

Taylor Wimpey (Manchester)
1 Lumsdale Road,
Stretford,
Manchester,
M32 0UT

Our Ref: 6646HTWM230713L
NHBC Ref. ENG235581

By EMAIL

13th July 2023

For the Attention of Mr Z. Ali

Dear Zahir,

Re: Verification of the Removal of Peat Strata at Hollin Lane, Middleton

Following on from Coopers' letter referenced 6646HTWM210806L, dated 6th August 2021, reporting on the findings of our intrusive investigation to identify and delineate locations of valley peat deposits, the NHBC created engineering conditions ENG21 and ENG22 relating to the removal of peat due to its risk of causing settlement. Planning also imposed Condition 9 with regards to removal of the peat deposits.

Engineering Condition 21 – Please provide definitive areas for the removal of peat encountered near plots 136-142 and 146-164 as the Coopers letter/report only states roads and shared driveways however peat presence could result in settlement of private drainage and paving. [Plots 136-142, 146-164]

Engineering Condition 22 – Please provide a validation report for the removal of peat in vicinity of plots 136-142 and 146-164. [Plots 136-142, 146-164]

Condition 9- No development shall take place until an investigation and risk assessment has been undertake by competent persons to assess the nature and extend of any contamination on the site (whether or not it originates on the site and in addition to any assessment provided with the planning application) and a written report of its findings submitted to and approved in writing by the local authority.

This letter details Coopers' verification of the progressive delineation and removal of peat, and is to be read in conjunction with the enclosed documents below:

- Coopers' Drawing No. 6646/Fd – Annotated Fd Extract with Approximate Location of Valley Peat Deposits, Revision B. (previously enclosed with 6646HTWM210806L)
- Coopers' Trial Pits TP401 to TP405, dated 20th March 2023.
- Coopers' Trial Pits TP406 to TP409, dated 16th May 2023.
- Coopers' Drawing No. 6646/400/PH2/HL – Peat Removal and Validation Plan.

Coopers were instructed by Taylor Wimpey Manchester to attend periodically to record and verify the removal of the peat, with formal works beginning on 19th October 2022. The removal of the peat was undertaken by PAS Groundworks and Civil Engineering Contractors who were contracted by Taylor Wimpey Manchester. The peat removal exercise was undertaken in two main phases, divided into a north area comprising Plots 146-164 and a south area comprising Plots 136-142 which are shown on the enclosed Drawing No. 6646/400/PH2/HL – Peat Removal and Validation Plan, and are discussed separately below.

South (Plots 136-142)

Coopers attended site on 19th October 2022 under instruction from Taylor Wimpey Manchester (TWM), to ascertain the current site status and how to proceed with the removal of the peat deposits. Coopers met with the foreman from PAS who explained he had been in charge of the works on this development from commencement. Coopers explained to PAS and the TWM site management the level of detail the information required to satisfy the engineering conditions would need to be presented in and began to formulate a system of works on what needed to be done to confirm that no peat remained in the areas (and potentially areas adjacent to) identified in 2021. It was proposed that PAS would progressively excavate areas and remove peat, calling Coopers to attend and verify its removal and absence before backfilling.

The full extent of the peat deposits previously identified in the proposed locations of Plots 136-142 was still not completely delineated following on from the initial intrusive investigation by Coopers dating from March 2021. As PAS had not undertaken specific removal exercises regarding the peat around these plots, Coopers firstly focused on which areas of peat could have been removed during the installation of adjacent infrastructure and which areas needed further investigation via informal trial pitting to confirm the presence or lack thereof of peat. As the road corridor adjacent to Plots 136-142 had now been constructed between Plots 139-142 the need for confirmatory trial pits in this area was now void. Coopers also witnessed peat arisings in an adjacent stockpile which had been generated during the construction of the road to date (refer to photographs 100 & 101). Coopers were requested to return at a later date to undertake some informal trial pits to help guide PAS with where needed excavation.



Photograph 100 (left) & 101 (right): Looking to the south, photograph 100 shows the road and sewer corridor construction in progress adjacent to Plots 136-142. Looking toward the west, photograph 101 shows peat that has been excavated from the adjacent road corridor and stockpiled on top of the proposed location of Plots 139-142, dated 19th October 2022.

Coopers returned to the site on 27th October 2022 and carried out further delineation works in the rear garden areas of Plots 139-142 to determine how far west any peat deposits extended in this area. It was confirmed via small excavations that limited peat deposits were present in the east facing side of an excavation circa ~5m off the proposed rear wall trench of Plot 142 but were absent on the western edge of the excavation. Circa ~2m off the rear wall trench of Plots 139-140, peat was still present extending in to the rear garden of Plots 139-140, but it was intermittent and thinning toward the west (refer to photographs 102 & 103).



Photograph 102 (left) & 103 (right): A view of photograph 102, showing the eastern face (right field of view) of the small excavation in the rear garden of Plot 142 exposing a thin band of peat, with no peat present toward the western edge of the excavation. In a similar vein, photograph 103 shows intermittent peat deposits present in the southern face of the excavation in the rear garden of Plots 139-140, with the peat thinning toward the western extreme of the excavation, dated 27th October 2022.

Further to the site visits in October 2022, Coopers were provided drone photographs of the area on 26th January 2023 from Taylor Wimpey Manchester showing the progress of excavations and stockpiling. Photograph 104 below shows the area of Plots 136-142 where the road construction has been recently completed and surfaced. It is indicative in the photograph that PAS had undertaken excavations to reportedly remove the peat encountered in the central area by trial pit TP213 and informal excavations on 27th October 2022 spanning the area of Plot 139 and 140. The excavation can be seen where perched groundwater is present at the base, extending northwards above and right of the water, flanked by remnant stockpiles beneath which further excavation was to be witnessed by Coopers. Further to the drone photographs provided, Coopers again returned to site on 20th March 2023 and carried out a sequence of trial pits (TP401-405), with TP404-405 pertinent to Plots 136-142.



Photograph 104: Drone photograph showing progress of excavation and removal of peat by PAS, received by Coopers on 26th January 2023.

Trial pits TP404 & TP405 had been completed within the southern section of site to confirm the extent of peat in the frontages of Plots 136-142 and determine if the peat still extended into the plot footprints. Within TP404 (refer to photograph 104), completed in the front of Plots 140-141, peat was identified to a maximum depth of 1.00m below current ground and a maximum thickness of 0.60m. Within TP405 (refer to photograph 105), completed to the front of Plots 136-138, peat was encountered to a depth of 0.80m below ground level with a maximum thickness of 500mm.



Photograph 104 (left) & 105 (right): A view of photograph 104, showing the peat deposits still present on the eastern face of Trial pit TP404 in front of Plot 141. Similarly, photograph 105 shows peat deposits present on the western face of the trial pit in front of Plots 136-138, dated 20th March 2023.

Coopers attended site on 28th April to witness 2 No. areas dug out around the former trial pits TP404 & TP405. Firstly, a broadly rectangular area around Plots 140-142 (TP404) was excavated with all peat removed. Underlying the peat was greyish brown silty sand, once the sand had been encountered and peat absent on the faces of excavations, the extent of the pit was terminated.

The second area witnessed during the visit was located around Plots 136-138 (TP405). The extent of removal was generally completed in an oval shape. The peat had been removed to a maximum depth of 1.00m below ground level, revealing the greyish brown silty sand at the base. The excavation was terminated once all witnessed peat had been removed. Below is a photographic summary of each section during the visit demonstrating the progressive removal and verification.



Photograph 106 (left) & 107 (right): Looking in a westerly direction, photograph 106 shows the completed extent of the peat removal in Plots 140-142, revealing the sands at the base. Looking in a south westerly direction, photograph 107 shows peat removal during excavation, with a thin band of peat progressively removed along the western face of the excavation, dated 28th April 2023.



Photograph 108 (left) & 109 (right): Firstly, 108 shows the completed extent of the peat removal in the area of Plots 140-142 along the eastern face of the excavation. Looking in a northerly direction, photograph 109 shows the western most face of the excavation following the completed removal of remaining peat, dated 28th April 2023.

North (Plots 146-164)

During an earlier visit on 19th October 2022, Coopers observed a reduced level excavation to accommodate a pile mat for the construction of Plots 144-148, where it could be determined in the face and base of the excavations that no peat was present in this area as shown in photographs 201 and 202 below. This observation concurred with the exploratory holes of trial pits TP55, TP221-223, and boreholes WS19 and BH08 undertaken during previous phases of site investigation.



