

2012 CONSTRUCTION STANDARD DETAILS

2012 Standards Drawing Number	Drawing Description	Date of Latest Revision	Drawing History					
			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 101.1.0	Limit of Muck Excavation	Feb-1996	101.1.0	101.1.0				E 101.1.0
E 102.1.0	Rock Cut Selection	Feb-1996	102.1.0	102.1.0				E 102.1.0
E 103.1.0	Method of Rounding Slopes- Cut and Fill Slopes	Feb-1996	103.1.0	103.1.0				E 103.1.0
E 104.1.0	Method of Stepping Surface and Base Course Layers	Feb-1996	104.1.0	104.1.0				E 104.1.0
E 104.1.1	Transverse Joints at Expansion Joints	Apr-2003		104.1.1		M/E 104.1.1		E 104.1.1
E 104.1.2	Location of Saw Cut for Transverse Joints at Bridge Abutment	Apr-2003		104.1.2		M/E 104.1.2		E 104.1.2
N/A	Granite Rubble Block Pavement at Ramps		105.1.0	Omitted		Deleted (2003)		N/A
E 105.2.0	Scored Concrete Pavement at Ramps	Apr-2003	105.2.0	105.2.0		M/E 105.2.0		E 105.2.0
E 105.2.1	Shoulder Section of Scored Concrete Pavement	Apr-2003				M/E 105.2.1		E 105.2.1
N/A	Milled Rumble Strips	--					(12/03/04) M/E 105.4.0	Omitted 2010
N/A	Notes for Installation of Rumble Strips	--					(12/03/04) M/E 105.4.1	Omitted 2010
E 106.1.0	Hot Mix Asphalt Berm Type A	Apr-2004	106.1.0	106.1.0R	(2/27/97) 106.1.0 R Revised	M/E 106.1.0 R	(4/16/04) M/E106.1.0R	E 106.1.0
E 106.2.0	Hot Mix Asphalt Curbs	Feb-1996	106.2.0	106.2.0				E 106.2.0
E 106.3.0 R	Method of Setting Vertical Curb	Mar-2012	106.3.0	106.3.0		M/E 106.3.0	(3/27/12) E 106.3.0R	E 106.3.0
N/A	Granite Faced Precast Concrete Edging		106.4.0	Obsolete				N/A
E 106.5.0	Method of Setting Sloped Edging	Apr-2003	106.5.0	106.5.0		M/E 106.5.0		E 106.5.0
E107.1.0	Intersections (Previously Wheelchair Ramp Notes)	Mar-2012	107.1.0	107.1.0 (R)	(WCR Standards 10/8/97) 107.1.0	M/E 107.1.0	Deleted (2010) (3/27/12) New Issue E 107.1.0	N/A

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Wheelchair Ramp Symbols	--			(WCR Standards 10/8/97) 107.1.1			Deleted 2010
E 107.2.0R	Wheelchair Ramps Less Than 12'-4" Sidewalk	Mar-2012	107.2.0	107.2.0 (R)	(WCR Standards 10/8/97) 107.2.0	M/E 107.2.0	(3/27/12) E 107.2.0R	E 107.2.0
E 107.2.1R	Wheelchair Ramp on Narrow Sidewalk with Detectable Warning Panel	Mar-2012					(4/16/04) M/E 107.2.1 (12/16/04) M/E 107.2.1 R (3/27/12) E 107.2.1R	E 107.2.1
E 107.3.0R	Wheelchair Ramps Greater Than 12'-4" Sidewalk	Mar-2012		107.3.0	(WCR Standards 10/8/97) 107.3.0	M/E 107.3.0	(3/27/12) E 107.3.0R	E 107.3.0
N/A	Brick Wheelchair Ramp Detail			107.4.0		Deleted (2003)		N/A
N/A	Paired Wheelchair Ramp Condition	--		107.5.0	(WCR Standards 10/8/97) 107.5.0	Deleted (2003)		N/A
E 107.6.0R	Wheelchair Ramp for One Continuous Length of Pedestrian Traffic	Mar-2012		107.6.0	(WCR Standards 10/8/97) 107.6.0	M/E 107.6.0	(3/27/12) E 107.6.0R	E 107.6.0

