



Project Delivery and Status of NEON and USA Parkway

Construction Working Group







Objective

- Delivery Method Selection. D-B use (or avoidance)
- Update on schedule and change orders to date for Project Neon and USA Parkway







NDOT Pioneer Program Guidelines

- Provides a framework, general process, and structure for the implementation of DB and CMAR contracts
- We have developed templates for CMAR contracts and are working towards developing a template for DB contracts









Delivery Method Selection Process

Criterion	Delivery Method Preference			
	DBB	DB	CMAR	
Criterion 1: Cost Impacts				
Criterion 2: Schedule Impacts				
Criterion 3: Opportunity to Manage Risk				
Criterion 4: Complexity of Design and Construction Phasing				
Criterion 5: Opportunity for Innovation				

Method	Potential Advantages	Potential Disadvantages	Preference (Circle One ⁵)
DBB	NDOT has more time to develop design solutions.	NDOT would not gain constructability value from a contractor until after award, thereby potentially losing the benefit of cost savings. NDOT could experience a limitation for potential innovative constructability concepts. NDOT may incur a higher number of change orders from an incurability.	
DB	NDOT can transfer risk that could be better managed by the contractor, potentially improving constructability and reducing errors and change orders. NDOT gains the benefit of innovative ideas being integrated early in the design	NDOT may incur unexpected project. NDOT may incur unexpected project. NDOT may incur unexpected project.	
CMAR	NDOT gains the benefit of innovative ideas being integrated early in the design	unique issues and complexities of a	
	NDOT may potentially reduce and mitigate project complexity through design, thereby gaining more certainty to cost, quality, and schedule delivery and construction.	NDOT may be in an undesirable negotiating position having to retain the contractor for subsequent construction project phases.	







Contract Days



Total Contract Days: 1,338

As of 4.1.17: 503



Work Complete

27% COMPLETE

PROJECT NEW JUNION Las Vegas Total Contract Amount \$571M

Spent to Date \$162M

94% COMPLETE

PRO ECT

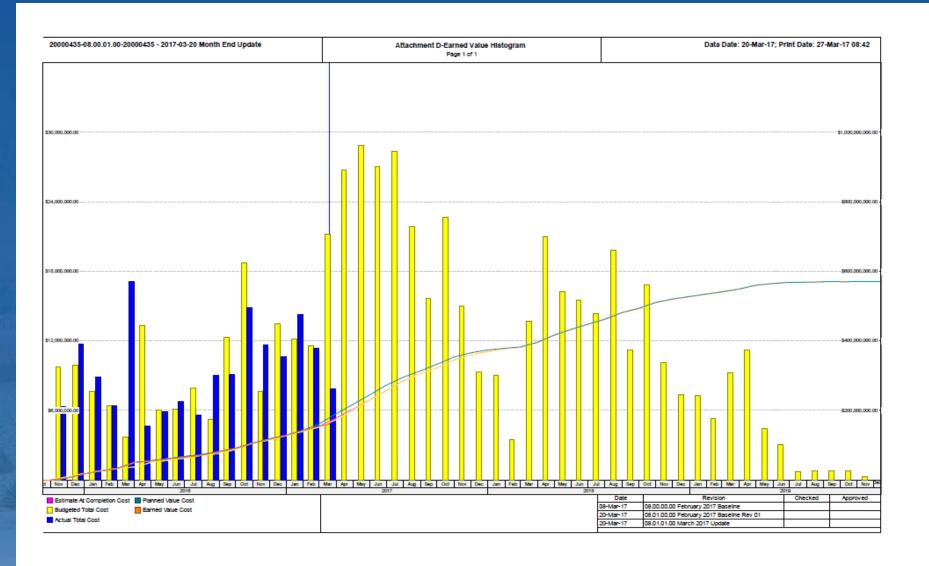
DESIGN



CONSTRUCTION



Earned Value





Change Order Status

Department CCO #	Description	Status	Date Executed	Amount	Owner Directed	Responsibility
1	515 Viaduct Repairs	Executed	4/25/2016	\$ 2,987,207.23	X	NDOT
2	Local Access Improvements	Executed	5/27/2016	\$ 1,060,000.00	X	NDOT / CLV
3	Design Work: MLK Ramp Mod.	Executed	6/14/2016	\$ 1,029,705.00	Х	NDOT
4	Sales Tax Increase	Executed	7/6/2016	\$ 150,000.00		NDOT
5	Upgrade to CLV Drainage	Executed	8/9/2016	\$ 22,940.63	Х	CLV
6	Pavement VECP	Executed	8/9/2016	\$ (95,878.49)		NDOT
7	MLK Ramp Mod. – 2016/2017	Executed	9/12/2016	\$ 1,652,219.67	X	NDOT
8	CenturyLink Additional Cost	Executed	9/15/2016	\$ 178,000.00		NDOT
9	CLV Local Street Improvements	Executed	10/24/2016	\$ 0.00	X	CLV
10	Design Work: Spaghetti Bowl Opt.	Executed	9/26/2016	\$ 169,713.40	X	NDOT
11	Sub-structural Bridge Resolution	Executed	12/6/2016	\$ 4,462,869.00		NDOT
12	Elimination of Courtesy Patrol	Executed	12/2/2016	\$ (400,000.00)	Χ	NDOT
13	Design Work: ATM Sign Mod	Executed	12/2/2013	\$ 331,326.44	Х	NDOT
14	ES Ramp Work	Executed	1/11/17	\$97,496.78	X	NDOT
15	Change in Driveway Access	Executed	4/7/17	\$41,617.51	X	NDOT
		TOTAL EXECUTED =		\$11,687,217.17		



