GENERAL

This section deals with the use of rectangular and square structures which, when laid end-to-end, form a conduit for the conveyance of storm or sanitary wastewaters. Applications of this product have been so extensive that varied widths and heights are available. They can be used in short structures such as bridge construction or replacement, and in long structures for watercourse location or development.

The shape of the box culvert is a four-sided box section with open ends to be monolithically cast of reinforced concrete. The inside surfaces shall be smooth so as not to restrict flow through the completed installation. These precast concrete sections are designed for easy and trouble-free operation.

Contact our engineering staff for assistance in the determination of attainable shapes and sizes of box culvert.

SPECIFICATIONS:

CONCRETE: 5,000 P.S.I. @ 28 DAYS
ENTRAINED AIR: 5% - 9%
STEEL: A.S.T.M. A490 - A616
GRADE 60 - 60 KSI

JOINTS

Each section shall have a male and a female end with not less than 1 1/2" concrete overlap.

Note: "V" bottom (low flow channel) available.

Greater spans to 36'-0" available.
Leaders and Innovators in the Small Bridge Industry...

Although Kistner Concrete Products has been an established leader in the precast concrete industry for many years, box culverts are a relatively new item to our line of excellent products. It is this very fact that has given us the opportunity to enter the box culvert business with a fresh and innovative approach. The following information will tell you about our time and money-saving products and exclusive features, all of which meet or exceed A.S.T.M. and N.Y.S.D.O.T. specifications.

At Kistner there is always a large inventory of various size box culverts on hand for immediate delivery. Thus, you can be assured that there will be no crew holdups or other costly delays due to a lack of supply.

**EXPOSED REINFORCING STEEL** – When additional concrete must be poured beyond the precast sections, reinforcing steel can be left exposed (usually 18”).

**KEYWAY SLOT** – A shear connection between the precast and field cast can be obtained by using a slot around the periphery of the end precast sections.

**PLAIN END** – This section can be used as the end of an installation when the wing and end walls are designed to act independently of the precast box.

**SLOPED FACE** – End sections with a sloped face can be used as an alternate to wing walls. The angle of the slope is determined by the grade of the embankment.

**SKewed FACE** – Special skewed end sections can be manufactured at crossings which are not perpendicular to the roadway. Any end finish such as those listed above can be used as a skewed end.
Precast Box Culvert Carries Conrail E-80 Rail Loading

Precast concrete box culvert sections designed for a Cooper E-80 loading were installed under Conrail tracks in Erie County, New York this summer. The box members had a 10’ span and 4’ rise. They were designed by engineers with the New York State Department of Transportation [NYSDOT].

The project was part of a reconstruction of routes 33 and 78, for NYSDOT. The installation under the tracks was completed in one day. Contractor for the project was Dipizio Construction, Inc. Kistner Concrete Products, Inc. cast the members in their plant in East Pembroke, N.Y. #