

Appendix B-1

Conceptual Construction Equipment Utilization

APPENDIX B-1

**Union Pacific ICTF Modernization Project
Conceptual Construction Equipment Utilization**

Equipment Type		Number used on	Number Days / Week used	Number Hours / Day	Quantity Hours	Fuel Type	Gal/ Hour	Total Gallons
Category	Description							
8AC175	Air Compressor, 175 CFM	2	5	10	3,274.02	Diesel	1.5	4,911
8BH320	Backhoe, Cat 320, 1.0 CY	10	5	10	19,942.62	Diesel	4	79,770
8BH325	Backhoe, Cat 325, 1.5 CY	2	5	10	4,226.32	Diesel	5.12	21,639
8BH416	Backhoe/loader, Cat. 416, 1CY	1	5	10	352.65	Diesel	2.08	734
8CASH1	Hyd. Shear for Backhoe	1	5	10	106.52	Diesel	2.14	228
8CCR12	Hyd. Boom, Trk Mtd. 12T	1	5	10	87.45	Diesel	2.76	241
8CCR45	RT Crane, 45T	1	5	10	955.15	Diesel	4.00	3,821
8CRUSH	Crush Concrete	1	5	10	825.00	Diesel	6.40	5,280
8DZ05	Cat D5 Dozer	1	5	10	336.87	Diesel	4.00	1,347
8DZ06	Cat D6 Dozer	1	5	10	1,596.73	Diesel	5.50	8,782
8DZ07	Cat D7 Dozer	2	5	10	3,624.00	Diesel	7.47	27,071
8DZ08N	Cat D8N Dozer	1	5	10	1,104.89	Diesel	8.75	9,668
8DZJD	John Deere 9400	1	5	10	1,287.54	Diesel	8.00	10,300
8LR936	Cat 936 Loader	10	5	10	19,699.22	Diesel	3.50	68,947
8LR966	Cat 966 Loader	1	5	10	825.00	Diesel	6.75	5,569
8LR980	Cat 980 Loader	2	5	10	2,932.84	Diesel	8.75	25,662
8LR988	Cat 988 Loader	1	5	10	58.29	Diesel	11.25	656
8MG14	Cat 14H Grader	2	5	10	3,015.46	Diesel	6.65	20,053
8MITMK	Telescopic Man Lift, 40 ft	1	5	10	126.00	Diesel	1.04	131
8PAVEAC	AC Paver	1	5	10	435.00	Diesel	5.34	2,323
8PAVEC	Concrete Paving Spread	1	5	10	975.00	Diesel	8.54	8,327
8RC563P	Cat 563 Padfoot Roller	1	5	10	706.19	Diesel	3.75	2,648
8RC563S	Cat 563 Smooth Roller	2	5	10	2,620.49	Diesel	3.75	9,827
8RC815	Cat 815 Roller	1	5	10	1,016.35	Diesel	10.25	10,418
8RCRMX	Ramex Roller	9	5	10	16,673.30	Diesel	0.45	7,503
8RCTMP	Hand Tamp	9	5	10	16,673.30	Gas	0.42	7,003
8RRADZER	Adzer Riding	1	5	10	281.21	Diesel	12.81	3,602
8RRCLIP	Clip Machine	1	5	10	421.19	Diesel	4.27	1,798
8RRHEAT	Rail Heater	1	5	10	281.21	Diesel	2.56	720

Equipment Type		Number used on	Number Days / Week used	Number Hours / Day	Quantity Hours	Fuel Type	Gal/ Hour	Total Gallons
Category	Description							
8RRREG	Regulator	1	5	10	1,318.70	Diesel	12.00	15,824
8RRSTAB	Ballast Stabilizer	1	5	10	211.37	Diesel	21.35	4,513
8RRSWING	Speed Swing	1	5	10	281.21	Diesel	5.34	1,502
8RRTLM	Track Laying Machine	1	5	10	281.21	Diesel	28.45	8,000
8RRTMP	Tamper Small	1	5	10	1,177.16	Diesel	6.03	7,098
8RRTMPL	Tamper Large	1	5	10	422.75	Diesel	16.00	6,764
8RRVIB	Vibratrac	1	5	10	351.20	Diesel	4.27	1,500
8RRWELD	Hi-Rail Welder	1	5	10	214.32	Diesel	6.00	1,286
8SC615	Cat 615 Elevating Scraper	1	5	10	862.14	Diesel	8.54	7,363
8SC621	Cat 621 Scraper, 21 CY	2	5	10	3,314.68	Diesel	5.76	19,093
8TK12Y	Dump Truck, 6x4, 12 CY	6	5	10	10,410.02	Diesel	5.34	55,590
8TK35T	35 Ton Art Dump	6	5	10	9,019.68	Diesel	6.25	56,373
8TK600	Truck, Flat Bed 14'	2	5	10	4,010.00	Diesel	2.64	10,586
8TKFUL	Fuel Truck, 2000 Gal	2	5	10	2,600.00	Diesel	1.80	4,680
8TKLUB	Lube Truck	2	5	10	2,600.00	Diesel	1.80	4,680
8TKMCH	Mechanics Truck, 1 Ton	2	5	10	3,316.21	Diesel	1.80	5,969
8TKPU4	Pickup 4 x 4	12	5	10	35,050.25	Diesel	1.80	63,090
8TKSUV	SUV	12	5	10	41,888.00	Diesel	1.50	62,832
8TKW05	Water Truck, 4000 Gal	2	5	10	2,717.21	Diesel	3.75	10,190
8TKW10	Water Truck, 8000 Gal Off Rd	1	5	10	1,016.35	Diesel	9.98	10,143

Appendix B-1A

Construction Equipment – Fuel Use

**Union Pacific Railroad
Application for Project Approval
Intermodal Container Transfer Facility (ICTF)
Modernization Project**

APPENDIX B-1A: Construction Equipment Fuel Usage Calculations

During project construction, additional short term air impacts may be created by the heavy machinery needed for grading, filling, excavation, and paving of the proposed improvements. Air impacts could include automobile and heavy equipment emissions.

The heavy equipment emissions were estimated using the HCSS™ heavy construction estimating software called HeavyBid®. HeavyBid is powerful construction estimating software for infrastructure contractors bidding projects ranging from \$50,000 to over \$1 billion.

HDR used R.S. Means Heavy Construction Cost Data and previous experience to establish crew requirements, equipment requirements, utility requirements and production rates for each item of construction. Also, input to the software is number of days per week and number of hours per day used. For each work activity crews including equipment were built to perform each construction activity. For each piece of equipment, for each work activity a productivity factor was input. The estimated quantities from the ICTF Modernization Feasibility Study estimate of probable construction cost for each work activity along with the project schedule was input into the software.

The software calculates the fuel cost for each piece of equipment at \$2.50 per gallon. The number of gallons used was calculated by dividing the total fuel cost by the cost per gallon. Also, calculated by the software by equipment type is the number of each and gallons of fuel per hour consumed.

Appendix B-2

Equipment Use – By Equipment

EQUIPMENT USE BY EQUIPMENT

Biditem/ Category	Activity/ Resource	Description	Quantity	Unit	Pcs	Rnt %	Opr %	Inside Equipment	Outside Equipment	Fuel	Lube	Parts	GEC	Repair	Other	Total	Mech Hrs
8AC175 *** 8AC175		Air compressor, 175 CFM Air compressor, 175 CFM	3,274.02					6,512		12,278	982	1,637	295	2,619		24,323	65.48
8ADJ *** 8ADJ		Equipment Adjustment Equipment Adjustment															
8BH320 *** 8BH320		Backhoe, Cat 320 1.0 CY Backhoe, Cat 320 1.0 CY	19,942.62					736,521		199,426	9,971	131,023	44,871	79,770		1,201,583	1,994.26
8BH325 *** 8BH325		Backhoe, Cat325L, 1.5 CY Backhoe, Cat325L, 1.5 CY	4,226.52					180,109		54,099	2,790	27,472	12,933	18,597		296,000	464.92
8BH416 *** 8BH416		Backhoe/loader, Cat 416, 1CY Backhoe/loader, Cat 416, 1CY	352.65						4,321	1,835	56	1,129	169	226		7,737	5.29
8CASH1 *** 8CASH1		Hyd. Shear for Backhoe Hyd. Shear for Backhoe	106.52						6,461	569	28	5,686		453		13,198	10.65
8CCR12 *** 8CCR12		Hyd.Boom,Trk Mtd, 12T Hyd.Boom,Trk Mtd, 12T	87.45					1,739		603	39	525	52	126		3,085	3.15
8CCR45 *** 8CCR45		R.T. Crane, 45 ton R.T. Crane, 45 ton	955.15					33,918		9,552	1,672	11,462	1,433	2,827		60,863	70.68
8CRUSH *** 8CRUSH		Crush Concrete Crush Concrete	825.00						61,648	13,210	2,202	17,614		3,523		98,197	82.50
8DZ05 *** 8DZ05		Cat D5 Dozer Cat D5 Dozer	336.87					9,570		3,369	74	1,853	1,516	957		17,338	23.92
8DZ06 *** 8DZ06		Caterpillar D6 Caterpillar D6	1,596.73					58,970		21,955	1,325	9,580	8,910	4,790		105,531	119.75
8DZ07 *** 8DZ07		Caterpillar D 7H Dozer Caterpillar D 7H Dozer	3,624.00						197,826	67,701	3,327	30,949	27,854	11,606		339,262	271.80
8DZ08N *** 8DZ08N		Caterpillar D 8R Dozer Caterpillar D 8R Dozer	1,104.89					91,656		24,169	950	12,982	9,392	4,994		144,144	124.85
8DZJD *** 8DZJD		John Deere 9400 John Deere 9400	1,287.54					65,840		25,751	1,738	12,232	1,288	3,863		110,710	96.57
8DZRDR *** 8DZRDR		Aerating Disk,Towed Aerating Disk,Towed	1,287.54					14,632			32	1,288	1,931	1,030		18,913	25.75
8LR936 *** 8LR936		Cat 936 Loader,IT28 or WA250 Cat 936 Loader,IT28 or WA250	19,699.22					335,773		172,368	9,062	147,744	21,748	29,155		715,850	728.87
8LR966 *** 8LR966		Caterpillar 966 Loader Caterpillar 966 Loader	825.00					39,843		13,922	718	5,775	2,569	1,221		64,048	30.53
8LR980 *** 8LR980		Caterpillar 980 Loader Caterpillar 980 Loader	2,932.84					133,312		64,156	2,786	26,396	14,664	10,089		251,403	252.22
8LR988 *** 8LR988		Caterpillar 988 Loader Caterpillar 988 Loader	58.29					3,312		1,639	91	816	433	201		6,491	5.01
8MECR1 *** 8MECR1		Boat, Skiff, 16', twin 40 hp Boat, Skiff, 16', twin 40 hp															
8MECR2 *** 8MECR2		Boat, crew, 26', twin 80 hp Boat, crew, 26', twin 80 hp															
8MEPB1 *** 8MEPB1		Tug, 700 hp, 50' twin screw Tug, 700 hp, 50' twin screw															
8MG14 *** 8MG14		Caterpillar 14 H Grader Caterpillar 14 H Grader	3,015.46					111,367		50,132	2,262	19,601	10,554	5,066		198,981	126.65

