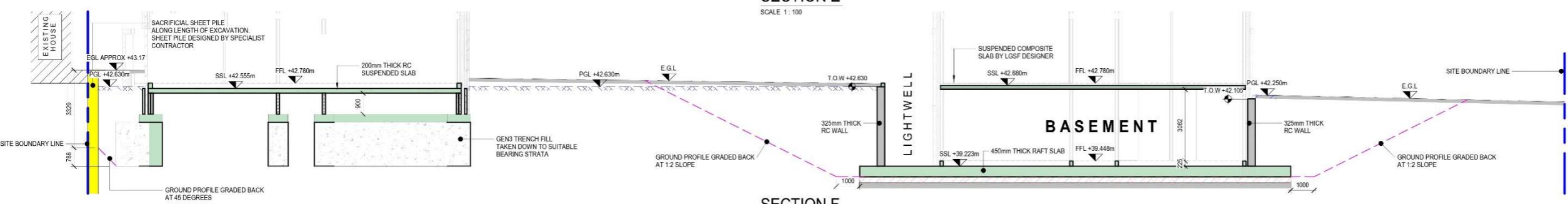
SECTION D

SCALE 1:100



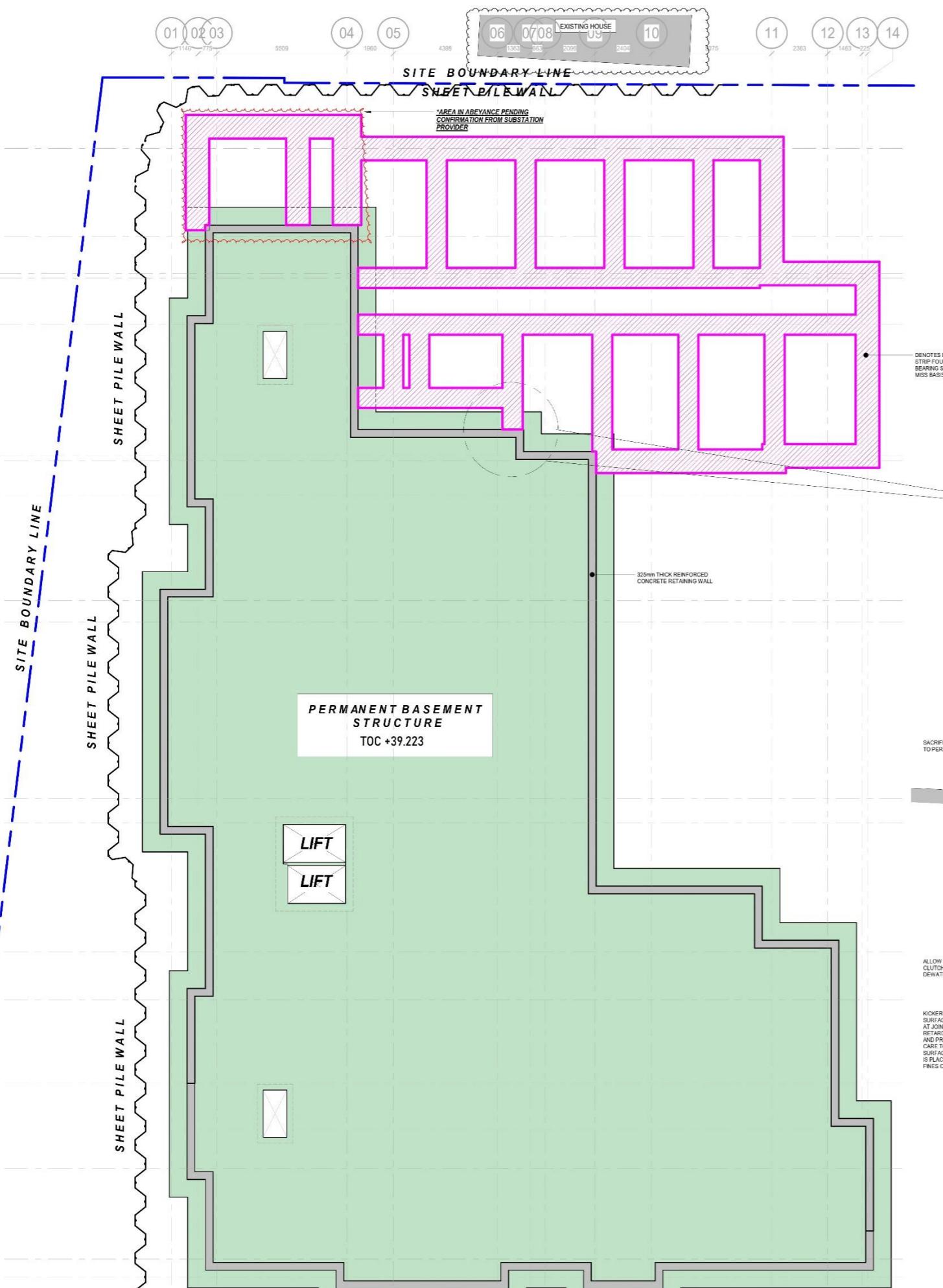
SECTION E

SCALE 1:100



SECTION F

SCALE 1:100



STAGE 1 FOUNDATION TANKING NOTES

- ALL WATERPROOFING / TANKING DETAILS AND SPECIFICATIONS ARE BY OTHERS AND TO BE CONSIDERED IN CONJUNCTION WITH THE STRUCTURAL DRAWINGS AND THOSE OF THE ARCHITECT AND BUILDING SERVICES ENGINEER PRIOR TO MATERIAL PROCUREMENT AND CONSTRUCTION.
- ALL PENETRATIONS THROUGH THE REINFORCED CONCRETE WALLS AND SLABS ARE TO BE PROVIDED IN CONJUNCTION WITH THESE DRAWINGS AND THOSE OF THE ARCHITECT AND BUILDING SERVICES ENGINEER PRIOR TO MATERIAL PROCUREMENT AND CONSTRUCTION. APPROPRIATE REVISIONS ON SUPPLEMENTARY STRUCTURAL DRAWINGS WILL BE PROVIDED IF NECESSARY AT A TIME WHEN TANKING ARRANGEMENTS ARE CONSIDERED. THE APPROPRIATE APPROVED SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION), BS EN 12060:1999 EXCERPT OF ECA GEOTECHNICAL WORKS - SHEET-PILE WALLS (3RD EDITION) AND RELEVANT EDITIONS OF THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION) SHALL BE DESIGNED AS A CANTILEVERED RETAINING WALL WITH NO PROPS IN THE TEMPORARY OR PERMANENT CONDITIONS. THE FINAL CHOICE OF PILE TYPE, PROFILE AND FOUNDING CRITERIA IS TO BE DETERMINED BY THE PILING CONTRACTOR IN AGREEMENT WITH THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE FOR SHEET PILING IN CONJUNCTION WITH A SUITABLE Dewatering STRATEGY