Steel Column Casing Guidance

Included in this attachment is guidance to assist SC Staff in understanding features of column casings:

- Backing plates for column casing to have a thickness equal to 3/8".

- When welding column casing sections together in the manufacturer's shop, the backing bars are to have a continuous full-length weld.

  The backing bars used to weld the column casing sections together in the field will only be welded to the column casing on one side by non-continuous welds. These welds will be 2" long and at 8" centers. This backing bar does not need a continuous full-length weld.

- Column casing welds must comply with Section 11, Welding, and Section 55, Steel Structures, of the Contract Specifications. The requirements of the American Welding Society (AWS) D1.5 Bridge Welding, do apply to the welding of column casings. A column casing is not considered a primary member unless it is designated as such in the contract. Therefore, any column casing not designated as a primary member on the contract plans is not subject to Nondestructive Testing (NDT) other than visual inspection, per AWS D1.5 Section 6.7.1. The base metal testing and preparation, weld quality, welder, welding operator, Welding Procedure Specification qualifications, and material requirements established in AWS D1.5 do apply for shop and field welding.

- Bridge Design Aids, 14-2, Steel Column Casing Design and Details, includes information regarding design considerations relevant to construction.