EQUIPMENT USE BY EQUIPMENT

Biditem/ Category	Activity/ Resource	Description	Quantity	Unit	Pcs	Rnt %	Opr %	Inside Equipment	Outside Equipment	Fuel	Lube	Parts	GEC	Repair	Other	Total	Mech Hrs
8MITMK		Telescopic Man Lift, 40 FT															
*** 8MITMK		Telescopic Man Lift, 40 FT	126.00					1,074		328	63	630	81	267		2,443	6.68
8PAVEAC		AC PAVER															
*** 8PAVEAC		AC PAVER	435.00						27,862	5,805	1,161	5,572	1,393	1,857		43,650	43.50
8PAVEC		CONCRETE PAVE SPREAD															
*** 8PAVEC		CONCRETE PAVE SPREAD	975.00						260,203	20,816	2,602	20,816	3,122	4,163		311,723	97.50
8RC563P		Cat 563 Padfoot Roller															
*** 8RC563P		Cat 563 Padfoot Roller	706.19					16,853		6,621	1,204	3,376	424	2,994		31,471	74.86
8RC563S		Cat 563 Smooth Roller															
*** 8RC563S		Cat 563 Smooth Roller	2,620.49					62,535		24,567	2,516	12,326	1,572	13,941		117,657	348.53
8RC815		Caterpillar 815 Roller															
*** 8RC815		Caterpillar 815 Roller	1,016.35							26,044	762	6,098	360	5,732		38,996	143.31
8RCRMX		Ramex Roller															
*** 8RCRMX		Ramex Roller	16,673.30					94,254		18,757	3,501	9,004		9,337		134,854	233.43
8RCTMP		Hand tamp,vibro plate/wacker															
*** 8RCTMP		Hand tamp,vibro plate/wacker	16,673.30					23,676		17,357	1,000	2,001		2,668		46,702	66.69
8RRADZER		Adzer Riding															
*** 8RRADZER		Adzer Riding	281.21						15,010			18,012				33,021	
8RRCLIP		Clip Machine															
*** 8RRCLIP		Clip Machine	421.19						11,241			8,992				20,233	
8RRHEAT		Rail Heater															
*** 8RRHEAT		Rail Heater	281.21						12,008			3,602				15,610	
8RRREG		Regulator															
*** 8RRREG		Regulator	1,318.70					59,342				79,122				138,464	
8RRSTAB		Ballast Stabilizer															
*** 8RRSTAB		Ballast Stabilizer	211.37						40,615			22,564				63,178	
8RRSWING		Speed Swing															
*** 8RRSWING		Speed Swing	281.21						7,505			7,505				15,010	
8RRTLM		Track Lay Machine															
*** 8RRTLM		Track Lay Machine	281.21						120,077			60,038				180,115	
8RRTMP		Tamper Small															
*** 8RRTMP		Tamper Small	1,177.16					47,086				35,315				82,401	
8RRTMPL		Tamper Large															
*** 8RRTMPL		Tamper Large	422.75					42,275				33,820				76,095	
8RRVIB		Vibratrac															
*** 8RRVIB		Vibratrac	351.20						5,624			7,498				13,122	
8RRWELD		HI-Rail Welder															
*** 8RRWELD		HI-Rail Welder	214.32					4,715				6,430				11,145	
8SC615		Cat 615 Elevating Scraper															
*** 8SC615		Cat 615 Elevating Scraper	862.14						47,062	18,407	2,301	11,044	3,681	7,363		89,858	172.43
8SC621		Cat 621 Scraper, 21 CY															
*** 8SC621		Cat 621 Scraper, 21 CY	3,314.68						325,694		8,846	47,769	17,692	14,154		414,154	331.47
8TK12Y		Dump Truck, 6 x 4, 12 CY															
*** 8TK12Y		Dump Truck, 6 x 4, 12 CY	10,410.02						176,792	138,909	11,113	22,225	11,113	17,780		377,932	416.40
8TK35T		35 Ton Art Dump															
*** 8TK35T		35 Ton Art Dump	9,019.68						574,427	140,817	13,865	122,763	45,986	43,136		940,994	1,010.20

EQUIPMENT USE BY EQUIPMENT

Biditem/ Category	Activity/ Resource	Description	Quantity	Unit	Pcs	Rnt %	Opr %	Inside Equipment	Outside Equipment	Fuel	Lube	Parts	GEC	Repair	Other	Total	Mech Hrs
8TK600 *** 8TK600		Truck, Flatbed/Dump 14'	4,010.00						26,754	26,455	3,853	3,425	2,996	3,425		66,907	80.20
8TKFUL *** 8TKFUL		Fuel Truck,2000 Gal	2,600.00					22,160		11,700	2,340	2,080	1,820	2,080		42,180	52.00
8TKLUB *** 8TKLUB		Lube Truck	2,600.00					22,248		11,700	2,340	2,080	1,820	2,080		42,268	52.00
8TKMCH *** 8TKMCH		Mechanics Truck, 1Ton	3,316.21					25,435		14,923	2,985	2,653	2,321	2,653		50,970	66.32
8TKPU4 *** 8TKPU4		Pickup 4x4	35,050.25					149,349		157,726	17,525	24,535	7,010	14,020		370,166	350.50
8TKSUV *** 8TKSUV		SUV	41,888.00					202,319		157,080	10,472	37,699	9,215	16,755		433,541	418.88
8TKSVY *** 8TKSVY		Pickup trk w/Camper(survey)															
8TKW05 *** 8TKW05		Water Truck,4000 Gal	2,717.21					37,671		25,482	2,772	3,179	1,598	5,108		75,810	127.71
8TKW10 *** 8TKW10		Water Truck 8000Gal off road	1,016.35						40,070	24,965	4,703	7,330	9,537	9,851		96,456	230.71
8TLFLT *** 8TLFLT		Trailer, 40' flat/van	2,600.00					1,477			221	640	1,685	832		4,854	20.80
8TTRAC *** 8TTRAC		Truck, Tractor															
REPORT TOTALS								2,633,545	1,961,197	1,585,192	136,250	1,096,105	284,038	361,311		8,059,637	8,846.97

*** indicates non-additive item

Appendix B-3

Equipment Use – By Bid Item

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 1									
Description =	PAVEMENT REMOVAL			Unit =	SCHEDULE: 1 100 SY Takeoff Quan: 360,000.000			Engr Quan: 360,000.000	
1000	REMOVE AND PILE FOR CRUSH			Quan: 360,000.00 SY	Hrs/Shft: 10.00	Cal: 50	WC: 3		
<u>AABLNK</u>	SET-UP CREW		3,600.00	CH	Prod: 100.0000 UH	Lab Pcs: 7.00		Eq Pcs: 5.00	
8BH325	Backhoe, Cat325L,1.5 C	1.00	3,600.00	HR	70.034	153,410	98,712	252,122	
8DZ07	Caterpillar D 7H Dozer	1.00	3,600.00	HR	87.696		196,516	140,500	337,016
8TK35T	35 Ton Art Dump	2.00	7,200.00	HR	97.730		458,539	292,614	751,153
8TKPU4	Pickup 4x4	1.00	3,600.00	HR	10.561	15,340		22,680	38,020
\$1,378,310.51					[]	168,750	655,055	554,506	1,378,311
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Item Totals: 1 - PAVEMENT REMOVAL					[]	168,750	655,055	554,506	1,378,311
\$1,378,310.51									
3.829		360000 SY				0.47	1.82	1.54	3.83
<hr/>									
BID/CAT# = 2									
Description =	CONCRETEAND ASPHALT CRUSH			Unit =	SCHEDULE: 1 100 CY Takeoff Quan: 82,500.000			Engr Quan: 82,500.000	
1000	CRUSH			Quan: 82,500.00 CY	Hrs/Shft: 10.00	Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		825.00	CH	Prod: 100.0000 UH	Lab Pcs: 5.00		Eq Pcs: 4.00	
8CRUSH	Crush Concrete	1.00	825.00	HR	111.500		61,648	36,549	98,197
8LR966	Caterpillar 966 Loader	1.00	825.00	HR	77.634	39,843		24,205	64,048
8LR980	Caterpillar 980 Loader	1.00	825.00	HR	85.720	37,500		33,219	70,719
8TKPU4	Pickup 4x4	1.00	825.00	HR	10.561	3,515		5,198	8,713
\$241,676.56					[]	80,859	61,648	99,169	241,677
<hr/>									
Item Totals: 2 - CONCRETEAND ASPHALT CRUSH					[]	80,859	61,648	99,169	241,677
\$241,676.56									
2.929		82500 CY				0.98	0.75	1.20	2.93
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BID/CAT# = 3									
Description =	PIPE REMOVE			Unit =	SCHEDULE: 1 100 LF Takeoff Quan: 4,600.000			Engr Quan: 4,600.000	
1000	PIPE REMOVE			Quan: 4,600.00 LF	Hrs/Shft: 10.00	Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		46.00	CH	Prod: 100.0000 UH	Lab Pcs: 6.00		Eq Pcs: 3.00	
8BH325	Backhoe, Cat325L,1.5 C	1.00	46.00	HR	70.034	1,960		1,261	3,222
8LR936	Cat 936 Loader,IT28 or	1.00	46.00	HR	36.339	784		888	1,672
8TKPU4	Pickup 4x4	1.00	46.00	HR	10.561	196		290	486
\$5,378.96					[]	2,940		2,439	5,379
<hr/>									
Item Totals: 3 - PIPE REMOVE					[]	2,940		2,439	5,379
\$5,378.96									
1.169		4600 LF				0.64		0.53	1.17
<hr/>									
BID/CAT# = 4									
Description =	LIGHT REMOVAL			Unit =	SCHEDULE: 1 100 EA Takeoff Quan: 63.000			Engr Quan: 63.000	
1000	LIGHT REMOVAL			Quan: 63.00 EA	Hrs/Shft: 10.00	Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		126.00	CH	Prod: 5.0000 US	Lab Pcs: 5.00		Eq Pcs: 2.00	
8CCR45	R.T. Crane, 45 ton	1.00	126.00	HR	63.721	4,474		3,554	8,029
8MITMK	Telescopic Man Lift, 4	1.00	126.00	HR	19.386	1,074		1,369	2,443
\$10,471.49					[]	5,548		4,923	10,471
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Item Totals: 4 - LIGHT REMOVAL					[]	5,548		4,923	10,471
\$10,471.49									
166.214		63 EA				88.07		78.15	166.21

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 9										
Description =	TRACK DRAIN REMOVE			Land Item Unit =	SCHEDULE: LF	1	100			
					Takeoff Quan:			8,000.000	Engr Quan:	8,000.000
\$9,354.72					[]	5,114		4,241		9,355
1.169		8000 LF				0.64		0.53		1.17
BID/CAT# = 10										
Description =	REMOVE 18" DRAINS			Land Item Unit =	SCHEDULE: LF	1	100			
					Takeoff Quan:			5,000.000	Engr Quan:	5,000.000
1000	PIPE REMOVE				Quan:	5,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		50.00	CH	Prod:	100.0000 UH		Lab Pcs:	6.00	Eqp Pcs: 3.00
8BH325	Backhoe, Cat325L,1.5 C	1.00	50.00	HR	70.034	2,131		1,371		3,502
8LR936	Cat 936 Loader,IT28 or	1.00	50.00	HR	36.339	852		965		1,817
8TKPU4	Pickup 4x4	1.00	50.00	HR	10.561	213		315		528
\$5,846.70					[]	3,196		2,651		5,847
						0.64		0.53		1.17
Item Totals:	10									
\$5,846.70					[]	3,196		2,651		5,847
1.169		5000 LF				0.64		0.53		1.17
BID/CAT# = 11										
Description =	EXCAVATION			Land Item Unit =	SCHEDULE: BCY	1	100			
					Takeoff Quan:			360,000.000	Engr Quan:	360,000.000
1000	EXCAVATE AND STOCKPILE TOPSOIL				Quan:	45,003.64 BCY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		250.03	CH	Prod:	1,799.9296 US		Lab Pcs:	5.00	Eqp Pcs: 4.00
8DZ06	Caterpillar D6	1.00	250.03	HR	66.092	9,234		7,291		16,525
8SC615	Cat 615 Elevating Scra	2.00	500.06	HR	97.636		27,297	24,822		52,119
8TKPU4	Pickup 4x4	1.00	250.03	HR	10.561	1,065		1,575		2,641
\$71,285.04					[]	10,299	27,297	33,688		71,285
1100	SG PREP				Quan:	270,000.00 SY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		269.99	CH	Prod:	0.0040 MU		Lab Pcs:	4.00	Eqp Pcs: 4.00
8DZJD	John Deere 9400	1.00	269.99	HR	85.986	13,806		9,409		23,215
8DZRDR	Aerating Disk,Towed	1.00	269.99	HR	14.689	3,068		898		3,966
8RCS63P	Cat 563 Padfoot Roller	1.00	269.99	HR	44.564	6,443		5,589		12,032
8TKPU4	Pickup 4x4	1.00	269.99	HR	10.561	1,150		1,701		2,851
\$42,064.47					[]	24,468		17,597		42,064
1200	EXCAVATE TO EMBANKMENT				Quan:	396,002.91 CY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		1,100.00	CH	Prod:	3,600.0265 US		Lab Pcs:	6.00	Eqp Pcs: 5.00
8DZ08N	Caterpillar 8 R Dozer	1.00	1,100.00	HR	130.460	91,251		52,256		143,506
8SC621	Cat 621 Scraper, 21 CY	3.00	3,300.01	HR	117.045		324,253	88,069		412,322
8TKPU4	Pickup 4x4	1.00	1,100.00	HR	10.561	4,687		6,930		11,617
\$567,444.62					[]	95,938	324,253	147,255		567,445
1210	COMPACT EMBANKMENT				Quan:	360,000.00 FCY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		1,011.85	CH	Prod:	3,557.8396 US		Lab Pcs:	4.00	Eqp Pcs: 5.00
8DZ06	Caterpillar D6	1.00	1,011.85	HR	66.092	37,370		29,506		66,875
8DZJD	John Deere 9400	1.00	1,011.85	HR	85.986	51,742		35,263		87,005
8DZRDR	Aerating Disk,Towed	1.00	1,011.85	HR	14.689	11,499		3,364		14,863
8RC815	Caterpillar 815 Roller	1.00	1,011.85	HR	38.369			38,824		38,824
8TKW10	Water Truck 8000Gal of	1.00	1,011.85	HR	88.903		39,892	56,136		96,029
\$303,595.44					[]	100,610	39,892	163,093		303,595
1300	FINE GRADE SUB GRADE				Quan:	270,000.00 SY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		296.93	CH	Prod:	9,093.0522 US		Lab Pcs:	5.00	Eqp Pcs: 4.00
8DZ05	Cat D5 Dozer	0.50	148.48	HR	51.469	4,218		3,424		7,642
8MG14	Caterpillar 14 H Grade	1.00	296.93	HR	65.987	10,966		8,627		19,594
8RCS63S	Cat 563 Smooth Roller	1.00	296.93	HR	44.899	7,086		6,246		13,332
8SC615	Cat 615 Elevating Scra	0.50	148.48	HR	97.636		8,105	7,370		15,476

