



Connecticut DOT  
Office of Engineering

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## ENGINEERING BULLETIN

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Engineering Administrator

### Revised Highway & Guide Sheets Issued

The Highway Standard Sheet and Guide Sheet modifications have been made to the Department's Highway Standard Drawings and are now available online at [Highway Standard - Guide Sheet Web Page](#) and should be used on all projects, effective immediately:

#### New / Revised Highway Standard Drawings issued are:

#### HW-506\_01a END WALLS and HW-506\_01b STEEL REINFORCING FOR ENDWALLS

Replaced existing drawings with three new drawings:

- HW-505\_01a STRAIGHT ENDWALL
- HW-505\_01b STEEL REINFORCING FOR STRAIGHT ENDWALLS  
(FOR 2'-0" DIFFERENCE FROM BASE TO FLOW LINE)
- HW-505\_01c STEEL REINFORCING FOR STRAIGHT ENDWALLS  
(FOR STANDARD RIPRAP APPLICATION)

#### HW-506-02 Type "D-G" and "L" ENDWALLS

Revised drawing number to match Standard Specification Form 818 change from Section 506 to 505 for (Type) ENDWALL.

#### HW-506-03 ENDWALLS FOR PIPE – ARCH

Removed drawing from standard drawings, moved to Guide Sheet

#### HW-586\_01 CATCH BASIN AND DROP INLET TYPES "C" AND "C-L" STRUCTURES

#### HW-586\_02 CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE I STRUCTURES

#### HW-586\_03 CATCH BASIN (TYPES "C" AND "C-L") FOR DOUBLE GRATE TYPE II STRUCTURES

Revised all diagrams to have angled catch basin tops separated from the drainage structure to emphasize the mortar and spacers are to be used for adjusting the top to match the roadway's profile and cross-slope.

#### HW-586\_07a CATCH BASIN TYPE "C" AND "C-L" TOPS

Errata

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HW-586\_10a MANHOLE FRAME AND COVER  
Revised required attributes shown on the Manhole Frame and Cover view.

HW-586\_10b MANHOLE FRAME AND GRATE  
Added plan view indicating the required frame attributes and  
Manhole Frame/Grate isometric view

HW-751\_01 UNDERDRAIN AND UNDERDRAIN OUTLET  
Revised sheet's content to include geotextile information. Removed section  
view of the "Culvert and Underdrain in the same Trench" application from  
the sheet, will be a guide sheet.

HW-821\_11a 42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB SHEET 1:  
Revised base dimension.

HW-821\_11b 42" SINGLE SLOPE PRECAST CONCRETE BARRIER CURB SHEET 2:  
Revised base dimension. Modified Transition Plan View note to match  
drawing's call outs.

HW-822\_02b TEMPORARY TRAFFIC BARRIER (BOLTED)  
Revised the sheet to reflect updated specifications for anchoring the threaded  
anchor rods required for bolting temporary traffic barrier to bridge decks.

HW-910\_20 MASH W-BEAM HARDWARE  
Added drawing for typical 3-space w-beam rail Element (10'-5" in length)  
and details for installation details for w-beam double sided delineator to  
be used on highway off ramps.

HW-910\_20 MASH W-BEAM HARDWARE

HW-910\_25a METAL BEAM RAIL TRANSITION 350 TO MASH GUIDERAIL

HW-911\_01 R-B END ANCHORAGE TYPE I AND II

HW-911\_02 MD-B END ANCHORAGE TYPE I

Revised these standard sheets to include New "3-Space W-Beam Guiderail rail  
element" to transition the rail splice off post for MASH compliant guiderail.

HW-910-21 METAL BEAM RAIL (R-B MASH) GUIDERAIL

Errata

HW-910-25b METAL BEAM RAIL MEDIAN APPLICATION TRANSITION 350 TO  
MASH GUIDERAIL

New drawings for guiderail transitioning from MD-I to MD-B MASH and  
MD-B MASH to R-B MASH.

