

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION**

Estimate Number	05410	Option:	0	PCN Number:	KIF530
Plant:	KIF	Revision:	0	Estimate Type:	Detailed
Cost Engineer:	C. L. Toney	Unit #:		Estimate Accuracy:	+/- 10%
Requesting Engr:	Stan Haber	Phase:	3	Estimate Issue Date	05/26/05

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering (Sunk Cost)		\$489,000
Engineering (Remaining)		\$168,000
Partner (Non-Manual)		\$0
Other / Other Organizations		\$0
<u>Total Phase I</u>		<u>\$657,000</u>
<u>Phase II</u>		
Engineering		\$0
Long Lead Procurement		\$0
Partner (Non-Manual)		\$0
Other / Other Organizations		\$0
<u>Total Phase II</u>		<u>\$0</u>
<u>Phase III</u>		
Construction (Partner)		
Permanent Material		\$518,009
Labor (T&L)	17,122.00	\$576,510
Labor (Non-Manual)	600.00	\$27,600
Equipment		\$222,397
Subcontracts		\$386,010
Partner Fee		\$76,274
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$40,200
Total Construction Cost		\$1,847,000
Engineering		\$52,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$200,000
Other / Other Organizations		\$0
<u>Total Phase III</u>		<u>\$2,099,000</u>
<u>All Phases</u>		
Construction Partner	17,722.00	\$1,847,000
Long Lead Procurement		\$0
Engineering (Sunk)		\$489,000
Engineering (Remaining)		\$220,000
Other / Other Organizations		\$0
Total Risk Dollars		\$200,000
<u>Total Project Costs</u>	<u>17,722.00</u>	<u>\$2,756,000</u>
<u>For Information only Total Environmental</u>		<u>\$0</u>
<u>For Information only Total Demolition Costs</u>		<u>\$0</u>

Spreadsheet Report
KIF/05410/FRENCH DRAINS

KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION

Project name KIF/05410/FRENCH DRAINS

Engineer Stan Haber

Estimator C. L. Toney

Project French Drains

Plant KIF

Estimate # 05410

PCN # KIF530

Requesting Engr Stan Haber

Option 0

Revision 0

Phase 3

Estimate Type Detailed

Estimate Accuracy +/- 10%

Est. Issue Date 05/26/05

Funding Type Capital

Outage(Y/N) N

Notes

This is total rollop cost estimate.

Construction part of estimate provided by HED.

Wage rates are per FY2005 craft augmented rates and no escalation is included for wages.

Estimate is based on 40 hours per week.

Report format

Sorted by 'Location/Activity'

'Detail' summary

Spreadsheet Report
KIF:05410/FRENCH DRAINS

stimate Company

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount	
PHASE 3 - HED	Installation	Construction Labor	1.00 ls	17,122.000	17,122.00 m/h	576,510	-	-	-	-	576,510.00	576,510	
		Non Manual Labor	1.00 ls	600.000	600.00 m/h	27,600	-	-	-	-	-	27,600.00	27,600
		Partner Purchased Material	1.00 ls	-	-	-	518,009	-	-	-	-	518,009.00	518,009
		Construction Heavy Equipment	1.00 ls	-	-	-	-	-	217,695	-	-	217,695.00	217,695
		Partner Subcontractors	1.00 ls	-	-	-	-	-	386,010	-	-	386,010.00	386,010
		Construction Tagged & 3rd Party Rental Equipment	1.00 ls	-	-	-	-	-	-	4,702	-	4,702.00	4,702
		Travel & Living Expenses	1.00 ls	-	-	-	-	-	-	-	5,100	5,100.00	5,100
		Installation	-	-	-	17,722.00 hrs	604,110	518,009	386,010	222,397	5,100	1,735,626	1,735,626
		PHASE 3 - HED	-	-	-	17,722.00 hrs	604,110	518,009	386,010	222,397	5,100	1,735,626	1,735,626

