



AGENDA

DC-10: Slab-on-Ground Committee

Tuesday, October 20, 2020
2:00 p.m. - 4:00 p.m. Eastern

Voting Members Present (xx of 20)

Tony Childress, Chair Childress Engineering Services, Inc.	Brian Eubanks Paragon Structural Engineering, LTD	Homer Parker Jr Parker Engineering, Inc.
Dean Read, Vice Chair MLAW Forensics, Inc.	Peter Fleming Geo-Technologies Inc	David Peralta Unitech Consulting Engineers, Inc.
Amy Dowell, NV Post-Tensioning Institute	Jack Graves Jr Builders Post-Tension DFW, Inc.	Andy Rapier Protex
Don Illingworth, TAB Contact, V Don Illingworth and Associates	Brian M Juedes Meritage Homes	Donald Shaheen DJS Engineering
John Bryant Bryant Consultants, Inc.	Jerald Kunkel University of Texas at Arlington	Mervin Snowden Snowden Engineering, Inc.
Dan Buck Suncoast Post-Tension Ltd	Harley Nethken Tech-Con Systems Inc	Tami Spicer STRAND
Kenneth Douglass Eric L. Davis Engineering	Daniel Overton Engineering Analytics, Inc.	Ryne Stoker Geotek Inc

Associate Members Present

Lowell Brumley Tri-Tech Engineering, L.P.	John Kennedy Martin Specialty Products	Michael Scanlon Norex Engineering, Inc.
Chris Burkle Suncoast Post-Tension, Ltd.	Chad Konger Strand Systems Engineering	David Sparks Felten Group
Jerry Coombs Coombs Engineering	Evan Langston PT Manufacturing	Christian Wurtz Post Tension Plugs
Chris Copeland Copeland Engineering, LLC	Derrick Lee Consolidated Reinforcement	
Fabio Albino De Souza INAEP	Kerry Lee Forensix Consulting, LLC	
David Hohman Superior Post Tension, LLC	Rene Luft	
	Jared Rosenquist General Technologies, Inc.	

ACTION ITEMS FROM LAST / THIS MEETING

Item #	Subject	Action	Responsible	Deadline / Completed
1.1	Geotechnical Equation Changes	Tony and Dean to discuss jump in equation	Read / Childress	May 2020
3.1	Collapsible Soil Standards	Staff to review and start ballot by June 2020.	Staff	June 2020 AMD to start ballot after meeting in October
4.1	Long Design Rectangles	TG to investigate capping the length at 75 ft to a fixed amount or 6 beta.	Childress/Konger	June 2020 Set meeting time after October meeting
5.1	SOG User Guide – Structural	Schedule TG to review editorial changes	Staff / TG	Meetings in progress
6.1	SOG User Guide Design Examples	Need soil numbers for realistic soil numbers for Colorado and then re-run design examples	Read / Childress	June 2020
7.1	SOG User Guide – Geotechnical	Schedule TG to review editorial changes	Staff / TG	Review complete, small sections for re-ballot to come this fall

Agenda Item	Expected Outcome / Actions Taken
A. General A.1 Call to Order A.2 Introductions A.3 Committee Roster / Changes A.4 PTI Antitrust Policy	A.3 Evan Langston, Kerry Lee and Jerry Coombs have joined as Associate Members
B. Agenda & Minutes B.1 Approval of Agenda B.2 Approval of Minutes from 5/27/20 (Meeting ballot required)	B.1 No agenda additions were noted B.2 Vote on Minutes from 5/27/20 approval Motion / Second: Result: (Y-N-A)

Agenda Item	Expected Outcome / Actions Taken
<u>C. Actions Taken Between Meetings</u> C.1 Letter Ballots (None) C.2 Web Meetings (none)	C.1 None C.2 None
<u>1. Action Item 1: (Geotechnical Equation Changes)</u> 1.1. Update	1.1 Update on proposed change to geotechnical equation to reflect change in E_m definition based on Wray's dissertation.
<u>2. Action Item 2: (Collapsible Soil Definition and Standards)</u> 2.1 TG update	2.1 Section draft complete. Staff to review and start ballot by end of October 2020.
<u>3. Action Item 3: (Long Design Rectangles)</u> 3.1 Short-term solution TG update 4.2 Long-term solution TG update	3.1 Tony and Chad to set up in-person work session to run some test calculations. Investigate: - Average the moments based on the aspect ratio. (straw poll had no opposition of those in attendance at this WM) TG to investigate capping the length at 75 ft to a fixed amount or 6 beta. 4.2 Hold for now – related to Action Item 1
<u>4. Action Item 4: (SOG User Guide – Geotechnical)</u> 4.1 TG update	4.1 TG update Ballot start in November 2020
<u>5. Action Item 5: (SOG User Guide – Structural)</u> 5.1 TG update	5.1 TG Update Ballot start in mid November 2020
<u>6. Action Item 6: (SOG User Guide Design Examples)</u> 6.1 Update	6.1 Set timeline goal and start ballot (Dean to update dry climate numbers) Ballot to start end of November 2020
<u>7. Action Item 7: (Flatwork TN)</u> 7.1 Reply to TAB comments	7.1 Review / Reply to TAB Comments