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Wheelchair Ramp- Typical for Limited Right-of-Way with Corner Radius Less than 33' utilizing a 3" Reveal	--			(WCR Standards 10/8/97) 107.6.1			Omitted 2010
N/A	Wheelchair Ramp- Typical for Limited Right-of-Way and Rounded Layout Line	--			(WCR Standards 10/8/97) 107.6.2			Omitted 2010
E 107.6.3R	Wheelchair Ramp with 3" Curb Reveal	Mar-2012			(WCR Standards 10/8/97) 107.6.3	M/E 107.6.3	(3/27/12) E 107.6.3R	E 107.6.3
E 107.6.4R	"T" Intersection Wheelchair Ramp	Mar-2012			(WCR Standards 10/8/97) 107.6.4	M/E 107.6.4	(3/27/12) E 107.6.4R	E 107.6.4
E 107.6.5R	Detectable Warning Panel for Wheelchair Ramps	Mar-2012					(4/16/04) M/E 107.6.5 (12/16/04) M/E 107.6.5R (3/27/12) E 107.0.5R	E 107.6.5
E 107.6.9R	Wheelchair Ramp with Landscaping Strip	Mar-2012					(3/27/12) E 107.6.9R	E 107.6.9
E 107.7.0	Sidewalk Through Driveways Without Curb Returns 6'	Apr-2003		107.7.0	(WCR Standards 10/8/97) 107.7.0	M/E 107.7.0		E 107.7.0

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 107.8.0	Sidewalk Through Driveways With Curb Returns 2' Curb Corners	Apr-2003		107.8.0	(WCR Standards 10/8/97) 107.8.0	M/E 107.8.0		E 107.8.0
E 107.8.1	Residential Driveways	Apr-2003		107.8.1		M/E 107.8.1		E 107.8.1
E 107.9.0	Curb Transition Length for Wheelchair Ramps	Apr-2003		107.9.0	(WCR Standards 10/8/97) 107.9.0	M/E 107.9.0		E 107.9.0
N/A	Ramp Length for Sidewalk Width and Profile Grade 0% Grade	--		107.10.0	(WCR Standards 10/8/97) 107.10.0	Deleted (2003)		N/A
N/A	Ramp Length for Sidewalk Width and Profile Grade 1% Grade	--		107.11.0	Deleted (5/16/1996)			N/A
N/A	Ramp Length for Sidewalk Width and Profile Grade 2% Grade	--		107.12.0	Deleted (5/16/1996)			N/A
N/A	Ramp Length for Sidewalk Width and Profile Grade 3% Grade	--		107.13.0	Deleted (5/16/1996)			N/A
N/A	Ramp Length for Sidewalk Width and Profile Grade 4% Grade	--		107.14.0	Deleted (5/16/1996)			N/A
N/A	Ramp Length for Sidewalk Width and Profile Grade 5% Grade	--		107.15.0	Deleted (5/16/1996)			N/A
N/A	Location of Catch Basins		201.1.0	201.1.0				N/A
N/A	Brick Catch Basin		201.2.0	Omitted		Deleted (2003)		N/A
E 201.3.0 R	Concrete Block Catch Basin	Mar-2012	201.3.0	201.3.0			(3/27/12) E 201.3.0R	E 201.3.0
E 201.4.0	Precast Concrete Catch Basin	Feb-1996	201.4.0	201.4.0				E 201.4.0
E 201.5.0	Precast Concrete Catch Basin Tub	Feb-1996	201.5.0	201.5.0				E 201.5.0

