

PROJECT SUMMARY

ARDOT 061630-Hwy10/100 I-430 Bridge (LED Roadway Lighting & ITS Improvements)

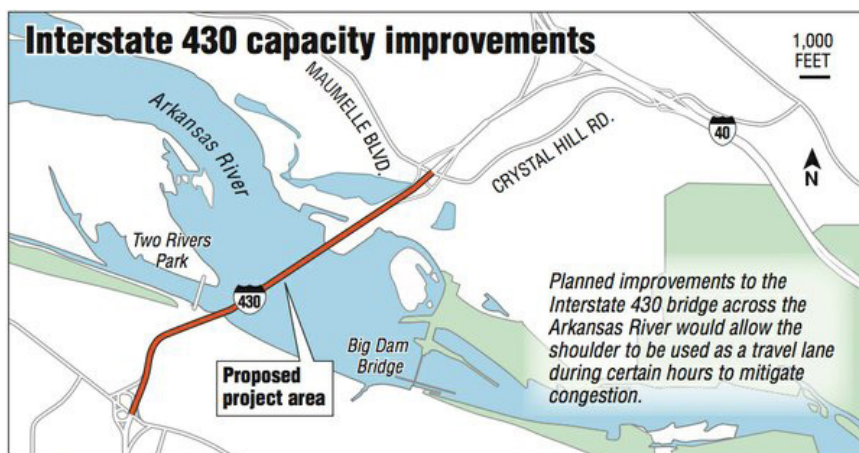
Arkansas Department of Transportation

ARDOT PROJECT OVERVIEW

ARDOT engineers realized that lane expansion for the I-430 bridge crossing the Arkansas River and adjoining corridors was imperative to accommodate the ever-growing rush hour traffic volumes. The cost to build new lanes was prohibitively expensive, so ARDOT developed a plan to reconstruct the existing shoulders to provide managed lanes in each direction of travel within the project corridor. By utilizing Intelligent Transportation Systems (ITS) ARDOT can manage the newly constructed shoulders enabling travelers to utilize these shoulders as lanes during high volume periods. The ITS implemented includes lane control signs, dynamic message signs, ITS Cameras, fiber optic networks, and supporting electrical systems.

The bridge and adjacent I-430 corridors within the project also lacked roadway lighting. This potentially posed a safety issue with the greatly increased traffic volumes and managed shoulder lanes. In response, ARDOT engineers included LED lighting across the project scope. This included Off Bridge Roadway Lighting Pole Assemblies w/Foundations and On Bridge Roadway Lighting Pole Assemblies as well as the supporting electric conduits, wire, and junction boxes.

Upon review of the plans, InLine's teams identified constructability deficiencies. InLine immediately started working with ARDOT and the prime contractor "Concrete Strategies" to develop alternative design approaches to resolve the issues. InLine's alternative designs were then implemented into the final project scope and constructed.



SOURCE: Arkansas Department of Transportation

Arkansas Democrat-Gazette

CUSTOMER CONTACTS

Arkansas Department of Transportation

Name: Deric Wyatt

Address: 11300 West Baseline,
Little Rock, Arkansas

Phone: (501) 569-2661

Email: Deric.Wyatt@ARDOT.gov

Prime Contractor: Concrete Strategies

Name: Tom Behr

Address: 2199 Inner Belt Business Center Dr.
St Louis, MO 63114

Phone: (314) 406-7855

Email: BehrT@concretestrategies.com



InLine ➤

InLine.com | 888-4InLine



InLine's management, construction, and subcontractor teams immediately went to work to meet the expedited timelines for this important project. InLine worked very closely with Concrete Strategies coordinating multiple team schedules to address the extremely challenging management of traffic (MOT) within the constrained work areas. These efforts ensured work zone safety for our crews and the traveling public.

InLine's teams constructed the following items for this important project on time with zero safety incidents over the three plus years of construction.

ITS Infrastructure Constructed	Quantity
ITS Device Cabinets	29 Each
ITS CCTV Cameras	10 Each
ITS Structure Poles w/foundations	10 each
ITS Structure Poles On-bridge	12 each
ITS DMS/DDMS	9 each
ITS Lane Control Assemblies	22 each
Communication Tower	1 each
Fiber Cable	40,791 LF
Traffic Signal Mast Arm Poles w/Foundations	22 each
Electric Infrastructure Constructed	
Underground Conduit	20,638 LF
Electrical Conductors	96,668 LF
120/240V-600V Step-Up Power Service Sites	3 each
120/240V Device Services	3 each
Smart Lighting Control	1 each
Navigational Lighting System (LED)	1 each
Off Bridge Roadway Lighting Pole Assemblies w/Foundation	30 each
On Bridge Roadway Lighting Pole Assemblies	22 each
Bridge Conduit Re-Design	1 LS
Multiduct Bulletproof Fiberglass Bridge Conduit w/Hanger System	19,952 LF
Bridge Pull Boxes	62 each
3" Casing Bored in Rock	315 LF

InLine ➤

InLine.com | 888-4InLine