

**APPENDIX 3**  
**Trial Pit Logs and Photos**



## Site

Burroughs Road, Ratby

### Trial Pit Number

## HP01

Machine : JCB 3CX

**Method** : Trial Pit

## Dimensions

**Ground Level (mOD)**

107.40

## Client

Lagan Homes Limited

**Job**

Number  
22069

## Location

450481 E 306310 N

## Dates

01/08/2023

## Engineer

Travis Baker Geo-Environmental

Sheet

1/1

|                 |                                                                                      |            |  |
|-----------------|--------------------------------------------------------------------------------------|------------|--|
| <div>Plan</div> | Remarks                                                                              |            |  |
|                 | Shallow trial pit for chemical testing.<br>Backfilled with arisings upon completion. |            |  |
|                 |                                                                                      |            |  |
|                 |                                                                                      |            |  |
|                 |                                                                                      |            |  |
|                 |                                                                                      |            |  |
|                 |                                                                                      |            |  |
| Scale (approx)  | Logged By                                                                            | Figure No. |  |
| 1:25            | DP                                                                                   | 22069.HP01 |  |



Site

Burroughs Road, Ratby

**Trial Pit  
Number**

## HP02

Machine : JCB 3CX

**Method** : Trial Pit

### Dimensions

Ground Level (mOD)

104.00

## Client

Lagan Homes Limited

Job

Number  
22069

### Location

450416 E 306393 N

## Dates

01/08/2023

## Engineer

Travis Baker Geo-Environmental

Sheet

1/1

|                 |                                                                                                                     |  |  |
|-----------------|---------------------------------------------------------------------------------------------------------------------|--|--|
| <div>Plan</div> | <div>Remarks</div> <div>Shallow trial pit for chemical testing.<br/>Backfilled with arisings upon completion.</div> |  |  |
|                 |                                                                                                                     |  |  |





Burroughs Road, Ratby

**Trial Pit  
Number**  
**HP04**

**Method** : Trial Pit

### Dimensions

107.00

Lagan Homes Limited

**Job  
Number**  
22069

### Location

450470 E 306528 N

## Dates

01/08/2023

**Engineer**

Travis Baker Geo-Environmental

Sheet

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Depth  
(m)

### Sample / Tests

Water  
Depth  
(m)

## Field Records

Level  
(mOD)

Depth  
(m)  
(Thickness)

### Description

**Legend :**

Water

0.10

D

106 80

(0.20)

Black sandy CLAY. - (TOPSOIL)

0.40

D

106.60

(0.20)  
0.40

Firm reddish brown slightly sandy CLAY. - (EDWALTON MEMBER)

Complete at 0.40m

### Plan

Remarks

Shallow trial pit for chemical testing.  
Backfilled with arisings upon completion.

Scale (approx)

1:25

**Logged By**

DP

**Figure No.**

22069.HP04





Burroughs Road, Ratby

**Trial Pit  
Number  
TP01**

**Method :** Trial Pit

### Dimensions

108.50

|               |  |
|---------------|--|
| <b>Client</b> |  |
|---------------|--|

Lagan Homes Limited

**Job  
Number**  
22069

Location

450663 E 306423 N

## Dates

01/08/2023

**Engineer**

Travis Baker Geo-Environmental

Sheet  
1/1

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records           | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                       | Legend                                                                                                                                                                  |  |
|-----------|----------------|-----------------|-------------------------|-------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 0.10      | D              |                 | 124, 94, 106/Av. 108.00 |             | (0.30)                | Dark brown slightly sandy CLAY with rare rootlets. - (PLOUGHED TOPSOIL)                                                                           |                                                                                                                                                                         |  |
| 0.40      | D              |                 |                         | 108.20      | 0.30 (0.40)           | Stiff reddish brown mottled light grey CLAY. - (EDWALTON MEMBER)                                                                                  |                                                                                                                                                                         |  |
|           |                |                 |                         | 107.80      | 0.70 (0.10)           | Extremely weak completely weathered light grey SANDSTONE with clay partings. - (EDWALTON MEMBER)                                                  |                                                                                                                                                                         |  |
|           |                |                 |                         | 107.70      | 0.80                  |                                                                                                                                                   |                                                                                                                                                                         |  |
| 0.90      | HSV 108kPa     |                 |                         |             |                       |                                                                                                                                                   | Stiff reddish brown and light grey interbedded slightly sandy CLAY and silty very sandy CLAY. Light grey bands include rare sandstone lithorelicts. - (EDWALTON MEMBER) |  |
| 1.20      | D              |                 |                         |             |                       | (0.70)                                                                                                                                            |                                                                                                                                                                         |  |
|           |                |                 |                         | 107.00      | 1.50                  | *Firm (damp and friable) reddish brown mottled light grey silty sandy CLAY with frequent mudstone and sandstone lithorelicts. - (EDWALTON MEMBER) |                                                                                                                                                                         |  |
| 1.70      | B              |                 |                         |             |                       | (1.30)                                                                                                                                            |                                                                                                                                                                         |  |
|           |                |                 |                         |             |                       |                                                                                                                                                   |                                                                                                                                                                         |  |
| 2.50      | D              |                 |                         |             |                       |                                                                                                                                                   |                                                                                                                                                                         |  |
|           |                |                 |                         | 105.70      | 2.80 (0.20)           | Very weak highly weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                              |                                                                                                                                                                         |  |
|           |                |                 |                         | 105.50      | 3.00                  | Excavator scraping at the base.                                                                                                                   |                                                                                                                                                                         |  |
|           |                |                 |                         |             |                       | Complete at 3.00m                                                                                                                                 |                                                                                                                                                                         |  |