AND CLUTCH SEALANT MEASURES TO MANAGE THE EFFECTS OF HYDROSTATIC PRESSURE AND UNCONTROLLED GROUNDWATER INGRESS INTO THE EXCAVATION. THE GROUND INVESTIGATION REPORT SUBJECT TO Dewatering AND TANKING SHOULD BE PROVIDED.
- THE PILE SETTING OUT PROFILE IS PRELIMINARY. IT IS TO BE USED FOR TANKING PURPOSES ONLY. FINAL SETTING OUT SHALL BE AGREED BETWEEN PILING CONTRACTOR AND ENGINEER.
- THE PERMANENT SUBSTRUCTURE HAS BEEN DESIGNED ON THE BASIS THAT THE SHEET PILE WALL IS NOT ATTACHED FROM THE PERMANENT STRUCTURE AND REDUNDANT DURING THE CONSTRUCTION PHASE.
- FULL DESIGN CALCULATIONS AND DRAWINGS ARE TO BE PROVIDED TO THE STRUCTURAL ENGINEER, ALONG WITH DETAILS OF THE COMPETENCE OF THE DESIGNER, A MINIMUM OF TWO WEEKS PRIOR TO SUBMISSION OF DESIGN DRAWINGS.
- THE CONTRACTOR MUST ENSURE THAT DESIGNS ARE CHECKED BY A SUITABLY QUALIFIED INDIVIDUAL OTHER THAN THE ORIGINAL DESIGNER IN LINE WITH THE RELEVANT DESIGN CODES OF PRACTICE & IN ACCORDANCE WITH THE REQUIREMENTS OF THE RISK CLASSIFICATION OF THE BUILDING STATED BELOW.
- THE CONTRACTOR MUST ARRANGE A DILATOMETRY SURVEY OF ADJACENT PROPERTIES BEFORE WORK COMMENCES ON SITE. REGULAR MONITORING SHOULD CONTINUE THROUGHOUT THE WORKS.
- THE SITE IS TO BE CLEARED OF ANY NEAR SURFACE OBSTRUCTIONS, INCLUDING BURIED FOUNDATIONS, AND EXCAVATED TO A SUITABLE AGREED EXCAVATED LEVEL. EXCAVATED MATERIALS COMPACTED GRANULAR MATERIAL.
