SAMPLING BITUMINOUS MIXTURE FROM BEHIND THE PAVER

1. GENERAL

This procedure is to standardize the sampling of bituminous mixture samples from behind the paver. The intent is to obtain the sample at the closest point of incorporation into the final pavement prior to compaction.

2. TRAINING

Personnel obtaining these samples must have training in Bituminous Certified Plant 1, Bituminous Street I, or be under direct supervision of someone who is certified.

3. EQUIPMENT

- A. Flat-nose shovel
- B. Insulated container
- C. Metal container
- D. Putty knife
- E. Insulated gloves

4. PROCEDURE

- A. Select a random sampling area where the mixture is uniform and displays no visible segregation. The random sample should be taken to represent a cross-section of the mat. Coordinate the sampling with the taking of a spot check, if possible. (The random sampling method may apply, CHECK SPECIFICATIONS)
- B. Obtain the sample at least one foot from the outer edge of the pavement. *Note: Put on insulated gloves before sampling.*
- C. Using a clean flat-nose shovel, shovel the amount of mixture needed into the metal container, being careful not to pick up any of the underlying material, such as tack or contaminate the sample with any foreign matter. Try not to disturb the sampling area any more than necessary to obtain the representative sample. Extreme care should be taken to minimize coarse and fine particle separation while the sample is being taken.
- D. Immediately after obtaining the sample fill in the samples area with loose mixture obtained from the paver hopper. Since the paver should be constantly moving, it might be convenient to obtain the mixture for filling the sampled area prior to taking the sample. After filling the area, the contractor's raker should smooth out the area before rolling.
- E. Accurately label sample according to MN/DOT procedures.

F. 'Verification' samples should be immediately split in the field by the quartering method. (See Mn/DOT Grading & Base Manual 5-692.212) One half of the sample is to be transported to the testing facility in an insulated container that will maintain sample temperature. This sample is then further quartered at the testing facility to perform the necessary tests.

'Quality Control' samples should be immediately transported back to the testing facility in an insulated container that will maintain sample temperature. They are then split by the quartering method and one-half is stored as the 'Quality Assurance' sample. The other half is used for the necessary tests.

NOTE: Optional hot-mix sampling procedures, plate sampling and truck sampling are available. Contact the Mn/DOT Bituminous Office for these procedures and sampling requirements.