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 201.6.0	Catch Basin Frame	Jun-2009	201.6.0	201.6.0			(1/16/09) 201.6.0R (6/18/09) 201.6.0 R2	E 201.6.0
E 201.7.0	Hook Lock Cascade Grate- Flow from Left Formerly Massachusetts Cascade Grate	Jun-2009	201.7.0	201.7.0			(1/16/09) 201.7.0R (6/18/09) 201.7.0 R2	E 201.7.0
E 201.7.1	Hook Lock Cascade Grate- Flow from Right	Jun-2009					(1/16/09) 201.7.1R (6/18/09) 201.7.1R	E 201.7.1
N/A	Cascade Bar Design – For Massachusetts Cascade Grate		201.8.0	201.8.0			(1/16/2009) Deleted	N/A
E 201.9.0	Frame and Hook Lock Cascade Grate- Flow from Left- Assembly Details Formerly Frame for Massachusetts Cascade Grate	Jun-2009	201.9.0	201.9.0			(1/16/09) 201.9.0R (6/18/09) 201.9.0 R2	E 201.9.0
E 201.9.1	Frame and Hook Lock Cascade Grate- Flow from Right-Assembly Details	Jun-2009					(1/16/09) 201.9.1 (6/18/09) 201.9.1R	E 201.9.1
E 201.10.0	Hook Lock Bar Grate Formerly Catch Basin Grate Type A-1	Jun-2009	201.10.0	201.10.0			(1/16/09) 201.10.0R (6/18/09) 201.10.0 R2	E 201.10.0
E 201.10.1	Frame and Hook Lock Bar Grate Assembly Details	Jun-2009					(1/16/09) 201.10.1 (6/18/09) 201.10.1 R	E 201.10.1

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 201.11.0	Drop Inlet Grate Formerly Catch Basin Grate Type A-3- for Freeways and Expressways	Aug-2010	201.11.0	201.11.0				E 201.11.0
E 201.12.0	Catch Basin Hood	Feb-1996	201.12.0	201.12.0				E 201.12.0
N/A	Brick Manhole for Pipes up to 30" Diam.		202.1.0	Omitted		Deleted (2003)		N/A
E 202.2.0	Concrete Block Manhole – Manholes 9' or Less in Depth	Feb-1996	202.2.0	202.2.0				E 202.2.0
E 202.3.0	Concrete Block Manhole – Manholes over 9' in Depth	Feb-1996	202.3.0	202.3.0				E 202.3.0
E 202.4.0	Precast Concrete Manholes 9' or Less in Depth	Feb-1996	202.4.0	202.4.0				E 202.4.0
E 202.5.0	Special Manholes for 36" to 84" Diameter R.C. Pipe	Feb-1996	202.5.0	202.5.0				E 202.5.0
E 202.6.0R	Manhole Frame and Cover – A Frame	Feb-1996	202.6.0	202.6.0				E 202.6.0
E 202.7.0	Manhole Frame and Cover – B Frame	Feb-1996	202.7.0	202.7.0				E 202.7.0
E 202.8.0	Manhole Cover Details	Feb-1996	202.8.0	202.8.0				E 202.8.0
E 202.9.0	Concrete Collars	Feb-1996	202.9.0	202.9.0				E 202.9.0
E 203.1.0	Drop Inlets Type A- Precast Concrete Type B Concrete Block	Feb-1996	203.1.0	203.1.0				E 203.1.0
E 203.2.0	Drop Inlets Type AF- Precast Concrete Type BF Concrete Block	Feb-1996	203.2.0	203.2.0				E 203.2.0
E 203.3.0	Drop Inlet Type C	Feb-1996	203.3.0	203.3.0				E 203.3.0
E 203.4.0	Drop Inlet Type CF	Feb-1996	203.4.0	203.4.0				E 203.4.0
E 203.5.0	Drop Inlet Type D	Feb-1996	203.5.0	203.5.0				E 203.5.0
E 203.6.0	Drop Inlet Type – DF	Feb-1996	203.6.0	203.6.0				E 203.6.0
E 203.7.0	Flush Drop Inlet Throat	Feb-1996	203.7.0	203.7.0				E 203.7.0
N/A	Brick Gutter Inlet		204.1.0	Omitted		Deleted (2003)		N/A
E 204.2.0	Gutter Inlet	Feb-1996	204.2.0	204.2.0				E 204.2.0
E 205.1.0	Dry Stone Masonry Leaching Basin	Feb-1996	205.1.0	205.1.0				E 205.1.0
E 205.2.0	Concrete Block Leaching Basin	Apr-2003		205.2.0		M/E 205.2.0		E 205.2.0