### Plan

Remarks

Groundwater encountered at 3.0m during excavation.  
Pit sides stable during excavation and for a short period afterwards.  
Backfilled with arisings upon completion.  
Hand shear vane at 0.9m tested in-situ; below 1.0m recovery is too friable to test.  
\*Recovered arisings generally comprise softened strata. However, it is considered that due to the damp and friable nature of this material, excavation has reduced the consistency, therefore firm is considered appropriate.

Scale (approx)

1:25

**Logged By**

DP

Figure No.

22069.TP01



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP02**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>110.00 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450617 E 306442 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records         | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                         | Legend | Water |
|-----------|----------------|-----------------|-----------------------|-------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 |                       |             | (0.30)                | Dark brown sandy CLAY with rare rootlets. - (PLOUGHED TOPSOIL)                                                                                                      |        |       |
| 0.50      | D              |                 |                       | 109.70      | 0.30                  | Stiff reddish brown mottled light grey slightly sandy silty CLAY. Rare light grey pockets comprise sandy clay with rare sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
| 0.80      | HSV 99kPa      |                 | 119, 96, 82/Av. 99.00 |             | (1.20)                |                                                                                                                                                                     |        |       |
| 1.40      | B              |                 |                       | 108.50      | 1.50                  | Firm reddish brown and light grey slightly sandy CLAY with occasional sandstone lithorelicts. - (EDWALTON MEMBER)                                                   |        |       |
| 1.60      | HSV 52kPa      |                 | 46, 60, 50/Av. 52.00  |             | (0.40)                |                                                                                                                                                                     |        |       |
| 1.80      | HSV 47kPa      |                 | 42, 59, 40/Av. 47.00  | 108.10      | 1.90                  | Extremely weak completely weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                       |        |       |
| 2.00      | D              |                 |                       | 108.00      | (0.10)                | Firm reddish brown mottled light grey CLAY. - (EDWALTON MEMBER)                                                                                                     |        |       |
|           |                |                 |                       | 107.90      | (0.10)                | Extremely weak completely weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                       |        |       |
|           |                |                 |                       | 107.80      | (0.10)                | Stiff slightly sandy CLAY with frequent mudstone and sandstone lithorelicts. - (EDWALTON MEMBER)                                                                    |        |       |
|           |                |                 |                       |             | (1.10)                | Excavator lightly scraping through strata from 3.0m.                                                                                                                |        |       |
|           |                |                 |                       | 106.70      | 3.30                  | Very stiff reddish brown CLAY with occasional mudstone lithorelicts. - (EDWALTON MEMBER)                                                                            |        |       |
| 3.50      | D              |                 |                       | 106.50      | 3.50                  | Complete at 3.50m                                                                                                                                                   |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                                          |  |                  |                   |
|-------------|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|-------------------|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                                           |  |                  |                   |
| .           | . | . | . | . | Hand shear vane at 0.8m tested in-situ; below 1.0m tested on boulder sized disturbed samples.<br>Groundwater not encountered at during excavation.<br>Pit sides stable during excavation and for a short period afterwards.<br>Backfilled with arisings upon completion. |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |  |                  |                   |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                                    |  | <b>Logged By</b> | <b>Figure No.</b> |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                                     |  | DP               | 22069.TP02        |