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 11									
Description =	EXCAVATION			Land Item Unit =	SCHEDULE: BCY	1 100 Takeoff Quan:	360,000.000	Engr Quan:	360,000.000
8TKPU4	Pickup 4x4	1.00	296.93 HR	10.561	1,265		1,871		3,136
\$59,178.96				[]	23,536	8,105	27,538		59,179
1400	FINISH DITCH AND SLOPES			Quan:	109,232.14 SY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		62.30 CH	Prod:	17,533.2488 US		Lab Pcs:	4.00	Eqp Pcs: 4.00
8DZ05	Cat D5 Dozer	3.00	186.90 HR	51.469	5,310		4,310		9,620
8TKPU4	Pickup 4x4	1.00	62.30 HR	10.561	265		392		658
\$10,277.51				[]	5,575		4,702		10,278
Item Totals: 11 - EXCAVATION									
\$1,053,846.04				[]	260,426	399,547	393,873		1,053,846
2.927	360000 BCY				0.72	1.11	1.09		2.93

BID/CAT# = 12									
Description =	RECYCLED CONCRETE			Land Item Unit =	SCHEDULE: CY	1 100 Takeoff Quan:	88,000.000	Engr Quan:	88,000.000
1000	LOAD AND HAUL			Quan:	88,000.00 CY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		880.00 CH	Prod:	100,0000 UH		Lab Pcs:	4.00	Eqp Pcs: 3.00
8LR980	Caterpillar 980 Loader	1.00	880.00 HR	85.720	40,000		35,433		75,434
8TK35T	35 Ton Art Dump	1.00	880.00 HR	97.730		56,044	35,764		91,808
8TKPU4	Pickup 4x4	1.00	880.00 HR	10.561	3,750		5,544		9,294
\$176,534.84				[]	43,750	56,044	76,741		176,535
1100	Place Subballast			Quan:	88,000.00 TON	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		440.00 CH	Prod:	2,000.0000 US		Lab Pcs:	5.00	Eqp Pcs: 4.00
8MG14	Caterpillar 14 H Grade	1.00	440.00 HR	65.987	16,250		12,784		29,034
8RC563S	Cat 563 Smooth Roller	1.00	440.00 HR	44.899	10,500		9,255		19,756
8TKPU4	Pickup 4x4	1.00	440.00 HR	10.561	1,875		2,772		4,647
8TKW05	Water Truck,4000 Gal	1.00	440.00 HR	27.900	6,100		6,176		12,276
\$65,712.68				[]	34,725		30,987		65,713
1110	FINISH TOP OF SUBBALLAST			Quan:	277,895.90 SY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		308.75 CH	Prod:	9,000.6769 US		Lab Pcs:	4.50	Eqp Pcs: 4.50
8MG14	Caterpillar 14 H Grade	1.00	308.75 HR	65.987	11,403		8,971		20,374
8RC563S	Cat 563 Smooth Roller	1.00	308.75 HR	44.899	7,368		6,495		13,863
8SC615	Cat 615 Elevating Sera	0.50	154.40 HR	97.636		8,428	7,664		16,093
8TKPU4	Pickup 4x4	1.00	308.75 HR	10.561	1,316		1,945		3,261
8TKW05	Water Truck,4000 Gal	1.00	308.75 HR	27.900	4,281		4,334		8,614
\$62,203.50				[]	24,367	8,428	29,408		62,204
Item Totals: 12 - RECYCLED CONCRETE									
\$304,451.02				[]	102,842	64,472	137,137		304,451
3.460	88000 CY				1.17	0.73	1.56		3.46

BID/CAT# = 13									
Description =	CONCRETE PAVEMENT			Land Item Unit =	SCHEDULE: CY	1 100 Takeoff Quan:	78,000.000	Engr Quan:	78,000.000
1000	PAVE			Quan:	78,000.00 CY	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		975.00 CH	Prod:	800,0000 US		Lab Pcs:	28.00	Eqp Pcs: 17.00
8LR936	Cat 936 Loader,IT28 or	1.00	975.00 HR	36.339	16,619		18,812		35,431
8MG14	Caterpillar 14 H Grade	1.00	975.00 HR	65.987	36,009		28,329		64,337
8PAVEC	CONCRETE PAVE SPREAD	1.00	975.00 HR	299.500		260,203	51,520		311,723
8RC563S	Cat 563 Smooth Roller	1.00	975.00 HR	44.899	23,267		20,509		43,777
8TK12Y	Dump Truck, 6 x 4,12 C	8.00	7,800.00 HR	34.009		132,466	150,710		283,176
8TK600	Truck, Flatbed/Dump 14	1.00	975.00 HR	15.630		6,505	9,763		16,268
8TKPU4	Pickup 4x4	3.00	2,925.00 HR	10.561	12,463		18,428		30,891
8TKW05	Water Truck,4000 Gal	1.00	975.00 HR	27.900	13,517		13,685		27,203

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 13									
Description =	CONCRETE PAVEMENT		Land Item Unit =	SCHEDULE: CY	1	100			
\$812,805.01				[]	Takeoff Quan: 101,876	78,000.000	399,175	311,755	Engr Quan: 78,000.000 812,805
1010	CONCRETE AT PLANT			Quan: 78,000.00	CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
====>	Item Totals: 13 - CONCRETE PAVEMENT								
\$812,805.01				[]	101,876	399,175	311,755		812,805
10.421	78000 CY				1.31	5.12	4.00		10.42

BID/CAT#	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 14									
Description =	AC PAVEMENT		Land Item Unit =	SCHEDULE: TON	1	100			
1000	AC PAVEMENT			Quan: 25,000.00	TON	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		416.67 CH	Prod: 600.0000	US	Lab Pcs: 22.00	Eqp Pcs: 16.00		
8LR936	Cat 936 Loader,IT28 or	1.00	416.67 HR	36.339	7,102	8,039			15,141
8MG14	Caterpillar 14 H Grade	1.00	416.67 HR	65.987	15,388	12,106			27,495
8PAVEAC	AC PAVER	1.00	416.67 HR	94.000		26,688	15,123		41,811
8RCS63P	Cat 563 Padfoot Roller	1.00	416.67 HR	44.564	9,943	8,625			18,568
8TK12Y	Dump Truck, 6 x 4,12 C	6.00	2,500.02 HR	34.009		42,457	48,305		90,762
8TK600	Truck, Flatbed/Dump 14	1.00	416.67 HR	15.630		2,780	4,172		6,952
8TKMCH	Mechanics Truck, 1Ton	1.00	416.67 HR	15.370	3,196	3,208			6,404
8TKPU4	Pickup 4x4	3.00	1,250.01 HR	10.561	5,326	7,875			13,201
8TKW05	Water Truck,4000 Gal	1.00	416.67 HR	27.900	5,777	5,848			11,625
\$231,960.47				[]	46,733	71,925	113,302		231,960
1010	AC AT PLANT			Quan: 25,000.00	TON	Hrs/Shft: 10.00	Cal: 60	WC: 3	
====>	Item Totals: 14 - AC PAVEMENT								
\$231,960.47				[]	46,733	71,925	113,302		231,960
9.278	25000 TON				1.87	2.88	4.53		9.28

BID/CAT#	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 15									
Description =	TRENCH DRAIN		Land Item Unit =	SCHEDULE: LF	1	100			
1000	TRENCH DRAIN			Quan: 24,000.00	LF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		2,400.00 CH	Prod: 100.0000	US	Lab Pcs: 11.00	Eqp Pcs: 5.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	2,400.00 HR	60.252	88,637	55,968			144,605
8LR936	Cat 936 Loader,IT28 or	1.00	2,400.00 HR	36.339	40,908	46,306			87,214
8RCRMX	Ramex Roller	1.00	2,400.00 HR	8.088	13,567	5,844			19,411
8RCTMP	Hand tamp,vibro plate/	1.00	2,400.00 HR	2.801	3,408	3,314			6,722
8TKPU4	Pickup 4x4	1.00	2,400.00 HR	10.561	10,226	15,120			25,346
\$283,298.40				[]	156,746	126,552			283,298
====>	Item Totals: 15 - TRENCH DRAIN								
\$283,298.40				[]	156,746	126,552			283,298
11.804	24000 LF				6.53	5.27			11.80

BID/CAT#	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 16									
Description =	TRACK DRAIN		Land Item Unit =	SCHEDULE: LF	1	100			
1000	ELB PIPE			Quan: 50,000.00	LF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		1,000.00 CH	Prod: 50.0000	UH	Lab Pcs: 8.00	Eqp Pcs: 5.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	1,000.00 HR	60.252	36,932	23,320			60,252
8LR936	Cat 936 Loader,IT28 or	1.00	1,000.00 HR	36.339	17,045	19,294			36,339
8RCRMX	Ramex Roller	1.00	1,000.00 HR	8.088	5,653	2,435			8,088
8RCTMP	Hand tamp,vibro plate/	1.00	1,000.00 HR	2.801	1,420	1,381			2,801
8TKPU4	Pickup 4x4	1.00	1,000.00 HR	10.561	4,261	6,300			10,561
\$118,041.00				[]	65,311	52,730			118,041

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 16									
Description =	TRACK DRAIN			Land Item Unit =	SCHEDULE: LF	1 100			50,000.000
					Takeoff Quan:			Engr Quan:	50,000.000
====> Item Totals:	16		- TRACK DRAIN						
\$118,041.00				[]	65,311		52,730		118,041
2.361		50000 LF			1.31		1.05		2.36

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 17									
Description =	LATERALS			Land Item Unit =	SCHEDULE: LF	1 100			5,000.000
					Takeoff Quan:			Engr Quan:	5,000.000
1000	ELB PIPE			Quan:	5,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNX</u>	SET-UP CREW		333.33	CH	Prod: 150.0015 US		Lab Pcs: 8.00	Eq Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	333.33 HR		60.252	12,311	7,773		20,084
8LR936	Cat 936 Loader,IT28 or	1.00	333.33 HR		36.339	5,682	6,431		12,113
8RCRNX	Ramex Roller	1.00	333.33 HR		8.088	1,884	812		2,696
8RCTMP	Hand tamp,vibro plate/	1.00	333.33 HR		2.801	473	460		934
8TKPU4	Pickup 4x4	1.00	333.33 HR		10.561	1,420	2,100		3,520
\$39,346.63				[]	21,770		17,577		39,347
====> Item Totals:	17		- LATERALS						
\$39,346.63				[]	21,770		17,577		39,347
7.869		5000 LF			4.35		3.52		7.87