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 206.1.0	Corrugated Steel Metal Pipe – Table of Minimum Wall Thickness	Feb-1996	206.1.0	206.1.0				E 206.1.0
E 206.2.0	Corrugated Steel Metal Pipe Arch – Table of Minimum Wall Thickness	Feb-1996	206.2.0	206.2.0				E 206.2.0
E 206.3.0	Corrugated Metal Pipe Under Fill Slopes	Feb-1996	206.3.0	206.3.0				E 206.3.0
E 206.4.0	Concrete and Field Stone Masonry Ends for Culverts 8” to 30” Pipe	Apr-2003	206.4.0	206.4.0		M/E 206.4.0		E 206.4.0
E 206.4.1	Quantity Tables for Concrete and Field Stone Masonry Pipe Ends	Apr-2003				M/E 206.4.1		E 206.4.1
E 206.5.0	Concrete and Fieldstone Masonry Pipe Ends for Combination Pipes Up To 30”	Feb-1996	206.5.0	206.5.0				E 206.5.0
E 206.6.0	Concrete and Fieldstone Masonry Pipe Ends for 30” to 84” Pipe Culverts	Feb-1996	206.6.0	206.6.0				E 206.6.0
E 206.7.0	Stone Pipe Ends For Pipes 24” and Less in Dia.	Feb-1996	206.7.0	206.7.0				E 206.7.0
E 206.8.0	Reinforced Concrete Pipe Flared Ends	Apr-2003	206.8.0	206.8.0		M/E 206.8.0		E 206.8.0
E 206.9.0	Standard Metal End	Feb-1996	206.9.0	206.9.0				E 206.9.0
N/A	Standard Joint for Plain Concrete Pipe Sizes 12” through 24”		206.10.0	Omitted		Deleted (2003)		N/A
N/A	Standard Joints for Reinforced Concrete Pipe		206.11.0	206.11.0		M/E 206.11.0		N/A
N/A	Reinforced Concrete Box Culvert		207.1.0	207.1.0				Omitted 2010
N/A	Reinforced Concrete Box Culvert		207.2.0	207.2.0				Omitted 2010
N/A	Details of Reinforced Concrete Box Culvert		207.3.0	207.3.0				Omitted 2010
N/A	Reinforced Concrete Box Culverts		207.4.0	Obsolete				N/A
N/A	Reinforced Concrete Box Culverts		207.5.0	Obsolete				N/A
E 208.1.0	Concrete Splash Pads	Feb-1996	208.1.0	208.1.0				E 208.1.0
E 209.1.0	Subdrain	Apr-2003	209.1.0	209.1.0		M/E 209.1.0		E 209.1.0
N/A	Erosion Control Notes		210.1.0	210.1.0		Deleted (2003)		N/A
E 210.2.0	Ditch Check Dams for Erosion Control	Apr-2003		210.2.0		M/E 210.2.0		E 210.2.0
E 210.3.0	Hay Bales and Silt Fences for Erosion Control	Apr-2003		210.3.0		M/E 210.3.0		E 210.3.0
E 211.1.0	Half Circle CCM Pipe Waterways	Feb-1996	211.1.0	211.1.0				E 211.1.0

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 211.2.0	Paved Waterways and Apron	Feb-1996	211.2.0	211.2.0				E 211.2.0
E 211.3.0	Paved Waterways	Feb-1996	211.3.0	211.3.0				E 211.3.0
N/A	Concrete Reinforcing Steel- Standard Reinforcing Bars		301.1.0	Omitted		Deleted (2003)		N/A
N/A	Low Retaining Walls		302.1.0	302.1.0				Omitted 2010
E 302.2.0	Cemented Stone Masonry Wall	Feb-1996	302.2.0	302.2.0				E 302.2.0
E 303.1.0	Special Slope Paving Under Bridges Reinforced Concrete Slab	Apr-2003	303.1.0	303.1.0		M/E 303.1.0		E 303.1.0
E 303.1.1	Special Slope Paving Under Bridges Reinforced Concrete Slab Details	Apr-2003				M/E 303.1.1		E 303.1.1
E 304.1.0	Cement Concrete Steps 1/2	Feb-1996	304.1.0	304.1.0				E 304.1.0
E 304.2.0	Cement Concrete Steps 2/2	Feb-1996	304.2.0	304.2.0				E 304.2.0
E 305.1.0	Typical Cantilever Retaining Wall Section	Apr-2004					(4/16/04) 305.1.0	E 305.1.0
E 305.2.0	Cantilever Retaining Walls Dense Foundation Soils, Sloping Backfill	Apr-2004					(4/16/04) 305.2.0	E 305.2.0
E 305.3.0	Cantilever Retaining Walls Dense Foundation Soils, Level Backfill, Surcharge	Apr-2004					(4/16/04) 305.3.0	E 305.3.0
E 305.4.0	Cantilever Retaining Walls Loose Foundation Soils, Sloping Backfill	Apr-2004					(4/16/04) 305.4.0	E 305.4.0
E 305.5.0	Cantilever Retaining Walls Loose Foundation Soils, Level Backfill, Surcharge	Apr-2004					(4/16/04) 305.5.0	E 305.5.0
E 305.6.0	Cantilever Retaining Walls Rock Foundation, Sloping Backfill	Apr-2004					(4/16/04) 305.6.0	E 305.6.0
E 305.7.0	Cantilever Retaining Walls Rock Foundation, Level Backfill, Surcharge	Apr-2004					(4/16/04) 305.7.0	E 305.7.0
					(2/27/09)			

