

**TABLE OF CONTENTS**  
 FY 2022-23 STANDARD PLANS FOR ROAD CONSTRUCTION

<i>Standard Plans Index</i>	<i>Index Title</i>
<b><u>Miscellaneous</u></b>	
000-510	<i>Superelevation Transitions - High Speed Roadways</i>
000-511	<i>Superelevation Transitions - Low Speed Roadways</i>
000-525	<i>Ramp Terminals</i>
<b><u>General Construction Operations</u></b>	
<b><u>Maintenance of Traffic</u></b>	
102-100	<i>Temporary Barrier</i>
102-110	<i>Type K Temporary Concrete Barrier System</i>
102-120	<i>Low Profile Barrier</i>
102-600	<i>General Information for Traffic Control Through Work Zones</i>
102-601	<i>Two-Lane and Multilane Roadway, Work Beyond Shoulder</i>
102-602	<i>Two-Lane and Multilane, Work on Shoulder</i>
102-603	<i>Two-Lane, Two-Way, Work Within the Travel Way</i>
102-604	<i>Two-Lane, Two-Way, Intersection Work</i>
102-606	<i>Two-Lane Roadway, Lane Closure Using Temporary Traffic Signals</i>
102-607	<i>Mobile Operations</i>
102-608	<i>Two-Lane, Two-Way, Temporary Diversion Connection</i>
102-613	<i>Multilane Roadway, Lane Closures</i>
102-615	<i>Multilane Roadway, Intersection Work</i>
102-620	<i>Multilane Roadway, Temporary Diversion</i>
102-625	<i>Temporary Road Closure</i>
102-628	<i>Two-Way Left-Turn Lanes</i>
102-655	<i>Traffic Pacing</i>
102-660	<i>Sidewalk Closure</i>
102-661	<i>Bicycle Facility Closures</i>
102-665	<i>Limited Access Temporary Opening</i>
102-680	<i>Haul Road Crossing</i>
<b><u>Clearing Construction Site</u></b>	
<b><u>Clearing and Grubbing</u></b>	
110-100	<i>Tree Protection and Preservation</i>
110-200	<i>Mailboxes</i>
<b><u>Earthwork and Related Operations</u></b>	
120-001	<i>Embankment Utilization</i>
120-002	<i>Subsoil Excavation</i>
125-001	<i>Utility Adjustments thru Existing Pavement</i>
141-T01	<i>Settlement Plate</i>
160-001	<i>Miscellaneous Earthwork Details</i>

<i>Standard Plans Index</i>	<i>Index Title</i>
<b><u>Bituminous Treatments, Surface Courses, and Concrete Pavement</u></b>	
<b><u>Concrete Pavement</u></b>	
330-001	<i>Paved and Graded Driveways</i>
350-001	<i>Concrete Pavement Joints</i>
353-001	<i>Concrete Slab Replacement</i>
370-001	<i>Bridge Approach Expansion Joint - Concrete Pavement with Special Select Soil Base</i>
<b><u>Structures</u></b>	
<b><u>Concrete Structures</u></b>	
400-010	<i>Cantilever Retaining Wall (C-I-P)</i>
400-011	<i>Gravity Wall</i>
400-021	<i>Concrete Steps</i>
<b><u>Inlets, Manholes and Junction Boxes</u></b>	
425-001	<i>Supplementary Details for Manholes and Inlets</i>
425-010	<i>Structure Bottoms - Type J and P</i>
425-020	<i>Curb Inlet Tops - Types 1, 2, 3 and 4</i>
425-021	<i>Curb Inlet Tops - Types 5 and 6</i>
425-022	<i>Curb Inlet - Type 7</i>
425-023	<i>Curb Inlet - Type 8</i>
425-024	<i>Curb Inlet Top - Type 9</i>
425-025	<i>Curb Inlet Top - Type 10</i>
425-030	<i>Median Barrier Inlets Types 1 and 2</i>
425-031	<i>Adjacent Barrier Inlet</i>
425-032	<i>Curb and Gutter Barrier Inlet</i>
425-040	<i>Gutter Inlet - Type S</i>
425-041	<i>Gutter Inlet - Type V</i>
425-050	<i>Ditch Bottom Inlet - Type A</i>
425-051	<i>Ditch Bottom Inlet - Type B</i>
425-052	<i>Ditch Bottom Inlets - Types C, D, E and H</i>
425-053	<i>Ditch Bottom Inlets - Types F and G</i>
425-054	<i>Ditch Bottom Inlet - Type J</i>
425-055	<i>Ditch Bottom Inlet - Type K</i>
425-060	<i>Back of Sidewalk Drainage</i>
425-061	<i>Closed Flume Inlet</i>
425-070	<i>Skimmer for Outlet Control Structures</i>
425-080	<i>Utility Conflicts thru Drainage Structures</i>
425-090	<i>Safety Modifications for Inlets In Box Culverts</i>