Photographs 201 and 202: Looking at a reduced level dig to accommodate pile mats for Plots 144-148 on 19th October 2022, where peat was proven not to be present.

The maximum depth of peat in the northern area potentially affecting Plots 149-164 was still unknown following the additional investigation in 2021, with the presence of peat proven in places to at least 1.5m with the full depth not proven. Trial pits undertaken during preparatory works for the removal of peat from the southern area on 20th March 2023 included trial pitting this northern area, where trial pits TP401 to TP403 were excavated. TP401 to the north of the proposed road and adjacent the rear garden of proposed Plot 184 did not encounter peat which was consistent with findings of previous trial pits undertaken during the site investigations. TP402 and TP403 were excavated south of the road to the front and rear of proposed Plot 154 and Plot 152 respectively, encountering peat at 1.7m and 1.6m to depths of 2.1m and 2.5m respectively and up to 900mm

thick. However based on the previous investigation the peat was anticipated to thin or disappear towards the run of Plots 146-148 which was confirmed by the open excavation observed on 19th October 2022 discussed above. As the peat in the northern area was anticipated to form a thicker continuous layer to the north of Plots 144-148 and was found to be at greater depth, the excavation and removal was proposed to be undertaken in smaller zones to enable easier management of temporary stockpiling of materials overlying the peat, the stockpiling and removal of the peat itself, and safety of open excavations.

The main process of removal of the northern area commenced on 16th May 2023 with a few confirmatory trial pits for the PAS foreman and Coopers' engineer to eye in and identify the peat strata and agree the projected extent of excavation. Trial pits TP406 to TP409 excavated in the rear gardens of Plots 155 to 164 on 20th March 2023 as shown on the enclosed annotated drawing confirmed peat was absent, which reflected the previous findings in trial pits TP227 and TP228, and was shown to comprise madeground overlying a thin relic topsoil and natural sand. It was proposed that the PAS foreman would lead the excavations and removal concentrating on the areas of Plots 149 to 154, and call out Coopers' engineer periodically to witness removal and verify all open excavations prior to backfilling. The progressive excavation and removal of the peat is shown on Coopers' Drawing No. 6446/400/PH2/HL – Peat Removal Validation Plan enclosed with this letter.

Coopers were first called out on 24th May 2023, with visits almost occurring daily up to 5th June. Below is a photographic summary of each visit demonstrating the progressive removal and verification.

24th May



Photographs 203 and 204: Looking north west and northwards, verifying the excavation and removal of peat from the footprint of Plots 152 and garage, and the rear garden and garage of Plot 153. Note a thick layer of peat still present on the face of the excavation which at the time is noted to be the rear garden of Plot 154 and the eastern end of the garden of Plot 152, dated 24th May 2023.



Photographs 205 and 206: Same excavation as photographs 203 and 204 looking westwards. The opposite face of the excavation is along the line of the proposed shared drive to the front of Plot 152. A layer of peat approximately 200-300mm thick was observed on the north face to the left, however the layer of peat appears to have disappeared to the east under the shared drive, dated 24th May 2023.

The excavation shown in photographs 203 to 206 spanning the area of Plots 152, its garage and the garden of Plot 153 was witnessed on arrival at site. The orientation and extent of the excavation in relation to proposed plot numbers could be determined using surveyed wooded stakes which were placed at 2m offsets of each plot, previously installed to mark the extent of the proposed pile mats. The depth of excavation was approximately 2.5-3.0m deep and any peat which was 2.5m at its deepest was verified to have been removed with the typical underlying grey sand or clay exposed at the base. Remnant layers of peat however were still observed in the face of the excavation to the south, west and north where further excavation was advised to PAS. No peat appeared to be present on the east face to the front of Plot 152. To avoid leaving a large excavation open for long periods, Coopers were requested to stay the remainder of the day and witness the extension of the excavation so that PAS could progressively back fill the following day.



Photographs 207 and 208: Additional excavation spanning the southern half of Plot 153 and front left of Plot 154, dated 24th May 2023.

During the course of the afternoon a secondary excavation (leaving just a 1-2 metre strip between this and the excavation in photos 203-206) was excavated to a depth of 3.0m, continuing to expose, chase and remove peat until the presence of stockpiles limited the excavation northwards. At the end of the day 300mm of fibrous peat was still observable as a dark layer shown on photograph 210

which is beneath Plot 153. The opposite face of the excavation in photograph 208 shows a 200mm layer of peat to continue beneath the proposed shared driveway to the east.

25th May



Photographs 209 and 210: Looking west and eastwards respectively. Photo 209 shows limited further excavation and continued presence of peat beneath Plot 153. Photograph 210 shows the face of the excavation to be largely absent of peat, which is only present in the left corner where peat was previously witnessed in photograph 207, dated 25th May 2023.

Excavation on 25th May was limited with works largely concentrating on backfilling and moving stockpiles prior to Coopers' attendance. The works undertaken however was noted to have merged both excavations from the 24th May 2023, however peat remained present along the north of the excavation halfway through Plot 153. In order to complete the removal of peat up to the road along the north of Plots 153 and 154, it was decided PAS would complete muckshifting of stockpiles and backfill the excavation to date in order to provide a platform to access and remove the last remaining peat prior to Coopers' next visit.

26th May



Photographs 211 and 212: Looking north west and north eastwards respectively, verifying the excavation and removal of peat from beneath the footprint of Plot 153 and front left of Plot 154, dated 26th May 2023.

The excavation was taken as far as possible up to the road, completing the removal of peat from the footprint of Plot 153 and the front left of Plot 154. Here the peat was noted to begin to shallow and thin to approximately 100mm thick. No remnant peat was witnessed on the east face of the excavation into the remainder of Plot 154 shown to the left of photograph 211. Peat was also absent in the corner of the road turning head off the front left of Plot 153. A thinner 100mm layer remained present adjacent the road to the north where excavations were restricted due to the presence of services. Excavation had also continued through the right side of Plot 151 and a part of its rear garden. No peat was present on the east face which concurred with the previous trial pit TP225. Some amorphous peat remained present on the face of the excavation to the south, and thick fibrous peat remained present in the west face into the rear gardens of the plots which would be the focus of further excavation.

31st May



Photographs 213 and 214: Looking south east into the extent of excavation spanning Plot 151 and the right side of Plot 150. A band or pocket of re-worked peat between 200-300mm thick was present at 0.5m depth to the front of the right side of Plot 150 only, shown in the corner of the excavation in photograph 213, dated 31st May 2023.



Photographs 215 and 216: Looking westwards at the progressive removal into the gardens of Plots 150 and 151. Remnant fibrous peat was still present beneath the loose spoil, dated 31st May 2023.

On arrival the excavation had extended to span the footprint of Plot 151 and the right side of Plot 150 and a section of their rear gardens. Coopers instructed that some loose disturbed peat left at the base of the excavation was removed which is demonstrated in photograph 214. With the topography

falling southwards, the peat and the excavation was beginning to shallow to 1.0m to 1.5m depth by this point. A shallow 300mm amorphous peat layer approximately 1.0m deep remained present in the south face of the excavation into the remainder of Plot 150 garden. No peat was noted in the face of the excavation to the east below the proposed shared drive or into the front left portion of the footprint of Plot 150 which concurred with trial pit TP224.

1st June



Photograph 217: Looking eastwards at the excavation spanning the remainder of Plot 150 and progressive backfill, dated 1st June 2023.



Photographs 218 and 219: Looking north westwards and westwards respectively at the excavation spanning the rear garden areas of Plots 150-152 and part of the gardens of Plots 154 and 155 respectively, dated 1st June 2023.

The excavation witnessed on this day had confirmed the southern most extent of the peat in this northern area with no remnant peat observed in the south face of the excavation beyond Plot 150 as shown to the right in photograph 217. The excavation on this day also extended into the rear gardens of Plots 150-152 and a part of the gardens of Plots 154 and 155, removing the thicker fibrous layer of peat exposed in progressive excavations to date. A thin layer of dark brown clayey silt of relic topsoil was observable at approximately 1.0m depth on the west face of the excavation to Plots 159-162 as seen in the above photographs, which concurred with the findings in trial pits TP406 to TP408. Whilst the peat had been largely removed from the plot and garden areas, a small area of thick fibrous peat remained in the rear gardens of Plots 154 and 155 as shown on the right side of photograph 221.

