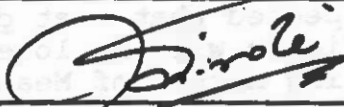


TO:  <p style="text-align: center;"><b>SUPERSEDED</b></p> <p><b>BY EB 97-020 EFFECTIVE 4/4/97</b></p>	<p style="text-align: center;"><b>ENGINEERING INSTRUCTION</b></p> <p style="text-align: center;">NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p> <p>SUBJECT: Section 557 - New "Method of Measurement" for Items 557.02, 557.03 &amp; 557.04</p> <p>Subject Code: 7.27-1-557; 7.35-6</p>
Distribution: <p style="text-align: center;">30 Main Office      32 Regions      34 Special</p>	Code: <u>91-10</u>
APPROVED:  <hr/> A. M. SHIROLE, Deputy Chief Engineer (Structures)	Date: <u>05/15/91</u>  Supersedes:

Bridges often carry utilities either above or between beams or stringers. Various types of utilities, such as waterlines, gaslines, telephone conduit and electrical runs are common occurrences. In most instances, the installation of utilities affects the design to some degree, but does not appreciably affect the quantity estimate. In the case of prestressed concrete box beam and slab units, however, the quantity estimate can be significantly affected by the utility installations.

Bridge designs which incorporate adjacent prestressed box or slab units accommodate utility installations by transversely separating units a sufficient distance to permit the installation. As a result, the "Method of Measurement" in the specification would include an area occupied by a utility that does not include actual square footage of prestressed beam or slab unit. In numerous instances, designers have omitted this area occupied by the utility. This area should have been included-as defined in the Method of Measurement. In those cases, an Order-on-Contract was prepared in order to provide payment to the contractor as a result of this omission by the designer.

In order to avoid future designer errors, Order-on-Contracts and to more accurately measure the actual area of the prestressed units placed, the following modifications are established:

Make the following changes to the Standard Specifications of January 2, 1990:

All of the requirements of Section 557 shall apply with the following modifications:

Page 5-57

Subsection 557-4.02. Delete the entire subsection. Replace with the following: The quantity to be paid for under this work shall be the number of square feet of plan area of each

Manual	Code 7.27.1.557 7.35-6	Date 05/15/91	Page 2
Subject: Section 557 - New "Method of Measurement" for Items 557.02, 557.03 & 557.04			

prestressed unit installed. Plan area is defined as the area bounded by the centerline of bearings and the outer edges of each prestressed unit. No deductions will be made for chamfers, or shear keys, or notch outs. Space between the units shall not be included in any measurement.

There should be no direct cost increase and the work effort should be the same. However, it is expected that cost differentials will occur, since the quantity figure will be lower than the quantity estimated under the existing Method of Measurement. Square foot costs as reflected in the "Average Bid Price" will in the long term increase insignificantly.

This instruction is effective with the letting of November 14, 1991 (P.S. & E. August 22, 1991).

For further information regarding this matter contact the Main Office Concrete Engineering Unit at 518-457-4534.

NS:D2#40