- ANY SERVICE RUNS CROSSING THE AREA TO BE PILED ARE TO BE DIVERTED OR DISCONNECTED PRIOR TO THE WORKS COMMENCING. WRITTEN CONFIRMATION OF THE DIVERSION OR DISCONNECTION OF EACH SERVICE IS REQUIRED PRIOR TO THE WORKS COMMENCING.
- A SUITABLE WORKING PLATFORM (TYPICALLY TYPE 2 GRANULAR MATERIAL OF A DEPTH NOT LESS THAN 300mm) IS TO BE PROVIDED PRIOR TO THE PILING RIG ARRIVING ON SITE. THE LEVEL OF THE PLATFORM RELATIVE TO ORDNANCE DATUM IS TO BE AGREED BETWEEN THE PILING CONTRACTOR AND ENGINEER. THE PLATFORM LEVEL, LOAD AND LOADING SHEET SHALL BE PROVIDED TO THE ENGINEER FOR PILING PLATE DESIGN.
- ALL PILING WORKS ARE TO BE COMPLETED IN STRICT ACCORDANCE WITH THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION) AND BS EN 12060:1999 EXCERPT OF ECA GEOTECHNICAL WORKS - SHEET-PILE WALLS (3RD EDITION).
- ALL PILES MUST BE LOCATED TO WITHIN 75mm OF THE POSITION INDICATED ON THE PILE LAYOUT DRAWING. SHOULD A PILE EXCEED THE TOLERANCE, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- RECORDS ARE TO BE PROVIDED TO ALL PARTIES UPON COMPLETION OF THE WORKS EVIDENCING CONSTRUCTION, THE DATE OF CONSTRUCTION, THE DATE, DEPTH AND DIAMETER AS WELL AS OTHER INFORMATION DEEMED NECESSARY.
- THE BUILDING RISK CLASSIFICATION WHERE RELEVANT SHOULD BE TAKEN AS 2A.

DO NOT SCALE, IF IN DOUBT ASK. DO NOT INTERROGATE DIGITAL BASE
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT, ENGINEER AND SPECIALIST DRAWINGS AND SPECIFICATIONS