5th June



Photographs 220 and 221: Looking north-north eastwards showing progressive excavation of Plots 154 and 155's rear gardens and continued exposure of fibrous peat in the rear garden and rear wall of proposed Plot 154, dated 5th June 2023.

On this day Coopers verified the further extent of peat to the west had been removed from the east of the rear garden of Plot 155 and the whole of the garden of Plot 154. The remaining excavation however still showed fibrous peat was present on the proposed rear wall of Plot 154 as shown by the darker band particularly on the right of photograph 221. The excavations by this point had almost gone full circle and it was anticipated the remaining peat would only comprise a small pocket before encountering the backfill of the previous excavation. This verification occurred at the very end of the day and due to the anticipated small extent and familiarity of the peat strata, it was agreed on site with PAS that they would explore this last remaining pocket and photograph it and send to Coopers for verification the following day.

6th June



Photographs 222 and 223: Looking north-north eastwards showing the removal of the last remaining dark area of fibrous peat from the rear of Plot 154, dated 5th June 2023.

Coopers received the above photographs from the PAS foreman the following morning, and could confidently verify the removal of the last remnants of peat from this northern area.

Conclusions & Recommendations

Following completion of the works to the north and southern area of peat, Coopers can verify the peat strata previously identified during investigations has been delineated and removed from the areas of Plots 136-142 and 146-164, removing any risk of potential future settlement to private paving, driveways, drainage and garden areas.

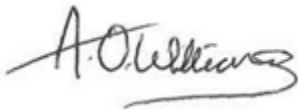
The peat in the southern area was shallower, more inconsistent and varied in thickness. At the time of validation the associated roads of the proposed development had been constructed and services

reportedly installed in the verges with peat removed as part of the highway construction. The verification works of the excavation confirmed the removal of the peat from the footprint of Plots 136-142 where it was chased out until no longer present at the periphery of the excavations.

At the time of excavation and verification of the north area of peat, the associated roads of the proposed development had been constructed and services reportedly installed in the verges and along the proposed shared driveway of Plots 150-152, limiting excavation up to these features. With the peat noted to be thinning to the north and east it was however noted any remnant peat exposed in the face of the excavation to the north and east was limited to 100mm-200mm thickness and in intermittent layers/pockets as shown on the enclosed annotated drawing. At this thickness isolated and small areas of any remnant peat between the road and frontage of plots would pose limited risk of settlement. Any peat that may also be present beneath the highway is likely to have been removed during the highway construction and services installation, and mitigated with the strength of the overlying highway specified construction.

I hope this report and detail of the delineation and removal of peat will be sufficient to enable the removal of engineering conditions ENG21 and ENG22 associated risk to settlement of peat in and surrounding Plots 136-142 and 146-164. If you have any queries or require any further information, please don't hesitate to contact us.

Yours sincerely



A O Williams
MEng (Hons), MEnvSc, PIEMA

&



S L Dodd
BSc (Hons), MSc, AMEnvSc, FGS



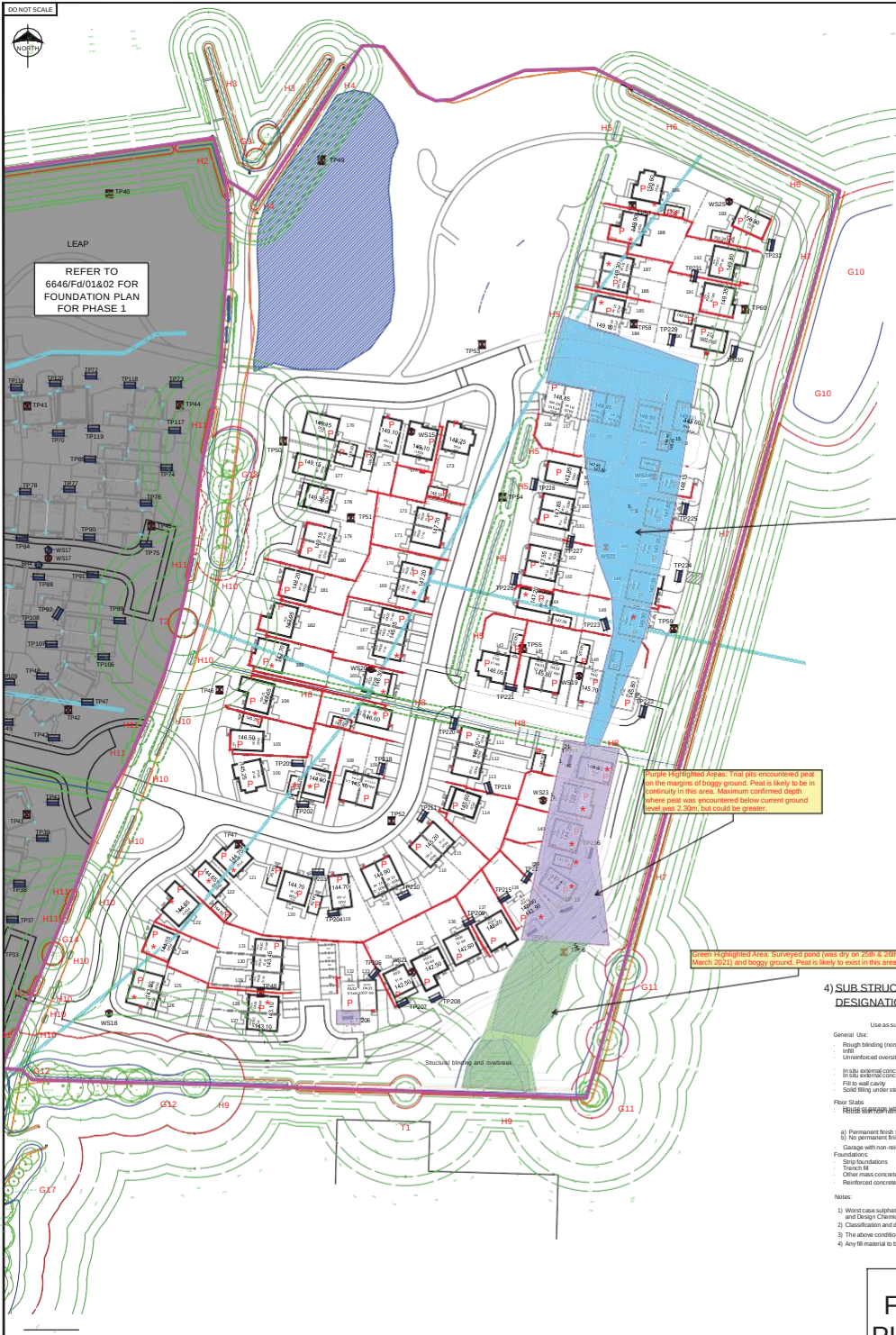
& S Thomas
BSc (Hons), MSc

For COOPERS
Encs.

DO NOT SCALE



REFER TO
6646/FD/01&02 FOR
FOUNDATION PLAN
FOR PHASE 1



3) SITE PLAN

1) ANTICIPATED FOUNDATION TYPES

P PILED FOUNDATIONS AND ASSOCIATED ASSOCIATED REINFORCED CONCRETE GROUND BEAMS
Where the maximum foundation depth exceeds 2.5m below slab level a piled foundation option is proposed.
Assumed to be suitable for driven concrete piles subject to noise and vibration considerations.
The determination of the number of piles (and therefore the loads) against pile length is largely commercial and typically determined by the contractors. Assuming piles to be friction bearing with glacial till anticipated pile lengths are likely to be up to 10m.
Cable penetration boreholes may be recommended to determine pile depths.
The piling must be designed in accordance with BS4773.
Further investigation recommended due to variable ground conditions.

*** FOUNDATION ANOMALIES**
Indicates foundations and slabs which may be affected by trial pits, trees, hedgerows or former features. The foundation and slab types indicated may have to be amended and appropriate foundations and slabs adapted to suit local ground conditions imposed at the time of construction and agreed with NRM/CAL Authority Inspectors.

Blue highlighted Area: Peat confirmed in the proposed rear gardens of Piles 150-151 during a trial dig. The highlighted area consists of a mixture of surface water ponds and long vegetation (rushes). All of the ground in this area is boggy. Peat is likely to underlie much of this area, but the exact dimensions are approximate as they are based on conjectured surface features witnessed on site. Valley peat is not always in continuity and may be found in places outside of the highlighted area.

