



GeoShield Verification Report 8



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:

Liam England

VERIFICATION COMPANY:

GeoShield Limited

COMPANY ADDRESS:

Icon Business Centre

4100 Park Approach, Thorpe Park

Leeds

LS15 8GB

CONTACT NUMBER:

07551 259023

EMAIL ADDRESS:

lengland@geoshield.co.uk



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CLIENT DETAILS

CLIENT CONTACT:	Ricky Cooper
CONTACTS ROLE:	Director - Omega Lining Solutions Ltd
MOBILE PHONE:	01773 317855
EMAIL ADDRESS:	enquiry@omega-ls.co.uk



CLIENT CONTACT:	
CONTACTS ROLE:	
MOBILE PHONE:	
EMAIL ADDRESS:	
NOTES:	



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APPLICATOR'S DETAILS

APPLICATOR NAME: Sam Scott

COMPANY: Omega Lining Solutions Ltd

APPLICATOR TEL: 01773 317855

APPLICATOR EMAIL:

APPLICATOR NAME:

COMPANY: Omega Lining Solutions Ltd

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 5, 6 & 7 - Full Line Out

SITE CONDITIONS

WEATHER:

Sunny

TEMPERATURE:

12°C

TIME:

09:05 - 10:45

DATE:

10.04.2026

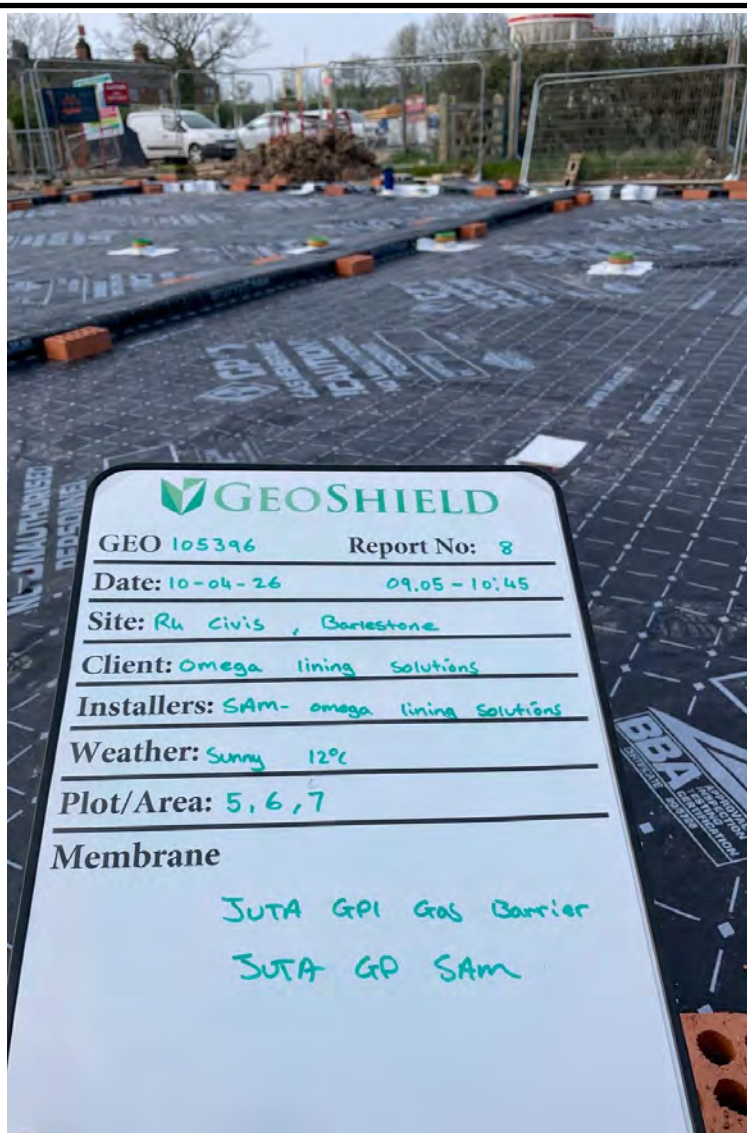
REPORT NUMBER:

008

ACCOMPANIED BY:

