

## Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila

AUG 0 9 2012

DEPARTMENT ORDER	) SUBJECT:	<b>Guidelines on</b>	Reblocking	of Portland
E /	)	<b>Cement Concre</b>	te Pavement	(PCCP)
No. <u>34</u>	)			
Series of 2012 HALGA USTON-12	)			

It has been observed that reblocking of distressed Portland Cement Concrete Pavement (PCCP) is oftentimes carried out without prior site condition surveys. Moreover, the improper implementation of concrete pavement reblocking results in public inconvenience and early deterioration of the reblocked sections.

To ensure the quality of reblocked pavement, the following guidelines are hereby prescribed:

## A. Before Construction

- 1. Concrete reblocking should be done only on pavements that are shattered, with faulting of more than 10mm, or with severe cracks.
- 2. The conduct of test pitting shall be undertaken to determine the actual properties (including soil classification of the underlying materials). Whenever possible, a Dynamic Cone Penetrometer (DCP) test must be conducted on the existing road base to determine the in-situ California Bearing Ratio (CBR) strength of the underlying materials.
- 3. When the CBR strength obtained for each soil layer fails to satisfy the requirements, the underlying materials shall be removed and replaced by suitable materials or its strength improved by the addition of granular materials or stabilization using cement or any approved chemicals until the required strength is achieved.

## B. During Construction

1. In the case of two-lane carriageways in non-urban areas and where no detour road has been provided, breaking and restoration of pavement shall be limited to one lane and not more than 100 meters in length at any one time. In urban areas, breaking and restoration of pavement shall be limited to one lane and not more than 50 meters in length at any one time.

- 2. 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. Flagmen shall be provided at each end of the closed section to direct counterflow traffic.
- 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. 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.

This Order shall take effect immediately.

**ROGELIO L. SINGSON** 

Secretary