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP03**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>109.90 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450604 E 306393 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records        | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                            | Legend | Water |
|-----------|----------------|-----------------|----------------------|-------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 | 81, 91, 83/Av. 85.00 | 109.60      | (0.30)                | Dark brown sandy CLAY with rare rootlets. - (PLOUGHED TOPSOIL)                                                                                                                         |        |       |
| 0.40      | D              |                 |                      |             | 0.30                  | Stiff reddish brown mottled light grey slightly sandy CLAY. - (EDWALTON MEMBER)                                                                                                        |        |       |
| 0.70      | HSV 85kPa      |                 |                      |             | (1.10)                |                                                                                                                                                                                        |        |       |
| 1.00      | D              |                 |                      |             | 1.40                  | Stiff reddish brown and light grey interbedded slightly sandy CLAY and sandy slightly gravelly CLAY. Gravel is fine to coarse angular sandstone lithorelicts. - (EDWALTON MEMBER)      |        |       |
|           |                |                 |                      | 108.50      | (0.30)                |                                                                                                                                                                                        |        |       |
|           |                |                 |                      | 108.20      | 1.70                  | Extremely weak completely weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                                          |        |       |
|           |                |                 |                      | 108.10      | (0.10)                |                                                                                                                                                                                        |        |       |
|           |                |                 |                      |             | 1.80                  | Stiff reddish brown and light grey interbedded slightly sandy CLAY and slightly sandy very gravelly CLAY. Gravel is fine to coarse angular sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
| 2.10      | HSV 76kPa      |                 | 82, 70, 76/Av. 76.00 |             | (1.00)                |                                                                                                                                                                                        |        |       |
| 2.20      | B              |                 |                      |             |                       |                                                                                                                                                                                        |        |       |
| 2.40      | B              |                 |                      |             |                       |                                                                                                                                                                                        |        |       |
| 2.70      | D              |                 |                      |             | 2.80                  | Extremely weak completely weathered light grey mottled reddish brown interbedded MUDSTONE and SANDSTONE. - (EDWALTON MEMBER)                                                           |        |       |
|           |                |                 |                      | 107.10      | (0.60)                |                                                                                                                                                                                        |        |       |
|           |                |                 |                      | 106.50      | 3.40                  | Complete at 3.40m                                                                                                                                                                      |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                                          |                  |                   |  |
|-------------|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                                           |                  |                   |  |
| .           | . | . | . | . | Backfilled with arisings upon completion.<br>Pit sides stable during excavation and for a short period afterwards.<br>Groundwater not encountered at during excavation.<br>Hand shear vane at 0.7m tested in-situ; below 1.0m tested on boulder sized disturbed samples. |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                          |                  |                   |  |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                                    | <b>Logged By</b> | <b>Figure No.</b> |  |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                                     | DP               | 22069.TP03        |  |



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP04**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>110.70 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450568 E 306375 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records            | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                                                              | Legend | Water |
|-----------|----------------|-----------------|--------------------------|-------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 |                          |             | (0.40)                | Dark brown sandy CLAY. - (PLOUGHED TOPSOIL)                                                                                                                                                                              |        |       |
| 0.60      | D              |                 |                          | 110.30      | 0.40 (0.50)           | Stiff slightly sandy gravelly CLAY. Gravel is fine to coarse angular sandstone. - (MADE GROUND - REWORKED EDWALTON MEMBER - ARCHAEOLOGICAL TRENCH)                                                                       |        |       |
| 0.90      | HSV 101kPa     |                 | 108, 99, 96/Av. 101.00   | 109.80      | 0.90                  | Firm reddish brown locally mottled light grey sandy CLAY. - (EDWALTON MEMBER)                                                                                                                                            |        |       |
| 1.00      | B              |                 |                          |             | (0.50)                |                                                                                                                                                                                                                          |        |       |
|           |                |                 |                          | 109.30      | 1.40 (0.20)           | Light grey silty SAND with rare sandstone lithorelicts. - (EDWALTON MEMBER)                                                                                                                                              |        |       |
|           |                |                 |                          | 109.10      | 1.60 (0.40)           | Stiff reddish brown locally mottled light grey slightly sandy CLAY with occasional pockets of light grey slightly gravelly very sandy clay. Gravel is fine to medium angular sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
| 1.90      | HSV 101.33kPa  |                 | 103, 100, 101/Av. 101.33 | 108.70      | 2.00                  | Stiff light grey and reddish brown interbedded slightly sandy CLAY and slightly sandy gravelly CLAY. Gravel is fine to medium subangular sandstone lithorelicts. - (EDWALTON MEMBER)                                     |        |       |
| 2.20      | D              |                 |                          |             | (0.80)                |                                                                                                                                                                                                                          |        |       |
|           |                |                 |                          | 107.90      | 2.80 (0.40)           | Extremely weak completely weathered light grey and reddish brown interbedded MUDSTONE and SANDSTONE with occasional clay partings. - (EDWALTON MEMBER)                                                                   |        |       |
| 3.00      | D              |                 |                          | 107.50      | 3.20                  | Complete at 3.20m                                                                                                                                                                                                        |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
|-------------|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|-------------------|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                                                                                                 |  |                  |                   |
| .           | . | . | . | . | Excavated within an area of an archaeological trench.<br>Hand shear vane at 0.9m tested in-situ; below 1.0m tested on boulder sized disturbed samples.<br>Groundwater not encountered during excavation.<br>Pit sides stable during excavation and for a short period afterwards.<br>Backfilled with arisings upon completion. |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                                                                                                |  |                  |                   |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                                                                                          |  | <b>Logged By</b> | <b>Figure No.</b> |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                                                                                           |  | DP               | 22069.TP04        |



