

## GAS MEMBRANE VALIDATION

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| Site: Bowes Street                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                         |
| Date: 02-11-2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Project Number: 11-813                                                  |
| Project Manager: R. Horseman                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | E3P Engineer: J. James                                                  |
| PM Qualifications: BSC(Hons) FGS Cenv                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Engineer Qualifications: Verification of Gas Protection Systems July 18 |
| Ground Gas Risk Assessment: <b>Characteristic Situation 2 / Amber 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                         |
| <p><b>Overview:</b></p> <p>The membrane comprised Visqueen GX DPC wrapped under slab and spanned across internal and external walls which was taped to VOC block with GX jointing tape.</p> <p>E3P can confirm there were no punctures or tears at the time of inspection. Upon being laid the membrane was covered with a Celotex (closed Cell) floor insulation material which is considered to provide a high degree of protection.</p> <p>All external joints were inspected and E3P can confirm that the membrane was overlapped and double taped to external and internal gas resistant GX DPM. The membrane was taped to the gas resistant VOC Block DPM using a double-sided jointing tape. All the overlaps were then additionally taped using foil backed girth tape.</p> <p>Each unit has a service duct located to the front and outer edge of the property. E3P inspected each one and can confirm that the top hats have been adequately sealed against the membrane.</p> <p>Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that Plots 1-6 have been installed with gas protection measures in accordance with Characteristic Situation 2 to an acceptable level of workmanship.</p> <p>Based on the information provided within this report, the site inspections and validation checklists, E3P can confirm that <b>Plots 19-20</b> have been installed with gas protection measures in accordance with Characteristic Situation 2 / Amber 1 to an acceptable level of workmanship.</p> |                                                                         |
| Membrane Specification: Hydrocarbon Resistant Membrane (VOC Blok and Visqueen GX)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                         |
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**Plot – 19**

**General Condition of Membrane-Good Condition**



**Verification of Joints and Seals-Good Condition**



**Verification of Service Penetrations-Good Condition**



**Verification of Ventilation- Good Condition**



Plot - 20

General Condition of Membrane-Good Condition



Verification of Joints and Seals-Good Condition



Verification of Service Penetrations-Good Condition



Verification of ventilation-Good Condition





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Plot No:

119

# Gas Protection Validation Site Record

Inspection date/time:

2/11/20

Inspected by:

J. SAMES

Photographed:

✓/x

✓/x Notes/recommendations

|                                         |   |  |
|-----------------------------------------|---|--|
| Membrane Type Correct                   | ✓ |  |
| Extent of Coverage Correct              | ✓ |  |
| Underside of Membrane                   | ✓ |  |
| Slab / membrane condition               | ✓ |  |
| Leaps and joints                        | ✓ |  |
| Damp-proof course                       | ✓ |  |
| Service entries                         | ✓ |  |
| Folded Membrane Joint Taped & Inspected | ✓ |  |

This Plot has **PASSED/FAILED** inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form).

An additional inspection visit IS/IS NOT required for this Plot

Inspection by: J. SAMES Signed: J. SAMES

One record sheet to be completed for each plot - To be completed by E3P Professional Inspecting.



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PLOT No. 20

### Gas Protection Validation Site Record

| Inspection date/time:                   | 21/1/20 | Inspected by: | J. SAMPES | Photographed: | ✓ |
|-----------------------------------------|---------|---------------|-----------|---------------|---|
| ✓/x Notes/recommendations               |         |               |           |               |   |
| Membrane Type Correct                   | ✓       |               |           |               |   |
| Extent of Coverage Correct              | ✓       |               |           |               |   |
| Underside of Membrane                   | ✓       |               |           |               |   |
| Slab / membrane condition               | ✓       |               |           |               |   |
| Laps and joints                         | ✓       |               |           |               |   |
| Damp-proof course                       | ✓       |               |           |               |   |
| Service entries                         | ✓       |               |           |               |   |
| Folded Membrane Joint Taped & inspected | ✓       |               |           |               |   |

This Plot has **PASSED/FAILED\*** inspection. (Any proposed remedial works will be noted in the "Remarks" column on this form).

An additional inspection visit IS/IS NOT\* required for this Plot.

Inspection by: J. SAMPES

Signed: J. SAMPES

One record sheet to be completed for each plot - To be completed by E3P Professional Inspecting.