Dr. Michael R. Panzer, Chairman Brett L. Tholborn, Trustee Dan MacDonnell, Trustee

RECLAMATION DISTRICT NO. 1608 LINCOLN VILLAGE WEST

Daniel J. Schroeder, Attorney Elvia C. Trujillo, Secretary Christopher H. Neudeck, Engineer Joe Bryson, Superintendent

BOARD OF TRUSTEES MEETING MONDAY, AUGUST 24, 2020 2:00 P.M. ENGINEER'S REPORT

I. SEDIMENT REMOVAL PROJECT

- A. Review general status of the project and modifications due to changed site conditions.
 - 1. The project has been modified to include the following
 - a) an additional 15,797 cubic yards (cy) to the original contract quantity of 60,000 cy (26.3% increase) of sediment removal per the pre-dredge survey conducted by Dixon Marine Services Inc. and confirmed by KSN Inc. above the original estimated quantity in order to meet design grades. This additional cy results in dredge operations expanding into "over" and "double-time" pay rates requiring a revised unit price to account for the extra time costs in order to meet the highly restrictive regulatory work windows.
 - b) costs associated with the removal of unforeseen, extraordinary aquatic debris and the placement at Grupe Park for removal by District forces.
 - c) an unforeseen requirement of the United States Coast Guard (USCG) and the Bar Pilots requiring frequent bathymetric surveys of the sediment disposal pipeline crossing beneath the Stockton Deepwater Ship Channel (DWSC) every two weeks to assure design depth of the crossing and safe navigation of the ocean-going traffic throughout the life of the project.
 - d) increased cost of additional bonding surety to be paid and provided for by Dixon Marine Services Inc.
- B. KSN Inc. has carefully reviewed and documented the modifications to this project and recommend consideration of several options set forth in the attached exhibit. KSN Inc. request Board of Trustees action to select an option for advancing this project and upon affirmative action by the Board of Trustees of that option KSN Inc. will then develop the associated Change Order documentation and execute the Change Order with Dixon Marine Services Inc. and RD 1608.

EXHIBIT A: Original Contract terms compared to Optional Change Orders prepared 8/20/2020.

Exhibit A

RECLAMATION DISTRICT NO. 1608 LINCOLN VILLAGE WEST SEDIMENT REMOVAL PROJECT

		ORIGIN	AL CON	ITRACT				
Original 2017 Slough				Original Contract 2020 Slough Conditions				
Dredge Depth Dredge Length		-6.0 5,450 ft		Dredge Depth Dredge Length		-6.0 4,300 - 4,900 ft		
Dredge Volume Unit Cost		60,000 cu-yds \$17.35/cu-yd		Dredge Volume Unit Cost		60,000 cu-yds \$17.35/cu-yd		
Onit cost	_	\$17.55/cu-yu		Unit Cost w/Debris		\$26.01/cu-yd		
Construction	\$	1,391,041.76		Construction	\$	1,391,041.76		
Debris Handling	\$			Debris Handling	\$	169,361.00		
Port Fee	\$	360,000.00		Port Fee	\$	360,000.00		
CM/Testing	\$	180,000.00		CM/Testing	\$	180,000.00		
TOTAL	\$	1,931,041.76		TOTAL	\$	2,100,402.76		
Working Da	iys	(hours)		Working Da	ays (hours)			
58		Mon-Fri (10-hrs)	ıf	58		Mon-Fri (10-hrs)		
0		Sat (10-hrs)		0		Sat (10-hrs)		
0		Sun (10-hrs)		0		Sun (10-hrs)		
58		Total Days		58		Total Days		

				PROPOSED CONTRAC	ст	CHANGE ORDERS					
CCO Option 1			CCO Option 2				· CCO Option 3				
Dredge Depth		-4.5		Dredge Depth		-5.0		Dredge Depth		-6.0	
Dredge Length		5,450 ft		Dredge Length		5,450 ft		Dredge Length		5,450 ft	
Dredge Volume		60,000 cu-yds		Dredge Volume		66,000 cu-yds		Dredge Volume		75,797 cu-yds	
Unit Cost	Unit Cost \$19.98/cu-yd			Unit Cost \$21.58/cu-		\$21.58/cu-yd		Unit Cost \$21.89/cu-yd			
Unit Cost w/Debris		\$28.94/cu-yd		Unit Cost w/Debris		\$29.73/cu-yd		Unit Cost w/Debris		\$28.99/cu-yd	
Construction	\$	1,567,281.33		Construction	\$	1,792,761.33		Construction	\$	2,027,677.66	
Debris Handling	\$	169,361.00		Debris Handling	\$	169,361.00		Debris Handling	\$	169,361.00	
Port Fee	\$	360,000.00		Port Fee	\$	396,000.00		Port Fee	\$	454,782.00	
CM/Testing	\$	180,000.00		CM/Testing	\$	180,000.00		CM/Testing	\$	180,000.00	
TOTAL	\$	2,276,642.33		TOTAL	\$	2,538,122.33		TOTAL	\$	2,831,820.66	
Working Days (hours)			Working Days (hours)				Working Days (hours)				
58	N	Mon-Fri (12-hrs)		62	N	1on-Fri (12-hrs)		62	١	Mon-Fri (12-hrs)	
0		Sat (12-hrs)		12		Sat (12-hrs)		12		Sat (12-hrs)	
0		Sun (12-hrs)		1		Sun (12-hrs)		12		Sun (12-hrs)	
58		Total Days		75		Total Days		86		Total Days	