APPENDIX A

EVIDENCE FOR GROUND REMOVAL

WASTE / MATERIAL TRACKING NOTE

Emf 18.2

Toureen Group
Solving complex challenges since 1991

TICK APPROPRIATE BOX

MATERIAL CONVEYANCE
WASTE TRANSFER
CONSIGNMENT

▲ ONLY FILL IN PARTS WITH THIS SYMBOL
● ONLY FILL IN PARTS WITH THIS SYMBOL
▮ ONLY FILL IN PARTS WITH THIS SYMBOL

A1 – Note Code: ▮●▲

/ 61510

PART A – Notification Details ▮●▲ VARIES

A2 – Address of Transfer / Collection Point (Site): ▮●▲

Postcode:

A3 – Premises Code ▮

A4 – Name & Address of Destination: ▮●▲

Postcode:

Permit/Exemption No: ▮●

A5 – Current Holder/ Producer of the Waste Material — Transferor

Toureen Group, 25 Cecil Rd. Wealdstone, HA3 5QY. tel: 020 8424 7998

PART B – Description of Waste / Material ▮●▲ VARIES

B1 – Process giving rise to the waste: ▮● FILL IN OR TICK BELOW

B2 – SIC Code: ▮● FILL IN OR TICK BELOW

42.99/0 Civil Engineering	41.20/1 Commercial Building	41.20/2 Residential Building	43.11/0 Demolition
42.22/0 Infrastructure/Utilities	39.00/0 Remediation/Waste Recycling	42.11/0 Groundwork's	42.13/0 Tunnelling

B3 – EWC Code & Description of Waste/Original Waste Material ▮●▲ FILL IN OR TICK BELOW

17 05 04 – Clean/Inert muck	17 05 04 – Non-Hazardous muck	17 05 03 – Hazardous muck	17 01 01 – Concrete
17 01 02 – Brick	17 01 07 – Demo Rubble	17 09 04 – Mixed Con. Waste	17 03 02 – Tarmac
17 02 01 – Timber/Wood	17 02 03 – Plastics	17 02 02 – Glass	17 06 04 – Insulation
17 01 03 – Tiles & Ceramics	13 05 07 – Oily Water	17 06 05 – Asbestos Containing Mat.	17 04 07 – Mixed Metals

Classification of Waste/Recovered Material: ▮●▲

Clean/Inert Non-Hazardous Hazardous

The Concentration of Chemicals/Biological component of concern: ▮

Hazard Codes ▮

B4 – If the "waste" material has been recycled/treated please identify to what specification it conforms? ▲

Type I Type II 6F2 6F3 Other (State)

B5 – How is the Waste Transported: No./weight/volume if applicable: ▮●▲ FILL IN OR TICK BELOW

Articulated Lorry	Tipper (20 Ton)	Grab (16 Ton)	Tanker	Drum/IBC/1 Ton Bag
RO/RO 40 Yd Bin	20 Yd Skip	16 Yd Skip	12 Yd Skip	8 Yd Skip
8 Yd Skip	6 Yd Skip	Mini Skip	Other (State)	

PART C – Carriers Certificate ▮●▲ VARIES

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any special handling requirements.

Company name: ▮●▲

Address: ▮●▲

Postcode: ▮●▲

Waste Carriers Licence No: ▮●▲

Vehicle Registration: ▮●▲

Driver Name: ▮●▲

Signature: ▮●▲

Date: ▮●▲ Time: ▮●▲

PART D – Consignor's Certificate ▮●▲

I certify that the information completed in A, B and C is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste/recovered material is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) regulations 2011

Name: ▮●▲

Signature: ▮●▲

Date: ▮●▲ Time: ▮●▲

PART E – Consignee's Certificate ▮●▲ VARIES

Quantity Received (tons) ▮●▲

Material/Waste Accepted ▮●▲ YES NO

Waste Management Operation (R or D Code) ▮●

I received this waste/material at the address detailed in A4 on – Date: Time: ▮●▲

I confirm the Vehicle Registration and Type as Detailed in B5 and Part C: ▮●▲ YES NO IF NO PLEASE PROVIDE DETAILS

Where waste/material is rejected; please provide details:

I certify that waste/material reuse permit/exemption operation number/reference: ▮●▲
authorises the management/receipt of the waste/material described in B at the address given in A4.

Name: ▮●▲ Signature: ▮●▲ Date: ▮●▲

*** White copy: Head Office Blue copy: Haulier Yellow copy: Waste facility Pink copy: PC/site ***

WASTE / MATERIAL TRACKING NOTE

Emf 18.2

Toureen Group
Solving complex challenges since 1991

COMBINED FORMS:

- MATERIAL CONVEYANCE — ▲ ONLY FILL IN PARTS WITH THIS SYMBOL
- ✓ WASTE TRANSFER — ● ONLY FILL IN PARTS WITH THIS SYMBOL
- CONSIGNMENT — ▮ ONLY FILL IN PARTS WITH THIS SYMBOL

(TICK APPROPRIATE BOX)

A1 – Note Code: ▮●▲ DW 2155310

/ 61510

PART A – Notification Details ▮●▲ VARIES

A2 – Address of Transfer / Collection Point (Site): ▮●▲ 354 Kilburn High Rd

Postcode: NW6

A3 – Premises Code ▮ CBL 619

A4 – Name & Address of Destination: ▮●▲ FCC Environmental UK Ltd

Postcode: MK3 5FP

Permit/Exemption No: ▮●

A5 – Current Holder/ Producer of the Waste Material — Transferor

Toureen Group, 25 Cecil Rd. Wealdstone, HA3 5QY. tel: 020 8424 7998

PART B – Description of Waste / Material ▮●▲ VARIES

B1 – Process giving rise to the waste: ▮● (FILL IN OR TICK BELOW)

B2 – SIC Code: ▮● 43.12 (FILL IN OR TICK BELOW)

- 42.99/0 Civil Engineering
- 41.20/1 Commercial Building
- 41.20/2 Residential Building
- 43.11/0 Demolition
- 42.22/0 Infrastructure/Utilities
- 39.00/0 Remediation/Waste Recycling
- ✓ 42.11/0 Groundwork's
- 42.13/0 Tunnelling

B3 – EWC Code & Description of Waste/Original Waste Material ▮●▲ (FILL IN OR TICK BELOW)

- 17 05 04 – Clean/Inert muck
- ✓ 17 05 04 – Non-Hazardous muck
- 17 05 03 – Hazardous muck
- 17 01 01 – Concrete
- 17 01 02 – Brick
- 17 01 07 – Demo Rubble
- 17 09 04 – Mixed Con. Waste
- 17 03 02 – Tarmac
- 17 02 01 – Timber/Wood
- 17 02 03 – Plastics
- 17 02 02 – Glass
- 17 06 04 – Insulation
- 17 01 03 – Tiles & Ceramics
- 13 05 07 – Oily Water
- 17 06 05 – Asbestos Containing Mat.
- 17 04 07 – Mixed Metals

Classification of Waste/Recovered Material: ▮●▲

- Clean/Inert
- ✓ Non-Hazardous
- Hazardous

The Concentration of Chemicals/Biological component of concern: ▮

Hazard Codes ▮

B4 – If the "waste" material has been recycled/treated please identify to what specification it conforms? ▲

- Type I
- Type II
- 6F2
- 6F3
- Other (State)

B5 – How is the Waste Transported: No./weight/volume if applicable: ▮●▲ (FILL IN OR TICK BELOW)

- Articulated Lorry
- ✓ Tipper (20 Ton)
- Grab (16 Ton)
- Tanker
- Drum/IBC/1 Ton Bag
- RO/RO 40 Yd Bin
- 20 Yd Skip
- 16 Yd Skip
- 12 Yd Skip
- 8 Yd Skip
- 8 Yd Skip
- 6 Yd Skip
- Mini Skip
- Other (State)

PART C – Carriers Certificate ▮●▲ VARIES

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any special handling requirements.