Spreadsheet Report
KIF05410/FRENCH DRAINS

Estimate Totals

	604,110	17,722,000	hrs	
Labor				
Material	518,009			
Subcontract	386,010			
Equipment	222,397			
Other	5,100			
	<u>1,735,626</u>			
Small Tools Expense P	24,827			L
Consumables & Expendables P	<u>18,273</u>			L
	35,100	1,770,726		
TVA-HED - Central Command	<u>76,274</u>			L
	76,274	1,847,000		
FES Engr - Phase 1(Sunk)	367,000			
Paicons Engr - Phase 1(Sunk)	122,000			
FES Engr - Phase 1(Remaining)	72,000			
Paicons Engr - Ph 1(Remaining)	<u>96,000</u>			
	657,000	2,504,000		
FES Engr - Phase 3	22,000			
Paicons Engr - Phase 3	<u>30,000</u>			
	52,000	2,556,000		
Contingency Total Project	<u>200,000</u>			L
	200,000	2,756,000		
Total		2,756,000		

**KINGSTON FOSSIL PLANT
KIF-DEVELOP FLY ASH, GYPSUM, & BOTTOM ASH DISPOSAL CAPACITY**

PCN: KIF530

CURRENT PHASE: 1

EST. TYPE: order of Magnitude

EST. ACCURACY: +/- 50%

OUTAGE: N/A

TAO 201

ACTIVE SHORT CODES

PHASE I	WORK PACKAGE	ACTIVE SHORT CODES	CURRENT BUDGET				ACTUALS AS OF 05/25/05				FORECAST								
			FY05	FY06	FY07	FY08	TOTAL	Pt Yrs	FY05	FY06	FY07	FY08	TOTAL	Pt Yrs	FY05	FY06	FY07	FY08	TOTAL
PHASE I	KIF530A-01	001D9VR	200	239	0	439	200	167	367	200	239	0	439	200	239	0	439	0	439
	KIF530A-02	001DQYM	0	5	0	5	0	0	0	0	5	0	5	0	5	0	5	0	5
	KIF530A-03	001DQYN	0	218	0	218	0	122	122	0	218	0	218	0	218	0	218	0	218
	KIF530A-04	001DQYP	0	40	0	40	0	0	0	0	40	0	40	0	40	0	40	0	40
		TOTAL STUDY PHASE	200	502	0	702	200	289	489	200	502	0	702	200	502	0	702	0	702
PHASE II	KIF530B-01	001DQYQ		50	95	330	475	0	0	0	50	95	330	475	0	475	0	475	
	KIF530B-02	001DQYR		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	KIF530B-03	001DQYS	0	15	0	15	0	0	0	0	15	0	15	0	15	0	15	0	15
	KIF530B-04	001DQYT	0	3	0	3	0	0	0	0	3	0	3	0	3	0	3	0	3
	KIF530B-05	001DQYV	0	200	200	4,000	6,900	0	0	0	200	200	4,000	6,900	200	2,500	2,500	4,000	6,900
	CONTINGENCY TOTAL PHASE II	0	268	295	2,830	7,393	0	0	0	0	268	295	2,830	7,393	0	2,830	4,000	7,393	
PHASE III	KIF530C-01	001DQYW		50	55	215	555	0	0	0	50	55	215	555	0	555	0	555	
	KIF530C-02	001DQYY		785	1,135	1,960	7,605	0	0	0	785	1,135	1,960	7,605	0	7,605	0	7,605	
	KIF530C-03	001DQYZ		20	20	20	80	0	0	0	20	20	20	80	0	80	0	80	
	KIF530C-04	001DQZ0		0	0	20	40	0	0	0	0	0	20	40	0	40	0	40	
	KIF530C-05	Parsons		0	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	CONTINGENCY TOTAL PHASE III	0	855	1,210	2,215	8,280	0	0	0	0	855	1,210	2,215	8,280	0	8,280	4,000	8,280	
TOTAL PROJECT			200	1,825	1,505	5,045	16,375	200	289	489	200	1,625	1,505	5,045	16,375	200	8,000	8,000	16,375

Ph 3 ~~200 hrs~~ FES 10K Civil 10K PE & PCS

200 hrs
220 hrs
300 hrs

5/1
5/10/02
1/20

Project Engineer: Stan Haber (751-3838)
Project Control Engineer: Tom Franklin (751-7941)

