

# I-95/I-495/I-395 SPRINGFIELD INTERCHANGE IMPROVEMENTS PHASE II, III & IV

SPRINGFIELD, VIRGINIA



**CLIENT:**

Virginia Department of  
Transportation (VDOT)

**CONTRACT AMOUNT:**

\$255 million

**DELIVERY METHOD:**

Bid-Build

**CONTRACTOR:**

Shirley Contracting Company

**DESIGNER:**

HNTB

**COMPLETION DATE:**

2005

From 2001 to 2005, Shirley completed Phase II, III and IV of VDOT's Springfield Interchange Improvements Project, known as the "Mixing Bowl." Working in an interchange that had close to 375,000 vehicles passing through every day. Phase II & III consisted of 15 bridges, 35,000 square meters of MSE retaining wall, demolition of five existing bridges, movement of more than 350,000 cubic meters of earth, over 10,000 meters of pipe, placement of 150,000 metric tons of aggregate base, and placement of over 160,000 metric tons of asphalt. Shirley successfully completed the project despite many obstacles and challenges.

Phase IV called for the construction of four new bridges, including a 4,200 foot long flyover ramp from the Capital Beltway Inner Loop to I-95 Southbound. The flyover is the longest inland bridge constructed in Virginia, rising over 100 feet at its highest point. At a cost of \$255 million, the Phase IV project represents the largest single contract awarded for the entire Springfield Interchange rebuilding project. Major elements of the project included 500,000 cubic yards of earthwork, 250,000 tons of asphalt concrete, 20,000 linear feet of stormwater and pressure waterlines, 15,000 linear feet of deep sanitary sewer pipe including 2,500 linear feet of micro-tunneling. Shirley designed and constructed 185,000 square feet of absorptive sound barrier walls and erected 150,000 square feet of permanent MSE retaining walls. The project was part of the reconstruction of one of the busiest interchanges on the east coast with extensive and complex traffic maintenance of the 200,000 plus vehicles per day using the interchange.

The project was highlighted by a complex three-stage bridge built over the heavily traveled railroads of both CSX Transportation and WMATA's Yellow Line. The project was completed ahead of schedule, four months in advance of the specified project completion date.

On the Phase IV project, Shirley was able to maintain our project schedule and achieve an early completion bonus offered by VDOT for completing the project four months in advance of the specified project completion date.