Company name: ▮●▲ Toureen Group.

Address: ▮●▲ 25 Cecil Rd

Postcode: ▮●▲ HA3 5QY

Waste Carriers Licence No: ▮●▲ CBDU 107958

Vehicle Registration: ▮●▲ EY64 EFF

Driver Name: ▮●▲ Bob

Signature: ▮●▲ [signature]

Date: ▮●▲ 25.7.17 Time: ▮●▲ 05.15

PART D – Consignor's Certificate ▮●▲

I certify that the information completed in A, B and C is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste/recovered material is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) regulations 2011

Name: ▮●▲ W Murphy

Signature: ▮●▲ [signature]

Date: ▮●▲ 25.5.17 Time: ▮●▲ 05.15

PART E – Consignee's Certificate ▮●▲ VARIES

Quantity Received (tons) ▮●▲

Material/Waste Accepted ▮●▲ YES NO

Waste Management Operation (R or D Code) ▮●

I received this waste/material at the address detailed in A4 on – Date: Time: ▮●▲

I confirm the Vehicle Registration and Type as Detailed in B5 and Part C: ▮●▲ YES NO (IF NO PLEASE PROVIDE DETAILS)

Where waste/material is rejected; please provide details:

I certify that waste/material reuse permit/exemption operation number/reference: ▮●▲
authorises the management/receipt of the waste/material described in B at the address given in A4.

Name: ▮●▲ Signature: ▮●▲ Date: ▮●▲

*** White copy: Head Office Blue copy: Haulier Yellow copy: Waste facility Pink copy: PC/site ***

WASTE / MATERIAL TRACKING NOTE

Emf 18.2

Toureen Group

Solving complex challenges since 1991

TICK APPROPRIATE BOX

- MATERIAL CONVEYANCE
- WASTE TRANSFER
- CONSIGNMENT

▲ ONLY FILL IN PARTS WITH THIS SYMBOL
● ONLY FILL IN PARTS WITH THIS SYMBOL
▮ ONLY FILL IN PARTS WITH THIS SYMBOL

A1 – Note Code: ▮●▲

/ 61528

PART A – Notification Details ▮●▲ VARIES

A2 – Address of Transfer / Collection Point (Site): ▮●▲

Postcode:

A3 – Premises Code ▮

A4 – Name & Address of Destination: ▮●▲

Postcode:

Permit/Exemption No: ▮●

A5 – Current Holder/ Producer of the Waste Material — Transferor

Toureen Group, 25 Cecil Rd. Wealdstone, HA3 5QY. tel: 020 8424 7998

PART B – Description of Waste / Material ▮●▲ VARIES

B1 – Process giving rise to the waste: ▮● FILL IN OR TICK BELOW

B2 – SIC Code: ▮● FILL IN OR TICK BELOW

- 42.99/0 Civil Engineering
- 41.20/1 Commercial Building
- 41.20/2 Residential Building
- 43.11/0 Demolition
- 42.22/0 Infrastructure/Utilities
- 39.00/0 Remediation/Waste Recycling
- 42.11/0 Groundwork's
- 42.13/0 Tunnelling

B3 – EWC Code & Description of Waste/Original Waste Material ▮●▲ FILL IN OR TICK BELOW

- 17 05 04 – Clean/Inert muck
- 17 01 02 – Brick
- 17 02 01 – Timber/Wood
- 17 01 03 – Tiles & Ceramics
- 17 05 04 – Non-Hazardous muck
- 17 01 07 – Demo Rubble
- 17 02 03 – Plastics
- 13 05 07 – Oily Water
- 17 05 03 – Hazardous muck
- 17 09 04 – Mixed Con. Waste
- 17 02 02 – Glass
- 17 06 05 – Asbestos Containing Mat.
- 17 01 01 – Concrete
- 17 03 02 – Tarmac
- 17 06 04 – Insulation
- 17 04 07 – Mixed Metals

Classification of Waste/Recovered Material: ▮●▲

- Clean/Inert
- Non-Hazardous
- Hazardous

The Concentration of Chemicals/Biological component of concern: ▮

Hazard Codes ▮

B4 – If the "waste" material has been recycled/treated please identify to what specification it conforms? ▲

- Type I
- Type II
- 6F2
- 6F3
- Other (State)

B5 – How is the Waste Transported: No./weight/volume if applicable: ▮●▲ FILL IN OR TICK BELOW

- Articulated Lorry
- RO/RO 40 Yd Bin
- 8 Yd Skip
- Tipper (20 Ton)
- 20 Yd Skip
- 6 Yd Skip
- Grab (16 Ton)
- 16 Yd Skip
- Mini Skip
- Tanker
- 12 Yd Skip
- Other (State)
- Drum/IBC/1 Ton Bag
- 8 Yd Skip

PART C – Carriers Certificate ▮●▲ VARIES

certify that I today collected the consignment and that the details in A2, 4 and B3 are correct and I have been advised of any special handling equirements.

ompany name: ▮●▲

ddress: ▮●▲

stcode: ▮●▲

ste Carriers Licence No: ▮●▲

icle Registration: ▮●▲

er Name: ▮●▲

ture: ▮●▲

▮●▲ Time: ▮●▲

PART D – Consignor's Certificate ▮●▲

I certify that the information completed in A, B and C is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste/recovered material is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) regulations 2011

Name: ▮●▲

Signature: ▮●▲

Date: ▮●▲ Time: ▮●▲

– Consignee's Certificate ▮●▲ VARIES

y Received (tons) ▮●▲

Material/Waste Accepted ▮●▲ YES NO

Waste Management Operation (R or D Code) ▮●

d this waste/material at the address detailed in A4 on – Date:

Time: ▮●▲

the Vehicle Registration and Type as Detailed in B5 and Part C: ▮●▲ YES NO

ste/material is rejected; please provide details: IF NO PLEASE PROVIDE DETAILS

at waste/material reuse permit/exemption operation number/reference: ▮●▲

the management/receipt of the waste/material described in B at the address given in A4.

▲

Signature: ▮●▲

Date: ▮●▲

copy: Head Office Blue copy: Haulier Yellow copy: Waste facility Pink copy: PC/site ***

WASTE / MATERIAL TRACKING NOTE

Emf 18.2

COMBINED FORMS

Toureen Group

Solving complex challenges since 1991

TICK APPROPRIATE BOX: ☐ MATERIAL CONVEYANCE ☐ WASTE TRANSFER ☐ CONSIGNMENT

▲ ONLY FILL IN PARTS WITH THIS SYMBOL ● ONLY FILL IN PARTS WITH THIS SYMBOL ■ ONLY FILL IN PARTS WITH THIS SYMBOL

A1 – Note Code: ■●▲ DW 21853/4 15.00 TO 15.44 45 MIN W/TIME

/ 61528

PART A – Notification Details ■●▲ VARIES

A2 – Address of Transfer / Collection Point (Site): ■●▲ 24H KITCHEN HIGH ST NW6.