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 18									
Description =	MANHOLE AND INLET			Land Item Unit =	SCHEDULE: EA	1 100			70.000
					Takeoff Quan:			Engr Quan:	70.000
1000	ELB MH			Quan:	70.00 EA	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNX</u>	SET-UP CREW		280.00	CH	Prod: 2.5000 US		Lab Pcs: 8.00	Eq Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	280.00 HR		60.252	10,341	6,530		16,871
8LR936	Cat 936 Loader,IT28 or	1.00	280.00 HR		36.339	4,773	5,402		10,175
8RCRNX	Ramex Roller	1.00	280.00 HR		8.088	1,583	682		2,265
8RCTMP	Hand tamp,vibro plate/	1.00	280.00 HR		2.801	398	387		784
8TKPU4	Pickup 4x4	1.00	280.00 HR		10.561	1,193	1,764		2,957
\$33,051.48				[]	18,287		14,764		33,051
====> Item Totals:	18		- MANHOLE AND INLET						
\$33,051.48				[]	18,287		14,764		33,051
472.164		70 EA			261.24		210.92		472.16

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 19									
Description =	CONSTRUCT 136# RR track			Land Item Unit =	SCHEDULE: TF	1 100			50,200.000
					Takeoff Quan:			Engr Quan:	50,200.000
2000	BUY TRACK MATERIALS			Quan:	50,200.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
2100	UNLOAD RAIL TRAIN			Quan:	100,400.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNX</u>	SET-UP CREW		18.71	CH	Prod: 53,661.1438 US		Lab Pcs: 10.00	Eq Pcs: 3.00	
8CCR45	R.T. Crane, 45 ton	1.00	18.71 HR		63.721	664	528		1,192
8LR988	Caterpillar 988 Loader	2.00	37.42 HR		111.365	2,126	2,041		4,167
\$5,359.50				[]	2,791		2,569		5,360
2200	UNLOAD AND DISTRIBUTE OTM			Quan:	50,200.00 TF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNX</u>	SET-UP CREW		56.14	CH	Prod: 5.6140 S		Lab Pcs: 3.50	Eq Pcs: 2.00	
8CCR12	Hyd.Boom,Trk Mtd, 12T	1.00	56.14 HR		35.276	1,116	864		1,980
8LR936	Cat 936 Loader,IT28 or	1.00	56.14 HR		36.339	957	1,083		2,040
\$4,020.47				[]	2,073		1,947		4,020
2300	BUY AND HANDLE CONCRETE TIES			Quan:	25,100.00 EA	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNX</u>	SET-UP CREW		502.00	CH	Prod: 0.1000 MU		Lab Pcs: 5.00	Eq Pcs: 2.00	
8LR980	Caterpillar 980 Loader	1.00	502.00 HR		85.720	22,818	20,213		43,031

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 19										
Description =	CONSTRUCT 136# RR track			Land Item Unit =	SCHEDULE: TF	1	100			
						Takeoff Quan:	50,200.000		Engr Quan:	50,200.000
8TKPU4	Pickup 4x4	1.00	502.00	HR	10.561	2,139		3,163		5,302
\$48,333.06					[]	24,957		23,376		48,333
2400	LAY RAIL WITH TLM									
<u>AABL NK</u>	SET-UP CREW		180.52	CH	Quan: 50,200.00	TF	Hrs/Shft: 18.0520 S	10.00	Cal: 60	WC: 3
8BH416	Backhoe/loader, Cat 41	1.00	180.52	HR	Prod: 20.552		2,212	1,749	24.00	Lab Pcs: 3,960
8DZ06	Caterpillar D6	1.00	180.52	HR	66.092	6,667		5,264		11,931
8RRADZER	Adzer Riding	1.00	180.52	HR	110.000			9,635		11,562
8RRCLIP	Clip Machine	1.00	180.52	HR	45.000			4,818		3,854
8RRHEAT	Rail Heater	1.00	180.52	HR	52.000			7,708		2,312
8RRSWING	Speed Swing	1.00	180.52	HR	50.000			4,818		4,818
8RRILM	Track Lay Machine	1.00	180.52	HR	600.000			77,082		38,541
8RRTMP	Tamper Small	1.00	180.52	HR	70.000	7,221		5,416		12,636
8RRVIB	Vibratrac	1.00	180.52	HR	35.000		2,891	3,854		6,745
8TKMCH	Mechanics Truck, 1Ton	1.00	180.52	HR	15.370	1,385		1,390		2,775
\$203,195.37					[]	15,272	109,163	78,760		203,195
2500	FIELD FLASH BUTT WELDS									
<u>AABL NK</u>	SET-UP CREW		137.58	CH	Quan: 84.24	EA	Hrs/Shft: 13.7580 S	10.00	Cal: 60	WC: 3
8RRWELD	HI-Rail Welder	1.00	137.58	HR	Prod: 52.000		3,027	4,127	1.00	Lab Pcs: 7,154
2600	DESTRESS RAIL									
<u>AABL NK</u>	SET-UP CREW		44.93	CH	Quan: 9,627.92	LF	Hrs/Shft: 0.0420 MU	10.00	Cal: 60	WC: 3
8RRCLIP	Clip Machine	2.00	89.86	HR	Prod: 45.000		2,398	1,919	9.00	Lab Pcs: 4,317
8RRVIB	Vibratrac	1.00	44.93	HR	35.000		719	959		1,679
8TKPU4	Pickup 4x4	1.00	44.93	HR	10.561	191		283		475
\$6,469.87					[]	191	3,118	3,161		6,470
2700	BALLAST									
<u>AABL NK</u>	SET-UP CREW		135.69	CH	Quan: 61,746.29	TON	Hrs/Shft: 13.5690 S	10.00	Cal: 60	WC: 3
8RRREG	Regulator	2.00	271.38	HR	Prod: 105.000		12,212	16,283	4.00	Lab Pcs: 28,495
8RRSTAB	Ballast Stabilizer	1.00	135.69	HR	280.000		26,073	14,485		40,558
8RRTMPL	Tamper Large	2.00	271.38	HR	180.000	27,138		21,710		48,848
8TKPU4	Pickup 4x4	1.00	135.69	HR	10.561	578		855		1,433
\$119,334.08					[]	39,928	26,073	53,333		119,334
Item Totals:	19									
\$393,866.51					[]	88,240	138,353	167,273		393,867
7.846	50200.TF					1.76	2.76	3.33		7.85

BID/CAT# = 20										
Description =	INSTALL #9 TURNOUT			Land Item Unit =	SCHEDULE: EA	1	100			
						Takeoff Quan:	20.000		Engr Quan:	20.000
1000	BUY AND INSTALL									
1100	UNLOAD AND HANDLE									
<u>AABL NK</u>	SET-UP CREW		100.00	CH	Quan: 40.00	LOAD	Hrs/Shft: 4.0000 US	10.00	Cal: 60	WC: 3
8CCR45	R.T. Crane, 45 ton	1.00	100.00	HR	Prod: 63.721		3,551	2,821	6.00	Lab Pcs: 6,372
8TKPU4	Pickup 4x4	1.00	100.00	HR	10.561	426		630		1,056
\$7,428.20					[]	3,977		3,451		7,428
1200	INSTALL TURNOUT #11									
<u>AABL NK</u>	SET-UP CREW		700.00	CH	Quan: 20.00	EA	Hrs/Shft: 3.5000 SU	10.00	Cal: 60	WC: 3
8AC175	Air compressor, 175 CF	1.00	700.00	HR	Prod: 7.429		1,392	3,808	9.00	Lab Pcs: 5,200
8CCR45	R.T. Crane, 45 ton	1.00	700.00	HR	63.721	24,858		19,747		44,605
8LR936	Cat 936 Loader, IT28 or	1.00	700.00	HR	36.339	11,932		13,506		25,437
8TKPU4	Pickup 4x4	1.00	700.00	HR	10.561	2,983		4,410		7,393
\$82,635.00					[]	41,164		41,471		82,635

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 20			Land Item	SCHEDULE: 1	100				
Description =	INSTALL #9 TURNOUT		Unit =	EA	Takeoff Quan:		20.000	Engr Quan:	20.000
Item Totals:		20	- INSTALL #9 TURNOUT						
\$90,063.20				[]	45,141		44,922		90,063
4,503.160		20 EA			2,257.07		2,246.09		4,503.16

BID/CAT# = 21			Land Item	SCHEDULE: 1	100				
Description =	CONCRETE CROSSING PANELS		Unit =	LF	Takeoff Quan:		4,050.000	Engr Quan:	4,050.000
1000	Buy and Handle		Quan:	4,050.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		547.30	CH	Prod: 54.7300 S	Lab Pcs: 6.00	Eqp Pcs: 2.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	547.30	HR	60.252	20,213	12,763		32,976
8TKPU4	Pickup 4x4	1.00	547.30	HR	10.561	2,332	3,448		5,780
\$38,755.96					[]	22,545	16,211		38,756
1100	Demo Existing		Quan:	54.73 LS	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		684.13	CH	Prod: 68.4130 S	Lab Pcs: 6.00	Eqp Pcs: 3.00		
8AC175	Air compressor, 175 CF	1.00	684.13	HR	7.429	1,361	3,722		5,082
8BH320	Backhoe, Cat 320 1.0 C	1.00	684.13	HR	60.252	25,266	15,954		41,220
8TKPU4	Pickup 4x4	1.00	684.13	HR	10.561	2,915	4,310		7,225
\$53,527.71					[]	29,542	23,986		53,528
1200	Install New X-ing		Quan:	4,050.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		1,641.89	CH	Prod: 164.1890 S	Lab Pcs: 9.00	Eqp Pcs: 4.00		
8AC175	Air compressor, 175 CF	1.00	1,641.89	HR	7.429	3,266	8,932		12,198
8BH320	Backhoe, Cat 320 1.0 C	1.00	1,641.89	HR	60.252	60,638	38,289		98,927
8RRREG	Regulator	0.50	820.95	HR	105.000	36,943	49,257		86,200
8RRTMP	Tamper Small	0.50	820.95	HR	70.000	32,838	24,629		57,467
8TKPU4	Pickup 4x4	1.00	1,641.89	HR	10.561	6,996	10,344		17,340
\$272,131.03					[]	140,681	131,450		272,131
1300	FLAGGING		Quan:	109.46 DAY	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		1,094.60	CH	Prod: 1.0000 SU	Lab Pcs: 2.00	Eqp Pcs: 0.00		
Item Totals:		21	- CONCRETE CROSSING PANELS						
\$364,414.70					[]	192,768	171,647		364,415
89.979		4050 LF				47.60	42.38		89.98

BID/CAT# = 22			Land Item	SCHEDULE: 1	100				
Description =	CONCRETE CROSSING STEEL		Unit =	LF	Takeoff Quan:		750.000	Engr Quan:	750.000
1000	Buy and Handle		Quan:	750.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		50.00	CH	Prod: 5.0000 S	Lab Pcs: 6.00	Eqp Pcs: 2.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	50.00	HR	60.252	1,847	1,166		3,013
8TKPU4	Pickup 4x4	1.00	50.00	HR	10.561	213	315		528
\$3,540.65					[]	2,060	1,481		3,541
1200	Install New X-ing		Quan:	750.00 EA	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABLNK</u>	SET-UP CREW		150.00	CH	Prod: 50.0000 US	Lab Pcs: 9.00	Eqp Pcs: 4.00		
8AC175	Air compressor, 175 CF	1.00	150.00	HR	7.429	298	816		1,114
8BH320	Backhoe, Cat 320 1.0 C	1.00	150.00	HR	60.252	5,540	3,498		9,038
8RRREG	Regulator	0.50	75.00	HR	105.000	3,375	4,500		7,875
8RRTMP	Tamper Small	0.50	75.00	HR	70.000	3,000	2,250		5,250
8TKPU4	Pickup 4x4	1.00	150.00	HR	10.561	639	945		1,584
\$24,861.30					[]	12,852	12,009		24,861
Item Totals:		22	- CONCRETE CROSSING STEEL						
\$28,401.95					[]	14,912	13,490		28,402
37.869		750 LF				19.88	17.99		37.87

