Table 5.1(a) Inlet Cross-Sectional Areas - Existing Versus Three Channel Depths with Maximum Channel Bottom Width of 400 feet

13.5 ft NGVD Channel (Dredge Volume = 906,100 cubic yards)

Station	Existing x-Sect Area (ft^2)	x-Area with 13.5-ft NGVD Channel (ft^2)	x-Area Difference (ft^2)	Possible Shoal Area (ft^2)	Cross Sec after shoaling (ft^2)	Potential Scour(-)/Shoal(+) Area for New Channel (ft^2)	Potential Scour(-)/Shoal(+) Volume (CY) New Channel
10+00	12,618	14,516	1,898	2,521	11,995	-623	
15+00	13,880	16,222	2,342	2,572	13,650	-230	-7,895
20+00	14,595	16,134	1,539	0	16,134	1,539	12,120
25+00	14,148	15,806	1,658	1,545	14,261	113	15,292
30+00	12,130	16,349	4,219	4,095	12,254	124	2,188
35+00	11,023	17,249	6,226	9,665	7,584	-3,439	-30,700
40+00	11,315	17,100	5,785	9,285	7,815	-3,500	-64,252
45+00	16,135	21,941	5,806	11,485	10,456	-5,679	-84,987
50+00	16,280	22,821	6,541	10,290	12,531	-3,749	-87,294
55+00	28,350	33,611	5,261	13,795	19,816	-8,534	-113,729
60+00	35,735	38,222	2,487	5,520	32,702	-3,034	-107,104
65+00	46,720	49,195	2,475	5,705	43,490	-3,230	-57,995
70+00	54,200	54,754	554	2,210	52,544	-1,656	-45,237
Ave/Totals							
10+00 to 40+00	**12,816**	**16,196**			**11,956**		**-73,248**
40+00 to 70+00	32,903	36,757			28,590		-496,347
10+00 to 70+00	22,087	25,686			19,633		-569,595
10+00 to 50+00	13,569	17,571			11,853		

15.5 ft NGVD Channel (Dredge Volume = 1,076,500 cubic yards)

Station	Existing x-Sect Area (ft^2)	x-Area with 15.5-ft NGVD Channel (ft^2)	x-Area Difference (ft^2)	Possible Shoal Area (ft^2)	Cross Sec after shoaling (ft^2)	Potential Scour(-)/Shoal(+) Area for New Channel (ft^2)	Potential Scour(-)/Shoal(+) Volume (CY) New Channel
10+00	12,618	15,034	2,416	2,521	12,513	-105	
15+00	13,880	16,758	2,878	2,572	14,186	306	1,862
20+00	14,595	16,609	2,014	0	16,609	2,014	21,487
25+00	14,148	16,292	2,144	1,545	14,747	599	24,197
30+00	12,130	17,169	5,039	4,095	13,074	944	14,284
35+00	11,023	18,337	7,314	9,665	8,672	-2,352	-13,035
40+00	11,315	18,159	6,844	9,285	8,874	-2,441	-44,372
45+00	16,135	23,015	6,880	11,485	11,530	-4,605	-65,234
50+00	16,280	24,068	7,788	10,290	13,778	-2,502	-65,799
55+00	28,350	34,661	6,311	13,795	20,866	-7,484	-92,458
60+00	35,735	38,826	3,091	5,520	33,306	-2,429	-91,788
65+00	46,720	48,251	1,531	5,705	42,546	-4,174	-61,146
70+00	54,200	55,232	1,032	2,210	53,022	-1,178	-49,560
Ave/Totals							
10+00 to 40+00	**12,816**	**16,908**			**12,668**		**4,424**
40+00 to 70+00	32,903	37,342			29,175		-425,985
10+00 to 70+00	22,087	26,339			20,286		-421,561
10+00 to 50+00	13,569	18,382			12,665		

17.5 ft NGVD Channel (Dredge Volume = 1,254,400 cubic yards)

Station	Existing x-Sect Area (ft^2)	x-Area with 17.5-ft NGVD Channel (ft^2)	x-Area Difference (ft^2)	Possible Shoal Area (ft^2)	Cross Sec after shoaling (ft^2)	Potential Scour(-)/Shoal(+) Area for New Channel (ft^2)	Potential Scour(-)/Shoal(+) Volume (CY) New Channel
10+00	12,618	15,584	2,966	2,521	13,063	445	
15+00	13,880	17,329	3,449	2,572	14,757	877	12,242
20+00	14,595	17,114	2,519	0	17,114	2,519	31,447
25+00	14,148	16,827	2,679	1,545	15,282	1,134	33,826
30+00	12,130	18,029	5,899	4,095	13,934	1,804	27,205
35+00	11,023	19,458	8,435	9,665	9,793	-1,231	5,308
40+00	11,315	19,269	7,954	9,285	9,984	-1,331	-23,720
45+00	16,135	24,119	7,984	11,485	12,634	-3,501	-44,744
50+00	16,280	23,744	7,464	10,290	13,454	-2,826	-58,585
55+00	28,350	35,751	7,401	13,795	21,956	-6,394	-85,369
60+00	35,735	39,469	3,734	5,520	33,949	-1,786	-75,741
65+00	46,720	48,807	2,087	5,705	43,102	-3,618	-50,038
70+00	54,200	55,749	1,549	2,210	53,539	-661	-39,616
Ave/Totals							
10+00 to 40+00	**12,816**	**17,658**			**13,418**		**86,308**
40+00 to 70+00	32,903	37,940			29,772		-354,093
10+00 to 70+00	22,087	27,019			20,966		-267,784
10+00 to 50+00	13,569	19,052			13,335		