

Construction Industry/NDOT Advisory Committee

Materials Subcommittee

Meeting Minutes, November 17, 2008

Attendees:

Rudy Malfabon, NDOT Dir. Office  
Reid Kaiser, NDOT Materials Div.  
Darin Tedford, NDOT Materials Div.  
Richard Buenting, RHB  
Derek Betts, Granite Const.  
Steve Hale, NDOT Construction Div.

John Elkins, Granite Const.  
Mike Robinson, Kleinfelder  
Kevin Stoehr, Frehner Const. Co., Inc.  
Parviz Noori, NDOT Materials Div.

I. Approve Minutes

The minutes of our meeting September 29, 2008 were approved as previously supplied by e-mail.

II. Follow Up Items From August 11, 2008

E-mailing a pdf of the asphalt mix design to the contractor and R.E. has been implemented by Materials Division.

Materials Division has scanned the NDOT Testing Manual into pdf format for each test method. It should be available on the NDOT website in early 2009.

III. Alternative to MC Prime Coat

Topein S will be allowed as an alternative to MC-70. NDOT will not test the materials but will accept as an equivalent with a change order. Typical application rate was 0.25 gal/SY for the first application and a second application at 0.15 gal/SY. This product is an emulsion.

***ACTION ITEM:***

*Materials Division could consider informing the R.E. 's of this alternative at the R.E. Meeting to be held in February 2009.*

IV. Recycled Asphalt Pavement (RAP)

Larry Sharp of Las Vegas Paving was unable to attend and asked that the discussion about RAP be deferred until next meeting.

RAP was used on the McCarran project in Reno. Research is underway to monitor pavement performance, particularly for fatigue and rutting. UNR tested the mix during construction. The mix design was done without RAP and bin percentages were adjusted.

Granite Construction used RAP on three projects in 2007.

***ACTION ITEM:***

*John Elkins will provide a list of Northern Nevada projects that used RAP. Larry Sharp will provide a list of Southern Nevada projects that used RAP. From our previous meeting, Larry also volunteered to summarize some recent information on the use of RAP. The subcommittee will continue discussion of this item.*

V. Materials Pits

An example was provided of another contractor wanting to use a pit that a different contractor was already in and the resource agency would not allow the second contractor to use the pit at the same time. Rich Buenting commented that there are not a lot of pits available. The BLM used to allow free use permits years ago. NDOT has gone to regional pits to address environmental issues such as air quality and tortoises.

NDOT will continue to set up pits as always on NDOT contracts. NDOT's Sloan regional pit is not fenced yet. NDOT is considering fencing a third or a quarter of the withdrawn area which has been approved by BLM. CL 18-2, located on north US 95, is another regional pit.

VI. Testing by Private Labs

Is NDOT considering test asphalt for local agencies? NDOT tests 3,000 to 4,000 asphalt samples a year, with back up in the fall due to workload. NDOT samples one per 25 tons, whereas the local agencies sample about one per 300 or 400 tons. Mike Robinson commented that some regional labs stay operating only because they are able to pull in work regionally. If NDOT does testing for local agencies, it will have an adverse effect on the private sector.

VII. Miscellaneous Comments

SEM Materials Update: Contractors are hearing that the SEM Materials assets could possibly be sold in early 2009. SEM may be trying to sell all of their terminals to one buyer, which limits the number of interested parties.

Stimulus Package: NDOT is working on a list of projects that could qualify for a federal stimulus package for transportation. We do not have all of the federal requirements yet (how much money? will it be divided into traditional federal programs or lump sum? advertise in 60 or 90 days or award?) so the list is not available to the public. Once a list is available, it will be sent to contractors.

#### VIII. Future Meeting Date

January 26, 2009 at 1:00 p.m. Rudy will check on the NDOT Las Vegas Building A Conference Room for video-conferencing and Reid will check on the 3<sup>rd</sup> Floor Conference Room in Carson City. Topics for discussion are:

- Use of RAP
- End Result Spec
- MSE Backfill

Note: The following page (NDOT Prime Coat Alternatives, MTV Spec, RAP and Material Sites 11/17/08) was e-mailed as a handout by Reid Kaiser:

## **NDOT Prime Coat Alternatives, MTV Spec, RAP and Material Sites 11/17/08**

The NDOT Materials Division has a policy of specifying a prime coat for all aggregate base surfaces to be covered by plantmix. In the past, SS-1h has been used as an alternative to MC-70 and MC-70NV. As a prime coat, SS-1h is not effective. It does not penetrate and tends to track out on the wheels of whatever equipment comes in contact with it. Two years ago there were some complaints about the national specifications for MC-70. Some of the specification windows were narrow enough to cause formulation issues. The specifications were widened, without sacrificing the quality or effectiveness, and the material was renamed MC-70NV. Environmental restrictions prohibit any MC material to be used as a seal coat in Clark and Washoe Counties. Use of MC-70NV as a prime coat or MC-250 as a seal over Roadbed Modification is permitted. Current NDOT Materials Division policy regarding the use of prime coats is to specify MC-70NV on every project that it applies. On small areas, saw cut and widening on shoulders, or other areas where construction or public traffic will not come in contact with the surface, a double application of SS-1h is allowed. One project in Las Vegas placed a one-mile test section of Topein-C or S as a prime coat. Topein is a proprietary product that appeared to perform satisfactorily. Use of this product has not been proposed since that time, but would be considered. If this or other alternatives are proven to work as well as MC-70NV, they may be added to the specifications.

*UPDATE: NDOT has reviewed the use of Topein S for use as a prime coat alternative on Contract 3327, the Carson Freeway extension. The use of Topein S for prime coat on SR 160 has been proposed. These test sections will provide for the refinement of a specification for use of this product, and based on continued success, it may be added to a QPL for alternate prime coat materials next year.*

RAP, or recycled asphalt pavement, has been used for many years in the structural section of roadways. RAP may consist of cold milled plantmix or crushed plantmix that has been removed from the roadway by some other method. Currently NDOT does not allow the introduction of RAP into plantmix for paving on state contracts. National and local research has shown that the combination of RAP, virgin aggregates and polymerized asphalt produces an inferior product compared to virgin aggregates and polymer asphalt alone. For some time, NDOT has been allowing the use of RAP and recycled concrete in borrow, shoulder material and base. Specifications are under development to allow the use of these materials without change orders.

*UPDATE: Based on national research and local efforts by Contractors, NDOT intends to advertise a project on McCarran from North Virginia to Seventh, requiring 15% RAP. Specifications will include a gradation for the RAP material and other necessary changes.*

The NDOT Materials Division has three employees that work to set up material sites on contracts. Coordination between Right of Way and Environmental Services is necessary to set one or more material sites up on most projects. Sites in the Reno and Las Vegas and any areas where no sites are available are set up for commercial sources. Sites are explored ahead of time by NDOT. Preliminary mix designs are run on aggregate crushed and graded by the Materials Division. Logs are kept to estimate amount of material available, but neither the quality nor quantity is guaranteed. Contractors are allowed to enter sites that are not set up, with change orders. With the possible exception of “regional sites”, one site will not be set up for multiple contracts in the future.