

DCNO

3569

ALASKA POWER AUTHORITY
SUSITNA HYDROELECTRIC PROJECT

WATANA FEASIBILITY ESTIMATE
PHASE I

Contract NO. 5225

Work Order NO. 5

Diversified Engineers & Constructors, Inc.
P. O. Box 487
Cottonwood, Arizona 86326 247

BID QUANTITY 3.600 UNIT CY TAKE OFF QUANTITY

[illegible]

OPERATION Rock Excavation - Portals

OPERATION

Rock Excavation - Portals

ITEM NO. 332.335

SHEET _____ OF _____ PAGE

JOB Watana - Stage 1

BID QUANTITY 1.000

UNIT CY

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Tunnel Concrete - Slabs

ITEM NO. 332.336 SHEET OF PAGE 86

BID QUANTITY 2,590 UNIT CY TAKE OFF QUANTITY 2618 JOB Watana - Stage 1

EST. BY Art Lee DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST
FURNISH CONCRETE	4019	CY	20.00	80.00	1.00					
PLACE CONCRETE	3795	CY	16.04	71.00	1.00					
WASTE CONCRETE	1377	CY								
CONCRETE OVERHEAD	24	CY								
FABRICATE FORMS	7440	SF	5.05	37.50	1.00					
ERECT FORMS	7440	SF	1.71	8.00	1.00					
STRIP & CLEAN FORMS	7440	SF	3.41	15.00	1.00					
FORM HARDWARE	7440	SF								
CONCRETE CURE	3995	CY	6.35	31.00	1.00					
FOUNDATION PREPARATION	7447	SF	2.21	10.00	1.00					
	2618	CY	11.51	50.00	1.00					
	2590	CY	11.51	45.00	1.00					

OPERATION Portal Concrete

ITEM NO. 332.337 — SHEET — OF — PAGE 87

Joe Watana - Stage 1

RID QUANTITY 20 UNIT CY TAKE OFF QUANTITY

EST BY **Art Lee**

DATE _____

UNIT		TAKE OFF QUANTITY		EST. BY		DATE		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
SAME AS ORIGINAL - ESCALATE				20	CY	2025		40.51	3281	1.56	21.35	429	21.35	475	24.4	493	76.10	1522	16.00	320	34.34	7002	

BID QUANTITY		585	UNIT	CY	TAKE OFF QUANTITY		583	EST. BY	APL	DATE											TOTAL	
				QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST		
FURNISH CONCRETE		709	CY	20.00		14180	0.34		276	10.29	7650	0.28	5877	10.83	7648	42.26	30316			9205	65927	
PLACE CONCRETE		699	CY	8.02		5606	0.42		274	0.64	447	0.53	310	1.33	730					1094	7647	
WASTE CONCRETE		10	CY																			
CONCRETE OVERBREAK		110	CY																			
FABRICATE FORMS		893	SF	505		1510	0.25		272	0.10	89	0.26	23.2	0.23	176					3881	77219	
ERECT FORMS		893	SF	777		2939	0.21		187	0.36	321	0.46	110	0.44	73					924	8250	
STRIP CLEAN FORMS		893	SF	341		2045	0.10		187	0.18	161	0.23	20.5	0.22	196					451	3676	
FORM HANDLING		893	SF				0.83		701											083	701	
FOUNDATION PREPARATION		6293	SF	287		14285	0.13		218	0.21	1322	0.16	1017	0.34	2140					311	19572	
		583	CY	83.30		18465	9.10		5007	17.13	9990	13.88	8575	17.78	11533	52.00	30316			17521	113806	
		585	CY	83.30		18431	9.10		5304	17.13	10021	13.88	8120	19.78	11521	52.00	30400			17511	114187	

OPERATION Pearl Doors, Architectural

OPERATION

ITEM NO. 332.339

- SHEET ____ OF ____ PAGE 89

JOB Watana - Stage 1

BID QUANTITY UNIT Es

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

OPERATION

ITEM NO. 332.340

- SHEET

OF

PAGE 90

— 108 —

Watana - Stage 1

BID QUANTITY

1

LS

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE _____

[illegible]

OPERATION Relict Channel

OPERATION

ITEM NO. 332.4

— SHEET — OF — PAGE 91

JOB Watana - Stage 1

BID QUANTITY 1

1

UNIT LS

TAKE OFF QUANTITY

EST. BY .

Art Lee

DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Outlet Facilities, Tunnel-Horizontal

OPERATION Outlet Facilities, Tunnel-Horizontal

ITEM NO. 332.511

- SHEET

— 98 —

PAGE 92

Excavation 31' Dia.

— JOB

Watana - Stage 1

BID QUANTITY 1.950

UNIT LF

TAKE OFF QUANTITY

1855

EST. BY

Art Lee

DATE _____

[illegible]

OPERATION Inclined Shaft Excavation 31' Dia.

ITEM NO. 332.512 SHEET OF PAGE 23

JOB Watana - Stage 1

BID QUANTITY 340 UNIT LF TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

EST. BY		DATE		QUANTITY		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
PER ORIGINAL - ESCALATE				340	LF	1716	433840	42893	145443	2601	265533	18356	12447	30713	1041421	7445	258263			3221	1086332

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Tunnel Excavation, Manifold

ITEM NO. 332.513 SHEET OF PAGE 74

JOB Watana - Stage 1

BID QUANTITY 900 UNIT LF TAKE OFF QUANTITY

EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Concrete Lining - Horizontal 28" I.D.

ITEM NO. 332-514 SHEET 95 OF 95

JOB Watana - Stage 1

BID QUANTITY 1,575 UNIT LF TAKE OFF QUANTITY EST. BY Art Lee DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
FURNISH CONCRETE	110.12	CY	20.80	220.310	0.29	4275	1079	118849	0.28	71177	0.23	117240	4275	4275			2108	1024426
PLACE CONCRETE	109.49	CY	80.2	817611	0.22	4597	0.64	11007	0.53	5803	0.23	10562					1084	119782
WASTE CONCRETE	63	CY																
CONCRETE OVERBREAK	2840	CY																
FABRICATE FORMS	476.9	SF	1346	64191	0.66	17455	0.27	1383	0.70	2328	0.59	21141					1320	87181
ERECT FORMS	13853.7	SF	727	1026122	0.21	27373	0.36	17843	0.16	63127	0.14	60756					924	126041
STRIP & CLEAN FORMS	13853.7	SF	341	1102111	0.10	12854	0.18	21737	0.23	31864	0.23	30417					414	51354
FORM HARDWARE	13853.7	SF			0.23	174886											0.93	114716
CONSTRUCTION JOINT PREPARATION	5839	SF	113	1057	0.27	109	0.11	122	0.08	1117	0.17	773					152	15104
PACK CLEANUP	153398	SF	221	219171	0.13	17180	0.21	92311	0.16	24542	0.24	52152					311	127136
CONCRETE CURE	10949	CY	635	65526	0.23	10422	0.24	2628	0.29	785	0.54	5913					317	28453
REINFORCING STEEL	405455	LB											0.28	112527	0.15	64573	0.44	172406
	1675	LF	1410	2315400	0.25	215283	1117	237500	0.28	221765	0.11	217127	0.21	524100	0.22	64573	0.21	756229

OPERATION Concrete
28' I.D.

— SHEET — OF — PAGE 96

JOB **Watana - Stage 1**

BID QUANTITY 375

UNIT LF

— TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
Concrete Lining Manifold 8' I.D.

OPERATION _____ ITEM NO. 332.516 SHEET _____ OF _____ PAGE 97

JOB Watana - Stage 1

BID QUANTITY 900 UNIT LF TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

BID QUANTITY		UNIT		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST		
		QUANTITY	UNIT																	
		FURNISH CONCRETE	3466	CY	20 ⁰⁰	149520	039	18502	10 ⁷⁵	37258	328	22698	1083	37537	4270	148206			2325	322511
		PLACE CONCRETE	3430	CY	30 ⁰²	27509	042	1441	024	2175	053	1818	123	2562					1024	37525
		WASTE CONCRETE	36	CY																
		CONCRETE OVERLAP	681	CY																
		FABRICATE FORMS	1421	SF	1346	19127	366	5201	029	412	020	775	059	839					1820	26593
		ERECT FORMS	22617	SF	777	175724	021	4750	026	2142	044	10464	024	9751					924	208781
		STRIP & CLEAN FORMS	22617	SF	341	77124	010	2363	018	4071	023	5002	022	1776					414	93635
		FORM MAINTENANCE	22617	SF			083	18772											083	18772
		CONSTRUCTION JOINT CLEANUP	1485	SF	123	1678	007	104	011	162	028	119	017	252					156	2316
		ROCK CLEANUP	36756	SF	227	82136	013	4778	021	7719	016	3881	022	12477					211	114341
		CONCRETE CURB	3430	CY	635	21781	025	2257	021	1233	029	309	054	1860					817	28024
		REINFORCING STEEL	137450	LB											028	22486	016	21772	024	60471

OPERATION Inclined Lining - 28' I.D.

OPERATION

ITEM NO. 332.517

- SHEET ____ OF ____ PAGE 98

JOB Watana - Stage 1

BID QUANTITY 340

UNIT LE

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
 OPERATION Mechanical - Inlet

ITEM NO. 332.518

SHEET 79 OF 79 PAGE

JOB Watana - Stage 1

EST. BY Art Lee

DATE

BID QUANTITY 1

UNIT LS

TAKE OFF QUANTITY

SUB CONTRACT

QUANTITY

UNIT

CONSTRUCTION
LABOR & INSURANCE

CONSTRUCTION
SUPPLIES

EQUIPMENT
REPAIR LABOR

EQUIPMENT
RENT

EQUIPMENT
SUPPLIES

PERMANENT
MATERIALS

SUB-CONTRACTS

TOTAL
DIRECT COST

LS. 1118234 LS. 1118234

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Mechanical - Outlet

ITEM NO. 332.519 SHEET OF PAGE 100

JOB Watana - Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

[illegible]

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION River Channel, Alluvium Excavation

OPERATION

ENGINEERS & CONSTRUCTORS, INC.

ITEM NO. 332.5213 SHEET OF PAGE 103

JOB Watana - Stage 1

EST. BY Art Lee DATE _____

BID QUANTITY 1,096,000 UNIT CY TAKE OFF QUANTITY

[illegible]

OPERATION Rock Excavation, Spillway Approach

ITEM NO. 332,5214 SHEET OF PAGE 104

JOB Watana - Stage 1

BID QUANTITY 2.748,400 UNIT CY TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Rock Excavation, Spillway Control

ITEM NO. 332-5215 SHEET OF PAGE 105

JOB Watana - Stage 1

EST. BY Art Lee DATE 11/1/78

BID QUANTITY 414.100 UNIT CY TAKE OFF QUANTITY

OPERATION		JOB		EST. BY		DATE		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST			
BID QUANTITY		UNIT		TAKE OFF QUANTITY																					
Structure		919.100		CY		Art Lee		13/5/58		203		240623		224		1134624		192		795072		251		1039391	
ORIGINAL - ESCALATE		414.100		CY		438		13/5/58		203		240623		224		1134624		192		795072		251		1039391	

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
 OPERATION Rock Excavation, Chute & Flip Bucket

OPERATION

Rock Excavation, Chute & Flip Bucket

332.5216

- SHEET ____ OF ____ PAGE 106

JOB Watana - Stage 1

BID QUANTITY 4,219,600 UNIT CY

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

0 0 3 5 6 9

OPERATION Drill & Grout Consolidation

ITEM NO. 332.5217 SHEET _____ OF _____ PAGE 107

JOB Watana - Stage 1

BID QUANTITY 10.000 UNIT LF TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

		EST. BY AT LWS		DATE									
		QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST		
SUB-CONTRACT		10220	LF.							25 ⁹⁰	284,000	28 ⁹⁰	284,000

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Spillway Concrete Piers

ITEM NO. 332.5221 SHEET OF PAGE 108

JOB Watana - Stage 1

BID QUANTITY 21.060 UNIT CY TAKE OFF QUANTITY 22071 EST. BY Art Lee DATE

BID QUANTITY		21.060	UNIT	CY	TAKE OFF QUANTITY		22071	EST. BY		Art Lee	DATE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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OPERATION Deck

ITEM NO. 332.5222 SHEET OF PAGE 409

108 Watanabe - Stage 1

BID QUANTITY 350 UNIT CY TAKE OFF QUANTITY 102 EST. BY Art Lee DATE

[illegible]

OPERATION Guide Walls

- SHEET _____ OF _____ PAGE 416

UNIT CY

- JOR

Watana - Stage 1

EST. BY Art Lee

DATE _____

UNIT		TAKE OFF QUANTITY		EST. BY		DATE													
		30712		Arl Lee															
		QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST								
FURNISH CONCRETE		35725	CY	20.00	1145.00	0.39	1127.33	10.70	381.47	8.28	7158.03	12.53	3267.03	12.26	15277.60	1	33.05	3320.21	2
PLACE CONCRETE		35956	CY	81.3	2814.44	1.53	1146.7	1.41	47.65	2.26	7177.05	20.2	1717.93				14.10	5026.61	
WASTE CONCRETE		969	CY																
CONCRETE OVERBREAK		463.6	CY																
FABRICATE FORMS		20166	SF	50.5	1044.63	0.25	1674.66	0.10	701.77	0.23	527.79	0.22	456.8						
ERECT FORMS		251580	SF	77.1	1854.17	0.20	503.16	0.27	930.85	0.60	1507.48	0.54	140.88						
STRIP & CLEAN FORMS		251580	SF	3.41	257.88	0.10	251.58	0.10	479.00	0.30	454.14	0.28	76.44						
FORM HARDWARE		251580	SF			0.23	20.21												
CONCRETE FINISH		30857	SF	10.2	3086.17	0.08	712.1	0.05	181.5	0.07	211.18	0.02	77.23						
POINT & PATCH		251580	SF	0.81	203.78	0.05	15.27	0.01	10.26	0.05	12.57	0.01	17.61						
CONCRETE CURE		35356	CY	6.35	224.51	0.75	23.58	0.21	84.85	0.09	31.20	0.54	150.73						
ROCK CLEANUP		251580	SF	2.27	311.08	0.13	32.10	0.21	52.83	0.15	10.25	0.30	25.53						
ROCK ANCHORAGE		12564	LB	23.41	2941.23	1.72	2141.0	10.21	1347.27	3.63	4560.7	7.20	907.63	19.25	741.85				
REINFORCING STEEL		30712	LB																
		30712	CY	170.00	24323.5	1.57	18277.0	25.60	18644.7	23.13	71726.8	25.31	27047.6	85.60	2627.36	11.00	471.22	26.57	23585.9
		29370	CY	176.00	172210.7	1.57	15264.7	25.60	13907.2	23.13	4683.10	25.31	33665.2	86.60	2471.27	16.00	46172.0	26.57	23585.9

Slab
OPERATION _____

ITEM NO. 332.5224 SHEET OF PAGE ///

108 Watana - Stage 1

BID QUANTITY 29.470 UNIT CY TAKE OFF QUANTITY 26670 EST. BY Art Lee DATE 10/1/80

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Ogee

ITEM NO. 332.5225 SHEET OF PAGE 112

JOB Watana - Stage 1

EST BY Art Lee

DATE

BID QUANTITY 24,800 UNIT CY

TAKE OFF QUANTITY 23676

CONSTRUCTION LABOR & INSURANCE

CONSTRUCTION SUPPLIES

EQUIPMENT REPAIR LABOR

EQUIPMENT RENT

EQUIPMENT SUPPLIES

PERMANENT MATERIALS

SUB-CONTRACTS

TOTAL DIRECT COST

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST
FURNISH CONCRETE	24129	CY	182580	7440	460352	107788	26131742	10211756		930512
PLACE CONCRETE	24087	CY	195827	7448	33763	54437	18877			1416
WASTE CONCRETE	42	CY								
CONCRETE OVERBREAK	411	CY								
FABRICATE FORMS	4530	SF	1376	16580	1314	2171	3673			1070
ERECT FORMS	15576	SF	777	121026	3163	7345	8123			950
STRIP & CLEAN FORMS	15576	SF	341	53114	1553	4623	4361			428
FORM HARDWARE	15576	SF	102	8617	6760	591	160			133
CONCRETE FINISH	3448	SF	102	8617	6760	591	160			156
CONSTRUCTION JOINT PREPARATION	74844	SF	113	84574	5230	8230	5788	12723		311
FOUNDATION CLEANUP	22176	SF	227	50240	2883	4656	3548	1540		819
CONCRETE CURE	24087	CY	635	152752	22823	5181	2168	13007	620	162928
REINFORCING STEEL	23676	LB							015	319916
	23676	CY	512	121066	4351	3320	1193	212707	1520	34000
	24800	CY	510	1247080	351	27057	1366	228768	1198	297104

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Flip Bucket & Outlet Discharge ITEM NO. 332.5226 SHEET 113 OF 113

Structure Walana - Stage 1 JOB Walana - Stage 1

BID QUANTITY 28,300 UNIT CY TAKE OFF QUANTITY 23590 EST. BY Art Lee DATE

		QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
FURNISH CONCRETE		24260	CY	2020	185200	039	7761	1079	261765	028	2008723	083	262736	1274	10272359			9305	22572713
PLACE CONCRETE		24244	CY	820	158801	031	8001	137	332114	171	42712	122	352715					1329	2272003
WASTE CONCRETE		16	CY																
CONCRETE OVERBREAK		654	CY																
FABRICATE FORMS		7968	SF	505	40228	025	25276	010	777	024	2071	022	1713					888	170715
ERECT FORMS		39840	SF	727	209557	021	3024	036	14342	046	18226	044	14530					924	363121
STRIP & CLEAN FORMS		39840	SF	341	135854	010	2724	016	7171	023	5763	022	876					441	124737
FORM HARDWARE		39840	SF			023	22067											083	22067
CONCRETE FINISH		19318	SF	102	17104	008	1545	006	1159	027	1853	009	1737					122	25477
CONCRETE CURE		24244	CY	625	152747	005	22332	024	5817	029	2182	054	13072					817	198074
CONSTRUCTION JOINT PREPARATION		35328	SF	113	37721	007	2443	011	3886	008	2826	017	6006					184	55012
FOUNDATION PREPARATION		35316	SF	227	80167	013	1571	021	4116	016	5551	024	12007					311	105232
POINT & PATCH		39840	SF	081	32270	006	2776	024	1593	003	1772	027	1772					103	211035
REINFORCING STEEL		2359000	LB															028	142620
							</												

OPERATION Drain Gallery & Aeration Gallery ITEM NO. 332.5227 SHEET OF PAGE 14
Concrete JOB Watana - Stage 1
 BID QUANTITY 2.910 UNIT CY TAKE OFF QUANTITY 4406 EST. BY Art Lee DATE

Concrete JOB Watana - Stage 1

BID QUANTITY 2,910 UNIT CY TAKE OFF QUANTITY 4406 EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Gravity Retaining Wall & Flip Bucket

ITEM NO. 332.5228

SHEET OF PAGE 115

JOB Watana - Stage 1

BID QUANTITY 1.000

UNIT CY

TAKE OFF QUANTITY 626

EST. BY Art Lee

DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST
FURNISH CONCRETE	634 CY	20.00	1224.0	0.39	247.10	6841.82	5750.10	1866.42	2111.0	9305.52
PLACE CONCRETE	626 CY	8.20	518.3	0.33	20.7	858.17	1108.16	181.4		1339.83
WASTE CONCRETE	8 CY									
CONCRETE OVERBREAK	-0-									
FABRICATE FORMS	2976 SF	5.05	1502.9	3.25	947.3	298.02	714.02	65.1		2611.27
ERECT FORMS	5952 SF	7.27	4624.7	0.21	1850.0	2143.04	243.8	261.7		8989.54
STRIP & CLEAN FORMS	5952 SF	3.41	2029.6	0.10	59.5	1871.02	126.9	130.9		4114.20
FORM HARDWARE	5952 SF			0.83	174.0					174.0
CONCRETE FINISH	240 SF	1.02	24.5	0.08	19.0	140.27	17.02	2.2		172.0
CONSTRUCTION JOINT PREPARATION	1120 SF	1.13	126.6	0.07	78.0	123.08	70.07	19.0		311.7
POINT & PATCH	2976 SF	0.81	241.0	0.06	179.0	119.05	147.07	20.8		156.7
CONCRETE CURE	626 CY	6.33	3975.5	0.95	59.5	150.02	56.05	23.8		817.3
REINFORCING STEEL	62600 LB.									211.4
								0.20	17528.04	10016.04
	626 CY	17.31	10728.1	29.40	1778.2	11617.15	11551.01	1322.1	4403.8	10016.04
	1000 CY	17.31	17137.0	29.40	3240.0	18550.15	18150.20	2111.0	7130.0	54518.0