KIF530 Dev. Fly Ash, Gypsum & Bottom Ash Disposal Cap..xls
05/26/2005

ESTIMATE SUMMARY

PRELIMINARY ESTIMATE FOR 75% REVIEW

REV # 0

P.A. NO 0

DATE: 19-May-05

MPAC W.O. 0

LOCATION: KINGSTON FOSSIL UNIT NO: 0
 SHORT CODE:

PROJECT DESCRIPTION: DREDGE CELL DIKE RESTORATION

WORKSCOPE:

PHASE	3	TYPE OF FUNDING	
		CAPITAL > 100K	

PREPARED BY: WORKMAN / RADFORD

1. TVA-HED LABOR COSTS		Target Data / Comments
Craft Labor	MANHOURS	17122 ✓
	COST	\$576,510 ✓
Non-Manual Labor	MANHOURS	600 ✓
	COST	\$27,600 ✓
Contingency 0.00%	MANHOURS	0
	COST	\$0
SUBTOTAL TVA-HED LABOR		
	MANHOURS	17,722
	COST	✓ \$604,110
2. TVA-HED OTHER COSTS		
TVA-HED Subcontracts		\$386,010 ✓
TVA-HED Subcontract fee		\$0
Travel & Living Expenses		\$5,100 ✓ <i>OTHER</i>
TVA-HED Material Purchases		\$0
HED Other Costs		\$0
Contingency 0%		\$0
SUBTOTAL TVA-HED OTHER ✓		\$391,110
TOTAL TVA-HED COSTS		\$995,220
3. ITEMS MANAGED BY TVA-HED		
Permanent Materials		\$518,009 ✓
Heavy Equipment		\$217,695 ✓
Tagged & 3rd Party Rental Equipment		\$4,702 ✓
Small Tools		\$24,827 ✓ <i>OTHER</i>
Supplies, Consumables & Expendable Tools		\$10,273 ✓ <i>OTHER</i>
Office Supplies & Expenses		\$0
Other TVA-HED Costs		\$0
TVA subcontracts (By Others)		\$0
Partner or OCIP Insurance 0.00%		\$0
TVA-HED - Central Command 5.00%		\$75,661 ✓
Contingency 0%		\$0 ✓
SUBTOTAL TVA-HED MANAGED		\$851,169
TOTAL TVA-HED COSTS		\$1,846,389

APPROVALS: TOTAL 1,847,000

TVA-HED Manager	Date:
TVA-HED Estimator	Date:
TVA - Project Manager	Date:
TVA - Project Engineer	Date:
TVA - Site Environmental Engineer	Date:

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	CRAFT LABOR			WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
						QTY	UNIT	UNIT MH				
					DREDGE CELL DIKE RESTORATION							
					MOBILIZATION / EROSION CONTROL OF PROJECT							
					OE A TRENCH / BACKFILL FOR SILT FENCES	5700	LF	0.04	\$40.00	\$9,120		
					LB J INSTALL SILT FENCE / STRAW BALES AS REQUIRED	5700	LF	0.12	\$26.00	\$17,784		
					OE A BUILD EQUIPMENT CONTAINMENT AREA	1	LS	20	\$40.00	\$800		
					LB J BUILD EQUIPMENT CONTAINMENT AREA	20	LS	20	\$26.00	\$520		
					LB J SET UP OFFICE TRAILER AND EQUIPMENT CONNEX	1	LS	30	\$26.00	\$780		
					LB J INSTALL CONSTRUCTION FENCING AS REQUIRED	2000	LF	0.092	\$26.00	\$4,784		
					LB J RECEIVE & INVENTORY MATERIALS	1	LS	40	\$26.00	\$1,040		
					SEDIMENT POND							
					OE A EXCAVATE SLOPE TO PROVIDE SPACE FOR POND	960	CY	0.05	\$40.00	\$1,920		
					OE A EXCAVATE FOR TEMPORARY / PERMINATE SEDIMENT POND	1680	CY	0.03	\$40.00	\$2,016		
					TM3 HAUL MATERIAL TO TOP OF DREDGE CELL	1680	CY	0.06	\$32.00	\$3,226		
					LB J INSTALL TEMPORARY POND DEWATERING STRUCTURE	1	EA	120	\$26.00	\$3,120		
					LB J PLACE TEMPORARY GEOTEXTILE AND PUT @ POND	611	SY	0.09	\$26.00	\$1,430		
					OE A INSTALL TEMPORARY CHECK DAMS	100	TN	0.1	\$40.00	\$400		
					OE A REPLACE 1' OF TOPSOIL ON SLOPE ADJACENT TO POND	1093	CY	0.03	\$40.00	\$1,312		
					TM3 HAUL TOPSOIL	1093	CY	0.06	\$32.00	\$2,099		
					LB J SEED AND MULCH REPLACED SOIL	4	MEN	20	\$26.00	\$2,080		
					LB J INSTALL CURLEX BLANKET	3000	SY	0.062	\$26.00	\$4,836		
					ACCESS ROAD MAINTENANCE (GRAVEL)							
					OE A INSTALL 1032 CRUSHED STONE 3" BASE MATERIAL	1760	TN	0.06	\$40.00	\$4,224		
					INSTALL DRAINS FOR SWAN POND ROAD							
					OE A INSTALL 6" PIPE BOLLARDS @ NEW WELLS	36	EA	1.5	\$40.00	\$2,160		
					LB J INSTALL 6" PIPE BOLLARDS @ NEW WELLS	36	EA	1.5	\$26.00	\$1,404		
					OE A STRIP 1' OF COVER SPOILS	14094	CY	0.03	\$40.00	\$16,913		
					OE A TRENCH LATERAL OUTLET PIPES @ 775', 780' & 796'	2339	LF	0.073	\$40.00	\$6,830		
					OE A INSTALL 6" BEDDING	100	TN	0.6	\$40.00	\$2,400		
					LB J INSTALL LATERAL OUTLET PIPES	2339	LF	0.2	\$26.00	\$12,163		
					OE A BACKFILL TRENCHES	2339	LF	0.07	\$40.00	\$6,549		
					OE A TRENCH FOR PERIMETER UNDERDRAINS (4 EA)	15760	LF	0.073	\$40.00	\$46,019		
					LB J INSTALL WOVEN MARAFI 350 GEOTEXTILE FABRIC	12258	SY	0.042	\$26.00	\$13,386		
					LB J INSTALL 8" PERIMETER ADS UNDERDRAINS	15760	LF	0.2	\$26.00	\$81,952		
					OE A BACKFILL 8" PERIMETER UNDERDRAINS	4721	TN	0.17	\$40.00	\$32,103		
					OE A BACKFILL 8" PERIMETER UNDERDRAINS	15760	LF	0.07	\$40.00	\$44,128		
					INSTALL COMPOSITE GEONET BETWEEN 765 AND 775							
					FOR INSTALLATION LABOR, SEE SUBCONTRACT BELOW							
					OE A STRIP TOPSOIL AND STOCKPILE FOR REUSE (1')	32700	SY	0.035	\$40.00	\$16,800		
					TM3 SCRAPE 1' OF ASH OUT X 5' WIDE	12000	CY	0.05	\$32.00	\$1,920		
					TM3 SCRAPE 1' OF ASH OUT X 5' WIDE	1200	CY	0.05	\$32.00	\$1,920		
					OE A REPLACE 1' OF SELECTED SOIL & COMPACT	24000	CY	0.075	\$40.00	\$22,000		
					TM3 HAUL SELECTED FILL BACK TO	24000	CY	0.05	\$32.00	\$38,400		
					LB J SEED AND STRAW TOPSOILED AREAS	6	AC	40	\$26.00	\$6,240		
					INSTALL RIP RAP DITCHES							
					OE A FINAL GRADING OF DITCHES	300	CY	0.04	\$40.00	\$480		
					OE A OVER ECAVATE DITCHES FOR RIP RAP	8040	CY	0.035	\$40.00	\$11,256		
					TM3 HAUL SPOILS	8040	CY	0.05	\$32.00	\$12,864		
					LB J INSTALL 8 OZ NEEDLE PUNCHED GEOTEXTILE	10000	SY	0.019	\$26.00	\$4,940		
					OE A PLACE RIP RAP	9500	TN	0.05	\$40.00	\$19,000		

