

# National Road Research Alliance (NRRA)

## Team Meeting PM Team Notes

Thursday, February 2, 2017

### 1. Welcome & Introductions

### 2. NRRA Update

- a. Executive Committee is scheduled February 14<sup>th</sup> from 1—11:30 am (CST)
- b. Updated team meetings to every 2 weeks on your calendars
- c. NRRA Workshop & Conference – May 23-24, 2017
  - i. Could use both rigid TT ideas for the workshop
  - ii. Also looking for case studies to be nominated – email will be sent out
- d. NRRA Website Changes – added 2017 construction / costs
- e. MnDOT Contracting – NRRA members can do work even though they helped develop the plans. Need to start thinking long term research and the remaining 2 years. Both good EC meeting discussion items.
- f. Discussion NRRA Budget
  - i. Project Overall Costs – Note the project management saved 200K and some savings on the sensors though a partnership with UTEP effort. Now estimated to have 8 long term projects that could be funded for 160K. More discussion is need on the individual projects and tasks needed.
  - ii. MnROAD Staff Costs – will bring up for the EC related to the tech transfer items and use of a staff engineer at MnDOT. Tack coat example.
  - iii. Sensor Costs – Reduction on the large stone base and large subbase dynamic sensors – helped save some costs and right now the long term research is not supporting a large effort in this area.
  - iv. Discussion on the two partnerships with Ingios and University of Texas El Paso to enter into a no-cost partnership agreement to map the unbound layers with IC technology. The cells are divided up for each group to work on. The UTEP effort relates to a NCHRP study which can cover costs of the pressure gauges and they will also buy other instrumentation for their individual needs. Both studies will provide the raw data and develop summary reports for NRRA.
  - v. Overall schedule  
(Later Action thought) --> Ben will look into developing a timeline for 2017 related to events – suggested in other NRRA team meetings – this will also help the executive members at their meeting February 14<sup>th</sup>.

### 3. 2017 MnROAD Construction (Dave VanDeusen)

- a. Final Clarification - February 8, 2017 – Turn In
- b. March 14, 2017 – PreBid Meeting
- c. Construction Letting - March 23, 2017

- d. Discussion on concrete partial depth repairs (original I-94 WB)
  - i. Discussed the three panel layout of repairs. Changes will be made to the wheelpath repairs and saved to the PM research statement and attached – change shown with the red circle following these notes.
  - ii. Eshan Dave (UNH) is working on an initial list of possible materials to share with the group for both the rigid and PM team’s review. Separate meeting with Jerry Geib and Eshan is scheduled for Friday Feb 3<sup>rd</sup>

**Action → Teams get back to Dave Van Deusen related to his questions this week.**

#### **4. Long Term Research**

- a. Online Problem Statements

**Action → Ben develop a summary of the status of the LT and TT topics for the team**

**Action → Next meeting will be devoted to reviewing the LT research tasks.**

- b. Research Contract Development

- i. Contract Timing
- ii. Contractor Tasks
- iii. Not limited to MnROAD

- c. Research Contract Development

- i. Contract Timing – 2 year contract
- ii. Contractor Selection – Need to discuss who
- iii. Contractor Tasks – see above – work on in 2 weeks at next meeting

#### **5. Short Term/Technology Transfer**

- a. Online Problem Statements

- b. MnDOT test subject – State of Practice “Tack Coat”

- Discussed a possible process for these state of practice topics
  - MnDOT pull basic data together – Grad Engineer
  - Team members review and make recommendations on further action
  - Grad Engineer finishes or goes out to a hired contractor
- Need to add to the example – National Resources available/Ongoing Research/Future research needs.








**Action → Will ask EC if MnDOT can be reimbursed for this effort and a Grad engineer.**

#### **6. Summarize/Prioritize Action Items**

- a. Need 5 minute discussion of future meeting focus

**Action → Next meeting mostly use as a working meeting related to long term research needs #1 and #2. MnDOT staff will take an initial effort to suggest the contracted research tasks for the group to review at the Mid-February meeting.**

## Partial Depth Repairs (new layout)

<b>NRRA Partial Depth Repairs (Draft Proposal - Updated 2/7/17)</b>			
<u>Assumptions</u>	3 Panels / Patch Material		MnROAD has roughly 1800 ft
	1 Panel separation between materials (shown below)		27 foot panels ~ 60+ panels
	Patching cleanout / Prep done by MnDOT or Contract		1973 PCC Doweled Concrete (9" thick)
	Manufacture join NRRA - \$2,000/year		Looking for 15 material Types
	Timeframe - Installations October 2017 or 2018 (Big Question)		3" depth patches
	Manufacture do installations - material donation		
3 foot HMA Inside Shoulder			
Transition Slab no repairs	Panel 1	Panel 2	Transition Slab no repairs
Transition Slab no repairs	Panel 3	Transition Slab no repairs	Transition Slab no repairs
27'	27'	27'	27'
10 foot HMA Outside Shoulder			
MnDOT Specifications - <a href="http://www.dot.state.mn.us/materials/concretedocs/MemoandCPR_Details_04-22-2016.pdf">http://www.dot.state.mn.us/materials/concretedocs/MemoandCPR_Details_04-22-2016.pdf</a>			
	<b>MnDOT Spec (Type B3)</b> Centerline Patch (10" x 60" - 5" on each side of C/L)		<b>MnDOT Spec (Type BA)</b> Corner Patch (10"x10")
	Midlane Patch (10"x36" - 5" on each side of C/L)		C/L Joint Patch (10"x24" -- 5" in into each panel)
	Full length patch (10" x 144" - 5" on each side of C/L)		Wheel Path Patch (10"x36" -- 5" in into each panel - ends in WP)
			Midlane Patch (10"x10")