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Rockbolts - 15'

ITEM NO. 332.5230 SHEET _____ OF _____ PAGE 116

JO8 Watana - Stage 1

EST BY **Art Lee**

EST. BY Art Lee DATE _____

BID QUANTITY 433 UNIT Ea TAKE OFF QUANTITY

EST. BY Art Lee DATE _____

EST. BY		DATE															
Art Lee																	
BID QUANTITY	UNIT	TAKE OFF QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST						
433	Ea																
ORIGINAL 1/2 ESCALATE		433	Ea	3210	1/3 299	257	11/13	1455	2300	492	2180	982	4252	4816	20867	11214	485516
							</										

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Rockbolts - 10'

ITEM NO. 332.5240 SHEET OF PAGE 117

JOB Watana - Stage 1

EST. BY Art Lee

BID QUANTITY 4.200 UNIT Ea TAKE OFF QUANTITY

EST. BY Art Lee DATE

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Spillway Mechanical & Electrical

ITEM NO. 332.5260 SHEET _____ OF _____ PAGE 19

108 Watana - Stage 1

EST. BY Art Lee DATE

BID QUANTITY	1	UNIT	LS	TAKE OFF QUANTITY	EST. BY	DATE
				CONSTRUCTION		

[illegible]

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Common Excavation - Power & Outlet

Intake & Approach

ITEM NO. 332.611 SHEET _____ OF _____ PAGE 120

JOB Watana - Stage 1

ESL BY Art Lee

DATE _____

[illegible]

OPERATION Rock Excavation - Approach

ITEM NO. 332.612 SHEET OF PAGE 121

OPERATION Rock Excavation - Approach

JOB Watana - Stage 1

EST. BY Art Lee

BID QUANTITY 5,961,400 UNIT CY TAKE OFF QUANTITY

[illegible]

OPERATION Rock Excavation - Intake

ITEM NO. 332.613

- SHEET ____ OF ____ PAGE 122

JOB Watana - Stage 1

BID QUANTITY 268.800 UNIT CY TAKE OFF QUANTITY

ESL BY Art Lee

SALE

[illegible]

OPERATION Concrete

Watana - Stage 1

JOB Wadena - Stage 1

EST. BY Art Lee

DATE _____

OPERATION		Concrete		JOB		Watana - Stage 1		DATE		EST. BY		Art Lee		TAKE OFF QUANTITY		96260		BID QUANTITY		87.350		UNIT		CY		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
				QUANTITY		UNIT		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES															
FURNISH CONCRETE		96089	CY	22.00	1.761	1.760	0.39	2.04	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	
PLACE CONCRETE		97896	CY	8.13	1.761	1.760	0.39	2.04	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	
WASTE CONCRETE		193	CY																												
CONCRETE OVERBREAK		1636	CY																												
FABRICATE FORMS		75564	SF	9.23	15035.0	3.54	2.67	4.57	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
ERECT FORMS		378169	SF	7.7	212.170.1	0.20	1.58	6.5	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
STRIP & CLEAN FORMS		378109	SF	3.41	1.78	3.52	0.10	1.18	1.1	0.19	1.18	1.1	0.20	1.13	4.33	0.28	1.45	9.71													
FORM HARDWARE		378109	SF																												
CONCRETE FINISH		23199	SF	1.02	2866.3	0.08	1.58	6.5	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
POINT & PATCH		378109	SF	0.81	206.76.8	0.04	2.67	4.57	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
CONSTRUCTION JOINT PREPARATION		28397	SF	1.3	32.08.9	0.07	1.58	6.5	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
FOUNDATION PREPARATION		92602	SF	2.27	21.020.1	0.13	1.58	6.5	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
CONCRETE CURE		97896	CY	6.35	2.216.10	0.95	1.58	6.5	0.21	1.58	6.5	0.54	4050.5	0.45	2.40	0.8															
REINFORCING STEEL		96260	LB																												
OFF ROCK ANCHORAGE		3946	EA	23.11	9.22	1.6	1.2	6.18	7.10	10.24	1.23	8.0	3.63	14.32	1.1	7.24	2.5	2.5	19.25	1.576.1											
		96260	CY	7.12	9.02	1.526	1.22	7.03	6.18	15.55	1.52	8.0	3.63	14.32	1.1	7.24	2.5	2.5	19.25	1.576.1											
		87350	CY	7.12	8.186	1.442	1.22	7.03	6.18	15.55	1.52	8.0	3.63	14.32	1.1	7.24	2.5	2.5	19.25	1.576.1											

OPERATION 1" x 15' Rockbolts

ITEM NO. 332.615 SHEET OF PAGE 124

IOB Watana - Stage 1

 JOB

EST BY Art Lee

BID QUANTITY 330 UNIT Ea TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

OPERATION Intake, Mechanical & Electrical

ITEM NO. 332.616

SHEET _____ OF _____ PAGE 125

JOB Watana - Stage 1

JOB Wadena - St
Art L...

BID QUANTITY

1

UNIT LS

TAKE OFF QUANTITY

EST. 1984

Art Lee

U.S.	73489.00	U.S.	73489.00
------	----------	------	----------

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Strand VSI Anchors Including

Installation

ITEM NO. 332.618 SHEET OF PAGE 127

JOB Watana - Stage 1

ARTIST BY Art Lee

BID QUANTITY 5,800

UNIT LF

TAKE OFF QUANTITY.

EST. 8Y

Arl Lee

DATE

Installation		JOB	EST. BY		DATE				
BID QUANTITY	UNIT	TAKE OFF QUANTITY	EST. BY	DATE					
5,800	LF		Art Lee						
QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST
SUB CONTRACT	5800 LF							16 ⁵⁹ 75702	16 ⁵⁹ 75702

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Drilling 11" Dia. Holes & Grouting

ITEM NO. 332.619 SHEET OF PAGE 26

OPERATION _____ Watana = Stage 1

JOB Wakana - Stage 1

BID QUANTITY 5,800 UNIT LF TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

BID QUANTITY		5,800	UNIT	LF	TAKE OFF QUANTITY		EST BY	Art Lee	DATE										
		QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
SUB CONTRACT		5,800	LF													49 ⁵⁰	287,100	49 ⁵⁰	287,100

OPERATION Intake Gates

ITEM NO. 332.6211 SHEET OF PAGE 129

JOB Watana - Stage 1

BID QUANTITY 4 UNIT Ea TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

OPERATION Shutter Gate

ITEM NO. 332.6213 SHEET _____ OF _____ PAGE 131

JOB Watana - Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION ICE BOMB

ITEM NO 332.6215 SHEET OF PAGE 133
Watana - Stage 1

Watana - Stage 1

JOB _____

ESI by Art Lee

DATE

BID QUANTITY 4 UNIT Ea TAKE OFF QUANTITY

BID QUANTITY _____

UNIT Ea

TAKE OFF QUANTITY

ESI-DY

Art Lee

DATE

**CONSTRUCTION
LABOR & INSURANCE**

CONSTRUCTION SUPPLIES

**EQUIPMENT
REPAIR LABOR**

EQUIPMENT
RENT

EQUIPMENT SUPPLIES

PERMANENT MATERIALS

SUB-CONTRACTS

**TOTAL
DIRECT COST**

SUB CONTRACT

4 EF

OPERATION

ENGINEERS & Intake Gates

FILE NO. 332.6221 SHEET OF PAGE 134

108 Watana - Stage 1

ESI BY Art Lee DATE

BID QUANTITY 2 UNIT Ea TAKE OFF QUANTITY

JOB		EST. BY		DATE		CONSTRUCTION LABOR & INSURANCE			CONSTRUCTION SUPPLIES			EQUIPMENT REPAIR LABOR			EQUIPMENT RENT			EQUIPMENT SUPPLIES			PERMANENT MATERIALS			SUB-CONTRACTS		TOTAL DIRECT COST	
BID QUANTITY	UNIT	TAKE OFF QUANTITY	EST. BY	DATE	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST															
2	Ea		Art Lee																								
SUB CONTRACT				2	EP																						

OPERATION: Intake Bulkhead

ITEM NO. 332.6222? SHEET OF PAGE 13

JOB Watana - Stage 1

set by Art Lee

EST BY Art Lee DATE _____

[illegible]

TITLE : WANTANA FEASIBILITY ESTIMATE PHASE I

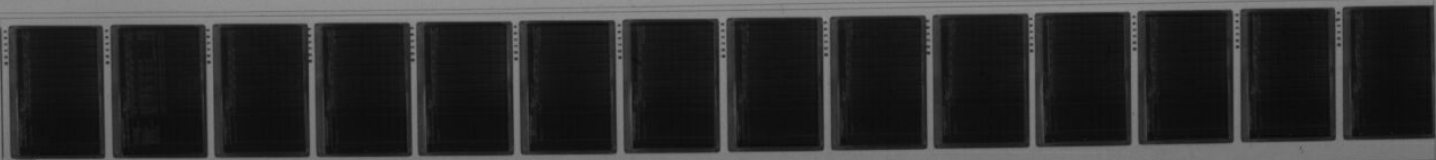
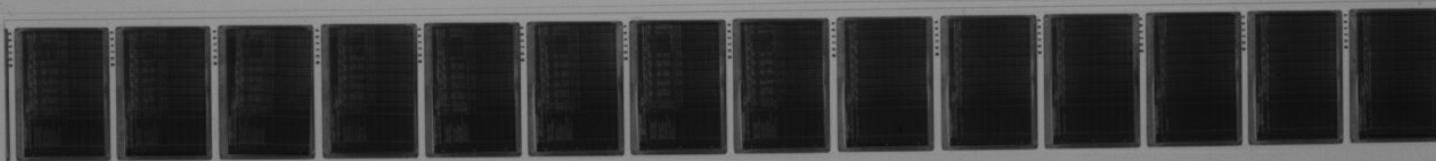
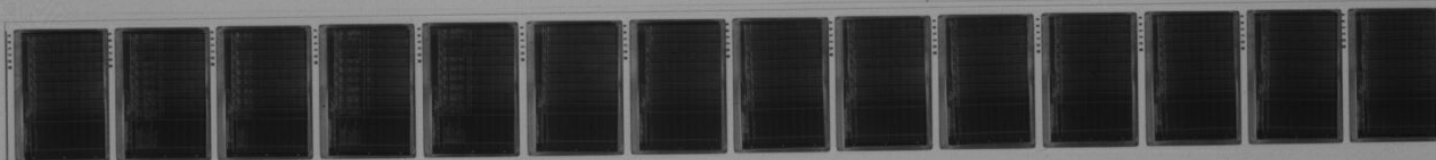
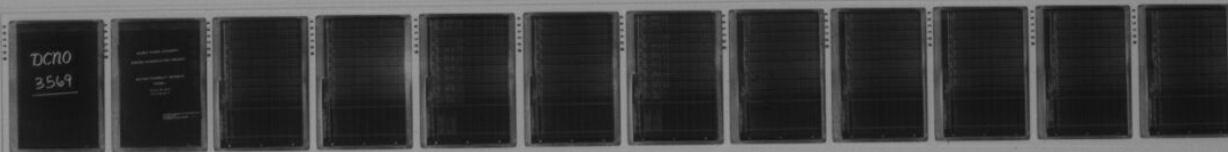
CONTRACT #5225 WORK ORDER #2 VOL. II

AUTHOR: DIVER

FICHE 1 OF 3

DATE : 860100

DOCUMENT NO. 3569



DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Intake Trashrack

ITEM NO. 332-6223 SHEET OF PAGE 136

JOB Watana - Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Surge Chamber - Rock Excavation

ITEM NO: 332.711

SHEET _____ OF _____ PAGE 139

JOB Watana - Stage 1

BID QUANTITY 68,000

UNIT CY

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

OPERATION Vent Shaft Excavation 8.5' Dia.

OPERATION

ITEM NO. 332.712

— SHEET

OF

B4

PAGE 139

808

Watana - Stage 1

BID QUANTITY

535

— UNIX

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Concrete 6.5 I.D.

ITEM NO. 332.714 SHEET 146 OF 146

JOB Watana - Stage 1

BID QUANTITY 90 UNIT LF TAKE OFF QUANTITY EST. BY Art Lee DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
FURNISH CONCRETE	130	CY	20.00	240.0	0.39	51	10.79	140.8	0.03	140.8	0.83	1410.8	42.76	655.57			93.25	120.77
PLACE CONCRETE	124	CY	8.02	77.4	0.42	52	0.60	177	0.53	66	1.33	16.5					10.84	125.6
WASTE CONCRETE	6	CY																
OVERBREAK CONCRETE	45	CY																
FABRICATE FORMS	327	SF	13.46	440.1	3.66	119.1	2.0	7.5	0.70	20.7	0.58	19.3					18.20	211.5
ERECT FORMS	183.8	SF	7.77	140.8	0.21	30.6	0.36	6.2	0.46	8.43	0.44	80.7					9.24	167.83
STRIP & CLEAN FORMS	183.8	SF	3.41	126.8	0.10	18.4	0.8	0.31	0.23	1.23	0.23	10.4					4.14	161.8
FORM HARDWARE	183.8	SF			0.83	1.326											0.83	15.26
ROCK CLEANUP	240.3	SF	2.27	515.5	0.13	31.2	0.21	50.5	0.16	28.4	0.34	81.7					3.11	74.73
CONSTRUCTION JOINT PREPARATION	118	SF	1.3	12.3	0.07	1.8	0.1	1.3	0.08	7	0.12	2.0					1.56	1.83
CONCRETE CURE	124	CY	1.35	18.7	0.95	11.1	0.24	2.1	0.29	1.1	0.54	2.7					8.17	10.53
REINFORCING STEEL	790.0	LB											0.38	220.2	0.4	126.4	0.44	311.6

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Shotcrete, 2" Thick

OPERATION

Shotcrete, 2" Thick

ITEM NO. 332.715 SHEET OF PAGE 141

ITEM NO. 332.715

— SHEET — OF — PAGE 141

JOB Watana - Stage 1

JOB

Watana - Stage 1

EST. BY _____

UNIT LS

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
 OPERATION Surge Chamber Concrete

ITEM NO. 332.716 SHEET OF PAGE 142

JOB Watana - Stage 1

EST. BY Art Lee

BID QUANTITY 3,400

UNIT CY

TAKE OFF QUANTITY 3580

DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST								
FURNISH CONCRETE	403.8	CY	20 ⁰⁰	801160	0 ²⁹	1815	10 ⁷⁰	43570	0 ²⁰	23435	10 ²³	43782	42 ⁷⁵	112165			9325	375137
PLACE CONCRETE	399.2	CY	80 ⁰²	32016	0 ⁴²	1816	0 ⁴⁴	2555	0 ⁵³		2116	1 ³³	5229				10 ²⁴	43672
WASTE CONCRETE	46	CY																
CONCRETE OVERBREAK	412	CY																
FABRICATE FORMS	6362	SE	10 ¹⁰	64254	3 ⁵⁰	22267	0 ²¹	12326	0 ⁵³	2312	0 ⁴¹	12175					1478	74030
ERECT FORMS	25454	SE	7 ²⁷	197718	0 ²¹	5215	0 ³⁶	7163	0 ⁴²	11707	0 ⁴⁴	11120					924	2351115
STRIP & CLEAN FORMS	25454	SE	3 ⁴¹	86798	0 ¹⁰	1345	0 ¹⁸	4582	0 ²³	5814	0 ²²	5600					44	105329
FORM HARDWARE	25454	SE			0 ³³	21127											089	311217
CONCRETE FINISH	17775	SE	10 ²	18131	0 ²⁸	1422	0 ⁰⁵	1067	0 ²⁷	1284	0 ⁰⁹	1600					132	23464
CONSTRUCTION JOINT PREPARATION	1629	SE	1 ¹³	1241	0 ⁰⁷	111	0 ¹¹	179	0 ⁰⁸	130	0 ¹⁷	2717					156	2541
ROCK CLEANUP	25579	SE	2 ²⁷	58064	0 ¹³	2325	0 ²¹	5212	0 ¹⁶	1073	0 ³⁴	8677					31	79551
CONCRETE CURE	3992	CY	6 ³⁵	25347	0 ²⁸	3712	0 ²⁴	758	0 ⁰⁹	357	0 ⁵⁴	2156					817	32618
REINFORCING STEEL	358000	LB																
FORM ANCHORAGE	727	EA	23 ¹¹	17019	1 ⁷²	1850	10 ⁷⁴	7808	2 ⁶³	2629	7 ²⁴	5263	19 ²⁵	100240	0 ¹⁶	51280	644	155520
																	6594	479714
	3580	CY	16 ⁵¹	582012	17 ²¹	64128	21 ²³	76570	18 ¹⁴	69751	24 ⁷¹	86553	80 ¹³	246700	16 ⁰¹	51280	240	1219724
	3400	CY	16 ²¹	552128	17 ⁰¹	61166	21 ²¹	79720	18 ¹⁴	61676	24 ⁷¹	82178	80 ¹³	272442	16 ⁰¹	5440	240	1157326

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

ITEM NO. 332,717 SHEET OF PAGE 43

OPERATION Drain Holes

JOB Watana - Stage 1

BID QUANTITY 10,340 UNIT LF TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

OPERATION 1" x 10' Rockbolts

ITEM NO. 332.718

— SHEET — OF — PAGE 154

JOB Watana - Stage 1

Art Lee

BID QUANTITY 270

UNIT Ed

TAKE OFF QUANTITY

EST. BY

DATA

[illegible]

OPERATION

Penstocks - Excavation, Shaft 27' Dia

ITEM NO. 332,811

— SHEET — OF — PAGE *kk*

JOB Watana - Stage 1

BID QUANTITY **778**

UNIT LF

TAKE OFF QUANTITY

EST. BY Art Loe

DATE _____

[illegible]

OPERATION Excavation, Horizontal 27' Dia

OPERATION Excavation, Horizontal 27' Dia

ITEM NO. 332.812

— SHEET — OF — PAGE 442

JOB Watana - Stage 1

BID QUANTITY 730

UNIT LF

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

EST. BY <u>Arl Lee</u> DATE _____		
BID QUANTITY <u>960</u>	UNIT <u>LF</u>	TAKE OFF QUANTITY
QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE
		CONSTRUCTION SUPPLIES
		EQUIPMENT REPAIR LABOR
		EQUIPMENT RENT
		EQUIPMENT SUPPLIES
		PERMANENT MATERIALS
		SUB-CONTRACTS
		TOTAL DIRECT COST
ORIGINAL - ESCALATE	460	16,780.4
		92,015
		58,277
		4,982
		6,147
		1,573
		127
		5,958

OPERATION Excavation, Horizontal 18' Dia

ITEM NO. 332.814 SHEET OF PAGE 109

108 **Watana - Stage 1**

BID QUANTITY 800 UNIT LF TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

OPERATION Drill & Grout Consolidation

OPERATION Drill & Grout Consolidation ITEM NO. 332.815 SHEET OF PAGE 19

ITEM NO. 332.815 SHEET OF PAGE 19

JOB Watana - Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Penstock Concrete Liner-Shaft 24" Dia.

OPERATION

Penstock Concrete Liner Co.

