STATE OF OHIO DEPARTMENT OF HIGHWAYS APPROXIMATE ESTIMATE

L.D. 20 E. 65

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FAP No. Job No. 12190(3)
P No. ACI-90 (22)2:
T-71 & Structures (22)23 &

TYPE

CZIT PRICE CONTRACT

R. NO. _

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SR

No

306

For improving Section LAK-1-4.02, State Routes No. 1 and 306 in Kirtland and Mentor Townships; the Villages of Willoughby Hills and Waite Hill; and the City of Willoughby, Lake County, Ohio, in accordance with plans and specifications by grading, draining, paving with reinforced Portland cement concrete and by constructing:

- a continuous steel beam bridge with concrete deck and concrete substructure (Spans 64'-80'-64', roadway 54' between parapets), Bridge No. LAK-1-0426 (N.B.) over State Route No. 174;
- continuous 541 between parapets), steel beam bridge with concrete deck and concrete substructure (Spans 56'-70'-56', Bridge No. LAK-1-0426 (S.B.) over State Route No. 174; 401-501-401
- roadway 54' between parapets), a continuous steel beam bridge with concrete deck and concrete substructure (Spans Bridge No. LAK-1-0499 (S.B.) over Riverside Drive;
- a continuous steel beam bridge with concrete deck and concrete substructure (Twin Bridge, each 541 between parapets), steel beam bridge with concrete deck and concrete substructure (Spa Bridge No. LAK-1-0499 (N.B. over Kiverside Drive; (Spans 44'-55'-44',
- a continuous riveted steel girder bridge with concrete deck and concrete substructure (Twin bridge, each structure: Spans 80'-100'-80', roadway 54' between parapets), Bridge No. LAK-1-0541 over East Branch of Chagrin River; structure: Sp Chagrin River; Spans 64'-80'-80'-64', roadway 54' between parapets), Bridge No. LAK-1-0505
- continuous steel beam bridge with concrete deck and concrete substructure (spans 54'-77'-77'-7'-7'-66.5', roadway 30' with 2' safety curbs), Bridge No. LAK-1-0608, Kirtland Road over tate Route No. 1;

and a continuous steel leam bridge with concrete deck and concrete substructure (Spans 57'-71.25'.71.25'-71.25'-71.25'-71.25'-71.25'. Foadway 70' including a variable width median and with 2' safety curbs). Bridge No. LAK-1-0665, State Route No. 306 over State Route No. 1

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		LAKE	COUNTY, SECTION	on IAK-1-4.02		•	Ċ.	
NO.	ITEM NO.	XIMATE			DOLL	UNIT PRICE	TOTAL DOLLARS	CENTS
21 22	0T-10 0T-1	10 , 679 725	sq. yds.	sodding for special berm and sl	slope			
23	L-9 T-10	160 100	tons	<pre>protection agricultural liming material traffic compacted surface course</pre>	о Ф			
25	M-10	5.1	O.	for maintaining traffic calcium chloride furnished and	•			
26	S-15	lump sum		temporary runaround roads, Class	SS -	-		
27	S-15	lump sum		runaround road using Type T-70 pavement,	as			
28	S-25	481	lin. ft.	per plan 4" asbestos-cement conduit, Sec. M-206 1/ 55 Fem plan	÷			
29 30	SS-18 Special	33,277 2 , 938	lin. ft. sq. yds.	juďi jum c	ıshed,			
31	Special	4	each	aggregate Interstate and Defense Highway Signes, furnished and erected				
332	Special S-24	lump sum lump sum		as well one story frame	residence,			
34	S-24	lump sum		one outbu	cel			
35	S-24	lump sum			ge			
36	S-24	lump sum		one story frame	residence,			
37	S-24	lump sum		of one outbu 200-LA	cel			
38	S-24	lump sum		of two story frame	residence,			
39	S-24	lump sum		of garage, Parcel No.	44-			
40	S-24	lump sum		of barn, Parcel No. 14-	-201-			
41	S-24	lump sum		moval of four outbuildings,	Farce			
42	5-24	lump sum		oval of one story frame cel No. 44-202-LA	residencs			
43	S-24	lump sum		of two	dence,			
44	S-24	lump sum		two story frame	residence,			
45	S-24	lump sum		of one	el			
46	S-24	lump sum		f one s tory frame	residence,			
47	S-24	lums sum		of two story frame	residence,	·		
48	S-24	lump sum		of two	dence,			
49	S-24	lump sum		of three frame sheds,	Parcel			
50	S-24	lump sum		oval of garage, Parcel No.	144-218-			
51	S-24	lump sum		removal of one story frame residence Parcel No. 44-226-LA	dence,			
52	S-24	lump sum		l of one	dence,			
53	S-24	lump sum		of garage, Parcel No.	44-			
54	S-24	lump sum		removal of one story frame residence Parcel No. 1/1-228-IA	dence,			
55	S-24	lump sum		two story stucco	residenco,			
56	S-24	lump sum		removal of frame garage, Parcel 44-252-LA	NO			

