**GLS Meeting Minutes: March 16, 2022 (Virtual Meeting)**

**Introduction/Welcome –** Bob Arndorfer

* Welcome members.
* Member updates:
  + Dave Pilon and Mike Hall retired.
  + Brandon Lamers is the new Chief in Bureau of Project Development, replacing Wayne Chase.
  + Updated Membership List was attached to the meeting invite.
* Meeting notes will be compiled by Brian DuPont (SE Freeways Oversight Engineer) and Bob Arndorfer.
* Meeting audio will be recorded to help capture discussion and person speaking. Transcripts will be deleted after minutes are finalized.
* Teams meeting function will also be used to capture who is in attendance.
* Previous meeting minutes were attached to the meeting invite. No discussion.

**Previous Meeting Carryover Topics:**

**QMP Subgrade –** Bob Arndorfer & Jake David

Bob gave a summary of the status of this initiative. WEMA was going to present DOT a summary of concerns and potential updates for consideration and discussion. WisDOT received those comments a week prior to the 3/16 meeting. WisDOT is now establishing a team to review the concerns and also begin updating the QMP Subgrade SPV to reflect other needed improvements. The WisDOT team will be composed of 5-6 individuals, and the initial internal meeting will be held in the next few weeks. When the DOT Team’s work is far enough along, it will present the updates to WEMA. After that, Bob will set up a joint meeting with both DOT and WEMA to discuss and come to agreement on revised SPV concepts and language. WEMA will select a similar number of representatives for this joint meeting.

It is expected that the FDM (and maybe CMM) will also need to be updated to provide better guidance on use/application of this QMP special. The goal is to complete work by fall, with the understanding that it is often difficult to estimate timelines related to spec revision/updates. Results will be presented/discussed at a GLS meeting.

Jake added that this topic was discussed at a project review meeting on STH 15 in Hortonville. It was a good meeting for both sides, and showed that WisDOT is investigating QMP Subgrade and how it affects the contractor. He was happy to see the upper level DOT management involvement in this meeting, and looks forward to moving to resolution on this item.

**Waste Bid item –** Bob Arndorfer

The waste bid item work was substantially completed on five pilot projects during the 2021 construction season. As part of the review of this item, Bob had agreed to meet with each of the individual project teams to discuss observations and collect/summarize feedback. These five separate meetings were recently held and a summary of feedback was presented to the group. Each of the meetings included: Designer, Contractor, Construction Engineer, Regional Representative and Bob.

Summary of Waste Projects:



Bob indicated that the designer has to assume the contractor will haul off all of the excess cut material. This may be different than what the contractor intends. The Contractor may intend to use some of the waste on site. Generally, it will be cheaper to do that, then for them to haul material off site.

Another consideration is the expansion factor of the waste material. Designers can provide an in-place volume but need an accurate expansion factor to provide an accurate waste volume if measured in the truck. Trying to keep track of the volume once it is removed is difficult for several reasons including: staging may require cut materials to be temporarily stored until they can be placed in their final position; difficulties when multiple contractors are using the same fill site; and when multiple contractors on a project are generating waste such as for underground piping excavation (i.e. water main, storm sewer and sanitary sewer).

Underground piping items currently have the waste included in the bid item so that contractors minimize excavation. Contractors suggested maybe this other ‘waste’ material should be included in this item. Bob said that this is not the intent of this item.

A few of the pilot projects consisted of urban construction that is not conducive to wasting material on-site. On several of these pilots, the waste was not measured, and the plan volume was used/paid. Going forward, we need to determine what is the most appropriate type(s) of projects the waste item should be used on. Overall, both contractors and designers thought that the SPV language actually worked pretty well. The difficulty is in tracking the volume of waste that is hauled off-site.

To help address this concern, Jake asked about getting/including more soil information in the bid documents. Bob indicated that this has been raised multiple times in the past. In order for WisDOT to consider this, we need to understand what soils information contractors desire. Jake suggested the contractors get together like they had on QMP subgrade and present WisDOT with what soils info would make sense to include in the bid docs. Bob thought that was a good place to start. The Department would need to consider the cost for obtaining/presenting this additional information vs. the projected bid savings. Grading contractors consider many different factors, such as; experience, staging, equipment, etc., when arriving at earthwork bids. This can be seen by the variability in earthwork bid prices on the same project, and between projects.

Chris Goss said Hoffman did not have any of the pilot projects, but they have had a waste item on projects in other states. He thought it should be measured in the trucks. DOT and contractor would need to agree on a volume per truck, and then count trucks leaving the site.

Eric Gwidt NE Region stated that it would be difficult to track which trucks are hauling to another part of the project and which were hauling off-site. Also, DOT does not currently count trucks. Another issue is that the start/stop times of independent trucks often vary on a project, increasing the difficulty with accurately counting/tracking truck loads.

Brian DuPont commented that the waste item would not qualify for payment of 7% for a deleted item or for consideration of a Cost Reduction Incentive (CRI) because WisDOT is only including the item if it is needed. Bob agreed.

