



GeoShield Verification Report 03



PROJECT REFERENCE:

GEO105396

PROJECT ADDRESS:

R4 Civils,
Barlestone,
Barton Road,
Osbaston
Nuneaton,
CV13 0EU

SPECIFICATION:

Verified in accordance with CIRIA 735.

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

Substrate prepared in accordance with
manufacturer's instructions.

MATERIAL SPECIFICATION:

JUTA GP1 Gas Barrier
JUTA GP1 SAM



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NAME OF SURVEYOR:

Nigel White

VERIFICATION COMPANY:

GeoShield Limited

COMPANY ADDRESS:

Icon Business Centre

4100 Park Approach, Thorpe Park

Leeds

LS15 8GB

CONTACT NUMBER:

07584 222519

EMAIL ADDRESS:

nwhite@geoshield.co.uk



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CLIENT DETAILS

CLIENT CONTACT:

CONTACTS ROLE:

MOBILE PHONE:

EMAIL ADDRESS:



CLIENT CONTACT:

CONTACTS ROLE:

MOBILE PHONE:

EMAIL ADDRESS:

NOTES:



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APPLICATOR'S DETAILS

APPLICATOR NAME: Connor

COMPANY: Omega Lining Solutions

APPLICATOR TEL: 07561 740706

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY:

APPLICATOR TEL:

APPLICATOR EMAIL:

NOTES:

At least one member of each team group will have a NVQ Level 2 qualification in gas membrane installation.

All installers are deemed competent and skilled to complete the installation of gas membranes.



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INSPECTION AREA(S)

Plots 37, 38, 39 & 40 - Full Line Out

SITE CONDITIONS

WEATHER:

Sunny

TEMPERATURE:

21°C

TIME:

10.00 - 11.15

DATE:

09.07.2025

REPORT NUMBER:

003

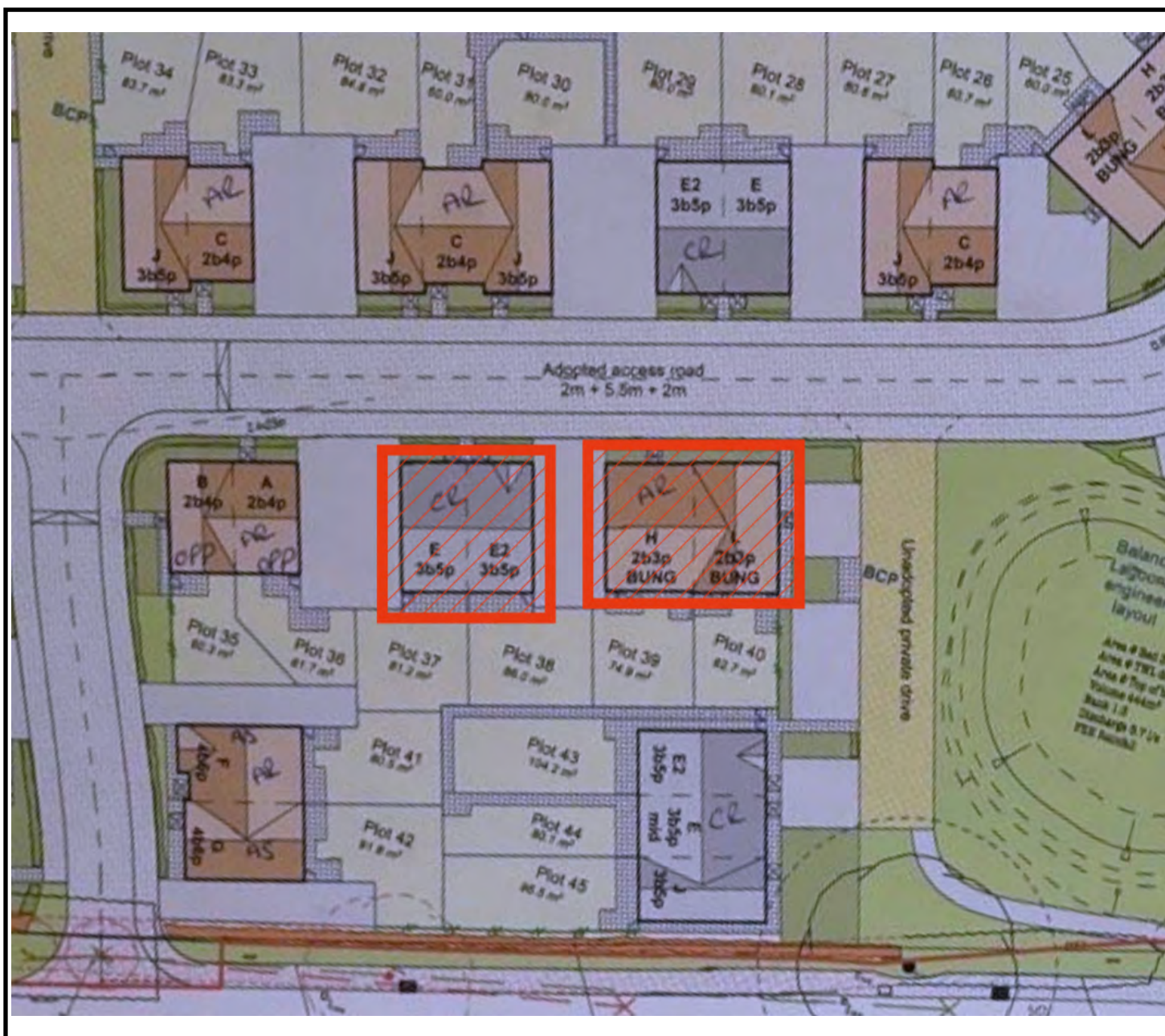
ACCOMPANIED BY:

VERIFICATION LAYOUT



The photograph above shows a full plan layout of the site.

VERIFICATION LAYOUT



The photograph above shows a plan layout of the site. The areas highlighted in red show plots 37, 38, 39, 40 where the verification inspection took place on site today.

OVERVIEW



The photograph above displays an overview of a plot where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of a plot where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of a plot where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of a plot where today's verification inspection took place on site.



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VERIFICATION ITEM ONE

AREA INSPECTED: Plots 37, 38, 39 & 40 - Full Line Out

INSPECTION DETAILS: installation of the JUTA GP1 Gas Barrier



NOTES:

A complete line out of the JUTA GP1 Gas Barrier has been installed across the footprint of plots 37, 38, 39 & 40. The JUTA GP1 Gas Barrier has been lined across the entirety of the plots, including the internal party walls and external cavities to ensure continuity throughout. All lap joints between



NOTES:

the adjacent sheets of JUTA GP1 Gas Barrier have been overlapped a minimum of 100mm and heat welded using a hot air leister and a silicone roller with adequate pressure applied to ensure a continuous weld is achieved. Installed in accordance with manufacturer's specifications.

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VERIFICATION ITEM ONE



All lap joints were subjected to thorough mechanical point stress testing and non destructive air lance integrity testing throughout the installation. No miswelded lap joints were identified at the time of the inspection, however upon a visual inspection one small hole in the membrane was identified and successfully remediated on site in the presence of GeoShield.



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REMEDIATIONS

Faults Identified and Remediated



As mentioned earlier in this report, thorough visual inspections, supported by mechanical point stress testing were conducted upon all aspects of the installation. One small fault in the outer leaf of the JUTA GP1 Gas Barrier was identified. The fault was brought to the attention of the installers and remediated



one site in the presence of GeoShield. The installers opted to remediate the faults by applying 150mm patches of JUTA GP SAM over the affected area. Heat and firm rolled pressure ensured the JUTA GP SAM had fully bonded. A thorough mechanical point stress test was conducted on the remedial works and identified no faults.

