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ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

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SUBJECT: PRECAST CONCRETE WALL UNITS,
CONCRETE CRIBBING & METAL BIN TYPE UNITS

Subject Code: 7.27-2-632

Distribution:



Main Office



Regions



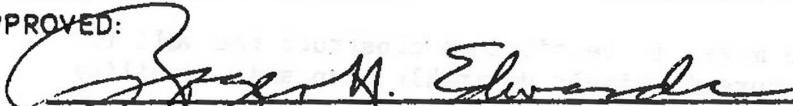
Special

Code: 84-37

Date: 7/25/84

Supersedes: 76-69

APPROVED:


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Installation and structural details for Metal Bin Type Units are shown on Standard Sheet 632-2. Installation and structural details for Precast Concrete Wall Units are shown on Standard Sheets 632-3 & 632-4. Neither of the installation sheets show where the payment lines should be drawn. In addition, the sheets depicting the concrete units were incomplete in that they failed to detail the most commonly provided end units.

This instruction supersedes the above sheets and transmits revised sheets as follows:

- 632-2R1 Installation Details for Concrete Cribbing and Metal Bin Type Retaining Walls
- 632-3R1 Installation Details for Precast Concrete Wall Units
- 632-4R1 Structural Details for Precast Concrete Wall Units

Payment lines have been added to the first two of these and, in addition, the last two of the above have been further modified as follows:

1. Details and a note have been added so that a single lift (6" depth) of sand may be used to ease the installation of the leveling footing.
2. Details of the normally furnished end section and the two-thirds (2/3) size sections have been provided. These details should eliminate the need for Orders-On-Contract when these sections are furnished to a contract.
3. A table has been added to the Installation Sheet giving the volumes to be deducted from the backfill to account for that occupied by the Precast Concrete Units as required by the method of measurement.
4. On the Installation sheet, the minimum curvature requirements are specified for two by four foot full size units. For certain wall heights and depths, these units can be modified to accommodate smaller radii; however, the Soil Mechanics Bureau should be called to determine if smaller radius units can be made.

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DESIGN	LANDSCAPE
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FACILITIES DESIGN DIVISION	
AUG 16 1984	

Subject: PRECAST CONCRETE WALL UNITS

Walls constructed with "Precast Concrete Wall Units" possess several advantages which the Design Engineer should be aware of.

1. The erection time for these units can be shorter than for conventional concrete crib and metal bin walls because the precast units are larger and require less hand labor to install.
2. The shorter erection time makes it feasible to construct the wall in short segments. This feature is highly desirable when soil stability considerations mandate a close order construction sequence.
3. A combination of the above benefits should serve to effect an economic savings with the precast wall units over the conventional crib and bin walls.
4. In certain configurations, higher wall heights may be achieved utilizing the precast units than are possible in the crib and bin wall standard sheets.

When the Design Engineer elects to allow the Contractor the option of Concrete Cribbing (Stretcher and Header Type) or Concrete Cribbing (Precast Concrete Wall Unit Type), he must set his estimate up so that all the necessary items of work are included for each type of cribbing. This is necessary because the excavation and backfill for the precast concrete wall unit is substantially less than the excavation and backfill for the stretcher and header type of concrete cribbing.

These revised Standard Sheets shall become effective with the letting of Jan. 31, 1985.

Precast Concrete Cribbing

Make the following changes to the Standard Specifications of January 2, 1981:

Page 6-75

In §632-4.01 Cribbing or Retaining Wall - In the second line after "plans" add the phrase ", Standard Sheets."

Also under 632-4.02 Excavation and Disposal of Excavated Material for the Installation of Cribbing or Retaining Walls - In the third line after "plans" add the phrase ", Standard Sheets."

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In §632-4.03 Backfill for the Installation of Cribbing or Retaining Wall - In the third line after "plans" add the phrase ", Standard Sheets."