Date: 1st July 2025
Reference: 15-974 V22

GARDEN VALIDATION – BENNETT STREET

Project Name:	Bennett Street
Project Number:	15-974
Client:	Kellen Homes Ltd
Date:	26-06-2025
Project Manager:	Matt Dee
E3P Engineer:	R. Webster
Plots:	160-172

OVERVIEW

An E3P engineer attended the above site to validate the thickness of the cover system placed within the rear gardens of plots 160-172 at Bennett Street, Manchester.

13 hand excavated trial pits were advanced, with the resulting strata detailed at the rear of this letter.

Trial pits in the soft cover areas were completed to highlight the required cover system of 450mm (150mm topsoil and 300mm subsoil). A geotextile membrane at the base of cover was not required within these areas, however, has been installed by the site team. As such, the E3P engineer recorded the presence of a geotechnical break layer at the base of cover system.

E3P can confirm that our independent validation demonstrates that the soft cover has been installed with 150mm of certified topsoil and at least 300mm subsoil in line with the requirements of the build phase mitigation plan for this site. A geotechnical break layer was noted within all trial pits at the base of the cover system.

A list of plots requiring validation and their associated validation letters is presented in Table 1 for reference.

TOPSOIL

E3P have obtained imported topsoil deposits from Donor Site 'Roman Way, Preston', 'Halewood Consortium' and 'Viking Way, Congleton' which were analysed in line with the E3P Remediation Strategy.

To date, a total of 16no. topsoil samples have been submitted for analysis from Roman Way, at a brownfield frequency of 1 per 50 m3. Five topsoil samples from Halewood Consortium, five topsoil samples from Viking Way, Congleton, three topsoil samples from Giantswood Way, Congleton and five samples from Delph Lane, Daresbury have been submitted for analysis at a greenfield frequency of 1 per 200m3 in line with the E3P remediation strategy. Total samples obtained cover 4,400 m3 of imported topsoil.

Analysis for subsoil undertaken by I2 Analytical Laboratories and Eurofins Laboratories using UKAS accredited methods where applicable.

The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos. The sampling frequency follows the agreed Remediation Strategy. Laboratory analysis certificates are attached to this validation certificate.

Chemical analysis confirmed that these topsoil deposits were chemically suitable for use within the proposed garden areas.

Chemical analysis results are included within lab reports 24-12322-1, 24-77927-1, 24-13816-1, 24-29418-1, 24-36526, 25-09340 and 25-15777 (relevant sampling attached to this letter).

SUBSOIL

E3P attended the site to obtain samples of the imported subsoil deposits from "The Mere Golf Club" and "Roman Way", which were tested in line with the E3P Remediation Strategy.

To date, a total of eight subsoil samples have been submitted for analysis, at a brownfield frequency of 1 per 50 m3 in line with the E3P remediation strategy, covering 400 m3 of imported subsoil.

Additionally, E3P have obtained samples of site won natural clay subsoils, won from civil excavations and cut/fill works across the development site. A total of 18no. site won subsoil samples have been obtained, two minor exceedances of generic screening values were identified (SW-CLAY-001 and SW-CLAY-011), unsuitable soils were segregated and used as bulk fill elsewhere on site with the remaining soils tested and confirming suitability for use in private gardens. To date, a total of 16no. suitable subsoil samples have been submitted for analysis, at a site won subsoil frequency of 1 per 250 m3 in line with the E3P remediation strategy, covering 4,000 m3 of site won subsoil.

Analysis for subsoil undertaken by I2 Analytical Laboratories and Eurofins Laboratories using UKAS accredited methods where applicable.

The chemical analysis suite comprises heavy metals, sulphates, phenols, speciated Polycyclic Aromatic Hydrocarbons (PAHs), speciated and total Petroleum Hydrocarbons (TPH) and asbestos. The sampling frequency follows the agreed Remediation Strategy. Laboratory analysis certificates are attached to this validation certificate.

Chemical analysis confirmed that these subsoil deposits were chemically suitable for use within the proposed garden areas. Chemical analysis results are included within lab reports 24-008736-1, 24-010773-1, 24-77927-1, 24-25212-1, 24-25843-1, 24-27346-1 and 24-29407-1 (attached to this letter).