EQUIPMENT BY BIDITEM

Activity	Desc	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 24									
Description =	SUBBALLAST SIDING		Land Item Unit =	SCHEDULE: CY	1 Takeoff Quan:	100	20,000.000	Engr Quan:	20,000.000
1000	LOAD & HAUL RECYCLED			Quan: 20,000.00	CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		277.78 CH	Prod: 72.0000	UH	Lab Pcs: 3.00		Eqp Pcs: 3.00	
8LR980	Caterpillar 980 Loader	1.00	277.78 HR	85,720	12,626	11,185		23,811	
8TK35T	35 Ton Art Dump	2.00	555.56 HR	97,730		35,381		57,960	
\$81,771.09				[]	12,626	35,381		33,763	81,771
1100	Place Subballast			Quan: 20,000.00	CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		277.78 CH	Prod: 72.0000	UH	Lab Pcs: 5.00		Eqp Pcs: 4.00	
8MG14	Caterpillar 14 H Grade	1.00	277.78 HR	65,987	10,259	8,071		18,330	
8RC563S	Cat 563 Smooth Roller	1.00	277.78 HR	44,899	6,629	5,843		12,472	
8TKPU4	Pickup 4x4	1.00	277.78 HR	10,561	1,184	1,750		2,934	
8TKW05	Water Truck,4000 Gal	1.00	277.78 HR	27,900	3,851	3,899		7,750	
\$41,485.62				[]	21,923	19,563		41,486	
1110	FINISH TOP OF SUBBALLAST			Quan: 63,158.16	SY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		70.17 CH	Prod: 9,000.7354	US	Lab Pcs: 4.50		Eqp Pcs: 4.50	
8MG14	Caterpillar 14 H Grade	1.00	70.17 HR	65,987	2,592	2,039		4,630	
8RC563S	Cat 563 Smooth Roller	1.00	70.17 HR	44,899	1,675	1,476		3,151	
8SC615	Cat 615 Elevating Scra	0.50	35.09 HR	97,636		1,915		3,657	
8TKPU4	Pickup 4x4	1.00	70.17 HR	10,561	299	442		741	
8TKW05	Water Truck,4000 Gal	1.00	70.17 HR	27,900	973	985		1,958	
\$14,136.99				[]	5,538	1,915		6,684	14,137
Item Totals: 24 - SUBBALLAST SIDING				[]	40,087	37,297		60,010	137,394
\$137,393.70					2.00	1.86		3.00	6.87
6.870			20000 CY						

BID/CAT# = 25									
Description =	CRANE RAIL 175#		Land Item Unit =	SCHEDULE: TF	1 Takeoff Quan:	100	28,000.000	Engr Quan:	28,000.000
2000	BUY TRACK MATERIALS			Quan: 28,000.00	LF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
2100	UNLOAD RAIL TRAIN			Quan: 56,000.00	LF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		10.44 CH	Prod: 53,639.8467	US	Lab Pcs: 10.00		Eqp Pcs: 3.00	
8CCR45	R.T. Crane, 45 ton	1.00	10.44 HR	63,721	371	295		665	
8LR988	Caterpillar 988 Loader	2.00	20.87 HR	111,365	1,186	1,138		2,324	
\$2,989.43				[]	1,557	1,433		2,989	
2200	UNLOAD AND DISTRIBUTE OTM			Quan: 28,000.00	TF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		31.31 CH	Prod: 3.1310	S	Lab Pcs: 3.50		Eqp Pcs: 2.00	
8CCR12	Hyd.Boom,Trk Mtd, 12T	1.00	31.31 HR	35,276	623	482		1,105	
8LR936	Cat 936 Loader,IT28 or	1.00	31.31 HR	36,339	534	604		1,138	
\$2,242.28				[]	1,156	1,086		2,242	
2300	BUY AND HANDLE CONCRETE TIES			Quan: 14,000.00	EA	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		280.00 CH	Prod: 0.1000	MU	Lab Pcs: 5.00		Eqp Pcs: 2.00	
8LR980	Caterpillar 980 Loader	1.00	280.00 HR	85,720	12,727	11,274		24,002	
8TKPU4	Pickup 4x4	1.00	280.00 HR	10,561	1,193	1,764		2,957	
\$26,958.68				[]	13,920	13,038		26,959	
2400	LAY RAIL WITH TLM			Quan: 28,000.00	TF	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		100.69 CH	Prod: 10.0690	S	Lab Pcs: 24.00		Eqp Pcs: 10.00	
8BH416	Backhoe/loader, Cat 41	1.00	100.69 HR	20,552	1,234	975		2,209	
8DZ06	Caterpillar D6	1.00	100.69 HR	66,092	3,719	2,936		6,655	
8RRADZER	Adzer Riding	1.00	100.69 HR	110,000	5,374	6,449		11,824	
8RRCLIP	Clip Machine	1.00	100.69 HR	45,000	2,687	2,150		4,837	
8RRHEAT	Rail Heater	1.00	100.69 HR	52,000	4,299	1,290		5,589	

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 30									
Description =	34.5 DUCTBANK			Land Item Unit =	SCHEDULE: 1	100			
				LF	Takeoff	Quan:	7,500.000	Engr Quan:	7,500.000
1000	DUCTBANK			Quan:	7,500.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		750.00 CH	Prod:	100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	750.00 HR	60.252	27,699		17,490	45,189	
8LR936	Cat 936 Loader,IT28 or	1.00	750.00 HR	36.339	12,784		14,471	27,254	
8RCRMX	Ramex Roller	1.00	750.00 HR	8.088	4,240		1,826	6,066	
8RCTMP	Hand tamp,vibro plate/	1.00	750.00 HR	2.801	1,065		1,036	2,101	
8TKPU4	Pickup 4x4	1.00	750.00 HR	10.561	3,196		4,725	7,921	
\$88,530.75				[]	48,983		39,548	88,531	
Item Totals:	30 - 34.5 DUCTBANK			[]	48,983		39,548	88,531	
\$88,530.75									
11.804	7500 LF				6.53		5.27	11.80	

BID/CAT# = 31									
Description =	34.5 DUCTBANK U			Land Item Unit =	SCHEDULE: 1	100			
				LF	Takeoff	Quan:	500.000	Engr Quan:	500.000
1000	DUCTBANK			Quan:	500.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		50.00 CH	Prod:	100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	50.00 HR	60.252	1,847		1,166	3,013	
8LR936	Cat 936 Loader,IT28 or	1.00	50.00 HR	36.339	852		965	1,817	
8RCRMX	Ramex Roller	1.00	50.00 HR	8.088	283		122	404	
8RCTMP	Hand tamp,vibro plate/	1.00	50.00 HR	2.801	71		69	140	
8TKPU4	Pickup 4x4	1.00	50.00 HR	10.561	213		315	528	
\$5,902.05				[]	3,266		2,637	5,902	
Item Totals:	31 - 34.5 DUCTBANK U			[]	3,266		2,637	5,902	
\$5,902.05									
11.804	500 LF				6.53		5.27	11.80	

BID/CAT# = 32									
Description =	12 DUCTBANK			Land Item Unit =	SCHEDULE: 1	100			
				LF	Takeoff	Quan:	7,000.000	Engr Quan:	7,000.000
1000	DUCTBANK			Quan:	7,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		700.00 CH	Prod:	100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	700.00 HR	60.252	25,852		16,324	42,176	
8LR936	Cat 936 Loader,IT28 or	1.00	700.00 HR	36.339	11,932		13,506	25,437	
8RCRMX	Ramex Roller	1.00	700.00 HR	8.088	3,957		1,705	5,662	
8RCTMP	Hand tamp,vibro plate/	1.00	700.00 HR	2.801	994		967	1,961	
8TKPU4	Pickup 4x4	1.00	700.00 HR	10.561	2,983		4,410	7,393	
\$82,628.70				[]	45,718		36,911	82,629	
Item Totals:	32 - 12 DUCTBANK			[]	45,718		36,911	82,629	
\$82,628.70									
11.804	7000 LF				6.53		5.27	11.80	

BID/CAT# = 33									
Description =	12 DUCTBANK			Land Item Unit =	SCHEDULE: 1	100			
				LF	Takeoff	Quan:	1,500.000	Engr Quan:	1,500.000
1000	DUCTBANK			Quan:	1,500.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		150.00 CH	Prod:	100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	150.00 HR	60.252	5,540		3,498	9,038	
8LR936	Cat 936 Loader,IT28 or	1.00	150.00 HR	36.339	2,557		2,894	5,451	
8RCRMX	Ramex Roller	1.00	150.00 HR	8.088	848		365	1,213	
8RCTMP	Hand tamp,vibro plate/	1.00	150.00 HR	2.801	213		207	420	
8TKPU4	Pickup 4x4	1.00	150.00 HR	10.561	639		945	1,584	

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pes	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 33				Land Item	SCHEDULE:	1	100			
Description =	12 DUCTBANK			Unit =	LF	Takeoff Quan:		1,500.000	Engr Quan:	1,500.000
\$17,706.15					[]	9,797		7,910		17,706
<hr/>										
====>	Item Totals:	33	- 12 DUCTBANK							
\$17,706.15					[]	9,797		7,910		17,706
11.804		1500 LF				6.53		5.27		11.80
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BID/CAT# = 34				Land Item	SCHEDULE:	1	100			
Description =	FIBER-OP DUCTBAN			Unit =	LF	Takeoff Quan:		8,000.000	Engr Quan:	8,000.000
1000	DUCTBANK			Quan:	8,000.00 LF	Hrs/Shft:	10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		800.00	CH	Prod: 100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	800.00	HR	60.252	29,546	18,656			48,202
8LR936	Cat 936 Loader,IT28 or	1.00	800.00	HR	36.339	13,636	15,435			29,071
8RCRMX	Ramex Roller	1.00	800.00	HR	8.088	4,522	1,948			6,470
8RCTMP	Hand tamp,vibro plate/	1.00	800.00	HR	2.801	1,136	1,105			2,241
8TKPU4	Pickup 4x4	1.00	800.00	HR	10.561	3,409	5,040			8,449
\$94,432.80					[]	52,249		42,184		94,433
<hr/>										
====>	Item Totals:	34	- FIBER-OP DUCTBAN							
\$94,432.80					[]	52,249		42,184		94,433
11.804		8000 LF				6.53		5.27		11.80
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BID/CAT# = 35				Land Item	SCHEDULE:	1	100			
Description =	FIBER-OP DUCTBAN			Unit =	LF	Takeoff Quan:		1,600.000	Engr Quan:	1,600.000
1000	DUCTBANK			Quan:	1,600.00 LF	Hrs/Shft:	10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		160.00	CH	Prod: 100.0000 US		Lab Pcs: 10.00	Eqp Pcs: 5.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	160.00	HR	60.252	5,909	3,731			9,640
8LR936	Cat 936 Loader,IT28 or	1.00	160.00	HR	36.339	2,727	3,087			5,814
8RCRMX	Ramex Roller	1.00	160.00	HR	8.088	904	390			1,294
8RCTMP	Hand tamp,vibro plate/	1.00	160.00	HR	2.801	227	221			448
8TKPU4	Pickup 4x4	1.00	160.00	HR	10.561	682	1,008			1,690
\$18,886.56					[]	10,450		8,437		18,887
<hr/>										
====>	Item Totals:	35	- FIBER-OP DUCTBAN							
\$18,886.56					[]	10,450		8,437		18,887
11.804		1600 LF				6.53		5.27		11.80
<hr/>										
BID/CAT# = 36				Land Item	SCHEDULE:	1	100			
Description =	EL MANHOLE			Unit =	EA	Takeoff Quan:		65.000	Engr Quan:	65.000
1000	ELB MH			Quan:	65.00 EA	Hrs/Shft:	10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW		650.00	CH	Prod: 1.0000 US		Lab Pcs: 8.00	Eqp Pcs: 5.00		
8BH320	Backhoe, Cat 320 1.0 C	1.00	650.00	HR	60.252	24,006	15,158			39,164
8LR936	Cat 936 Loader,IT28 or	1.00	650.00	HR	36.339	11,079	12,541			23,620
8RCRMX	Ramex Roller	1.00	650.00	HR	8.088	3,674	1,583			5,257
8RCTMP	Hand tamp,vibro plate/	1.00	650.00	HR	2.801	923	898			1,821
8TKPU4	Pickup 4x4	1.00	650.00	HR	10.561	2,770	4,095			6,865
\$76,726.65					[]	42,452		34,275		76,727
<hr/>										
====>	Item Totals:	36	- EL MANHOLE							
\$76,726.65					[]	42,452		34,275		76,727
1,180.410		65 EA				653.11		527.30		1,180.41