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP05**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>111.00 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450553 E 306415 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records                 | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                      | Legend | Water |
|-----------|----------------|-----------------|-------------------------------|-------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 |                               |             | (0.30)                | Dark brown sandy CLAY. - (PLOUGHED TOPSOIL)                                                                                                                                      |        |       |
| 0.40      | D              |                 |                               | 110.70      | 0.30                  | Stiff reddish brown slightly sandy gravelly CLAY with frequent sandstone lithorelicts. Gravel is well rounded quartzite. - (EDWALTON MEMBER)                                     |        |       |
| 0.80      | HSV 95.6kPa    |                 | 94, 76, 128, 93, 87/Av. 95.60 |             | (0.90)                |                                                                                                                                                                                  |        |       |
| 1.30      | B              |                 |                               | 109.80      | 1.20                  | Firm reddish brown mottled light grey slightly sandy CLAY with pockets of light grey sand. - (EDWALTON MEMBER)                                                                   |        |       |
| 1.80      | D              |                 |                               | 109.10      | 1.90                  | Firm reddish brown and light grey interbedded slightly sandy CLAY and slightly gravelly sandy CLAY. Gravel is fine to medium angular sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
| 2.50      | D              |                 |                               | 108.40      | 2.60                  | Extremely weak completely weathered light grey SANDSTONE with frequent bands of reddish brown clay. - (EDWALTON MEMBER)                                                          |        |       |
|           |                |                 |                               | 108.00      | 3.00                  | Very weak highly weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                                             |        |       |
|           |                |                 |                               | 107.80      | 3.20                  | Complete at 3.20m                                                                                                                                                                |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                             |                  |                   |  |
|-------------|---|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                              |                  |                   |  |
| .           | . | . | . | . | Backfilled with arisings upon completion.<br>Pit sides stable during excavation and for a short period afterwards.<br>Groundwater not encountered during excavation.<br>Hand shear vane at 0.8m tested in-situ; below 1.0m recovery is too friable to test. |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                       | <b>Logged By</b> | <b>Figure No.</b> |  |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                        | DP               | 22069.TP05        |  |