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	DESCRIPTION	CRAFT LABOR				WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL	
					QTY	UNIT	UNIT MH	MAN HOURS					
0EA		CRFT		PLACE ADDITIONAL RIP RAP AT TOE FOR STABILITY	11150	TN	0.07	781	\$40.00	\$31,220			
0EA		CRFT		INSTALL SEDIMENT TRAP	1	EA	20	20	\$40.00	\$800			
CONSTRUCT PERMANENT POND													
0EA		CRFT		REMOVE TEMPORARY DEWATERING STRUCTURE	1	LS	20	20	\$40.00	\$800			
0EA		CRFT		SET 60" MANHOLE	1	LS	30	30	\$40.00	\$1,200			
0EA		CRFT		EXCAVATE FOR 8" DIA. FORCE MAIN	1333	CY	0.08	107	\$40.00	\$4,266			
LBJ		CRFT		INSTALL 8" FORCE MAIN PIPING	2400	LF	0.098	235	\$26.00	\$6,115			
0EA		CRFT		BACKFILL MAIN	934	CY	0.07	65	\$40.00	\$2,614			
LBJ		CRFT		INSTALL GEOTEXTILE LINER - ASSUMES 12 OZ.	889	SY	0.065	58	\$26.00	\$1,502			
LBJ		CRFT		INSTALL 3" STONE	440	TN	0.15	66	\$26.00	\$1,716			
EROSION CONTROL AND BORROW PIT AREA													
0EA		CRFT		SILT FENCE TRENCHING	1200	LF	0.04	48	\$40.00	\$1,920			
LBJ		CRFT		SILT FENCE INSTALLATION	1200	LF	0.12	144	\$26.00	\$3,744			
LBJ		CRFT		FINAL SEEDING	2	AC	40	80	\$26.00	\$2,080			
0EA		CRFT		INSTALL SEDIMENT TRAP	1	EA	20	20	\$40.00	\$800			
<small>ADD ABOVE THIS LINE IF NECESSARY. DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					PRE-OUTAGE DIRECT					\$572,094			
<small>DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					SUBTOTALS :				16990				
OUTAGE - DIRECT CRAFT													
DREDGE CELL DIKE RESTORATION													
<small>ADD ABOVE THIS LINE IF NECESSARY. DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					OUTAGE DIRECT								
<small>DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					SUBTOTALS :								
POST OUTAGE - DIRECT CRAFT													
DREDGE CELL DIKE RESTORATION													
<small>ADD ABOVE THIS LINE IF NECESSARY DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					POST OUTAGE DIRECT								
<small>DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>					SUBTOTALS :				16990			\$572,094	
TOTALS - DIRECT CRAFT													
SUPPORT CRAFT													
(QTY & UNITS MUST BE INCLUDED FOR EA. LINE ITEM)													
PRE-OUTAGE - SUPPORT CRAFT													
912	CAJ			JOURNEYMAN SUPPORT - PREOUTAGE									
905	ELJ			CARPENTER - SCAFFOLDING SUPPORT								\$29.93	
902	LBJ			ELECTRICAL GENERAL SUPPORT								\$36.66	
902	LBJ			LABORERS FOR CLEAN - UP								\$22.64	
930	LBJ			LABORERS FOR WATER DISTRIBUTION								\$22.64	
930	0EA			OPERATORS FOR CRANES								\$33.60	
930	0EA			OPERATORS FOR ELEVATORS								\$33.60	
930	0EA			OPERATORS FORKRLIFTS								\$33.60	
930	0EA			TUGGER OPERATORS								\$33.60	
270	PJ			PAINTER TOUCHUP SUPPORT								\$27.16	
908	TMS			TEAMSTER TRUCK DRIVERS								\$26.34	
908	TMW			TEAMSTER TOOL ROOMS								\$26.34	
908	TMW			TEAMSTER WAREHOUSE								\$26.34	

