

## Concrete Task Group (TG + STG) Minutes December 13<sup>th</sup>, 2019 10:00 AM – 12:00 PM

## **DOT Translab - OSM Room 514**

Call-in: 866-676-8836; Participant Code: 6275887

Meeting Called By:	Concrete Task Group
Goal:	Obtain update of current work products
Invitees:	Keith Hoffman, Kuo-Wei Lee, Ken Solak, Kirk McDonald, Mark Hill, Dulce Feldman, Bruce Carter, Divyesh Vora, Arshad Vali, Jacquelyn Wong, Nathan Forrest, Joe Holland, Chu Wei, Douglas Mason, Cortney VanHook

ITEM	TIME	Lead	TOPIC	Desired Outcome						
1	10:00 – 10:05	Keith H.	Introductions/Review Agenda/Past Action Items	Member introductions and agreement on agenda						
2	10:05 – 10:15	CIP	Pavement Smoothness	Review of signed scoping documents. Provide current status from each working group						
3	10:15 – 10:25	CIP	Limited Construction Windows	Review of signed scoping documents. Provide current status from each working group						
4	10:25 – 10:35	Precast	Precast Pavement – Phase II	Review of signed scoping documents. Provide current status from each working group						
5	10:35 – 10:45	M&QA	4x8 Cylinders	Review of signed scoping documents. Provide current status from each working group						
6	10:45 – 10:55	M&QA	&QA Concrete Mix Design Review of signed documents. Provistatus from each							
7	10:55 – 11:05	M&QA	Recycled Crushed Concrete Aggregate	Review of signed scoping documents. Provide current status from each working group						
8	11:05 – 11:15	M&QA	CT 523 – Flexural Beam	Review of signed scoping documents. Provide current status from each working group						
9	11:15 – 11:30	CTG	Review of bin list/scoping documents	Review of bin lists/scoping documents						

10	11:30 – 11:40	Joe	Update on research efforts	Discussion on different ongoing research efforts
11	11:40 – 11:50	CTG	Status of pilot projects/long-term tracking/Standard Specs  - Crackless Bridge Deck - Low Flexural Beam Spec Language - Report on SCMs supply and ASTM/ACI	Track status of pilot projects and any additional long term items
12	11:50 – 12:00	CTG	Roundtable / Review Action Items / Next Meeting - 2020 Meeting Calendar Discussion	Review action items and close meeting

## **Meeting Minutes:**

- 1. Introductions/Review Agenda/Past Action Items
  - a. Compressive strength memo has been submitted to the TG for review and submission to the EC
  - b. Mix design naming protocol time extension memo will be submitted by end of day, 12/13/19
  - c. Precast Phase II memo has been submitted to the TG for review and submission to the EC
- 2. Pavement Smoothness
  - a. Only have 6 active projects right now
  - b. Working with Deborah Yost to track projects
- 3. Limited Construction Windows
  - a. Group will update/clarify in the construction manual to ensure that the strength is met before opening to traffic
  - b. Final report has been submitted to the EC and group is being dissolved
  - c. Bruce Need to account for mandatory stakeholder review process.
    - i. Need to account for delay in the schedule if want to meet milestones.
    - ii. Meeting milestones should not be solely on the working group if holdup comes during stakeholder review
- 4. Precast Pavement Phase II
  - a. Working group drafted memo requested modification to the scoping document.
    - i. Extending due date for revisions to specification change; and moving revision of guidance documents to phase III
    - ii. Working group members will be reevaluated to get better membership participation
    - iii. Keith need to develop a new scoping document for phase III for approval
    - iv. Keith potentially add clarification that a new phase III will be created
    - v. Phase III scoping document will take priority over lateral stability on the bin list
- 5. 4x8 Cylinders
  - a. Collected a total of 52 sets of data points across 2 districts
  - b. The 4x8s are breaking 5.41% higher than their 6x12 counterparts
  - c. Data is leaning towards adopting the 4x8 cylinders
  - d. After report is finalized, will work on making updates to the specs to reflect use of 4x8's
- 6. Concrete Mix Design
  - a. Caltrans and industry agreed on tolerances for change in mix number
  - b. Specs are with spec development and under review; review process taking longer than expected

