


TO: Director, Preliminary Plan Review Bureau	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>
Distribution: <input checked="" type="checkbox"/> Main Office <input checked="" type="checkbox"/> Regions <input type="checkbox"/> Special	Code: <u> EI 78-51 </u> Date: <u> 9/6/78 </u>
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In previous years, we have experienced serious failures of blacktop pavement, reflected by ravelling of the top course or the longitudinal joints. These failures are largely attributable to paving late in the season at a time when the mix cools too rapidly for effective compaction of the top layer or for the consolidation of the joints. Whenever we waive the seasonal limitations prescribed by the Specifications, the risk of poor results is dramatically increased.

We recognize the many types of situations and arguments which lead us begrudgingly into the granting of waivers; the desirability of a hard surface before winter shutdown, projecting manholes and inlets which would impede snow plowing, adequacy of drainage, sudden warm spells, and the various economic benefits to the contractors. However, these can largely be overcome by proper scheduling and sequencing of the contract operations via early coordination between our project engineers and the contractors.

This year, we intend to impose a highly restrictive policy on late season blacktop paving in order to insure the specified quality of product for which we are paying.

No waivers of seasonal limits for top course asphalt concrete paving will be approved by this office except in unusual situations where paving is required for safety or other compelling reasons which are in the best interest of the Department. Accordingly, you should immediately ascertain which project contractors may predictably submit requests for variance from seasonal requirements. On those contracts a job meeting should be promptly held with the contractor, and work scheduling thoroughly discussed to ameliorate the undesirable aspects of any late season paving. If a request is submitted, it should be thoroughly documented as to necessity. Such requests will be evaluated, and if approved, may contain requirements to insure satisfactory results such as requiring additional compaction equipment, two pavers in tandem, etc.

Since asphalt concrete placed late (close to or beyond seasonal limits) doesn't receive the benefit of additional compaction from warm weather traffic action, the risk of obtaining poor results increase significantly. It is imperative that all the specification requirements in regard to weather conditions, base temperatures, seasonal limits, mix temperatures, compaction and joint construction be rigidly enforced.

It would be desirable to delay paving top courses from the late season to the Spring whenever possible. Dense binder currently being used will "winter over" satisfactorily. If late paving is approved, the following additional suggestions should be implemented to help insure satisfactory results.

Subject: LATE SEASON PAVING - ASPHALT CONCRETE

1. Produce and place mixes at the upper ranges of the mix temperature specifications.
2. Insure that proper course thicknesses are placed. Don't allow thin spots since they are potential problem areas.
3. When possible, use a dual drum vibratory roller as a break down roller.
4. Insure that vibratory rollers are operated at the proper speed, frequency and amplitudes.
5. Keep all rollers as close to the paver as possible. Insure that required number of roller passes are met.
6. Pay attention to all aspects of joint construction. Attempt to "Close up" adjacent lanes of paving as quickly as possible.
7. Use lay down machines whenever possible. If hand work is necessary, pay attention to proper compaction.