Postcode:

A3 – Premises Code ■ CRL619

A4 – Name & Address of Destination: ■●▲ FCC UPSIDE RAILWAY YARD

Postcode: NW2 1LN

Permit/Exemption No: ■●

A5 – Current Holder/ Producer of the Waste Material — Transferor

Toureen Group, 25 Cecil Rd. Wealdstone, HA3 5QY. tel: 020 8424 7998

WORKING TIME 45 MINS

PART B – Description of Waste / Material ■●▲ VARIES

B1 – Process giving rise to the waste: ■● FILL IN OR TICK BELOW

B2 – SIC Code: ■● 43.12 FILL IN OR TICK BELOW

☐ 42.99/0 Civil Engineering ☐ 41.20/1 Commercial Building ☐ 41.20/2 Residential Building ☐ 43.11/0 Demolition

☐ 42.22/0 Infrastructure/Utilities ☐ 39.00/0 Remediation/Waste Recycling ☑ 42.11/0 Groundwork's ☐ 42.13/0 Tunnelling

B3 – EWC Code & Description of Waste/Original Waste Material ■●▲ 17-05-04 FILL IN OR TICK BELOW

☐ 17 05 04 – Clean/Inert muck ☐ 17 05 04 – Non-Hazardous muck ☐ 17 05 03 – Hazardous muck ☐ 17 01 01 – Concrete

☐ 17 01 02 – Brick ☐ 17 01 07 – Demo Rubble ☐ 17 09 04 – Mixed Con. Waste ☐ 17 03 02 – Tarmac

☐ 17 02 01 – Timber/Wood ☐ 17 02 03 – Plastics ☐ 17 02 02 – Glass ☐ 17 06 04 – Insulation

☐ 17 01 03 – Tiles & Ceramics ☐ 13 05 07 – Oily Water ☐ 17 06 05 – Asbestos Containing Mat. ☐ 17 04 07 – Mixed Metals

Classification of Waste/Recovered Material: ■●▲

☐ Clean/Inert ☑ Non-Hazardous ☐ Hazardous

The Concentration of Chemicals/Biological component of concern: ■

Hazard Codes ■

B4 – If the "waste" material has been recycled/treated please identify to what specification it conforms? ▲

☐ Type I ☐ Type II ☐ 6F2 ☐ 6F3 ☐ Other (State)

B5 – How is the Waste Transported: No./weight/volume if applicable: ■●▲ FILL IN OR TICK BELOW

☐ Articulated Lorry ☑ Tipper (20 Ton) ☐ Grab (16 Ton) ☐ Tanker ☐ Drum/IBC/1 Ton Bag

☐ RO/RO 40 Yd Bin ☐ 20 Yd Skip ☐ 16 Yd Skip ☐ 12 Yd Skip ☐ 8 Yd Skip

☐ 8 Yd Skip ☐ 6 Yd Skip ☐ Mini Skip ☐ Other (State)

PART C – Carriers Certificate ■●▲ VARIES

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any special handling requirements.

Company name: ■●▲ TOUREEN GROUP

Address: ■●▲ 25 CECIL RD

Postcode: ■●▲ HA3 5QY

Waste Carriers Licence No: ■●▲ CBDU107968

Vehicle Registration: ■●▲ EY64 CFD

Driver Name: ■●▲

Signature: ■●▲

■●▲ 30/5/17 Time: ■●▲

PART D – Consignor's Certificate ■●▲

I certify that the information completed in A, B and C is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste/recovered material is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) regulations 2011

Name: ■●▲ W J HUGHES

Signature: ■●▲

Date: ■●▲ 30/5/17 Time: ■●▲

– Consignee's Certificate ■●▲ VARIES

Quantity Received (tons) ■●▲ Material/Waste Accepted ■●▲ ☐ YES ☐ NO Waste Management Operation (R or D Code) ■●

I accepted this waste/material at the address detailed in A4 on – Date: Time: ■●▲

Did the Vehicle Registration and Type as Detailed in B5 and Part C: ■●▲ ☐ YES ☐ NO IF NO PLEASE PROVIDE DETAILS

If waste/material is rejected; please provide details:

What waste/material reuse permit/exemption operation number/reference: ■●▲

I confirm the management/receipt of the waste/material described in B at the address given in A4.

■●▲ Signature: ■●▲ Date: ■●▲

White copy: Head Office Blue copy: Haulier Yellow copy: Waste facility Pink copy: PC/site ***

WASTE / MATERIAL TRACKING NOTE

Emf 18.2

Toureen Group
Solving complex challenges since 1991

TICK APPROPRIATE BOX
- MATERIAL CONVEYANCE
- WASTE TRANSFER
- CONSIGNMENT

▲ ONLY FILL IN PARTS WITH THIS SYMBOL
● ONLY FILL IN PARTS WITH THIS SYMBOL
▮ ONLY FILL IN PARTS WITH THIS SYMBOL

A1 – Note Code: ▮●▲

/ 61542

PART A – Notification Details ▮●▲ VARIES

A2 – Address of Transfer / Collection Point (Site): ▮●▲

Postcode:

A3 – Premises Code ▮

A4 – Name & Address of Destination: ▮●▲

Postcode:

Permit/Exemption No: ▮●

A5 – Current Holder/ Producer of the Waste Material — Transferor

Toureen Group, 25 Cecil Rd. Wealdstone, HA3 5QY. tel: 020 8424 7998

PART B – Description of Waste / Material ▮●▲ VARIES

B1 – Process giving rise to the waste: ▮● FILL IN OR TICK BELOW

B2 – SIC Code: ▮● FILL IN OR TICK BELOW

42.99/0 Civil Engineering	41.20/1 Commercial Building	41.20/2 Residential Building	43.11/0 Demolition
42.22/0 Infrastructure/Utilities	39.00/0 Remediation/Waste Recycling	42.11/0 Groundwork's	42.13/0 Tunnelling

B3 – EWC Code & Description of Waste/Original Waste Material ▮●▲ FILL IN OR TICK BELOW

17 05 04 – Clean/Inert muck	17 05 04 – Non-Hazardous muck	17 05 03 – Hazardous muck	17 01 01 – Concrete
17 01 02 – Brick	17 01 07 – Demo Rubble	17 09 04 – Mixed Con. Waste	17 03 02 – Tarmac
17 02 01 – Timber/Wood	17 02 03 – Plastics	17 02 02 – Glass	17 06 04 – Insulation
17 01 03 – Tiles & Ceramics	13 05 07 – Oily Water	17 06 05 – Asbestos Containing Mat.	17 04 07 – Mixed Metals

Classification of Waste/Recovered Material: ▮●▲

Clean/Inert | Non-Hazardous | Hazardous

The Concentration of Chemicals/Biological component of concern: ▮

Hazard Codes ▮

B4 – If the "waste" material has been recycled/treated please identify to what specification it conforms? ▲

Type I | Type II | 6F2 | 6F3 | Other (State)

B5 – How is the Waste Transported: No./weight/volume if applicable: ▮●▲ FILL IN OR TICK BELOW

Articulated Lorry	Tipper (20 Ton)	Grab (16 Ton)	Tanker	Drum/IBC/1 Ton Bag
RO/RO 40 Yd Bin	20 Yd Skip	16 Yd Skip	12 Yd Skip	8 Yd Skip
8 Yd Skip	6 Yd Skip	Mini Skip	Other (State)	

PART C – Carriers Certificate ▮●▲ VARIES

I certify that I today collected the consignment and that the details in A2, A4 and B3 are correct and I have been advised of any special handling requirements.

Company name: ▮●▲
Address: ▮●▲
Postcode: ▮●▲
Waste Carriers Licence No: ▮●▲
Vehicle Registration: ▮●▲
Driver Name: ▮●▲
Signature: ▮●▲
Date: ▮●▲ Time: ▮●▲

PART D – Consignor's Certificate ▮●▲

I certify that the information completed in A, B and C is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures. All of the waste/recovered material is packaged and labelled correctly and the carrier has been advised of any special handling requirements.

I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) regulations 2011

Name: ▮●▲
Signature: ▮●▲
Date: ▮●▲ Time: ▮●▲

PART E – Consignee's Certificate ▮●▲ VARIES

Quantity Received (tons) ▮●▲

Material/Waste Accepted ▮●▲ YES NO

Waste Management Operation (R or D Code) ▮●

I received this waste/material at the address detailed in A4 on – Date: Time: ▮●▲

I confirm the Vehicle Registration and Type as Detailed in B5 and Part C: ▮●▲ YES NO IF NO PLEASE PROVIDE DETAILS

Where waste/material is rejected; please provide details:

I certify that waste/material reuse permit/exemption operation number/reference: ▮●▲ authorises the management/receipt of the waste/material described in B at the address given in A4.