**TABLE OF CONTENTS**  
 FY 2022-23 STANDARD PLANS FOR ROAD CONSTRUCTION

<b>Standard Plans Index</b>	<b>Index Title</b>	<b>Standard Plans Index</b>	<b>Index Title</b>
<b>Pipe Culverts – End Treatments</b>		<b>Concrete Barriers, Traffic Railings, and Parapets</b>	
430-001	Miscellaneous Drainage Details	521-001	Concrete Barrier
430-010	U-Type Concrete Endwalls With Grates – 15" to 30" Pipe	521-002	Pier Protection Barrier
430-011	U-Type Concrete Endwalls – Baffles and Grate Optional – 15" to 30" Pipe	521-010	Opaque Visual Barrier
430-012	U-Type Concrete Endwall – Energy Dissipator – 30" to 72" Pipe	521-510	Concrete Barrier/Noise Wall (8'-0")
430-020	Flared End Section	521-511	Concrete Barrier/Noise Wall (14'-0")
430-021	Cross Drain Mitered End Section	521-512	Concrete Barrier/Noise Wall-Junction Slab
430-022	Side Drain Mitered End Section	521-513	Concrete Barrier/Noise Wall T-Shaped Spread Footing
430-030	Straight Concrete Endwalls – Single and Multiple Pipe	521-514	Concrete Barrier/Noise Wall L-Shaped Spread Footing
430-031	Straight Concrete Endwalls – Single and Double 60" Pipe	521-515	Concrete Barrier/Noise Wall Trench Footing
430-032	Straight Concrete Endwalls – Single and Double 66" Pipe	521-600	MSE Wall Coping (Precast or C-I-P)
430-033	Straight Concrete Endwalls – Single and Double 72" Pipe	521-610	Concrete Barrier/Junction Slab – Wall Coping
430-034	Straight Concrete Endwalls – Single 84" Pipe	521-611	Concrete Barrier/Junction Slab-Wall Coping (FRP)
430-040	Winged Concrete Endwalls	521-620	Concrete Barrier/Raised Sidewalk – Wall Coping
430-090	Safety Modifications for Endwalls	521-630	Parapet with C-I-P Sidewalk – Wall Coping
<b>Structures – Miscellaneous Drainage</b>		521-640	Drainage Inlet Openings in Junction Slab – Wall Coping
436-001	Trench Drain	521-650	Light Pole Pedestal – Wall Coping
440-001	Underdrain	<b>Concrete Sidewalk and Driveways</b>	
440-002	Underdrain Inspection Box	522-001	Concrete Sidewalk
443-001	French Drain	522-002	Detectable Warnings and Sidewalk Curb Ramps
443-002	Skimmers for French Drain Outlets	522-003	Concrete Flared Driveways
444-T01	Deep Well Injection Box	<b>Ditch and Slope Pavement</b>	
446-001	Concrete Pavement Subdrainage	524-001	Ditch Pavement and Sodding
<b>Structures Foundations – Sheet Pile Wall</b>		<b>Noise and Perimeter Walls</b>	
455-400	Precast Concrete Sheet Pile Wall (Conventional)	534-200	Noise Walls (Precast)
455-440	Precast Concrete Sheet Pile Wall (CFRP/GFRP & HSSS/GFRP)	534-250	Perimeter Walls
<b>Incidental Construction</b>		<b>Guardrail</b>	
<b>Miscellaneous</b>		536-001	Guardrail
508-T01	Traffic Control Devices for Movable Span Bridge Signals	536-002	Guardrail Transitions and Connections for Existing Bridges
509-070	Railroad Grade Crossing Traffic Control Devices	<b>Crash Cushions</b>	
509-100	Advance Warning for R/R Crossing	544-001	Crash Cushion Transition Details
<b>Metal Pedestrian/Bicycle Railings, Guiderails and Handrails</b>		<b>Rumble Strips</b>	
515-052	Pedestrian/Bicycle Railing (Steel)	546-001	Raised Rumble Strips
515-062	Pedestrian/Bicycle Railing (Aluminum)	546-010	Ground-In Rumble Strips
515-070	Pipe Guiderail (Aluminum)	<b>Retaining Wall Systems</b>	
515-080	Pipe Guiderail (Steel)	548-020	MSE Retaining Wall Systems – Permanent
<b>Concrete Gutter, Curb Elements and Traffic Separator</b>		548-030	MSE Retaining Wall Systems – Temporary
520-001	Curb and Gutter	<b>Fencing</b>	
520-005	Concrete Shoulder Gutter Spillway	550-001	Fence – Type A
520-010	Median Opening Flume	550-002	Fence – Type B
520-020	Traffic Separators	550-003	Cantilever Slide Gate – Type B Fence
		550-004	Fence Location