Agenda Item	Expected Outcome / Actions Taken
D. <u>New Business</u>	Complete current items before starting new business.
E. <u>Next Meeting</u> 2021 PTI Convention, Weston Indianapolis, IN April 18-21, 2021 Web Meetings: as needed	
F. <u>Adjourn</u>	

AGENDA / MEETING EXHIBITS

Exhibit #	Subject
A.4	PTI Anti-Trust Policy
B.2	Minutes from 5/27/2020
7.1	TAB Comments on Flatwork TN

PTI POLICY STATEMENT ON COMPLIANCE WITH ANTITRUST LAWS

At a meeting on October 8, 1980, the Board of Directors first discussed the Institute's status and policies regarding compliance with antitrust laws. After review of both the internal and external compliance procedures, the following resolution was approved:

"The staff, officers, directors and members of the Post-Tensioning Institute are reminded that they are required to comply with the spirit and specific requirements of the antitrust laws on all activities within the scope of, and related to, the official functions of PTI. Further, this restated position, along with appropriate explanatory material, should be placed in all meeting folders/books periodically, beginning with the 8th of October meeting of PTI."

On July 24, 2012 and again on October 7, 2015, the Executive Committee authorized Legal Counsel to review and update this Policy Statement in the perspective of the Department of Justice Business Review Letter of July 30, 1997 and current case law. As a continuing guide for your participation in PTI's meetings, please review and continue to adhere to the following "Legal Limitation on Discussions at PTI Meetings."

LEGAL LIMITATION ON DISCUSSIONS AT PTI MEETINGS AND EVENTS

A free exchange of ideas on matters of mutual interest to the members is necessary for the success of all meetings. Indeed, such an exchange of views is essential to the successful operation of every trade association and the law specifically allows legitimate exchange of views pertaining to, e.g., quality control, safety, building design and construction integrity, etc.

It is not the purpose of this memorandum to discourage the exploration in depth of any matters of legitimate concern to meeting participants. Nevertheless, to ignore certain antitrust ground rules, either through ignorance or otherwise, is to create a civil and criminal hazard businessmen simply cannot afford.

It is for these reasons that PTI provides you with a reminder that certain areas of formal and informal communication between competitors or between manufacturers and their suppliers and customers must be avoided, as posing potential antitrust problems.

The Sherman Antitrust Act, the Clayton Act, the Federal Trade Commission Act, and the Robinson-Patman Act comprise the basic federal antitrust laws, which set forth the broad areas of conduct considered illegal as restraints of trade. In general, agreements or understandings between competitors that operate as an impediment to free and open competition are forbidden. Federal antitrust prohibitions forbid any "agreement or understanding...to substantially lessen competition or tend to create a monopoly in any line of commerce." An important point to keep in mind is that communications and discussions between competitors or between sellers and customers, about matters which may be considered anti-competitive, often comprise the evidence from which courts infer antitrust violations. ***It is the policy of the Post-Tensioning Institute that such agreements, understandings or communications shall not be tolerated at any formal or informal meetings or social events of the Institute.***

The general prohibitions contained in the federal antitrust laws, have been particularized in the form of a series of consent decrees, originally entered against a number of member companies of various trade associations and the associations themselves. It is important to note that these laws not only apply to PTI members, but also to PTI itself. Often trade associations have been and are presently co-defendants in cases brought by the Justice Department and the Federal Trade Commission ("FTC"). Recently, the FTC has stated: "*Because trade associations are by their nature collaborations among competitors, the Commission and courts have long been concerned with anti-competitive restraints imposed by such organizations under the guise of codes of conduct. Competing for customers, cutting prices, and recruiting employees are hallmarks of vigorous competition. Agreements among competitors not to engage in these activities injure consumers by increasing prices and reducing quality and choice.*" Similar "codes" or policies and requirements that encourage directly or indirectly members' unlawful activity are strictly forbidden by PTI in the course of its business with its members.