- c. Was not able to meet December deadline for spec submission; will have to extend to July submission
- 7. Recycled Crushed Concrete Aggregate
  - a. Report has been submitted on RCA to the TG for review
  - b. Report recommends up to 30% RCA in new PCCP and RCA can be used in the lower lift of a two lift pavement
    - i. Kirk How many two lift pavement are done within Caltrans?
      - 1. Currently only 1
      - 2. If these types of projects are not done often; what is the benefit of specifying RCA
  - c. Ken Potentially put on pilot projects to evaluate cost benefit
  - d. Next step would be looking into how to write this into the specification
  - e. Need to provide clarification on 1 lift vs 2 lifts
  - f. Task group provided approval for the working group to move forward with milestones 2-4
- 8. CT 523 Flexural Beam
  - a. Waiting on review of CPD; potentially will come out next week
  - b. Questions about securing curing environment from FHWA
    - i. Working on language to clarify curing environment
- 9. Review of bin lists
  - a. Base/Concrete pavement Interface
    - i. Best practices and guidance for the designers
    - ii. Potentially remove as a bin list item and use A&E contract?
  - b. Want to propose adding concrete pavement acceptance based compressive strength to the bin list as item number 2 for CIP STG
  - c. Dulce to revise memo for adding compressive strength and removing base/concrete pavement interface
- 10. Update on research efforts
  - a. UCPRC research efforts list was provided to Joe, no particular order on priority
  - b. Joe to send out meeting invite discussing research efforts to all (every 6 months)
- 11. Status of pilot projects/long-term tracking/Standard Specs
- 12. Roundtable/Review Action Items/Next Meeting

**Action Items** 

Item	Task	Owner	Due Date
1	Send out meeting invite on research updates to TG members (every 6 months)	Joe	12/20/19
2	Revise compressive strength memo to detail changes to the bin list	Dulce	12/13/19

Action Items from 11/21/19

Item	Task	Owner	Due Date
1	Send out latest UCPRC research ideas to the STG's for review by 12/2/19 (any items missing?)	Cortney	<del>11/22/19</del>
2	Send final report of limited construction windows	<del>Dulce</del>	<del>11/22/19</del>
3	Send updated memo for adding compressive strength for concrete pavement	<del>Dulce</del>	<del>12/13/19</del>
4	Develop memo for time extension on mix design naming protocol	Jackie	12/13/19
5	Send RCA report to TG for review by 12/13/19	Cortney	<del>11/22/19</del>
6	Address delay in precast phase II with detailed explanation and plan of action moving forward	Divyesh/Dulce	<del>12/13/19</del>

Action Items from 10/24/19

Item	Task	Owner	Due Date
1	Clarify Memo for Compressive Strength Acceptance for Concrete Pavement	Kuo-Wei/Dulce	<del>11/8/19</del>
2	CTM 523 to get routed for comments	Samir	<del>11/1/19</del>
3	Finalized report for recycled crushed concrete aggregate to be sent to CTG for review	<del>Jackie</del>	<del>11/8/19</del>
4	Letter for time extension for recycled crushed concrete to be written	<del>Jackie</del>	<del>11/8/19</del>

Action Items from 9/11/19

Item	Task	Owner	Due Date
1	Report on SCMs supply and ASTM/ACI updates to Task Group (Add Agenda Item)	<del>Cortney</del>	<del>10/24/19</del>
2	Verify DIME can collect mix design, flex beam and cylinder data for rigid pavement	Dulce/Jackie/Brett	<del>10/24/19</del>
3	STGs to included TG members on meeting minutes as interim solution for website ADA issues	STGs	Ongoing