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E 401.1.0	Steel W Beam Highway Guard	Apr-2003	401.1.0	401.1.0R	401.1.0 R Revised	M/E 401.1.0		E 401.1.0
E 401.1.1	Steel W Beam Highway Guard - Sections	Apr-2004				M/E 401.1.1 R	(4/16/04) M/E 401.1.1R	E 401.1.1
E 401.2.0R	Steel W Beam Highway Guard for Sign Protection	Mar-2012	401.2.0	401.2.0		M/E 401.2.0 R	(3/27/12) E 401.2.0R	E 401.2.0
E 401.2.1a	Steel W Beam Highway Guard Buried in Back-Slope Plan View	Mar-2005					(3/02/05) M/E 401.2.1a	E 401.2.1a
E 401.2.1b	Steel W Beam Highway Guard Buried in Back-Slope Post Location	Mar-2005					(3/02/05) M/E 401.2.1b	E 401.2.1b
E 401.2.1c	Steel W Beam Highway Guard Buried in Back-Slope Post Location	Mar-2005					(3/02/05) M/E 401.2.1c	E 401.2.1c
E 401.2.1d	Steel W Beam Highway Guard Buried in Back-Slope Anchorage Details	Mar-2005					(3/02/05) M/E 401.2.1d	E 401.2.1d
E 401.2.1e	Steel W Beam Highway Guard Buried in Back-Slope End Anchorage Details for Posts 1, 2 and 3	Mar-2005					(3/02/05) M/E 401.2.1e	E 401.2.1e
E 401.3.0	Table of Offsets for Highway Guard Flared Ends	Apr-2003	401.3.0	401.3.0R	(2/27/09) 401.3.0 R revised	M/E 401.3.0		E 401.3.0
N/A	Installation of Highway Guard on Median with Open Well Between Bridges		401.4.0	401.4.0				Omitted 2010
E 401.5.0	Steel Thrie Beam Highway Guard Rail Details	Apr-2003	401.5.0	401.5.0	(9/29/00) 401.5.0R	M/E 401.5.0		E 401.5.0
E 401.5.1R	Bridge Rail to Highway Guard Transition	Mar-2012				M/E 401.5.1	(3/27/12) E 401.5.2R	E 401.5.1
E 401.5.2	Bridge Rail to Highway Guard Transition - Sections	Apr-2003				M/E 401.5.2		E 401.5.2
E 401.5.3	Steel Thrie Beam Highway Terminal Connector	Apr-2003				M/E 401.5.3		E 401.5.3