ITEM NO. 332.816

SHEET

Of

- PAGE 15

JOA

Watana - Stage 1

EST. BY Art Lee

DATE _____

BID QUANTITY 778

UNIT LF

TAKE OFF QUANTITY

31 POUES 3462 CY.

	QUANTITY	UNIT	DATE		CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
FURNISH CONCRETE	4747	CY	20 ⁰⁰		94740	0 ²⁹	1851	10 ²⁹	51220	0 ⁴⁶	27365	10 ²³	51410	42 ²⁶	202862				2702	141708
PLACE CONCRETE	4684	CY	18 ⁰²		97566	0 ⁴²	1767	0 ⁶⁴	2998	0 ⁵³	2483	1 ²³	51410	42 ²⁶	202862				10 ²⁹	31244
WASTE CONCRETE	63	CY																		
CONCRETE OVERBREAK	1221	CY																		
FABRICATE FORMS	1885	SE	13 ⁴⁶		75372	3 ⁶⁶	6879	0 ²⁹	547	0 ²⁰	1320	0 ⁵⁸	1112							
ERECT FORMS	58661	SE	777		155775	0 ²¹	12317	0 ³⁶	21118	0 ⁴⁶	26784	0 ⁴⁴	25811							
STRIP & CLEAN FORMS	58661	SE	341		200234	0 ¹⁰	5266	0 ¹⁸	10557	0 ²³	13482	0 ²²	12705							
FORM HARDWARE	58661	SE					48617													
ROCK CLEANUP	65990	SE	227		147797	0 ¹³	2517	0 ²¹	12858	0 ¹⁶	10558	0 ²⁴	23437							
CONSTRUCTION JOINT PREPARATION	3739	SE	113		4225	0 ²⁷	262	0 ¹¹	111	0 ⁰⁸	379	0 ¹⁷	636							
CONCRETE CURE	4684	CY	635		27143	0 ⁹⁵	4450	0 ²⁴	1124	0 ²⁹	122	0 ⁵⁴	2527							
REINFORCING STEEL	231066	LB																		
	778	LF	112		717412	116 ²¹	90812	130 ²³	101135	121 ²⁰	94862	158 ²⁴	122270	240 ²⁴	261680	41 ²²	26771	27011	1112773	

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Concrete Liner, Horizontal 24' Dia

ITEM NO. 332.817

SHEET 12 OF 12 PAGE

JOB Watana - Stage 1

BID QUANTITY 730

UNIT LF

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE

3249 CY	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE		CONSTRUCTION SUPPLIES		EQUIPMENT REPAIR LABOR		EQUIPMENT RENT		EQUIPMENT SUPPLIES		PERMANENT MATERIALS		SUB-CONTRACTS		TOTAL DIRECT COST	
FURNISH CONCRETE	436.8	CY	20.00	8773.60	0.29	127.04	10.28	4771.31	828	3416.7	10.23	47330.5	4276	1861776			9369	4080042
PLACE CONCRETE	436.8	CY	20.02	34774.5	0.42	181.7	0.54	27712	0.53	2296	1.33	5162					1024	473572
WASTE CONCRETE	36	CY																
CONCRETE OVERBREAK	108.3	CY																
FABRICATE FORMS	3016	SE	13.46	40551.5	3.46	11239	0.29	81.5	0.20	2111	0.59	17719					1870	563179
ERECT FORMS	550.42	SE	7.27	1276116	0.21	115579	0.36	17815	0.46	25319	0.44	24218					924	569587
STRIP & CLEAN FORMS	550.42	SE	9.41	187693	0.10	55014	0.18	9708	0.23	12660	0.22	12169					414	327874
FORM HARDWARE	550.42	SE			0.83	45485											0.83	45615
FORM CLEANUP	61919	SE	2.27	140656	0.13	1087	0.21	12003	0.16	9707	0.34	21052					511	1925617
CONSTRUCTION JOINT PREPARATION	219.3	SE	1.13	24718	0.07	151	0.11	241	0.09	1715	0.17	223					156	3121
CONCRETE CURE	4332	CY	6.35	975018	0.95	4115	0.24	10410	0.09	570	0.54	2339					817	35272
REINFORCING STEEL	216800	LB															0.44	95272
													0.28	60704	0.16	34689		
	730	LF	12.99	9419609	122.71	89623	121.84	947183	121.71	89025	154.21	114927	239.61	247480	4.12	34689	2017	16171512

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
 OPERATION Concrete Liner, Horizontal 18" Dia.

ITEM NO. 332.818 SHEET OF PAGE 153

BID QUANTITY 860 UNIT LF TAKE OFF QUANTITY JOB Watana - Stage 1 EST. BY Art Lee DATE

1565 CY.		QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST					
FURNISH CONCRETE	215.8	CY.	20.00	4314.6	0.23	842	10.28	2328.1	0.28	17868	10.23	2531.1	42.26	572226	83.05	200190.2
PLACE CONCRETE	212.7	CY.	80.2	1705.9	0.22	872	0.24	1361	0.53	1127	1.23	2529			16.24	23269
WASTE CONCRETE	31	CY.														
CONCRETE OVERBREAK	562	CY.														
FABRICATE FORMS	169.7	SF.	13.46	22894.2	3.66	6211	0.23	472	0.70	1188	0.59	1201				
ERECT FORMS	2601.3	SF.	7.27	20212.1	0.21	3462	0.26	7365	0.46	11766	0.44	11416			18.20	317314
STRIP & CLEAN FORMS	2601.3	SF.	3.41	8810.4	0.10	2601	0.18	4612	0.23	5783	0.22	5723			9.24	240361
FORM HARDWARE	2601.3	SF.			0.83	2157.1									4.14	1076723
ROCK CLEANUP	30346	SF.	7.27	6889.5	0.13	13014.5	0.21	6273	0.14	2155	0.24	10318			0.83	21551
CONSTRUCTION JOINT PREPARATION	140.9	SF.	1.13	159.2	0.07	77	0.11	155	0.08	112	0.17	240			3.11	94376
CONCRETE CURE	212.7	CY.	6.35	13501.6	0.25	2021	0.24	520	0.29	191	0.54	1149			1.56	3179
REINFORCING STEEL	104450	LB.													8.12	170777
													0.28	29206	0.14	16712
	460	LF	715.36	15786.9	7.27	43266	10.43	46223	7.11	43201	12.1	50717	264.4	121522	2.63	16712
															116.7	785360

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION

Concrete Liner, Horizontal 15' Dia.

ITEM NO. 332.819

SHEET

OF PAGE 158

JOB Watana - Stage 1

EST. BY Art Lee

DATE

BID QUANTITY 800

UNIT LF

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST
2304 CY.										
FURNISH CONCRETE	3174	CY	20 ²⁰	123480	0 ³⁹	1038	10 ²⁴	34281	0 ²⁸	7205
PLACE CONCRETE	3142	CY	80 ²³	251199	0 ⁴²	1820	0 ⁶⁴	2011	0 ⁵³	1084
WASTE CONCRETE	32	CY								
CONCRETE OVERBREAK	838	CY								
FABRICATE FORMS	2356	SF	13 ⁴⁴	31712	3 ⁶⁶	8623	0 ²⁹	1645	0 ⁷⁰	1820
ERECT FORMS	37696	SF	7 ²⁷	272878	0 ²¹	1716	0 ³⁶	13571	0 ⁴⁶	924
STRIP & CLEAN FORMS	37696	SF	3 ⁴¹	128513	0 ¹⁰	3790	0 ¹⁸	6185	0 ²³	414
FORM HARDWARE	37696	SF			0 ⁸³	31218				0 ⁸³
ROCK CLEANUP	45240	SF	2 ²⁷	102675	0 ¹³	5881	0 ²¹	9500	0 ¹⁶	311
CONSTRUCTION JOINT PREPARATION	1244	SF	1 ¹³	1406	0 ⁰⁷	27	0 ¹¹	137	0 ⁰⁸	156
CONCRETE CURE	3142	CY	6 ³⁵	19752	0 ⁹⁵	7185	0 ²⁴	154	0 ⁰⁹	813
REINFORCING STEEL	153746	LB								0 ²⁸
										13045
										0 ¹⁶
										24599
										0 ²⁴
										1145387
800 LF			32 ³⁵	165585	78 ⁸⁵	62108	1 ⁰⁰	67688	71 ⁰⁰	63226
										102 ¹⁴
										52112
										72 ⁴⁶
										178169
										30 ²⁴
										24599
										14312

OPERATION Steel Liner 800' - 15' D ITEM NO. 332.820 SHEET OF PAGE 155
(Exclude Concrete) JOB Watana - Stage 1
 BID QUANTITY 1.820 UNIT Tn TAKE OFF QUANTITY EST. BY Art Lee DATE

BID QUANTITY 1.820 UNIT Tn TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

OPERATION Tailrace Tunnel Excavation - 37'

ITEM NO. 332.911 SHEET OF PAGE 456

JOB Watana - Stage 1

BID QUANTITY 800 UNIT LF TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

OPERATION		ITEM NO.		JOB		DATE		EST. BY		EQUIPMENT		EQUIPMENT		EQUIPMENT		PERMANENT		SUB-CONTRACTS		TOTAL	
Portal Excavation - Common				Watana - Stage 1				Art Lee		REPAIR LABOR		RENT		SUPPLIES		MATERIALS				DIRECT COST	
RID QUANTITY	4.560	UNIT	CY	TAKE OFF QUANTITY	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST							
ORIGINAL - ESCALATE					4.560	CY	5472.00	91.00	2101.07	2225.03	375.11			1528.66							

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
Portal Excavation - Rock

ITEM NO. 332.913 SHEET 1 OF 1
11-10-66 - Stage 1

ITEM NO. 352-100
JOB Watana - Stage 1

JOB Washing DATE _____
EST. BY Art Lee _____
INSTRUCTION _____

BID QUANTITY 31,095 UNIT CY TAKE OFF QUANTITY

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION — Tailrace Tunnel Concrete - 35' I.D.

ITEM NO. 332.914 SHEET _____ OF _____ PAGE 159

108 Watana - Stage 1

BID QUANTITY 2.000 UNIT LF TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

BID QUANTITY	UNIT	TAKE OFF QUANTITY	EST. BY	DATE
40 POURS	LF	12293 CY. NET	Art Lee	
FURNISH CONCRETE	CY	16778	CONSTRUCTION LABOR & INSURANCE	0.39
PLACE CONCRETE	CY	16698	CONSTRUCTION SUPPLIES	0.42
WASTE CONCRETE	CY	80	EQUIPMENT REPAIR LABOR	0.24
CONCRETE OVERBRIDGE	CY	1305	EQUIPMENT RENT	0.28
FABRICATE FORMS	SF	5341	EQUIPMENT SUPPLIES	0.53
ERECT FORMS	SF	213620	PERMANENT MATERIALS	0.29
STRIP & CLEAN FORMS	SF	213620	SUB-CONTRACTS	0.14
FORM HARDWARE	SF	213620	TOTAL DIRECT COST	0.24
ROCK CLEANUP	SF	232480		
CONSTRUCTION JOINT PREPARATION	SF	6692		
CONCRETE CURE	SF	16698		
REINFORCING STEEL	LB	817938		
	LF	2000		

OPERATION Portal Concrete

ITEM NO. 332.915 SHEET OF PAGE 169

OPERATION

JOB Watana - Stage 1

BID QUANTITY 300 UNIT CY TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

[illegible]

0 0 3 5 6 9

OPERATION Portal Rockbolts 1" x 25'

ITEM NO. 332.916 SHEET OF PAGE 161

Watana - Stage 1

BID QUANTITY 110 UNIT Ea TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION: Tailrace Stoplogs, Guides & Followers

OPERATION: Tailrace Stoplogs, Guides & Followers

ITEM NO. 332.917

- SHEET _____ OF _____ PAGE 162

JOH Watana - Stage 1

EST. BY Art Lee

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION

Waterwheels, Turbine & Generators

ITEM NO. 333.10 SHEET OF PAGE 163

JOB Watana - Stage 1

Guard Valves

EST. BY Art Lee DATE

BID QUANTITY 4

UNIT Ea

TAKE OFF QUANTITY

QUANTITY

UNIT

CONSTRUCTION
LABOR & INSURANCE

CONSTRUCTION
SUPPLIES

EQUIPMENT
REPAIR LABOR

EQUIPMENT
RENT

EQUIPMENT
SUPPLIES

PERMANENT
MATERIALS

SUB-CONTRACTS

TOTAL
DIRECT COST

SUB CONTRACT

4 ED

51880 2071520 51880 2071520

OPERATION Turbines and Governors

ITEM NO. 333.11 SHEET OF PAGE 164

JOB Watana - Stage I

BID QUANTITY 4 UNIT Ea TAKE OFF QUANTITY EST. BY Art Lee DATE

OPERATION Generators & Exciters

ITEM NO. 333.21 SHEET OF PAGE 16

JOB Watana - Stage 1

BID QUANTITY 4 UNIT Ea TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Accessory Electrical Equipment

ITEM NO. 334.334 SHEET OF PAGE 110

JOB Watana - Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Miscellaneous Power Plant Equipment ITEM NO. 335.335 SHEET OF PAGE 167

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

OPERATION Upgrade Denali Highway

ITEM NO. 336.111

SHEET _____ OF _____

PAGE 168

JOB

Watana - Stage 1

BID QUANTITY 23

UNIT Mi**TAKE OFF QUANTITY**

EST. BY .

Art Lec

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Build Highway to Site

ITEM NO. 336.112 SHEET OF PAGE 16

JOB Watana - Stage 1

BID QUANTITY 42

UNIT Mi

TAKE OFF QUANTITY

EST. BY Art Lee

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Maintain

ITEM NO. 336.113 SHEET _____ OF _____ PAGE 176

JOB Watana - Stage 1

BID QUANTITY 504

UNIT MI

TAKE OFF QUANTITY

EST BY Art Lee

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Build Site Roads

ITEM NO. 336.12 SHEET OF PAGE 17

JOB Watana - Stage 1

BID QUANTITY 11 UNIT MI TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Maintain Site Roads

ITEM NO. 336.121 SHEET OF PAGE 172

JOB Watana - Stage 1

BID QUANTITY 11 UNIT Mi TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

OPERATION MAINTAIN SITE ROADS. **DIVERSIFIED CONSTRUCTORS, INC.**

ITEM NO. 336 SHEET 1 OF 1 PAGE 173
JOB WATANA
CK'D BY _____ DATE _____

FORM 2 QUANTITY 11 UNIT MILES EST. BY _____

THE FOLLOWING SPREAD
WORKING 5 DAYS / WEEK - 10
HOURS PER DAY FOR 7.5 YEARS
19,500 HOURS.

SPREAD

- 1- 966 E.E.L.
- 2- LEGAL END SPILLS
- 1- MOTOR PATROL
- 1- FLATBED 4/L = 68.99
- 1- PICKUP
- 1- E.E.L. OPERATOR
- 2- TEAMSTERS - END SPILLS
- 1- PATROL OPERATOR
- 1- TEAMSTER - FLATBED
- 3- LABORERS
- 1- UNION

LABOR	EQUIPMENT	SUPPLIES
17.14	1780	26.43
29.14	19.24	2028
15.86	17.93	19.51
428	4.12	11.04
25.7	0.97	5.71
38.34		
74.56		
28.34		
36.11		
99.37		
35.53		
29.129	60.11	1000
7430.55	1172.146	20722.5

COST PER HOUR

COST 19,500 HOURS

SUMMARY

- DIRECT LABOR
- SUPPLIES
- REPAIR LABOR
- EQUIPMENT
- EQUIP. SUPPLIES

TOTAL	UNIT PRICE
62948.50	571.250
2925.00	26.59.1
1545.00	122.300
112.145	106.559
1779.765	161.797
10874.565	988.57

OPERATION Build Permanent Roads

ITEM NO. 336.131

SHEET ____ OF ____

PAGE 174

JOB Watana - Stage 1

EST. BY Ar Lee

DATE _____

OPERATION Old Rail & Storage Facilities

OPERATION

ITEM NO. 336.201

— SHEET — OF — PAGE 125

JOB Watana - Stage 1

EST. BY **Art Lee**

DATE _____

BID QUANTITY 100

UNIT Pc**TAKE OFF QUANTITY**

EST. BY

Art Lee

DIVERSIFIED CONSTRUCTORS, INC.

236 - SHEET 1 OF 2 PAGE 176

OPERATION OLD RAIL STORAGE

JOB KATANA

FACILITIES

CK'D BY

DATE

QUANTITY 1

UNIT L.S.

EST. BY

FORM 2

FIGURE THE FOLLOWING SPREAD
ALLOW 6 MONTHS - 6 DAYS - 10
HOURS PER DAY - 1548 HOURS

SPREAD

1- DB DOZER

1- PATROL

1- COMPACTOR

1- 988 FEL

4- LEGAL END SPILLS

1- FLATBED B/L = 199.29

1- HYDRA CRANE

1- LOWBOY

3- PICKUPS

1- DOZER OPERATOR

1- PATROL OPERATOR

1- COMPACTOR OPERATOR

1- FEL OPERATOR

4 TEAMSTERS - END SPILLS

1- TEAMSTER - FLATBED

1- CRANE OPERATOR

1- LOWBOY TEAMSTER

16- LABORERS

10- CARPENTERS

3- 411EN

COST PER HOUR

COST 1548 HOURS

SUBTOTAL

DIRECT LABOR

SUPPLIES

REPAIR LABOR

EQUIPMENT

EQUIP. SUPPLIES

LABOR EQUIPMENT SUPPLIES

42.87 25.91 38.85

15.86 17.93 19.51

6.43 9.81 17.29

32.15 33.00 45.85

58.28 38.48 56.76

4.28 4.17 11.01

16.71 11.19 15.80

15.00 11.00 17.07

7.71 2.91 17.13

38.34

38.84

34.15

38.34

149.12

36.71

38.34

39.55

527.04

361.40

117.82

11,209.44 154.40 291.30

250,921.5 239,911 450,932

TOTAL

222,714

92,880

308,501

239,911

358,052

3,199.58

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION		ITEM NO.	SHEET 2 OF 2	PAGE 127
QUANTITY	UNIT	EST. BY	JOB	DATE
FORM 2		CK'D BY		
PERMANENT MATERIAL		UNIT PRICE	TOTAL	
WORKSHOP				
1-50 X 100	= 5000 S.F.			
STORES		10.00		300.000
2-45 X 45	= 4050 S.F.			
GENERATOR		75.00		323750
1-25 X 35	= 875 S.F.			
OFFICE		60.00		52500
1-20 X 60	= 1200 S.F.			
FUEL STORAGE		120.00		144000
2-100 X 100	= 20000 S.F.			
1-30 X 30	= 900 S.F.	35.00		70000
RAISED DOCK		15.00		15000
1-25 X 130	= 3250 S.F.			
DOCK		20.00		15000
1-20 X 50	= 1000 S.F.			
RAIL		25.00		25000
17,050 L.F.	= 1,023,000 L.F.			
TIES		0.30		306900
11400 EA.				
BALLAST		15.00		171000
72,500 CU. YDS.				
CAMP FACILITY		10.00		725000
56,000 S.F.				
CEMENT SILOS		70.00		507000
3- EACH				
GENERATORS		15000.00		45000
2- EACH				
MISC.		15000.00		30000
1- LOT				
				150000
				2907150

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Maintain Rail & Storage Facilities

ITEM NO. 336.202

SHEET OF PAGE 112

Watana - Stage 1

EST. BY Art Lee

DATE _____

BID QUANTITY 90 UNIT Mo TAKE OFF QUANTITY

0 0 3 5 6 9

DIVERSIFIED CONSTRUCTORS, INC.