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 41			Land Item	SCHEDULE: 1	100				
Description =	480 DUCTBANK		Unit = LF	Takeoff Quan:	31,000.000	Engr Quan:	31,000.000		
1000	DUCTBANK		Quan:	31,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABL NK</u>	SET-UP CREW		3,100.00 CH	Prod:	100.0000 US	Lab Pcs:	10.00	Eqp Pcs:	5.00
8BH320	Backhoe, Cat 320 1.0 C	1.00	3,100.00 HR	60.252	114,489	72,292		186,781	
8LR936	Cat 936 Loader,IT28 or	1.00	3,100.00 HR	36.339	52,840	59,811		112,651	
8RCRMX	Ramex Roller	1.00	3,100.00 HR	8.088	17,524	7,549		25,073	
8RCTMP	Hand tamp,vibro plate/	1.00	3,100.00 HR	2.801	4,402	4,281		8,683	
8TKPU4	Pickup 4x4	1.00	3,100.00 HR	10.561	13,209	19,530		32,739	
\$365,927.10				[]	202,464	163,463		365,927	
Item Totals:	41 - 480 DUCTBANK			[]	202,464	163,463		365,927	
\$365,927.10					6.53	5.27		11.80	
11.804	31000 LF								

BID/CAT# = 42			Land Item	SCHEDULE: 1	100				
Description =	480 DUCTBANK		Unit = LF	Takeoff Quan:	9,000.000	Engr Quan:	9,000.000		
1000	DUCTBANK		Quan:	9,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABL NK</u>	SET-UP CREW		900.00 CH	Prod:	100.0000 US	Lab Pcs:	10.00	Eqp Pcs:	5.00
8BH320	Backhoe, Cat 320 1.0 C	1.00	900.00 HR	60.252	33,239	20,988		54,227	
8LR936	Cat 936 Loader,IT28 or	1.00	900.00 HR	36.339	15,341	17,365		32,705	
8RCRMX	Ramex Roller	1.00	900.00 HR	8.088	5,088	2,192		7,279	
8RCTMP	Hand tamp,vibro plate/	1.00	900.00 HR	2.801	1,278	1,243		2,521	
8TKPU4	Pickup 4x4	1.00	900.00 HR	10.561	3,835	5,670		9,505	
\$106,236.90				[]	58,780	47,457		106,237	
Item Totals:	42 - 480 DUCTBANK			[]	58,780	47,457		106,237	
\$106,236.90					6.53	5.27		11.80	
11.804	9000 LF								

BID/CAT# = 43			Land Item	SCHEDULE: 1	100				
Description =	EL MANHOLE		Unit = EA	Takeoff Quan:	220.000	Engr Quan:	220.000		
1000	ELB MH		Quan:	220.00 EA	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABL NK</u>	SET-UP CREW		2,200.00 CH	Prod:	1.0000 US	Lab Pcs:	8.00	Eqp Pcs:	5.00
8BH320	Backhoe, Cat 320 1.0 C	1.00	2,200.00 HR	60.252	81,250	51,304		132,554	
8LR936	Cat 936 Loader,IT28 or	1.00	2,200.00 HR	36.339	37,499	42,447		79,946	
8RCRMX	Ramex Roller	1.00	2,200.00 HR	8.088	12,437	5,357		17,794	
8RCTMP	Hand tamp,vibro plate/	1.00	2,200.00 HR	2.801	3,124	3,038		6,162	
8TKPU4	Pickup 4x4	1.00	2,200.00 HR	10.561	9,374	13,860		23,234	
\$259,690.20				[]	143,684	116,006		259,690	
Item Totals:	43 - EL MANHOLE			[]	143,684	116,006		259,690	
\$259,690.20					653.11	527.30		1,180.41	
1,180.410	220 EA								

BID/CAT# = 45			Land Item	SCHEDULE: 1	100				
Description =	FIRE HYD RELOCATE		Unit = EA	Takeoff Quan:	72.000	Engr Quan:	72.000		
1000	hyd remove		Quan:	72.00 EA	Hrs/Shft:	10.00 Cal: 60	WC: 3		
<u>AABL NK</u>	SET-UP CREW		144.00 CH	Prod:	5.0000 US	Lab Pcs:	6.00	Eqp Pcs:	3.00
8BH325	Backhoe, Cat325L,1.5 C	1.00	144.00 HR	70.034	6,136	3,948		10,085	
8LR936	Cat 936 Loader,IT28 or	1.00	144.00 HR	36.339	2,454	2,778		5,233	
8TKPU4	Pickup 4x4	1.00	144.00 HR	10.561	614	907		1,521	
\$16,838.50				[]	9,204	7,634		16,839	

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 45									
Description =	FIRE HYD RELOCATE		Land Item Unit =	SCHEDULE: EA	1	100			
				Takeoff Quan:			72.000	Engr Quan:	72.000
====>	Item Totals:	45	- FIRE HYD RELOCATE						
\$16,838.50				[]	9,204		7,634		16,839
233.868		72 EA			127.84		106.03		233.87

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 46									
Description =	WATER PIPE		Land Item Unit =	SCHEDULE: LF	1	100			
				Takeoff Quan:			31,000.000	Engr Quan:	31,000.000
1000	ELB PIPE			Quan:	31,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABL NK</u>	SET-UP CREW		2,066.65 CH	Prod:	150.0012 US		Lab Pcs: 8.00	Eq Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	2,066.65 HR	60.252	76,326		48,194		124,520
8LR936	Cat 936 Loader,IT28 or	1.00	2,066.65 HR	36.339	35,226		39,874		75,100
8RCR MX	Ramex Roller	1.00	2,066.65 HR	8.088	11,683		5,032		16,715
8RCTMP	Hand tamp,vibro plate/	1.00	2,066.65 HR	2.801	2,935		2,854		5,789
8TKPU4	Pickup 4x4	1.00	2,066.65 HR	10.561	8,806		13,020		21,826
\$243,949.45				[]	134,975		108,974		243,949
====>	Item Totals:	46	- WATER PIPE						
\$243,949.45				[]	134,975		108,974		243,949
7.869		31000 LF			4.35		3.52		7.87

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 47									
Description =	WATER PIPE C		Land Item Unit =	SCHEDULE: LF	1	100			
				Takeoff Quan:			9,000.000	Engr Quan:	9,000.000
1000	ELB PIPE			Quan:	9,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABL NK</u>	SET-UP CREW		599.99 CH	Prod:	150.0025 US		Lab Pcs: 8.00	Eq Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	599.99 HR	60.252	22,159		13,992		36,151
8LR936	Cat 936 Loader,IT28 or	1.00	599.99 HR	36.339	10,227		11,576		21,803
8RCR MX	Ramex Roller	1.00	599.99 HR	8.088	3,392		1,461		4,853
8RCTMP	Hand tamp,vibro plate/	1.00	599.99 HR	2.801	852		829		1,681
8TKPU4	Pickup 4x4	1.00	599.99 HR	10.561	2,557		3,780		6,337
\$70,823.45				[]	39,186		31,638		70,823
====>	Item Totals:	47	- WATER PIPE C						
\$70,823.45				[]	39,186		31,638		70,823
7.869		9000 LF			4.35		3.52		7.87

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 49									
Description =	HDPE AIR		Land Item Unit =	SCHEDULE: LF	1	100			
				Takeoff Quan:			8,000.000	Engr Quan:	8,000.000
1000	ELB PIPE			Quan:	8,000.00 LF	Hrs/Shft:	10.00 Cal: 60	WC: 3	
<u>AABL NK</u>	SET-UP CREW		533.33 CH	Prod:	150.0009 US		Lab Pcs: 8.00	Eq Pcs: 5.00	
8BH320	Backhoe, Cat 320 1.0 C	1.00	533.33 HR	60.252	19,697		12,437		32,134
8LR936	Cat 936 Loader,IT28 or	1.00	533.33 HR	36.339	9,091		10,290		19,381
8RCR MX	Ramex Roller	1.00	533.33 HR	8.088	3,015		1,299		4,314
8RCTMP	Hand tamp,vibro plate/	1.00	533.33 HR	2.801	757		737		1,494
8TKPU4	Pickup 4x4	1.00	533.33 HR	10.561	2,273		3,360		5,633
\$62,954.83				[]	34,832		28,123		62,955
====>	Item Totals:	49	- HDPE AIR						
\$62,954.83				[]	34,832		28,123		62,955
7.869		8000 LF			4.35		3.52		7.87

Activity Resource	Desc	Pes	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 54									
Description =	REMOVALS FOR CR		Land Item Unit =	SCHEDULE: SY	1	100			
				Takeoff Quan:			2,400.000	Engr Quan:	2,400.000

EQUIPMENT BY BIDITEM

Activity	Desc	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 54									
Description =	REMOVALS FOR CR				SCHEDULE: 1	100			
					Unit = SY	Takeoff Quan:	2,400.000	Engr Quan:	2,400.000
1000	REMOVE AND PILE FOR CRUSH				Quan: 2,400.00 SY	Hrs/Shft: 10.00	Cal: 50	WC: 3	
<u>AABLNK</u>	SET-UP CREW			24.00	CH	Prod: 100.0000 UH	Lab Pcs: 7.00	Eqp Pcs: 5.00	
8BH325	Backhoe, Cat325L, 1.5 C	1.00	24.00	HR		70.034	1,023	658	1,681
8DZ07	Caterpillar D 7H Dozer	1.00	24.00	HR		87.696		1,310	2,247
8TK35T	35 Ton Art Dump	2.00	48.00	HR		97.730		3,057	5,008
8TKPU4	Pickup 4x4	1.00	24.00	HR		10.561	102	151	253
\$9,188.74						[]	1,125	4,367	3,697
Item Totals: 54 - REMOVALS FOR CR									
\$9,188.74						[]	1,125	4,367	3,697
3.829		2400 SY					0.47	1.82	1.54
									9,189
									3.83
BID/CAT# = 55									
Description =	EXC FOR RUNWAYS				SCHEDULE: 1	100			
					Unit = BCY	Takeoff Quan:	1,600.000	Engr Quan:	1,600.000
1000	EXCAVATE AND STOCKPILE TOPSOIL				Quan: 200.02 BCY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			1.11	CH	Prod: 1,801.9820 US	Lab Pcs: 5.00	Eqp Pcs: 4.00	
8DZ06	Caterpillar D6	1.00	1.11	HR		66.092	41	32	73
8SC615	Cat 615 Elevating Scra	2.00	2.22	HR		97.636		121	231
8TKPU4	Pickup 4x4	1.00	1.11	HR		10.561	5	7	12
\$316.46						[]	46	121	150
1100	SG PREP				Quan: 1,200.00 SY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			1.20	CH	Prod: 0.0040 MU	Lab Pcs: 4.00	Eqp Pcs: 4.00	
8DZJD	John Deere 9400	1.00	1.20	HR		85.986	61	42	103
8DZRDR	Aerating Disk, Towed	1.00	1.20	HR		14.689	14	4	18
8RC563P	Cat 563 Padfoot Roller	1.00	1.20	HR		44.564	29	25	53
8TKPU4	Pickup 4x4	1.00	1.20	HR		10.561	5	8	13
\$186.97						[]	109	78	187
1200	EXCAVATE TO EMBANKMENT				Quan: 1,760.01 CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			4.89	CH	Prod: 3,599.2025 US	Lab Pcs: 6.00	Eqp Pcs: 5.00	
8DZ08N	Caterpillar D 8R Dozer	1.00	4.89	HR		130.460	406	232	638
8SC621	Cat 621 Scraper, 21 CY	3.00	14.67	HR		117.045		1,441	1,833
8TKPU4	Pickup 4x4	1.00	4.89	HR		10.561	21	31	52
\$2,522.57						[]	426	1,441	655
1210	COMPACT EMBANKMENT				Quan: 1,600.00 FCY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			4.50	CH	Prod: 3,555.5556 US	Lab Pcs: 4.00	Eqp Pcs: 5.00	
8DZ06	Caterpillar D6	1.00	4.50	HR		66.092	166	131	297
8DZJD	John Deere 9400	1.00	4.50	HR		85.986	230	157	387
8DZRDR	Aerating Disk, Towed	1.00	4.50	HR		14.689	51	15	66
8RC815	Caterpillar 815 Roller	1.00	4.50	HR		38.369		173	173
8TKW10	Water Truck 8000Gal of	1.00	4.50	HR		88.903		177	427
\$1,350.17						[]	447	177	725
1300	FINE GRADE SUB GRADE				Quan: 1,200.00 SY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			1.32	CH	Prod: 9,090.9091 US	Lab Pcs: 5.00	Eqp Pcs: 4.00	
8DZ05	Cat D5 Dozer	0.50	0.66	HR		51.469	19	15	34
8MG14	Caterpillar 14 H Grade	1.00	1.32	HR		65.987	49	38	87
8RC563S	Cat 563 Smooth Roller	1.00	1.32	HR		44.899	32	28	59
8SC615	Cat 615 Elevating Scra	0.50	0.66	HR		97.636		36	33
8TKPU4	Pickup 4x4	1.00	1.32	HR		10.561	6	8	14
\$263.07						[]	105	36	122
1400	FINISH DITCH AND SLOPES				Quan: 485.48 SY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
<u>AABLNK</u>	SET-UP CREW			0.28	CH	Prod: 17,338.5714 US	Lab Pcs: 4.00	Eqp Pcs: 4.00	
8DZ05	Cat D5 Dozer	3.00	0.83	HR		51.469	24	19	43
8TKPU4	Pickup 4x4	1.00	0.28	HR		10.561	1	2	3

