

Accreditation Certificate

Roadbridge Ltd

Ballyclough, Ballysheedy, Co. Limerick

Testing Laboratory

Registration number: 190T


is accredited by the Irish National Accreditation Board (INAB) to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005 2nd Edition *“General Requirements for the Competence of Testing and Calibration Laboratories”* (This Certificate must be read in conjunction with the Annexed Schedule of Accreditation)

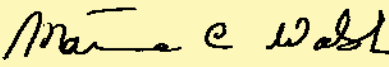
Date of award of accreditation: 19:02:2008

Date of last renewal of accreditation: 19:02:2008

Expiry date of this certificate of accreditation: 19:02:2013

This Accreditation shall remain in force until further notice subject to continuing compliance with INAB accreditation criteria, ISO/IEC 17025 and any further requirements specified by the Irish National Accreditation Board.

Manager: 
Mr Tom Dempsey

Chairperson: 
Dr Máire Walsh

Issued on 19 February 2008

Organisations are subject to annual surveillance and are re-assessed every five years. The renewal date on this Certificate confirms the latest date of renewal of accreditation. To confirm the validity of this Certificate, please contact the Irish National Accreditation Board.

The INAB is a signatory of the European co-operation for Accreditation (EA) Testing Multilateral Agreement (MLA) and the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement.

Schedule of Accreditation



(Annex to Accreditation Certificate)

Site Laboratory:

Category D

ROADBRIDGE LTD

Site Laboratory Located At Ballanaboy Bridge Gas Terminal, Glenamoy, Ballina, Co. Mayo

Construction Materials Testing Laboratory

<i>Initial Registration Date :</i>	19-February 2008	
<i>Postal Address:</i>	Head Office	Site Office
<i>(Address of other locations as they apply)</i>	Roadbridge	Roadbridge Site Lab
	Ballyclough	Ballanaboy Bridge Gas Terminal
	Ballysheedy	Glenamoy
	Co. Limerick	Ballina, Co. Mayo
<i>Telephone:</i>	+353 (61) 414 874 - Head Office	
	+353 (97) 87005 - Site Office	
<i>Fax:</i>	+353 (61) 414 767- Head Office	
	+353 (97) 87008 - Site Office	
<i>E-mail:</i>	saad.siddique@roadbridge.ie	
<i>Contact Name:</i>	Saad Siddique	
<i>Facilities:</i>	Normally available for Public testing	

Schedule of Accreditation



Site Laboratory:
 Category D

THE IRISH NATIONAL ACCREDITATION BOARD (INAB) is the Irish body for the accreditation of organisations including laboratories.

Laboratory accreditation is available to testing and calibration facilities operated by manufacturing organisations, government departments, educational institutions and commercial testing/calibration services. Indeed, any organisation involved in testing, measurement or calibration in any area of technology can seek accreditation for the work it is undertaking.

Each accredited laboratory has been assessed by skilled specialist assessors and found to meet criteria which are in compliance with ISO/IEC 17025 or ISO/IEC 15189 (medical laboratories). Frequent audits, together with periodic inter-laboratory test programmes, ensure that these standards of operation are maintained.

Testing and Calibration Categories:

- Category A:** Permanent laboratory calibration and testing where the laboratory is erected on a fixed location for a period expected to be greater than three years.
- Category B:** Site calibration and testing that is performed by staff sent out on site by a permanent laboratory that is accredited by the Irish National Accreditation Board.
- Category C:** Site calibration and testing that is performed in a site/mobile laboratory or by staff sent out by such a laboratory, the operation of which is the responsibility of a permanent laboratory accredited by the Irish National Accreditation Board.
- Category D:** Site calibration and testing that is performed on site by individuals and organisations that do not have a permanent calibration/testing laboratory. Testing may be performed using
- (a) portable test equipment
 - (b) a site laboratory
 - (c) a mobile laboratory or
 - (d) equipment from a mobile or site laboratory

Standard Specification or Test Procedure Used:

The standard specification or test procedure that is accredited is the issue that is current on the date of the most recent visit, unless otherwise stated.

