Bridge Memorandum

Job No.: JXXXXXX	Bridge No.: AXXXXX (major)				
County: XXXXXX	X/XXXX Route: AAA (major)/BBB (major) over XXXX River & AAA RR				
Final Layout: U.I.P. Existing (86'-118') Prestressed Concrete Bulb-Tee Girder (439'-596'-439') Continuous Tied Arch Truss (131'-160'-160'-130')(90'-109'-90'-90'-90'-90')(90'-109')(88') Prestressed Concrete Bulb-Tee Girder					
Roadway Width:	46'-10" plus 20" Safety Barrier Curbs				
Alignment:	Tangent				
Skew:	Square				
Grade:	Match existing plus ±				
Loading:	HS20-44 (Alt. Military)				
Beg. Station:	14+02.96 +/- (Match Existing)				
Traffic Handling: Maintaining two lanes (half bridge width) at night to perform the bridge deck topsic					
	night time. During the day time all lanes will be open to traffic. Weekend work could be				
	allowed if traffic volumes can be maintained in two lanes without much backup. Traffic				
control could be done by trim lines and TMA's, no temporary barrier curbs needed.					

GENERAL NOTES:

Condition Rating: Deck = 7, Superstructure = 6 & Substructure = 6.

AADT 2016 = 26,709 AADT truck = 18% = 4808

AADT 2036 = 46,741 AADT truck = 18% = 8413

Estimate 1000 sf of substructure repair (formed) at Pier 3 & 6. See estimate sheet for break down.

Estimate 2000 1000 sf of substructure repair (formed) at land bents. See estimate sheet for break down.

Mitigation of wind vibration on vertical members. Likely gray plastic pipe around affected verticals to break upwind flow. District Maintenance to install cable system on east side of bridge in order to mitigate wind vibration. EPC 4/30/2020

Estimate 1000 sf of Repairing Concrete Deck (half-soling). (overlay only).

Apply Methylmethacrylate Slurry Polymer Concrete Overlay an Epoxy Urethene Polymer Overlay with Healer/Sealer. EPC 7/14/2020

Clean and seal beam caps with protective coating - concrete bents and piers (urethane epoxy) at bents 4 & 5. 3, 4, 5, 6, 10, 16 & 18. EPC 6/17/2020

Apply penetrating sealer to rest of protective coating - concrete bents and piers (epoxy) to all exposed substructure elements at bent 3, 6, 10, 16 & 18. EPC 6/17/2020

Clean and seal outside face of diaphragms at bent 18.

Replace compress seals at L4, L8, L12, L16, L20, L20', L16', L12', L8', L4' with Open Cell Foam Seal. Remove seal material and install open cell foam seal at bent 18.

Pressure epoxy inject cracks in girders ends (estimated at 2.5 diagonal cracks per girder).

Apply epoxy-mastic primer to the bottom of the top flange on floor beam and stringer on each side of joints at L4, L8, L12, L16, L20, L20', L16', L12', L8' & L4'. EPC 9/8/2020

SPECIAL NOTES:

District contact is Jane Doe, TPM (###) ###-####.

Bridge Division contact is John Smith, SPM (###) ### ####. Eddie Punch-Clock, SPM (###) ###-#####

Total required working/calendar days:			lar days:	90/140*	
Bridge STIP programmed amount for FY'21:			r FY'21:	\$3,839,000	
Const. Estimated for FY'21:			r FY'21:	\$1,903,000	
Does NOT include inflation from Planning (3% compounded annu					
*45/70 working/calender days for deck work + 45/70 working/calendar days for substructure.					
Bridge:	John Smith	Date:	9/26/2018	8	
	Structural Project Mana	ger			
District:	Jane Doe	Date:	9/27/2018	8	
	Transportation Project Ma	nager			
District:		Date:			

District Bridge Engineer