**TABLE OF CONTENTS**  
 FY 2022-23 STANDARD PLANS FOR ROAD CONSTRUCTION

<b>Standard Plans Index</b>	<b>Index Title</b>	<b>Standard Plans Index</b>	<b>Index Title</b>
<b>Performance Turf</b>		<b>Highway Signing (Cont.)</b>	
570-001	Permanent Erosion Control	700-050	Free-Swinging, Internally-Illuminated Street Sign Assemblies
570-010	Shoulder Sodding and Turf on Existing Facilities	700-090	Dynamic Message Sign Walk-In
<b>Landscape</b>		700-091	Catwalk Details
580-001	Landscape Installation	700-101	Typical Sections for Placement of Single and Multi-Column Signs
<b>Traffic Control Signals and Devices</b>		700-102	Special Sign Details
630-001	Conduit Installation Details	700-104	Signing for Motorist Services
634-001	Signal Cable and Span Wire Installation Details	700-105	Welcome Center Signing
634-002	Aerial Interconnect	700-106	Rural Narrow Bridge Treatment
635-001	Pull and Splice Boxes	700-107	Bridge Weight Restrictions
639-001	Service Point Details	700-108	Typical Signing for Truck Weigh and Inspection Stations
639-002	Electric Power Service	700-110	Mounting Exit Number Panels to Signs
641-010	Concrete Poles	700-120	Enhanced Highway Signing Assemblies
641-020	Concrete CCTV Pole	<b>Pavement Markings</b>	
646-001	Aluminum Post and Pedestal Mounted Pedestrian Detectors and Signals	706-001	Typical Placement of Raised Pavement Markers
649-010	Steel Strain Pole	711-001	Pavement Markings
649-020	Steel CCTV Pole	711-002	Bicycle Markings
649-030	Standard Mast Arm Assemblies	711-003	Interchange Markings
649-031	Mast Arm Assemblies	<b>Highway Lighting Systems</b>	
653-001	Pedestrian Control Signal Installation Details	715-001	Conventional Lighting
654-001	Rectangular Rapid Flashing Beacon Assembly	715-002	Standard Aluminum Lighting
659-010	Span Wire Mounted Sign Details	715-003	Utility Conflict Pole
659-020	Camera Mounting Details	715-010	High Mast Lighting
660-001	Vehicle Loop Installation Details	<b>Railroad Crossing</b>	
665-001	Pedestrian Detector Assembly Installation Details	830-T01	Railroad (Grade) Crossings
671-001	Standard Signal Operating Plans		
676-010	Cabinet Installation Details		
695-001	Traffic Monitoring Site		
<b>Signing, Pavement Markings and Lighting</b>			
<b>Highway Signing</b>			
700-010	Single Column Ground Signs		
700-011	Single Column Cantilever Ground Mounted Sign		
700-012	Single Post Bridge Mounted Sign Support		
700-013	Single Post Median Barrier Mounted Sign Support		
700-020	Multi-Column Ground Sign		
700-030	Wind and Hanger Beams for Overhead Signs		
700-031	External Lighting for Signs		
700-040	Cantilever Sign Structure		
700-041	Span Sign Structure		