Name: ▮●▲ Signature: ▮●▲ Date: ▮●▲

*** White copy: Head Office | Blue copy: Haulier | Yellow copy: Waste facility | Pink copy: PC/site ***

APPENDIX B

EVIDENCE FOR GAS PROTECTION

Spring Copse Business Park
Slinfold, West Sussex,
RH13 0SZ

RE: 254 Kilburn High Road, Kilburn. London 24th October 2017

Dear James,

As requested I can confirm that I visited site on Friday 7th July 2017 and observed the following Cordek products being installed:

- Cordek Cellvent HX
- Cordek Cellcore HXB
- Cordek Cellcore HG

The Cellvent HX is a combined ground heave protection and sub-floor passive ventilation system. The grade of Cellvent being installed was 9/13 which is suitable for concrete depths between 220mm and 300mm.

Cellcore HXB and Cellcore HG are both ground heave protection panels suitable for concrete depths of 660mm to 900mm and 1540mm to 1940mm respectively.

On visiting the site, I was able to observe elements of the installation for all products listed above and can confirm that it appeared to be carried out in-line with our recommendations for best practice and the guidance provided in the accompanying product data sheets.

I hope this information is of use, please do not hesitate to contact me should you require any further information.

Best regards

Adam Scaldwell
Technical Sales Executive

M: 07967 746046

Spring Copse Business Park
Slinfold, West Sussex,
RH13 0SZ

T: 01403 799601
E: AScaldwell@cordek.com

Cellvent HX Data Sheet

Cellvent HX combines the benefits of Ventform with the Cellcore HX range.

Cellvent HX alleviates the effects of ground movement and also provides an excellent gas venting medium. It is designed for use under suitably reinforced ground floor slabs. The depth of the Cellvent HX panel will depend upon the amount of ground heave that has been predicted (for a full explanation and design examples please refer to our Ground Movement brochure or the Cordek website).

Key Features

- Provides combined ground heave protection and gas venting capabilities in a single product
- Range of thicknesses and grades to suit most project requirements
- Light, robust and easy to install 2.40m x 1.20m panels
- All variations include drainage slots to alleviate water pressure
- Unaffected by both UV light and water
- Can be connected to the Cordek range of perimeter vents to vent hazardous ground gases from beneath the building footprint to the atmosphere.

Installation

The procedure for installing the Cellvent panels is straightforward; the following points should be adhered to:

- Ensure that the Cellvent HX panels are placed upon a firm, level surface. A concrete or sand/cement blinding will often be required.
- Do not overload the Cellvent HX panels with reinforcement or surcharge them with concrete.

Storage & Handling

All products are delivered in a polythene wrapping and are clearly labelled. The packs of Cellvent HX can be manually handled and offloaded upon delivery, taking into account site Health and Safety procedures.

Due to the relatively light nature of the product, all packs of Cellvent HX should be weighted down or secured if stored outside prior to installation.

For further information please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.

cordek

Product Data

The depths available are:

NHBC Shrinkage Category	Soil Plasticity Index	Cellvent HX Product Depth (mm)	Equivalent Cellcore HXS Depth (mm)	Maximum Heave Potential
Low	10-20	135	90	50
Medium	20-40	205	160	100
High	40-60	270	225	150

The grade of Cellvent is determined by the depth of the concrete slab:

Cellvent Grade Category	Maximum Depth of Concrete (mm)	Maximum Safe Load (inc. 1.5kN/m² live load)	Fail Load kN/m²
7/10	220	7	10
9/13	300	9	13
13/18	460	13	18
18/24	660	18	24

Based on the above tables, the Cellvent HX specification for a 250mm thick concrete slab on top of a medium shrinkability clay would be: **Cellvent 205 HX9/13.**

Cellvent is supplied with an equivalent ventilation capacity to the Ventform 80 range which includes a 40mm void depth. If a greater venting capacity is required please contact our Technical Department on 01403 799600 for further guidance.

Cellvent should only be used on sites where subsidence is not expected.

Ground Movement and Gas Protection brochures are available at www.cordek.com and contain further technical and explanatory information around the complete range of Cordek ground movement and ground gas protection systems.

Issued: 03/2016

Cordek Ltd
Spring Copse Business Park, Slinfold, West Sussex
RH13 0SZ, United Kingdom

Telephone (+44) 1403 799600 Fax (+44) 1403 791718
E-mail info@cordek.com

www.cordek.com

Cellcore HX Data Sheet

Cellcore HX is Cordek's fourth generation collapsible void former and has been designed to protect foundations from the effects of ground heave.

The product consists of a Cellular construction of expanded polystyrene which has been designed, moulded and tested to tight tolerances to achieve the specified performance characteristics.

The standard range of products are available in a variety of depths and grades to suit most commonly encountered combinations of soil heave potential and concrete depth. If a suitable product for your requirements is not listed below please contact our sales support desk for further assistance.

In addition to the standard Cellcore HX range, variations of the product are available:

- Cellcore HX Plus with EPS insulation incorporated
- Cellform HX with integral formwork for ground beams
- Cellvent which includes protection against VOC's and ground gases
- Cellcore HG suitable for providing ground heave protection where concrete depths exceed the capacity of the standard Cellcore HX range

Key Features

- It reduces the upward force transmitted to the structure
- Wide range of profiles and grades to suit most applications
- BBA certified
- Meets the NHBC's Technical Standards
- Moulded production for enhanced and consistent performance
- Available with integral EPS insulation, permanent formwork for ground beams or voids for gases to vent

Installation

The procedure for installing Cellcore panels is straightforward, but the following points should be adhered to:

- Please ensure that Cellcore panels are placed upon a suitable firm and level surface. Typically a layer of concrete blinding beneath the panels is recommended.
- The lightweight but durable panels can be easily laid by one person. Where they are required to be cut this can be carried out using a fine tooth saw or hot wire cutter (available for hire from Cordek – please contact our sales team on 01403 799600).
- When installing Cellcore adjacent to piles, we suggest that the use of Claymaster pile collars is considered – please see the

For further information on the full range of Cordek's Ground Heave Solutions, please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.

Cordek Claymaster data sheet for further information.

- Individual panels should be butted together, with taping of the joints using the formwork tape to avoid any grout loss between the panels.
- Reinforcement spacers can be positioned directly upon the Cellcore panels, the top surface of the panels can be reinforced with a layer of concrete blinding to spread the spacer loads if a very heavy reinforcement cage has been specified.

Storage & Handling

All products are delivered in a polythene wrapping and are clearly labelled. Both packs of Cellcore and individual panels can be manually handled and offloaded upon delivery, taking in to account any site specific manual handling regulations.

Due to the relatively light nature of the product, all packs of Cellcore should be weighted down or secured should they be stored outside prior to installation. No further storage requirements are needed as the product is unaffected by both UV light and water.

Product Sizes

Standard Panel: 2400mm x 1200mm

Beams Widths: 2400mm x 1200mm to 300mm (in 25mm increments)

Product specification

Firstly the depth of the Cellcore HX panel should be determined by the heave potential of the soil, as detailed in table one below:

Table One

Results of Soil Analysis	NHBC Category	Predicted Ground Movement or BRE/ NHBC requirement	Depth of Cellcore HX required to achieve 'Equivalent Void'	
Plasticity Index	**Shrinkage Category**	**Void Dimensions (mm)**	**HX S (mm)**	**HX B (mm)**
10 - 20	Low	50	90	85
20 - 40	Medium	100	160	155
40 - 60*	High	150	225	220

* When the analysis exceeds 60 or a deeper void is required, please consult our Technical Services team.

Secondly, the grade of the product is determined by the depth of the concrete to be cast on the Cellcore, as detailed in table two below:

Table Two

Grade*	Safe Load (kN/m²)	Fail Load (kN/m²)	Maximum Concrete Depth** (mm)
7/10	7	10	220
9/13	9	13	300
13/18	13	18	460
18/24	18	24	660
24/32	24	32	900

* For easy identification the panel labels are coloured as shown.