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**HW-910\_28 R-B MASH BRIDGE ATTACHMENT TRAILING END**

Removed standard drawing for use on new construction to be replaced with new HW-910\_29 THRIE-BEAM BRIDGE ATTACHMENT TRAILING END.

**HW-910\_29 THRIE-BEAM BRIDGE ATTACHMENT TRAILING END**

New drawing to replace existing HW-910\_28 R-B MASH BRIDGE ATTACHMENT TRAILING END to change how w-beam guiderail is anchored to bridge parapet on the trailing end.

**HW-911\_01 R-B END ANCHORAGE TYPE I AND II**

Revised sheet to include example of end anchorage combined with 3-Space W-Beam Guiderail” component drawing to shift post off w-beam splice for MASH compliant guiderail. Added Object Marker to be installed near the w-beam terminal element.

**HW-911\_03 ANCHOR IN EARTH CUT SLOPE & ANCHOR IN ROCK CUT SLOPE**

Revised Section B drawing to indicate #3 rebar used for concrete anchor. Added language on how to transition rail METAL BEAM (R-B MASH) guiderail configuration based on HW-910\_25a METAL BEAM RAIL TRANSITION 350 to MASH GUIDERAIL.

**HW-930\_01 OBJECT MARKER (MAINTENANCE)**

New sheet developed for specification change to require the installation of Object Markers (Maintenance) at end walls, pipe drainage outlets and guiderail end anchorages.

**New & Revised Highway Guide Sheets issued are:**

File Name	Description
GS-011.pdf	SEDIMENTATION CONTROL DOUBLE ROLL SYSTEMS SHEET 1
GS-012.pdf	SEDIMENTATION CONTROL DOUBLE ROLL SYSTEMS SHEET 2
GS-013.pdf	EROSION CONTROL MATTING AND TEMPORARY SLOPE DRAIN
GS-026.pdf	UNDERDRAIN AND DRAINAGE PIPE IN THE SAME TRENCH
GS-031.pdf	ROUNDABOUT TRUCK APRON–GENERAL DESIGN 1 OF 3
GS-034.pdf	ROUNDABOUT TRUCK APRON–REINFORCEMENT & HARDWARE 2 OF 3
GS-035.pdf	ROUNDABOUT TRUCK APRON–REINFORCEMENT & HARDWARE 3 OF 3
GS-064.pdf	WING ENDWALL UNIT
GS-067.pdf	STEEL REINFORCEMENT FOR WING ENDWALL UNIT (12 TO 24 DIA RCP)
GS-070.pdf	STEEL REINFORCEMENT FOR WING ENDWALL UNIT (30 TO 48 DIA RCP)
GS-073.pdf	PRECAST WNGWALL TO ENDWALL CONNECTION DETAILS
GS-076.pdf	ENDWALL FOR PIPE ARCH
GS-082.pdf	WING ENDWALL FOR PIPE ARCH

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GS-106.pdf CONCRETE SDEWALK RAMP(S) --INDEX SHEET--[ [Contains Links to Sheets](#) ]--  
GS-109.pdf CONCRETE SDEWALK RAMPS SHEET 1  
GS-112.pdf CONCRETE SDEWALK RAMPS SHEET 2  
GS-115.pdf CONCRETE SDEWALK RAMPS SHEET 3  
GS-118.pdf CONCRETE SDEWALK RAMPS SHEET 4  
GS-121.pdf CONCRETE SDEWALK RAMPS SHEET 5  
GS-124.pdf CONCRETE SDEWALK RAMPS SHEET 6  
GS-127.pdf CONCRETE SDEWALK RAMPS SHEET 7  
GS-130.pdf CONCRETE SDEWALK RAMPS SHEET 8  
GS-133.pdf CONCRETE SDEWALK RAMPS SHEET 9  
GS-136.pdf CONCRETE SDEWALK RAMPS SHEET 10  
GS-139.pdf CONCRETE SDEWALK RAMPS SHEET 11