Bob stated that it is a complicated initiative and said he would look forward to Jake providing feedback on the soil information wanted by the contractors

Jake thought that Wayne Chase said that this item may have been include in some 2022 contracts. Bob will contact Wayne to confirm/deny this. (After the meeting, Bob did speak to Wayne, and he was not aware of any 2022 contracts with this item.)

It appears that more work/discussion on this item may be necessary before moving its application forward. Work includes: Determining what projects this is appropriate for. (Will not be all projects.) Complete more pilots on projects with that present more difficult ways to measure. Discuss alternative measurement options in more detail.

**Environmental Topics –** Hans Hallanger and Jeremy Ashauer

* Polyethylene Sheeting – Hans presented an example of the use of Polyethylene sheeting and indicated that this is a practice that he is working with the storm water engineers in the Regions to utilize on other applications beyond diversion channels to protect sensitive areas. He is updating the Specs/FDM to provide guidance on the use of this material. This could be included in future plans or as an option for the contractor to request a change order to implement, based on trying to minimize erosion.
* ECIP Form Update – Jeremy provided an update on DOT and DNR design concurrence process. There is a new check box on the ECIP form to indicate if DNR had, or had not, reviewed the plans in design. This pertains more to design, than construction.
* Heavy Duty Silt Fence – Jeremy also provided information on heavy-duty silt fence used in high-risk (environmentally sensitive) areas. This has been used the last 5-6 years, but there are different SPVs and fence heights. The desire is to arrive at one STSP for this item. Will also need to update FDM on application. Generally there are two different applications/installations, wet or dry areas, and projects can require both options.

Chris Goss asked if there would be separate bid items for wet and dry installations. Jeremy said there is currently only one bid item. Chris said it is generally significantly more expensive to install the wet option because sandbags add approximately $7-15/each, which would more than double the cost compared to the dry option. He suggested paying for the sandbags separately as needed in the field. Jeremy will consider this feedback.

Brian DuPont suggested having two separate bid items for wet and dry installations or have a bid item for sandbags so we minimize change orders on projects.

Josh Wade recommended that the maximum height of the heavy-duty silt fence should be 3 feet. He indicated that higher fence would not stand up to water higher that 3 feet and that this is an item that would be maintained after a rain event so any build up of silt would be removed. Jeremy will consider this feedback.

Jonathon Engerson brought up an option of utilizing heavy chain instead of sandbags which would be easier to install, remove and reuse. Or possibly a combination application of sandbags and chain.

Contractors also asked that the Department consider the possibility of draping the geotextile material over the back side of the fence, so that it does not need to be cut. Also suggest drafting STSP so that materials are standardized and would allow recycling of materials.

* Use of Seed Water Item – Jeremy brought up seed watering item and how it is used to get to 70% vegetation needed to close out projects. Josh Wade stated it is very difficult to perform the watering due to project delays/limited time or opening the project to traffic, which removes the necessary project traffic control needed when watering is performed. Staged projects also create issues. Tadd Owens commented that is difficult when there are tall slopes involved. A fire hose may cause erosion, and setting up a sprinkler system on an entire area is very difficult and costly.

Josh and Mark Polega of WisDOT had discussion on the timing of seeding and that due to staging it might be seeded at a time which is not conducive for the seed to germinate, so there is no sense in watering it if you can’t continue to access the site.

It was also pointed out that once watering begins, it needs to be continued to get effective germination.

* DNR Permits Update (TS4 and TCGP) - Hans mentioned that DOT has a Separate Storm Sewer System (TS-4) permit for urbanized areas which needs updating. Jeremy also said the Transportation Construction General Permit (TCGP for land disturbances over 1 acre) needs to be renewed in 2023, and the Department is starting that process.
* Jeremy and Hans Presentations:

 

**Grass Seed Updates –** Mark Polega

Mark and Crista Schaefer have been working on new seed mixes for high pH soils, low maintenance, and native seed usage. They are looking at newer technology for difficult areas needing seed. There has also been some seed spec changes seen in the April lets.

There is a significant national seed shortage nation-wide, due to drought conditions and wildfires. It was a poor year for growing seed, and much of the surplus seed was used to vegetate areas affected by wild fires. This situation is likely to affect our projects because the mixes we specify may no longer be available anywhere in bulk. Seed manufactures would continue to sell to home improvement stores as they make a larger profit than by selling in bulk to landscape companies. Most of the seed DOT uses comes from NW US. Expect this issue to be most prominent in mid-summer.

The seed industry is talking about conserving seed by producing a “coated seed” which will use less seed because it germinates better. The coated seed weighs three times as much as uncoated, so this would impact our payment method, which is based on seed weight.

Josh Wade asked about contract changes for alternative mixes and the responsibility for 70% coverage on projects previously bid. Mark agreed this could be an issue, but WisDOT is just beginning to address the situation. Josh indicated that contractors cannot order a seed that is not preapproved by WisDOT and therefore can’t prepare for the shortage by providing a substitute. Josh thinks the best way to achieve 70% coverage sooner is to raise the seeding rate. Christa Schaefer said they are looking into that for the future. Mark and Josh discussed different seed mix components. Josh was worried about maintaining permanent erosion control if no seed was available. Christa mentioned that this is not a supply chain item that could resolve itself in the near future. This may be with us for a year or two, especially if there is another poor growing season.