L. D. 20 C:

COUNTY, SECTION LAK-1-4, 02

	95	94	93	92	91	%	89	88	87	86	85	84	83		NA.
	I N		I-2	T . 2	I-2	I-2	1-2	1-2	I-2	I-2	I-2	I-2	I-2		I TEM NO.
	co	166	94	164	90	170	600	286	244	160	118	3,711	98	ADMIN I I I E S	APPROXIMATE
	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. ft.	lin. f	lin. ft.		COUNTY, SECTION
	ment or approaches 21" reinforced concrete pipe, Sec. N-6.6(a), or extra-strength vitri- fied sewer pipe, Sec. N-6.8(b), for Class "A" storm sewers under pave- ment or approaches	pave 24" M-6. fied Clas	fied sewer pipe, Sec. M-6.8(b), for Class "A" storm sewers under	pavement or approaches 27" reinforced concrete pipe, Sec. M-6.6(a), or extra-strength vitri- fied sewer pipe, Sec. 1-6.8(b), for Class "A" storm sewers under	pavement or approaches 24" reinforced concrete pipe, Sec. M-6.6(a), or extra-strength vitri- fied sewer pipe, Sec. M-6.8(b), for Class "A" storm sewers under		pavement or 10" extra-s concrete pin extra-stren pipe, Sec. 1 storm sewer			ar 15 co ex		(b), for Class "A" storm sewers ft. 8" extra-strength plain cement concrete pipe, Sec. M-6.5(b), or extra-strength vitrified sewer pipe, Sec. M-6.8(b), for Class "A"			IAK-1-4, 02
<u> </u>														DOLLARS CENTS	UNIT PRICE
														DOLLARS	101
														CENTS	۸L

