

Construction Industry/NDOT Advisory Committee

Materials Subcommittee

Meeting Minutes, April 21, 2009

Attendees:

Rudy Malfabon, NDOT Dir. Office  
Reid Kaiser, NDOT Materials Div.  
Richard Buenting, RHB  
Darin Tedford, NDOT Materials Div.  
David Titzel, NDOT District 2  
Larry Sharp, Las Vegas Paving Corp.  
Mark Salazar, NDOT Materials Div.  
Jeff Shapiro, NDOT Const. Div.

John Elkins, Granite Const.  
Derek Betts, Granite Const.  
Mike Robinson, Kleinfelder  
Gary Dion, Frehner Const. Co., Inc.  
Parviz Noori, NDOT Materials Div.  
Steve Hale, NDOT Construction Div.

I. Approve Minutes

The minutes of our meeting January 26, 2009 were slightly modified per request by Darin Tedford. Minutes from all subcommittees have been posted at:

[http://www.nevadadot.com/business/Liaison\\_Committee/MeetingAgendas.asp](http://www.nevadadot.com/business/Liaison_Committee/MeetingAgendas.asp)

Reid Kaiser introduced Mark Salazar as the new Assistant Chief Materials Engineer for geotechnical issues. Parviz Noori transferred from that position to be the Assistant Chief Materials Engineer for roadway issues.

II. SEM Materials Update

Richard Buenting informed the group that SEM Group, a publicly traded company that is not in bankruptcy, bought SEM Materials' hard assets. The industry hopes to see them begin supplying asphalt products soon.

III. Percent Within Limits (PWL)

Steve Hale from NDOT Construction Division provided copies of materials used at a recent FHWA workshop on PWL. Also, a UNR research proposal has been received by NDOT and will go through the ranking process in order to compete for limited research funds. The agenda of the PWL training program and the research problem statement for PWL are included in these minutes as a PDF.

It is felt that a PWL spec will reward the contractor for production consistency and will result in more uniform construction administration by the Resident Engineers, particularly when gradation tests are out of spec. Concern was expressed is that if a contractor starts out producing coarse material, they have to stay coarse throughout the remaining production in order to earn a pay bonus. Also, a contractor could be within specifications throughout production and not earn a pay bonus, and could be in specifications and get a reduction in pay factor.

PWL is used by FAA, FHWA Central Federal Lands (on new alignment for Hoover Dam Bypass), and Colorado DOT. Lot sizes vary for different agencies. FHWA lot size = entire project; FAA lot size = day's production. FAA specifies PWL for mat density, air voids, stability, and joint density.

Questions:

Is the cost of implementing PWL justified if we see that we are already producing consistent material, say +/- 0.05 % asphalt content?

Would NDOT consider paying a bonus for a tight group of results around a particular target value?

***ACTION ITEM:***

*Follow PWL research proposal to see if it receives research funding. Ranking is a two-step process: Research Advisory Committee ranks project proposals, then Research Management Committee makes final determination.*

#### IV. Mix Design PDF Discussion

Jeff Shapiro expressed concern with the Materials Division dealing directly with the contractor, not the Resident Engineers, on e-mailing a PDF of the asphalt mix design. Jeff felt the R.E.s could give same-day service on getting the mix design to the contractor and he was willing to work with the R.E.s to get consistency. Rudy Malfabon said we need to commit to e-mailing directly to the contractor and we have already listed this as an accomplishment of this team.

#### V. Release Agents

Steve Hale said NDOT doesn't have a formal program for approval of release agents. TXDOT has an established program. If a release agent is on TXDOT's Qualified Products List (QPL), NDOT will approve in most cases and add the product to NDOT's QPL. A release agent manufacturer can certify that their product meets TXDOT specifications. Steve Hale handles release agent acceptance while working with Roma Clewell in NDOT Research Division. A handout titled "Use of Asphalt Release Agents on NDOT Projects" is included in these minutes.

## VI. Baghouse Fines

Four contractors responded to an NDOT survey on baghouse fines. The Materials Division presumes that baghouse fines are considered indirectly in the mix design process, because the fines are already in the aggregate submitted for a mix design. Not all baghouse fines are equal; check the effects on the mix design, particularly on stability. Milltronics metering equipment is useful for uniform metering.

Question:

Can a contractor increase the baghouse fines percentage if they have good stabilities. For instance, a contractor could be producing 3% baghouse fines and is wasting 1% because only 2% may be reintroduced.

## VII. COLA for Aggregate Pits

Nevada Division of Environmental Protection (NDEP) will be advised by the NDOT Materials Division of who the apparent low bidder is on an NDOT project. NDEP will then begin the COLA process, which permits the contractor to conduct aggregate pit and asphalt hot plant operations. This is being proposed as an initial process until NDOT develops a final process on this issue.

If there are multiple pits on a project, typically the contractor will only use one pit as a material source. In that case, the other pits that will not be used will be available for use by other contractors for NDOT projects.

United States Environmental Protection Agency (USEPA) is involved if the pit is in a non-attainment area for air quality. They look at impact on the air shed (equipment, drop points,

There are over 1,100 pits across the state that NDOT controls; no one can get in a pit unless NDOT allows its use. Obviously the amount of asphalt cement required for the particular aggregate, the price of asphalt cement, and the haul costs come into consideration when determining whether to use a particular pit.

If anyone has another idea, submit the proposal to Darin Tedford or Reid Kaiser and they will coordinate with Construction Division.

Questions:

Can a contractor already in a pit lock all other competitors out of using that pit? The example provided (Lovelock) is a privately owned pit, so it does not apply to this question.

If the low bidder is not aware that another contractor has a COLA, will NDEP rescind the other contractor's COLA? Darin Tedford explained that it is up to NDEP.

## VIII. Recycled Asphalt Pavement (RAP)

NDOT was going to specify RAP on the McCarran Boulevard project, but funding was taken for the Meadowwood Interchange project on U.S. 395. NDOT does not want to use RAP on the interstate system. The Materials Division will identify another project to specify RAP on.

Larry Sharp informed the group that LV Paving has a project with Clark County using Nevada grade asphalt cement with 15% RAP. It uses the Marshall mix design method and gradation is a little different than NDOT mix. He asked if there is a desire to gather information from that project. LV Paving can send out samples for recovered binder testing.

## IX. Economic Stimulus Projects Update

Pyramid Way and McCarran Boulevard projects are ready but funding went to Meadowwood Interchange. They may be funded still due to delays on the interchange project.

NEXT MEETING: July 28, 2009, 2 p.m.; Subjects include continued discussion on RAP, Pit Permitting, PWL and Prime Coat alternatives. If anyone has new items, e-mail them to Reid Kaiser ([rkaiser@dot.state.nv.us](mailto:rkaiser@dot.state.nv.us))