**SPECIFIC EXAMPLES OF ACTIVITIES AND PRACTICES PROHIBITED
AT ALL PTI MEETINGS AND EVENTS:**

Included in activities and practices which are forbidden, and are contrary to the policy of the Institute, both under the general antitrust laws and the consent decrees, subject to the said Business Review Letter, are the following:

- Agreeing to allocate markets, customers or suppliers among competitors, classify certain customers or suppliers being entitled to preferential treatment by manufacturers, and establish geographic trading areas.
- Participating in any plan designed to induce any manufacturer or distributor to sell or refrain from selling, or discriminate in favor of, or against any particular customer or class of customers.
- Agreeing in any manner to fix or otherwise establish bids, prices (including price increases, decreases, standardization or stabilization), profits, costs, contract terms affecting price (such as discounts and credit terms), etc. because, e.g. prices were too low, with the exception of certain resale pricing agreements between manufacturers and retailers or distributors.
- Agreeing in any manner to limit or restrict the quality of products to be produced (e.g., restrictions on selling coated strand to certain customers).
- Participating in any plan which has the effect of discriminating against, or excluding competitors, suppliers or customers.

These examples are provided to guide you in your discussions during formal and informal PTI meetings and social events. If the occasion arises, more specific advice will be provided by legal counsel, who is required by Article IV, Section 7 of the PTI By-Laws to be present at all meetings of the Board of Directors and the Executive Committee.



AGENDA

DC-10: Slab-on-Ground Committee

Wednesday, May 27, 2020

11:00 a.m. - 12:05 p.m. Eastern

GoToMeeting

Voting Members Present (13 of 20)

Tony Childress, Chair
Childress Engineering Services,
Inc.

Brian Eubanks
Paragon Structural Engineering,
LTD

Homer Parker Jr
Parker Engineering, Inc.

Dean Read, Vice Chair
MLAW Forensics, Inc.

Peter Fleming
Geo-Technologies Inc

David Peralta
Unintech Consulting Engineers,
Inc.

Amy Dowell, NV
Post-Tensioning Institute

Jack Graves Jr
Builders Post-Tension DFW, Inc.

Andy Rapier
Protex

Don Illingworth, TAB Contact, V
Don Illingworth and Associates

Brian M Juedes
Meritage Homes

Donald Shaheen
DJS Engineering

John Bryant
Bryant Consultants, Inc.

Jerald Kunkel
University of Texas At Arlington

Mervin Snowden
Snowden Engineering, Inc.

Dan Buck
Suncoast Post-Tension Ltd

Harley Nethken
Tech-Con Systems Inc

Tami Spicer
STRAND

Kenneth Douglass
Eric L. Davis Engineering

Daniel Overton
Engineering Analytics, Inc.

Ryne Stoker
Geotek Inc

Associate Members Present

Lowell Brumley
Tri-Tech Engineering, L.P.

John Kennedy
Martin Specialty Products

Michael Scanlon
Norex Engineering, Inc.

Chris Burkle
Suncoast Post-Tension, Ltd.

Chad Konger
Strand Systems Engineering

David Sparks
Felten Group

Chris Copeland
Copeland Engineering, LLC

Derrick Lee
Consolidated Reinforcement

Christian Wurtz
Post Tension Plugs

Fabio Albino De Souza
INAEP

Rene Luft

David Hohman
Superior Post Tension, LLC

Jared Rosenquist
General Technologies, Inc.

ACTION ITEMS FROM LAST / THIS MEETING

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1.1	Geotechnical Equation Changes	Tony and Dean to discuss jump in equation	Read / Childress	May 2020
3.1	Collapsible Soil Standards	Staff to review and start ballot by June 2020.	Staff	June 2020
4.1	Long Design Rectangles	TG to investigate capping the length at 75 ft to a fixed amount or 6 beta.	Childress/Konger	June 2020
5.1	SOG User Guide – Structural	Schedule TG to review editorial changes	Staff / TG	August 2020
6.1	SOG User Guide Design Examples	Need soil numbers for realistic soil numbers for Colorado and then re-run design examples	Read / Childress	June 2020
7.1	SOG User Guide – Geotechnical	Schedule TG to review editorial changes	Staff / TG	August 2020