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VERIFICATION INSPECTION INFORMATION



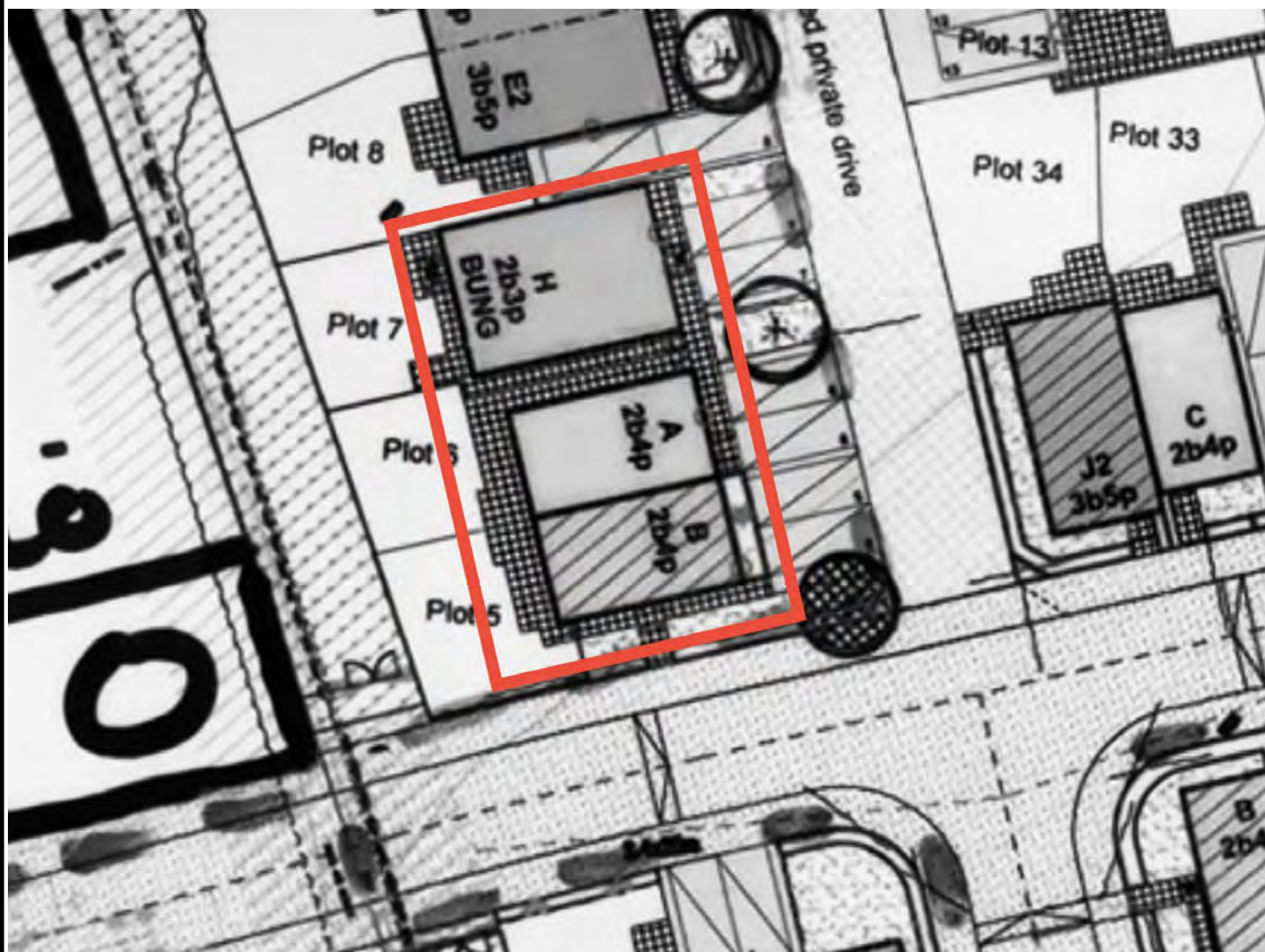
The image above provides details of today's verification inspection visit to site, including the gas membrane(s) used for the installation.

VERIFICATION LAYOUT



The photograph above shows a plan layout of the site for this project.

