



# I-49N, Segment K

SHREVEPORT, CADDO PARISH, LOUISIANA

## SDI Scope

*Post-Tensioning Supply*

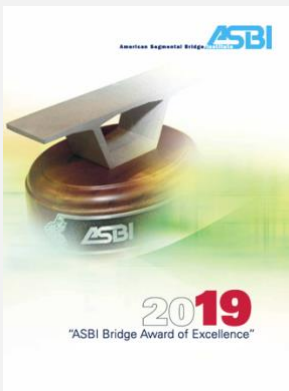
## Contractor

*PCL Civil Constructors*

## Owner

*Louisiana Department  
of Transportation and  
Development*

## Layout



## I-49N Project Description

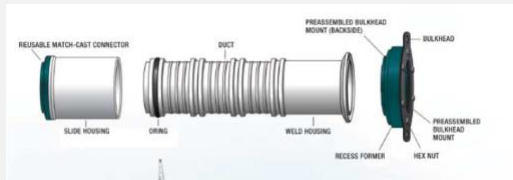
The I-49N project involves the construction of a four-lane interstate from I-220 in Shreveport, Caddo Parish, Louisiana to the Arkansas state line. This I-49N Project is Segment K, a precast segmental bridge project (the first in the State of Louisiana) separated into 11 segments. The interstate provides a seamless link from Louisiana ports to the Arkansas border, significantly improving commercial shipping and cargo infrastructure, supporting Louisiana's growing trade volume and economic development.

### SDI'S SCOPE OF WORK

Schwager Davis, Inc. is supplying all the post-tensioning material required for the I-49N, Segment K, Phase 2 portion. SDI will be providing material for longitudinal, transverse, and cantilever tendons.

SDI is also providing newly designed segmental couplers for use with split pier tendons and cantilever tendons. SDI's segmental coupler increases efficiency through ease-of-use while still maintaining a product that meets all specifications. Over 8,700 SDI couplers were employed on this project.

SDI's Segmental Coupler:



### PROJECT HIGHLIGHTS AND FACTS

**SDI Products:**

- 4.6A Anchorages – 4,578 count
- 12.6-PC Anchorages – 1,268 ct.
- 19.6-PC1 Anchorages – 252 ct.
- 27.6-PC6 Anchorages – 42 ct.
- 31.6-PC Anchorages – 160 ct.

SDI Plastic Duct:

- 1x3 – 86,278 ft.
- 3" – 83,396 ft.
- 4" – 356 ft.
- 4.5" – 1,129 ft.
- 5" – 1,630

The project went exceptionally well and garnered an [ASBI Bridge Award in 2019](#) due to its design innovation and beauty. We expect precast segmental bridges may become a staple in the region due to their strong performance, cost-effective design, and time-saving construction features.



*With hundreds of bridge segments to join in a large project, SDI's excellent, tested, time-saving coupler design is a significant step forward in segmental bridge post-tensioning.*