

## MINUTES OF A TECHNICAL COMMITTEE MEETING

**Date:** Thursday 27<sup>th</sup> February 2020

**Time:** 10:00am

**Location:** Hamilton House, Mabledon Place, London, WC1H 9BD

**PRESENT:**

Chris Barker	Arup
James Binns	Byland Engineering
Andrew Bell	Cementation Skanska
Maria Dimitriadi	Card Geotechnics
Steve Hadley	Central Piling
Chris Beynon	JRL Civil Engineering
David Roy	Keltbray
Keith Miller	Laing O'Rourke
Michael Christie	Pile Designs
David Illingworth	Pile Designs
Jack Clayton	Rock & Alluvium
Jonathan Ball	Roger Bullivant Limited
Simon Shaw	Van Elle

**In the Chair:** Mark Pennington BBGE

**In Attendance:** Ciaran Jennings FPS Secretary  
Grace Hawkins FPS Secretariat

No	TOPIC	ACTION
1	<b>APOLOGIES FOR ABSENCE</b>	
	Apologies had been received from Mike Johnson (Abbey Pynford), Andrew Fingland (Atkins), Michael Gavins (Atkins), David Hard (Bachy Soletanche), Owen Francis (BAM Ritchies), Richard Ball (Card Geotechnics), Andreas Ramsauer (DYWIDAG), Toby Hayward (Expanded), Andrew Bond (Geocentrix), Ebenezer Adenmosun (Geofirma Ltd), James Blackwell (Martello Piling), Darren Milo (Murphy), Derek Egan (Remedy Geotechnics) and Mark Toye (Socotec UK) Martyn Ellis (Socotec UK)	
2	<b>MINUTES OF THE LAST MEETING</b>	
	The minutes of the meeting held on the 14 <sup>th</sup> November 2019 were approved.	
3	<b>MATTERS ARISING</b>	
a)	<p><b>CIRIA proposed update of their 1970s piling guides</b></p> <p>Mark Pennington reminded the Committee that Kieran Tully from CIRIA attended the last meeting and advised that CIRIA would be looking for £50k for a light update and £75k for more in depth updates.</p> <p>Mark noted that CIRIA have revised their proposal based on feedback from the FPS and they have considered a suggestion from the Technical Committee to amalgamate PG1 and PG2 and PG8.</p> <p>He added CIRIA is looking for the FPS to fund and endorse to encourage further support. The intention would be to produce a pipeline of the guides until October 2022.</p> <p>At the FPS Quarterly meeting it was agreed the FPS will provide note of endorsement and provide funding. It was agreed that the FPS Technical Committee will provide people for the CIRIA steering group, it was noted CIRIA are looking to confirm technical authors</p>	