CHEMICAL ANALYSIS

TOPSOIL/SUBSOIL	SOURCE	LAB REFERENCE	SAMPLE REFERENCE	PASS/FAIL
Topsoil	Roman Way	24-77927-1	TS001 – TS003	Pass
		24-12322-1	TS101 – TS103	Pass
		24-13816-1	TS104 – TS113	Pass
	Halewood	24-29418-1	IMP-TS-101 - 105	Pass
	Viking Way	24-36526-1	Cong TS 001-005	Pass
	Giantswood Way	25-09340-1	GW-TS01-TS03	Pass
	Daresbury	25-15777-1	DBTS01 – 05	Pass
Subsoil	The Mere Golf Club	24-008736-1	IMP-SS-101-104	Pass
		24-010773-1	IMP-SS-105	Pass
	Roman Way	24-77927-1	SS-001 – SS-003	Pass
	Site won	24-25212-1	SW-CLAY-001-005	Pass – Following segregation of SW-CLAY-001
		24-25843-1	SW-CLAY-006-010	Pass
		24-27346-1	SW-CLAY-011-015	Pass – Following segregation of SW-CLAY-011
		24-29407-1	SW-CLAY-016-018	Pass

The cover system validation photographs are enclosed within this letter. For information, Table 1 includes references and validation dates of previously validated plots.

Table 1 – Validation Letter Reference

PLOT NUMBER	DATE	REPORT REFERENCE
9-12 & 14-17	17th April 2024	V1
13	29th April 2024	V2
17-19	12th August 2024	V3
136, 137, 141-146	21st October 2024	V4
138-140, 147, FG 18, 139, 145	14th November 2024	V5
123-124	4th December 2024	V6
125-127, 20-22	11th December 2024	V7
132	7th January 2025	V8
133 and 135	21st January 2025	V9
112-113 and 117-121	2nd February 2025	V10
114 and 134	20th February 2025	V11
105-111, 122	4th March 2025	V12
115-116	14th March 2025	V13
128-131	25th March 2025	V14
80-86, 91-95, 97, 98	3rd April 2025	V15
99-102, 104	22nd April 2025	V16
87-90	9th May 2025	V17
96 and 103	19th May 2025	V18
72-79	2nd June 2025	V19
60-63, 65-69	4th June 2025	V20
Block 1 and Block 2	30th June 2025	V21
160-172	26th June 2025	V22

Garden Cover System Validation

Complete

Score	65 / 65 (100%)
Site Name	Bennett street
Location	61 Galloway Dr Manchester England M12 United Kingdom (53.46998039510095, -2.209326721655605)
Project Number	15974
Developer	Kellen
Project Manager	Mdee
Conducted By	Richard Webster
Date of visit	26 Jun 2025 11:44 AM BST

Subsoil/Topsoil Material Source (If the site manager can't supply you with detail of where the soil is sourced STOP THE INSPECTION and call the PM)	
Where has the Subsoil been sourced	Site Won
Where has the Topsoil been sourced	Daresbury

Plot Validation	65 / 65 (100%)
Plot Validation	65 / 65 (100%)
Plot Validation 1	5 / 5 (100%)
Plot Number	172
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 1

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 2

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 3

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na

Geotextile membrane present	Yes


Photo 4


Photo 5

Plot Validation 2	5 / 5 (100%)
Plot Number	171
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 6

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 7

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 8

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes

If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 9


Photo 10

Plot Validation 3	5 / 5 (100%)
Plot Number	170
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 11


Photo 12


Photo 13

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 14

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 15

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 16


Photo 17


Photo 18

Plot Validation 4	5 / 5 (100%)
Plot Number	169
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 19

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450
Depth of Cover System at Ground Level (Photo)	


Photo 20

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)



Photo 21

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes



Photo 22



Photo 23



Photo 24

Plot Validation 5	5 / 5 (100%)
Plot Number	168
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600



Photo 25

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450
Depth of Cover System at Ground Level (Photo)	