ITEM NO. 202 SHEET 1 OF 1 PAGE 179

OPERATION MAINTAIN RAIL & STORAGE

JOB KATANA

DATE

CK'D BY

QUANTITY 90 UNIT MONTHS EST. BY

FORM 2

SPREAD

- 1-HYDRACRANE
- 1-966 F.E.L. R/L = 71.13
- 1-END SPILL, LEGAL
- 1-MOTOR PATROL
- 1-FLATBED
- 1-PICKUP
- 1-CRANE OPERATOR
- 1-FEL OPERATOR
- 1-TEAMSTER, END SPILL
- 1-PATROL OPERATOR
- 1-TEAMSTER, FLATBED
- 4-LABORERS
- 1-H.MAN

LABOR	EQUIPMENT	SUPPLIES
1671	1119	1580
1714	1780	2663
1457	962	1419
1580	1793	1951
428	417	1104
257	297	571
3834		
4033		
3728		
3834		
3671		1500
13176		
4227		
43616	1128	10788
112529	15913	27833

COST PER HOUR

COST 258 HOURS

SUMMARY

- DIRECT LABOR
- SUPPLIES
- REPAIR LABOR
- EQUIPMENT
- EQUIP. SUPPLIES

TOTAL	UNIT PRICE
8475930	94177
348300	3870
1651680	18352
1432170	15913
2156670	23963
14064750	156275

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Build Temporary Air Strip

ITEM NO. 336.301 SHEET OF PAGE 120

JOB Watana ~ Stage 1

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

DIVERSITY OPERATION

ENGINEERS & CONSTRUCTORS Build Permanent Airstrip

ITEM NO. 336.302

SHEET 1 OF 1

PAGE 181

ITEM
JOB

Watana - Stage 1

JOE

EST. BY Art Lee

DATE _____

BID QUANTITY _____

UNIT LS

TAKE OFF QUANTITY

QUANTITY

UNI

CONSTRUCTION
LABOR & INSURANCE

**CONSTRUCTION
SUPPLIES**

**EQUIPMENT
REPAIR LABOR**

EQUIPMENT
RENTEQUIPMENT
SUPPLIES

PERMANENT
MATERIALS

SUB-CONTRACTS

**TOTAL
DIRECT COST**

ORIGINAL - ESCALATE

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Transmission Plant

ITEM NO. 350 - 359 SHEET OF PAGE 182

(Divided by 10 to use 9 numbers)

JOB Watana - Stage 1

EST. BY Art Lee

DATE

BID QUANTITY 10

UNIT LS

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE

	QUANTITY	UNIT	CONSTRUCTION LABOR & INSURANCE	CONSTRUCTION SUPPLIES	EQUIPMENT REPAIR LABOR	EQUIPMENT RENT	EQUIPMENT SUPPLIES	PERMANENT MATERIALS	SUB-CONTRACTS	TOTAL DIRECT COST			
ORIGINAL - ESCALATE O.H.	370	HL	55869.220	7714.2854180	6317010	1137	4207480	1101	4929680	11818	47132760	78923631470	11071158544670
SUBMARINE	3	HL	7184	230207	3714	11142	3371	105811380	25140	314	111344	77359	31771175391
SUBSTATIONS - SUBCONTRACT													
			56099867	2805322	6327591	4234030	4941724	48619031	133880610	1.5	280968721		

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Other Tangible Property

ITEM NO. 399.399 SHEET OF PAGE 183

108 **Watana - Stage 1**

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
Build Main Camp
OPERATION _____

ITEM NO. 63.11

SHEET _____ OF _____ PAGE 24

Watana - Stage 1

JOB

EST. BY Art Lee

DATE _____

BID QUANTITY 1,800 UNIT U TAKE OFF QUANTITY

EST. BY Art Lab

CO

QUANTITY

UNIT

**CONSTRUCTION
LABOR & INSURANCE**

**CONSTRUCTION
SUPPLIES**

**EQUIPMENT
REPAIR LABOR**

**EQUIPMENT
RENT**

EQUIPMENT SUPPLIES

PERMANENT
MATERIALS

SUB-CONTRACTS

**TOTAL
DIRECT COST**

SUB CONTRACT

1-25-

LS. 28050000 LS. 28050000

2. L.S. 28050000

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Build Construction Village

ITEM NO. 63.12 SHEET OF PAGE 185

JOB Watana - Stage 1

BID QUANTITY 310 UNIT U TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Build Permanent Town (80%)

ITEM NO. 63.13

SHEET _____ OF _____ PAGE 186

JOB Watana - Stage 1

BID QUANTITY 92

UNIT 11

TAKE OFF QUANTITY

EST. BY Art. Lee

DATE

OPERATION Salvage Camp & Village

ITEM NO. 63.14

SHEET _____ OF _____ PAGE 187

OPERATION

__JOB

Watana - Stage 1

BID QUANTITY

1

UNIT

TAKE OFF QUANTITY

EST. BY

Art Lee

DATE

OPERATION Direct Labor

ITEM NO. 63.51ITEM NO. 63.51 SHEET OF PAGE 155

JOB Watana - Stage 1

BID QUANTITY 1.123.000 UNIT MD TAKE OFF QUANTITY _____ EST BY Arl Lee DATE _____

OPERATION Indirect Labor

ITEM NO. 63.52 SHEET OF PAGE 189

JOB Watana - Stage 1

BID QUANTITY 394.000 UNIT MD TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

OPERATION Owner's Representative

ITEM NO. 63.53 SHEET OF PAGE 190

JOB Watana - Stage 1

EST. BY Art Lee

BID QUANTITY 299.000 UNIT MD TAKE OFF QUANTITY

EST. BY Art Lee DATE _____

0 0 3 5 6 9

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Allowances - Family Status

ITEM NO. 63-6 SHEET _____ OF _____ PAGE 191

Watana - Stage 1

BID QUANTITY 100.000 UNIT MD TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION: Electrical Power - 34.5 KV System

ITEM NO. 63.71

- SHEET ____ OF ____ PAGE 192

JOB Watana - Stage 1

BIO QUANTITY

UNIT 15

TAKE OFF QUANTITY

EST BY Art Lee

DATE

OPERATION Camp Power

ITEM NO. 63.72 SHEET OF PAGE 192

Job Watana - Stage 1

BID QUANTITY 90 UNIT MO TAKE OFF QUANTITY _____ EST BY Art Lee DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

OPERATION Construction Heating & Ventilating

ITEM NO 63.81 SHEET OF PAGE 174

OPERATION

Plant

JOB

Watana - Stage 1

BY Art Lee

DATE _____

BID QUANTITY

1

UNIT LS

TAKE OFF QUANTITY

581

Art_Lee

DATE _____

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Offsite Transportation of Personnel

ITEM NO 63.83 SHEET OF PAGE 73

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
OPERATION Offsite Transportation of Personnel

JOB Watana - Stage 1
Art Lee

EST BY Art Lee DATE _____

BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY

0 0 3 5 6 9

OPERATION Mitigation

ITEM NO 68 SHEET 1 OF 1 PAGE 196

JOB Watana - Stage 1

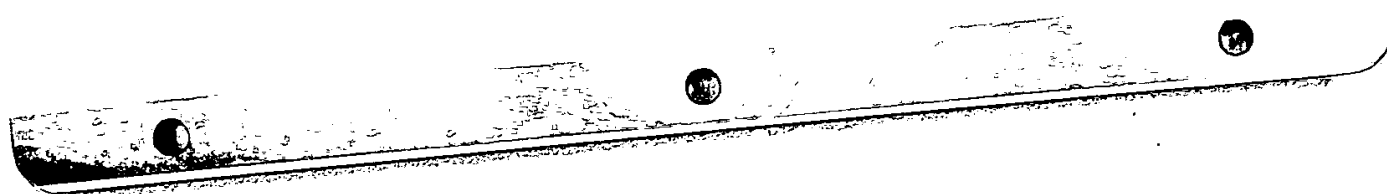
BID QUANTITY 1 UNIT LS TAKE OFF QUANTITY _____ EST. BY Art Lee DATE _____

[illegible]

0 0 3 5 6 9

003596

EQ-1PM-1N



HOURLY EQUIPMENT OPERATING COSTS

MECH. REPAIR _____
P. R. TAX & INS. _____
OVERTIME 10 % 42.87
BUTANE _____ PER GAL. _____
ELECT. POWER _____ PER KWH. BY A. LEE

HOURLY EQUIPMENT OPERATING COSTS

CONTRACT NO.	SHEET	OF	PAGE
SUPPLIES	DIESEL FUEL	PER GAL.	
	GASOLINE	PER GAL. / LIT.	
	BUTANE	PER GAL.	
	ELECT. POWER	PER HOUR - BY	

14 - Gross, as reduced under Later Submissions to the Exclusion of payroll taxes and fee, and amount of actual contribution of each indicated in case at top of sheet.

LABOR RATES

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page
Sheet 1 of 10
Date

Project SUSITNA - WATANA - DEVILS CANYON DAMS

TAXES & INSURANCE AT 27.55%

Classification	Rate					USE
	current to 6-30-85					
LABORERS	BASE	FRINGE	TOTALS		REMARK	
General: Common	20.34	6.50	5.60		0.50	32.94
Air Tool Operator	21.08	"	5.80		0.51	33.39
Dumpman	20.34	"	5.60		0.50	32.94
Pipelayer - Metallic Culy.	21.34	"	5.87		0.52	34.23
Non - Metal.	21.34	"	5.87		0.52	34.23
Concrete: Concrete Laborer	20.68	"	5.69		0.50	33.32
Vibrator Operator	21.08	"	5.80		0.51	33.39
Sandblaster	21.08	"	5.80		0.51	33.39
Gunite - Nozzelman	21.08	"	5.80		0.51	33.39
Gun tender	20.34	"	5.60		0.50	32.94
Rockwork: Highcaler	21.60	"	5.95		0.52	34.57
Jackhammer	21.08	"	5.80		0.51	33.39
Wagon Drill	21.60	"	5.95		0.52	34.57
Chuck Tender	21.08	"	5.80		0.51	33.39
Diamond Drill						
Powder Foreman	23.15	"	6.37		0.55	36.57
Powderman	21.90	"	6.03		0.53	34.96
Powderman Helper	21.08	"	5.80		0.51	33.39
Riprapman-Hand Placed	20.34	"	5.60		0.50	32.94
Under Ground: (Free Air)						
Shifter	24.76	"	6.82		0.59	38.67
Powderman	24.09	"	6.63		0.57	37.79
Miner - Mucker	22.74	"	6.26		0.55	36.05
Driller	23.76	"	6.54		0.57	37.37
Chuck Tender	23.18	"	6.38		0.55	36.61
Timberman	23.18	"	6.38		0.55	36.61

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page
Sheet 2 of 10
Date

Project

Classification	Rate					
	current 10- 6-30-85	FRINGE	UNEMP.	PENAL	USB	
Foreman	22.34	6.50	6.15	0.54	35.58	
Health & Welfare	2.10					
Pension	4.00					
Vacation						
Industry Advancement	0.25					
Apprenticeship	0.20					
LEGAL	0.15					
Travel Time						
Subsistence						
	6-30-86					
OPERATING ENGINEERS						
Tractor-Crawler W/Attachments- Over 50HP.	24.47	6.55	6.74	0.58	38.34	
-Rubber Tired W/Attachment:-						
- Earth Mover	24.47	"	6.74	0.58	38.34	
- Farm Type	23.17	"	6.38	0.55	36.65	
CRANES, ETC:						
Cable Way	26.01	"	7.16	0.61	40.33	
Whirley Crane						
Truck Crane-Under 100T	24.47	"	6.74	0.58	38.34	
Truck Crane-Over 100T	26.01	"	7.16	0.61	40.33	
R. T. Crane	24.47	"	6.74	0.58	38.34	
Overshot Loader						
Hoist-Single Drum						
Hoist-2 or More Drums						
Power Shovel or Dragline	26.01	"	7.16	0.61	40.33	

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.

WAGE RATES FOR ESTIMATE

Page

Sheet

Date

3 of 10

Project

Classification	Rate					
	current to-	FRINGES	Tax & Inc.		REBUR	USE
	6-30-86					
Motor Grader-No. 12 & Under	24.47	6.55	6.74		0.58	38.34
Motor Grader-Over No. 12	24.47	"	6.74		0.58	38.34
Smooth Roller-Finish Work	26.01	"	7.16		0.61	40.32
-Other Work	23.17	"	6.38		0.55	36.65
Elevating Grader	23.17	"	6.38		0.55	36.65
Trenching Machine	23.80	"	6.55		0.57	37.47
Crushing Plant	24.47	"	6.74		0.58	38.34
Blower Operator-Cement						
Concrete Batch & Mix	24.47	"	6.74		0.58	38.34
Front End Loader-Under 5 CY	24.47	"	6.74		0.58	38.34
-Over 5 CY	26.01	"	7.16		0.61	40.32
Refrigeration Plant						
Conveyor Operator						
Air Compressor-Portable	23.80	"	6.55		0.57	37.47
-Stationary						
-Two or More						
Water Pump						
Pumpcrete or Grout Pump	24.47	"	6.74		0.58	38.34
Churn Drill or Diamond Drill						
H.D. Mechanic or Welder	24.87	"	6.87		0.59	38.98
Oiler	23.17	"	6.38		0.55	36.65
Fireman						
Dinkey Locomotive	23.80	"	6.55		0.57	37.47
Mucking Machine-Under Grnd.	26.91	"	7.41		0.63	41.50
Foreman	27.51	"	7.57		0.64	42.27
Health & Welfare	2.35					
Pension	4.00					
Vacation						
Industry Advancement	0.05					

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page _____
Sheet 4 of 10
Date _____

Project _____

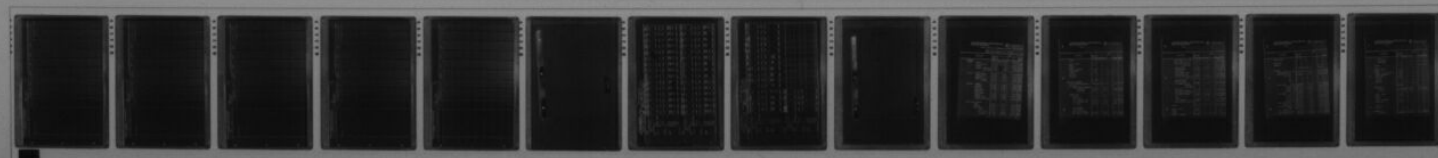
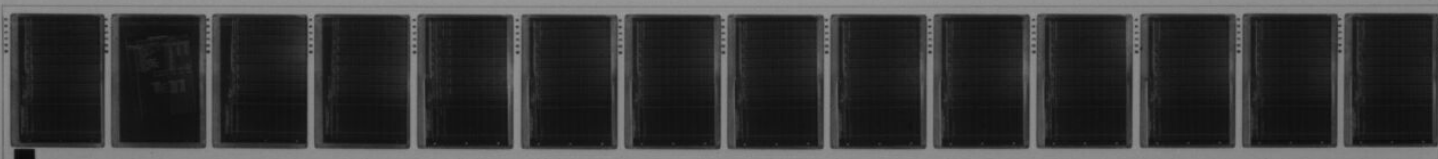
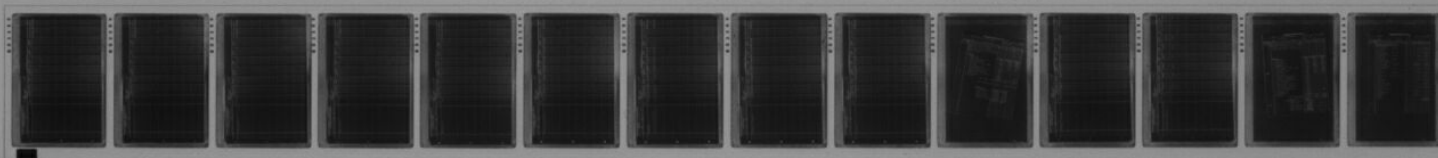
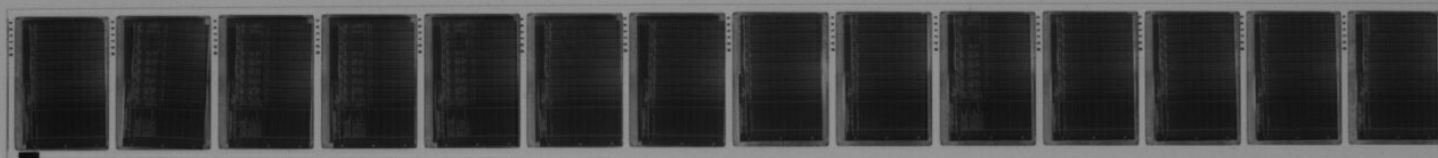
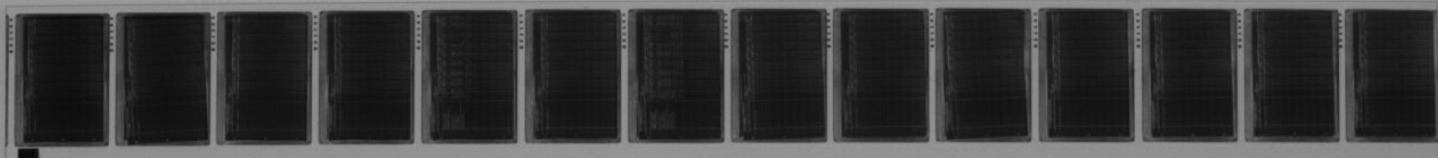
Classification	Rate					
	current to -					USE
	6-30-86					
Apprenticeship	0.15					
Travel Time						
Subsistence						
	1-30-85	FRUITES TONKIN			REURE	
TEAMSTERS						
Pickups & Flatracks 10 3/4 T	21.61	7.69	5.95		0.54	35.79
Flatracks "S" AXLE 10 T	21.61	"	5.95		0.54	35.79
"D" AXLE 10 T	22.32	"	6.14		0.56	36.71
T10 T						
T10 T						
Over T						
Dump Trucks 10 10 CY T	22.32	"	6.14		0.56	36.71
10 CY 10 20 CY	22.76	"	6.27		0.56	37.28
20 CY 10 40 CY	23.46	"	6.46		0.58	38.19
40 CY 10 60 CY	24.51	"	6.75		0.60	39.55
60 Over 100 CY	25.56	"	7.04		0.62	40.71
Bottom Dump 10 10 CY	22.32	"	6.14		0.56	36.71
10 CY 10 20 CY	22.76	"	6.27		0.56	37.28
20 CY 10 40 CY	23.46	"	6.46		0.58	38.19
40 CY 10 60 CY	24.51	"	6.75		0.60	39.55
60 Over 100 CY	25.56	"	7.04		0.62	40.71
Water Truck "S" AXLE 10 Gal	21.61	"	5.95		0.54	35.79
"D" AXLE Over Gal	22.32	"	6.14		0.56	36.71
Transit Mix Trucks 10 7 CY	22.76	"	6.27		0.56	37.28
To Over 12 CY	23.46	"	6.46		0.58	38.19
Oil Distributor Truck	22.76	"	6.27		0.56	37.28
A-Frame & Cherry Picker	21.61	"	5.95		0.54	35.79
Semi-Truck & Trailer	22.76	"	6.27		0.56	37.28

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page _____
 Sheet 5 of 10
 Date _____

Project _____

Classification	Rate					
	current 10- 6-30-85	FRINGES	INSUR.	REHIRE	USE	
Lowboy	24.51	7.69	6.15	0.60	37.55	
Concrete Haul	-					
Warehouseman	21.61	"	5.95	0.54	35.79	
Foreman	25.51	"	7.02	0.62	40.14	
Health & Welfare	2.59					
Pension	4.10					
Vacation (SERVICE CORP.)	0.45					
Industry Advancement	0.05					
Apprenticeship	0.30					
LEGAL	0.20					
Travel Time						
Subsistence						
	6.3085					
CARPENTERS:						
Journeyman	23.95	5.05	6.59	0.55	36.14	
Foreman	26.94	5.05	7.42	0.61	40.02	
Health & Welfare	1.65					
Pension	3.00					
Vacation						
Industry Advancement	0.05					
Apprenticeship	0.35					
Travel Time						
Subsistence						
MILLWRIGHTS:						
Journeyman	24.65	5.05	6.79	0.56	37.05	



DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page _____
Sheet 6 of 10
Date _____

Project _____

Classification	Rate					
	Current to 6-30-85	6-30-85 FOMLES	7-1-85 TAMULES		REMARKS	USE
Foreman	27.73	5.05	7.63		0.62	41.03
Health & Welfare	1.65					
Pension	3.00					
Vacation	-					
Industry Advancement	0.05					
Apprenticeship	0.35					
Travel Time						
Subsistence						
	6.31.84					
PILE DRIVERS:						
Journeyman	23.38	6.15	6.44		0.55	36.52
Foreman	26.30	6.15	7.24		0.61	40.30
Health & Welfare	1.40					
Pension	4.50					
Vacation	-					
Industry Advancement	0.05					
Apprenticeship	0.20					
Travel Time						
Subsistence						
CEMENT FINISHERS:						
Journeyman	22.26	6.50	6.13		0.54	35.43
Foreman	24.48	6.50	6.74		0.58	38.30
Health & Welfare	2.10					
Pension	4.10					