STAGE 1 SHEET PILING

- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ANY RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS AND THE GEOTECHNICAL AND ENVIRONMENTAL INTERPRETATIVE REPORT BY ARDMORE POINT, DATED APRIL 2024.
- THE SHEET PILING SCHEME SHOWN IS INTENDED TO FORM A SACRIFICIAL RETAINING WALL FOR THE CONSTRUCTION OF THE PERMANENT REINFORCED CONCRETE BASEMENT.
- THE SACRIFICIAL SHEET PILE WALL IS A CONTRACTOR DESIGNED ITEM TO BE FULLY DESIGNED AND DETAILED BY THE CONTRACTOR IN ACCORDANCE WITH THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION) AND RELEVANT EDITIONS OF THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION). THE CONTRACTOR SHALL PROVIDE A CANTILEVERED RETAINING WALL WITH NO PROPS IN THE TEMPORARY OR PERMANENT CONDITIONS. THE FINAL CHOICE OF PILE TYPE, PROFILE AND FOUNDING CRITERIA IS TO BE DETERMINED BY THE PILING CONTRACTOR IN AGREEMENT WITH THE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE FOR SHEET PILING IN CONJUNCTION WITH A SUITABLE Dewatering STRATEGY AND CLUTCH SEALANT MEASURES TO MANAGE THE EFFECTS OF HYDROSTATIC PRESSURE AND UNCONTROLLED GROUNDWATER INGRESS INTO THE EXCAVATION. THE GROUND INVESTIGATION REPORT SUBJECT TO Dewatering AND TANKING SHOULD BE PROVIDED.
- THE PILE SETTING OUT PROFILE IS PRELIMINARY. IT IS TO BE USED FOR TANKING PURPOSES ONLY. FINAL SETTING OUT SHALL BE AGREED BETWEEN PILING CONTRACTOR AND ENGINEER.
- THE PERMANENT SUBSTRUCTURE HAS BEEN DESIGNED ON THE BASIS THAT THE SHEET PILE WALL IS NOT ATTACHED FROM THE PERMANENT STRUCTURE AND REDUNDANT DURING THE CONSTRUCTION PHASE.
- FULL DESIGN CALCULATIONS AND DRAWINGS ARE TO BE PROVIDED TO THE STRUCTURAL ENGINEER, ALONG WITH DETAILS OF THE COMPETENCE OF THE DESIGNER, A MINIMUM OF TWO WEEKS PRIOR TO SUBMISSION OF DESIGN DRAWINGS.
- THE CONTRACTOR MUST ENSURE THAT DESIGNS ARE CHECKED BY A SUITABLY QUALIFIED INDIVIDUAL OTHER THAN THE ORIGINAL DESIGNER IN LINE WITH THE RELEVANT DESIGN CODES OF PRACTICE & IN ACCORDANCE WITH THE REQUIREMENTS OF THE RISK CLASSIFICATION OF THE BUILDING STATED BELOW.
- THE CONTRACTOR MUST ARRANGE A DILATOMETRY SURVEY OF ADJACENT PROPERTIES BEFORE WORK COMMENCES ON SITE. REGULAR MONITORING SHOULD CONTINUE THROUGHOUT THE WORKS.
- THE SITE IS TO BE CLEARED OF ANY NEAR SURFACE OBSTRUCTIONS, INCLUDING BURIED FOUNDATIONS, AND EXCAVATED TO A SUITABLE AGREED EXCAVATED LEVEL. EXCAVATED MATERIALS COMPACTED GRANULAR MATERIAL.
- ANY SERVICE RUNS CROSSING THE AREA TO BE PILED ARE TO BE DIVERTED OR DISCONNECTED PRIOR TO THE WORKS COMMENCING. WRITTEN CONFIRMATION OF THE DIVERSION OR DISCONNECTION OF EACH SERVICE IS REQUIRED PRIOR TO THE WORKS COMMENCING.
- A SUITABLE WORKING PLATFORM (TYPICALLY TYPE 2 GRANULAR MATERIAL OF A DEPTH NOT LESS THAN 300mm) IS TO BE PROVIDED PRIOR TO THE PILING RIG ARRIVING ON SITE. THE LEVEL OF THE PLATFORM RELATIVE TO ORDNANCE DATUM IS TO BE AGREED BETWEEN THE PILING CONTRACTOR AND ENGINEER. THE PLATFORM LEVEL, LOAD AND LOADING SHEET SHALL BE PROVIDED TO THE ENGINEER FOR PILING PLATE DESIGN.
- ALL PILING WORKS ARE TO BE COMPLETED IN STRICT ACCORDANCE WITH THE ICE SPECIFICATION FOR PILING AND EMBEDDED RETAINING WALLS (3RD EDITION) AND BS EN 12060:1999 EXCERPT OF ECA GEOTECHNICAL WORKS - SHEET-PILE WALLS (3RD EDITION).
- ALL PILES MUST BE LOCATED TO WITHIN 75mm OF THE POSITION INDICATED ON THE PILE LAYOUT DRAWING. SHOULD A PILE EXCEED THE TOLERANCE, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- RECORDS ARE TO BE PROVIDED TO ALL PARTIES UPON COMPLETION OF THE WORKS EVIDENCING CONSTRUCTION, THE DATE OF CONSTRUCTION, THE DATE, DEPTH AND DIAMETER AS WELL AS OTHER INFORMATION DEEMED NECESSARY.
- THE BUILDING RISK CLASSIFICATION WHERE RELEVANT SHOULD BE TAKEN AS 2A.

