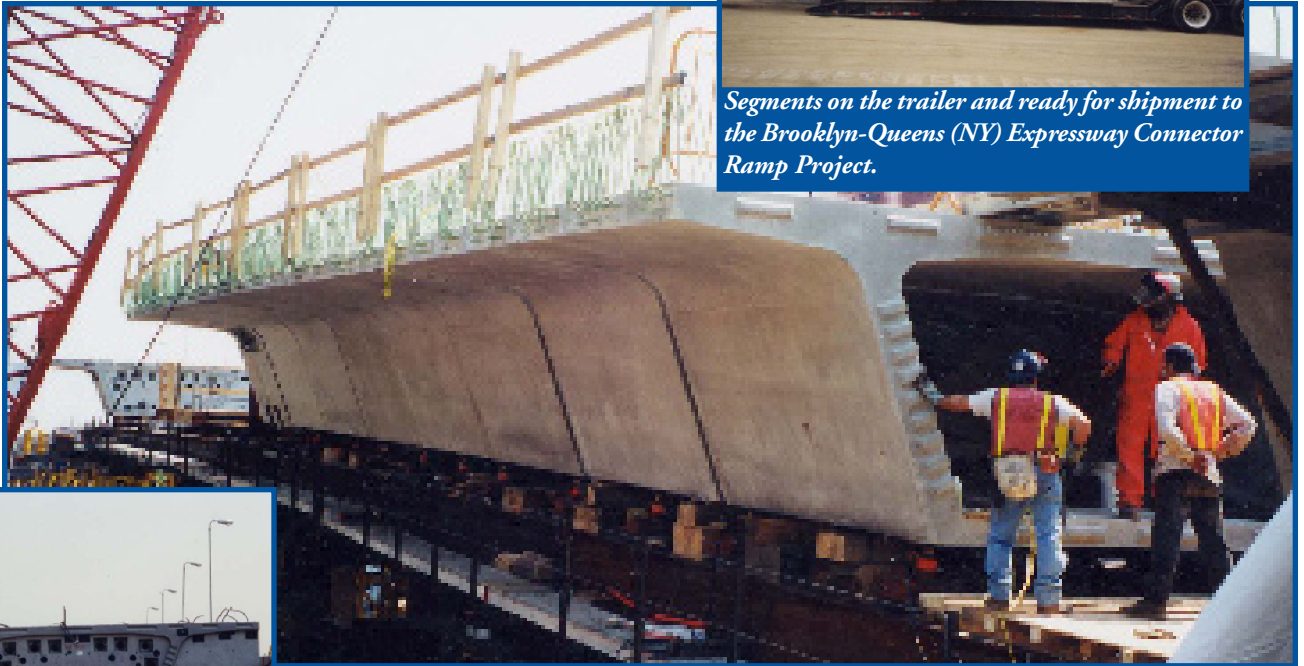


PLANT-CAST SEGMENTAL BRIDGES



Segments on the trailer and ready for shipment to the Brooklyn-Queens (NY) Expressway Connector Ramp Project.



Erection of Span No. 1.



Pier No. 2 Segment looking East.

PRODUCT DESCRIPTION

Segmental bridge units are cast full width, in lengths of three meters or less. They may be designed side-by-side to achieve wider bridges and may also be cast to accommodate radii as low as 250 feet to nearly any vertical profile. Units are cast year-round in Fort Miller's plant, at the same time substructure work is done in the field. Segments are erected in a relatively short period of time, significantly speeding up the overall construction process. Transverse (in the plant) and longitudinal (in the field) post-tensioning improves long-term durability. Segmental bridge design also permits top-down construction, which is especially beneficial for sensitive environmental or traffic areas. The segment weight of 55 tons (average), width of 32.7 feet, and length of 9.8 feet make it ideal for transport through heavily congested urban areas.

ADVANTAGES OF PLANT CASTING

Casting segmental units in Fort Miller's environmentally-controlled plant also adds to long-term durability of the completed bridge. Even during cold winter months, casting conditions are kept at optimum levels. Our state-of-the-art plant gives us more control over batching, casting, and quality control operations. Our labor force is specially trained for the intricate work required on these castings. All of the aggregates used in our segmental units are NYSDOT-approved and are of the highest quality available.

BQE EXPRESSWAY CONNECTOR PROJECT SPECIFICS:

The BQE project consisted of 177 standard, 61 deviation, 36 pier, and four abutment units, for a total of 278 units for 2495 linear feet of new ramp. The ramp was aligned to an 820 foot horizontal radius, as well as to various vertical curves. Casting began in December 2000 and will be completed in October 2001. Phase I erection will commence in the spring of 2001. The owner of the bridge is NYSDOT. The segments were designed by J. Muller International for Daniel Frankfurt, P.C.

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YOUR IMAGINATION IS OUR ONLY LIMITATION

**SEGMENTAL BRIDGE FORM: SHORT ERECTION TIME
SPEEDS CONSTRUCTION PROCESS**



FORM DESCRIPTION

The forms used for the Marcy Avenue Project were manufactured by the Southern Form Company. One short-bed form makes standard units only while another short-bed form is designed to make pier segments as well as standard units. A third form is designed to make abutment and pier segments only. Each form is capable of producing one segment per day with proper curing techniques.

FORM FEATURES*

Depth of cross section:	7'-6"
Width of cross section:	32'-8"
Span Lengths:	Span-by-span: To 157'; 134'-6" Optimum Balanced Cantilever: To 197'; 180' Optimum
Deck Width:	26' to 36'
Horizontal Curvature:	250' minimum, Greater than 820' Optimum
Segment Length:	9'-10" Optimum

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***This form is available for rent or purchase. Curing and other accessories and technical assistance are available for setting up the form for different spans and widths for other projects. Please call The Fort Miller Co. for details.**