Agenda Item	Expected Outcome / Actions Taken
<u>A. General</u> A.1 Call to Order A.2 Introductions A.3 Committee Roster / Changes A.4 PTI Antitrust Policy	Meeting was called to order at 11:05 Introductions were not made over GTM There have been no changes in roster since the last meeting Members present are still subject to the PTI Antitrust Policy
<u>B. Agenda & Minutes</u> B.1 Approval of Agenda B.2 Approval of Minutes from 10/2/2019 (Meeting ballot required)	B.1 No agenda additions were noted B.2 Vote on Minutes from 10/2/2019 approval Motion / Second: Childress / Shaheen Result: 12-0-0 (Y-N-A)
<u>C. Actions Taken Between Meetings</u> C.1 Letter Ballots (1905, 2001, 2002)	C.1: Ballot 1905-TN on Flatwork – ballot complete on DC-10 and document currently in TAB Review Ballot 2001-DC10.3 Design, Construction, and Maintenance of Post-Tensioned Concrete Courts – ballot complete and has completed TAB review. Responding to TAB comments

Agenda Item	Expected Outcome / Actions Taken
C.2 Web Meetings (none)	Ballot 2002- DC10.3 Design, Construction, and Maintenance of Post-Tensioned Concrete Courts Elongation Tables – ballot complete and has completed TAB review. C.2 none
<u>1. Action Item 1: (Geotechnical Equation Changes)</u> 1.1. TG update	1.1 Tony and Dean to discuss jump in equation tomorrow. Action Item 1.1: Call tomorrow at 2 CT.
<u>2. Action Item 2: (Beam Depth Ratio)</u> 2.1 TG update	2.1 TG recommended no change – position statement circulated to committee with no comments. Item closed for now.
<u>3. Action Item 3: (Collapsible Soil Definition and Standards)</u> 3.1 TG update	3.1 Section draft complete. Action Item 3.1: Staff to review and start ballot by June 2020.
<u>4. Action Item 4: (Long Design Rectangles)</u> 4.1 Short-term solution TG update 4.2 Long-term solution TG update	4.1 Tony and Chad to set up in-person work session to run some test calculations. Investigate: - Average the moments based on the aspect ratio. (straw poll had no opposition of those in attendance at this WM) Action Item 4.1: TG to investigate capping the length at 75 ft to a fixed amount or 6 beta. 4.2 Hold for now – related to Action Item 1
<u>5. Action Item 5: (SOG User Guide – Structural)</u> 5.1 TG update	5.1 Schedule TG to review editorial changes Action Item 5.1: Tony, Kunkel, Parker to help edit
<u>6. Action Item 6: (SOG User Guide Design Examples)</u> 6.1 Update	6.1 Set timeline goal and start ballot Action Item 6.1 Need soil numbers for realistic soil numbers for Colorado and then re-run design examples – Dean goal to complete in 3 weeks.

Agenda Item	Expected Outcome / Actions Taken
7. <u>Action Item 7:</u> (SOG User Guide – Geotechnical) 7.1 TG update	7.1 Schedule TG to review editorial changes <i>Action Item 7.1: Schedule TG to review editorial changes Overton, Stoker to help edit</i>
D. <u>New Business</u>	Complete current items before starting new business.
E. <u>Next Meeting</u> 2020 Convention—Miami, FL – September 27-30, 2020 <i>Web Meetings: as needed</i>	
F. <u>Adjourn</u>	Meeting was adjourned at 12:05 p.m.

AGENDA / MEETING EXHIBITS

Exhibit #	Subject
A.4	PTI Anti-Trust Policy

PTI Committee: Technical Advisory Board	Ballot-TAB-2004	Ballot Start Date:	May 13, 2020
Document Title: Technical Note on Flatwork		Ballot End Date:	June 13, 2020

Comment #	Page / Line #	Vote: Y / Y-E / N / A	Y=Affirmative Y-E=Affirmative with Comment N=Negative (must include reason and proposed resolution) A=Abstain	Comment	Proposed Resolution
Section 1 - Introduction					
1		N	What is the difference between Slab-on-Grade and Flatwork?		I believe this should be defined if any. Otherwise I would say that title needs to drop Flatwork and the balance of the document should refer to Slab-on-Grade only. BTW, the correct terminology now is SLAB-ON-GROUND , not SLAB-ON-GRADE. Do note that this document later on does use slab-on-ground.
2		N	See attached markup		
3	1/2	E	No need to start document with PTI DC10.5-19		Instead I would use The Standard.....
4	1/6	E	Change "as" to "against"		
5		Y-E	Page 1 of 6 Line 22:<div>Recommend revising the sentence as "... with adequate expansion joint with flexible joint sealant material is recommended.</div>		
6	1/9	E	Attachment to PT foundations		Should it not read "attachment to foundations"
7	1/9	N	Suggest clarifying what the Tech Note covers. It seems the TN only describes the benefits and shortfall of each attachment type but does not recommend one over the other?		
8	1/17	E	, if any.		Get rid of , if any. After all it anticipates having reinforcement. Otherwise remove the "depending on the size of the installed reinforcement"
9	1/20	N	There are two (2) different.....		There are actually more ways. How about a simple ledge where the slab-on-ground rests on.
10	1/20	E	Replace "foundation" with "PT foundation"		
11	1/20	E	Replace "One is not to connect" with "The first option is not to connect"		
12	2/5-15	N			In general I believe these paragraphs could improve. Why bring up sidewalks, these are not connected to the residential foundations.