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page _____
 Sheet 7 of 10
 Date _____

Project _____

Classification	Rate					
	Current to	FRINGE	INSURANCE	REHIRE	USE	
Vacation	-					
Industry Advancement	0.25					
Apprenticeship	0.25					
Travel Time						
Subsistence						
IRON WORKERS:						
Reinforcing	24.97	6.35	6.87	0.59	38.78	
Structural	24.87	"	6.87	0.59	38.78	
Foreman	27.27	"	7.51	0.63	41.76	
Health & Welfare	1.45					
Pension	1.50					
Vacation	-					
Industry Advancement	0.15					
Apprenticeship	0.25					
Travel Time						
Subsistence						
BOILERMAKERS:						
Journeyman	26.99	4.80	7.43	0.60	37.82	
Foreman	29.29	4.80	8.06	0.65	42.80	
Health & Welfare	1.30					
Pension	3.40					
Vacation						
Industry Advancement	0.05					

DIVERSIFIED ENGINEERS & CONSTRUCTORS, INC.
WAGE RATES FOR ESTIMATE

Page _____
Sheet 8 of 10
Date _____

Project _____

Classification	Rate					
	current to-	FRAMES	FRAMES		RODING	USE
Apprenticeship	0.25					
Travel Time						
Subsistence						
ELECTRICIANS:						
Journeyman	29.77	6.55	7.65		0.65	42.62
Foreman	31.22	"	8.60		0.71	41.06
GEORGINIAN	25.47	"	7.01		0.60	37.63
Health & welfare	1.65					
Pension	4.50					
Vacation						
Industry Advancement	0.15					
Apprenticeship	0.25					
Travel Time						
Subsistence						
PLUMBERS & STEAMFITTERS:						
Journeyman						
Foreman						
Health & Welfare						
Pension						
Vacation						
Industry Advancement						
Apprenticeship						
Travel Time						

003569

WAGE RATES FOR ESTIMATE

Page _____
Sheet 9 of 10
Date _____

Project

WAGE RATES FOR ESTIMATE

Sheet 10 of 10
Date _____

Project _____

ALASKA
A.G.C. OF AMERICA, INC.
WAGE
&
FRINGE BENEFIT
SUPPLEMENT

EFFECTIVE FEBRUARY 1, 1985

BRICKLAYERS LOCAL UNION NO. 1.....	Page 1
CARPENTERS (South of the 63rd Parallel).....	Page
CARPENTERS LOCAL UNION #1243 (North of the 63rd Parallel).....	Page
HOTEL EMPLOYEES AND RESTAURANT EMPLOYEES, AND CONSTRUCTION CAMP EMPLOYEES UNION AFL CIO OF ALASKA.....	Page
ALASKA STATE DISTRICT COUNCIL OF LABORERS AND ITS AFFILIATED LOCAL UNIONS.....	Pages 3 - 7
OPERATING ENGINEERS, LOCAL 302.....	Pages 9 - 13
PILEDRIVERS, BRIDGE, DOCK BUILDERS & DIVERS NO. 2520.....	Page 14
PLASTERERS & CEMENT MASONS #867 (South of the 63rd Parallel).....	Pages 15 - 16
PLASTERERS & CEMENT MASONS #867 (North of the 63rd Parallel).....	Pages 17 - 18
TEAMSTERS LOCAL NO. 959.....	Pages 19 - 21

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99509
AND
SEATTLE LOCAL UNION NO. 1

Hourly wage rates and fringe benefits - effective February 1, 1983 through June 30, 1983

CLASSIFICATION	HOURLY RATE	PENSION FUND	HEALTH & WELFARE	I.N.I	TRAINING	INT'L. PENSION FUND	*ACIAP
Ironworkers	\$22.54	\$5.30	\$2.10	5.01	5.00	\$1.62	1.03
Steelworkers	22.54	5.00	2.10	.01	.00	.62	.03
Stone Masons	22.54	5.00	2.10	.01	.00	.62	.03
Marble Masons	22.54	5.00	2.10	.01	.00	.62	.03
Tile Setters	21.81	5.00	2.10	.01	.00	.62	.03
Tile Setters Helpers	19.41	5.00	2.10	.01	.00	.62	.03
Terrazzo Workers	22.54	5.00	2.10	.01	.00	.62	.03
Terrazzo Helpers	19.41	5.00	2.10	.01	.00	.62	.03
Vertical Applicators	21.25	5.00	2.10	.01	.00	.62	.03

FORWEL shall receive \$1.00 above their classification scale.

GENERAL FOREMEN shall receive \$2.00 above their classification scale.

Union Working Agreement: 5.25 per compensable hour (subject to I.B.S. taxation).

*Alaska Construction Industry Advancement Program. All signatory employers are obligated to remit 1.03 per compensable hour to the A.C.I.A.P.

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99509
AND
ALASKA TECHNICAL ENGINEERS
(AFFILIATE OF TEAMSTERS 3159)

Hourly wage rates and fringe benefits - effective February 1, 1983 through June 30, 1983.

CLASSIFICATION	HOURLY RATE	HEALTH & WELFARE	PENSION PLAN	REPAID LEGAL	APPRENTICE TRAINING	SERVICE COMP.	*ACIAP
Chief of Parties	23.92	2.59	3.00	.20	.30	.45	.05
Party Chief	23.80	2.59	3.00	.20	.30	.45	.05
Associate Party Chief	23.10	2.59	3.00	.20	.30	.45	.05
Instrumentperson	22.43	2.59	3.00	.20	.30	.45	.05
Office Survey Technician	22.43	2.59	3.00	.20	.30	.45	.05
Stakeboy	22.43	2.59	3.00	.20	.30	.45	.05
Chainperson	18.85	2.59	3.00	.20	.30	.45	.05

Union Agreement: \$1.00 per hour. (Subject to IRS taxation.)

*ACIAP - Alaska Construction Industry Advancement Program - All signatory employers are obligated to remit 1.03 per compensable hour to the ACIAP.

PRIVATE WORK AND RESIDENTIAL RATES

CLASSIFICATION	HOURLY RATE	HEALTH & WELFARE	PENSION PLAN	REPAID LEGAL	APPRENTICE TRAINING	SERVICE COMP.	*ACIAP
Chief of Parties	19.96	2.59	1.00	.20	.30	.45	.05
Party Chief	18.46	2.59	1.00	.20	.30	.45	.05
Associate Party Chief	15.96	2.59	1.00	.20	.30	.45	.05
Instrumentperson	13.96	2.59	1.00	.20	.30	.45	.05
Office Survey Technician	13.96	2.59	1.00	.20	.30	.45	.05
Stakeboy	13.96	2.59	1.00	.20	.30	.45	.05
Chainperson	10.46	2.59	1.00	.20	.30	.45	.05

AGREEMENT BETWEEN THE ALASKA CHAPTER ASSOCIATED GENERAL CONTRACTORS AND
TEAMSTERS UNION LOCAL 515

Continued-

CLASSIFICATION	HOURLY RATE	PERM.	V.COMP.	PREPAID APPRNT.	SERVICE	ACIAP
WAGE	PLAN	PENSION	B & V	LEGAL	TRAINING	CHRG.
Group 3						
Intermechanics - Class I	21.61	4.00	.10	2.50	.20	.50
Intermechanics - Class II	21.61	4.00	.10	2.50	.20	.50
Bus Operators, up to 30	21.61	4.00	.10	2.50	.20	.50
Bus Operators	21.61	4.00	.10	2.50	.20	.50
Perm Type Rubber Tired Tractor (when material handling or pulling wagons)	21.61	4.00	.10	2.50	.20	.50
Perm Distributor, single mile	21.61	4.00	.10	2.50	.20	.50
Amulance	21.61	4.00	.10	2.50	.20	.50
Hydro Boosters, single mile	21.61	4.00	.10	2.50	.20	.50
Team Drivers (horses, mules, and similar equipment)	21.61	4.00	.10	2.50	.20	.50
Vacuum Trucks, truck vacuum suckers, single mile	21.61	4.00	.10	2.50	.20	.50
Pipe Trucks, single mile	21.61	4.00	.10	2.50	.20	.50
Digger, continuous operation	21.61	4.00	.10	2.50	.20	.50
Paul Handler	21.61	4.00	.10	2.50	.20	.50
Group 4						
Shower Gulper	19.41	4.00	.10	2.50	.20	.50

ACIAP - All signatory employers are obligated to remit 0.05 per compensable hour to the Alaska Construction Industry Advancement Program.

Union Working Agreement: \$1.00 per hour (Subject to I.R.S. limitation.)
Effective September 15, 1984 - \$1.00 per hour.

Perman: Receive \$1.00 per hour over highest classification supervised.

General Perman: Receive \$1.50 per hour over highest classification supervised.

PRIVATE WORKS AND RESIDENTIAL RATES

CLASSIFICATION	HOURLY RATE	PERM.	V.COMP.	PREPAID APPRNT.	SERVICE	ACIAP
WAGE	PLAN	PENSION	B & V	LEGAL	TRAINING	CHRG.
Residential Shower	12.34	2.00	.10	2.50	.20	.50
Private Street & Utility Shower	10.55	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50
Shower	13.22	2.00	.10	2.50	.20	.50

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-1500
ANCHORAGE, ALASKA 99509

LOCAL CARPENTERS UNIONS WITHIN THE
ALASKA STATE COUNCIL OF CARPENTERS ANCHORAGE
(SOUTH OF 15TH PARALLEL)

Hourly wage rates and fringes from February 1, 1985 through June 30, 1985 are as follows

CLASS	WAGE	HEALTH & SECURITY	PENSION	APPRENTICE TRAINING	ACIAP
JOBSITEMAN	PER HOUR				
Carpenter	\$13.95	\$1.65	\$2.00	\$1.35	\$0.05
Leather	24.44	1.65	1.00	.35	.05
Acoustical Applicator	24.44	1.65	1.00	.35	.05
Radial Arm Saw Operator	24.44	1.65	1.00	.35	.05
Millwright	24.45	1.65	1.00	.35	.05

Perman receive 12-1/2% above majority of classifications being supervised.

General Perman receive 25% above majority of classifications being supervised.

TOOL ALLOWANCE: 15¢ per hour - Carpenter Classification

30¢ per hour - Millwright Classification

Tool allowance is at straight time rate and subject to I.R.S. limitation.

APPRENTICES REGISTERED BEFORE JANUARY 1, 1985

	6th	5th	4th	3rd	2nd	1st	6th	5th	4th	3rd	2nd	1st
750 HOURS	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th
Carpenter	\$15.33	\$16.29	\$17.24	\$18.20	\$19.16	\$20.14	\$21.10	\$22.06	\$23.02	\$23.98	\$24.94	\$25.90
Radial Arm Saw Operator	15.61	16.62	17.60	18.57	19.55	20.53	21.50	22.48	23.45	24.43	25.40	26.38
Millwright	15.78	16.76	17.75	18.73	19.72	20.71	21.69	22.68	23.66	24.65	25.63	26.62

APPRENTICES REGISTERED AFTER JANUARY 1, 1985

	7th	6th	5th	4th	3rd	2nd	1st	6th	5th	4th	3rd	2nd	1st
750 HOURS	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th
Carpenter	\$11.98	\$13.41	\$14.85	\$16.28	\$17.74	\$19.16	\$20.60	\$22.06	\$23.50	\$24.94	\$26.38	\$27.82	\$29.26
Radial Arm Saw Operator	12.22	13.69	15.13	16.57	18.00	19.45	20.89	22.33	23.77	25.20	26.64	28.07	29.51
Millwright	12.33	13.80	15.28	16.73	18.17	19.62	21.06	22.50	23.94	25.38	26.82	28.26	29.70

ACIAP - All signatory employers are required to remit 0.05 per compensable hour to the Alaska Construction Industry Advancement Program.

LIGHT COMMERCIAL RATES

CLASS	WAGE	HEALTH & SECURITY	PENSION	APPRENTICE TRAINING	ACIAP
JOBSITEMAN	PER HOUR				
Carpenter	\$ 20.00	\$ 1.65	\$ 2.00	\$.35	\$.05
Leather/Acoustical Applicator	20.20	1.65	2.00	.35	.05
Radial Arm Saw Operator	20.20	1.65	2.00	.35	.05

**AGREEMENT BETWEEN
ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 3-2500
ANCHORAGE, ALASKA 99509**

**CARPENTERS LOCAL UNION #1245 FAIRBANKS
AND
(NORTH OF THE 61ST PARALLEL)**

Hourly wage rates and fringe benefits - effective February 1, 1985 through June 30, 1985:

CLASS	AGE	HEALTH & SECURITY	RETIREMENT	APPRENTICE TRAINING	WACAP
ZONE 1 - (15 - 35 MILES FROM THE FAIRBANKS POST OFFICE)					
Journeyman Carpenter	\$26.00	\$ 1.40	\$4.00	\$1.15	\$1.05
Welder or similar type saw operator	26.54	1.40	4.00	.15	.05
Low Piler	26.54	1.40	4.00	.15	.05
Millwright	26.54	1.40	4.00	.15	.05
Powerer Assistant Tool Tumbler	26.54	1.40	4.00	.15	.05
Welder & Acoustical Applicator	26.54	1.40	4.00	.15	.05
Floor Workers	26.54	1.40	4.00	.15	.05
Pipe or Flood Repair Work	26.54	1.40	4.00	.15	.05
Millwright	26.54	1.40	4.00	.15	.05

ZONE 2 - (15 - 35 MILES FROM THE FAIRBANKS POST OFFICE):
Add \$1.04 per hour to Zone 1 scale.

ZONE 3 - (35 - 50 MILES FROM THE FAIRBANKS POST OFFICE):
Add \$1.69 per hour to Zone 1 scale.

Welder - \$1.54 per hour above classification to which working.

Bladder - Scale of classification to which working.

General Foreman - 25% above Journeyman Carpenter/Millwright scale.

Foreman - 15% above Journeyman Carpenter/Millwright scale.

Working Foreman - 12-1/2% above Journeyman Carpenter/Millwright scale.

Tool Allowance: 15¢ per hour for Carpenter classifications.

10¢ per hour for Millwright classifications.

Tool allowance is subject to U.S. taxation.

Blade Pay - 15¢ per hour for 25 foot up, plus 10¢ per hour per each additional 20 feet above the ground, dock or surface below (free fall distance) on a half shift basis.

Trade Pay - 50¢ per hour on half shift basis.

APPRENTICE wage schedules are as follows:

1st	2nd	3rd	4th	5th	6th	7th
Year	Year	Year	Year	Year	Year	Year
Carpenters	\$16.64	\$17.42	\$18.20	\$19.74	\$21.32	\$22.58
Welder & Acoustical	16.99	17.78	18.58	20.17	21.76	23.16
Floor Workers	16.99	17.78	18.58	20.17	21.76	23.16
Pipe & Flood	16.99	17.78	18.58	20.17	21.76	23.16
Millwrights	17.12	17.92	18.73	20.33	21.94	23.54

**AGREEMENT BETWEEN THE ALASKA CHAPTER ASSOCIATED GENERAL CONTRACTORS AND
FAIRBANKS DISTRICT NO. 1**

CLASSIFICATION	HOURLY RATE	PERM.	U. CONF.	REPAID APPROP.	SERVICE	WACAP
AGE	PLAN	REASON	U & M	LEGAL	TRAINING	CONF.
Group 1						
Excavator	22.32	4.00	.10	2.50	.20	.30
Back or Front/Driver	22.32	4.00	.10	2.50	.20	.30
Operator	22.32	4.00	.10	2.50	.20	.30
Back Tractor over 3 yards	22.32	4.00	.10	2.50	.20	.30
Back Tractor including roughing	22.32	4.00	.10	2.50	.20	.30
and trucks with pump up to and	22.32	4.00	.10	2.50	.20	.30
including 15 yards	22.32	4.00	.10	2.50	.20	.30
Cla. Pile Driver	22.32	4.00	.10	2.50	.20	.30
Front Tractor and pump	22.32	4.00	.10	2.50	.20	.30
Stringing Truck	22.32	4.00	.10	2.50	.20	.30
Back Tractor, Back Tractor off-truck	22.32	4.00	.10	2.50	.20	.30
Grass Tractor	22.32	4.00	.10	2.50	.20	.30
Flat Bed, Back rear axle	22.32	4.00	.10	2.50	.20	.30
Operator (including bulk	22.32	4.00	.10	2.50	.20	.30
aggregate)	22.32	4.00	.10	2.50	.20	.30
Loader Carriers	22.32	4.00	.10	2.50	.20	.30
Ready Mix over 3 yards up to	22.32	4.00	.10	2.50	.20	.30
and including 3 yards	22.32	4.00	.10	2.50	.20	.30
Water Wagon, Back	22.32	4.00	.10	2.50	.20	.30
Water Wagon, Back axle	22.32	4.00	.10	2.50	.20	.30
Water Truck, tractor, flat bed	22.32	4.00	.10	2.50	.20	.30
including "A" from over 3 yards	22.32	4.00	.10	2.50	.20	.30
Back Tractor and Fork Lifts, Fork	22.32	4.00	.10	2.50	.20	.30
lifts with power boom & swing	22.32	4.00	.10	2.50	.20	.30
attachment over 3 yards	22.32	4.00	.10	2.50	.20	.30
Front End Loader with Forks	22.32	4.00	.10	2.50	.20	.30
One Operator over 30 passengers	22.32	4.00	.10	2.50	.20	.30
All Terrain Vehicle	22.32	4.00	.10	2.50	.20	.30
Back Tractor, Back Tractor over	22.32	4.00	.10	2.50	.20	.30
3 yards	22.32	4.00	.10	2.50	.20	.30
Front End Loader Truck/Back axle	22.32	4.00	.10	2.50	.20	.30
Hydro Loader, Back axle	22.32	4.00	.10	2.50	.20	.30
Tractor Truck, Tractor Truck	22.32	4.00	.10	2.50	.20	.30
Tractor, Back axle	22.32	4.00	.10	2.50	.20	.30
Tractor (all 4 wheel)	22.32	4.00	.10	2.50	.20	.30
All Crawler or similar type	22.32	4.00	.10	2.50	.20	.30
Pile Truck, Back axle	22.32	4.00	.10	2.50	.20	.30
Combination Truck-Pull/Grass	22.32	4.00	.10	2.50	.20	.30
Grass	22.32	4.00	.10	2.50	.20	.30
Bigger-than-crawler operation	22.32	4.00	.10	2.50	.20	.30
Excavator	22.32	4.00	.10	2.50	.20	.30
Group 2						
Back Tractor up to and	21.41	4.00	.10	2.50	.20	.30
including 3 yards	21.41	4.00	.10	2.50	.20	.30
Gravel Spreader Back Operator	21.41	4.00	.10	2.50	.20	.30
on truck	21.41	4.00	.10	2.50	.20	.30
Flat Bed, Single rear axle	21.41	4.00	.10	2.50	.20	.30
Ready Mix up to and including	21.41	4.00	.10	2.50	.20	.30
3 yards	21.41	4.00	.10	2.50	.20	.30
Back Tractor/Tractor Truck up to	21.41	4.00	.10	2.50	.20	.30
and including 3 yards	21.41	4.00	.10	2.50	.20	.30
Pickup (all 4 wheel and all	21.41	4.00	.10	2.50	.20	.30
light duty vehicles)	21.41	4.00	.10	2.50	.20	.30
Water Wagon, single axle	21.41	4.00	.10	2.50	.20	.30
Water Truck, tractor, flat bed	21.41	4.00	.10	2.50	.20	.30
including "A" from 3 yards	21.41	4.00	.10	2.50	.20	.30
and under	21.41	4.00	.10	2.50	.20	.30
Back Tractor and Fork Lifts (Fork Lifts	21.41	4.00	.10	2.50	.20	.30
with power boom & swing attach-	21.41	4.00	.10	2.50	.20	.30
ments up to & including 3 yards	21.41	4.00	.10	2.50	.20	.30

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(2/1/85)

AGREEMENT BETWEEN
ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS
ANCHORAGE, ALASKA 99509
AND
TEAMSTERS UNION LOCAL 910

Hourly wage rates and fringe benefits - effective February 1, 1983 through June 30, 1983.

