

ENGINEERING DIRECTIVES AND STANDARDS

Volume : II Effective Date :
Chapter : 2 Revision Date : 09/14/1977
Section : 1 Subject : **ALTERNATE PAVEMENT CONSTRUCTION MATERIALS IN
Directive : 5 PAVEMENT TYPICAL SECTION DESIGNS**

1. **PURPOSE.** The purpose of this directive is to establish a policy for the use of commercially available pavement construction materials to the greatest extent possible in order to use the most cost effective materials and components and avoid any delays resulting from temporary shortage of supply.
2. **SCOPE.** This directive affects all pavement and base course materials that are currently included in the Office of Highways ways' latest Standard Specifications for Roads and Bridges. Those materials that are being used on a semi-experimental basis or covered by Special Provisions regarding materials and construction specifications are to be excepted.
3. **POLICY.** It will be the policy of the Office of Highways to design and make provisions for use of alternate materials in pavement typical sections if practical and feasible. Factors to be considered in determining if an alternate is to be used will include but not be limited to traffic volumes, traffic classification, projected land use, continuity of the highway or street system, past pavement experience in the area, and construction procedures. It is recognized that in some cases it will not be feasible to use alternates.

The following guidelines will be used:

- a. Urban projects utilizing curb or curb and gutter will not require alternate pavements. If concrete pavement is utilized, it will be a minimum of 8 inches thick.
- b. Rural project pavements will be designed using, as a minimum, the highest design ADT on the continuous section between population centers of 5,000; for freeways population centers of 20,000 or more will apply. The intent is to obtain continuity of structural design for reasonable lengths of highways. Reasonable lengths are considered to be no less than 20 to 25 miles. Individual construction projects will have alternate pavement sections.
- c. Pavements for widening of less than full lanes and overlay of pavements are excepted from this policy.
- d. AASHTO Interim Guide for Design of Pavement Structures as modified by the Office of Highways will be the design method.

- e. Interim pavements will be treated on an individual basis.
 - f. A concrete alternate may not be required where less than 8 inches of asphaltic concrete will satisfy the design.
 - g. Urban projects off the state maintained system may be designed in accordance with local standards and will not require alternates but will be reviewed only for reasonableness of design.
4. **IMPLEMENTATION.** The Chief Location and Design Engineer shall implement and monitor, on a continuing basis, a program which will insure compliance with this directive. The Road Design Engineer, Interstate Engineer, and Highway Soil Design Engineer are responsible for assisting the Chief Location and Design Engineer. Any deviations from this policy require prior approval of the Chief Engineer.
5. **OTHER ISSUANCES AFFECTED.** This directive supersedes EDSM NO. 11.2.1.5, dated February 16, 1977. All directives, memoranda, or instructions previously issued in conflict with this directive are hereby rescinded.
6. **EFFECTIVE DATE.** This directive will become effective immediately upon receipt.

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