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 401.5.4	Bridge Rail to Highway Guard Collapsing Tube	Apr-2003				M/E 401.5.4		E 401.5.4
E 401.5.5	Bridge Rail to Highway Guard at Sidewalk	Jul-2010						E 401.5.5
E 401.5.6	Bridge Rail to Highway Guard at Sidewalk - Sections	Jul-2010						E 401.5.6
E 401.6.0R	Steel Thrie Beam Highway Details	Mar-2012	401.6.0	401.6.0	(9/29/00) 401.6.0R	M/E 401.6.0 R	(3/27/12) E 401.6.0R	E 401.6.0
E 401.6.1	Steel Highway Guard Transition Beam	Apr-2003				M/E 401.6.1		E 401.6.1
E 401.7.0	Steel W Beam Highway Guard Rail Details	Apr-2003	401.7.0	401.7.0	(9/29/00) 401.7.0R	M/E 401.7.0		E 401.7.0
E 401.8.0R	Steel W Beam Highway Guard Posts and Terminal Section Details	Mar-2012	401.8.0	401.8.0	(9/29/00) 401.8.0R	M/E 401.8.0 R	(3/27/12) E 401.8.0R	E 401.8.0
N/A	Steel Beam Guard Rail with "C" Posts		401.9.0	401.9.0	Deleted (9/29/00)			N/A
E 401.10.0	Steel Beam Highway Guard with Wood Post	Apr-2003	401.10.0	401.10.0		M/E 401.10.0 R		E 401.10.0
E 401.11.0R	Special Base Anchor for Highway Guard Installation on Concrete	Feb-1996	401.11.0	401.11.0			(3/27/12) E 401.11.0R	E 401.11.0
E 401.12.0	Modified Highway Guard Post Installation Where Standard Embedment is Not Feasible	Feb-1996	401.12.0	401.12.0				E 401.12.0
N/A	Pre-cast Concrete Jersey Median Barrier Single Face		401.13.0	401.13.0		Deleted (2003)		N/A
N/A	Pre-cast Concrete Jersey Median Barrier Reinforcement Details			401.13.1		Deleted (2003)		N/A
N/A	Pre-cast Concrete Median Barrier Dowel Details		401.14.0	401.14.0		Deleted (2003)		N/A
N/A	Pre-cast Concrete Median Barrier with Concrete Cap Separator		401.15.0	401.15.0		Deleted (2003)		N/A
N/A	Precast Median Barrier for Temporary Traffic Control Jersey Shape				(Aug 1979) 401.15.1 (10/26/94)		Deleted (2003) but allowed for use of pre-	N/A

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
	Control Jersey Shape				401.15.1 Revised		existing barriers until 10/13/06	

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			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Precast Median Barrier for Temporary Traffic Control Jersey Shape				(Aug 1979) 401.15.2 (10/26/94) 401.15.2 Revised		Deleted (2003) but allowed for use of pre-existing barriers until 10/13/06	N/A
E 401.16.0R	Steel Thrie Beam Highway Guard Median – Barrier	Mar-2012	401.16.0	401.16.0	(9/29/00) 401.16.0R	M/E 401.16.0 R	(3/27/12) E 401.16.0R	E 401.16.0
N/A	F-Shape Median Barrier			401.17.0		Deleted (2003)		N/A
N/A	F-Shape Median Barrier			401.18.0		Deleted (2003)		N/A
N/A	Pre-cast Concrete Tall-Wall Median Barrier			401.19.0		Deleted (2003)		N/A
E 401.20.0	Offset Blocks for Steel W Beam Highway Guard	Apr-2004			(9/29/00) 401.20.0R	M/E 401.20.0 R	(4/16/04) M/E 401.20.0R	E 401.20.0
E 401.21.0	Offset Blocks for Steel Thrie Beam Highway Guard	Apr-2004			(9/29/00) 401.21.0	M/E 401.21.0 R	(4/16/04) M/E 401.21.0R	E 401.21.0
N/A	Method of Placing Guard Rail Terminal Connectors on Prop. Bridge Structures (Leading and Trailing Ends W-Rail)		402.1.0	402.1.0		Deleted (2003)		N/A
E 402.2.0	Steel W Beam Highway Guard Terminal Connectors on Exist. Bridge W-Rail Leading End at Abutments & End Posts	Feb-1996	402.2.0	402.2.0				E 402.2.0
E 402.3.0	Installation of Steel W Beam Highway Guard (Trailing End) At Existing Bridge Abutments and End Posts (W-Rail)	Feb-1996	402.3.0	402.3.0				E 402.3.0
E 402.4.0	Masonry Bracket For Steel W Beam Highway Guard on Abutments and End Posts (Trailing End)	Feb-1996	402.4.0	402.4.0				E 402.4.0
E 402.5.0	Masonry Bracket For Steel W Beam Highway Guard on Abutments and End Posts (Trailing End)	Feb-1996	402.5.0	402.5.0				E 402.5.0