Brian DuPont mentioned that if we know a contractor cannot get what we specify, WisDOT should temporarily require a seed that is available, like the coated seed, so that every project does not have to have a change order to allow a seed substitute. Mark said it is a moving target now and is difficult to decide what will be available in sufficient quantities for our needs. He is aware of the issue and looking at various alternatives.

Suggest further discussion/update at next GLS meeting.

**New Topics:**

**Manual of Test Procedures (MOTP)** – Erik Lyngdal

Erik showed a draft of the MOTP and stated that the Department has a contract with Behnke Materials (Signe Reichelt) to create this manual. The manual will address all testing procedures including those internal to WisDOT [a WisDOT Modified Test (WTM)]. The Manual will contain all material testing modifications/clarifications to standard ASTM/AASHTO/etc. test methods. Currently these modifications are located in several different locations, and this manual will create a single location for this information. Comments from industry and WisDOT on the MOTP, are still being reviewed. The timeline for implementation has yet to be determined, but It is expected that the MOTP may be published during the summer of 2022.

Bob Arndorfer stated that this should not have much impact on GLS members but wanted them to be aware of the initiative.

**WHRP Research Studies and GLS –** Dave Staab

Dave provided background on the Wisconsin Highway Research Program (WHRP), which was established in 1988, and is in collaboration with UW Madison. Basic goal is to research better ways to design, build, maintain, and reconstruct our highways, with an emphasis on practical research that can be put to use. The four main areas are: Flexible pavement, Rigid pavement, Structures and Geotechnics. There is a high-level committee that oversees work of all four areas. WisDOT, academia and industry reps are on this Oversight committee. Each of the four technical areas then has a Technical Oversight Committee (TOC) that develops and oversees projects for that area. Each individual research project then has a Project Oversight Committees (POC) that guides the researcher completing work on that project. Once a project topic is developed and approved, Request For Proposals (RFP’s) are solicited from academia/consultants/researchers, and a research team is selected to complete the study. The POC is then selected to oversee the research work on that project.

Along with Departmental staff and academia, Shawn Hoffman is a representative on the Geotechnics team. WHRP is always looking for new topics and people from the construction industry to participate on the TOC or POC’s. Each area usually has one or two research studies being conducted each year.

If you would like more information on the Geotechnic Oversight Team of WHRP, please contact Dave Staab, or visit the WHRP website found at Wisconsindot.gov.

There is a current study that is investigating expansion/shrinkage factors of soils, and construction conversions factors (weight to volume) of aggregates and recycled materials. This summer, the research team is looking to get samples of these materials on WisDOT projects with the assistance of contractors and WisDOT staff. Work involves completing soil and aggregate field testing, as well as collecting samples for laboratory testing. Will need to coordinate the sampling with contractors on these projects, to help minimize researcher travel to project sites. This will require good communication. The intent is for this research work to minimize any impacts on contractor work/operations as much as possible. Research will **not** be used for individual project control.

Feel free to contact Shawn Hoffman or Dave Staab for further details. We hope contractors/field staff will accommodate researcher requests. The main requests will be to obtain aggregate material source information and to get project construction status, so researchers can optimize their site visits. Researchers hope to experience multiple, concurrent grading/granular material placement operations on single site visits.

**Rock Excavation Incidental to Culvert Installation –** Bob Arndorfer

Bob said that the question of a separate bid item for culvert rock removal was raised by a contractor at the last GLS meeting. This is probably a fairly rare occurrence, and if rock is encountered, it is probably only at the lower excavation limits for the culvert, so quantities are anticipated to be low.

After some internal discussion, the Department is looking to revise the Standard Specifications to pay for rock excavation, if it is encountered during culvert installation. The language will probably be similar to Section 608 Storm Sewer, but revisions need to be incorporated into several different sections of the specs. Bob said designers will try to estimate any rock conflicts using typical boring spacings, but DOT does not bore specifically at culvert locations. There will still be a potential that not all bedrock found during culvert excavation, will be identified in the plan.

Jake asked how it will be handled in the field if there is no rock bid item in the plan, and rock is encountered during culvert excavation. It is expected that this will be paid similar to Section 608, which states payment as per Std. Spec 109.4.

Bob hoped to have the spec changes completed this summer, but noted that with Michael Hall gone, this may take a bit longer. There will also be a review of FDM guidance to determine if that document needs to be updated to reflect this change.

**Other/Additional Topics –** Bob Arndorfer/All

None added.

**Next Meeting:** September 21, 2022. 1-4 PM (Week after Letting)

Bob said that hopefully we could meet in person at the next meeting. Jake noted that the original suggested date of Sept 14 was a bid opening week. Bob has since confirmed this, and moved the meeting to Wed., Sept 21.

Meeting ended at 3:38 pm.

**Attachments:**

Meeting Agenda:



Attendance List: (From Teams)



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**DP/RPA**