The global network for the materials cycle



Ref: CD 5 September 2022

BAM Nuttall Ltd St James House Knoll Road Camberley Surrey GU15 3XW

Dear Mr Shields,

Accreditation Visit: 28 June 2022

Thank you for hosting such a productive and enjoyable accreditation visit.

I am pleased to confirm the accreditation status of the following IPD Scheme reviewed have been approved by the IOM3 Accreditation and Professional Formation Committee (APFC).

IPD Scheme	Accreditation Decision	Accreditation Period
Geotechnical Engineering Training	Recommendation for CEng	January 2022 - December
Scheme	approved	2024

A copy of your certificates and report are enclosed.

An IOM3 accredited programme logo is available for promotional use on your website and/or other promotional material.



We hope that you will take advantage of this promotional tool.

Important to note

Whilst we expect your scheme to change over time, it is essential to notify APFC of any proposed major changes. This is to ensure delivery of the UKSPEC competencies are not jeopardised. Major changes include content, structure, or method of delivery. IOM3 are happy to support any future planning to new or current schemes.

Information for your scheme participants

Accreditation of your scheme provides many benefits for you and your engineers. We would be grateful if staff and students are provided with the following information:

Professional registration gives employers, government, and society confidence that a practitioner has been assessed as competent to practise and is committed to maintaining and developing their competencies through an ongoing programme of continuing professional development (CPD).

To apply for professional registration as an Engineering Technician (EngTech), Incorporated Engineer (IEng) or Chartered Engineer (CEng), engineers need to join a licenced body, such as IOM3, and develop the necessary competences through their professional work and personal experiences. We look forward to working with your staff towards IOM3 membership, professional registration and to supporting their continuous professional development.

If you have any questions or other matters concerning accreditation, please do not hesitate to contact me.

Thank you for your cooperation.

Yours sincerely,

Cara Dowson Accreditation Manager

I•M3

Accredited Company IPD Scheme

Certificate of Accreditation

This is to certify that

Geotechnical Engineering Training Scheme

at

BAM NUTTALL LTD

has been accredited by The Institute of Materials, Minerals & Mining from

January 2022 - December 2024

Chief Executive

No. 03/022

The Institute of Materials, Minerals & Mining Registered Charity No. 269275 | www.iom3.org The global network for the materials cycle



Accreditation Visit Report BAM Nuttall Ltd 28 June 2022

Executive Summary

Sites covered by this accreditation:

This scheme is coordinated from Kilsyth (Head Office) and primarily relates to the BAM Ritchies business which is contracts based. Engineers are contracted to sites for set periods of time within the UK or internally.

Scheme submitted: Geotechnical Engineering Training Scheme

Purpose of visit: Reaccreditation

IOM3 Panel members:

- Dr Ali Albadri CEng CEnv FIMMM (Chair)
- Dr Xiaoxue An CEng FIMMM
- Cara Dowson (IOM3 Team)

Company Staff:

- David Lindfield CEng MIMMM
- Elliot Bullman AIMMM
- Frederico Barata IEng RSci MIMMM
- Jim Shields CEng CSci FIMMM
- Meghan Oliver EngTech RSciTech AIMMM
- Sarah Sherratt CEng FIMMM
- Emily Wood CEng CSci MIMMM
- Owen Francis
- Hollie Colville IEng REnvP MIMMM
- Michael Kenny AIMMM
- James Watson EngTech MIMMM
- Kirsty Hughes

Contact for IOM3 visit arrangements:

Position: Operations Manager

Divisional Engineering Manager

Senior Geotechnical Engineer

Name: Jim Shields CEng CSci FIMMM

Project Manager

Blasting Engineering

Geotechnical Engineer

Geotechnical Engineer

Business Improvement

Engineering Manager

Geotechnical Engineer

Contracts Manager HR Business Partner

Operations Manager; Supervising Geotechnical Engineer

Recommendation to IOM3 Accreditation and Professional Formation Committee (APFC):

Programme	Accreditation Decision	Accreditation Period	Requirements	Review/Re- Accreditation Due
Geotechnical Engineering Training Scheme	Recommendation for IEng and CEng	January 2022 - December 2024	Yes	November 2024

Please note that accreditation is subject to APFC acceptance of the recommendations of the panel and approval of any action plan to be completed by the Company.

Requirements¹:

Requirements must be satisfied in line with an agreed schedule or accreditation may be withdrawn.

RQ1: To promote the IPD scheme and IOM3 recognition on the BAM website. To be submitted by **1 September 2022**.

RQ2: To provide two examples of a complete quarterly report (including CPD and working experience log). To be submitted **1 September 2022**.

Recommendations²:

REC1: Update IOM3 Training programme document and add a document control page to track changes.