** Based on the Eurocode and a live load allowance of 1.5kN/m2.

For concrete thicknesses between 900mm and 2000mm, further grades of Cellcore are available. For further advice please contact the Cordek technical team on 01403 799600.

Design Notes

- Each Cellcore grade is designed to support a given thickness of concrete plus a live load allowance of 1.5 kN/m² with negligible creep compression during a 16 hour curing period; this is known as the **SAFE LOAD.**
- At the pre-determined load the polystyrene legs of the Cordek panels will buckle and collapse due to the upward movement of the ground beneath; this is known as the **FAIL LOAD.**
- The slab, beam or pile cap must be designed to accept the difference between its self-weight and the fail load (please see design examples on next page).

Design Examples

Design Example 1

Lightweight Slab (220mm thick)

- **Assume the soil survey showed a plasticity index of 15.**
- **Table 2 shows the potential for ground movement is low.**
- **BRE/NHBC data recommends a clear Void of 50mm.**

1. **Total deadweight/downward load is:**

   Self weight of 220mm concrete slab:

0.22 x 25kN/m^3	=	5.5kN/m^2
Live load allowance	=	1.5kN/m^2
TOTAL LOAD	=	**7.0kN/m^2**

2. Table 1 shows the next SAFE LOAD value is 7kN/m^2 (Fail Load of 10kN/m^2)

   The appropriate Cellcore HX S grade = 7/10

3. A maximum 50mm of ground movement is predicted and Table 2 shows that,

   The Cellcore HX S depth to accommodate this = 90mm
   So, the full product specification =

   Cellcore HX S 90mm 7/10

   As stated above, this Cellcore HX S grade has a FAIL LOAD of 10 kN/m^2

The slab must be suitably designed to accommodate the transmitted load and two possible modes of failure should be considered:

i) The Slab being lifted off the foundation.
ii) Failure of the Slab in bending or shear due to the uplift.

Design Example 2

Beam (600mm deep)

- **Assume the soil survey showed a plasticity index of 30.**
- **Table 2 shows the potential for ground movement is medium.**
- **BRE/NHBC data recommends a clear Void of 100mm.**

1. **Total deadweight/downward load is:**

   Self weight of 600mm concrete beam:

0.60 x 25kN/m^3	=	15.0kN/m^2
Live load allowance	=	1.5kN/m^2
TOTAL LOAD	=	**16.5kN/m^2**

2. Table 1 shows the next SAFE LOAD value is 18kN/m^2 (Fail Load of 24kN/m^2)

   The appropriate Cellcore HX B grade = 18/24

3. A maximum 100mm of ground movement is predicted and Table 2 shows that,

   The Cellcore HX B depth to accommodate this = 155mm
   So, the full product specification =

   Cellcore HX B 155mm 18/24

   As stated above, this Cellcore HX B grade has a FAIL LOAD of 24 kN/m^2

The beam must be suitably designed to accommodate the transmitted load and two possible modes of failure should be considered:

i) The Beam being lifted off the top of the piles.
ii) Failure of the Beam in bending or shear due to the uplift.

Additional Cellcore Products

Cellcore HX Plus

In cases where insulation is also required beneath the slab, the Cellcore HX Plus range can be utilised to provide combined ground movement protection and insulation from a single product.

The thermal resistance of the Cellcore HX Plus is based upon the thickness of insulation incorporated within the panels, as outlined in the table below. Please contact the Cordek technical team on 01403 799600 for further assistance with determining the most appropriate Celllcore HX Plus specification.

Thickness (mm)	Thermal Resistance m^2c/w
50 (Standard)	1.39
75	2.08
100	2.78
125	3.47
150	4.17

Cellform HX

Cellform HX combines the benefits of Cellcore HX with an economical and simple to install permanent formwork system.

Each Cellform HX panel is supplied to the required beam width and depth. The principle is that the hinged side panels are supported off the reinforcement cage by concrete spacers, this then allows the excavation to be backfilled. The backfill then supports the formwork against the concrete pressure whilst the beam is cast and thereby avoids the need for fixing and striking traditional formwork.

Cellvent

Cellvent HX protects a building from both ground heave and hazardous soil gases and is designed for use under suitably reinforced concrete floor slabs.

For further details and design examples please refer to our Cellvent HX data sheet which is available to download from www.cordek.com.

Cellcore HG

The range of products are available in a variety of depths and grades to suit the most commonly encountered combinations of soil heave potential and concrete depths that exceed the capacity of the standard Cellcore HX range.

Issued: 01/2016

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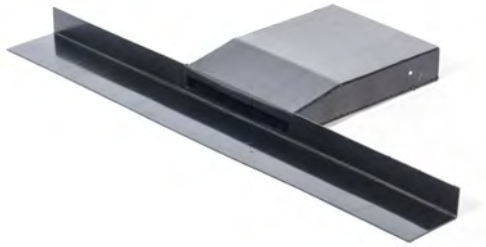
Gas Venting System Accessories Data Sheet

In addition to the venting mediums and outlets provided by Cordek, a range of accessories is also offered in order to provide a complete gas venting system.

The gas venting accessories are required to ensure a robust connection between the selected venting system and the vent outlets positioned at the perimeter of the building.

Cordek's gas venting accessory range includes:

Gas Vent Connectors



Product Reference	CGV-001
Description	Rectangular Sleeved Vent Connector
Dimensions	N/A
Compatible with	CGV 011, CGV 012

Product Reference	CGV-002
Description	Pipe / Sleeved Vent Connector
Dimensions	N/A
Compatible with	CGV 003*, CGV-004*, CGV-009A, CGV-010. *Coupling Required.

Pipes

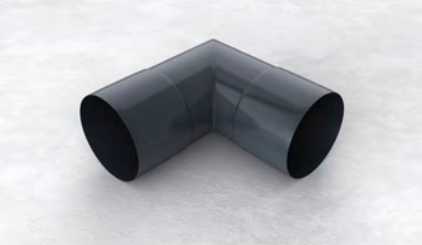
Product Reference	CGV-003
Description	Solid Pipe
Dimensions	3M Long 114mm external diameter
Compatible with	CGV-002, CGV-006, CGV-007, CGV-008, CGV-009, CGV-010, CGV-017, CGV-022, CGV-023

Product Reference	CGV-004
Description	Twinwall Pipe
Dimensions	3M Long 110mm external diameter
Compatible with	CGV-002, CGV-006, CGV-007, CGV-008, CGV-009, CGV-010, CGV-017, CGV-022, CGV-023

Product Reference	CGV-005
Description	Flexible Twinwall Pipe
Dimensions	1.5M Long 110mm external diameter
Compatible with	CGV-002, CGV-006, CGV-007, CGV-008, CGV-009, CGV-010, CGV-017, CGV-022, CGV-023

For further information on the full range of VOC and Ground Gas Protection, please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.