LAKE COUNTY, SECTION LAK-1-1,02

SHEET ____OF. 13__ SHEETS

	TAKE		COUNTY, SECTION	IAK-1-4,02	•		
NO.	ITEM NO.	APPROXIMATE QUANTITIES		ITEM	UNIT PRICE	TOTAL	CENTS
				er)			
151	S-27	112	lin. ft.	45" x 29" reinforced elliptical concrete culvert pipe, Sec.			
152	S-27	607	lin. ft.	M-206.6(b), for roadway culverts 53" x 34" reinforced elliptical concrete culvert pipe, Sec.			
153	S-27	108	lin. ft.	concrete culvert pipe, Sec.			
154 155	S-27 S-28	464 97	lin. ft.	M-206.6(b), for roadway culverts 36" pipe for roadway culverts 174" sectional corrugated metal			
156	S-29	150	cu. yds.	drainage of structures, No. 2 aggregate, as per plan			
157				TOTAL DRAINAGE			
				PAVEMENT			
158	B-20	957	są. yds.	8" waterbound macadam base course using Size No. 2 coarse aggregate			
159	B-219	4,570	cu. yds.	waterproofed aggregate base course			
160	B-35	. 66	cu. yds.	asphaltic concrete base course (70-85)			
161 162	B-19 T-30	350 691	cu. yds. gals.	aggregate base course bituminous prime coat: Sec. M-5.7, RT-2 or RT-3, or			
163	T-31	13,709	gals.	bituminous surface treatment -			
164	'I-31	439	cu. yds.	bituminous surface treatment - No. 6 aggregate			
165	T-32	861	gals.	road mix bituminous material: Sec. M-5.7, M-8 or RT-9; or Sec. M-5.3 MC-1 or MC-5			
166	T-32	239	gals.	seal cost bituminous material: Sec. M-5.7, RT-9 or HT-10; or Sec. M-5.3, MC-4 or MC-5			
167 168 169 170	T-32 T-32 T-35	54 4 8 52	cu. yds. cu. yds. cu. yds. cu. yds.	No. 46 aggregate for road mix No. 6 or No. 9 aggregate for choke No. 6 aggregate for seal coat asphaltic concrete surface course, Type "A" (70-85)			
171	T-71	15,473	sq. yds.	9" reinforced Portland cement con- crete pavement			
172 173	1-71 1-7	92,332 1.067	sq. yds.	<pre>10" reinforced Fortland cement con- crete pavement reinforced concrete approach slabs</pre>			
174	I-7	571.5		(T=13") reinforced			
175 176	I-12 I-12	2 , 848	lin. ft. lin. ft.	as per plan (T=13") Standard Type 2-A concrete curb Standard Type 6 concrete curb			
1.7.7	7-12) O (e ±	} 6 •	special fortiand centers concrete			
178	1-18	8,539	yds.	stabilized crushed aggregate shoulders and approaches			
179	I-21	195	yds.	4" Fortland cement concrete median pavement, Standard Type 1			
180	I-23	87	, ,	standard precast white Fortland . cement concrete traffic dividers			
181	1-22	30 , 593	cu. yds.	subbase, Grading "A" or "b", as per plan			-
182				TOTAL PAVEMENT			

182(22	182(1) 182(1) 182(2) 182(4) 182(6) 182(6) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(1) 182(2)	REF.	
	1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03 1-124.03	ITEM NO.	5 1
	410 2,704 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	APPROXIMATE QUANTITIES	Lake
	lin. ft. lin. ft. lin. ft. each each each each each each each each		COUNTY, SECTION
TOTAL - WATER LINE	WATER LINE 4" new water line 6" new water line 8" new water line 12" galvanized nipple 12" galvanized ground union 4" cast iron 60 degree laterial 4" cast iron socket caps 6" cast iron socket caps 6" cast iron 111 degree bends 8" cast iron 222 degree bends 8" cast iron 112 degree bends 8" cast iron 45 degree bends 8" cast iron 90 degree bends 8" valve and valve box 6" valve and valve box 6" valve and valve box fire hydrants removed and reset service stop and box removed and reset 18" reinforced concrete pipe, Sec. M-6.6(b); or extra-strength vitri- fied sewer pipe, Sec. M-6.8(b), for storm sewers under pavement or approaches, encased, as per plan	ITEM	LAK-1-
		DOLLARS CENTS	
		TOTAL DOLLARS	
		AL CEN 1	

SHEET **2**_OF **13**. SHEETS

		Total, Bridge No. LAK-1-0426(S.B.)			213
		each bridge delineators	1	<u>I</u> -127	212
		crushed	774	I-10	211
		steel piles, 12 BP 53	1,320	S-18	209
		te	430	S-14	208
	eel	inting of structural st	301,500	8 8	207
		reinforcing steel	742	S-1+	205
		С	170	S-1	204
		cu.yds. Class "C" concrete, pier caps	133	S-1	203
		<pre>cu.yds. Class "E" concrete, abutments above footings</pre>	138	8-1	202
		cu.yds. Class "C" structu		S-1	201
ANAL . Protest		cu.yds. unclassified excavat	lump sum	馬馬 1 22	199 200
		Bridge No. LAK-1-C+26(S.B.)			
		Total, Bridge No. LAK-1-0426(N.B.)			198
		each bridge delineators	2	I - 127	197
		sq.yds. crush	ללא	T-T0	196
		cu.yds. porous backfill		S-29	195
		first test pile lineft, steel piles, 12 Bl	lump sum 1.250	8-16 8-18	193 194
	·	lin.ft. railing (aluminum rail and sup- ports, concrete parapet)	498	S-14	192
		steel	, -)		
		lbs. structure	100	ນ ໝ 	191 190
		lbs.	152,854	8 - 1-1	189
		and columns	106	2 (4 F
		cu.vds. Class "C" concrete, pier caps	131	S.I.	187
		cu.yds. Class "E" concrete, abutments	181	S-1	186
		cu.yds. Class "C" concrete,	362	S-1	185
# ·		_	lump sum	更 氏 一 2	183
		Bridge No. LAK-1-0426(N.B.)			
		STRUCTURES OVER 20 FOOT SPAN			
10 CHTTCC	CHIAS CENTS	NET.I	APPROXIMATE QUANTITIES	ITEM NO.	NO.
		COUNTY, SECTION LAK-1-4.02		Lake	