PTI Committee: Technical Advisory Board	Ballot-TAB-2004	Ballot Start Date:	May 13, 2020
Document Title: Technical Note on Flatwork		Ballot End Date:	June 13, 2020

Comment #	Page / Line #	Vote: Y / Y-E / N / A	Y=Affirmative Y-E=Affirmative with Comment N=Negative (must include reason and proposed resolution) A=Abstain	Comment	Proposed Resolution
					BTW, I believe an explanation as to what is refer to as the "RESIDENTIAL FOUNDATION" is in order. I assume that, for the purpose of this document, the "Residential Foundation" includes a portion of slab-on-ground with a turndown (called grade beam on figure 1).
13	2/21	E	Seems the sentence is missing something. Maybe "will be discussed in more detail below" should be deleted.		
14	pg. 2 line 22	Y-E	: Is the term "still" in this description commonly used to describe a dowel? I know what is meant here but maybe another term that is more typically used to describe this type of transfer would be better (rigid for instance)		
Section 2 – Flatwork not attached to the foundation					
15		N	I am voting negative because there are quite a few comments and I want to be sure others feel the same way that I did		
16	3/13-16	N	...where the flatwork has moved up or down resulting in conditions such as tripping hazards. The flatwork can also pull away from the foundation or direct water toward the slab-on-ground providing a path for water intrusion and performance issues.		Need to be more clear as to how water may be directed towards the "slab-on-ground". I would use turndown. Again, better explanation needed in my opinion.
17	3/18-20	N	There should be sufficient space....		Needs better explanation, perhaps illustrate in the figure as well. Do keep in mind that the greater the separation between what I assume is the "flatwork" and the turndown, the more water will intrude.
18	3/19	E	Replace "and the" with "and any"		
19	4/figure	E			I suggest moving this figure up so at least the reader can get a better understanding. Also, suggest using turn-down rather than grade beam, suggest instead of PT SOG refer to Interior Slab-on-Ground and instead of FLATWORK, refer to exterior Slab-on-ground.

PTI Committee: Technical Advisory Board	Ballot-TAB-2004	Ballot Start Date:	May 13, 2020
Document Title: Technical Note on Flatwork		Ballot End Date:	June 13, 2020

Comment #	Page / Line #	Vote: Y / Y-E / N / A	Y=Affirmative Y-E=Affirmative with Comment N=Negative (must include reason and proposed resolution) A=Abstain	Comment	Proposed Resolution
					Of course if this is accepted, it needs to be modified through the document.
Section 3 – Flatwork attached to the foundation					
20	4/8-9	N			These two lines do not read right.
21	4/8	E	“eliminates the concern for a tripping hazard” should be moved to the end of the sentence		
22	4/11	N	..move up or down...		If the “flatwork” was to moved up it would actually reduce water ponding and water intrusion issues. I am missing something?
23	5/8	Eeither up or down...		I thought the purpose of doweling (connecting) is to avoid this issue. Properly “connected” flatwork to turndown should prevent this issue. I would delete lines 8-11 and/or have a better explanation.
24	5/12	N	Industry practices to minimize non-connected		This section is about “flatwork” attached to the “foundation”. These statements, would be better introduced in section 2.
25	4/13	E	Add comma after Problems		
26	5/12	E	This should be for “connected”		
27	5/16	E	Uniform thickness foundations (UTF)		Why add (UTF) if not used again.
28	5/17	E	Minimum		Delete the word minimum
29	6/fig	E			Suggest moving figure up.
Section 4 - Conclusion					
30	6/4	E	The issue of whether flatwork and/or driveway approaches....		Why introduce the word “driveway approaches”. Not previously referred to nor defined.
31	6/6-8	N			Is the damaged to the slab-on-ground or to the turndown (or grade beam)? With the figures shown I have to assume that the damage is related to the grade beam