CLASSIFICATION	BASIC WAGE PER HOUR	HEALTH & WELFARE FUND	PENSION FUND	TRAINING FUND	LEGAL AID FUND	*ACIAP
Group 1 Handyman over 17 & up to and including 15 years (over 15 years to be negotiated between Union and AGC).	24.31 4.00	.10	2.50 .20	.30	.45	.05
Hand with Double Box Nipper	24.31 4.00	.10	2.50 .20	.30	.45	.05
Hand Trucks (including carting) 2 trucks with pump) over 40 up to & including 60 yards	24.31 4.00	.10	2.50 .20	.30	.45	.05
Helios, Commanders, Ballgown & smaller equipment where pulling slides, etc.	24.31 4.00	.10	2.50 .20	.30	.45	.05
Hand Commuters	24.31 4.00	.10	2.50 .20	.30	.45	.05
Handcar Transporters	24.31 4.00	.10	2.50 .20	.30	.45	.05
Landings (including attached trailers and jumps, 12 miles over 12 miles or 150 tons to be negotiated between Union and AGC).	24.31 4.00	.10	2.50 .20	.30	.45	.05
Group 1A Hand Trucks (including rockhugger and trucks with pump) over 60 up to and including 100 yds (over 100 yds to be negotiated between Union and AGC)	25.34 4.00	.10	2.50 .20	.30	.45	.05
Group 2 Hand Trucks (including rockhugger and trucks with pump) over 100 up to and including 120 yds	25.34 4.00	.10	2.50 .20	.30	.45	.05
All Helios, Commanders, Ballgown and smaller equipment	25.34 4.00	.10	2.50 .20	.30	.45	.05
Handcar	25.34 4.00	.10	2.50 .20	.30	.45	.05
Hand Trucks (including rockhugger and trucks with pump) over 20 up to and including 40 yards	25.34 4.00	.10	2.50 .20	.30	.45	.05
Group 3 Hand Trucks (including rockhugger and trucks with pump) over 40 up to and including 70 yards	27.76 4.00	.10	2.50 .20	.30	.45	.05
Landings (including attached trailers and jumps up to and including 11 miles	27.76 4.00	.10	2.50 .20	.30	.45	.05
Oil Distributor Drivers	27.76 4.00	.10	2.50 .20	.30	.45	.05
Hand Trucks (over 3 yards up to and including 7 yards	27.76 4.00	.10	2.50 .20	.30	.45	.05
Compressor (where pulled by rubber tire equipment)	27.76 4.00	.10	2.50 .20	.30	.45	.05
Water Mops (where pulled by rubber tire equipment)	27.76 4.00	.10	2.50 .20	.30	.45	.05
Hand Trucks (over 7 yards up to and including 11 yards	27.76 4.00	.10	2.50 .20	.30	.45	.05

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99509
AND
HOTEL EMPLOYEES AND RESTAURANT EMPLOYEES, AND CONSTRUCTION CAMP EMPLOYEES UNIONS
AFC-CIO OF ALASKA

Hourly wage rates and fringe benefits effective January 1, 1984 through June 30, 1984.

CLASSIFICATION	BASIC WAGE PER HOUR	HEALTH & WELFARE FUND	PENSION FUND	TRAINING FUND	LEGAL AID FUND	*ACIAP
Working Camp Manager	21.36	.08	4.00	.04	.02	.05
Head Cook	21.36	.08	4.00	.04	.02	.05
Baker	20.69	.08	4.00	.04	.02	.05
Cook/Baker	20.69	.08	4.00	.04	.02	.05
Cook	20.17	.08	4.00	.04	.02	.05
Head Housekeeper	18.61	.08	4.00	.04	.02	.05
Head Kitchen Helper	18.61	.08	4.00	.04	.02	.05
Commissary Attendant	18.25	.08	4.00	.04	.02	.05
Housekeeper	18.25	.08	4.00	.04	.02	.05
Kitchen Helper	18.25	.08	4.00	.04	.02	.05
General Helper	18.25	.08	4.00	.04	.02	.05
Janitor	18.25	.08	4.00	.04	.02	.05

Travellers wage rate for one month is 85% of journeyman wage rate.

APPRENTICESHIP wage schedules are as follows:

1000 Hours	1st	2nd	3rd	4th	5th	6th	958
	15.1	16.50	17.34	18.17	19.01	19.85	
Baker	15.67	16.50	17.34	18.17	19.01	19.85	
Cook/Baker	15.13	15.95	16.76	17.55	18.35	19.16	

Union Assessment: 0.35 per compensable hour (subject to I.B.S. taxation).

\$10.00 per day will be paid when split shift is worked.

Tool Allowance: \$4 per compensable hour.

Load, Unload, Drive: Employees required to load, unload, or drive vehicles as part of their regular work shall receive an additional \$3.00 per shift.

*ACIAP - All signatory employers are obligated to remit 0.05 per compensable hour to the Alaska Construction Industry Advancement Program.

*A NEW AGREEMENT WAS NOT THEN CONCLUDED AS OF 2/1/83.

(AL-AGC)

(2/1/83)

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(AL-AGC)

(2/1/83)

ALASKA STATE DISTRICT COUNCIL OF LABORERS AND ITS AFFILIATED LOCAL UNIONS

[illegible]

FORNMAN to receive 10% above Group 1 scale.
~~FORNMAN~~ FORNMAN to receive 50% per hour above Foreman.

WORKING DUES CHECK OFF - \$06 per hour (subject to IRS taxation).

APPENDICES

APPRENTICES	1ST YEAR	2ND YEAR	3RD YEAR
	75 %	90 %	90 %
Group I	16.34	17.64	17.85
Group II	16.60	17.79	20.02
Group III	16.68	18.01	20.26
Group IV	17.06	18.20	20.48
Group V	17.65	18.62	21.16

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99504
AND
PLASTERERS & CONCRETE MASONS LOCAL NO. 947
(North of the 63rd Parallel)

Hourly wage rates and fringe benefits effective February 1, 1985 through June 30, 1986.

CLASSIFICATION	HOURLY WAGE	HEALTH & WELFARE	RETIREMENT	APPRENTICE TRAINING	PACIAP
Group I					
Building, General	22.05	2.10	4.10	.25	.05
Paving (Concrete)	22.05	2.10	4.10	.25	.05
Curb, Gutter & Sidewalks	22.05	2.10	4.10	.25	.05
Second Fix & Second Settlers	22.05	2.10	4.10	.25	.05
Plumbing Concrete	22.05	2.10	4.10	.25	.05
Spooling or Site Coating of Concrete	22.05	2.10	4.10	.25	.05
Application of Joint Sealing Compound	22.05	2.10	4.10	.25	.05
Curing all Concrete	22.05	2.10	4.10	.25	.05
Application of Underlayment	22.05	2.10	4.10	.25	.05
Grouting & Caulking of Tilt Up Panels	22.05	2.10	4.10	.25	.05
Grouting of all Plates	22.05	2.10	4.10	.25	.05
Group II					
Pump Operators	22.24	2.10	4.10	.25	.05
Group III					
Trenching Machine	22.51	2.10	4.10	.25	.05
Curb & Gutter Machine	22.51	2.10	4.10	.25	.05
Operating Brooming & Sweeping Machines	22.51	2.10	4.10	.25	.05
Concrete Saw (Self-Powered)	22.51	2.10	4.10	.25	.05
Powerless Power Tools	22.51	2.10	4.10	.25	.05
Power Grinder	22.51	2.10	4.10	.25	.05
Power Chipping & Brooming	22.51	2.10	4.10	.25	.05
Architectural Finish	22.51	2.10	4.10	.25	.05
Group IV					
Application of all Composition & Mastic	22.75	2.10	4.10	.25	.05
Application of all Epoxy Materials	22.75	2.10	4.10	.25	.05
Application of all Plastic Materials	22.75	2.10	4.10	.25	.05
Painted Colored Concrete	22.75	2.10	4.10	.25	.05
Hard General Grinder	22.75	2.10	4.10	.25	.05
Swiss Machine	22.75	2.10	4.10	.25	.05
Tuned Workers	22.75	2.10	4.10	.25	.05
Group V					
Plasterers	23.53	2.10	4.10	.25	.05

(3/1/85)

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(AG-ACC)

AGREEMENT BETWEEN THE ALASKA CHAPTER ASSOCIATED GENERAL CONTRACTORS AND
THE ALASKA STATE DISTRICT COUNCIL OF LABORERS AND ITS AFFILIATED LOCAL UNIONS

CLASSIFICATION	HOURLY WAGE	RETIREMENT	HEALTH & WELFARE	APPRENTICE TRAINING	PAID LEGAL	PACIAP
*Scrapers (including, but not limited to, as sidebooms, grapple trucks, reach trucks, forklifts, etc.)	20.34	4.00	2.10	.20	.15	.05
Tank Cleaning	20.34	4.00	2.10	.20	.15	.05
*Tapers	20.34	4.00	2.10	.20	.15	.05
Topmen and Bull Gang (tunnel and shaft work)	20.34	4.00	2.10	.20	.15	.05
Drillwall and Utility Laborer	20.34	4.00	2.10	.20	.15	.05
Workmen (construction projects)	20.34	4.00	2.10	.20	.15	.05
Window Cleaner	20.34	4.00	2.10	.20	.15	.05
GROUP II						
Asphalt workers (asphaltmen, plant crew) (for rubber and 15¢/hr.)	20.68	4.00	2.10	.20	.15	.05
Concrete Labor (Curb & gutter, chase handler, grouting, curing, screeding)	20.68	4.00	2.10	.20	.15	.05
Workers (tunnel and shaft work)	20.68	4.00	2.10	.20	.15	.05
Rigger	20.68	4.00	2.10	.20	.15	.05
Starry work	20.68	4.00	2.10	.20	.15	.05
GROUP III						
Boring and Cutting Torch	21.08	4.00	2.10	.20	.15	.05
Cutliff, Grade	21.08	4.00	2.10	.20	.15	.05
Concrete or Lime Dumper or Handler (back or bulk)	21.08	4.00	2.10	.20	.15	.05
Chainman Filler	21.08	4.00	2.10	.20	.15	.05
Chainman Operator	21.08	4.00	2.10	.20	.15	.05
Chainman splicer	21.08	4.00	2.10	.20	.15	.05
Chainman (wages, electric and hydraulic drills)	21.08	4.00	2.10	.20	.15	.05
Concrete Laborers (power buggy, concrete pump, pumpcrete assistant, vibrators)	21.08	4.00	2.10	.20	.15	.05
Pump Gun or Pump Machine Operator	21.08	4.00	2.10	.20	.15	.05
Green Gunner (dam work)	21.08	4.00	2.10	.20	.15	.05
Concrete layout man	21.08	4.00	2.10	.20	.15	.05
Concrete Operator	21.08	4.00	2.10	.20	.15	.05
Laborer Man	21.08	4.00	2.10	.20	.15	.05
Insulator	21.08	4.00	2.10	.20	.15	.05
Jackhammer Or Pavement Breakers Labor (instrument operators)	21.08	4.00	2.10	.20	.15	.05
Heavy Tender and Mud Blower (sewer work)	21.08	4.00	2.10	.20	.15	.05
Maintenance Man	21.08	4.00	2.10	.20	.15	.05
Handicraft workers (tunnel work)	21.08	4.00	2.10	.20	.15	.05
Oil Spill Laborer (marine work)	21.08	4.00	2.10	.20	.15	.05
Pumpman Helper	21.08	4.00	2.10	.20	.15	.05
Pump Gun Operator	21.08	4.00	2.10	.20	.15	.05
Railroad Switch Layout Laborer	21.08	4.00	2.10	.20	.15	.05
*Road crossings (coatings)	21.08	4.00	2.10	.20	.15	.05
Seablaster	21.08	4.00	2.10	.20	.15	.05
Sewer Cleaners	21.08	4.00	2.10	.20	.15	.05
Sewer Plant Maintenance Man	21.08	4.00	2.10	.20	.15	.05
*Pipeline Classifications						

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(AG-ACC)

AGREEMENT BETWEEN THE ALASKA CHAPTER ASSOCIATED GENERAL CONTRACTORS AND
THE ALASKA STATE DISTRICT COUNCIL OF LABORERS AND ITS AFFILIATED LOCAL UNIONS

CLASSIFICATION	HOURLY WAGE	PENSION	HEALTH & WELFARE	APPRENTICE TRAINING	PAID LEGAL	*ACIAP
Sloper (over 20')	21.08	4.00	2.10	.20	.15	.05
Thermal Plastic Applicator	21.08	4.00	2.10	.20	.15	.05
Timber Faller	21.08	4.00	2.10	.20	.15	.05
Timberman	21.08	4.00	2.10	.20	.15	.05
*BM Drilling helper (welding, chipping, etc., etc.)	21.08	4.00	2.10	.20	.15	.05
Water Slinger (dam work)	21.08	4.00	2.10	.20	.15	.05

GROUP IV						
Concrete Vibrator Worker	21.34	4.00	2.10	.20	.15	.05
(4' and over)	21.34	4.00	2.10	.20	.15	.05
Red Chislers	21.34	4.00	2.10	.20	.15	.05
Pipe Builder (Store Pipe Crew)	21.34	4.00	2.10	.20	.15	.05
Pipelayer, Culvert and	21.34	4.00	2.10	.20	.15	.05
Multiple Laborer	21.34	4.00	2.10	.20	.15	.05
Pipelayers	21.34	4.00	2.10	.20	.15	.05
Plasterer, Drylender and	21.34	4.00	2.10	.20	.15	.05
Concrete Finisher Tenders	21.34	4.00	2.10	.20	.15	.05

GROUP V						
Asphalt Baker	21.60	4.00	2.10	.20	.15	.05
(Tar rubber: Add 19¢)	21.60	4.00	2.10	.20	.15	.05
Bit Grader	21.60	4.00	2.10	.20	.15	.05
*Coldwater	21.60	4.00	2.10	.20	.15	.05
*Concrete Finishers	21.60	4.00	2.10	.20	.15	.05
Drill Worker (in the field)	21.60	4.00	2.10	.20	.15	.05
Drillers (including, but not limited to, auger drills, air-track drills, hydraulic drills)	21.60	4.00	2.10	.20	.15	.05
*Formbuilder (building of shafts, and boards, timbers, concrete type work etc.)	21.60	4.00	2.10	.20	.15	.05
Gradesman (setting or transfer- ring of grade marks)	21.60	4.00	2.10	.20	.15	.05
High Scale	21.60	4.00	2.10	.20	.15	.05
Shutdownmen, manual or shaft work	21.60	4.00	2.10	.20	.15	.05
Slurry seal equipment men	21.60	4.00	2.10	.20	.15	.05

GROUP VI						
Ice Milling (in connection with Laborers work)	21.90	4.00	2.10	.20	.15	.05
High Slinger and Tree Tapper	21.90	4.00	2.10	.20	.15	.05
Pioneer Drilling and Drilling off Tapper (full type drills)	21.90	4.00	2.10	.20	.15	.05
Reedman	21.90	4.00	2.10	.20	.15	.05

*Pipeline Classifications

*ACIAP - All signatory employers are obligated to remit \$0.05 per compressible hour to the Alaska Construction Industry Advancement Program.

All laborers required to work in tunnels, shafts or caissons shall receive 10¢ above their wage group, based on full shift method.

AGREEMENT BETWEEN THE ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS AND THE
PLASTERERS AND CEMENT MASONS LOCAL 867 (South of the 63rd Parallel)

Continued -

FORWARD to receive 10¢ above Group I scale.

GENERAL FORWARD to receive 50¢ per hour above Forward.

WORKING OVERS CHECK OFF - 50¢ per hour (subject to IRS caution).

*ACIAP - All signatory employers are obligated to remit 5¢ per compressible hour to the Alaska Construction Industry Advancement Program.

APPRENTICES

	1ST YEAR 75 %	2ND YEAR 80 %	3RD YEAR 85 %
Group I	16.35	17.44	19.61
Group II	16.49	17.59	19.79
Group III	16.70	17.81	20.03
Group IV	16.88	18.00	20.25
Group V	17.46	18.62	20.95

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-1500
ANCHORAGE, ALASKA 99509

AND
PLASTERERS & CEMENT MASONS LOCAL NO. 861
(South of the 57th Parallel)

Hourly wage rates and fringe benefits effective February 1, 1965 through June 30, 1966.

June 30,

CLASSIFICATION	HOURLY WAGE	HEALTH & WELFARE	PENSION	APPRENTICE TRAINING	*ACIAP
Group I					
Setting General	21.80	2.10	4.10	.25	.05
Concrete Paving	21.80	2.10	4.10	.25	.05
Curb & Gutter, Sidewalk	21.80	2.10	4.10	.25	.05
Retard Pile Setter	21.80	2.10	4.10	.25	.05
Placing Concrete	21.80	2.10	4.10	.25	.05
Spotting/Slab Casting	21.80	2.10	4.10	.25	.05
Spotting or Slab Casting of Concrete	21.80	2.10	4.10	.25	.05
Application of Joint	21.80	2.10	4.10	.25	.05
Sealing Compound	21.80	2.10	4.10	.25	.05
Curing all Concrete	21.80	2.10	4.10	.25	.05
Application of Underlayment	21.80	2.10	4.10	.25	.05
Crowning and Coaling of Tilt Up Forms	21.80	2.10	4.10	.25	.05
Crowning of all Places	21.80	2.10	4.10	.25	.05
Group II					
Form Builders	21.99	2.10	4.10	.25	.05
Group III					
Trimming Machine	22.26	2.10	4.10	.25	.05
Curb & Gutter Machine	22.26	2.10	4.10	.25	.05
Operating Screeding and Bidding Machine	22.26	2.10	4.10	.25	.05
Concrete Saw (Self-Powered)	22.26	2.10	4.10	.25	.05
Pneumatic Power Tools	22.26	2.10	4.10	.25	.05
Floor Grinder	22.26	2.10	4.10	.25	.05
Power Chipping & 1 Bushing	22.26	2.10	4.10	.25	.05
Scabbling Architectural Finish	22.26	2.10	4.10	.25	.05
Group IV					
Application of all					
Composition & Plastic	22.50	2.10	4.10	.25	.05
Application of all Epoxy Materials	22.50	2.10	4.10	.25	.05
Application of all Plastic Materials	22.50	2.10	4.10	.25	.05
Finish Colored Concrete	22.50	2.10	4.10	.25	.05
Hand Powerd Grinder	22.50	2.10	4.10	.25	.05
Concrete Masons	22.50	2.10	4.10	.25	.05
Tunnel Workers	22.50	2.10	4.10	.25	.05
Group V					
Plasterer	23.28	2.10	4.10	.25	.05

(2/1/65)

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(2/1/55)

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AGREEMENT BETWEEN THE ALASKA CHAPTER ASSOCIATED GENERAL CONTRACTORS AND
THE ALASKA STATE DISTRICT COUNCIL OF LABORERS AND ITS AFFILIATED LOCAL UNIONS

Foreman: \$1.00 per hour over Group 4
Foreman: \$1.25 over Group 4
General Foreman: \$2.00 over Group 5.

Union Working Agreement: 32 of gross wages (Subject to I.R.S. taxation.)

PRIVATE WORKS AND RESIDENTIAL RATES

CLASSIFICATION	HOURLY WAGE	PENSION FUND	HEALTH & WELFARE	APPRENTICE TRAINING	PREPAID LEGAL	*ACIAP
Residential	13.00	1.00	2.10	0	0	.05
Private Street & Utility	17.90	1.00	2.10	0	0	.05
Site Work	16.35	1.00	2.10	0	0	.05
Light Commercial	15.65	1.00	2.10	0	0	.05

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99509
AND
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 201

Hourly wages and fringe benefits effective February 1, 1985 through June 30, 1986.