			Total, Bridge No. LAK-1-0499(N.B.)			244
•			Bridge No. LAK-1-O499(N.B.) Bridge No. LAK-1-O499(N.B.) cofferdams, cribs and sheeting cu.yds. unclassified excavation cu.yds. Class "C" concrete, supercu.yds. Class "C" concrete, pier caps and columns cu.yds. Class "E" concrete, footings cu.yds. Class "E" concrete, footings cu.yds. Class "E" concrete, footings lbs. structural steel lbs. field painting of structural lbs. field painting of structural lin.ft. railing (aluminum rail and supports, concrete parapet) lin.ft. steel piles, 12 BP 53 cu.yds. porous backfill sq.yds. crushed aggregate slope protection bridge delineator	1 ump sum 547 243 100 106 119,588 194,600 194,600 660	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	229 230 231 232 233 234 235 236 237 238 239 240 241 242 243
			cu.yds. unclassified excavation cu.yds. Class "C" concrete, super- cu.yds. Class "C" concrete, pier caps cu.yds. Class "C" concrete, pier caps and columns cu.yds. Class "E" concrete, abutments above footings cu.yds. Class "E" concrete, footings lbs. reinforcing steel lbs. field painting of structural lbs. field painting of structural lin.ft. railing (aluminum rail and sup- ports, concrete parapet) first test pile lin.ft. steel piles, 12 BP 53 cu.yds. crushed aggregate slope protection each bridge delineator	lump sum 557 221 98 97 169,600 169,600 169,600 169,600 310 lump sum 900 36 645	E : 12 S : 12 S : 12 S : 14 S : 14 S : 16 S : 16 S : 18 S : 10 I : 129 I : 129 I : 127	214 215 216 217 217 218 219 220 221 222 223 224 225 226 227
CENT	TOTAL DOLLARS	OLLARS CENTS	ITEM DO	APPROXIMATE QUANTITIES	ITEM NO.	REF.
			COUNTY, SECTION LAK-1-4,02	C	Lake	
			Since I was to the since I so	56; 7500	20, Ç	L. D

COUNTY SECTION LAK-1

			TOURL, Bringe No. LAK-1-0541			279
			Drai Arro No			20
			cu.yas. dumped rock channel protection each bridge delineators	2,400 ct 4 ea	I-127	277 278
			 crushed aggregate sl protection 	000 000 000		276
			cu.yds. porous backfili	777	-29	274 275
			first test pile			273
			n.ft. railing (aluminum rail and	1,194 1in	S-14	272
				000		7/7
				600	S-27	270
			rein	9 2 2 2 2 2 3	-4	268 269
			above footings		S	
			cu.yds. Class "E" concrete, abuthents	299 cı	S-1	267
			cu.yds. Class "C" concrete, piers	723 ci	C.	266
÷			structure) :	,	~ ~
			cu.yds. channel excavation	900	<u>"</u> "	264
			cofferdams, cribs and sneeting yds. unclassified excavation	Lump sum	NOV	262 263
			Bridge No. TAK-1-064			
			'lotaî, Bridge No. LAK-1-0505			261
			each bridge delineators	<u></u> 4 е	I-127	260
			orotection stope		F (259
				2 <u>5</u> 6	S-29	258
			n.ft. steel piles, 12 BP 53	900	91-	256 257
			supports, concrete parapet)	Lump sum	-16	05/
			ai	1,270 1	S-14	255
					(254
			structural steel	196,200		253
			lbs. reinforcing steel	362,712	\$ -4 S	252
			Class "A" concrete			361
			cu.yds. Class "E" concrete, abut-	214 c	S-1	250
	-		cu.yds. Class "C" concrete, piers	756 c	S-I	249
			yas.			248
			shale excavation	849 648	2 - Z	247
		Ų.	yds.	724	2 5	246
		3	coffendame onthe and about a	mus amul	ง	21.5
			Bridge No. LAK-1-0505			
			N (N			
				••••••		
FOTAL CEN	OLLARS CENTS	DOLLAF	ITEM	APPROXIMATE QUANTITIES	I TEM NO.	NO.
				500		25.5
				60	T,ake	L