	<p>in March with a view to producing the first draft by July. Mark noted the timescale is tight however it is achievable.</p> <p>Ciaran Jennings added there has been a budget agreed for a series of guides to be produced, he added how the budget is allocated, is dependent on the funding they have. Ciaran advised that Kieran Tully has been asked to indicate how well they have done so the FPS can decide how much funding they should provide towards each update.</p> <p>Mark asked for volunteers from the Technical Committee to input into the steering group. The FPS Secretariat agreed to send out a request for volunteers.</p> <p>Ciaran advised he will draft a letter confirming formal agreement from the FPS.</p> <p>Mark added at the last Technical Committee meeting there was a strong view that the knowledge gained from people in the FPS should be incorporated into the guides to benefit new people coming into the industry.</p> <p>Ciaran suggested the updated guides could potentially be integrated into the degree apprenticeship.</p> <p>Chris Barker asked if there was anything that should be introduced to the updated guides such as digital information management, Andrew Bell suggested sustainability should be referenced in the updated guide.</p> <p><b>b) BSI 5975: Code of practice for temporary works procedures</b></p> <p>Andrew Bell advised there are no new developments to update however he reminded the Committee that the standard has been released and some members will have needed to update procedures to meet it. He also reminded the Committee that Cementation Skanska have developed training for temporary works co-ordinators which will be available to FPS members later in the year. They are currently obtaining CITB accreditation for it to be placed on the CITB's register of courses. He added the course will be piling specific</p> <p>Ciaran Jennings agreed to add this to the FPS Safety Plant and Operations meeting agenda.</p> <p><b>c) Apprenticeship Degree</b></p> <p>Andrew Bell relayed an update on the apprenticeship degree from Zoe Baldwin, it was noted that they are progressing with the main part of the structure of the degree including the End Point Assessment plan. The next step is to get costs from three universities in order to be allocated a funding band. They are expecting it to be ready for delivery in 2021. Andrew added that they are continuing with L7 ground engineering apprenticeship degree, the apprenticeship needs to have a specific job associated with it with defined skills, knowledge and behaviours.</p> <p>They also feel there is a gap for something else at level 6 as this would capture school leavers at 18. The L6 has been placed on hold.</p> <p>Steve Hadley suggested moving forward with the L6, he noted it would help towards getting more people into the industry whereas the L7 will retain those already in the industry. Andrew agreed to circulate information on the L6 detailing the issues they have been struggling with. Mark Pennington agreed if there is a skills shortage on large infrastructure projects, school leavers will be keen for apprenticeships.</p> <p>Ciaran Jennings reported that the FPS Executive want to raise awareness of the ground engineering industry to A-Level students.</p> <p>In addition, Zoe has produced an article due to be included in the GE magazine and John Chick has also written an article included in the GeoDrilling magazine:</p> <p><a href="https://www.geodrillinginternational.com/industryvoice/opinion/1381060/apprenticeship-degrees-in-geotechnical-engineering">https://www.geodrillinginternational.com/industryvoice/opinion/1381060/apprenticeship-degrees-in-geotechnical-engineering</a></p> <p><b>d) Update to FPS Chalk Guidance in response to NHBC</b></p> <p>Jonathan Ball reported that he approached the NHBC, he advised that they accept a 2.5 factor of safety but need formal guidance confirming acceptance. Jonathan agreed to update the FPS chalk guidance with Mike Johnson.</p>	<p><b>All FPS Secretariat Ciaran Jennings</b></p> <p><b>Ciaran Jennings FPS Safety, Plant and Operations</b></p> <p><b>Jonathan Ball Mike Johnson</b></p>
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<b>4.</b>	<b>LOAD CASES GUIDANCE DOCUMENT PRESENTATION</b>	
	<p>Mark Pennington reported that Debbie Darling has arranged for the FPS to present to the IStructE on the 8<sup>th</sup> July 2020. Mark asked for volunteers to present, he added he will be happy to present.</p> <p>Steve Hadley suggested the presentation can be used around the regions, Mark agreed and advised they can review this following the response and interest received on the 8<sup>th</sup> July 2020.</p> <p>Andrew Bell advised he may be able to attend, David Roy, Jonathan Ball and Chris Barker all advised they are available and willing to present.</p> <p>Mark added it provides continuity with digital data development.</p>	<p><b>Mark Pennington</b></p> <p><b>Andrew Bell</b> <b>David Roy</b> <b>Jonathan Ball</b> <b>Chris Barker</b></p>
<b>5.</b>	<b>SITE INVESTIGATION DATA</b>	
<b>a)</b>	<p><b>Guidance on Minimum Site Investigation requirements for foundation design &amp; GI Questionnaire results</b></p> <p>Jonathan Ball thanked everyone who participated in providing responses to the Questionnaire, he advised that a total of 133 responses were received from 15 members, there was a good range geographically, in size and discipline and a good range across what FPS members do. Jonathan added there was no responses which used data in AGS format, they were mostly in PDF format. James Binns advised he received an AGS pile schedule this week from Structural Engineer in York.</p> <p>Jonathan advised he has some further work to do with the responses and will aim to present at the next meeting. He also suggested presenting at the Piling Conference 2020, having it peer reviewed. Mark Pennington replied that he is part of the organising committee so can discuss further with Jonathan.</p> <p>Ciaran Jennings suggested it could be submitted into Ground Engineering.</p>	<b>Jonathan Ball</b>
<b>b)</b>	<p><b>AGS Procurement of Ground Investigation Steering Group</b></p> <p>Jonathan Ball reported that the AGS have given the FPS space for an appendix in the Yellowbook for specification for piling. James Binns agreed this would be good to take advantage of. Jonathan stated he will look to reinvigorate the site investigation sub-group to support this.</p>	<b>Jonathan Ball</b>
<b>6.</b>	<b>FPS GUIDE TO DEEP PILES IN LONDON</b>	
	This item was agreed to be placed on hold but would remain on the agenda.	
<b>7.</b>	<b>EUROCODES AND EXECUTION CODES</b>	
<b>a)</b>	<p><b>Revision of EN1997-3 Clause 6 – Pile Design</b></p> <p>Jonathan Ball reported that he collated 144 comments from 9 members, of those 113 went to the meeting. Jonathan advised that BSI have accepted 124 suggestions to the latest amendment, 90 of which are from the FPS, he added that he has requested permission to share these with the FPS.</p> <p>Jonathan reported there is a proposal for partial factors as national acceptance. There is a view to make it more complicated however the UK has adopted a position which is more simplified. There is a proposal for the amalgamation of CFA. There are also proposals for rigid CMCs input on housing foundations, concrete specifications and design principles to be much more defined.</p> <p>Jonathan advised that he has been asked to be the UK representative on the execution code for tensor static testing. They are due to meet in Paris in April; he will feed back to FPS.</p>	<b>Jonathan Ball</b>