Photo 26

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 27

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 28


Photo 29

Plot Validation 6	5 / 5 (100%)
Plot Number	165
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	700


Photo 30


Photo 31

Depth of Topsoil (mm)	200

Depth of Subsoil (mm)	500

Depth of Cover System at Ground Level (Photo)



Photo 32

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)



Photo 33

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes

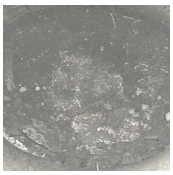


Photo 34

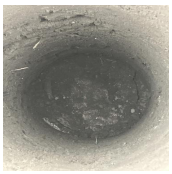


Photo 35



Photo 36

Plot Validation 7	5 / 5 (100%)
Plot Number	167
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 37

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 38

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 39

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 40


Photo 41


Photo 42


Photo 43

Plot Validation 8	5 / 5 (100%)
Plot Number	166
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass

Depth of Cover System Materials (record the depth and support with Photos down the hole)	700


Photo 44

Depth of Topsoil (mm)	200
Depth of Subsoil (mm)	500

Depth of Cover System at Ground Level (Photo)


Photo 45

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 46

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 47


Photo 48

Plot Validation 9	5 / 5 (100%)
Plot Number	164
Garden position	Rear

Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600



Photo 49

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)



Photo 50

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)



Photo 51

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes



Photo 52



Photo 53

Plot Validation 10	5 / 5 (100%)

Plot Number	163
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 54

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 55

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 56

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 57


Photo 58

Plot Validation 11	5 / 5 (100%)
Plot Number	162
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	700



Photo 59

Depth of Topsoil (mm)	200
Depth of Subsoil (mm)	500
Depth of Cover System at Ground Level (Photo)	



Photo 60

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)	



Photo 61

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 62


Photo 63

Plot Validation 12	5 / 5 (100%)
Plot Number	161
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	600


Photo 64


Photo 65

Depth of Topsoil (mm)	150
Depth of Subsoil (mm)	450

Depth of Cover System at Ground Level (Photo)


Photo 66

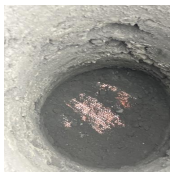
Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 67

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes

If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 68


Photo 69

Plot Validation 13	5 / 5 (100%)
Plot Number	160
Garden position	Rear
Is Plot Ready	Yes
Installation Standard	Pass
Depth of Cover System Materials (record the depth and support with Photos down the hole)	700


Photo 70

Depth of Topsoil (mm)	200
Depth of Subsoil (mm)	500

Depth of Cover System at Ground Level (Photo)


Photo 71

Depth of Cover System in Relation to Plot (Ensure the whole plot can be seen in the photo)


Photo 72

Soil suitable (Must be free from Brick, concrete, wood, plastics, glass, metal and anything none natural) if identified contact PM.	Yes
If soil is unsuitable please add a FULL description and support with photos.	Na
Geotextile membrane present	Yes


Photo 73

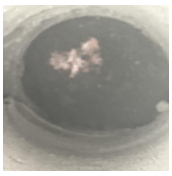

Photo 74


Photo 75


Photo 76


Photo 77

Site Manager or Representative

Name	Janos

Signature

[redacted]