REC2: Stronger consistency of communication between the direct line manager and mentor for all individuals on the scheme.

REC3: To reconsider the formatting of the report to embed the working experience log within the discussion section of the report rather than in the appendix.

REC4: To improve the mentor training to provide examples from within the company for consistent competency marking.

¹A "**Requirement**" is something that must be completed in order for the PEI to consider conferring accreditation. This will normally be reported on by the HEI or FE College in an action plan as requested by the panel and IOM3 Secretariat, and there will be a deadline for its implementation. The requirement may specify making a change or ask for the development of a plan of action.

²A "**Recommendation**" is intended to assist the awarding institution and is directed to programme enhancement. It does not require implementation in order for accreditation to be conferred. After consideration by the HEI or FE College, the recommendation may or may not be acted upon. However, whatever the outcome, it should be reported on at any subsequent accreditation visit to demonstrate that it has been considered.

Notification of changes:

The Department must inform IOM3 of any changes to the structure or content of any of the IPD scheme under consideration at this visit.

Commendable Findings:

C1: Being EDI champions: including all employees regardless of qualification level.

- C2: Use of CPD as part of the IPD scheme.
- C3: The format for this scheme is well developed and is reflective of the professional work put into it.
- C4: Despite the difficulties of the COVID-19 pandemic, the programme did not get disrupted.
- C5: The amount of time and resources taken to deliver the programme.

Main Report

Section A: Introduction and Background

1. Brief outline of the Company and its industry

BAM Nuttall Ltd are a civil engineering contractor operating in three sectors, namely major projects, regional business, and transportation. BAM Ritchies as the specialist geotechnical division contributes to approximately 10% of the total turnover of £800M.

2. Previous accreditation findings and follow up:

1.1 Date of last accreditation visit 20 June 2018

1.2 Outcome of last accreditation visit

Accreditation for the Geotechnical Engineering training programme.

1.3 Responses to actions from the previous visits

Requirements	Responses
RQ1: Ensure all mentors receive training/refresher training as per the planned rota. Evidence should be provided to IOM3 no later than July 2019 .	Requirement met.
Recommendations	
REC1: Consider having an IOM3 staff representative to offer mentor training as an addition to support the valued training already received. This could be offered online to enable as many as possible to attend.	Mentor training was held at the IOM3 Euston Road facility.
REC2: Consider ways to implement succession planning to support current scheme management.	An individual has been identified as a future supervisor for the scheme.
REC3: Consider formally allowing professional registration application time during working hours, especially for those undertaking the technical report route.	Time in work is now allotted to allow candidates to prepare for review.

3. Major changes since the previous visit including staff and scheme

- Implementation of UKSPEC 4th edition. All trainees are now reporting their development against the updated competencies.
- Introduction of support to achieve CSci, RSci, RSciTech, and REnvP qualifications.

Section B: Company Wide Information

1. Quality assurance (QA)

3.1 Internal scheme review

Review of the scheme is led by the Professional Development Manager in conjunction with the SGE (Supervising Geotechnical Engineering). This review incorporates the feedback from the DGE (Delegate Geotechnical Engineering) workshops, quarterly DGE reviews, and annual SGE reviews.

3.2 QA consistency over multiple sites

As the scheme is delivered over multiple sites, the Professional Development Manager and SGE ensure consistency of the scheme. This is guaranteed by delivering reliable mentor training and reviewing (and countering signing) quarterly reports produced from the trainee with DGE comments.

2. Company policy regarding the employment and development of Incorporated and Chartered Engineers

The company encourages all employees who wish to gain professional registration by actively supporting development with vocational, academic, and professional training. Funding of annual subscriptions for professional membership and registration fees are provided.

3. Safeguarding, harassment, and EDI

The appropriate policies are in place. No issues were raised.

4. Resources

- The BAM Ritchies business is responsible for the management, cost, and success of the scheme.
- The SGE has operational responsibility within the scheme who is supported by the Professional Development Manager.
- There is a small budget within the UK People Services Team for the scheme.

5. Future plans including staff recruitment, resources and programme portfolio

- Continuing to promote applications for CSci, RSci, RSciTech and REnvP qualifications.
- To have the BAM Learning Portal fully operational by 2023. This will be used as a learning journey for all developing engineers for storing scheme documentation, competency recording, e-learning modules, and attendance recording for physical training courses.
- Develop role profiles as a competency development guide for DGEs and trainees. This will include mandatory and optional experience and training.

Section C: Programme Specific Information and Issues

1. Aims and objectives of the scheme

To support the development and retention of a diverse workforce to meet the skills required for the geotechnical business.

2. Scheme specifications including staff numbers covered by the scheme

There are nine DGEs available, with seven currently active. No more than two trainees per DGE.