LEGEND

(All positions are approximate unless otherwise stated)
(All references refer to those stated within General Notes)

KEY TO EXPLORATORY HOLES

Trail pits excavated by Coopers:
TP101 - TP125 between 17 - 18 September 2018.
TP201 - TP222 between 25 & 26 March 2021.
Cable penetration boreholes drilled by Coopers between 14 - 18 November 2018.
Trail at TP223 - TP242 excavated by Curtis between 05 March 2015 & 12 March 2015 (taken from ref. 4).
Note: WS26 not referenced on Curtis drawing.

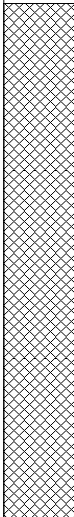
KEY TO SURVEYED FEATURES

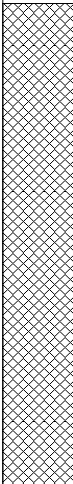
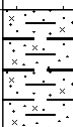
Surveyed foliage (taken from ref. 5)
Surveyed fence (taken from ref. 5)
Surveyed pond (taken from ref. 5)

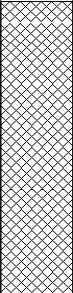
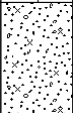
4) SUB-STRUCTURE READY MIX CONCRETE DESIGNATIONS BY END USE