Janos
26 Jun 2025 12:23 PM BST

Media summary



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8



Photo 9



Photo 10



Photo 11



Photo 12



Photo 13



Photo 14



Photo 15



Photo 16



Photo 17



Photo 18



Photo 19



Photo 20



Photo 21



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27



Photo 28



Photo 29



Photo 30



Photo 31



Photo 32



Photo 33

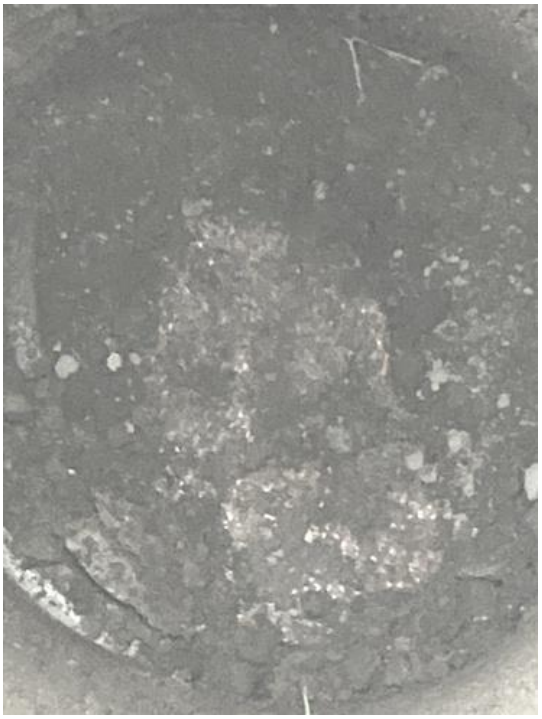


Photo 34



Photo 35



Photo 36



Photo 37



Photo 38



Photo 39



Photo 40



Photo 41



Photo 42



Photo 43



Photo 44



Photo 45



Photo 46



Photo 47



Photo 48



Photo 49



Photo 50



Photo 51



Photo 52



Photo 53



Photo 54



Photo 55



Photo 56



Photo 57



Photo 58



Photo 59



Photo 60



Photo 61



Photo 62



Photo 63



Photo 64



Photo 65



Photo 66



Photo 67



Photo 68



Photo 69



Photo 70



Photo 71



Photo 72



Photo 73

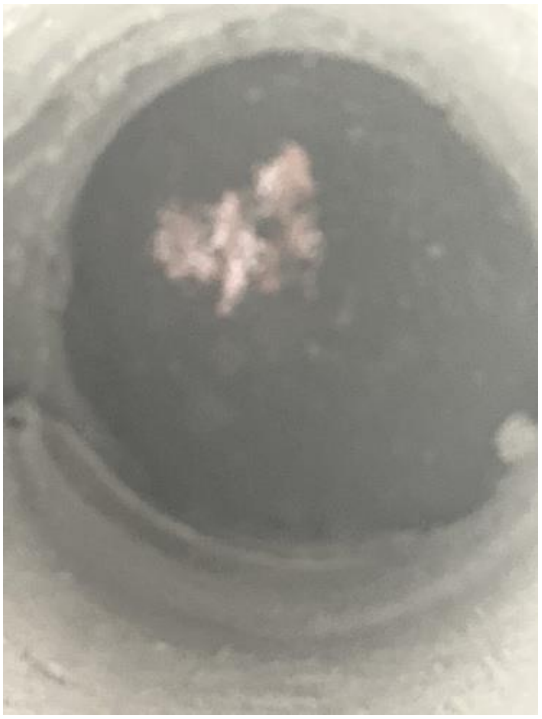


Photo 74

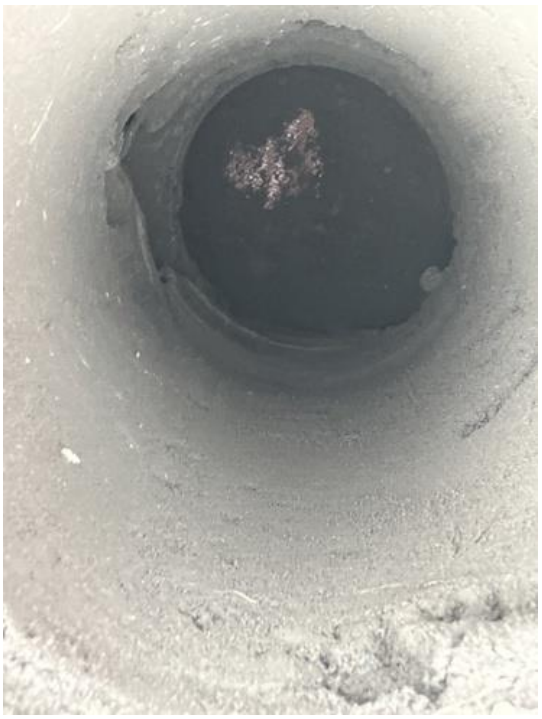


Photo 75



Photo 76



Photo 77