

Design Standards Letter

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Section/Plan No.: P901.05, P901.12, P901.15, P901.16, P901.18, P901.19, P901.20, P901.22, P901.24, P901.25, P902.60, P203.75, P204.30, P602.40, P619.10, P620.00, P732.05, P806.10, P901.02, P901.30, P901.80, P902.20, P203.20, P203.21, P502.04, P604.05, P606.00, P606.22, P606.23, P614.10, P614.30, P616.10, P731.00, P731.10, P732.10, P901.00, P901.01, P902.10, P902.15, P902.21, P902.30, P902.70, P902.80

Subject: Deleted, New, and Revised Standard Plans (English) - Revised D2 Sheet

Body

Enclosed is a listing of deleted, new and revised standard plans, with a brief description of each. The new and revised standard plans are effective with the March, 1996 letting. The deleted standard plans are not to be used after the February, 1996 letting.

The 1996 edition of the English Standard Plans Book will be available in the near future. It will be effective with the March, 1996 letting. The following standard plan additions, deletions and revisions are incorporated into the 1996 Standard Plans book.

Deleted Standard Plans:

The following Highway Lighting Standard Plans have been deleted because pole mounted control stations are no longer used.

Highway Lighting: Description

Standard Plan 901.05A: Control Panel Cabinet Details

Standard Plan 901.12C: Pole Mount Cont Sta Secondary Serv 480 V Multi Cir (Not Metered).

Standard Plan 901.15E: Pole Mount Cont Sta Sec Serv 120, 240, & 480 V Multi Cir.

Standard Plan 901.16D: Pole Mount Cont Sta Sec Serv 480 V Multi Cir (Metered).

Standard Plan 901.18D: Pole Mount Cont Sta Sec Serv - 120/240 V Multi. Cir.

Standard Plan 901.19D: Pole Mount Cont Sta - Sec Serv - 240 V Multi Cir (Not Metered).

Standard Plan 901.20D: Pole Mount Cont Sta - Sec Serv - 120/240 V Multi Cir (Sig Metered).

Standard Plan 901.22E: Pole Mount Cont Sta Sec Serv 120/240 V & 480 V Multi Cir (Both Metered).

Standard Plan 901.24D: Pole Mount Cont Sta Sec Serv 240 V Multi Cir (Lights & Signals Both Metered).

Standard Plan 901.25D: Base Mount Cont Sta Sec Serv 120 /240 V Multi Cir.

Traffic Signals:

The following traffic signal standard plan is deleted.

Standard Plan 902.60F: Span Wire Details - Steel Post.

New Standard Plans:

The following standard plans have been added to the D-2 sheet and 1996 Standard Plans Book and should be used as required on projects. All of the new standard plans are developed as a CADD drawing.

Standard Plan 203.75: Rumble Strips.

Sheet 1 of 1:

Adds a new standard plan showing details for the construction of asphaltic concrete and portland cement concrete rumble strips to be constructed in roadway shoulders.

Standard Plan 204.30: Pore Pressure Measuring Devices.

Sheet 1 of 1:

Adds a new standard plan showing details of pore pressure measuring devices. This new standard plan replaces the special sheet for the same. The station, location and other data previously shown on the special sheet table will have to be provided elsewhere in the plans or contract special provisions.

Standard Plan 602.40: Geographic Reference System Movement.

Sheet 1 of 1:

Adds a new standard plan for GRS monument construction and installation methods. This new standard plan replaces the special sheet for GRS monuments.

Standard Plan 619.10: Pavement Edge Treatment.

Sheet 1 of 1:

Adds a new standard plan that details cross sections, conditions, signing, and treatment methods for pavement edge treatment. This new standard plan replaces the special sheet previously in use.

Standard Plan 620.00: Pavement Marking.

Sheet 1 of 1:

Adds a new standard plan detailing various pavement marking applications and installations. This new standard plan replaces the previous D39 pavement marking special sheet.

Standard Plan 732.05: Beveled Pipe End Treatment.

Sheet 1 of 1:

Adds a new standard plan detailing methods of encasing the end section of beveled pipes with slopes of 3:1, 4:1, and 6:1. This standard plan can be used for either steel or plastic pipe.

Standard Plan 806.10: Temporary Erosion Control.

(Five Sheets):

Adds a new standard plan consisting of five sheets. This standard plan replaces the five generic special sheets previously in use for erosion control.

Standard Plan 901.02: Highway Lighting, Cable, Conduit and Trenching.

Sheet 1 of 1:

Adds a new standard plan providing details of cable, conduit, and trenching. Details for cable, conduit and trenching locations, trenching and backfilling, fused slip connector, and transformer base attachment were moved and revised from other drawings. Details for outside shoulder layouts and termination of cable-conduit into rigid conduit were added. Burial tape was added to trenching details.