VERIFICATION LAYOUT



The areas highlighted show Plots 5, 6 & 7 where the verification inspection of the JUTA GP1 Gas Barrier complete line out installation took place on site today.

OVERVIEW



The photograph above displays an overview of Plots 5 & 6 where today's verification inspection took place on site.

OVERVIEW



The photograph above displays an overview of Plot 7 where today's verification inspection took place on site.



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VERIFICATION ITEM ONE

LOCATION/GRID LINE: Plots 5, 6 & 7 - Full Line Out

Installation of JUTA GP1 Gas Barrier - Lap Joints



NOTES:

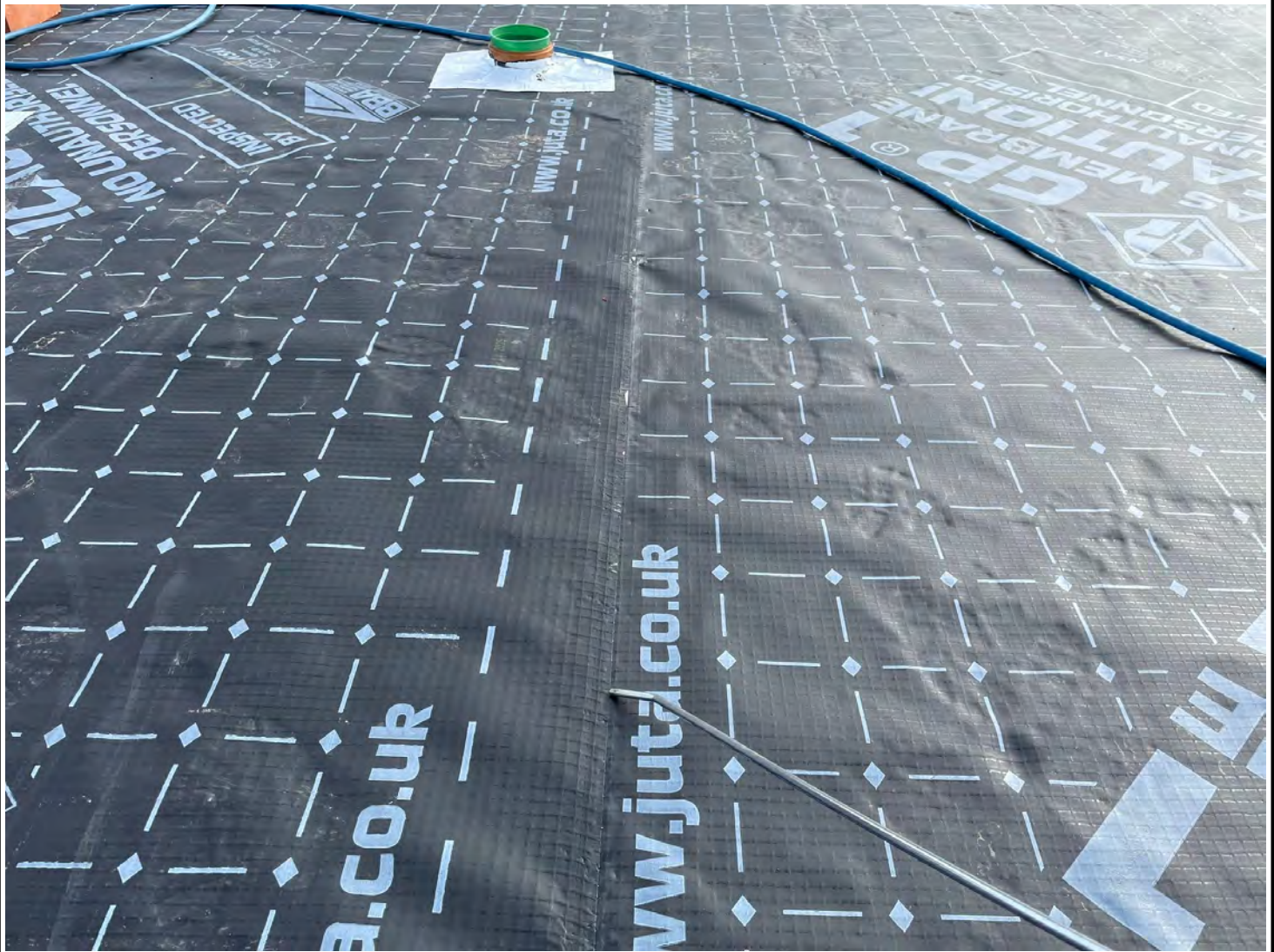
A complete line out of the JUTA GP1 Gas Barrier has been installed across the footprint of Plots 5, 6 & 7, upon an insulated block and beam ventilated sub floor void. The JUTA GP1 Gas Barrier has been lined out across the entirety of the plots, including the internal party walls, ensuring it overlaps the external cavity to



