

EXHIBIT A. ESITMATED LAKE PARK REHABILITATED CONCRETE ARCH BRIDGE MAINTENANCE COST (BASED ON MAY 5, 2020 WJE MAINTENANCE SCHEDULE)

			Basis for Estimate -2020 Costs			Cost of Maintenance/Repair Tasks - Year Scheduled										
Element for Maintenance/Repair	Maintenance/Repair Task	Frequency and/or Return Interval	Quantities	Units	Unit Cost	2	5	10	15	20	25	30	35	40	45	50
Bridge Inspections	Standard Bi-annual inspection	2 yrs			Standard Maintenance											
	Full extensive inspection with lift truck, sounding concrete, etc.	10 yrs	1	LS	\$ 24,000			\$ 24,000		\$ 24,000		\$ 24,000		\$ 24,000		
Overall Preventive Maintenance	Washing	Yearly - deck and railings			Standard Maintenance											
		5 yrs - entire bridge	1	LS	\$ 15,000		\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	
	Drainage system cleaning	2 yrs			Standard Maintenance											
Deck – Reconstructed	Drainage system rehabilitation or replacement (assumes half original cost)	25 yrs	1	LS	\$ 31,000											
	Crack sealing of overlay (route and caulk)	2 yrs after construction (one time only)	334	LF	\$ 200											
	Sounding and concrete surfaces repairs of overlay and structural deck below overlay	15 and 20 yrs after each overlay installation (assume 5% of surface)	468	SF	\$ 33				\$ 15,000	\$ 15,000				\$ 15,000	\$ 15,000	
	Overlay mill and replacement, including partial depth repairs to structural deck below	25 yrs	3,123	SF	\$ 16											
Railing - Reconstructed	Deck joint replacement	10 yrs	2	EA	\$ 2,400											
	Local concrete surface repairs	25 yrs	118	SF	\$ 45						\$ 5,000					
Approach Wing Walls - Reconstructed	Complete rehabilitation or replacement	50 yrs	472	LF	\$ 470											
	Local concrete surface repairs	First at 25 yrs and every 10 yrs thereafter	20	SF	\$ 300						\$ 6,000		\$ 6,000		\$ 6,000	
Vaulted Abutment (Outer) - Reconstructed	Local concrete surface repairs	First at 25 yrs and every 10 yrs there after	10	SF	\$ 300						\$ 3,000		\$ 3,000		\$ 3,000	
	Removal of any loose concrete; localized concrete surface and crack repairs; including coating touchup and sealant replacement at the locations of surface repairs and crack repairs	10 yrs	30 30 30 60 60	SF	\$ 550			\$ 16,500		\$ 16,500		\$ 16,500		\$ 33,000		
Spandrel Beams, Diaphragm Walls, Bracing Beams - Repaired	Removal of any loose concrete; localized concrete surface and crack repairs, including coating touchup and sealant replacement at the locations of surface repairs and crack repairs	10 yrs	43 43 43 86 86	SF	\$ 600			\$ 26,000		\$ 26,000		\$ 26,000		\$ 51,500		
	Removal of any loose concrete; localized concrete surface and crack repairs, including coating touchup and sealant replacement at the locations of surface repairs and crack repairs	10 yrs	10 16 20 24 30	SF	\$ 700			\$ 7,000		\$ 11,000		\$ 14,000		\$ 17,000		
Repaired Portion of Bridge	Coating reapplication and widespread concrete surface repairs, including evaluation of crack repairs (rehabilitation)	20 yrs	2,000 3,000	SF	\$ 4.56					\$ 9,000				\$ 14,000		
Cost Summary						\$ -	\$ 15,000	\$ 88,500	\$ 30,000	\$ 116,500	\$ 29,000	\$ 95,500	\$ 24,000	\$ 169,500	\$ 39,000	\$ -
Provided in 2020 U.S. Dollars																
						\$ 607,000 Total										
						\$ 607,000 check										