Glossary of Terms

Facilities:

- Public calibration/testing service:** Commercial operations which actively seek work from others.
- Conditionally available for public calibration/testing:** Established for another primary purpose but, more commonly than not, is available for outside work.
- Normally not available for public calibration/testing:** Unavailable for public calibration/testing more often than not.

Laboratory users wishing to obtain assurance that calibration or test results are reliable and carried out to the Irish National Accreditation Board criteria should insist on receiving an accredited calibration certificate or test report. Users should contact the laboratory directly to ensure that this scope of accreditation is current. INAB will, on request, verify the status and scope.

Scope of Accreditation



Roadbridge Ltd

Site Laboratory:

Category D

On Site Construction Materials Testing Laboratory - Ballanaboy Bridge Gas Terminal

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
212 Concrete		
.01 Sampling	Sampling	BS EN12350-1:2000
.12 Consistency	Determination of Slump	BS EN12350-2:2000
.21 Making Concrete test specimens	Making Concrete Cubes - in the laboratory	BS EN12390-2:2000
.22 Curing test specimens in the laboratory	Curing concrete cubes in the laboratory	BS EN12390-2:2000
.23 Compression tests on moulded specimens	Determination of compressive strength. - Loads 50Kn to 2000 Kn	BS EN12390-3: 2000: Clause 6
.27 Mass per unit volume of Hardened Concrete	Determination of Density	BS EN12390-7:2000: Clause 5.5

Scope of Accreditation



Roadbridge Ltd

Site Laboratory:

Category D

On Site Construction Materials Testing Laboratory - Ballanaboy Bridge Gas Terminal

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
216 Aggregates .01 Sampling	Sampling from heaps and stockpiles	In house procedure IDTP/01 based on BS.812: Part 102:1989
.13 Sieve analysis	Sieve analysis	BS 812: Part 103.1: 1985
.17 Flakiness Index	Flakiness index	BS 812: Part 105.1: 1989
.20 Aggregate Crushing Value	Ten percent fines value - Dry Load Range 50Kn to 2000 Kn	BS 812: Part 111: 1990 Clause 7.1
.34 Moisture Content	Moisture Content	BS 812: Part 104: 1990
218 Soils .01 Sampling	Sampling - from disturbed heaps	In house procedure IDTP/01 based on BS1377: Parts 1&2:1990
.11 Classification tests	Liquid limits - cone penetrometer (Definitive method) Plastic Limit Plastic Index Moisture Content Particle Density Particle Size Distribution	BS1377:Part 2:1990 Clause 4.4 BS1377:Part 2:1990: Clause 5 BS1377:Part 2:1990: Clause 5.4 BS1377:Part 2:1990: Clause 3.2 BS1377:Part 2:1990: Clause 8.2 BS1377:Part 2:1990: Clause 9.2

Scope of Accreditation



Roadbridge Ltd

Site Laboratory:

Category D

On Site Construction Materials Testing
Laboratory - Ballanaboy Bridge Gas Terminal

INAB Classification number (P9) Materials/products tested	Type of test/properties measured Range of measurement	Standard specifications Equipment/techniques used
218 Soils		
.31 Compaction & Density Tests	<p>In-Situ density testing using Nuclear Density Gauge (NDG) - Direct Method</p> <p>California Bearing Ratio (CBR) - Range of measurement 8% to 40% using defined compactive effort 2.5kg rammer</p> <p>Optimum Moisture Content -2.5kg Rammer -Vibrating Hammer</p>	<p>BS1377:Part 9:1990: Clause 2.5</p> <p>BS1377:Part 4: 1990: Clause 7</p> <p>BS1377:Part 4: 1990: Clause 3.4 and 3.7</p>