

Design Standards Letter

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Section/Plan No.: **P502.05, P504.00, P604.70, P606.00, P609.40, P616.10, P617.00, P702.02, P732.10, P902.50, P503.00**

Subject: **Standard Plans Revisions and Revised D-2 Sheet**

Body

The following are new or revised standard plans that are effective with the March, 1994 letting. We apologize for the short notice of this revision, but the 1994 Standard Plans Book is later than usual. The 1994 Standard Plan Book is now being printed and will be available and effective with the March, 1994 letting. The 1994 edition of the Standard Plans Book will list a brief description of revisions to standard plans since the last printing which was January, 1992.

Below is a brief description of the revisions which are also included in the March, 1994 Standard Plans Book.

Std. Dwg. 502.05: Concrete Pavement and Base Appurtenances for 15 Foot Joint Spacing

A new standard drawing showing joint details for PCC pavement designed under the New Pavement Design (NPD) theory. Details for doweling and tying PCC shoulders are also shown. This new standard drawing will replace the special sheet that has been used for sometime.

Std. Dwg. 504.00A: Concrete Approach Pavement
Sheet 1 of 2: Transverse Contraction Joint (C1) spaced at 15 foot centers has been added. The 3/4 inch joint filler is to be placed with the concrete approach pavement and the cost of furnishing and placing to be included in the bid for the concrete approach pavement.
Sheet 2 of 2: The bottom of the approach pavement has been sloped to match the top of the approach pavement. The construction base designation has been revised to 4" of Type 5 aggregate base and extended 18" outside the limits of the approach pavement.

Std. Dwg. 604.70: Types A, B, or C Slotted Drain

Std. Drg. 604.70 is a new standard drawing.

Sheet 1 of 2: Provides details of Type A Slotted Drain.

This slotted drain may only be used in locations where traffic will not be crossing it.

Sheet 2 of 2: Provides details of Type B and Type C Slotted Drains. Type B or Type C Slotted Drains are to be used in locations where traffic crosses them.

Computer bid items have been established to pay for slotted drain.

Std. Dwg. 606.00Z: Guard Rail

Sheet 1 of 6: In detail of "Guard Rail at Barrier Curbs" the curb height has been dimensioned to be 4".

Sheet 2 of 6: In detail of "Beam Splice at Post" the direction of traffic has been added and the beam splice location revised to the left of centerline post.

Sheet 3 of 6: No revisions.

Sheet 4 of 6: A general note has been added stating that "washers shall be omitted on all guardrail to steel W-Beam post connections on BCT installations.

Sheet 5 of 6: The general note regarding installation of steel tube foundations has been revised to require drilling if the soil plate is bolted to the tube and to allow driving if the soil plate is welded to the tube as shown in the standard plans.

Sheet 6 of 6: No revisions. .

Std. Dwg. 609.40F: Drain Basin, Shoulder Paving and Fill Slopes at Bridge Ends

Sheet 1 of 2. The location of the Type A curb in relation to the drop inlet is revised. The height of the Type A curb is dimensioned to be 4". Any reference to Type B drop inlet is deleted. Detail "B" is revised to agree with Std. Drg. 731.10. The rock lining at the outlet of the drain basin pipe is deleted and replaced by use of permanent erosion control to be determined by site conditions. The general note referencing Std. Drg. 604.20 is revised to 731.10. The general note for determining the depth of the drop inlet is revised.

Sheet 2 of 2. A new detail "Guard Rail at Barrier Curb" is added. Section E-E and F-F are revised to show the use of Permanent Erosion Control at pipe outlet. The 18" minimum on the concrete slope protection is revised to 18 inches.

Std. Dwg. 616.10Q: Traffic Control Devices

Sheet 1 of 4: No revision.

Sheet 2 of 4: Requirements for solar powered arrow panels are added. The requirements for flashing arrow panels are revised to include the latest MUTCD requirements and delete the 12000 candlepower requirement for the lamps.

Sheet 3 of 4: A new sheet detailing the work zone speed limits for rural and urban areas is added. The new sheet is the result of a work zone task force study.

Sheet 4 of 4: No revision.

Std. Dwg. 617.00Y: Concrete Traffic Barrier

Sheet 1 of 3. In the "Barrier Height Transition" detail the length has been increased to 20'-0" and referenced for use only on permanent installations.

General notes and details are revised to eliminate dowels on precast units used for temporary installations and to require the units to be cabled together.

Sheet 2 of 3. Details are revised for 20'-0" Barrier Height Transition.

Sheet 3 of 3. A precast barrier height transition detail for use on temporary installations has been added. A detail showing concrete traffic barrier paint for use on temporary traffic barrier is added. The title block is revised for Temporary Traffic Barrier, Precast Details.

Std. Dwg. 702.02C: Cast-In-Place Concrete Piles

Sheet 1 of 1. Reference on the drawing to "minimum nominal thickness" is revised to "nominal thickness".

Std. Dwg. 732.10A: Safety Slope End Section

Sheet 1 of 2. In the "Side Elevation Circular Section" view the safety bar spacing for cross drainage structures is revised from 2'-6" to 4'-0". A note stating that the longitudinal bar is used only on cross drainage structures is added. In the "Top View Circular Section" detail safety bar spacings are added and the longitudinal bar spacing is added for cross drainage structures. The note referencing longitudinal bar location and placement is revised. In the "Front View Circular Pipe" detail reference to specific bolt size has been deleted. In the "Detail of Safety Bar" view the reference to "5/8" diameter holes" is revised to "1"x 9/16" slotted holes." In the Type #1 and #2 connector details pay length for pipe has been added. In the "Steel End Section for Concrete Pipe" detail the "R" value for the extension to be inserted into the concrete pipe is revised to be a constant 24". The general notes are revised to delete reference to flat washers and specific bolt size.

Sheet 2 of 2. Detail "C" is added to dimension the "F" bar length and location.

Std. Dwg. 902.50G: Section A-A, Loop Slot Detail; Section B-B, Lead Slot Detail; and Section F-F, Loop or Lead Slot Detail are revised to provide a variable depth of slot depending on the number of conductors per slot. A table is added to dimension the depth of slot per number of conductors.

Std. Dwg. 503.00J: This standard drawing is deleted from the March, 1994 Standard Plans Book. This drawing will be retained in the headquarters office for use as a special sheet if the need arises.

vij/kd