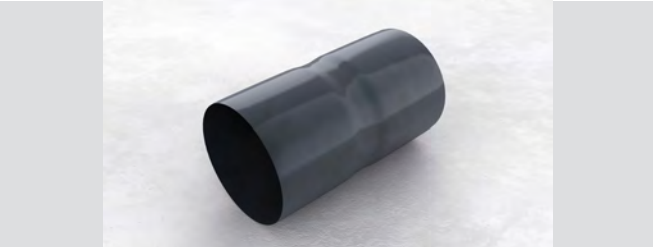
Fittings



Product Reference	CGV-006
Description	90° Bend
Dimensions	N/A
Compatible with	CGV-003, CGV-004, CGV-005, CGV-017, CGV-025, CGV-026, CGV-027

Product Reference	CGV-007
Description	Tee Piece
Dimensions	N/A
Compatible with	CGV-003, CGV-004, CGV-005, CGV-017

Product Reference	CGV-008
Description	End Cap
Dimensions	N/A
Compatible with	CGV-003, CGV-004, CGV-005



Product Reference	CGV-009
Description	Coupler
Dimensions	N/A
Compatible with	CGV-003, CGV-004, CGV-005, CGV-017

Product Reference	CGV-010
Description	Vent to Pipe Adaptor
Dimensions	N/A
Compatible with	CGV-003, CGV-004, CGV-005, CGV-011

Issued: 03/2016

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www.cordek.com

GEOSHIELD Verification Report

PROJECT REFERENCE:	GEO100718		
REPORT NUMBER:	002	REPORT DATE:	09/12/2019
PROJECT:	Godfrey Ltd - Kilburn High Road		
PROJECT ADDRESS:	254 Kilburn High Road		

London

NW6 2BS

MEMBRANE SPECIFICATION: Verified in accordance CIRIA 735.

Design in accordance with BS8485 2015 + 2019 for Methane and Carbon Dioxide.

Substrate prepared in-accordance with manufactures instructions and BS8485

Cordek Tori-Gas Membrane - Taped System

Cordek Cellcore

Cordek Cellvent HX

Telescopic Vents

GEOSHIELD Verification Report

MEMBRANE SPECIFICATION:

DESIGN DETAILS:

3630 - 200F Drainage Layout

3630 - 201 D

3630 - 001 Piling Layout Rev A

3630 - 002 Pile Cap Layout Rev B

3630 - 004 Core Layout Rev A

3630 - 005 Ground Floor Layout Rev E

22_446 - Separation Wall Detail 08 Rev 01

3144_420 External Wall Details Rev 04

3144_421 External Wall Details Rev 03

Issued on 09/12/2019 - 3144 420 External Wall Details Sht 1 Rev 04

GEOSHIELD Verification Report

VERIFICATION OFFICER: Chris Ingham

VERIFICATION COMPANY: GeoShield Limited

Icon Business Park, 4100 Park Approach

Thorpe Park, LEEDS

West Yorkshire

LS15 8GB

CONTACT NUMBER: 07555214679

EMAIL ADDRESS: CIngham@geoshield.co.uk

ORDER NUMBER:

PER VISIT: YES: ✔ NO: ☐ PROJECT: YES: ☐ NO: ✔

GEOSHIELD Verification Report

CLIENT DETAILS

CLIENT CONTACT:	Aleem Hassoo
CONTACTS ROLE:	Godfrey Ltd
MOBILE PHONE:	02082093048
EMAIL ADDRESS:	Aleem@godfreylondon.co.uk

CLIENT CONTACT:	Robert Lewis
CONTACTS ROLE:	Site Manager
MOBILE PHONE:	07866 464872
EMAIL ADDRESS	Robert.lewis@godfreylondon.co.uk
NOTES:	
NOTES:	
NOTES:	

GEOSHIELD Verification Report

APPLICATION TEAM LEADERS

APPLICATOR NAME:	Bill Ndreu
COMPANY:	BNS Screeding Ltd
APPLICATOR TEL:	
APPLICATOR EMAIL:	Bndreu@bns-screeding.com

APPLICATOR NAME:	
COMPANY:	
APPLICATOR TEL:	
APPLICATOR EMAIL:	

NOTES:	
NOTES:	
NOTES:	
NOTES:	

GEOSHIELD Verification Report

AREA SURVEYED: A-J/1-21

SITE CONDITIONS:

WEATHER: Clear

TEMPERATURE: 7C

MEMBRANE TEMPERATURE: Not Applicable - Membrane covered with screed

RELATIVE HUMIDITY: 68

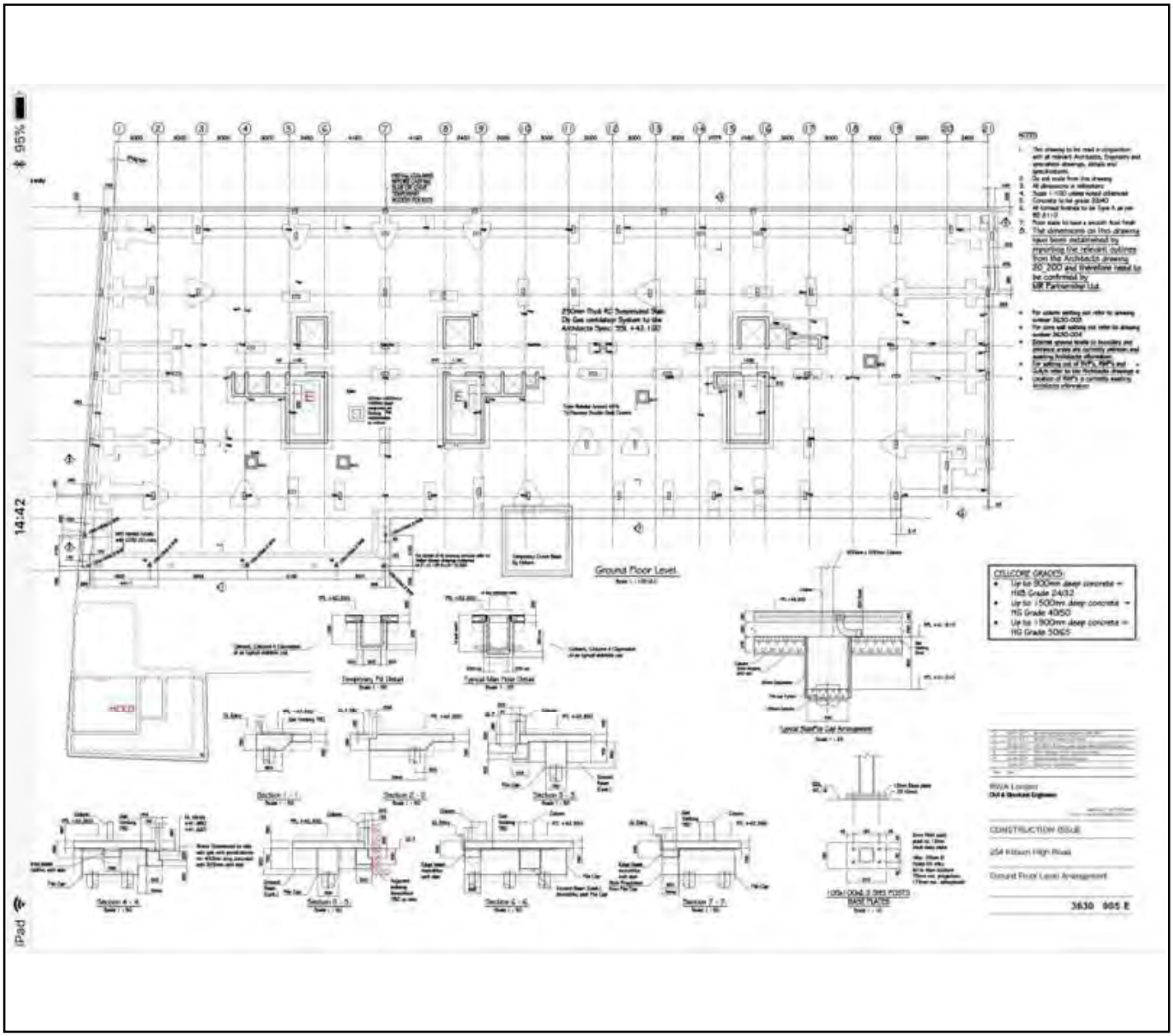
TIME: 10:00 - 12:00 REPORT NUMBER: 002

DATE: 9th December 2019

ACCOMPANIED Eoghan McHugh - Godfrey Construction

GEOSHIELD Verification Report

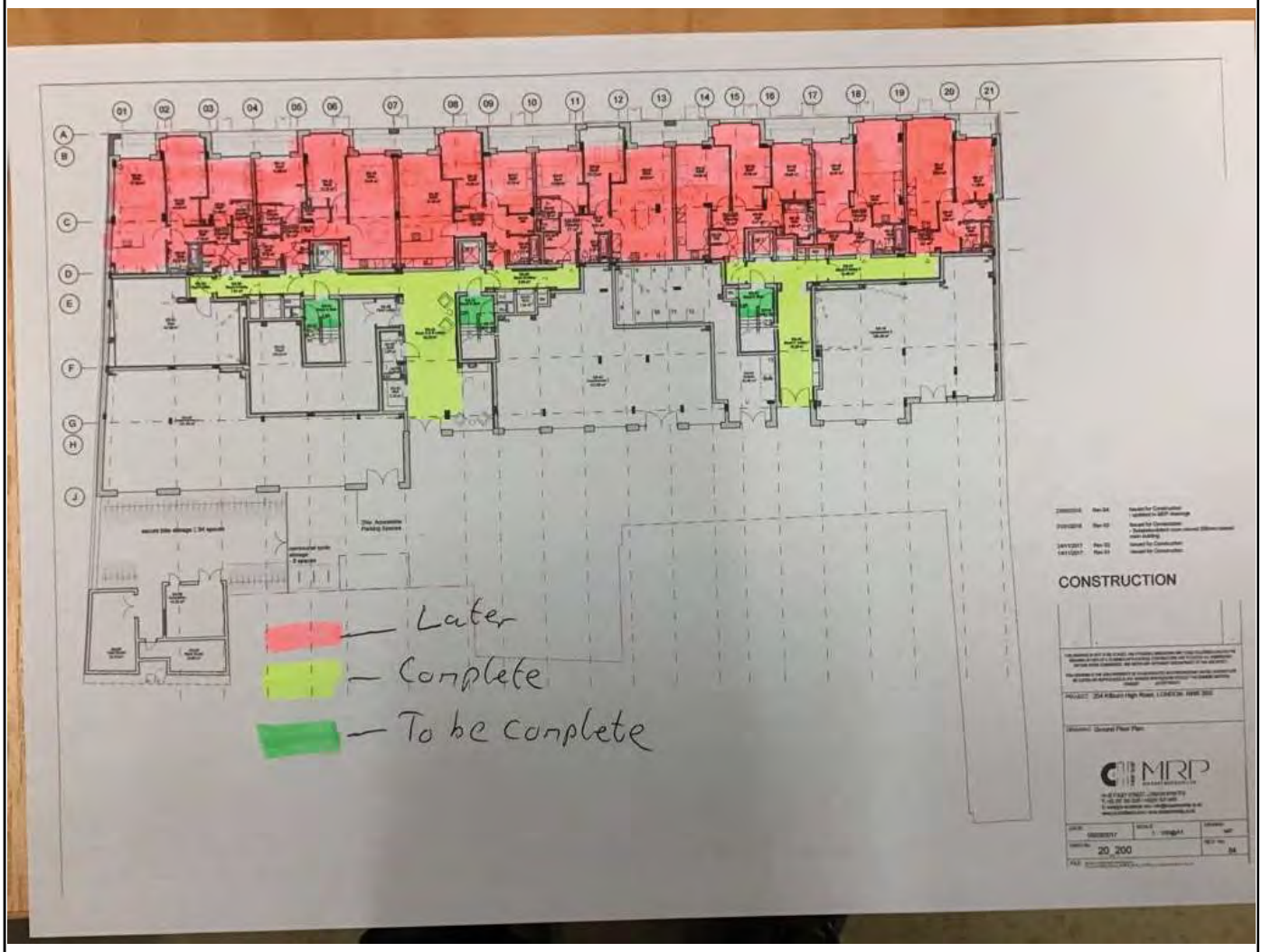
VERIFICATION LAYOUT



Floor Plan

GEOSHIELD Verification Report

VERIFICATION LAYOUT



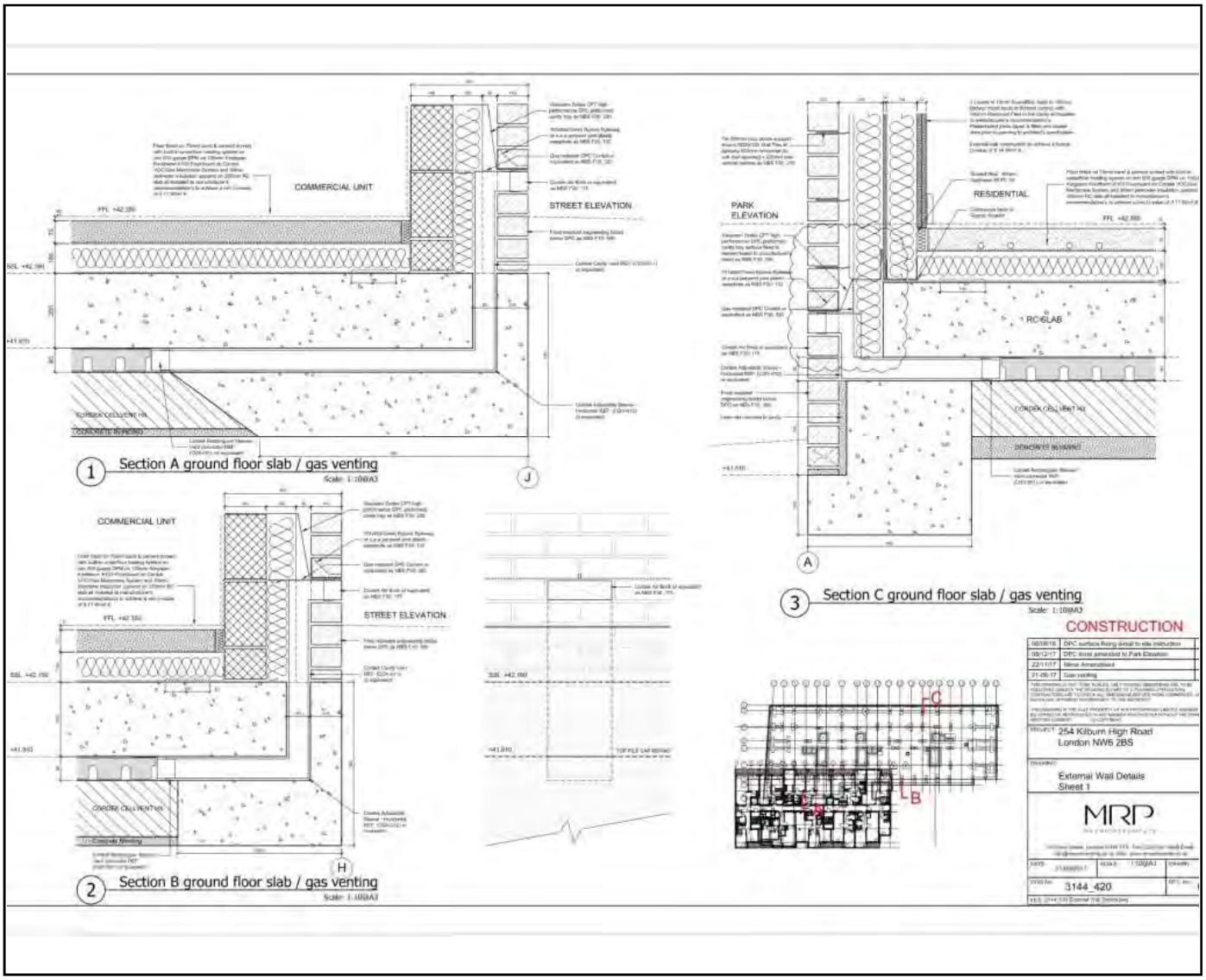
Floor Plan. Yellow areas show where the DPC has been covered with screed.

Green areas show where the DPC is still to be installed (stairwells).

Pink area is to be completed but no contract of works has yet been agreed.