EQUIPMENT BY BIDITEM

Activity	Desc	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 55									
Description =	EXC FOR RUNWAYS		Land Item Unit =	SCHEDULE: 1	100				
\$45.69				BCY	Takeoff Quan:	1,600.000		Engr Quan:	1,600.000
				[]	25		21		46
Item Totals: 55 - EXC FOR RUNWAYS									
\$4,684.93				[]	1,158	1,776	1,751		4,685
2.928		1600 BCY			0.72	1.11	1.09		2.93

BID/CAT# = 56									
Description =	AB RUNWAYS		Land Item Unit =	SCHEDULE: 1	100				
				CY	Takeoff Quan:	1,100.000		Engr Quan:	1,100.000
1000	LOAD & HAUL RECYCLED			Quan:	1,100.00 CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
AABL NK	SET-UP CREW		15.28 CH	Prod:	71,989.5 UH	Lab Pcs:	3.00	Eq Pcs:	3.00
8LR980	Caterpillar 980 Loader	1.00	15.28 HR		85,720	695	615		1,310
8TK35T	35 Ton Art Dump	2.00	30.56 HR		97,730		1,946		1,242
\$4,498.03				[]	695	1,946	1,857		4,498
1100	Place Subballast			Quan:	1,100.00 CY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
AABL NK	SET-UP CREW		15.28 CH	Prod:	71,989.5 UH	Lab Pcs:	5.00	Eq Pcs:	4.00
8MG14	Caterpillar 14 H Grade	1.00	15.28 HR		65,987	564	444		1,008
8RC563S	Cat 563 Smooth Roller	1.00	15.28 HR		44,899	365	321		686
8TKPU4	Pickup 4x4	1.00	15.28 HR		10,561	65	96		161
8TKW05	Water Truck,4000 Gal	1.00	15.28 HR		27,900	212	214		426
\$2,282.04				[]	1,206		1,076		2,282
1110	FINISH TOP OF SUBBALLAST			Quan:	3,473.70 SY	Hrs/Shft: 10.00	Cal: 60	WC: 3	
AABL NK	SET-UP CREW		3.86 CH	Prod:	8,999.2228 US	Lab Pcs:	4.50	Eq Pcs:	4.50
8MG14	Caterpillar 14 H Grade	1.00	3.86 HR		65,987	143	112		255
8RC563S	Cat 563 Smooth Roller	1.00	3.86 HR		44,899	92	81		173
8SC615	Cat 615 Elevating Scra	0.50	1.93 HR		97,636		105		96
8TKPU4	Pickup 4x4	1.00	3.86 HR		10,561	16	24		41
8TKW05	Water Truck,4000 Gal	1.00	3.86 HR		27,900	54	54		108
\$777.66				[]	305	105	368		778
Item Totals: 56 - AB RUNWAYS									
\$7,557.73				[]	2,205	2,052	3,301		7,558
6.871		1100 CY			2.00	1.87	3.00		6.87

BID/CAT# = 57									
Description =	AC PAVE RUNWAYS		Land Item Unit =	SCHEDULE: 1	100				
				TON	Takeoff Quan:	1,100.000		Engr Quan:	1,100.000
1000	AC PAVEMENT			Quan:	1,100.00 TON	Hrs/Shft: 10.00	Cal: 60	WC: 3	
AABL NK	SET-UP CREW		18.33 CH	Prod:	600,109.1 US	Lab Pcs:	22.00	Eq Pcs:	16.00
8LR936	Cat 936 Loader,IT28 or	1.00	18.33 HR		36,339	312	354		666
8MG14	Caterpillar 14 H Grade	1.00	18.33 HR		65,987	677	533		1,210
8PAVEAC	AC PAVER	1.00	18.33 HR		94,000		1,174		1,839
8RC563P	Cat 563 Padfoot Roller	1.00	18.33 HR		44,564	437	379		817
8TK12Y	Dump Truck, 6 x 4,12 C	6.00	110.00 HR		34,009		1,868		2,125
8TK600	Truck, Flatbed/Dump 14	1.00	18.33 HR		15,630		122		184
8TKMCH	Mechanics Truck, 1Ton	1.00	18.33 HR		15,370	141	141		282
8TKPU4	Pickup 4x4	3.00	55.00 HR		10,561	234	347		581
8TKW05	Water Truck,4000 Gal	1.00	18.33 HR		27,900	254	257		511
\$10,205.20				[]	2,056	3,164	4,985		10,205
1010	AC AT PLANT			Quan:	1,100.00 TON	Hrs/Shft: 10.00	Cal: 60	WC: 3	
Item Totals: 57 - AC PAVE RUNWAYS									
\$10,205.20				[]	2,056	3,164	4,985		10,205
9.277		1100 TON			1.87	2.88	4.53		9.28

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 90000921									
Description =	PROJECT ONSITE OFFICE		Land Item Unit =	SCHEDULE: MO	1	100	1.000	Engr Quan:	1.000
921A	OFFICE SET-UP AND REMOVAL		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: NONE	
921B	OFFICE TIME RELATED		Quan:	1.00 MO	Hrs/Shft:	8.00		WC: NONE	
921C	COMPUTERS		Quan:	1.00 MO	Hrs/Shft:	8.00		WC: NONE	
921CI	SURVEY EQUIPMENT		Quan:	1.00 MO	Hrs/Shft:	8.00		WC: NONE	
921D	LABOR AND EQUIPMENT TO MOBE		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: 1	
<u>MOBE</u>	On-Site Facilities Mobe		85.71 CH	Prod:	600.0000 MU	Lab Pes:	7.00	Eqp Pes:	1.00
8BH416	Backhoe/loader, Cat 41	0.50	42.86 HR	20.552		525	415	940	
8LR936	Cat 936 Loader,IT28 or	0.50	42.86 HR	36.339	731		827	1,558	
\$2,497.82				[]	731	525	1,242	2,498	
Item Totals: 90000921 - PROJECT ONSITE OFFICE									
\$2,497.82				[]	731	525	1,242	2,498	
2,497.820			1 MO		730.55	525.11	1,242.16	2,497.82	

BID/CAT# = 90000922									
Description =	PROJECT ONSITE WAREHOUSE/STORAGE		Land Item Unit =	SCHEDULE: MO	1	100	1.000	Engr Quan:	1.000
922A	WAREHOUSE IN AND OUT		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: NONE	
922B	TIME RELATED COSTS		Quan:	1.00 MO	Hrs/Shft:	8.00		WC: NONE	
922C	Small Tools and Supplies		Quan:	300,000.00 CMH	Hrs/Shft:	8.00		WC: NONE	
922D	MOBE MISCELLANEOUS		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: 1	
<u>MOBE</u>	On-Site Facilities Mobe		28.57 CH	Prod:	200.0000 MU	Lab Pes:	7.00	Eqp Pes:	1.00
8BH416	Backhoe/loader, Cat 41	0.50	14.29 HR	20.552		175	138	314	
8LR936	Cat 936 Loader,IT28 or	0.50	14.29 HR	36.339	244		276	519	
\$832.80				[]	244	175	414	833	
Item Totals: 90000922 - PROJECT ONSITE WAREHOUSE/STORAGE									
\$832.80				[]	244	175	414	833	
832.800			1 MO		243.57	175.08	414.15	832.80	

BID/CAT# = 90000923									
Description =	PROJECT MISC BLDGS&SHOPS		Land Item Unit =	SCHEDULE: LS	1	100	1.000	Engr Quan:	1.000
923A	PRUCHASE/ERECT/REMOVE		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: NONE	
923B	TIME RELATED CHARGES		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: NONE	
	<i>There are no cost resources for this activity.</i>								
923C	MOBE MISCELLANEOUS BLDG		Quan:	1.00 LS	Hrs/Shft:	8.00		WC: 1	
<u>MOBE</u>	On-Site Facilities Mobe		28.57 CH	Prod:	200.0000 MU	Lab Pes:	7.00	Eqp Pes:	1.00
8BH416	Backhoe/loader, Cat 41	0.50	14.29 HR	20.552		175	138	314	
8LR936	Cat 936 Loader,IT28 or	0.50	14.29 HR	36.339	244		276	519	
\$832.80				[]	244	175	414	833	
Item Totals: 90000923 - PROJECT MISC BLDGS&SHOPS									
\$832.80				[]	244	175	414	833	
832.800			1 LS		243.57	175.08	414.15	832.80	

EQUIPMENT BY BIDITEM

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
BID/CAT# = 90000927									
Description = PROJECT TRAVEL,TRANSPORTATION&CLEANUP									
1,379.720	1 MO				772.73		606.99		1,379.72
BID/CAT# = 90000929									
Description = CONSTRUCTION PLANT									
929A	Site Parking and Laydown		Quan: 20,000.00 SF		Hrs/Shft: 8.00	Cal: 40	WC: 3		
929B	OWNERS OFFICE		Quan: 1.00 MO		Hrs/Shft: 8.00		WC: NONE		
929D	LAY DOWN AREA GRADING		Quan: 4,000.00 CY		Hrs/Shft: 8.00		WC: 3		
<u>BLNK</u>			40.00 CH		Prod: 5.0000 S	Lab Pcs: 5.00	Eq Pcs: 3.00		
8DZ06	Caterpillar D6	1.00	40.00 HR		66.092	1,477	1,166		2,644
8LR936	Cat 936 Loader,IT28 or	1.00	40.00 HR		36.339	682	772		1,454
8RC563S	Cat 563 Smooth Roller	1.00	40.00 HR		44.899	955	841		1,796
\$5,893.20					[]	3,114	2,780		5,893
929E	ROCK AREA		Quan: 1.00 TON		Hrs/Shft: 8.00		WC: 3		
<u>BLNK</u>			0.03 CH		Prod: 0.0038 S	Lab Pcs: 5.00	Eq Pcs: 3.00		
8DZ06	Caterpillar D6	1.00	0.03 HR		66.092	1	1		2
8LR936	Cat 936 Loader,IT28 or	1.00	0.03 HR		36.339	1	1		1
8RC563S	Cat 563 Smooth Roller	1.00	0.03 HR		44.899	1	1		1
\$4.41					[]	2	2		4
====> Item Totals: 90000929 - CONSTRUCTION PLANT									
\$5,897.61					[]	3,116	2,782		5,898
5,897.610	1 LS					3,115.98	2,781.63		5,897.61
BID/CAT# = 90000965									
Description = PROJECT MISC.EXPENSES									
965A	PROJECT ADMINISTRATION		Quan: 1.00 LS		Hrs/Shft: 8.00		WC: NONE		
8ADJ	Equipment Adjustment		0.00 HR		0.010				
965B	ESCALATION		Quan: 1.00 LS		Hrs/Shft: 8.00		WC: 1		
965D	UNSCHEDULED OVERTIME		Quan: 1.00 MO		Hrs/Shft: 8.00		WC: 1		
<u>BLNK</u>			0.33 CH		Prod: 1.0000 MU	Lab Pcs: 3.00	Eq Pcs: 0.00		
====> Item Totals: 90000965 - PROJECT MISC.EXPENSES									
\$0.00					[]				
0.000	1 LS								
====> Item Totals: 90000929 - CONSTRUCTION PLANT									
\$8,059,637.14						2,635,545	1,961,197	3,462,896	8,059,637

>>> indicates Non Additive Activity

-----Report Notes:-----

The estimate was prepared with BID Quantities.

This report shows TAKEOFF Quantities with the resources.

Bid Date: 08/20/07 Owner: Engineering Firm:

Estimator-In-Charge:

* on units of MH indicate average labor unit cost was used rather than base rate.