CLASSIFICATION	BASIC WAGE PER HOUR	PENSION FUND	HEALTH & WELFARE FUND	TRAINING FUND	*ACIAP
GROUP 1					
Asphalt Paver	24.47	4.00	2.35	.15	.05
"A" Frame Trucks, Helicopters, Transporters, Dock Winches; Double Drum	24.47	4.00	2.35	.15	.05
Back Filler	24.47	4.00	2.35	.15	.05
Batch Plant Operator: batch and sizer over 200 yds.	24.47	4.00	2.35	.15	.05
Belts with Power Pack & sizer	24.47	4.00	2.35	.15	.05
Grading Machine	24.47	4.00	2.35	.15	.05
Rollers	24.47	4.00	2.35	.15	.05
Cableways & Highlines, 3 yds and under	24.47	4.00	2.35	.15	.05
Cleaning Machine	24.47	4.00	2.35	.15	.05
Crushing Machine	24.47	4.00	2.35	.15	.05
Crusher: Shovel, Backhoe, Dragline, Claw Shells	24.47	4.00	2.35	.15	.05
a) Grader, Truck type, crater, floating (locomotive, wheeled, either 3 yds or under or 150' beam, including jibs and under, or 45 tons & under)	24.47	4.00	2.35	.15	.05
b) Hydraulic	24.47	4.00	2.35	.15	.05
c) Hydraulic cranes & attachments, sideboom 45 tons & under	24.47	4.00	2.35	.15	.05
Graders	24.47	4.00	2.35	.15	.05
Gravels	24.47	4.00	2.35	.15	.05
Grading/Trucking machine (16" or over)	24.47	4.00	2.35	.15	.05
Grilling machines, cone, cable, rotary, and emulsifier	24.47	4.00	2.35	.15	.05
Grinding Machine, concrete paving, sidewalk, curb & gutter machine	24.47	4.00	2.35	.15	.05
Hydro Air & similar	24.47	4.00	2.35	.15	.05
Loaders: elevating belt type, bucket and similar types	24.47	4.00	2.35	.15	.05
Loaders: a) Forklifts with power boom and swing attachments	24.47	4.00	2.35	.15	.05
b) Overhead & front end 2 1/2 yds through 4 yds	24.47	4.00	2.35	.15	.05
c) Loaders with forks or 44" clamps	24.47	4.00	2.35	.15	.05
Mechanized, welders, bodywork	24.47	4.00	2.35	.15	.05
Mixers: Mobile type with hot mixing	24.47	4.00	2.35	.15	.05
Motor Patrol Grader: over 14	24.47	4.00	2.35	.15	.05
Rolling Machines: Mole, Tunnel Drill, and/or Shield	24.47	4.00	2.35	.15	.05

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(2/1/85)

AGREEMENT BETWEEN
ALASKA CHAPTER
ASSOCIATED GENERAL CONTRACTORS
P. O. BOX 4-2500
ANCHORAGE, ALASKA 99509
AND
PILEDRIVERS, BRIDGE, DOCK BUILDERS AND RIVERS LOCAL UNION NO. 2520

Hourly wage rates and fringe benefits - effective July 1, 1983 thru June 30, 1984.

CLASSIFICATION	BASIC WAGE PER HOUR	HEALTH & WELFARE FUND	PENSION FUND	APPRENTICE TRAINING FUND	*ACIAP
Piledriverman	23.00	1.40	4.50	.20	.05
Piledriverman/Tonic Worker	23.00	1.40	4.50	.20	.05
Piledriver Carpenter	23.30	1.40	4.50	.20	.05
Piledriver Carpenter/Tonic Worker	24.23	1.40	4.50	.20	.05
Shift Operator	23.00	1.40	4.50	.20	.05
Shift Operator/Tonic Worker	23.98	1.40	4.50	.20	.05
Certified Welder	24.65	1.40	4.50	.20	.05

Foreman: receive twelve & one-half percent (12.5%) above majority of classifications supervised.

General Foreman: receive 25% above majority of classifications supervised.

Sheet Stabber: shall receive \$1.00 per hour above the journeyman rate for actual hours spent stabling sheets.

Room and Board: allowance is \$50 per day.

*ACIAP - All signatory employers are obligated to remit 3.0% per compensable hour to the Alaska Construction Industry Advancement Program.

Working Days: Effective October 1, 1982 working days are 4 per cent of the gross wages. Employers will deduct from the wages of each employee each amount of the Union dues and/or assessments owed by them to the Union, or may be certified by the Union, provided the employee has executed a written assignment authorizing such deductions. The Union has agreed to indemnify the Employer for any litigation costs, expenses or liabilities which an employer may incur by compliance with this provision.

Revised Section

Hourly wage rates and fringe benefits - effective July 1, 1983 through June 30, 1984.

CLASSIFICATION	BASIC WAGE PER HOUR	HEALTH & WELFARE FUND	PENSION FUND	APPRENTICE TRAINING FUND
Assistant Tender	22.78	1.40	4.50	.20
Shift Operator	22.78	1.40	4.50	.20
Tender	25.00	1.40	4.50	.20
Standby Diver	25.00	1.40	4.50	.20
General Diving Foreman	32.00	1.40	4.50	.20
Working Diver	33.36	1.40	4.50	.20

A NEW AGREEMENT HAS NOT BEEN NEGOTIATED AS OF 3/1/85.

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(AR-40C)

AGREEMENT BETWEEN THE ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS AND THE
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 302

AGREEMENT BETWEEN THE ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS AND THE
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 302

CLASSIFICATION	BASIC WAGE PER HOUR	PENSION FUND	HEALTH & WELFARE FUND	TRAINING FUND	*ACIAP
GROUP II					
Batch Plant Operator: batch & mixer					
100 yds per hr. & under	23.80	4.00	2.35	.15	.05
Roller-Piromen	23.80	4.00	2.35	.15	.05
Concrete Mix & concrete					
putting operator	23.80	4.00	2.35	.15	.05
Compressor: Steel erection, including					
and blasting, painting of					
same, pile driving	23.80	4.00	2.35	.15	.05
Compressor (except as listed in					
Group I)	23.80	4.00	2.35	.15	.05
Belts on steel erection. Tower-					
machines & Air Tuggers	23.80	4.00	2.35	.15	.05
Loaders, elevating grader.					
Dumpers & similar	23.80	4.00	2.35	.15	.05
Locomotives: Red & General engines					
Motors	23.80	4.00	2.35	.15	.05
Screening, Plant Service Oilier,					
Jeeps	23.80	4.00	2.35	.15	.05
Shibson (cradling rock drill					
regardless of size)	23.80	4.00	2.35	.15	.05
Shifter	23.80	4.00	2.35	.15	.05
Trucking Machines under 15"	23.80	4.00	2.35	.15	.05
GROUP III					
A. Prime Tractor, dock winches:					
single drum	23.17	4.00	2.35	.15	.05
Double drum (each or two rig)	23.17	4.00	2.35	.15	.05
Boring Machine	23.17	4.00	2.35	.15	.05
Brooms, Power Hoops, Sagins and					
similar types	23.17	4.00	2.35	.15	.05
Dump Cutter (General, Christensen or					
similar types)	23.17	4.00	2.35	.15	.05
Compressor: Backhoeing					
Drill Slinger	23.17	4.00	2.35	.15	.05
Pump Tractor	23.17	4.00	2.35	.15	.05
Postlift, industrial type	23.17	4.00	2.35	.15	.05
Old Truck or Wheel Truck with					
police when used for mixing	23.17	4.00	2.35	.15	.05
Grade Checker and Stone Slinger					
Belts, Air Tuggers, Elevators	23.17	4.00	2.35	.15	.05
Loaders:					
a) Elevating-Army, Barber Green					
and similar types	23.17	4.00	2.35	.15	.05
b) Perforator or Lumber carrier					
(on construction job sites)	23.17	4.00	2.35	.15	.05
c) Perforator with saw					
d) Overhead/Front end,					
under 1 1/2 yds	23.17	4.00	2.35	.15	.05
Locomotives: Steam (Air, steam,					
gas & electric) operators	23.17	4.00	2.35	.15	.05
Mechanical light duty	23.17	4.00	2.35	.15	.05
Motors: Concrete mixers and batch					
200 yds per hour and under	23.17	4.00	2.35	.15	.05

CLASSIFICATION	BASIC WAGE PER HOUR	PENSION FUND	HEALTH & WELFARE FUND	TRAINING FUND	*ACIAP
Oil, Slower Distributors	23.17	4.00	2.35	.15	.05
Pipeline Dredge	23.17	4.00	2.35	.15	.05
Footable Diggers, mechanical	23.17	4.00	2.35	.15	.05
Put Piroon (power agitated)	23.17	4.00	2.35	.15	.05
Power Plant, Turbine Operator,					
under 300 KW	23.17	4.00	2.35	.15	.05
Pumps:					
a) Puller Canyon	23.17	4.00	2.35	.15	.05
b) Water	23.17	4.00	2.35	.15	.05
Big Oilier over 45 tons, over 3 yards,					
or over 150' boom	23.17	4.00	2.35	.15	.05
Ballers, Tampers, Vibrators, all					
except asphalt	23.17	4.00	2.35	.15	.05
Saws, concrete	23.17	4.00	2.35	.15	.05
Straightening machine	23.17	4.00	2.35	.15	.05
Tow tractor	23.17	4.00	2.35	.15	.05
GROUP IV					
Big Oilier (advances to Group III					
if over 45 tons or 3 yds or					
150' boom)	17.75	4.00	2.35	.15	.05
Parts & Equipment Coordinator	17.75	4.00	2.35	.15	.05
Shopper (on craning machines					
or shovel type equipment)	17.75	4.00	2.35	.15	.05
Specter	17.75	4.00	2.35	.15	.05
Steam Cleaner	17.75	4.00	2.35	.15	.05

1. Oilier Foreman to receive 75¢ per hour over Group II.
2. Operator and Mechanic Foreman to receive 75¢ per hour over Group IA.
3. General Foreman and Master Mechanic to receive \$1.50 per hour over Group IA.
4. Mechanic Foreman to receive 50¢ per hour over Group I.
5. Operators working underground to receive a two percent (10¢) premium.
6. Operators to receive a premium of 25¢ per hour when working on rubber asphalt.

*ACIAP - all signatory employers are obligated to remit \$.05 per compensable hour to the Alaska Construction Industry Advancement Program.

Union Working Agreement: \$.40 per compensable hour (subject to I.R.S. taxation).

APPENDIX

	60¢	70¢	80¢	85¢	90¢	95¢
1000 HOURS	157	207	257	276	296	315
July 1, 1984	\$14.80	\$17.13	\$19.58	\$20.79	\$22.02	\$23.23

PLEASE NOTE: The above amounts apply to all Operating Engineer Apprentices, except for apprentices indentured prior to 10/1/78 whose rates are higher and will appear on the dispatch slip. You can call the Apprenticeship Office for rates for those apprentices who were indentured prior to 10/1/78. The phone number is 561-3044.

The rates for apprentices are based on Group I, Ballroom Operator scale.

AGREEMENT BETWEEN THE ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS AND THE
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 302

Continued -

PRIVATE WORK AND INDUSTRIAL RATES

CLASSIFICATION	BASIC WAGE PER HOUR	PENSION FUND	HEALTH & WELFARE	TRAINING FUND	*ACIAP
Residential	19.00	2.00	2.35	.15	.05
Prime Street & Utility	20.28	2.00	2.35	.15	.05
Site Work	18.17	2.00	2.35	.15	.05
Light Industrial	21.17	2.00	2.35	.15	.05

(2/1/85)

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AGREEMENT BETWEEN THE ALASKA CHAPTER, ASSOCIATED GENERAL CONTRACTORS AND THE
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL 302

Continued -

CLASSIFICATION	BASIC WAGE PER HOUR	PENSION FUND	HEALTH & WELFARE	TRAINING FUND	*ACIAP
Redwell See Cat	24.47				
Operator on Bridges	24.47	4.00	2.35	.15	.05
Piledriver Engineers, L.B. Foster, Pulley, or similar, paving bucket	24.47	4.00	2.35	.15	.05
Power plant, turbine operator: 300 KW and over (power plants or power units over 300 KW on highway or airfield construction or quarry operations)	24.47	4.00	2.35	.15	.05
Scrapers, Trenchers, Caterpillar, Euclid and similar type equipment over 25 yds through 40 yds	24.47	4.00	2.35	.15	.05
Shot Blast Machine	24.47	4.00	2.35	.15	.05
Spreaders: Snow Blower, Caterpillar, Scram, Barber Green, Slurry machine	24.47	4.00	2.35	.15	.05
Sub-grader (Curtiss, C.N.I. and C.N.I. Once Hills and similar types)	24.47	4.00	2.35	.15	.05
Tack tractor	24.47	4.00	2.35	.15	.05
Truck mounted concrete pump	24.47	4.00	2.35	.15	.05
Water Gate Machine	24.47	4.00	2.35	.15	.05
Water Craft, Pile Craft, Loadmaster, air cushion, terrain vehicle, helicopter transporters, cableways, heligons, drugs, barge-cable, highway or cable car, camp maintenance engineer, boat engine	24.47	4.00	2.35	.15	.05
GROUP 1A Cableways and Highlines: over 3 yds	26.01	4.00	2.35	.15	.05
Cranes: Shovel, Backhoe, Draglines Class 1000					
a) Crawler, truck type floating locomotives, whirley, either over 3 yds or over 150' boom, including jibs or over 45 tons	26.01	4.00	2.35	.15	.05
b) Tower Cranes, Boco sidebooms over 45 tons	26.01	4.00	2.35	.15	.05
c) Gyator Cat Cranes & attachments, sidebooms over 45 tons	26.01	4.00	2.35	.15	.05
Loaders over 4 yds	26.01	4.00	2.35	.15	.05
Ractor Petrol Grader (when finishing to final grades and/or to bubs, or for asphalt)	26.01	4.00	2.35	.15	.05
Power Plants: a) 1000 KW and over	26.01	4.00	2.35	.15	.05
Quad	26.01	4.00	2.35	.15	.05
Slip form paver, C.N.I. and similar types	26.01	4.00	2.35	.15	.05
Trenchers, Caterpillar, Euclid Scrapers and similar type equipment over 40 yds	26.01	4.00	2.35	.15	.05

(2/1/85)

-14-

(AK-AGC)

WORK SHEETS

OPERATION **CREW COMPOSITION AND PRODUCTION**

DIVERSIFIED CONSTRUCTORS, INC.

ITEM NO

SHEET 1 OF 21 PAGE

JOB **WATANA ; DEVIL CANYON**

CKD BY

DATE

QUANTITY

UNIT

EST BY

FABRICATE FORMS

SCHEDULE

4. CARPENTERS

3. LABORS

1. SAWMAN

1/2. OPERATOR

1/2. MAN

1/2. TEAMSTER

1/2. HYDRA CRANE

1/2. PICKUP

1/2. FLATBED

1. MISC.

LABOR

EQUIPMENT SUPPLIES

144.56

98.82

37.14

4.79

20.01

17.89

2.08

1.28

2.14

1.52

330.21

10.00

0.50

7.50

1.40

0.44

2.00

3.00

16.97

1.98

2.86

5.52

8.00

30.36

COST PER HOUR

SUMMARY

DIRECT LABOR

SUPPLIES

REPAIR LABOR

EQUIPMENT

EQUIP. SUPPLIES

TOTAL

325.21

16.00

7.00

16.97

14.36

377.54

PRODUCTION

STRAIGHT PANELS

CURVED PANELS

DRAFT TUBES

COLUMNS & PIERS

BENNS

MISCELLANEOUS

16

6

2

8

10

4

S.F.

"

"

"

"

"

PER CREW CARPENTER HOUR

FORM. LUMBER AT WEIGHTED
AVERAGE COST OF \$3.00 /S.F.

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 2 OF 21 PAGE

JOB

QUANTITY

UNIT

EST BY

CK'D BY

DATE

FORM 2

		DIRECT LABOR	SUPPLIES	REPAIR LABOR	EQUIPMENT	EQUIP. SUPPLIES
64	STRAIGHT PANELS	5.05	3.25	0.10	0.26	0.22
			8.88			
24	CURVED PANELS	13.46	5.66	0.29	0.70	0.59
			18.70			
8	DRAFT TUBES	40.40	5.00	0.87	2.12	1.79
			50.18			
32	COLUMNS & PIERS	10.10	3.50	0.21	0.53	0.44
			14.78			
40	BEAMS	8.08	3.40	0.17	0.42	0.35
			12.42			
16	MISCELLANEOUS	20.20	4.00	0.43	1.06	0.89
			24.58			

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 3 OF 21 PAGE

JOB

QUANTITY

UNIT

EST BY

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DATE

FORM 2

	LABOR	EQUIPMENT	SUPPLIES
<u>ERECT FORMS - TOWER CRANE</u>			
6- CARPENTERS	216.84		10.00
3- LABORERS	98.82		
1/4 OPERATOR	19.17		
1/2 OILER	18.32		
1/2 4 MAN	20.01		
1/2 TOWER CRANE	16.71	28.68	24.26
1/2 PICKUP	128	0.48	2.85
COST PER HOUR	391.15	29.13	37.11
<u>PRODUCTION</u>			
FIGURE A WEIGHTED AVERAGE OF 8 S.F. PER CARPENTER HOUR OR 48 S.F. PER CREW HOUR			
<u>SUMMARY</u>	<u>TOTAL</u>	<u>UNIT PRICE</u>	
DIRECT LABOR	373.16	7.77	
SUPPLIES	10.00	0.20	
REPAIR LABOR	17.99	0.37	
EQUIPMENT	29.13	0.60	
EQUIP. SUPPLIES	27.11	0.56	
	457.39	7.50	

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 4 OF 21 PAGE

QUANTITY

UNIT

EST. BY

JOB

CK'D BY

DATE

FORM 2

ERECT FABRICATIONS - TRUCK CRANE

6. CARPENTERS

216.84

10.00

3. LABORERS

98.82

1/2. OPERATOR

19.17

1/2. OILER

18.32

1/2. HUMAN

20.01

1/2. TRUCK CRANE

16.07

21.38

10.17

1/2. PICKUP

12.28

0.48

2.85

COST PER HOUR

390.51

21.86

31.02

PRODUCTION

FIGURE A WEIGHTED AVERAGE

DE. B.S.F. PER CARPENTER HOUR

OR. 485.F. PER CREW HOUR

SUMMARY

DIRECT LABOR

373.16

7.77

SUPPLIES

10.00

0.21

REPAIR LABOR

17.35

0.36

EQUIPMENT

21.86

0.46

EQUIP. SUPPLIES

21.02

0.44

443.39

9.24

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

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QUANTITY

UNIT

EST BY

JOB

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DATE

FORM 2

STRIP FORMS - TOWER CRANE

6 LABORERS
2 CARPENTERS
1/2 OPERATOR
1/2 OILER
1/2 HMAN
1/2 TOWER CRANE
1/2 PICKUP

LABOR	EQUIPMENT	SUPPLIES
200.22		10.00
72.28		
19.11		
18.32		
17.77		
16.71	28.65	29.26
1.28	2.48	2.05
345.75	29.13	37.11

COST PER HOUR

PRODUCTION

FIGURE A. WEIGHTED AVERAGE
PRODUCTION OF 16 SF. PER
LABOR MANHOUR OR 96 SF.
PER CREW HOUR.

SUMMARY

DIRECT LABOR
SUPPLIES
REPAIR LABOR
EQUIPMENT
EQUP. SUPPLIES

TOTAL	UNIT PRICE
327.16	3.91
10.00	0.10
17.99	0.19
29.13	1.30
27.11	0.28
411.99	4.28

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

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JOB

QUANTITY

UNIT

EST BY

CK'D BY

DATE

FORM 2

STRIP FORMS - TRUCK CRANE

	LABOR	EQUIPMENT	SUPPLIES
6 LABORERS	200.22		10.00
2 CARPENTERS	72.28		
1/2 OPERATOR	19.17		
1/2 OILER	18.32		
1/2 HMAN	17.11		
1/2 TRUCK CRANE	16.07	21.38	18.17
1/2 PICKUP	1.28	0.48	2.85
COST PER HOUR	345.11	21.86	31.02

PRODUCTION

FIGURE A WEIGHTED AVERAGE
PRODUCTION OF 16 SF. PER
LABOR MANHOUR OR 96 SF.
PER CREW HOUR.