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294	293 293(1	289 290 291 292	285 286 287 288	283 284	280 281 282		REF.	
	293 I-10 293(1)Special	8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S-2 S-7 4-2	S-1 S-1	日 日 ら 日 ら		ITEM NO.	Lake
	573 lump sun	lump sun 4,275	200 192,737 504,000 504,000	81 141	lump sum 642 506		APPROXIMATE QUANTITIES	
Total,	sq.yds.	lin.ft.	cu.yds. lbs. lbs. lbs. lbs.	cu.yds. cu.yds.	cu.yds.			COUNTY, SECTION
Bridge No. LAK-1-0608	crushed aggregate slope protection 8" W. I. water line (Sec. M-6.10 Std.), as per plan	crete pa	i f	Class "E" concrete, abutments above footings Class "C" concrete, pier caps	cofferdams, cribs and sheeting unclassified excavation Class "C" concrete, super-	Bridge No. LAK-1-0608	жэн	_{CM} LAK-1-4.02
							TALL BEICE	
							20-14-20-2	

SHRET 13 OF. 7

LAK-1-4.02

313Estimated 311 312 REF. 310 307 308 304 305 299 300 301 302 295 296 309 303 298 297 306 Special County-Federal Municipality Estimated Estimated Approximate Total Cost and Expense Estimated Cost of Engineering, Superintendence and Contingencies S-29 I-10 **S-16 S-1**8 8-8 4-8 1-8 S-14 S-1 E-2 S-1 -S Special ITEM NO. ke DISTRIBUTION OF FUNDS ACI Cost of Repairs to Detour

Cost of rights of way for

Cost of rights Superintendence X Lump Sum -Lump Sum — Premium on Industrial Insurance. × APPROXIMATE QUANTITIES lump 10 326 385,358 834,300 834,300 lump sum \$ \$ 49 1,132 1,011 sum, 255 55 756 612 843 272 151 COUNTY. Maintaining Traffic, Including Lights, Signs, Barricades and Watchmen, Twenty-four Hour Service cu.yds. cu.yds.
lbs.
lbs.
lbs. cu.yds. lin.ft. lin.ft. cu.yds. cu.yds. lin.ft. drainage, Total, SECTION. . unclassified excavation
. Class "C" concrete, super
structure
Class "E" concrete, abuta
above footings
. Class "C" concrete, pier
and columns
. Class "E" concrete, footi
reinforcing steel
structural steel
structural steel
field painting of structu
steel
. railing (aluminum rail an
supports, concrete para
first test pile
. 12" cast-in-place reinfor
concrete piles
. 10" to 14" diameter prebo 10" to 14" diamete holes porous backfill crushed aggregate protection construction layout stakes Bridge **Bridge** pavement, water line Rt 306 No. No.) Verifi LAK-1-0665 LAK-1-0665 Approve Approved slope reinforced structural and prebored footings abutments pier caps super-11 and
parapet) Shandhnaek as to Financing Dep. Dir. of Planning & Programming UNIT PRICE
Dollars Cents E. Muchet Director of Highways May Dollars 18 TOTAL 195 195 Cents