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REPUBLIC OF THE PHILIPPINES MINISTRY OF PUBLIC WORKS AND HIGHWAYS

OFFICE OF THE MINISTER MANII.A

23 May 1986

MINISTR ORDER SERIES OF 1986

This Ministry

SUBJECT: Adequate Compaction of Subgrade.

Subbase and Base Course.

Bureau/Regional Directors Project Managers/Engineers District/City Engineers Others Concerned

It has been observed that many Project Engineers still fail to implement adequate compaction of the subgrade, subbase and base course all of which are the soil structures of the road. Aside from poor drainage construction, this is another reason why many of our roads today deteriorate very early and rapidly.

Adequate compaction of soil structures will result in the following: (a) Minimal future settlement, (b) Greater stability, thus reducing danger of slips and (c) Greater resistance to water absorption, or minimal change in water content. Therefore. thorough compaction of these structural soil elements maximizes their stability which is an essential requirement in road construction.

In order to effect adequate compaction, the required number and kind of compaction equipment (rollers) should be at the right time and the right place. Compaction operations should be carried out in various stages of construction by layers and only of specified thickness (usually 20 cms.) No succeeding layer should be laid unless the previously compacted layer is subjected to field density tests and attained the required degree of compaction. The required degree of compaction and proper construction methods are clearly spelled out in the revised Standard Specifications for Highways and Bridges.

When the compaction equipment are heavier than those normally used and/or so designed to compact thicker layers, test sections with thickness corresponding to the capacity of the equipment shall first be constructed and corressponding density tests shall be made throughout the compacted depth. If the results are satisfactory, the Project Engineers may allow compaction of layers with the same thickness as the test sections.

Compliance is hereby enjoined.

This supersedes all existing memoranda/orders on this subject matter.

Minister *