

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
MANILA

097-13 DPWH

Feb. 09, 1999

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DEPARTMENT ORDER)
No. **29**)
Series of 1999)

SUBJECT: Proper Construction Procedures
for Concrete Pavement Reblocking


It has been observed that improper implementation of concrete pavement reblocking activities result in public inconvenience and early deterioration of the repaired sections.

To ensure proper implementation of these reblocking activities, all concerned are hereby directed to strictly comply with the following construction procedures in addition to the construction requirements under Item 311 (Portland Cement Concrete Pavement) of the 1995 DPWH Standard Specifications, Volume II:

1. Adequate barricades and traffic warning signs shall be installed and the working area shall be adequately illuminated at night to warn motorists of on-going construction.
2. Cutting of the defective section shall be done on a per block basis. The defective block shall be cut using a concrete saw to the specified depth and shall be broken into pieces using a pavement breaker (jackhammer).
3. Spoils from demolished/excavated materials shall not be allowed to be stockpiled at the sidewalk or part of the travelled roadway and shall be removed immediately to prevent obstruction.
4. Re-preparation and compaction of the base to the required density shall be done prior to concreting in accordance with the DPWH Standard Specifications, Volume II, 1995, using vibrating rollers and pneumatic tire rollers. In areas where the said equipment cannot be used, a portable/mechanical compactor shall be used.

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5. At transverse construction joints, holes of 260 mm diameter and spaced at 300 mm shall be drilled at one-half (1/2) of the existing concrete pavement thickness so as to permit the load transfer device (250 mm diameter plain dowel bars) to be inserted at one-half (1/2) of its length. The said device shall be installed firmly at the holes and shall be held in position parallel to the surface of the slab. The dowel bars shall be painted with red lead and the surface of one-half (1/2) of the length to be inserted shall be coated with concrete epoxy while the other-half shall be coated with approved bituminous materials.
6. If reinforcing steel bars are used, mortar blocks of approved dimension shall be installed at specific intervals to maintain uniform clearance from the base.
7. Transverse contraction joints shall be cut using a concrete saw to the required depth (one-fourth to one-third of the concrete pavement thickness) and width as shown on the approved plans.
8. All joints shall be sufficiently sealed with asphalt sealant prior to opening to vehicular traffic.
9. The use of Type III Portland Cement meeting the requirements of AASHTO M-85 for high-early strength mix or Type I Portland Cement with accelerating admixtures conforming to the requirements of AASHTO M-194 shall be used.
10. The entire surface of the newly placed concrete shall be cured with either one of the curing materials specified in Item 708.1 of the DPWH Standard Specifications, Volume II, 1995.


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Secretary