Standard Plan 901.30: Highway Lighting, Base Mounted Control Station.

Sheet 1 of 1:

Adds a new standard plan providing details for 4 circuit control stations. This standard plan was consolidated and revised from 2 special sheets for control stations. Additional

information can be found in General Letter Number 18, 1995.

Standard Plan 901.80: Highway Lighting, Power Supply Assembly, Secondary Service.

Sheet 1 of 1:

Adds a new standard plan providing details for power supply assemblies. This standard plan was consolidated and revised from 2 special sheets for power supplies. Additional information can be found in General Letter Number 18, 1995.

Standard Plan 902.20: Pull Boxes.

Sheet 1 of 1:

Adds a new standard plan for preformed and concrete pull boxes for traffic signals. This new standard plan replaces the pull box special sheet previously used.

Revised Standard Plans:

The following standard plan have been revised in the 1996 Standard Plans Book and should be used as required on MHTD projects. All of the following revised standard plans have been revised as a CADD drawing.

Standard Plan 203.20C: Superelevation Spirals and Widening (Undivided).

Sheet 1 of 1:

Adds "X" dimension equal to 50 feet for superelevation transition for pavement and shoulder cross slopes of .02 ft./ft.

Standard Plan 203.21C: Superelevation Spirals and Widening (Divided).

Sheet 1 of 1:

Adds "X" dimension equal to 50 feet for superelevation transition for pavement and shoulder cross slope of .02 ft./ft.

Standard Plan 502.05A: Concrete Pavement & Base Appurtenances, 15 Ft. Joint Spacing (2 sheets).

Sheet 1 of 2. No revisions.

Sheet 2 of 2.

Adds "Joint Filler Detail" to show proper joint filler depth with respect to pavement surface.

Standard Plan 604.05C: Pipe Culvert Headwalls - Type S.

Sheet 1 of 1.

Adds a general note providing for the use of precast pipe culvert headwalls.

Standard Plan 606.00AB: Guard Rail. Six Sheets.

Sheet 1 of 6:

Reference to BCT use for end terminal is deleted as per FHWA's 1994 mandate. Approved Crashworthy Guardrail Terminals have replaced BCT's. The Pier Protection At Centerline Median detail is totally revised to use Type E guardrail and ET 2000 end terminal. Median fill, grading and drainage have been eliminated. Presently the ET-2000 is the end terminal selected by MHTD that meets NCHRP 350 requirements.

Sheet 2 of 6:

Details for use of wood blocks installed with steel W posts have been added for Type A and B Guardrail. "Buffer End" detail has been deleted.

Sheet 3 of 6:

Details for use of wood blocks installed with steel W posts have been added for Type E guardrail.

Sheet 4 of 6:

Details revised for End Anchor only. End Anchor is to be used on downstream ends of guardrail sections when required. Detail of "Terminal Connector" is moved to sheet 2 of 6. The detail of "Terminal End" has been deleted.

Sheet 5 of 6:

Steel Tube Foundation revised for End Anchor use only.

Sheet 6 of 6:

Minor revisions for End Anchor use.

Standard Plan 606.22M: Bridge Anchor Section (Safety Barrier Curb on Bridge).

Sheet 1 of 1:

Details revised to allow the use of wood blocks to be installed with steel W posts.

Standard Plan 606.23D: Bridge Anchor Section (Thrie Beam Rail on Bridge).

Sheet 1 of 1:

Details revised to allow the use of wood blocks to be installed with steel W posts.

Standard Plan 614.10S: Curb Inlets, Grates & Bearing Plates.

Sheet 1 of 1:

Detail A is revised by adding Note (4) which permits alternate shapes for 3/8" bolting lugs.

Standard Plan 614.30E: Manhole Frames & Covers.

Sheet 1 of 1:

Type IC Manhole Frame and Cover details are added as an acceptable alternate to Type 1A or 1B Manhole Frame and Cover. A general note is added to address manhole frames placed in pavements greater than 10 inches thick.

Standard Plan 616.10S: Traffic Control Devices (Four sheets).

Sheet 1 of 4:

Mounting heights for rural, non-portable signs revised to 7 ft. minimum and 8 ft. maximum. The horizontal location dimensions are revised to be measured from edge of shoulder and for roadways without shoulders from edge of pavement. The sheeting for object markers is revised from Type 1 to Type 2. The notes for Type 1 and Type 2 movable barricades are revised to provide 4 inch stripes for barricades less than 36 inch wide and 6 inch stripes for barricades 36 inch or greater in width. The U-channel post splice detail is revised to provide a longer splice. The splice bolts are also provided a specification to adhere to.