SUBBASE PREPARATION KEY:

ALL FOUNDATIONS TO BEAR ON TO STIFF CLAY WITH BEARING CAPACITY OF 125kPa. AS NOTED ON ARDMORE POINT REPORT

BEARING MATERIAL AT UNDERSIDE OF RAFT TO BE INSPECTED BY ENGINEER AND SI CONTRACTOR. IF SUITABLE BEARING IS NOT ACHIEVED, SOFTER MATERIAL TO BE REMOVED AND REPLACED WITH FULLY COMPACTED GRANULAR MATERIAL. PLATE LOAD TESTING OF COMPACTED MATERIAL REQUIRED.

BEARING MATERIAL AT UNDERSIDE OF RAFT TO BE STIFF CLAYS PROVIDING A BEARING CAPACITY OF 125kPa. SUITABLE IN-SITU TESTING OF BEARING MATERIAL TO BE UNDERTAKEN TO CONFIRM SUITABILITY OF MATERIAL. TEST RESULTS TO BE REPORTED BACK TO ENGINEER PRIOR TO CONTINUING WITH EXCAVATION OR POURING FOUNDATION.

GEOTEXTILE MEMBRANE

SPECIALIST Dewatering CONTRACTOR TO BE CONSULTED TO SUFFICIENTLY LOWER GROUND WATER TABLE BENEATH FORMATION AND PREVENT NEGATIVE IMPACTS OF SEEPAGE DURING WORKS

REV	DATE	REVISION	BY	CHK
P01	10.07.24	TENDER ISSUE	SJ	GH
P02	09.08.24	STAGE 1 WARRANT ISSUE	SJ	GH
P03	13.08.24	DARWING UPDATES	SJ	GH

SIMPLY DEVELOP
PROPOSED 81 BED CARE HOME,
18 PIELD HEATH ROAD, UXBRIDGE

SHEET PILING LAYOUT & PERFORMANCE SPECIFICATION

Goodson Associates ABERDEEN
civil structural infrastructure transportation
EDINBURGH
www.goodsons.com GLASGOW

PURPOSE OF ISSUE		TENDER
ORIGINATOR'S JOB NO.		P15969
DATE CREATED		Jul 24
DRAWING No.	P15969-GOO-XX-XX-DR-C-0010	SCALE As indicated @ A1
REV	P03	