GEOSHIELD Verification Report

VERIFICATION LAYOUT



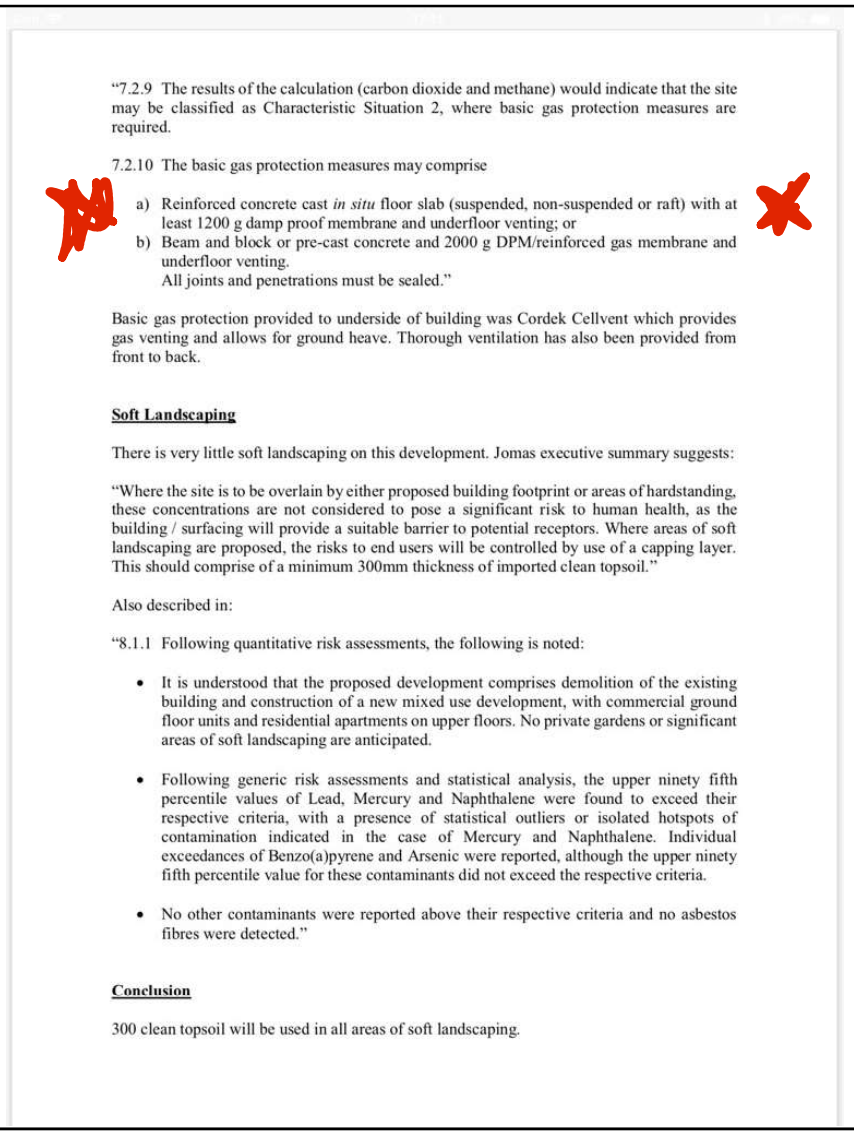
Drawing issued confirming the design detail for ventilating beneath the raft

slab. Note: entire building is built on a suspended raft foundation with

ventilation beneath the raft.

GEOSHIELD Verification Report

VERIFICATION LAYOUT



"7.2.9 The results of the calculation (carbon dioxide and methane) would indicate that the site may be classified as Characteristic Situation 2, where basic gas protection measures are required.

7.2.10 The basic gas protection measures may comprise

a) Reinforced concrete cast *in situ* floor slab (suspended, non-suspended or raft) with at least 1200 g damp proof membrane and underfloor venting; or
b) Beam and block or pre-cast concrete and 2000 g DPM/reinforced gas membrane and underfloor venting.
All joints and penetrations must be sealed."

Basic gas protection provided to underside of building was Cordek Cellvent which provides gas venting and allows for ground heave. Thorough ventilation has also been provided from front to back.

Soft Landscaping

There is very little soft landscaping on this development. Jomas executive summary suggests:

"Where the site is to be overlain by either proposed building footprint or areas of hardstanding, these concentrations are not considered to pose a significant risk to human health, as the building / surfacing will provide a suitable barrier to potential receptors. Where areas of soft landscaping are proposed, the risks to end users will be controlled by use of a capping layer. This should comprise of a minimum 300mm thickness of imported clean topsoil."

Also described in:

"8.1.1 Following quantitative risk assessments, the following is noted:

- It is understood that the proposed development comprises demolition of the existing building and construction of a new mixed use development, with commercial ground floor units and residential apartments on upper floors. No private gardens or significant areas of soft landscaping are anticipated.
- Following generic risk assessments and statistical analysis, the upper ninety fifth percentile values of Lead, Mercury and Naphthalene were found to exceed their respective criteria, with a presence of statistical outliers or isolated hotspots of contamination indicated in the case of Mercury and Naphthalene. Individual exceedances of Benzo(a)pyrene and Arsenic were reported, although the upper ninety fifth percentile value for these contaminants did not exceed the respective criteria.
- No other contaminants were reported above their respective criteria and no asbestos fibres were detected."

Conclusion

300 clean topsoil will be used in all areas of soft landscaping.

Approved remediation statement states the ground gas protection system is to

comprise of a suspended raft foundation with underfloor venting with a DPC installed

on top of the raft.

GEOSHIELD Verification Report

VERIFICATION ITEM ONE

LOCATION/GRID LINE: A-J/1-21

NOTES: O&M Manual produced by Toureen (previous contractor

who built the up to floor level before handover to Godfreys) confirms Cordek Cellvent

HX has been installed beneath the suspended raft slab. Photos have been submitted

to provide evidence that these works were carried out (included in Additional Photos),

1. Cellvent HX Data Sheet in O&M manual

2. Cellvent HX Data Sheet in O&M manual

GEOSHIELD Verification Report

VERIFICATION ITEM ONE

Data Sheet

Cellvent HX Data Sheet

Cellvent HX combines the benefits of Ventform with the Cellcore HX range.

Cellvent HX alleviates the effects of ground movement and also provides an excellent gas venting medium. It is designed for use under suitably reinforced ground floor slabs. The depth of the Cellvent HX panel will depend upon the amount of ground heave that has been predicted (for a full explanation and design examples please refer to our Ground Movement brochure or the Cordek website).

Key Features

- Provides combined ground heave protection and gas venting capabilities in a single product
- Range of thicknesses and grades to suit most project requirements
- Light, robust and easy to install 2.40m x 1.20m panels
- All variations include drainage slots to alleviate water pressure
- Unaffected by both UV light and water
- Can be connected to the Cordek range of perimeter vents to vent hazardous ground gases from beneath the building footprint to the atmosphere.

Installation

The procedure for installing the Cellvent panels is straightforward; the following points should be adhered to:

- Ensure that the Cellvent HX panels are placed upon a firm, level surface. A concrete or sand/cement blinding will often be required.
- Do not overload the Cellvent HX panels with reinforcement or surcharge them with concrete.

Storage & Handling

All products are delivered in a polythene wrapping and are clearly labelled. The packs of Cellvent HX can be manually handled and offloaded upon delivery, taking into account site Health and Safety procedures.

Due to the relatively light nature of the product, all packs of Cellvent HX should be weighted down or secured if stored outside prior to installation.

For further information please contact the Cordek technical team on 01403 799600, techsupport@cordek.com or consult our website at www.cordek.com.

M-DS05 Cellvent Data Sheet V2 03/16

cordek

3. Cellvent HX Data Sheet in O&M manual. The number of points gained under

BS8485:2019 for this type of ventilation is determined by the number of telescopic

vents installed around the perimeter walls.