Use as substructure and ground floors
Ready-mixed concrete (designated RM)
General Use:
- GEN1
- GEN2
- GEN3
- GEN4
- GEN5
- GEN6
- GEN7
- GEN8
- GEN9
- GEN10
- GEN11
- GEN12
- GEN13
- GEN14
- GEN15
- GEN16
- GEN17
- GEN18
- GEN19
- GEN20
- GEN21
- GEN22
- GEN23
- GEN24
- GEN25
- GEN26
- GEN27
- GEN28
- GEN29
- GEN30
- GEN31
- GEN32
- GEN33
- GEN34
- GEN35
- GEN36
- GEN37
- GEN38
- GEN39
- GEN40
- GEN41
- GEN42
- GEN43
- GEN44
- GEN45
- GEN46
- GEN47
- GEN48
- GEN49
- GEN50
- GEN51
- GEN52
- GEN53
- GEN54
- GEN55
- GEN56
- GEN57
- GEN58
- GEN59
- GEN60
- GEN61
- GEN62
- GEN63
- GEN64
- GEN65
- GEN66
- GEN67
- GEN68
- GEN69
- GEN70
- GEN71
- GEN72
- GEN73
- GEN74
- GEN75
- GEN76
- GEN77
- GEN78
- GEN79
- GEN80
- GEN81
- GEN82
- GEN83
- GEN84
- GEN85
- GEN86
- GEN87
- GEN88
- GEN89
- GEN90
- GEN91
- GEN92
- GEN93
- GEN94
- GEN95
- GEN96
- GEN97
- GEN98
- GEN99
- GEN100
- GEN101
- GEN102
- GEN103
- GEN104
- GEN105
- GEN106
- GEN107
- GEN108
- GEN109
- GEN110
- GEN111
- GEN112
- GEN113
- GEN114
- GEN115
- GEN116
- GEN117
- GEN118
- GEN119
- GEN120
- GEN121
- GEN122
- GEN123
- GEN124
- GEN125
- GEN126
- GEN127
- GEN128
- GEN129
- GEN130
- GEN131
- GEN132
- GEN133
- GEN134
- GEN135
- GEN136
- GEN137
- GEN138
- GEN139
- GEN140
- GEN141
- GEN142
- GEN143
- GEN144
- GEN145
- GEN146
- GEN147
- GEN148
- GEN149
- GEN150
- GEN151
- GEN152
- GEN153
- GEN154
- GEN155
- GEN156
- GEN157
- GEN158
- GEN159
- GEN160
- GEN161
- GEN162
- GEN163
- GEN164
- GEN165
- GEN166
- GEN167
- GEN168
- GEN169
- GEN170
- GEN171
- GEN172
- GEN173
- GEN174
- GEN175
- GEN176
- GEN177
- GEN178
- GEN179
- GEN180
- GEN181
- GEN182
- GEN183
- GEN184
- GEN185
- GEN186
- GEN187
- GEN188
- GEN189
- GEN190
- GEN191
- GEN192
- GEN193
- GEN194
- GEN195
- GEN196
- GEN197
- GEN198
- GEN199
- GEN200
- GEN201
- GEN202
- GEN203
- GEN204
- GEN205
- GEN206
- GEN207
- GEN208
- GEN209
- GEN210
- GEN211
- GEN212
- GEN213
- GEN214
- GEN215
- GEN216
- GEN217
- GEN218
- GEN219
- GEN220
- GEN221
- GEN222
- GEN223
- GEN224
- GEN225
- GEN226
- GEN227
- GEN228
- GEN229
- GEN230
- GEN231
- GEN232
- GEN233
- GEN234
- GEN235
- GEN236
- GEN237
- GEN238
- GEN239
- GEN240
- GEN241
- GEN242
- GEN243
- GEN244
- GEN245
- GEN246
- GEN247
- GEN248
- GEN249
- GEN250
- GEN251
- GEN252
- GEN253
- GEN254
- GEN255
- GEN256
- GEN257
- GEN258
- GEN259
- GEN260
- GEN261
- GEN262
- GEN263
- GEN264
- GEN265
- GEN266
- GEN267
- GEN268
- GEN269
- GEN270
- GEN271
- GEN272
- GEN273
- GEN274
- GEN275
- GEN276
- GEN277
- GEN278
- GEN279
- GEN280
- GEN281
- GEN282
- GEN283
- GEN284
- GEN285
- GEN286
- GEN287
- GEN288
- GEN289
- GEN290
- GEN291
- GEN292
- GEN293
- GEN294
- GEN295
- GEN296
- GEN297
- GEN298
- GEN299
- GEN300
- GEN301
- GEN302
- GEN303
- GEN304
- GEN305
- GEN306
- GEN307
- GEN308
- GEN309
- GEN310
- GEN311
- GEN312
- GEN313
- GEN314
- GEN315
- GEN316
- GEN317
- GEN318
- GEN319
- GEN320
- GEN321
- GEN322
- GEN323
- GEN324
- GEN325
- GEN326
- GEN327
- GEN328
- GEN329
- GEN330
- GEN331
- GEN332
- GEN333
- GEN334
- GEN335
- GEN336
- GEN337
- GEN338
- GEN339
- GEN340
- GEN341
- GEN342
- GEN343
- GEN344
- GEN345
- GEN346
- GEN347
- GEN348
- GEN349
- GEN350
- GEN351
- GEN352
- GEN353
- GEN354
- GEN355
- GEN356
- GEN357
- GEN358
- GEN359
- GEN360
- GEN361
- GEN362
- GEN363
- GEN364
- GEN365
- GEN366
- GEN367
- GEN368
- GEN369
- GEN370
- GEN371
- GEN372
- GEN373
- GEN374
- GEN375
- GEN376
- GEN377
- GEN378
- GEN379
- GEN380
- GEN381
- GEN382
- GEN383
- GEN384
- GEN385
- GEN386
- GEN387
- GEN388
- GEN389
- GEN390
- GEN391
- GEN392
- GEN393
- GEN394
- GEN395
- GEN396
- GEN397
- GEN398
- GEN399
- GEN400
- GEN401
- GEN402
- GEN403
- GEN404
- GEN405
- GEN406
- GEN407
- GEN408
- GEN409
- GEN410
- GEN411
- GEN412
- GEN413
- GEN414
- GEN415
- GEN416
- GEN417
- GEN418
- GEN419
- GEN420
- GEN421
- GEN422
- GEN423
- GEN424
- GEN425
- GEN426
- GEN427
- GEN428
- GEN429
- GEN430
- GEN431
- GEN432
- GEN433
- GEN434
- GEN435
- GEN436
- GEN437
- GEN438
- GEN439
- GEN440
- GEN441
- GEN442
- GEN443
- GEN444
- GEN445
- GEN446
- GEN447
- GEN448
- GEN449
- GEN450
- GEN451
- GEN452
- GEN453
- GEN454
- GEN455
- GEN456
- GEN457
- GEN458
- GEN459
- GEN460
- GEN461
- GEN462
- GEN463
- GEN464
- GEN465
- GEN466
- GEN467
- GEN468
- GEN469
- GEN470
- GEN471
- GEN472
- GEN473
- GEN474
- GEN475
- GEN476
- GEN477
- GEN478
- GEN479
- GEN480
- GEN481
- GEN482
- GEN483
- GEN484
- GEN485
- GEN486
- GEN487
- GEN488
- GEN489
- GEN490
- GEN491
- GEN492
- GEN493
- GEN494
- GEN495
- GEN496
- GEN497
- GEN498
- GEN499
- GEN500
- GEN501
- GEN502
- GEN503
- GEN504
- GEN505
- GEN506
- GEN507
- GEN508
- GEN509
- GEN510
- GEN511
- GEN512
- GEN513
- GEN514
- GEN515
- GEN516
- GEN517
- GEN518
- GEN519
- GEN520
- GEN521
- GEN522
- GEN523
- GEN524
- GEN525
- GEN526
- GEN527
- GEN528
- GEN529
- GEN530
- GEN531
- GEN532
- GEN533
- GEN534
- GEN535
- GEN536
- GEN537
- GEN538
- GEN539
- GEN540
- GEN541
- GEN542
- GEN543
- GEN544
- GEN545
- GEN546
- GEN547
- GEN548
- GEN549
- GEN550
- GEN551
- GEN552
- GEN553
- GEN554
- GEN555
- GEN556
- GEN557
- GEN558
- GEN559
- GEN560
- GEN561
- GEN562
- GEN563
- GEN564
- GEN565
- GEN566
- GEN567
- GEN568
- GEN569
- GEN570
- GEN571
- GEN572
- GEN573
- GEN574
- GEN575
- GEN576
- GEN577
- GEN578
- GEN579
- GEN580
- GEN581
- GEN582
- GEN583
- GEN584
- GEN585
- GEN586
- GEN587
- GEN588
- GEN589
- GEN590
- GEN591
- GEN592
- GEN593
- GEN594
- GEN595
- GEN596
- GEN597
- GEN598
- GEN599
- GEN600
- GEN601
- GEN602
- GEN603
- GEN604
- GEN605
- GEN606
- GEN607
- GEN608
- GEN609
- GEN610
- GEN611
- GEN612
- GEN613
- GEN614
- GEN615
- GEN616
- GEN617
- GEN618
- GEN619
- GEN620
- GEN621
- GEN622
- GEN623
- GEN624
- GEN625
- GEN626
- GEN627
- GEN628
- GEN629
- GEN630
- GEN631
- GEN632
- GEN633
- GEN634
- GEN635
- GEN636
- GEN637
- GEN638
- GEN639
- GEN640
- GEN641
- GEN642
- GEN643
- GEN644
- GEN645
- GEN646
- GEN647
- GEN648
- GEN649
- GEN650
- GEN651
- GEN652
- GEN653
- GEN654
- GEN655
- GEN656
- GEN657
- GEN658
- GEN659
- GEN660
- GEN661
- GEN662
- GEN663
- GEN664
- GEN665
- GEN666
- GEN667
- GEN668
- GEN669
- GEN670
- GEN671
- GEN672
- GEN673
- GEN674
- GEN675
- GEN676
- GEN677
- GEN678
- GEN679
- GEN680
- GEN681
- GEN682
- GEN683
- GEN684
- GEN685
- GEN686
- GEN687
- GEN688
- GEN689
- GEN690
- GEN691
- GEN692
- GEN693
- GEN694
- GEN695
- GEN696
- GEN697
- GEN698
- GEN699
- GEN700
- GEN701
- GEN702
- GEN703
- GEN704
- GEN705
- GEN706
- GEN707
- GEN708
- GEN709
- GEN710
- GEN711
- GEN712
- GEN713
- GEN714
- GEN715
- GEN716
- GEN717
- GEN718
- GEN719
- GEN720
- GEN721
- GEN722
- GEN723
- GEN724
- GEN725
- GEN726
- GEN727
- GEN728
- GEN729
- GEN730
- GEN731
- GEN732
- GEN733
- GEN734
- GEN735
- GEN736
- GEN737
- GEN738
- GEN739
- GEN740
- GEN741
- GEN742
- GEN743
- GEN744
- GEN745
- GEN746
- GEN747
- GEN748
- GEN749
- GEN750
- GEN751
- GEN752
- GEN753
- GEN754
- GEN755
- GEN756
- GEN757
- GEN758
- GEN759
- GEN760
- GEN761
- GEN762
- GEN763
- GEN764
- GEN765
- GEN766
- GEN767
- GEN768
- GEN769
- GEN770
- GEN771
- GEN772
- GEN773
- GEN774
- GEN775
- GEN776
- GEN777
- GEN778
- GEN779
- GEN780
- GEN781
- GEN782
- GEN783
- GEN784
- GEN785
- GEN786
- GEN787
- GEN788
- GEN789
- GEN790
- GEN791