STAGE 1 FOUNDATION NOTES

- ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ANY RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS AND THE SITE INVESTIGATION REPORT.
- ALL FOUNDATIONS TO BE CENTERED UNDER WALLS AND COLUMNS UNLESS OTHERWISE STATED.
- ALL SHALLOW STRIP PAD AND RAFT FOUNDATIONS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 125kN/m² ON NON-COHESIVE SOILS. REFER TO THE SI REPORT BY CGE, REVISION 1, DATED SEPTEMBER 2022.
- THE BASEMENT RAFT FOUNDATION HAS BEEN DESIGNED WITH AN ELASTIC SPRING MODEL, DESIGN 7.4M X 1.2M, ALLOWING A BEARING CAPACITY OF 100kN/m² FOLLOWING GUIDANCE FROM THE SI SUBCONTRACTOR. REFER TO PRELIMINARY SETTLEMENT ANALYSIS, CGE, DATED 27th JULY.
- ANTICIPATED FORMATION LEVELS VARY FROM 15.655m TO 13.526m. WHERE NOTED IN THE PLANS, FORMATION LEVELS ARE TO BE STEPPED TO ENSURE COORDINATED FORMATION MATERIAL.
- THE ENGINEER IS TO BE NOTIFIED AND GIVEN THE OPPORTUNITY TO INSPECT FORMATION PRIOR TO PLACING OF CONCRETE.
- ALL EXCAVATIONS ARE TO BE BLINDED AS SOON AS THEY ARE CARRIED OUT TO PROTECT THE FORMATION LAYER. ALL LOOSE SPOTS TO BE REMOVED BEFORE CONCRETE PLACEMENT.
- SUITABLE PUMPING ARRANGEMENTS SHALL BE UTILISED IN THE EVENT THAT INGRESS OF WATER INTO EXCAVATIONS OCCURS TO ENSURE WATER IS REMOVED BEFORE POURING CONCRETE.
- ALL FORMATION LEVELS TO BE CARRIED OUT IN ACCORDANCE WITH BS EN 13670:2009 & EXECUTION CLASS 2.
- ALL REINFORCEMENT TO BE HIGH YIELD IN ACCORDANCE WITH BS 4492:2005+A3:2016 AND BS EN 10080:2015.
- REINFORCEMENT SHOULD BE BENT IN ACCORDANCE WITH BS 869:2003.
- ALL SHEET PILING REQUIREMENT TO BE TO BS 4462:2005 AND SUPPLIED IN PLATE SHEETS. MINIMUM LAP LENGTH TO BE 400mm EACH END AND LAPS ARE TO BE STAGGERED.
- WHERE STRIP FOUNDATIONS ARE SPECIFIED AS REINFORCED ADOPT A BOTTOM LAYER OF A252 MESH. MESH TO HAVE 75mm BOTTOM AND SIDE COVER.
- UNDER REINFORCED CONCRETE WALLS ARE TO BE FILLED WITH LEAN MIX CONCRETE TO WITHIN 150mm OF CPC. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.
- ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.
- ALL MASS CONCRETE TO BE FND-4 TO BS EN 206:2013+A2:2021.
- ALL BLINDING CONCRETE TO BE GRADE GEN-1 TO BS EN 206:2013+A2:2021.

DESIGNED CONCRETE SPECIFICATION FOR FOUNDATION CONCRETE
THE CONCRETE SHALL BE PRODUCED IN ACCORDANCE WITH BS8500-2.
CONCRETE CLASSIFICATION: C28/35
MAXIMUM SPACING/INTERCIMENT RATIO: 0.45
MINIMUM CEMENT/COMBINATION CONTENT: 360 kg/m³
CEMENT AND COMBINATION DESIGNATION: IIB + SR
MAXIMUM AGGREGATE SIZE: 20mm
CHLORIDE CONTENT CLASS: 0.1, 0.40
CONCRETE CLASS: S4
ACI CLASS: AC1
DESIGN SULPHATE CLASS: DS1