USA Parkway DB Project Status Update

March 2017







Project Status

Notice of Award: November 13, 2015

• **NTP1:** January 12, 2016

• NTP2: April 29, 2016

• Substantial Completion: September 9, 2017 (606 days from NTP1)

• **Design Status:** 92% complete

Construction Status: 54% complete

• Schedule Completion Status: 74% complete (450 of 606 calendar days from NTP1, as of April 5, 2017)

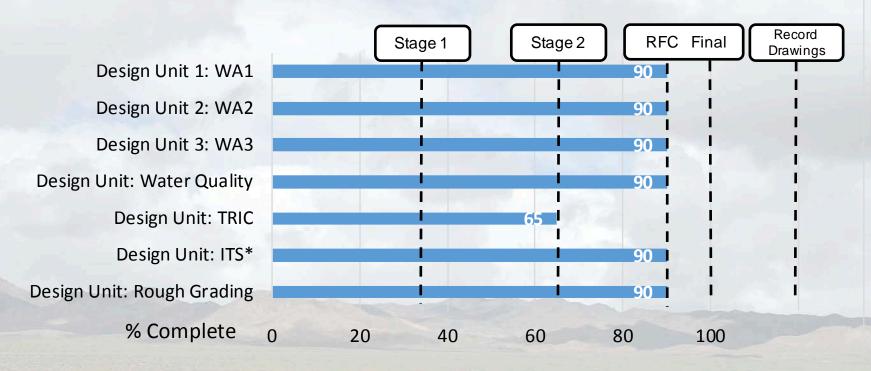
Cost Completion Status: 60% expended (as of 3/2017)







Design Status



Through March 2017, the overall design is 92% complete.

* The ITS design unit does not include any SR 439 ITS conduit and vault installation work (CO #09).







Construction Status



Through March 2017, the overall construction is 54% complete.







Executed Change Orders

No.	Title	Cost Impact	Initiated by	Schedule Impact	Description
CO 01	NV Energy Transmission Line Relocation	(\$144,462)	DB	None	Revise planned relocation of transmission line to accommodate DB proposed roadway alignment.
CO 02	Control of Access Fencing Modification	\$287,387	NDOT	None	Change control of access fence from a Type C NV 4-strand fence to a Type A Modified.
CO 03	Switch Access Improvements	(\$42,184)	NDOT	None	Deletion of Contract Work in conflict with Switch access permit.
CO 04	AVCS	\$173,495	NDOT	None	Design, furnish, and Install a fully operational Automated Vehicle Classification System.
CO 05	VECP for WA1 Guardrail	(\$55,151)	DB	None	Value Engineering change to remove specific proposed guardrail runs to increase safety and reduce future maint.
CO 07	Wildlife Undercrossing Drainage	\$76,127	DB	None	Revise proposed grading/drainage to provide unobstructed approaches and exits to both wildlife under crossings.
CO 08	US 50 Utility Casings	\$132,778	NDOT	None	Install four runs of 16-inch steel pipe under US 50 to accommodate future utility crossings.
CO 09	SR 439 Conduit and ITS Vaults	\$4,660,519	NDOT	None	Design and construction of seven future use conduits and ITS pull boxes along the USA Parkway alignment from the intersection of US 50 to station "USA" 687 (12.5 miles)
CO 10	High Sulfate Soils at Concrete Structures	\$191,788	DB	None	Provide a waterproofing membrane for protection of two concrete structures potentially exposed to high water soluble sulfates.







Executed Change Orders - Cont.

	No.	Title	Cost Impact	Initiated by	Schedule Impact	Description
	CO 13	Case 3 Roundabout Design	\$28,241	NDOT	None	T&M change order for design investigation of roundabout alternatives for accommodating trucks. Department did not move forward with incorporation of revisions.
	CO 14	TRIC Utility Casings	\$60,313	NDOT	None	Installation of four 18-inch steel pipes under USA Parkway within the TRIC area for future utility crossings.
	CO 18	Highlands Utility Casings	\$119,773	NDOT	None	Installation of six 18-inch steel pipes under USA Parkway within the Highlands area for future utility crossings.
	CO 19	Control of Access Fence Revisions	\$4,360	NDOT	None	Fence revisions in multiple locations within Highlands to be consistent with the final R/W.
1	CO 21	Associated Crane Late Payroll	(\$1,000)	NDOT	None	Assessment of penalty for subcontractor late payroll.

TOTAL EXECUTED CHANGE ORDER AMOUNT TO DATE: \$5,491,984

Others not listed above:

CO 06

CO 11, 12 Not used

CO 15

50. Approx. \$25K

CO 16, 17, 20 Not used

Department administrative change for revisions in Field Manager

Pending the completion of a T&M split flow drainage analysis at the intersection of SR 439 and US







SR 439 Work Areas