Sheet 2 of 4:

The "Two Lane Two Way Traffic Delineation" detail is entirely revised to eliminate the 18 inch wide asphalt island. The detail is revised to use a combination of flexible delineators and Type I Channelizer/markers with 4 inch solid yellow pavement marking to separate traffic.

Sheet 3 of 4: No revisions.

Sheet 4 of 4:

Sign W022-5, No Passing Zones Unmarked, is deleted and sign W08-12, No Center Stripe, is added to provide construction zone warning to drivers when pavement markings are obliterated.

Standard Plan 731.00T: Precast Manholes.

Sheet 1 of 1:

Section C-C is revised to allow welded wire fabric with areas equivalent to the #4 bars at 10 inch centers in each direction.

Standard Plan 731.10L: Precast Drop Inlets (Four sheets).

Sheet 2 of 4: No revisions.

Sheet 3 of 4: No revisions.

Sheet 4 of 4:

Details for "Median Relief - 60' Medians" is revised for 8 foot flat bottom ditches and 4 foot, median side shoulders.

Standard Plan 732.10B: Safety Slope End Sections (2 sheets).

Sheet 1 of 2:

The details for beveled pipe ends on parallel drainage structures is deleted. These details are shown on new Standard Plan 732.05, Beveled Pipe End Treatment.

Sheet 2 of 2: No revisions.

Standard Plan 901.00Q: Highway Lighting, Poles, Foundations & Appurtenances for 30' (2 sheets).

Sheet 1 of 2:

This sheet was renumbered from sheet 1 of 3. Bracket arm mounting details were revised. Additional details were added to the Type B poles. Mercury vapor lamps were removed from the ANSI Lamp table. Other minor revisions were made.

Sheet 2 of 3 of the Standard Plan 901.00P was eliminated. Cable, conduit and trenching details were moved to new Standard Plan 901.02. Pull box details were moved to new Standard Plan 902.20.

Sheet 2 of 2:

This sheet was renumbered from sheet 3 of 3 on Standard Plan 901.00P. Connector plate dimensions were revised. Additional details and notes were added and other minor revisions were made.

Standard Plan 901.01V: Highway Lighting, Poles, Foundations and Appurtenances for 45' (3 sheets).

Sheet 1 of 3:

Bracket arm mounting details were revised. Additional details were added to the Type B and MB poles. Mercury vapor lamps were removed from the ANSI Lamp table. Details for pole locations and cable-conduit and fused slip connector were moved to new Standard Plan 901.12. Other minor revisions were made.

Sheet 2 of 3:

Trenching details were moved to new Standard Plan 901.02 and pull box details were moved to new Standard Plan 902.20. A conduit detail was added. Other minor revisions were made.

Sheet 3 of 3:

Connector plate dimensions were revised. Additional details and notes were added and other minor revisions were made.

Standard Plan 902.10K: Traffic Signals, Controllers, Conduit Location.

Sheet 1 of 1:

This standard plan was renamed. Pull box details were moved to new Standard Plan 902.20.

Standard Plan 902.15E: Traffic Signals, Power Supply Assembly, 240/120 Volt Service (2 sheets).

Sheet 1 of 2:

This sheet is significantly revised. The primary revisions are the elimination of Type 3 power supplies and installation of lighting control on the power supply assembly. Additional information can be found in General Letter Number 18, 1995.

Sheet 2 of 2:

This new sheet provides details for the 120V lighting control cabinet installed on the power supply.

Standard Plan 902.21C: Traffic Signals, Telephone Interconnect.

Sheet 1 of 1:

The notes were revised.

Standard Plan 902.30J: Traffic Signals, Post Bases.

Sheet 1 of 1:

This standard plan has been renamed. Controller base details have been moved to Standard Plan 902.10. Cast base details have been moved to this standard plan from Standard Plan 902.10.

Standard Plan 902.70E: Traffic Signals, Span Wire Details (2 sheets).

Sheet 1 of 2:

This sheet was renumbered from sheet 1 of 1. Several details were added or revised. All cable terminations are made with automatic jaw type fittings.

Sheet 2 of 2:

Span wire post details are moved from deleted Standard Plan 902.60F. All cable terminations are made with automatic jaw type fittings. Other minor revisions were made.

Standard Plan 902.80B: Traffic Signals, Traffic Signal Symbols.

Sheet 1 of 1:

Several symbols were revised. Several signs were added. Sign numbers are denoted with an "S" to avoid confusion with traffic control signs.

vji/sa

Enclosure