- GEN792
- GEN793
- GEN794
- GEN795
- GEN796
- GEN797
- GEN798
- GEN799
- GEN800
- GEN801
- GEN802
- GEN803
- GEN804
- GEN805
- GEN806
- GEN807
- GEN808
- GEN809
- GEN810
- GEN811
- GEN812
- GEN813
- GEN814
- GEN815
- GEN816
- GEN817
- GEN818
- GEN819
- GEN820
- GEN821
- GEN822
- GEN823
- GEN824
- GEN825
- GEN826
- GEN827
- GEN828
- GEN829
- GEN830
- GEN831
- GEN832
- GEN833
- GEN834
- GEN835
- GEN836
- GEN837
- GEN838
- GEN839
- GEN840
- GEN841
- GEN842
- GEN843
- GEN844
- GEN845
- GEN846
- GEN847
- GEN848
- GEN849
- GEN850
- GEN851
- GEN852
- GEN853
- GEN854
- GEN855
- GEN856
- GEN857
- GEN858
- GEN859
- GEN860
- GEN861
- GEN862
- GEN863
- GEN864
- GEN865
- GEN866
- GEN867
- GEN868
- GEN869
- GEN870
- GEN871
- GEN872
- GEN873
- GEN874
- GEN875
- GEN876
- GEN877
- GEN878
- GEN879
- GEN880
- GEN881
- GEN882
- GEN883
- GEN884
- GEN885
- GEN886
- GEN887
- GEN888
- GEN889
- GEN890
- GEN891
- GEN892
- GEN893
- GEN894
- GEN895
- GEN896
- GEN897
- GEN898
- GEN899
- GEN900
- GEN901
- GEN902
- GEN903
- GEN904
- GEN905
- GEN906
- GEN907
- GEN908
- GEN909
- GEN910
- GEN911
- GEN912
- GEN913
- GEN914
- GEN915
- GEN916
- GEN917
- GEN918
- GEN919
- GEN920
- GEN921
- GEN922
- GEN923
- GEN924
- GEN925
- GEN926
- GEN927
- GEN928
- GEN929
- GEN930
- GEN931
- GEN932
- GEN933
- GEN934
- GEN935
- GEN936
- GEN937
- GEN938
- GEN939
- GEN940
- GEN941
- GEN942
- GEN943
- GEN944
- GEN945
- GEN946
- GEN947
- GEN948
- GEN949
- GEN950
- GEN951
- GEN952
- GEN953
- GEN954
- GEN955
- GEN956
- GEN957
- GEN958
- GEN959
- GEN960
- GEN961
- GEN962
- GEN963
- GEN964
- GEN965
- GEN966
- GEN967
- GEN968
- GEN969
- GEN970
- GEN971
- GEN972
- GEN973
- GEN974
- GEN975
- GEN976
- GEN977
- GEN978
- GEN979
- GEN980
- GEN981
- GEN982
- GEN983
- GEN984
- GEN985
- GEN986
- GEN987
- GEN988
- GEN989
- GEN990
- GEN991
- GEN992
- GEN993
- GEN994
- GEN995
- GEN996
- GEN997
- GEN998
- GEN999
- GEN1000
- GEN1001
- GEN1002
- GEN1003
- GEN1004
- GEN1005
- GEN1006
- GEN1007
- GEN1008
- GEN1009
- GEN1010
- GEN1011
- GEN1012
- GEN1013
- GEN1014
- GEN1015
- GEN1016
- GEN1017
- GEN1018
- GEN1019
- GEN1020
- GEN1021
- GEN1022
- GEN1023
- GEN1024
- GEN1025
- GEN1026
- GEN1027
- GEN1028
- GEN1029
- GEN1030
- GEN1031
- GEN1032
- GEN1033
- GEN1034
- GEN1035
- GEN1036
- GEN1037
- GEN1038
- GEN1039
- GEN1040
- GEN1041
- GEN1042
- GEN1043
- GEN1044
- GEN1045
- GEN1046
- GEN1047
- GEN1048
- GEN1049
- GEN1050
- GEN1051
- GEN1052
- GEN1053
- GEN1054
- GEN1055
- GEN1056
- GEN1057
- GEN1058
- GEN1059
- GEN1060
- GEN1061
- GEN1062
- GEN1063
- GEN1064
- GEN1065
- GEN1066
- GEN1067
- GEN1068
- GEN1069
- GEN1070
- GEN1071
- GEN1072
- GEN1073
- GEN1074
- GEN1075
- GEN1076
- GEN1077
- GEN1078
- GEN1079
- GEN1080
- GEN1081
- GEN1082
- GEN1083
- GEN1084
- GEN1085
- GEN1086
- GEN1087
- GEN1088
- GEN1089
- GEN1090
- GEN1091
- GEN1092
- GEN1093
- GEN1094
- GEN1095
- GEN1096
- GEN1097
- GEN1098
- GEN1099
- GEN1100
- GEN1101
- GEN1102
- GEN1103
- GEN1104
- GEN1105
- GEN1106
- GEN1107
- GEN1108
- GEN1109
- GEN1110
- GEN1111
- GEN1112
- GEN1113
- GEN1114
- GEN1115
- GEN1116
- GEN1117
- GEN1118
- GEN1119
- GEN1120
- GEN1121
- GEN1122
- GEN1123
- GEN1124
- GEN1125
- GEN1126
- GEN1127
- GEN1128
- GEN1129
- GEN1130
- GEN1131
- GEN1132
- GEN1133
- GEN1134
- GEN1135
- GEN1136
- GEN1137
- GEN1138
- GEN1139
- GEN1140
- GEN1141
- GEN1142
- GEN1143
- GEN1144
- GEN1145
- GEN1146
- GEN1147
- GEN1148
- GEN1149
- GEN1150
- GEN1151
- GEN1152
- GEN1153
- GEN1154
- GEN1155
- GEN1156
- GEN1157
- GEN1158
- GEN1159
- GEN1160
- GEN1161
- GEN1162
- GEN1163
- GEN1164
- GEN1165
- GEN1166
- GEN1167
- GEN1168
- GEN1169
- GEN1170
- GEN1171
- GEN1172
- GEN1173
- GEN1174
- GEN1175
- GEN1176
- GEN1177
- GEN1178
- GEN1179
- GEN1180
- GEN1181
- GEN1182
- GEN1183
- GEN1184
- GEN1185
- GEN1186
- GEN1187
- GEN1188
- GEN1189
- GEN1190
- GEN1191
- GEN1192
- GEN1193
- GEN1194
- GEN1195
- GEN1196
- GEN1197
- GEN1198
- GEN1199
- GEN1200
- GEN1201
- GEN1202
- GEN1203
- GEN1204
- GEN1205
- GEN1206
- GEN1207
- GEN1208
- GEN1209
- GEN1210
- GEN1211
- GEN1212
- GEN1213
- GEN1214
- GEN1215
- GEN1216
- GEN1217
- GEN1218
- GEN1219
- GEN1220
- GEN1221
- GEN1222
- GEN1223
- GEN1224
- GEN1225
- GEN1226
- GEN1227
- GEN1228
- GEN1229
- GEN1230
- GEN1231
- GEN1232
- GEN1233
- GEN1234
- GEN1235
- GEN1236
- GEN1237
- GEN1238
- GEN1239
- GEN1240
- GEN1241
- GEN1242
- GEN1243
- GEN1244
- GEN1245
- GEN1246
- GEN1247
- GEN1248
- GEN1249
- GEN1250
- GEN1251
- GEN1252
- GEN1253
- GEN1254
- GEN1255
- GEN1256
- GEN1257
- GEN1258
- GEN1259
- GEN1260
- GEN1261
- GEN1262
- GEN1263
- GEN1264
- GEN1265
- GEN1266
- GEN1267
- GEN1268
- GEN1269
- GEN1270
- GEN1271
- GEN1272
- GEN1273
- GEN1274
- GEN1275
- GEN1276
- GEN1277
- GEN1278
- GEN1279
- GEN1280
- GEN1281
- GEN1282
- GEN1283
- GEN1284
- GEN1285
- GEN1286
- GEN1287
- GEN1288
- GEN1289
- GEN1290
- GEN1291
- GEN1292
- GEN1293
- GEN1294
- GEN1295
- GEN1296
- GEN1297
- GEN1298
- GEN1299
- GEN1300
- GEN1301
- GEN1302
- GEN1303
- GEN1304
- GEN1305
- GEN1306
- GEN1307
- GEN1308
- GEN1309
- GEN1310
- GEN1311
- GEN1312
- GEN1313
- GEN1314
- GEN1315
- GEN1316
- GEN1317
- GEN1318
- GEN1319
- GEN1320
- GEN1321
- GEN1322
- GEN1323
- GEN1324
- GEN1325
- GEN1326
- GEN1327
- GEN1328
- GEN1329
- GEN1330
- GEN1331
- GEN1332
- GEN1333
- GEN1334
- GEN1335
- GEN1336
- GEN1337
- GEN1338
- GEN1339
- GEN1340
- GEN1341
- GEN1342
- GEN1343
- GEN1344
- GEN1345
- GEN1346
- GEN1347
- GEN1348
- GEN1349
- GEN1350
- GEN1351
- GEN1352
- GEN1353
- GEN1354
- GEN1355
- GEN1356
- GEN1357
- GEN1358
- GEN1359
- GEN1360
- GEN1361
- GEN1362
- GEN1363
- GEN1364
- GEN1365
- GEN1366
- GEN1367
- GEN1368
- GEN1369
- GEN1370
- GEN1371
- GEN1372
- GEN1373
- GEN1374
- GEN1375
- GEN1376
- GEN1377
- GEN1378
- GEN1379
- GEN1380
- GEN1381
- GEN1382
- GEN1383
- GEN1384
- GEN1385
- GEN1386
- GEN1387
- GEN1388
- GEN1389
- GEN1390
- GEN1391
- GEN1392
- GEN1393
- GEN1394
- GEN1395
- GEN1396
- GEN1397
- GEN1398
- GEN1399
- GEN1400
- GEN1401
- GEN1402
- GEN1403
- GEN1404
- GEN1405
- GEN1406
- GEN1407
- GEN1408
- GEN1409
- GEN1410
- GEN1411
- GEN1412
- GEN1413
- GEN1414
- GEN1415
- GEN1416
- GEN1417
- GEN1418
- GEN1419
- GEN1420
- GEN1421
- GEN1422
- GEN1423
- GEN1424
- GEN1425
- GEN1426
- GEN1427
- GEN1428
- GEN1429
- GEN1430
- GEN1431
- GEN1432
- GEN1433
- GEN1434
- GEN1435
- GEN1436
- GEN1437
- GEN1438
- GEN1439
- GEN1440
- GEN1441
- GEN1442
- GEN1443
- GEN1444
- GEN1445
- GEN1446
- GEN1447
- GEN1448
- GEN1449
- GEN1450
- GEN1451
- GEN1452
- GEN1453
- GEN1454
- GEN1455
- GEN1456
- GEN1457
- GEN1458
- GEN1459
- GEN1460
- GEN1461
- GEN1462
- GEN1463
- GEN1464
- GEN1465
- GEN1466
- GEN1467
- GEN1468
- GEN1469
- GEN1470
- GEN1471
- GEN1472
- GEN1473
- GEN1474
- GEN1475
- GEN1476
- GEN1477
- GEN1478
- GEN1479
- GEN1480
- GEN1481
- GEN1482
- GEN1483
- GEN1484
- GEN1485
- GEN1486
- GEN1487
- GEN1488
- GEN1489
- GEN1490
- GEN1491
- GEN1492
- GEN1493
- GEN1494
- GEN1495
- GEN1496
- GEN1497
- GEN1498
- GEN1499
- GEN1500
- GEN1501
- GEN1502
- GEN1503
- GEN1504
- GEN1505
- GEN1506
- GEN1507
- GEN1508
- GEN1509
- GEN1510
- GEN1511
- GEN1512
- GEN1513
- GEN1514
- GEN1515
- GEN1516
- GEN1517
- GEN1518
- GEN1519
- GEN1520
- GEN1521