b) c)	<p><b>Revision of Eurocode 7</b> No report was given under this item.</p> <p><b>Update of Codes</b> No report was given under this item.</p>	
8.	<b>FPS DIGITAL DEVELOPMENT TASK GROUP</b>	
	<p><b>AGS/FPS Data Information Transfer for Piling</b></p> <p>Mark Pennington reported that the FPS Digital Development Task Group will be speaking on a conference call set up Monday 2<sup>nd</sup> March 2020. He reported that Neil Chadwick has developed the AGS data further since he presented to the Technical Committee, he has asked for feedback from the FPS.</p> <p>Ciaran Jennings added that the EFFC keen to set up digital task group, an associate member Optimise suggested the industry needs to set a standard for data.</p>	
9.	<b>LIMITATIONS IN ULS RETAINING WALL DESIGN</b>	
	Mark Pennington advised there is no update on this item, it was noted at a previous meeting that someone from BBGE is progressing it.	
10.	<b>FPS WEBSITE</b>	
	It was noted that a brief review of updates took place last year, Ciaran Jennings advised that older versions of documents were removed from the website, but the FPS need to review the guidance and agree which documents are due an update.	Ciaran Jennings
11.	<b>RIG BEARING PRESSURE SPREADSHEET WORKSHOPS</b>	
	The FPS Secretariat advised that dates have been secured with Remedy Geotechnics, the 3 <sup>rd</sup> September 2020 in Derby and the 1 <sup>st</sup> December 2020 in London. The Technical Committee confirmed they are happy for these workshops to continue noting they are well attended by members of the FPS and non-FPS delegates. The FPS Secretariat agreed to secure the bookings with venues in Derby and London.	FPS Secretariat
12.	<b>EFFC</b>	
	<p><b>a) Sustainability</b></p> <p>Mark Pennington noted the FPS is also looking at areas where sustainability can be improved. Ciaran Jennings reported that Stuart Norman is currently looking to issue a strategy. He added that he will speak with Luke Deamer from Keller, who is currently doing a PhD in sustainability in piling. The EFFC aim to look at zero emissions by 2050 and moving to low carbon alternatives.</p> <p>Jonathan Ball advised there is an addition to the draft 206 concrete specification code, he added they recognise things are moving to being carbon neutral and aim to add a new CEN class. However, they have noted the difficulty in the longevity of concrete.</p> <p>Steve Hadley noted very few members are using the carbon calculator, he advised every estimate should include this. Jonathan agreed members should provide clients with the information. Mark Pennington suggested the reinvigoration of the carbon calculator is added to the FPS Quarterly Committee agenda.</p> <p>Chris Barker noted that clients are uninterested by innovative sustainable alternatives, FPS members need to be aware of the durability of alternatives in order to convince their clients. Jonathan agreed the FPS needs to showcase their longevity.</p> <p>Mark suggested the FPS Technical Committee could have a presentation on low carbon concrete technology.</p> <p>David Roy Suggested contacting Andy Mulholland who has worked with Keltbray looking at various ultra/low cement concrete mixes for piling. He's an associate member of the Institute of Concrete Technology so could present to the technical committee and provide</p>	<p>Quarterly Committee</p> <p>David Roy</p>