NOTES:

the outer leaf brickwork. All lap joints between the adjacent sheets of JUTA GP1 Gas Barrier have been overlapped a sufficient amount, and heat welded using a hot air leister and silicone roller with adequate pressure applied to ensure a continuous gas resistant seal is achieved.

VERIFICATION ITEM ONE



The above photograph displays a non destructive air lance integrity test being conducted upon a welded lap joint of the JUTA GP1 Gas Barrier. Thorough visual inspections, supported by non destructive air lance integrity testing conducted upon all overlaps, identified three faults.

Tested and verified in accordance with CIRIA 735.



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REMEDIATIONS

Faults Identified & Remediated



As mentioned, three faults were identified during the testing procedures conducted upon all aspects of the installation. The faults were brought to the attention of the installers and remediated during the visit, in the presence of GeoShield.



The faults were remediated by applying 150mm patches of JUTA GP SAM over the affected areas with heat and rolled pressure applied to activate the bitumen backing. No further faults or defects were identified during the testing of the remedial work.

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VERIFICATION ITEM TWO

LOCATION/GRID LINE: Plots 5, 6 & 7 - Full Line Out

Pipe Penetrations



NOTES:

Throughout the complete line out 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 gas resistant self adhesive



NOTES:

membrane. The installers have first cut the JUTA GP1 Gas Barrier tight around the base of each pipe penetration to minimise voided areas. Next, patches of JUTA GP SAM are placed intricately in a petal formation around the pipe penetration and onto the JUTA GP1 Gas Barrier, with a 300mm square of JUTA GP SAM placed

VERIFICATION ITEM TWO



over the top to form a top hat detail. Heat and rolled pressure is applied to activate the bitumen backing, creating a secure bond between the pipe penetration and the JUTA GP1 Gas Barrier. All pipe penetrations throughout the referenced plots were subjected to thorough mechanical point stress testing and non destructive air lance integrity testing. No faults or defects were identified at the time of the inspection.

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VERIFICATION ITEM THREE

LOCATION/GRID LINE: Plots 5, 6 & 7 - Full Line Out

Corner & Threshold Detailing



NOTES:

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



NOTES:

corner and threshold junction has been reinforced by heating strips of JUTA GP SAM and placing into position around each corner and threshold, 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.

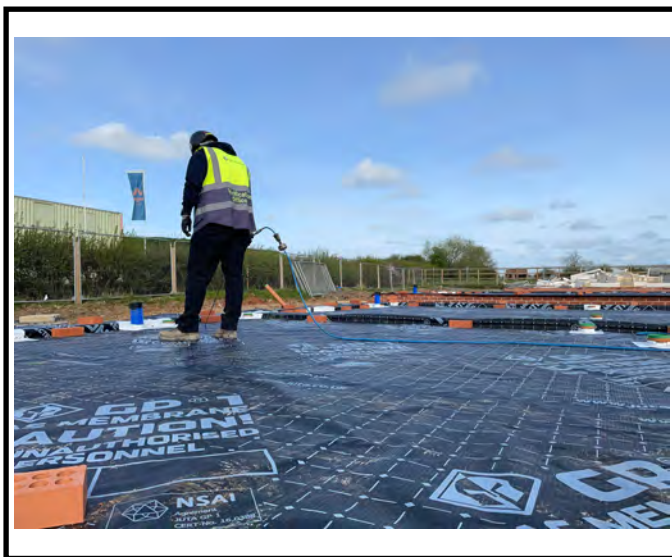
VERIFICATION ITEM THREE



As with the pipe penetrations, a probe and an air lance were run along all JUTA GP SAM corner detailing to validate that a gas tight seal had been achieved throughout. No faults or defects were identified. A complete adhesion has been achieved. Tested and verified in accordance with CIRIA 735.