16. ALL MASS CONCRETE TO BE FND-4 TO BS EN 206:2013+A2:2021.

17. ALL BLINDING CONCRETE TO BE GRADE GEN-1 TO BS EN 206:2013+A2:2021.

18. ALL FORMATION CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

19. ALL FORMATION CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

20. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

21. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

22. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

23. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

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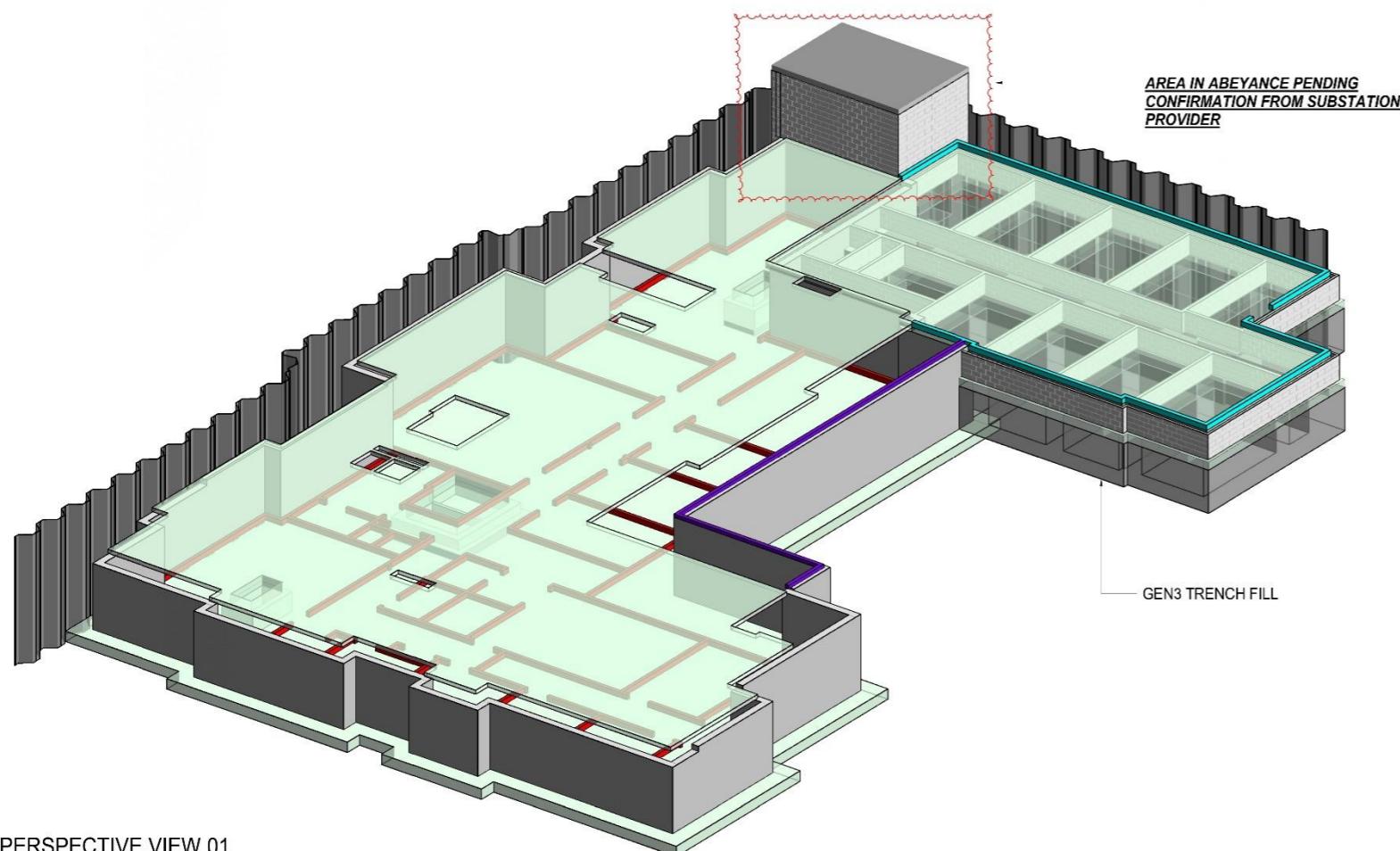
98. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

99. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

100. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

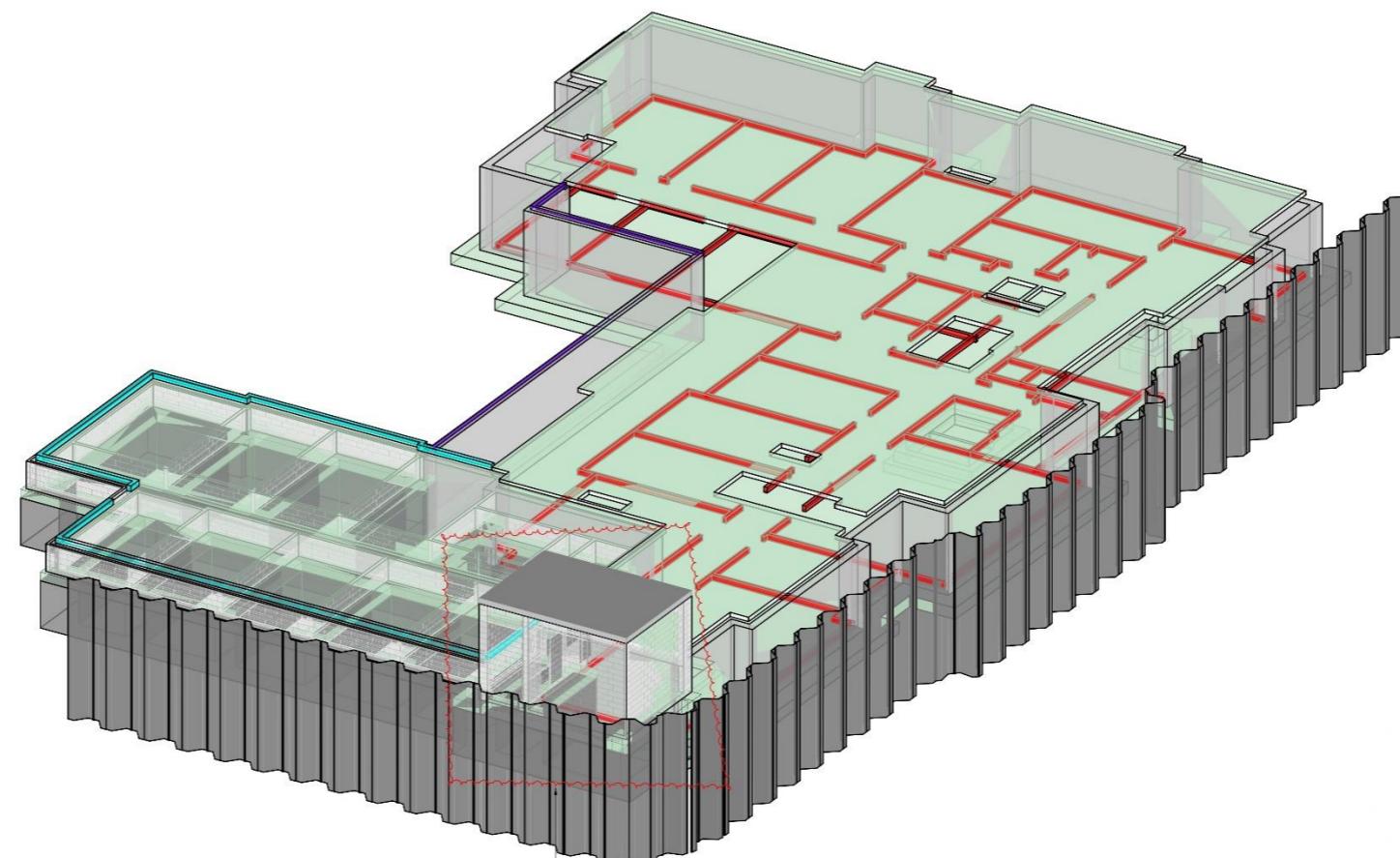
101. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS EN 206:2013+A2:2021.

102. ALL REINFORCED CONCRETE TO BE STRENGTH C 28/35 TO BS



PERSPECTIVE VIEW 01

SCALE



PERSPECTIVE VIEW 02

SCALE

AREA IN ABEYANCE PENDING
CONFIRMATION FROM SUBSTATION
PROVIDER

DO NOT SCALE; IF IN DOUBT ASK. DO NOT INTERROGATE DIGITAL BASE
THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT,
ENGINEER AND SPECIALIST DRAWINGS AND SPECIFICATIONS.

REV	DATE	REVISION	BY	CHK
P01	09.08.24	STAGE 1 WARRANT ISSUE	SJ	GH

SIMPLY DEVELOP
PROPOSED 81 BED CARE HOME,
18 PIELD HEATH ROAD, UXBRIDGE

PERSPECTIVE VIEWS

 Goodson Associates civil structural infrastructure transportation	ABERDEEN
	EDINBURGH
	glasgow
www.goodsons.com	glasgow
PURPOSE OF ISSUE	WARRANT
ORIGINATOR'S JOB No.	P15969
DATE CREATED AUG 24	SCALE @ A1
DRAWING No.	REV
P15969-GOO-XX-ZZ-VS-S-0060	P01