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VERIFICATION ITEM TWO

AREA INSPECTED: Plots 37, 38, 39 & 40 - Full Line Out

INSPECTION DETAILS: Pipe Penetrations



NOTES:

Throughout the installation of the JUTA GP1 Gas Barrier to the referenced plots, there were a number of pipe penetrations that have been sealed in accordance with manufacturer's specifications and design guidelines. This has been achieved using JUTA GP SAM which is a self adhesive membrane.



NOTES:

The installers have first cut the JUTA GP1 Gas Barrier tight around the base of each pipe penetration to minimise voided areas. Next, strips of JUTA GP SAM are placed intricately in a top hat formation around the pipe penetration and onto the JUTA GP1 Gas Barrier. Heat and rolled pressure is applied to activate the bitumen backing.



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VERIFICATION ITEM THREE

AREA INSPECTED: Plots 37, 38, 39 & 40 - Full Line Out

INSPECTION DETAILS: Corners and Thresholds



NOTES:

A number of corners and thresholds throughout the referenced plots have been sealed as per manufacturer's specifications and design guidelines. This has been achieved using JUTA GP SAM. The JUTA GP1 Gas Barrier has been cut to minimise any voided areas and gaps across the footprint of the referenced



NOTES:

plots. Each corner and threshold junction has been reinforced by heating strips of JUTA GP SAM and placing them into position around each corner, onto the JUTA GP1 Gas Barrier. Firm rolled pressure is applied with a silicone roller to aid in the adhesion ensuring the JUTA GP SAM has fully bonded.

ADDITIONAL PHOTOGRAPHS



The JUTA GP1 Gas Barrier has been installed tight to the perimeter walls and across the cavities.



Sufficient overlap achieved.



A pick and probe test being carried out.



Safety warning attached to a pipe penetration.

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AIR LANCE INTEGRITY TESTING

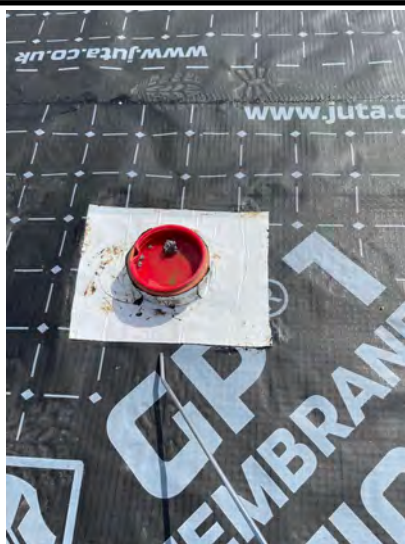
Air Lance Integrity Testing - ASTM D4437-08:2013. This inspects all seams for unbonded areas using a 4.8mm air nozzle held a minimum of 51mm away. 50 PSI is the minimum requirement. The air nozzle is directed on the upper edge seam, ripples indicate an unbonded seam. Each fault identified is highlighted for remediation to take place.



Correct pressure achieved.



Air lance test on a welded lap.



Air lance test on a pipe penetration.



Air lance test on a sealed corner.



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GAS MEMBRANE TESTING



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[illegible]



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VERIFICATION SUMMARY

This was the third visit to the site where verification was required for the full line out installation of the JUTA GP1 Gas Barrier to plots 35, 36, 37 & 38.

All overlaps between the adjacent sheets of JUTA GP1 Gas Barrier have been successfully welded using a hot air leister and silicone roller creating continuous welded joints throughout.

All details throughout the installation, such as corners, thresholds and pipe penetrations have been successfully sealed using JUTA GP SAM, heated down to aid in the adherence.

Thorough mechanical point stress testing, as well as visual inspections and non destructive air lance integrity testing were conducted throughout the visit today.

One small hole in the outer leaf of the JUTA GP1 Gas Barrier was identified. This was successfully remediated on site in the presence of GeoShield, using patches of JUTA GP SAM.

The installation has been conducted to a good NVQ 2 standard and in accordance with manufacturer's specifications.

Is the project ready for handover?	No
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This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+A1 2019.

GEOSHIELD SIGNATURE

DATE: 09-Jul-2025