3. Scheme structure

The scheme provides structured training and experience with formal quarterly mentoring. Quarterly development reports are filled out by the trainees on their progression and the UKSPEC competency building. This document is reviewed by their DGE who provide comment on progress and future development. Progress is reviewed at least once per year by the SGE. The DGE and SGE support the trainee when they are ready to apply for professional registration by reviewing application forms and arranging mock interviews. The SGE, DGEs and the trainee line managers work together to ensure strong competency development and address any gaps through on the job experience and/or formal training. This covers, but not limited to, geotechnical technology, environmental awareness, budget and financial control, and safety and risk assessment.

4. Website wording and published information

It was noted by the Panel that no published information is displayed on the BAM website. IOM3 would like to see promotion of the IPD scheme and IOM3 recognition.

5. Projects/reports

Graduates work on a variety of projects through which their competencies are developed and are recorded in their individual development reports.

6. Community and higher education links

6.1. Links with universities

The company has focussed on working with Abertay University Dundee and University of Portsmouth but do work with others.

6.2. Community and outreach initiatives

There is an established system for STEM Ambassadors to undertake outreach activity. This is discussed as part of the induction process for all individuals and are actively encouraged to take part.

7. Company policy on scheme recruitment

Most individuals who enter the scheme have a geotechnical engineering, geology, or geoscience qualification. However, recruitment is not limited to this and includes individuals from alternative backgrounds. There is no qualification requirement and individual attributes are more important.

8. Professional Engineering Institution (PEI) membership

There are significant staff numbers in professional IOM3 membership with and without professional registration; and several of those are professionally active within the Institute governance structure. For example, the SGE is Chair of the IOM3 Membership Committee and represents IOM3 on the Executive Board of the Engineering Council.

9. Company understanding of UKSPEC competencies and cross referencing to internal competences The company maps the UKSPEC competencies directly in the quarterly review reports.

10. Records and documentation seen by the Panel

- Perform and develop scheme manual
- Training scheme manual
- Mentor training presentation
- Scheme induction presentation
- Safeguarding guidance
- Staff handbook

11. Mentors (DGEs)

11.1. Names

- Emily Wood CEng CSci MIMMM
- David Lindfield CEng MIMMM
- Sarah Sherratt FIMMM
- Owen Francis

Engineering Manager Project Manager Business Improvement Divisional Engineering Manager

11.2. Feedback

DGEs feel confident providing feedback, including improvements for competency development, to the trainees through their quarterly reports verbally and in writing.

11.3. Support and training

- DGEs feel supported by the SGE.
- They feel able to mentor alongside their daily responsibilities within working hours without feeling overloaded.
- One training improvement mentioned was to provide competency marking examples.

11.4. Support for trainee

- DGEs feel comfortable in providing advice on competency development and can seek out opportunities for the trainee when gaps are showing.
- During the COVID-19 pandemic, the company remained operational and went virtual with communication and support. This resulted in providing better communication and support to trainees due to the multiple virtual communication platforms than pre-pandemic.
- DGEs meet with trainees annually to focus on long term development.

11.5. IOM3 membership

The majority of DGEs present are active IOM3 members.

12. Trainee

12.1. Mentors/DGEs

Trainees are happy with the communication from their assigned DGE and feel the COVID-19 pandemic has made communication easier.

12.2. Recording of competencies

Trainees are happy with the recording of competencies. One improvement is to embed competency development within the discussion part of the report. This will allow elaboration of the competency development instead of using the working experience log as an appendix.

12.3. Feedback from trainee

Trainees are happy with the scheme. They feel the flexibility with the report, being written either quarterly or for each project (depending on what works best for them) enables them to reflective effectively on their progress. One improvement a trainee felt necessary, is stronger consistency of communication between DGE and the trainees' direct line managers as the individual felt their direct line manager is unaware they are participating in the scheme.

Section D: Accreditation

The Panel are happy the scheme is fulfilling the UKSPEC competencies and recommend for accreditation.

Recommendations for the APFC

Please note that accreditation may be subject to APFC acceptance of the requirements and recommendations and approval of a possible action plan to be completed by the company.

Section E: Conclusions

The Panel Chair thanked the company staff for their time and strong IPD scheme, as well as the time and effort from the Panel. The findings were presented. The staff welcome the findings and communicated the appreciation of the time and effort from the volunteers.

Report draft prepared by: Cara Dowson

Tracking: Draft completed: 1 July 2022 Draft sent to panel: 13 July 2022 Draft agreed: 15 July 2022 Draft sent to company: 15 July 2022 Final report agreed: 17 August 2022 Final report presented to APFC: 19 August 2022

Report approved by APFC: 5 September 2022