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 no more than 50mm 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.



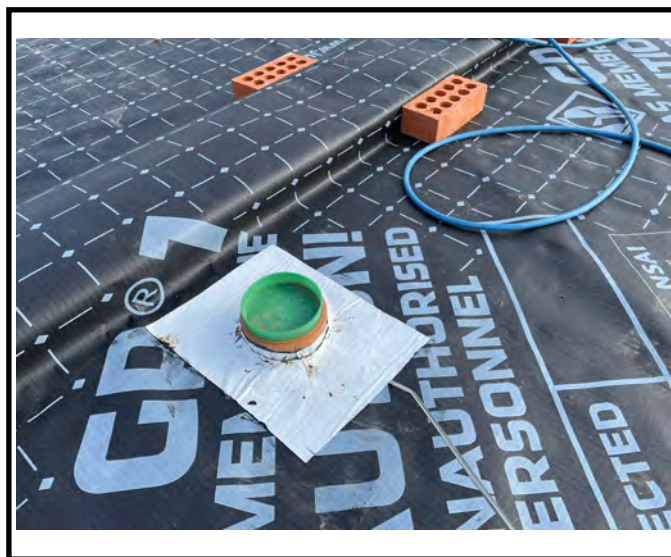
Air lance test on a welded lap.



Air lance test on a welded lap.



Air lance test on a sealed corner.



Air lance test on a pipe penetration.



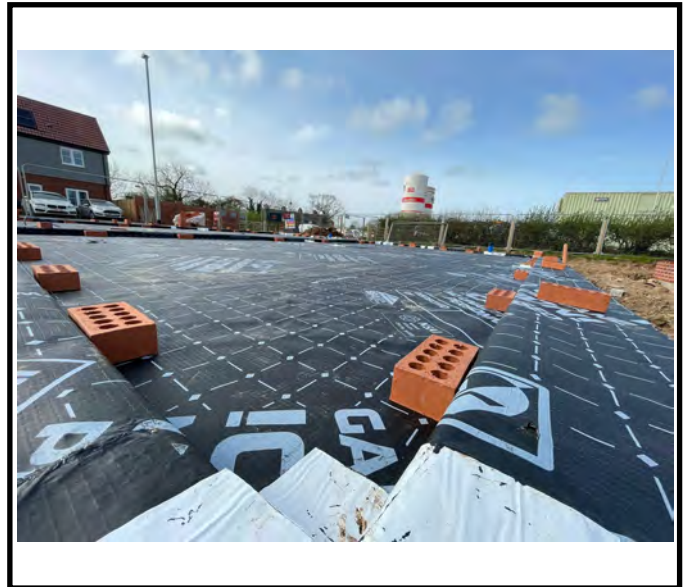
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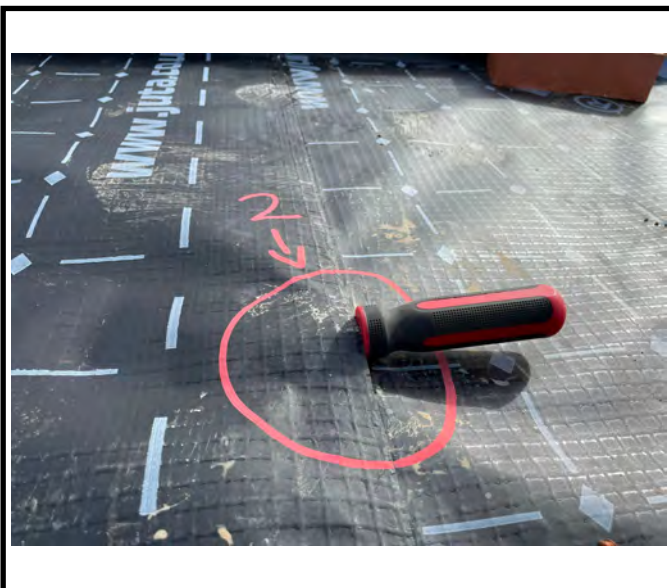
ADDITIONAL PHOTOGRAPHS



GeoShield safety warning notices placed around details to be sealed internally at a later date.