[] in the Unit Cost Column = Labor Unit Cost Without Labor Burdens

In equipment resources, rent % and operating % not = 100% are represented as XXX%YYY where XXX=Rent% and YYY=Operating%

-----Calendar Codes-----

Calendars are found in crew and labor codes and have the format XXXdY where

EQUIPMENT BY BIDITEM

Activity	Desc	Quantity	Unit	Unit Cost	Inside Equipment	Outside Equipment	EOE	Other	Total
----------	------	----------	------	-----------	------------------	-------------------	-----	-------	-------

BID/CAT#	= 9000965			Land Item	SCHEDULE:	1	100		
Description =	PROJECT MISC.EXPENSES			Unit =	LS	Takeoff Quan:	1.000	Engr Quan:	1.000

XXX = The Calendar and Y = The Starting Day of the Week with Day 1 = Monday, etc.

40	40 hr week 5 - 8 hr. days
45	45 hr. week 5 - 9 hr. days
50	50 hr. week 5 - 10 hr. days
60	60 hr. week 6 - 10 hr. days

Appendix B-4

Construction Equipment Schedule
Monthly Fuel Usage

Appendix B-4

UP ICTF Modernization Construction Schedule and Fuel Usage

Month	31	32	33	34	35	36		1	2	3
	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Gals/Hr	Monthly	Monthly	Monthly
Equipment	Hours	Hours	Hours	Hours	Hours	Hours		Gallons	Gallons	Gallons
Air Compressor, 175 CFM	75	75	75	75	100	100	1.50	147	150	150
Backhoe, Cat 320, 1.0 CY	600	400	400	300	240	200	4.00	1,600	2,400	2,400
Backhoe, Cat 325, 1.5 CY							5.12	1,572	1,516	1,434
Backhoe/loader, Cat. 416, 1CY				125	125	103	2.08	0	0	0
Hyd. Shear for Backhoe							2.14	229	0	0
Hyd. Boom, Trk Mtd. 12T		31					2.76	0	0	0
RT Crane, 45T	11	100	200	200	300		4.00	0	0	252
Crush Concrete							6.40	0	0	0
Cat D5 Dozer			5	81	100		4.00	0	0	0
Cat D6 Dozer							5.50	0	0	0
Cat D7 Dozer		12	12				7.47	747	1,494	1,494
Cat D8N Dozer							8.75	0	0	0
John Deere 9400							8.00	0	0	0
Cat 936 Loader	675	780	713	500	400	200	3.50	438	525	700
Cat 966 Loader							6.75	0	0	0
Cat 980 Loader	102						8.75	0	0	0
Cat 988 Loader				22			11.25	0	0	0
Cat 14H Grader	175	200	200	200	92		6.65	0	0	0
Telescopic Man Lift, 40 ft							1.04	0	0	66
AC Paver		200	200	35			5.34	0	0	0
Concrete Paving Spread	175						8.54	0	0	0
Cat 563 Padfoot Roller		200	120	16			3.75	0	0	0
Cat 563 Smooth Roller	175	27					3.75	0	0	0
Cat 815 Roller							10.25	0	0	0
Ramex Roller	850	830	683	500	500		0.45	0	0	0
Hand Tamp	850	830	683	500	500		0.42	0	0	0
Adzer Riding				100	100	81	12.81	0	0	0
Clip Machine				100	200	121	4.27	0	0	0
Rail Heater				100	100	81	2.56	0	0	0
Regulater				400	500	419	12.00	0	0	0
Ballast Stabilizer				75	100	36	21.35	0	0	0
Speed Swing				100	100	81	5.34	0	0	0
Track Laying Machine				100	100	81	28.45	0	0	0
Tamper Small				400	400	378	6.03	0	0	0
Tamper Large				100	200	123	16.00	0	0	0

Appendix B-4

UP ICTF Modernization Construction Schedule and Fuel Usage

Month	31	32	33	34	35	36		1	2	3
	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Gals/Hr	Monthly	Monthly	Monthly
Equipment	Hours	Hours	Hours	Hours	Hours	Hours		Gallons	Gallons	Gallons
Vibratrac				100	150	100	4.27	0	0	0
Hi-Rail Welder				100	100	14	6.00	0	0	0
Cat 615 Elevating Scraper							8.54	0	0	0
Cat 621 Scraper, 21 CY							5.76	0	0	0
Dump Truck, 6x4, 12 CY	1500	1200	1200	110			5.34	0	0	0
35 Ton Art Dump							6.25	1,250	2,500	2,500
Truck, Flat Bed 14'	200	200	200	200	200	200	2.64	0	0	0
Fuel Truck, 2000 Gal	75	75	75	75	50		1.80	135	135	135
Lube Truck	75	75	75	75	50		1.80	135	135	135
Mechanics Truck, 1 Ton	200	200	200	98	100		1.80	135	135	135
Pickup 4 x 4	975	975	975	975	975	925	1.80	1,755	1,755	1,755
SUV	1175	1175	1175	1175	1175	763	1.50	1,763	1,763	1,763
Water Truck, 4000 Gal	175	200	200	200	102		3.75	0	0	0
Water Truck, 8000 Gal Off Rd							9.98	0	0	0
								9,906	12,509	12,921

Appendix B-4

UP ICTF Modernization Construction Schedule and Fuel Usage

Month	4	5	6	7	8	9	10	11	12	13
	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Equipment	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
Vibratrac	0	0	0	0	0	0	0	0	0	0
Hi-Rail Welder	0	0	0	0	0	0	0	0	0	0
Cat 615 Elevating Scraper	0	0	0	0	0	854	1,708	854	854	0
Cat 621 Scraper, 21 CY	0	0	0	0	0	0	0	3,456	3,456	3,456
Dump Truck, 6x4, 12 CY	0	0	0	0	0	0	0	0	0	0
35 Ton Art Dump	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500
Truck, Flat Bed 14'	0	0	0	0	0	0	0	0	0	0
Fuel Truck, 2000 Gal	135	135	135	135	135	135	135	135	135	135
Lube Truck	135	135	135	135	135	135	135	135	135	135
Mechanics Truck, 1 Ton	135	135	135	135	135	135	135	135	135	135
Pickup 4 x 4	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755
SUV	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763
Water Truck, 4000 Gal	0	0	0	0	0	0	0	0	0	0
Water Truck, 8000 Gal Off Rd	0	0	0	0	0	0	0	1,996	1,996	1,996
	12,768	12,313	12,314	13,963	13,964	15,876	17,494	27,918	27,344	26,176

Appendix B-4

UP ICTF Modernization Construction Schedule and Fuel Usage

Month	14	15	16	17	18	19	20	21	22	23
	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Equipment	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
Vibratrac	0	0	0	0	0	0	0	0	0	0
Hi-Rail Welder	0	0	0	0	0	0	0	0	0	0
Cat 615 Elevating Scraper	0	0	0	641	641	0	0	0	0	0
Cat 621 Scraper, 21 CY	3,456	3,456	1,728	86	0	0	0	0	0	0
Dump Truck, 6x4, 12 CY	0	0	0	0	0	0	0	0	0	0
35 Ton Art Dump	2,500	2,500	2,500	2,500	2,500	1,250	1,250	1,250	1,250	1,250
Truck, Flat Bed 14'	0	26	264	264	528	528	528	528	528	528
Fuel Truck, 2000 Gal	135	135	135	135	135	135	135	135	135	135
Lube Truck	135	135	135	135	135	135	135	135	135	135
Mechanics Truck, 1 Ton	135	135	135	135	135	135	135	135	135	135
Pickup 4 x 4	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755
SUV	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763
Water Truck, 4000 Gal	0	0	0	0	0	0	0	0	750	750
Water Truck, 8000 Gal Off Rd	1,996	1,996	160	0	0	0	0	0	0	0
	26,017	25,856	17,323	21,223	22,452	18,449	17,723	13,965	14,014	16,095

Appendix B-4

UP ICTF Modernization Construction Schedule and Fuel Usage

Month	24	25	26	27	28	29	30	31	32	33
	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly	Monthly
Equipment	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
Vibratrac	0	0	0	0	0	0	0	0	0	0
Hi-Rail Welder	0	0	0	0	0	0	0	0	0	0
Cat 615 Elevating Scraper	0	658	658	0	495	0	0	0	0	0
Cat 621 Scraper, 21 CY	0	0	0	0	0	0	0	0	0	0
Dump Truck, 6x4, 12 CY	0	0	0	8,544	8,544	8,544	8,544	8,010	6,408	6,408
35 Ton Art Dump	1,250	1,250	1,250	1,250	1,250	119	0	0	0	0
Truck, Flat Bed 14'	528	528	528	528	528	528	528	528	528	528
Fuel Truck, 2000 Gal	135	135	135	135	135	135	135	135	135	135
Lube Truck	135	135	135	135	135	135	135	135	135	135
Mechanics Truck, 1 Ton	135	135	135	135	167	360	360	360	360	360
Pickup 4 x 4	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755	1,755
SUV	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763	1,763
Water Truck, 4000 Gal	750	900	750	750	750	750	750	656	750	750
Water Truck, 8000 Gal Off Rd	0	0	0	0	0	0	0	0	0	0
	16,096	17,645	15,161	26,359	26,966	25,007	25,717	23,238	20,855	20,426

Appendix B-4**UP ICTF Modernization Construction Schedule and Fuel Usage**

Month	34	35	36	Total
	Monthly	Monthly	Monthly	
Equipment	Gallons	Gallons	Gallons	
Air Compressor, 175 CFM	113	150	150	4,910
Backhoe, Cat 320, 1.0 CY	1,200	960	800	79,760
Backhoe, Cat 325, 1.5 CY	0	0	0	21,642
Backhoe/loader, Cat. 416, 1CY	260	260	214	734
Hyd. Shear for Backhoe	0	0	0	229
Hyd. Boom, Trk Mtd. 12T	0	0	0	240
RT Crane, 45T	800	1,200	0	3,820
Crush Concrete	0	0	0	5,280
Cat D5 Dozer	324	400	0	1,344
Cat D6 Dozer	0	0	0	8,784
Cat D7 Dozer	0	0	0	27,071
Cat D8N Dozer	0	0	0	9,669
John Deere 9400	0	0	0	10,304
Cat 936 Loader	1,750	1,400	700	68,947
Cat 966 Loader	0	0	0	5,569
Cat 980 Loader	0	0	0	25,664
Cat 988 Loader	248	0	0	653
Cat 14H Grader	1,330	612	0	20,056
Telescopic Man Lift, 40 ft	0	0	0	131
AC Paver	187	0	0	2,323
Concrete Paving Spread	0	0	0	8,327
Cat 563 Padfoot Roller	60	0	0	2,648
Cat 563 Smooth Roller	0	0	0	9,829
Cat 815 Roller	0	0	0	10,414
Ramex Roller	225	225	0	7,503
Hand Tamp	210	210	0	7,003
Adzer Riding	1,281	1,281	1,038	3,600
Clip Machine	427	854	517	1,798
Rail Heater	256	256	207	719
Regulator	4,800	6,000	5,028	15,828
Ballast Stabilizer	1,601	2,135	769	4,505
Speed Swing	534	534	433	1,501
Track Laying Machine	2,845	2,845	2,304	7,994
Tamper Small	2,412	2,412	2,279	7,103
Tamper Large	1,600	3,200	1,968	6,768

Appendix B-4**UP ICTF Modernization Construction Schedule and Fuel Usage**

Month	34	35	36	Total
	Monthly	Monthly	Monthly	
Equipment	Gallons	Gallons	Gallons	
Vibratrac	427	641	427	1,495
Hi-Rail Welder	600	600	84	1,284
Cat 615 Elevating Scraper	0	0	0	7,361
Cat 621 Scraper, 21 CY	0	0	0	19,094
Dump Truck, 6x4, 12 CY	587	0	0	55,589
35 Ton Art Dump	0	0	0	56,369
Truck, Flat Bed 14'	528	528	528	10,586
Fuel Truck, 2000 Gal	135	90	0	4,680
Lube Truck	135	90	0	4,680
Mechanics Truck, 1 Ton	176	180	0	5,969
Pickup 4 x 4	1,755	1,755	1,665	63,090
SUV	1,763	1,763	1,145	62,832
Water Truck, 4000 Gal	750	383	0	10,189
Water Truck, 8000 Gal Off Rd	0	0	0	10,140
	29,352	30,997	20,291	