

<h1>PMPC</h1>	<b>PMPC Meeting</b>
	<b>Pavement Foundation STG</b> <b>Date: November 30, 2020</b> <b>Time: 1:30 pm - 3:30 pm</b> <b>Location: WebEx</b>
<b>Facilitator:</b>	Deepak Maskey (Chair)
<b>Attendees:</b>	Samir Ead, Patrick Lo, Raghubar Shrestha, Don Vivant, Marco Estrada, Jeff Pollard, Gregory Vinson, and Rukesh Maharjan

The first Pavement Foundation STG meeting started with self-introductions, and a brief information on the formation of a new Pavement Foundation Sub Task Group (STG) under PMPC CTG. The following items were discussed:

- A tentative work product (WP) bin list which was submitted as supporting document for the formation of Pavement Foundation STG to resolve all issues and develop specifications and test methods pertaining to the pavement bases and subgrades. All members agreed to use this tentative bin list as a living document and prioritize WP with edits and use for the development of short scoping documents. The following 3 WP selected from the bin list for the development of short scoping documents:
  - Determine alternative testing in lieu of R-value for unbound base materials:  
The current practices of preparing test specimen and testing for R-value for bases, subbases, and subgrades require kneading compactor, which is time consuming and expensive, and gradually vanishing its use due to not being used in HMA testing. In addition, R-value is not directly used in ME pavement design both for rigid as well as flexible pavements. The R-value is used to determine resilient modulus (MR) through the correlation for use in ME pavement design. Other alternative test method including unconfined compressive strength, confined compressive strength, and CBR will be evaluated for use in lieu of R-value.
  - Use of alternative compaction method to determine application rate of lime:  
The current practice of preparing soil samples requires compaction with kneading compactor, which is time consuming, expensive, and gradually vanishing due to not being used in HMA testing. Team proposed to eliminate the compaction testing of soils using kneading compactor due to lack of its popularity and testing knowledge. Team proposed to use modified proctor test as an alternative compaction method for lime stabilized soils like used for cement stabilized soils.
  - Use of lime/ cement for drying up the subgrade:  
The current practice of subgrade preparation only allows natural drying either under sunlight or air which takes considerable time and dependent to the weather condition. The use of lime or cement will expedite drying up of subgrade and enhance construction process. Lime has been used as a drying agent in municipality building projects and found very successful in expediting subgrade construction. Team tentatively agreed that this will be a method type specification.
- STG members discussed other WP items and recommended the following item to include in bin list with priority in descending order:
  - Low Nuclear Density Gauge Investigation
  - Revisit CT 231 for frequency of testing
  - Compaction QC/QA test results turnover time
  - Use of scm in LCB
  - Use of combined lime and cement in subgrade stabilization

- Determine method to estimate vertical movement of pavement subgrade  
If potential vertical rise (PVR) is included in site investigation, remove this item from bin list.
- Action Items:
  - i. Prepare following 3 short scoping documents and circulate the draft by 12/07/2020:
    - 1. Alternative testing to R-value for unbound base materials. (Deepak/Raghu)
    - 2. Alternative compaction method to determine application rate of lime. (Deepak)
    - 3. Use of lime/cement for drying up subgrade. (Marco)
  - ii. Industry to come up with suggestion on compaction QC/QA test results turnover time. (Don)
  - iii. Update Pavement Foundation STG work product bin list with priority. (Deepak)