Action Items from 5/23/19

Item	Task	Owner	Due Date
1	STG chairs to evaluate current workload and upcoming bin list tasks to determine capacity	STG Chairs	<del>6/13/19</del>
2	Have conversation with Deborah and Dulce about concerns with smoothness schedule/discuss	TG Chair	<del>6/7/19</del>
	<del>plan of action</del>		
3	Communicate through DME meetings, IA and QASI communications implementation of 4x8	Keith	<del>Ongoing</del>
	<del>cylinders</del>		
4	Confirm what is being collected for batch tickets (Mix ID's)	Keith	<del>6/7/19</del>

	Concrete Task Group Meeting Attendance Log																												
		TG Meeting Date																											
Member	Role	9/12/2018	12/12/2018	1/24/2019	2/21/2019	3/13/2019	4/25/2019	5/23/2019	6/13/2019	7/25/2019	8/22/2019	9/11/2019	10/24/2019	11/21/2019	12/13/2019	TBD													
Keith Hoffman	CT Chair	<b>√</b>	<b>✓</b>	×	<b>✓</b>	<b>✓</b>	×	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	✓	<b>√</b>	<b>√</b>	<b>✓</b>														
Kuo-Wei Lee	CT Member	✓	<b>✓</b>	<b>✓</b>	✓	<b>✓</b>	✓	×	<b>√</b>	<b>✓</b>	<b>✓</b>	×	<b>✓</b>	✓	<b>✓</b>														
Blair Anderson	CT Member	<b>√</b>	<b>✓</b>	✓	<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	×	×	✓																
Ken Solak	CT Member													×	✓														
Kirk McDonald	Industry Lead	✓	<b>✓</b>	✓		<b>✓</b>	✓		<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>		<b>✓</b>														
Mark Hill	Industry Member	<b>✓</b>	<b>✓</b>	<b>✓</b>		<b>✓</b>	✓		<b>✓</b>	<b>✓</b>		<b>✓</b>	<b>✓</b>		<b>✓</b>														
Dulce Feldman	CIP CT Chair	✓	<b>✓</b>		×	✓		×	✓		<b>✓</b>	✓		✓	✓														
Bruce Carter	CIP Ind. Lead	<b>✓</b>	<b>✓</b>			✓			<b>√</b>			<b>√</b>			<b>✓</b>														
Divyesh Vora	Precast CT Chair	<b>✓</b>	<b>✓</b>		×	✓		<b>✓</b>	<b>√</b>		<b>✓</b>	×		✓	<b>✓</b>														
Doug McLaughlin	Precast Ind. Lead	<b>✓</b>																											
Jacquelyn Wong	M&QA CT Chair	<b>✓</b>	<b>✓</b>		×	<b>✓</b>		×	<b>√</b>		×	<b>√</b>		<b>√</b>	<b>✓</b>														
Nathan Forrest	M&QA Ind. Lead	<b>✓</b>	<b>✓</b>			<b>✓</b>			<b>\</b>			<b>\</b>			<b>✓</b>														
Joe Holland	UCPRC	<b>✓</b>	×			<b>✓</b>			×			>			<b>✓</b>														
Arshad Vali	Precast Ind. Lead		<b>✓</b>			<b>✓</b>			<b>√</b>			×			<b>✓</b>														
Charles Stuart	CIP Ind. Member		<b>✓</b>			<b>✓</b>			<b>√</b>			×																	
Deepak Maskey	EC Coordinator				<b>✓</b>	<b>✓</b>			<b>\</b>																				
Hector Romero	For Kuo-Wei Lee							<b>\</b>																					
Samir Ead	For Jackie Wong							<b>\</b>																					
David Lim	For Jackie Wong										<b>✓</b>																		
Deepak Maskey	For Kuo-Wei Lee											<b>✓</b>																	
Doug Mason	EC Coordinator											<b>✓</b>	<b>✓</b>	<b>√</b>	<b>✓</b>														

Key									
<b>✓</b>	Present								
×	Absent								
	Not Required								