


TO: <b>SUPERSEDED BY EB 97-039</b> <b>EFFECTIVE 7/1/97</b>	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p> <p>SUBJECT: GALVANIZED STEEL END SECTIONS FOR CORRUGATED STEEL PIPE &amp; CORRUGATED STEEL PIPE-ARCH</p> <p>Subject Code: 7.27-2-603-3</p>
Distribution:            30    Main Office            32    Regions            34    Special	Code: <u>EI 90-37</u>
APPROVED:  J. R. LAMBERT, Deputy Chief Engr., (Fac. Design Div.)	Date: <u>10-10-90</u> Supersedes: EI81-40

We are issuing the following revised standard sheet:

603-3R2 Galvanized Steel End Sections for Corrugated Steel Pipe and Corrugated Steel Pipe - Arch (Annular and Helical Corrugations)

The revised standard sheet supersedes Standard Sheet 603-3R1 issued by EI 81-40. The new sheet has the following revisions:

1. The name of the sheet has been changed to make it consistent with the item titles for corrugated steel pipe and galvanized steel end sections.
2. The end sections for 48 and 54 inch corrugated steel pipe may now be 1, 2, or 3 piece end sections.
3. The end sections for 57 X 38 inch and 64 X 43 inch corrugated steel pipe-arches with 2 2/3 X 1/2 inch corrugations; and the end sections for 53 X 41 inch and 60 X 46 inch corrugated steel pipe-arches may now be 1, 2, or 3 piece end sections.
4. There are six new sizes, two round and four pipe arch, listed. The pay items for these new end sections are listed on page 2 of this instruction.

Toe plate extensions are required at the outlet ends only, and then only whenever the gradient of the channel downstream of the culvert is 5% or steeper. When toe plate extension is required, the designer shall indicate the location of each end section requiring a toe plate extension in the Drainage Structure Table (See fig. 21E of the Highway Design Manual).

Standard Sheet 603-3R2 shall become effective with the letting of April 4, 1991.

If you have any questions regarding this standard sheet you may contact W. E. Hopkins of the Final Plan Review Bureau at (518) 457-4092.

Subject: GALVANIZED STEEL END SECTIONS

ITEM NUMBER	UNIT OF PATMENT	ABBREVIATED DESCRIPTION	FULL DESCRIPTION
603.1777	EA	GALV ST END-SECTIONS-PIPE (2-2/3X1/2) 90 IN.D 10 GA	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3 IN. X 1/2 IN. CORRUGATIONS) 90 INCH DIAMETER, 10 GAUGE
603.1782	EA	GALV ST END-SECTIONS-PIPE (2-2/3X1/2) 96 IN.D 10 GA	GALVANIZED STEEL END SECTIONS-PIPE (2-2/3 IN. X 1/2 IN. CORRUGATIONS) 96 INCH DIAMETER, 10 GAUGE
603.1977	EA	GALV ST END-SECTIONS-PIPE (3X1) 90 IN. DIAM 10 GAUGE	GALVANIZED STEEL END SECTIONS-PIPE (3 IN. X 1 IN. CORRUGATIONS) 90 INCH DIAMETER, 10 GAUGE
603.1982	EA	GALV ST END-SECTIONS-PIPE (3X1) 96 IN. DIAM 10 GAUGE	GALVANIZED STEEL END SECTIONS-PIPE (3 IN. X 1 IN. CORRUGATIONS) 96 INCH DIAMETER, 10 GAUGE
603.2062	EA	GAL ST E SECT-PI ARC (3X1/5X1) 7 FT 3 IN SP 5 FT 3 IN RI 12 G	GALVANIZED STEEL END SECTION - PIPE ARCH (3X1 OR 5X1 CORR) 7 FOOT-3 INCH SPAN 5 FOOT-3 INCH RISE, 12 GAUGE
603.2068	EA	GAL ST E SECT-PI ARC (3X1/5X1) 7 FT 11 IN SP 5 FT 7 IN RI 10G	GALVANIZED STEEL END SECTION - PIPE ARCH (3X1 OR 5X1 CORR) 7 FOOT-11 INCH SPAN 5 FOOT-7 INCH RISE, 10 GAUGE
603.2073	EA	GAL ST E SECT-PI ARC (3X1/5X1) 8 FT 7 IN SP 5 FT 11 IN RI 10G	GALVANIZED STEEL END SECTION - PIPE ARCH (3X1 OR 5X1 CORR) 8 FOOT-7 INCH SPAN 5 FOOT-11 INCH RISE, 10 GAUGE
603.2078	EA	GAL ST E SECT-PI ARC (3X1/5X1) 9 FT 4 IN SP 6 FT 3 IN RI 10G	GALVANIZED STEEL END SECTION - PIPE ARCH (3X1 OR 5X1 CORR) 9 FOOT-4 INCH SPAN 6 FOOT 3 INCH RISE, 10 GAUGE
603.7915	EA	GALV ST PIPE END SECTS (OPTS) (2-2/3X1/2)(3X1)90 IN D 10 G	GALVANIZED STEEL PIPE END SECTIONS (OPTIONS)(2-2/3 INCH X 1/2 INCH CORRUGATION) OR (3 INCH X 1 INCH CORRUGATION) 90 INCH DIAMETER, 10 GAUGE
603.7916	EA	GALV ST PIPE END SECTS (OPTS) (2-2/3X1/2)(3X1)96 IN D 10 G	GALVANIZED STEEL PIPE END SECTIONS (OPTIONS)(2-2/3 INCH X 1/2 INCH CORRUGATION) OR (3 INCH X 1 INCH CORRUGATION) 96 INCH DIAMETER, 10 GAUGE