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2012 Standards Drawing Number	Drawing Description	Date of Latest Revision	Drawing History					
			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Method of Placing Thrie Beam Guard Rail Terminal Connectors on Prop. Bridge Structure (Leading and Trailing Ends)		402.6.0	402.6.0		Deleted (2003)		N/A
E 402.7.0	Steel Thrie Beam Guard Rail Terminal Connectors on Exist. Bridge Leading End at Abutments & End Posts	Feb-1996	402.7.0	402.7.0				E 402.7.0
E 402.8.0	Steel Thrie Beam Highway Guard (Trailing End) At Existing Bridge Abutments and End Posts	Feb-1996	402.8.0	402.8.0				E 402.8.0
E 402.9.0	Masonry Bracket For Steel Thrie Beam Highway Guard on Abutments and End Posts (Trailing End)	Feb-1996	402.9.0	402.9.0				E 402.9.0
E 402.9.1	Guardrail Retrofit on Bridges (Plan View)							E 402.9.1
E 402.9.2	Guardrail Retrofit on Bridges (Details)							E 402.9.2
E 402.9.3	Guardrail Retrofit on Bridges (Notes)							E 402.9.3
E 402.10.0	F Shape Concrete Barrier	Apr-2003	402.10.0	402.10.0		M/E 402.10.0		E 402.10.0
E 402.11.0	F Shape Concrete Barrier Symmetrical Section Reinforcing Details	Apr-2003				M/E 402.11.0		E 402.11.0
E 402.12.0	F Shape Concrete Barrier Asymmetrical Section Reinforcing Details	Apr-2003				M/E 402.12.0		E 402.12.0
E 402.13.0	F Shape Concrete Barrier Dowel Details	Apr-2003				M/E 402.13.0		E 402.13.0
E 402.20.0	F Shape Concrete Barrier with Concrete Separator	Apr-2003				M/E 402.20.0		E 402.20.0
E 402.21.0	F Shape Concrete Barrier with Concrete Separator Reinforcing Details	Apr-2003				M/E 402.21.0		E 402.21.0
E 402.22.0	F Shape Concrete Barrier with Concrete Separator Dowel Details	Apr-2003				M/E 402.22.0		E 402.22.0
E 403.1.0	Precast Portable Concrete Barrier 1/3	Apr-2003	403.1.0	Omitted	(10/21/02) M/E 403.1	M/E 403.1		E 403.1.0

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2012 Standards Drawing Number	Drawing Description	Date of Latest Revision	Drawing History					
			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
E 403.2.0	Precast Portable Concrete Barrier 2/3	Apr-2003	403.2.0	Omitted	(10/21/02) M/E 403.2	M/E 403.2		E 403.2.0
E 403.3.0	Precast Portable Concrete Barrier 3/3	Apr-2003	403.3.0	Omitted	(10/21/02) M/E 403.3	M/E 403.3		E 403.3.0
N/A	Highway Guard Type C-3-C		403.4.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-C		403.5.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S		403.6.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S		403.7.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S		403.8.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S		403.9.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S and C-3-C		403.10.0	Omitted		Deleted (2003)		N/A
N/A	Highway Guard Type C-3-S and C-3-C		403.11.0	Omitted		Deleted (2003)		N/A
E 404.1.0	Chain Link Fence (Spring Tension Wire)	Apr-2003	404.1.0	404.1.0		M/E 404.1.0		E 404.1.0
E 404.2.0	Chain Link Fence (Spring Tension Wire)	Feb-1996	404.2.0	404.2.0				E 404.2.0
N/A	Chain Link Fence with Top Tension Cable		404.3.0	404.3.0				Omitted 2010
E 404.4.0	Chain Link Fence (Pipe Top Rail)	Feb-1996	404.4.0	404.4.0				E 404.4.0
E 404.5.0	Chain Link Fence Details of Cable Attachments & Post Bases	1977/Feb 1996	404.5.0	*Dwg. Omitted but in TOC*				E 404.5.0
E 404.6.0	Chain Link Fence – Swing Gate	Feb-1996	404.6.0	404.6.0				E 404.6.0
E 404.7.0	Chain Link Fence Cantilever Gate	Feb-1996	404.7.0	404.7.0				E 404.7.0
E 404.8.0	Chain Link Fence Mounted on Guard Rail	Feb-1996	404.8.0	404.8.0				E 404.8.0
N/A	Chain Link Fence Post Details		404.9.0	404.9.0				Omitted 2010
E 404.10.0	Chain Link Fence Post Details	Feb-1996	404.10.0	404.10.0				E 404.10.0
N/A	Expanded Metal Glare Barrier (Steel)		405.1.0	Omitted		Deleted (2003)		N/A
N/A	Fabric Glare Barrier		405.2.0	Omitted		Deleted (2003)		N/A
N/A	Illuminated Potable Barrier Fence		406.1.0	Omitted		Deleted (2003)		N/A
N/A	Portable Barrier Fence		406.2.0	406.2.0		Deleted (2003)		N/A
N/A	Permanent Barrier Fence for Dead End Streets		406.3.0	Omitted		Deleted (2003)		N/A
N/A	Woven Wire Fence		407.1.0	Omitted		Deleted (2003)		N/A
N/A	Woven Wire Fence		407.2.0	Omitted		Deleted (2003)		N/A