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP06**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>111.00 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450553 E 306415 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records        | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                                             | Legend | Water |
|-----------|----------------|-----------------|----------------------|-------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 | 94, 91, 73/Av. 86.00 | 110.70      | (0.30)                | Dark brown slightly sandy slightly gravelly CLAY. Gravel is fine to medium well rounded chert and angular sandstone. - (PLOUGHED TOPSOIL)                                                               |        |       |
|           |                |                 |                      |             | 0.30                  | Stiff reddish brown slightly sandy CLAY with rare mudstone lithorelicts. - (EDWALTON MEMBER)                                                                                                            |        |       |
| 0.60      | D              |                 |                      |             | (0.80)                |                                                                                                                                                                                                         |        |       |
| 0.80      | HSV 86kPa      |                 |                      |             |                       |                                                                                                                                                                                                         |        |       |
| 1.20      | B              |                 |                      | 109.90      | 1.10                  | Stiff reddish brown and light grey interbedded sandy CLAY with subordinate clayey locally cemented slightly gravelly SAND. Gravel is fine to coarse angular sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
|           |                |                 |                      |             | (0.60)                |                                                                                                                                                                                                         |        |       |
|           |                |                 |                      | 109.30      | 1.70                  | Stiff light grey locally reddish brown sandy CLAY with occasional becoming frequent sandstone lithorelicts and occasional pockets of clay.                                                              |        |       |
| 1.90      | D              |                 |                      | 109.00      | 2.00                  | Extremely weak becoming very weak light grey locally reddish brown SANDSTONE. - (EDWALTON MEMBER)                                                                                                       |        |       |
|           |                |                 |                      |             | (0.20)                |                                                                                                                                                                                                         |        |       |
| 2.20      | D              |                 |                      | 108.80      | 2.20                  | Complete at 2.20m                                                                                                                                                                                       |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                             |  |                  |                   |
|-------------|---|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------|-------------------|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                              |  |                  |                   |
| .           | . | . | . | . | Backfilled with arisings upon completion.<br>Pit sides stable during excavation and for a short period afterwards.<br>Groundwater not encountered during excavation.<br>Hand shear vane at 0.8m tested in-situ; below 1.0m recovery is too friable to test. |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |  |                  |                   |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |  |                  |                   |
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| .           | . | . | . | . |                                                                                                                                                                                                                                                             |  |                  |                   |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                       |  | <b>Logged By</b> | <b>Figure No.</b> |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                        |  | DP               | 22069.TP06        |



# Travis Baker Geo-Environmental Ltd

|                                      |                                        |
|--------------------------------------|----------------------------------------|
| <b>Site</b><br>Burroughs Road, Ratby | <b>Trial Pit Number</b><br><b>TP07</b> |
|--------------------------------------|----------------------------------------|

|                                                       |                                      |                                     |                                                   |                            |
|-------------------------------------------------------|--------------------------------------|-------------------------------------|---------------------------------------------------|----------------------------|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit | <b>Dimensions</b>                    | <b>Ground Level (mOD)</b><br>110.50 | <b>Client</b><br>Lagan Homes Limited              | <b>Job Number</b><br>22069 |
|                                                       | <b>Location</b><br>450596 E 306376 N | <b>Dates</b><br>01/08/2023          | <b>Engineer</b><br>Travis Baker Geo-Environmental | <b>Sheet</b><br>1/1        |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records         | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                                               | Legend | Water |
|-----------|----------------|-----------------|-----------------------|-------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 |                       |             | (0.30)                | Dark brown sandy CLAY with rare rootlets. - (PLOUGHED TOPSOIL)                                                                                                                                            |        |       |
| 0.40      | D              |                 |                       | 110.20      | 0.30                  | Stiff reddish brown with light grey bands increasing with depth slightly sandy CLAY with occasional mudstone and sandstone lithorelicts. Occasional pockets of light grey sandy clay. - (EDWALTON MEMBER) |        |       |
| 0.80      | HSV 91.67kPa   |                 | 81, 94, 100/Av. 91.67 |             | (1.20)                |                                                                                                                                                                                                           |        |       |
| 1.00      | D              |                 |                       |             |                       |                                                                                                                                                                                                           |        |       |
| 1.60      | B              |                 |                       | 109.00      | 1.50                  | Stiff reddish brown and light grey slightly sandy silty CLAY with rare becoming occasional sandstone lithorelicts. Occasional bands of silty sandy clay. - (EDWALTON MEMBER)                              |        |       |
| 2.10      | D              |                 |                       | 108.30      | 2.20                  | Extremely weak becoming very weak completely weathered becoming highly weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                |        |       |
|           |                |                 |                       | 108.00      | 2.50                  | Excavator scraping at base of trial pit.<br>Complete at 2.50m                                                                                                                                             |        |       |

|             |                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Plan</b> | <b>Remarks</b>                                                                                                                                                                                                                                              |
|             | Backfilled with arisings upon completion.<br>Pit sides stable during excavation and for a short period afterwards.<br>Groundwater not encountered during excavation.<br>Hand shear vane at 0.8m tested in-situ; below 1.0m recovery is too friable to test. |
|             | <b>Scale (approx)</b><br>1:25                                                                                                                                                                                                                               |
|             | <b>Logged By</b><br>DP                                                                                                                                                                                                                                      |
|             | <b>Figure No.</b><br>22069.TP07                                                                                                                                                                                                                             |