	an overview of what is currently available in the market and how this may develop in the future. David agreed to provide contact details for him.	<b>FPS Secretariat</b>
<b>13.</b>	<b>INDUSTRY EVENTS</b>	
	<p><b>BGA Piling Conference 15-16<sup>th</sup> September 2020</b></p> <p>Mark Pennington noted this item was discussed, he added the deadline is in March and the papers will be reviewed.</p>	
<b>14.</b>	<b>SOCIAL EVENTS</b>	
	<p>i.FPS Summerball – 27th June, Coombe Abbey Hotel, Warwickshire</p> <p>ii.FPS Golf Day – 9th September, Whittlebury Park, Northamptonshire</p> <p>iii.Annual Awards Dinner – 16th October, Hilton London Tower Bridge</p>	
<b>15.</b>	<b>ANY OTHER BUSINESS</b>	
	<p><b>DFI Paper on Terminology and Evaluation Criteria of Cross-hole Sonic logging</b></p> <p>Chris Barker presented the DFI paper produced on terminology and evaluation criteria of cross-hole sonic logging. Chris noted there is a slightly modified criteria, he agreed to circulate the paper to the committee.</p> <p><b>Trend of designs being carried out without a piling test</b></p> <p>James Binns advised that he has been seeing an emerging trend when advising piling contractors of pile designs being carried out without piling tests. He added it is also concerning that he has observed a couple of London clay schemes seeing alpha of 0.6 without testing however Alpha testing shows it should be 0.5. James advised this is a commercial risk for companies. Andrew Bell advised he has seen clients who do not want to undertake testing. It was noted that time constraints put clients off testing. Mark Pennington suggested members of the Technical Committee should be pushing for testing in their own organisations. Chris Beynon suggested the FPS engage with the NHBC as it would be in their own interest to reduce risk, he added there seems to be a lack of checking by the NHBC or the London district clay association.</p> <p>Steve Hadley advised the testing that Central Piling do is just a sample and it is not reflective of other piles on the job so it can be argued that the risk is increased, but sensitivity is necessary. Mark Pennington agreed sensitivity is necessary and it is not worthy to make an FPS note but it is worthwhile talking about testing regimes.</p> <p><b>Diversity</b></p> <p>Steve Hadley reported that the FPS Early Careers Group will be receiving a talk from Ebenezer Adenmosun about diversity in the industry, this will also tie into a networking lunch with the FPS Quarterly Committee.</p> <p><b>FPS Football Event</b></p> <p>Steve Hadley advised that the registration form for the FPS five a side event close on the 28<sup>th</sup> February 2020, the event is being held on the 20<sup>th</sup> March 2020.</p> <p>*post meeting note: the football was postponed due to the situation with Coronavirus*</p>	<p><b>Chris Barker</b></p> <p><b>All</b></p>
<b>16.</b>	<b>DATE OF NEXT MEETINGS</b>	
	<ul style="list-style-type: none"> <li>• 21<sup>st</sup> May 2020 *Post meeting note: this meeting will take place as an online meeting due to the Coronavirus outbreak.*</li> <li>• 3<sup>rd</sup> September 2020</li> <li>• 5<sup>th</sup> November 2020</li> </ul> <p>To start at 10am at Hamilton House, Mabledon Place, London, WC1H 9BD.</p>	