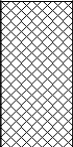
 Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk				Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP401			
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 1.40m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H	
		Location (Observed measurements)		Dates 20/03/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
1.20	B				0.30	MADEGROUND. Greyish brown, sandy, angular to sub-angular, fine to coarse GRAVEL of various lithologies including plastic, brick fragments, ceramic fragments, concrete fragments, timber and metal. Low cobble content of brick fragments. *Assumed as loose to medium dense.			
					0.80	MADEGROUND. Light brown, slightly silty, slightly gravelly, fine to coarse SAND. Gravel is angular to sub-angular, fine to coarse of brick fragments. *Assumed as loose to medium dense.			
					1.10	Firm, brown, slightly sandy, slightly gravelly, silty CLAY with thin lenses of light reddish brown, fine to medium sand. Sand is fine to medium. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies.			
					1.40	Complete at 1.40m			
						Remarks Location CAT scanned prior to excavation. Sides stable during excavation. Surface water ingress only. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision D Trial pit excavated adjacent to rear right corner of Plot 184. Backfilled upon completion.			
Scale (approx) 1:25						Logged By ST		Checked By PRS	

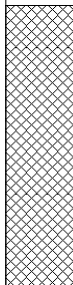
 coopers chartered consulting engineers				Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk		Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP402	
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 2.40m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H	
		Location (Observed measurements)		Dates 20/03/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
1.80	B		Seepage(1) at 1.30m.		(1.70)	MADEGROUND. Greyish brown, clayey, sandy, angular to sub-angular, fine to coarse GRAVEL of various lithologies including brick fragments, ceramic fragments, timber, metal, plastic fragments and plastic bags. Moderate cobble content of brick fragments and timber. Low boulder content of masonry. *Assumed as loose.		V ₁	
					1.70 (0.40)	Soft, brown, spongy, pseudo-fibrous PEAT. Distinct organic odour.			
					2.10 (0.30)	Yellowish brown, slightly silty, fine to medium SAND. *Assumed as loose to medium dense.			
2.20	B				2.40	Complete at 2.40m			
						Remarks			
						Location CAT scanned prior to excavation. Spalling from 0.00 - 1.70m during excavation. Stable below 1.70m. Seepage at 1.30m during excavation. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision D Trial pit excavated adjacent to front left corner of Plot 154. Backfilled upon completion.			
						Scale (approx) 1:25		Logged By ST	

 coopers chartered consulting engineers				Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk				Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP403	
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 2.90m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H			
		Location (Observed measurements)		Dates 20/03/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1			
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water		
1.70	B					MADEGROUND. Light brown and brown, slightly silty, slightly gravelly, fine to coarse SAND. Gravel is angular to sub-angular, fine to coarse of various lithologies including brick fragments, ceramic fragments and organic matter (twigs). Low cobble content of natural stone. *Assumed as loose to medium dense.					
					(1.60)						
									1.60	Soft, brown, spongy, pseudo-fibrous PEAT. Distinct organic odour.	
					(0.90)						
2.60	SV 71kPa				2.50	Firm, grey, silty, sandy CLAY. Sand is fine to medium. From 2.60m: Medium strength					
2.80	B				(0.40)						
					2.90	Complete at 2.90m					
						Remarks					
						Location CAT scanned prior to excavation. Sides stable during excavation. Surface water ingress only. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision D Trial pit excavated to the rear of Plot 159's detached garage. Backfilled upon completion.					
						Scale (approx)		Logged By		Checked By	
						1:25		ST		PRS	

 coop ers chartered consulting engineers				Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk		Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP404
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 2.00m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H
		Location (Observed measurements)		Dates 20/03/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.30	B				(1.00)	MADEGROUND. Soft to firm, greyish brown, slightly sandy, gravelly CLAY. Sand is fine to coarse. Gravel is angular to sub-angular, fine to coarse of various lithologies including ceramic fragments, brick fragments and timber.		
					1.00 (0.60)	**Soft, brown, spongy, pseudo-fibrous PEAT. Distinct organic odour.		
1.70	B				1.60 (0.40)	Grey, slightly silty, slightly gravelly, fine to coarse SAND. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies. *Assumed as loose to medium dense.		
					2.00	Complete at 2.00m		
						Remarks Location CAT scanned prior to excavation. Sides stable, minor spalling only. No groundwater encountered during excavation. *Based upon trenchside stability characteristics. **Only on east face of trial pit. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision D Trial pit excavated adjacent to the front left corner of Plot 141. Backfilled upon completion.		
						Scale (approx) 1:25	Logged By ST	Checked By PRS

 Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk				Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP406					
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 1.20m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H			
		Location (Observed measurements)		Dates 16/05/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1			
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water		
					(1.00) 1.00 (0.10) 1.10 (0.10) 1.20	MADEGROUND. Light brown and brown, slightly clayey, gravelly, fine to coarse SAND. Gravel is angular to sub-angular, fine to coarse of various lithologies including brick, timber and natural stone. *Assumed as loose to medium dense.					
					MADEGROUND. Dark brown, slightly sandy, slightly gravelly, clayey SILT. Sand is fine to coarse. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies including coal. Contains rootlets. (Relic topsoil).						
					Light grey and light brown, slightly silty, slightly gravelly, fine to medium SAND. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies. *Assumed as loose to medium dense.						
						Complete at 1.20m					
						Remarks Location CAT scanned prior to excavation. Sides stable during excavation. No groundwater encountered during excavation. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision E. Trial pit excavated in the rear gardens of Plots 155 - 156. Backfilled with arisings upon completion.					
						Scale (approx) 1:25		Logged By ST		Checked By PRS	

 Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk				Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP407			
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 1.00m Location (Observed measurements)		Ground Level (mOD) Dates 16/05/2023		Client Taylor Wimpey Manchester Engineer Coopers (Chester) Ltd		Job Number 6646H Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
					0.50 0.50 (0.20) 0.70 (0.30) 1.00	MADEGROUND. Light brown and orangish brown, slightly clayey, gravelly, fine to coarse SAND. Gravel is angular to sub-rounded, fine to coarse of various lithologies including brick fragments, plastic and natural stone. *Assumed as loose to medium dense. MADEGROUND. Dark brown, slightly sandy, slightly gravelly, clayey SILT. Sand is fine to coarse. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies including coal. Contains rootlets. (Relic topsoil). Light brown and brown, slightly silty, slightly gravelly, fine to medium SAND. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies. *Assumed as loose to medium dense. Complete at 1.00m		  	
						Remarks Location CAT scanned prior to excavation. Sides stable during excavation. No groundwater encountered during excavation. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision E. Trial pit excavated in the rear garden of Plot 159. Backfilled with arisings upon completion.			
						Scale (approx) 1:25		Logged By ST	

 coopers chartered consulting engineers				Coopers (Chester) Ltd tel: 01244 684 910 web: www.coopers.co.uk email: admin@coopers.co.uk		Site HOLLIN LANE EAST, PHASE 2, MIDDLETON		Trial Pit Number TP408	
Machine : 10 Tonne Tracked Excavator Method : Mechanical Excavation		Dimensions 2.50 x 1.00 x 1.50m		Ground Level (mOD)		Client Taylor Wimpey Manchester		Job Number 6646H	
		Location (Observed measurements)		Dates 16/05/2023		Engineer Coopers (Chester) Ltd		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	
					(0.95) 0.95 1.00 (0.50) 1.50	MADEGROUND. Light brown and brown, slightly clayey, slightly gravelly, fine to coarse SAND with inclusions of topsoil. Gravel is angular to sub-rounded, fine to coarse of various lithologies including brick fragments and natural stone. *Assumed as loose to medium dense. MADEGROUND. Dark brown, slightly sandy, slightly gravelly, clayey SILT. Sand is fine to coarse. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies including coal. Contains rootlets and organic matter (grass). (Relic topsoil). Light grey and light orangish brown, slightly silty, slightly gravelly, fine to medium SAND with a low cobble content. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies. *Assumed as loose to medium dense. Complete at 1.50m	 		
						Remarks Location CAT scanned prior to excavation. Sides stable during excavation. No groundwater encountered during excavation. *Based upon trenchside stability characteristics. Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy. Trial pits excavated to determine presence of peat deposits. To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision E. Trial pit excavated in the rear garden of Plot 161. Backfilled with arisings upon completion.			
						Scale (approx) 1:25	Logged By ST	Checked By PRS	



coop

ers

chartered consulting engineers

Coopers (Chester) Ltd

tel: 01244 684 910

web: www.coopers.co.uk

email: admin@coopers.co.uk

Site

HOLLIN LANE EAST, PHASE 2, MIDDLETON

Trial Pit Number

TP409

Machine : 10 Tonne Tracked Excavator

Method : Mechanical Excavation

Dimensions

2.50 x 1.00 x 2.30m

Ground Level (mOD)