SUMMARY

	TOTAL	UNIT PRICE
DIRECT LABOR	327.76	3.41
SUPPLIES	10.00	0.10
REPAIR LABOR	17.35	0.18
EQUIPMENT	21.86	0.23
EQUIP. SUPPLIES	21.02	0.22
	397.99	4.14

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

SHEET 7 OF 21 PAGE

JOB

QUANTITY

UNIT

EST. BY

CK'D BY

DATE

FORM 2

	LABOR	EQUIPMENT	SUPPLIES
<u>FINISH CONCRETE</u>			
2 FINISHERS	70.86		10.00
1 FINISHER HELPER	33.37		
1/2 FINISHER 4 MAN	19.15		
1/2 PICKUP	1.28	9.48	2.85
1 MISC.	6.00	9.00	8.50
COST PER HOUR	130.66	9.48	21.35
<u>PRODUCTION</u>			
FIGURE A WEIGHTED AVERAGE PRODUCTION OF 120 SF. PER CREW HOUR.			
<u>SUMMARY</u>	<u>TOTAL</u>	<u>UNIT PRICE</u>	
DIRECT LABOR	129.38	1.02	
SUPPLIES	10.00	0.08	
REPAIR LABOR	7.28	0.06	
EQUIPMENT	9.48	0.07	
EQUIP. SUPPLIES	11.35	0.09	
	161.49	1.32	
<u>POINT & PATCH</u>			
80% OF CONCRETE FINISH UNIT PRICES			
<u>SUMMARY</u>	<u>UNIT PRICE</u>		
DIRECT LABOR	0.81		
SUPPLIES	0.06		
REPAIR LABOR	0.04		
EQUIPMENT	0.05		
EQUIP. SUPPLIES	0.07		
	1.03		

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 8 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

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DATE

FORM 2

CONSTRUCTION JOINT CLEANUP

1-AIR WATER BLASTER

1-NOZZLEMAN

1-HOSE TENDER

2-CLEANUP MEN

1-OPERATOR

COST PER HOUR

LABOR

EQUIPMENT

SUPPLIES

15.86

12.32

25.15

35.39

32.74

65.88

37.47

1.00

186.04

12.32

35.15

PRODUCTION

FIGURE A WEIGHTED AVERAGE
OF 150 S.F. / CREW HOUR

SUMMARY

TOTAL

UNIT PRICE

DIRECT LABOR

170.13

1.13

SUPPLIES

10.00

0.07

REPAIR LABOR

15.86

0.11

EQUIPMENT

12.32

0.08

EQUIP. SUPPLIES

25.15

0.17

235.51

1.56

ROCK CLEANUP

SAME SPREAD AS CONSTRUCTION
JOINT CLEANUP

PRODUCTION

75 S.F. / CREW HOUR

SUMMARY

UNIT PRICE

DIRECT LABOR

2.27

SUPPLIES

0.13

REPAIR LABOR

0.21

EQUIPMENT

0.16

EQUIP. SUPPLIES

0.34

3.11

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 9 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

CK'D BY

DATE

FORM 2

PLACE CONCRETE - TOWER CRANE

- 1- TOWER CRANE
- 2- CONCRETE BUCKETS
- 1- PICKUP
- 1- MISC.
- 1- OPERATOR
- 1- OILER
- 4- LABORERS
- 1- HUMAN

LABOR	EQUIPMENT	SUPPLIES
33.43	57.31	48.53
3.96	6.07	37.8
2.57	0.97	57.1
2.50	3.30	2.75
38.34		
36.65		
133.43		10.00
35.53		

COST PER HOUR

286.26	67.65	74.77
--------	-------	-------

PRODUCTION AT 40 CU. YDS. PER HOUR.

SUMMARY

- DIRECT LABOR
- SUPPLIES
- REPAIR LABOR
- EQUIPMENT
- EQUIP. SUPPLIES

TOTAL	UNIT PRICE
244.00	6.10
10.30	0.25
42.26	1.06
67.65	1.69
60.77	1.52
424.18	10.62

PRODUCTION AT 30 CU. YDS. PER HOUR.

SUMMARY

- DIRECT LABOR
- SUPPLIES
- REPAIR LABOR
- EQUIPMENT
- EQUIP. SUPPLIES

TOTAL	UNIT PRICE
AS ABOVE	8.13
	0.33
	1.41
	2.26
	2.03
	14.16

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 10 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

CK'D BY

DATE

FORM 2

PLACE CONCRETE - MISC. STRUCTURES

1. 150 I CRANE

2. CONCRETE BUCKETS

1. PICKUP

1. MISC.

1. OPERATOR

1. OILER

4. LABORERS

1. MIAN

LABOR

EQUIPMENT

SUPPLIES

32.15

12.77

36.34

3.97

6.07

3.78

2.57

0.97

5.71

2.30

3.30

2.75

40.33

36.65

133.45

35.53

10.00

COST PER HOUR

286.98

53.11

58.58

PRODUCTION AT 40 CU. YOS. PER HOUR

SUMMARY

DIRECT LABOR

SUPPLIES

REPAIR LABOR

EQUIPMENT

EQUIP. SUPPLIES

TOTAL

UNIT PRICE

245.99

6.15

10.00

0.25

40.74

1.02

53.11

1.33

40.58

1.21

398.67

9.96

PRODUCTION AT 30 CU. YOS. PER HOUR

SUMMARY

DIRECT LABOR

SUPPLIES

REPAIR LABOR

EQUIPMENT

EQUIP. SUPPLIES.

TOTAL

UNIT PRICE

AS

8.20

ABOVE

0.33

1.37

1.77

1.62

13.29

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

SHEET 11 OF 21 PAGE

QUANTITY

UNIT

EST. BY

JOB

CK'D BY

DATE

FORM 2

PRODUCTION AT 20 CU.YDS. PER HOUR

SUMMARY

DIRECT LABOR
SUPPLIES
REPAIR LABOR
EQUIPMENT
EQUIP. SUPPLIES

TOTAL UNIT PRICE

12.30
0.50
2.05
2.60
2.43
19.94

PRODUCTION AT 10 CU.YDS. PER HOUR

SUMMARY

DIRECT LABOR
SUPPLIES
REPAIR LABOR
EQUIPMENT
EQUIP. SUPPLIES

TOTAL UNIT PRICE

24.60
1.00
4.10
5.31
4.86
39.87

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 12 OF 21 PAGE

QUANTITY

UNIT

EST BY

CND BY

DATE

FORM 2

	LABOR	EQUIPMENT	SUPPLIES
<u>PLACE CONCRETE - PUMPKRETE</u>			
1- CONCRETE PUMP	13.71	9.37	26.91
1- MISC.	2.89	5.50	8.25
1- PICKUP	2.57	0.87	5.71
1- OPERATOR	28.34		
5- LABORERS	166.85		12.50
1- HUMAN	35.53		
COST PER HOUR	259.89	15.84	52.47
PRODUCTION			
FIGURE 30 CU. YDS. PER HOUR			
<u>SUMMARY</u>	<u>TOTAL</u>	<u>UNIT PRICE</u>	
DIRECT LABOR	240.72	8.02	
SUPPLIES	12.50	0.42	
REPAIR LABOR	19.17	0.64	
EQUIPMENT	15.84	0.53	
EQUIP. SUPPLIES.	39.97	1.33	
	928.20	10.94	

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION CONCRETE PLACEMENT

ITEM NO

SHEET 13 OF 21 PAGE

JOB VIATUNA I + III

QUANTITY

UNIT

EST BY

CHK'D BY

DATE

FORM 2

DIVISION

Notes

ITEM	DESCRIPTION	NET	+ WASTE	TOTAL	Per Rate
331.114	POWERHOUSE	43,430	969	44,299.30	1477
127	PORTAL	600	30	630.20	32
128	TUNNEL SLAB	3,775	189	3,964.20	198
129	PENSTOCK ACCESS PLUG	11,919	226	12,145.30	585
134	TUNNEL LINING	2,777	990	3,767.30	126
154	BUS TUNNEL SLAB	350	18	368.20	18
164	TRANSFORMER GALLERY	2,225	792	3,017.30	101
174	BUS SHAFT LINING	476	342	818.20	41
332.208	TUNNEL LINING	47,254	16,389	63,643.40	1591
209	TUNNEL LINING	6,168	2120	8,288.40	297
210	PORTAL CONCRETE	18,525	463	18,988.40	475
211	MASS CONCRETE	200	5	205.20	10
212	FLIP BUCKET	2,000	50	2,050.30	68
213	EMER. RELEASE CHAIN	15,300	383	15,683.30	523
215	LOWER DIV. PLUG	5,570	139	5,709.40	143
215	" " "	565	14	579.40	14
325	DENTAL	73,010	0	73,010.40	1825
336	TUNNEL SLABS	2,590	62	2,652.30	88
337	PORTAL CONCRETE	20	2	22.10	3
338	TUNNEL PLUG	585	25	610.30	18
514	TUNNEL LINING	8,096	2898	10,994.40	275
515	" " 28' 4"	1,931	675	2,606.40	65
516	" " 8' 7"	2,749	717	3,466.10	347
517	" " 28' 4"	1,748	626	2,374.30	79
5221	SPILLWAY - PIERS	42,430	1491	43,921.30	1464
5222	" - DECK	700	12	712.20	36
5223	" - GUIDE WALLS	66,770	11618	78,388.30	2613
5224	" - SLAB	29,470	59	29,529.30	984
5225	" - Ogee	267,150	4809	271,959.30	9065
5226	" - FLIP BUCKET	28,300	708	29,008.40	725
5227	" - OUTLET DISCH.	2,910	73	2,983.30	79
5228	" - GRAVITY RETAINING	1,800	25	1,825.20	51
614	POWER & OUTLET	223,910	4926	228,836.40	5721
714	TUNNEL LINING	79	45	124.10	12
716	SURGE CHAMBER	6670	167	6837.30	228
816	PENSTOCK - SHAFT	6,132	2274	8,406.30	280
817	" - HORIZ	5,541	1906	7,447.40	186

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 14 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

CK'D BY

DATE

FORM 2

OVERBREAK

HOURS

ITEM	DESCRIPTION	NEAT	WASTE	TOTAL	PAIR	RATE
725 LA	.818 PENSTOCK - HORIZ	2,465	928	3393	40	8
1230 LA	.819 " "	3,542	1,325	4867	40	122
2580 LA	.914 TAILRACE LINING	15,970	5,650	21,620	40	54
	.915 PORTAL	300	12	312	20	16
		754,516		1,018,771		30266

AVERAGE POUR RATE = 33.66 CUYDS. / HOUR

CONCRETE CURE

1. PICKUP
2. LABORERS

COST PER HOUR

LABOR	EQUIPMENT	SUPPLIES
257	097	571
6674		10.00
6931	097	1571

PER CUYD

SUMMARY

6.35
0.95
2.24
0.09
0.54
8.17

DIRECT LABOR
SUPPLIES
REPAIR LABOR
EQUIPMENT
EQUIP. SUPPLIES

COST/HOUR	HOURS	TOTAL
6674	90780	605651
10.00	"	907800
257	"	233905
097	"	88051
571	"	518353
8599		7806175

3026 DAYS - POURING
3026 " - SETUP FOR CURE
3026 " - REMOVE
9078 DAYS (IN) = 90780 HOURS.

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

SHEET 15 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

CK'D BY

DATE

FORM 2

DRILLING & SETTING ROCK BOLTS

ASSUME 6 FEET INTO ROCK
USE AIR TRAC AT 45 LF./HOUR.

50 MINUTE HOUR

45 LF./HOUR = 1.11 L.F./MINUTE (6) = 6.66 (SAY TWENTY MINUTE)
DRILL TIME PER IN.

CYCLE TIME

SET UP	1.50 MINUTES
DRILL	7.00 "
RETRACT	1.00 "
MOVE	2.00 "

11.50 MINUTES PER HOLE

50 MINUTE HOUR

11.50 MIN./HOLE = 4.35 HOLES/HOUR

SPREAD

1- AIR TRAC
1- 600 CFM COMPRESSOR
1- PICKUP
1- DRILLER
1- CHUCKTENDER
1- ROCK BOLTER

LABOR	EQUIPMENT	SUPPLIES
32.15	8.22	10.85
12.00	4.61	14.95
2.57	0.97	5.71
34.57		
33.89		
33.37		7.50

COST PER HOUR

148.55	15.80	39.01
	EACH	L.F.

SUMMARY

DIRECT LABOR

SUPPLIES

REPAIR LABOR

EQUIPMENT

EQUIP. SUPPLIES

PERM. MATERIAL

TOTAL	UNIT PRICE	UNIT PRICE
101.83	23.41	390.
7.50	1.72	0.29
46.72	10.74	1.79
15.80	3.63	1.61
31.51	7.24	1.21
	19.25	3.20
203.36	65.99	11.00.

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION CONCRETE AND AGGREGATE
PRODUCTION

ITEM NO

SHEET 16 OF 21 PAGE

JOB

QUANTITY

UNIT

EST BY

CK'D BY

DATE

FORM 2

CONCRETE

FROM PAGE 14 = 1,018,471 CU. YDS.

AGGREGATE

GRADATION OF RAW MATERIAL
UNKNOWN. PLAY IT SAFE AND
FIGURE ON PROCESSING 2 CU. YDS.
TO GET 1 CU. YD. OF SPEC. MATERIAL

1,018,471 (1.3) (2) (1.62) = 4,289,800 TONS

FIGURE PLANT CAPACITY AT
150 TONS/HOUR = 28,600 HOURS.

SPREAD

	LABOR	EQUIPMENT	SUPPLIES
1- PLANT	86.59	34.35	60.71
1- DB DOZER	42.87	25.91	33.95
1- DRAGLINE	32.15	42.77	36.34
1- 988 FEL R/L - 245.61	92.15	33.00	45.85
2- 769 END SPILLS	47.14	63.00	64.82
1- 300 AMP WELDER	2.14	0.81	6.42
1- PICKUP	2.57	0.97	5.71
1- PLANT OPERATOR	38.34		
1- PLANT OILER	36.45		
1- F.E.L. OPERATOR	40.33		
1- DOZER OPERATOR	38.34		
2- TEAMSTERS	76.38		
2- PLANT LABORERS	65.88		7.50
1- DRAGLINE-OPERATOR	40.33		
1- " OILER	36.45		
1- HAN	42.27		
COST PER HOUR	660.78	200.81	266.20
COST 28,600 HOURS.	188983.08	57431.66	74703.20

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 17 OF 21 PAGE

JOB

QUANTITY

UNIT

EST BY

CK'D BY

DATE

FORM 2

		CY CONCRETE		TON	
		TOTAL	UNIT PRICE	UNIT PRICE	
<u>SUMMARY</u>					
DIRECT LABOR	11873.52		11.65	2.77	
SUPPLIES	214500		0.21	0.05	
REPAIR LABOR	702446		6.90	1.64	
EQUIPMENT	5743166		5.64	1.34	
EQUIP. SUPPLIES	7255820		7.12	1.69	
	32111794		31.52	7.49	

DIVERSIFIED CONSTRUCTORS, INC.

SHEET 18 OF 21 PAGE

OPERATION

ITEM NO

JOB

CK'D BY

DATE

QUANTITY

UNIT

EST BY

FORM 2

PLANT ERECTION SUPPLIES (ALLOW)

ALLOW 100 HOURS TO SET UP
AND 60 HOURS TO TAKE DOWN:

160 HOURS

SPREAD

- 1- 100T CRANE
- 1- LO BOY
- 1- DB DOZER R/L: 91.72
- 2- 300 HPA WELDERS
- 1- PICKUP
- 1- CRANE OPERATOR
- 1- " OILER
- 1- TEAMSTER
- 1- DOZER OPERATOR
- 2- PLANT OPERATORS
- 2- PLANT OILERS
- 2- H.O. MECHANICS
- 2- LABORERS
- 1- 4 MAN

COST PER HOUR

COST 160 HOURS

SUMMARY

- DIRECT LABOR
- SUPPLIES
- REPAIR LABOR
- EQUIPMENT
- EQUIP. SUPPLIES

LABOR EQUIPMENT SUPPLIES

27.20	25.00	27.46
15.00	11.00	14.07
42.87	25.91	33.85
4.28	1.62	12.84
2.57	0.97	5.71
40.33		
36.65		
39.55		
38.34		
76.68		
73.30		
77.96		
65.88		10.00
42.27		

582.68 64.50 103.93

93229 10320

TOTAL UNIT PRICE UNIT PRICE

78554	0.08	0.02
200152	0.20	0.05
14475	0.01	0.01
10320	0.01	0.01
15029	0.01	0.01
318730	0.31	0.10

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO

SHEET 19 OF 21 PAGE

QUANTITY

UNIT

EST BY

JOB

CND BY

DATE

TOTAL AGGREGATE PRODUCTION

SUMMARY

DIRECT LABOR
SUPPLIES
REPAIR LABOR
EQUIPMENT
EQUIP. SUPPLIES.

TOTAL	ST. CONCRETE UNIT PRICE	TON UNIT PRICE
11952416	11.73	2.79
414652	0.41	0.10
7039121	6.91	1.65
5753486	5.65	1.35
7270319	7.13	1.70
32430524	31.83	7.59

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION CONCRETE PRODUCTION

ITEM NO.

SHEET 20 OF 21 PAGE

JOB

CK'D BY

DATE

QUANTITY

UNIT

EST BY

FORM 2

SHEET 14 - 30260 HOURS
PLANT OPERATION

AVERAGE HOURLY PRODUCTION = 33.66 C.Y.S.

SPREAD

LABOR EQUIPMENT SUPPLIES

1- PLANT
1- 966 FEL K/L - 130.68
1- 300 AMP WELDER
3- READY-MIX TRUCKS
1- PICKUP
1- PLANT OPERATOR
1- " OILER
1- " LABORER
1- FEL OPERATOR
3- TEAMSTERS
1- 500 KW GENERATOR

30.00	28.01	10.99
17.14	17.80	26.63
2.14	0.81	6.42
43.68	28.86	42.57
2.57	0.97	5.71
38.34		
36.65		
32.94		5.00
38.34		
114.57		
35.15	12.32	32.14

COST PER HOUR

891.52 88.77 128.46

COST 30260 HOURS

11841395 2486180 3917460

STANDBY TIME

1- PLANT OPERATOR
1- " OILER

38.34
36.65

COST PER HOUR

74.99

COST 7565 HOURS

567299

DIVERSIFIED CONSTRUCTORS, INC.

OPERATION

ITEM NO.

SHEET 21 OF 21 PAGE.

JOB

QUANTITY

UNIT

EST BY

CHK BY

DATE

FORM 2

CONCRETE PLANT SET-UP AND
TAKE DOWN

SUPPLIES

30000

USE SAME SPREAD AS SHEET
18 AND ALLOW 60 HOURS TO
SET-UP AND 40 HOURS TO
TAKE DOWN.

COST PER HOUR

582.68

6450

10393

COST 100 HOURS

58268

6450

10393

SUMMARY

TOTAL

DIRECT LABOR

49096

SUPPLIES

31000

REPAIR LABOR

9172

EQUIPMENT

6450

EQUIP. SUPPLIES

9393

105111

TOTAL CONCRETE PRODUCTION

SUMMARY

TOTAL

REDI-MIX

REDI-MIX

UNIT PRICE

AGGREGATE

UNIT PRICE

UNIT PRICE

DIRECT LABOR

8500241

8.35

20.00

SUPPLIES

182300

0.18

0.39

REPAIR LABOR

3963549

3.89

10.79

EQUIPMENT

2692630

2.64

8.28

EQUIP. SUPPLIES

3775553

3.71

10.83

19114273

18.77

50.29

CEMENT AT \$162.00 PER TON

SCHED.