The JUTA GP1 Gas Barrier taken over the external cavity.



A fault identified.



A mechanical point stress test being conducted upon the remediated fault.



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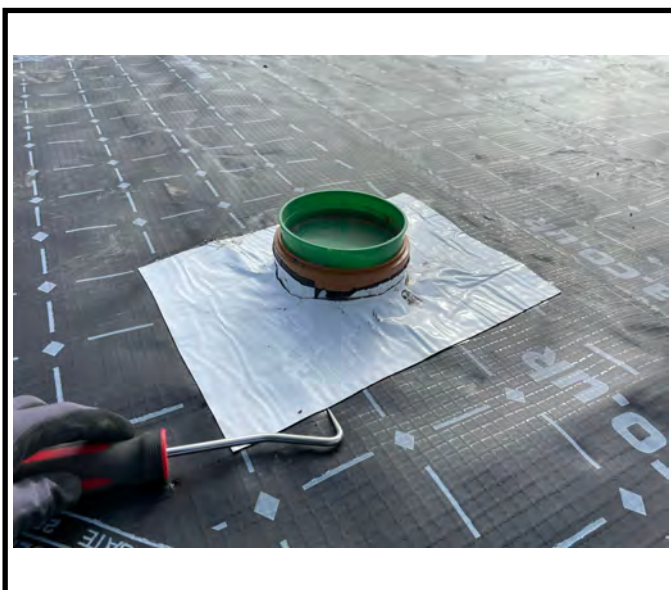
ADDITIONAL PHOTOGRAPHS



A fault identified.



A mechanical point stress test being conducted upon the remediated fault.



A mechanical point stress test being conducted upon a sealed pipe penetration.



A mechanical point stress test being conducted upon a sealed pipe penetration.



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ADDITIONAL PHOTOGRAPHS



A mechanical point stress test being conducted upon a sealed corner.



A mechanical point stress test being conducted upon a sealed corner.



GeoShield Verification Sticker confirming sign off of Plots 5 & 6.



GeoShield Verification Sticker confirming sign off of Plot 7.



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GAS MEMBRANE TESTING

VISUAL /PICK & PROBE: ☒

AIR LANCING: ☒

DESTRUCTIVE: ☐

INERT GAS TEST: ☐

SMOKE TEST: ☐

DIELECTRIC: ☐

OTHER (PLEASE SPECIFY): ☐

Report No.	AREA INSPECTED	Y/N
001	Plots 1, 2, 3, 4, 35 & 36 - Full Line Out	☒
002	Plots 41 & 42 - Full Line Out	☒
003	Plots 37, 38, 39 & 40 - Full Line Out	☒
004	Plots 26, 27, 28, 29, 30, 31, 32, 33 & 34 - Full Line Out	☒
005	Plots 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 43.....	☒
	44 & 45 - Full Line Out	☒
006	Plots 8, 9, 10, 11, 50, 51, 52, 53, 54 & 55 - Full Line Out	☒
007	Plots 46, 47, 48 & 49 - Full Line Out	☒
008	Plots 5, 6 & 7 - Full Line Out	☒
		☐
		☐



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REMEDIATION LOG

[illegible]



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VERIFICATION SUMMARY

This was the eighth visit to the site where verification was required for the complete line out installation of the JUTA GP1 Gas Barrier to Plots 5, 6 & 7.

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

All details throughout the installation, such as pipe penetrations, thresholds and corners have been sealed using JUTA GP SAM, a self adhesive membrane which has been heated down to aid in the adherence.

Thorough visual inspections, supported by non destructive air lance integrity testing and mechanical point stress testing were conducted upon all aspects of the installation. A total of three faults were identified, all of which were remediated during the visit in the presence of GeoShield.

Is the project ready for handover?

No

This was passed and verified in accordance with CIRIA 735 and installed to BS8485:2015+A1 2019.

GEOSHIELD SIGNATURE

L. England

DATE:

10-Apr-2026