Client

Taylor Wimpey Manchester

Job Number

6646H

Location (Observed measurements)

Dates

16/05/2023

Engineer

Coopers (Chester) Ltd

Sheet

1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
						MADEGROUND. Light brown and brown, slightly clayey, slightly gravelly, fine to coarse SAND. Gravel is angular to sub-rounded, fine to coarse of various lithologies including brick fragments, timber and natural stone. *Assumed as loose to medium dense.		
					1.30	Light brown and grey, slightly silty, slightly gravelly, fine to medium SAND with lenses of firm, grey clay. Gravel is sub-angular to sub-rounded, fine to coarse of various lithologies. *Assumed as loose to medium dense.		
					2.30	Complete at 2.30m		



Remarks

Location CAT scanned prior to excavation.
 Sides stable during excavation.
 No groundwater encountered during excavation.
 *Based upon trenchside stability characteristics.
 Please note that discolouration of photographs may occur when viewed on screen as a PDF, or when printed as a hard copy.
 Trial pits excavated to determine presence of peat deposits.
 To be read in conjunction with Drawing No. 6646/HL/Fd/PH2/01 Revision E.
 Trial pit excavated in the rear gardens of Plots 163 - 164.
 Backfilled with arisings upon completion.

Scale (approx)

1:25

Logged By

ST

Checked By

PRS

LEGEND
(All positions are approximate unless otherwise stated)

PROGRESS OF EXCAVATION REMOVAL VERIFICATION
(All positions are approximate unless otherwise stated)

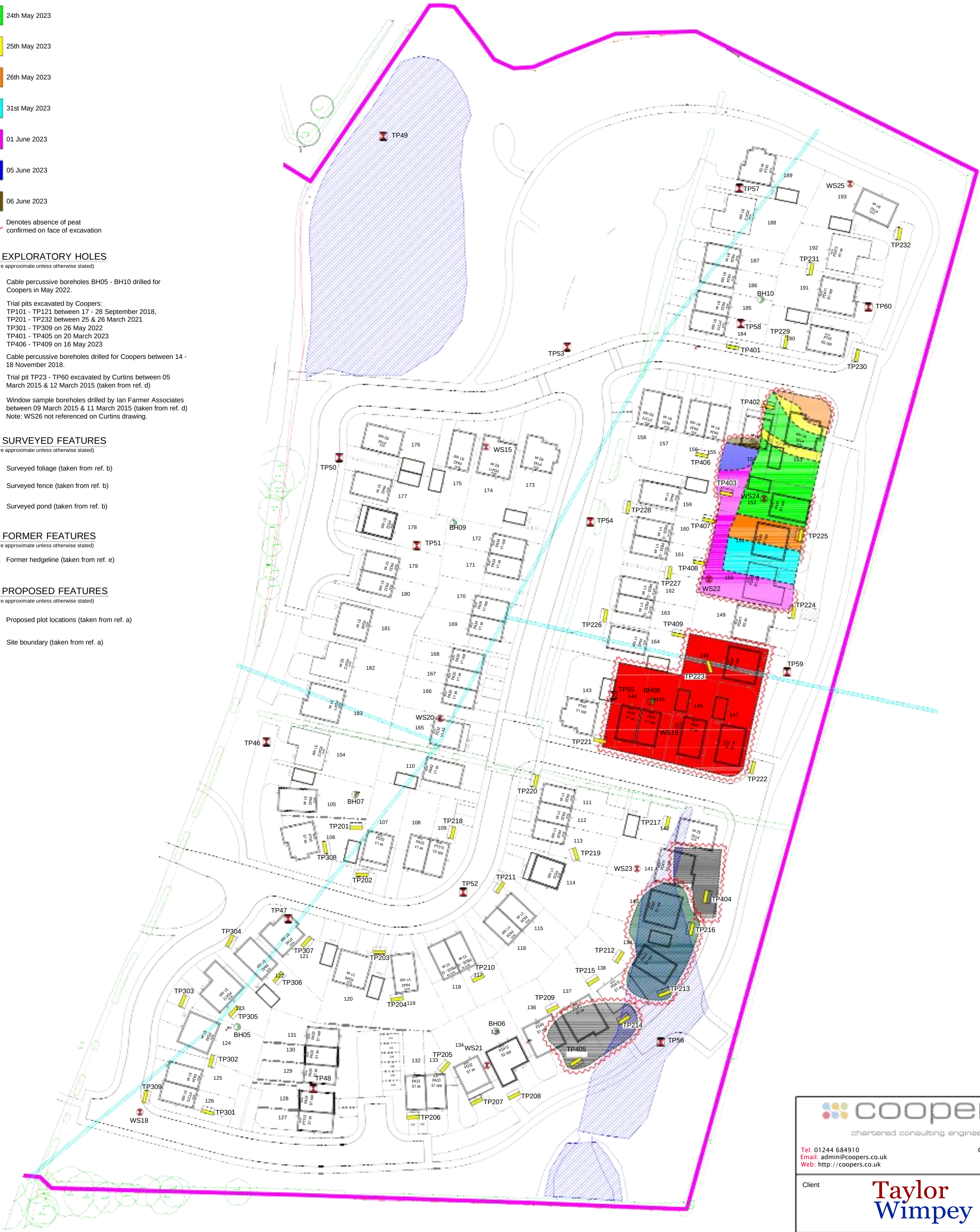
- 19th October 2022
- 26 January 2023
- 28 April 2023
- 24th May 2023
- 25th May 2023
- 26th May 2023
- 31st May 2023
- 01 June 2023
- 05 June 2023
- 06 June 2023
- Denotes absence of peat confirmed on face of excavation

- KEY TO EXPLORATORY HOLES
(All positions are approximate unless otherwise stated)
- Cable percussive boreholes BH05 - BH10 drilled for Coopers in May 2022.
- Trial pits excavated by Coopers:
TP101 - TP121 between 17 - 28 September 2018,
TP201 - TP232 between 25 & 26 March 2021
TP301 - TP309 on 26 May 2022
TP401 - TP405 on 20 March 2023
TP406 - TP409 on 16 May 2023
- Cable percussive boreholes drilled for Coopers between 14 - 18 November 2018.
- Trial pit TP23 - TP60 excavated by Curtins between 05 March 2015 & 12 March 2015 (taken from ref. d)
- Window sample boreholes drilled by Ian Farmer Associates between 09 March 2015 & 11 March 2015 (taken from ref. d)
Note: WS26 not referenced on Curtins drawing.

- KEY TO SURVEYED FEATURES
(All positions are approximate unless otherwise stated)
- Surveyed foliage (taken from ref. b)
- Surveyed fence (taken from ref. b)
- Surveyed pond (taken from ref. b)

- KEY TO FORMER FEATURES
(All positions are approximate unless otherwise stated)
- Former hedgeline (taken from ref. e)

- KEY TO PROPOSED FEATURES
(All positions are approximate unless otherwise stated)
- Proposed plot locations (taken from ref. a)
- Site boundary (taken from ref. a)



THIS DRAWING SHOULD ONLY
BE PRINTED IN COLOUR



- This drawing is to be read in conjunction with the following:-
- a) GID, Hollins Lane East, Phase 2, Planning Layout, ref. 20218 - PL02, rev. P7, dated 03 February 2021.

b) RJP, Proposed Development at Langley Lane, Middleton, MCR, Topographical Survey, Ref. TW015/TOO, dated February 2014 .

c) WSP, Hollin Lane, Middleton, Preliminary Environmental Risk Assessment, ref. 25124/001, dated October 2011.

d) Curtins, Hollin Lane and Langley Lane, Middleton, Foundation Zone Plan, ref. EB1352/L002, rev. A, dated 21 April 2015.

coopers

chartered consulting engineers

Tel: 01244 684910

Email: admin@coopers.co.uk

Web: <http://coopers.co.uk>

Park House

Sandpiper Court

Chester Business Park

Chester

CH4 9QU

Client

Taylor Wimpey

Project

Hollin Lane,
Middleton - PHASE 2

Title

PEAT REMOVAL AND
VALIDATION PLAN

DRAWING NUMBER

6646 / 400 / PH2 / HL

SCALE at A1

1:500

DATE

13.07.23

DRAWN

AW

CHECKED

AW

REVISION

-