# Travis Baker Geo-Environmental Ltd

**Site**  
Burroughs Road, Ratby

**Trial Pit Number**  
**TP08**

|                                                       |  |                                      |  |                                     |  |                                                   |  |                            |  |
|-------------------------------------------------------|--|--------------------------------------|--|-------------------------------------|--|---------------------------------------------------|--|----------------------------|--|
| <b>Machine</b> : JCB 3CX<br><b>Method</b> : Trial Pit |  | <b>Dimensions</b>                    |  | <b>Ground Level (mOD)</b><br>109.00 |  | <b>Client</b><br>Lagan Homes Limited              |  | <b>Job Number</b><br>22069 |  |
|                                                       |  | <b>Location</b><br>450470 E 306445 N |  | <b>Dates</b><br>01/08/2023          |  | <b>Engineer</b><br>Travis Baker Geo-Environmental |  | <b>Sheet</b><br>1/1        |  |

| Depth (m) | Sample / Tests | Water Depth (m) | Field Records        | Level (mOD) | Depth (m) (Thickness) | Description                                                                                                                                                                          | Legend | Water |
|-----------|----------------|-----------------|----------------------|-------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------|
| 0.10      | D              |                 |                      |             | (0.30)                | Dark brown sandy CLAY with rare rootlets. - (PLOUGHED TOPSOIL)                                                                                                                       |        |       |
| 0.50      | D              |                 |                      | 108.70      | 0.30                  | Stiff light grey and reddish brown interbedded sandy slightly gravelly CLAY and slightly sandy CLAY. Gravel is fine to medium subangular sandstone lithorelicts. - (EDWALTON MEMBER) |        |       |
| 0.80      | HSV 87.33kPa   |                 | 82, 90, 90/Av. 87.33 |             | (0.90)                |                                                                                                                                                                                      |        |       |
| 1.50      | B              |                 |                      | 107.80      | 1.20                  | Firm (damp and friable) reddish brown mottled light grey slightly sandy silty CLAY. - (EDWALTON MEMBER)                                                                              |        |       |
| 1.50      | D              |                 |                      |             | (0.50)                |                                                                                                                                                                                      |        |       |
|           |                |                 |                      | 107.30      | 1.70                  | Firm light grey slightly sandy CLAY with frequent sandstone lithorelicts. - (EDWALTON MEMBER)                                                                                        |        |       |
|           |                |                 |                      | 107.20      | (0.10)                |                                                                                                                                                                                      |        |       |
| 1.90      | D              |                 |                      | 107.10      | (0.10)                | Very weak highly weathered light grey SANDSTONE. - (EDWALTON MEMBER)                                                                                                                 |        |       |
|           |                |                 |                      |             | 1.90                  | Complete at 1.90m                                                                                                                                                                    |        |       |

|             |   |   |   |   |                                                                                                                                                                                                                                                             |                  |                   |  |
|-------------|---|---|---|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--|
| <b>Plan</b> |   |   |   |   | <b>Remarks</b>                                                                                                                                                                                                                                              |                  |                   |  |
| .           | . | . | . | . | Backfilled with arisings upon completion.<br>Pit sides stable during excavation and for a short period afterwards.<br>Groundwater not encountered during excavation.<br>Hand shear vane at 0.8m tested in-situ; below 1.0m recovery is too friable to test. |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
| .           | . | . | . | . |                                                                                                                                                                                                                                                             |                  |                   |  |
|             |   |   |   |   | <b>Scale (approx)</b>                                                                                                                                                                                                                                       | <b>Logged By</b> | <b>Figure No.</b> |  |
|             |   |   |   |   | 1:25                                                                                                                                                                                                                                                        | DP               | 22069.TP08        |  |

### **Trial Pit Photographs**

**Appendix 3 – Selection of Photographs  
Burroughs Road, Ratby**



TP01 Trial Pit



TP01 Arisings

**Appendix 3 – Selection of Photographs**  
**Burroughs Road, Ratby**



TP02 Trial Pit



TP02 Arisings

**Appendix 3 – Selection of Photographs  
Burroughs Road, Ratby**



TP03 Trial Pit



TP03 Arisings

**Appendix 3 – Selection of Photographs**  
**Burroughs Road, Ratby**



TP04 Trial Pit



TP04 Arisings

**Appendix 3 – Selection of Photographs  
Burroughs Road, Ratby**



TP05 Trial Pit



TP05 Arisings

**Appendix 3 – Selection of Photographs  
Burroughs Road, Ratby**



TP06 Trial Pit



TP06 Arisings

**Appendix 3 – Selection of Photographs**  
**Burroughs Road, Ratby**



TP07 Trial Pit



TP07 Arisings

**Appendix 3 – Selection of Photographs  
Burroughs Road, Ratby**



TP08 Trial Pit



TP08 Arisings