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2012 Standards Drawing Number	Drawing Description	Date of Latest Revision	Drawing History					
			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Stock Fence		408.1.0	408.1.0				Omitted 2010
N/A	Stock Fence		408.2.0	408.2.0				Omitted 2010
N/A	Stock Fence		408.3.0	408.3.0				Omitted 2010
N/A	Galvanized Steel Pipe Fence		409.1.0	409.1.0		Deleted (2003)		N/A
E 501.1.0	Wetlands Protection Act Sign	Feb-1996	501.1.0	501.1.0				E 501.1.0
E 502.1.0	Tree Wells	1977/Feb. 1996	502.1.0	* Dwg. Omitted but in TOC*				E 502.1.0
N/A	Metal Bin – Type Retaining Wall		503.1.0	503.1.0		Deleted (2003)		N/A
N/A	Metal Bin – Type Retaining Wall Designs “A” And “B”			503.1.1				Omitted 2010
N/A	Metal Bin – Type Retaining Wall Design “C”			503.1.2				Omitted 2010
N/A	Metal Bin – Type Retaining Wall Design “D”			503.1.3				Omitted 2010
N/A	Metal Bin – Type Retaining Wall Design “E”			503.1.4				Omitted 2010
N/A	Metal Bin – Type Retaining Wall Design “F”			503.1.5				Omitted 2010
N/A	Metal Bin-Type Retaining Wall Design Chart			503.1.6		M/E 503.1.6		N/A
N/A	Metal Bin – Type Retaining Wall		503.2.0	503.2.0				Omitted 2010
N/A	Metal Bin – Type Retaining Wall		503.3.0	503.3.0				Omitted 2010
E 504.1.0	Setting Rural Mailboxes	Feb-1996	504.1.0	504.1.0				E 504.1.0
E 505.1.0	Demountable Reflectorized Station Marker and Project Marker	Apr-2003	505.1.0	505.1.0		M/E 505.1.0		E 505.1.0
N/A	Bound Concrete		506.1.0	506.1.0				Omitted 2010
E 506.2.0	Bound Lettered Granite	Feb-1996	506.2.0	506.2.0				E 506.2.0
N/A	Portable Office Building		507.1.0	Omitted		Deleted (2003)		N/A
N/A	Portable Office Building		507.2.0	Omitted		Deleted (2003)		N/A
N/A	Portable Office Building		507.3.0	Omitted		Deleted (2003)		N/A
N/A	Portable Office Building		507.4.0	Omitted		Deleted (2003)		N/A

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2012 Standards Drawing Number	Drawing Description	Date of Latest Revision	Drawing History					
			1977 Standards	1996 Metric Edition Standards	Engineering Directives Pre 2003	2003 Supplemental Standards	Engineering Directives Post 2003	2010 Standards
N/A	Portable Office Building		507.5.0	Omitted		Deleted (2003)		N/A
N/A	Portable Sanitary Building		508.1.0	Omitted		Deleted (2003)		N/A
N/A	Portable Sanitary Building		508.2.0	Omitted		Deleted (2003)		N/A
N/A	Portable Sanitary Building		508.3.0	Omitted		Deleted (2003)		N/A
N/A	Portable Sanitary Building		508.4.0	Omitted		Deleted (2003)		N/A