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN	HOURS				
PRE-OUTAGE SUPPORT													
SUBTOTALS :													
OUTAGE - SUPPORT CRAFT													
JOURNEYMAN SUPPORT - OUTAGE													
912		CAJ			CARPENTER - SCAFFOLDING SUPPORT		MEN			\$29.93			
905		ELJ			ELECTRICAL GENERAL SUPPORT		MEN			\$36.66			
902		LBJ			LABORERS FOR CLEAN - UP		MEN			\$22.64			
902		LBJ			LABORERS FOR WATER DISTRIBUTION		MEN			\$22.64			
930		OEJ			OPERATORS FOR CRANES		MEN			\$33.60			
930		OEJ			OPERATORS FOR ELEVATORS		MEN			\$33.60			
930		OEJ			OPERATORS FORKLIFFS		MEN			\$33.60			
930		OEJ			TUGGER OPERATORS		MEN			\$26.89			
270		PAJ			PAINTER TOUCHUP SUPPORT		MEN			\$27.16			
908		TMJ			TEAMSTER TRUCK DRIVERS		MEN			\$26.34			
908		TMW			TEAMSTER TOOL ROOMS		MEN			\$26.34			
908		TMW			TEAMSTER WAREHOUSE		MEN			\$26.34			
GENERAL FOREMAN SUPPORT - OUTAGE													
942		AWG			INSULATOR GENERAL FOREMAN		MEN			\$42.02			
942		BMG			BOILERMAKER GENERAL FOREMAN		MEN			\$56.70			
942		ELG			ELECTRICAL GENERAL FOREMAN		MEN			\$43.51			
942		PFG			PIPEFITTER GENERAL FOREMAN		MEN			\$43.66			
OUTAGE SUPPORT													
SUBTOTALS :													
POST-OUTAGE - SUPPORT CRAFT													
JOURNEYMAN SUPPORT - POST OUTAGE													
912		CAJ			CARPENTER - SCAFFOLDING SUPPORT		MEN			\$29.93			
905		ELJ			ELECTRICAL GENERAL SUPPORT		MEN			\$36.66			
902		LBJ			LABORERS FOR CLEAN - UP		MEN			\$22.64			
902		LBJ			LABORERS FOR WATER DISTRIBUTION		MEN			\$22.64			
930		OEJ			OPERATORS FOR CRANES		MEN			\$33.60			
930		OEJ			OPERATORS FOR ELEVATORS		MEN			\$33.60			
930		OEJ			OPERATORS FORKLIFFS		MEN			\$33.60			
930		OEJ			TUGGER OPERATORS		MEN			\$33.60			
930		OEJ			TEAMSTER TRUCK DRIVERS		MEN			\$26.89			
270		PAJ			PAINTER TOUCHUP SUPPORT		MEN			\$27.16			
908		TMJ			TEAMSTER TRUCK DRIVERS		MEN			\$26.34			
908		TMW			TEAMSTER TOOL ROOMS		MEN			\$26.34			
908		TMW			TEAMSTER WAREHOUSE		MEN			\$26.34			
GENERAL FOREMAN SUPPORT - POST OUTAGE													
942		AWG			INSULATOR GENERAL FOREMAN		MEN			\$42.02			
942		BMG			BOILERMAKER GENERAL FOREMAN		MEN			\$56.70			
942		ELG			ELECTRICAL GENERAL FOREMAN		MEN			\$43.51			
942		PFG			PIPEFITTER GENERAL FOREMAN		MEN			\$43.66			

ADD ABOVE THIS LINE IF NECESSARY
DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE

ADD ABOVE THIS LINE IF NECESSARY
DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRAFT	DESCRIPTION	POST OUTAGE SUPPORT			CRAFT LABOR			TOTAL LABOR	MATERIAL	TOTAL MATERIAL	
						QTY UNIT	UNIT MH	MAN HOURS	WAGE RATE	UNIT MH	MAN HOURS				WAGE RATE
ADD ABOVE THIS LINE IF NECESSARY DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE															
MOBILIZATION OF CRAFT															
901		AWJ			ADMINISTRATIVE TIME										
901		AWJ			SAFETY MEETING										
901		AWJ			DRUG TEST										
901		ABJ			ADMINISTRATIVE TIME										
901		ABJ			SAFETY MEETING										
901		ABJ			DRUG TEST										
901		BMJ			ADMINISTRATIVE TIME										
901		BMJ			SAFETY MEETING										
901		BMJ			DRUG TEST										
901		CAJ			ADMINISTRATIVE TIME										
901		CAJ			SAFETY MEETING										
901		CAJ			DRUG TEST										
901		ELJ			ADMINISTRATIVE TIME										
901		ELJ			SAFETY MEETING										
901		ELJ			DRUG TEST										
901		IWJ			ADMINISTRATIVE TIME										
901		IWJ			SAFETY MEETING										
901		IWJ			DRUG TEST										
901		LBJ			ADMINISTRATIVE TIME										
901		LBJ			SAFETY MEETING										
901		LBJ			DRUG TEST										
901		OEA			ADMINISTRATIVE TIME										
901		OEA			SAFETY MEETING										
901		OEA			DRUG TEST										
901		PAJ			ADMINISTRATIVE TIME										
901		PAJ			SAFETY MEETING										
901		PAJ			DRUG TEST										
901		MWJ			ADMINISTRATIVE TIME										
901		MWJ			SAFETY MEETING										
901		MWJ			DRUG TEST										
901		PFJ			ADMINISTRATIVE TIME										
901		PFJ			SAFETY MEETING										
901		PFJ			DRUG TEST										
901		SMJ			ADMINISTRATIVE TIME										
901		SMJ			SAFETY MEETING										
901		SMJ			DRUG TEST										
901		TMW			ADMINISTRATIVE TIME										
901		TMW			SAFETY MEETING										
901		TMW			DRUG TEST										

CONSTR FAC & MOB SUBTOTALS : \$4,416

MISCELLANEOUS CONSTRUCTION FACILITIES

MISC. CONSTR FAC SUBTOTALS :

0.77%
99.23%

\$4,416
\$572,094
\$576,510

132
16990
17122

TOTAL SUPPORT CRAFT LABOR
TOTAL DIRECT CRAFT LABOR
GRAND TOTAL CRAFT LABOR

LABOR SUMMARY

SUBCONTRACTS - HED

PSUB1	HCOST	ENGINEERING - GEOCOMPOSITE O&J OC - MACTEC	\$15,000
PSUB2	HCOST	HCOST TVA SURVEY/LAYOUT OF CONTROL POINTS	\$11,500
PSUB3	HCOST	HCOST WELL INSTALLATION CONTRACTOR	\$9,510
PSUB4	HCOST	HCOST GEOCOMPOSITE LINER INSTALLATION CONTRACTOR (32,700 SY)	\$165,000
PSUB5	HCOST	HCOST ELECTRICAL PUMP RELOCATION CONTRACTOR	\$20,000
PSUB6	HCOST	HCOST FENCE CONTRACTOR (4500 LF & GATES)	\$165,000
PSUB7	HCOST		\$386,010

TOTAL - SUBCONTRACTS - HED \$386,010

SUBCONTRACTS - TVA (OTHERS)

TSUB1	HCOST		
TSUB2	HCOST		
TSUB3	HCOST		
TSUB4	HCOST		
TSUB5	HCOST		
TSUB6	HCOST		

TOTAL - SUBCONTRACTS - TVA (OTHERS)

MATERIALS - TVA PURCHASE

SEE MATERIALS LIST

TMTL	HCOST		
TMTL	HCOST		
TMTL	HCOST		

TOTAL - MATERIALS - HED PURCHASE \$518,009

MATERIALS - TVA (OTHERS) PURCHASE

TMTL			
------	--	--	--

DO NOT USE

PMTL	HCOST		
PMTL	HCOST		
PMTL	HCOST		

TOTAL - MATERIALS - TVA (OTHERS)

NON-MANUAL LABOR

STAFFING (See Staff Plan for Details)

950 600 \$27,600

NON PROJECT SPECIFIC STAFF

MAT. CODE	WORK ORDER	CODE	ACT SCH	CODE	DESCRIPTION	CRAFT LABOR			TOTAL LABOR	MATERIAL	TOTAL MATERIAL
						QTY	UNIT	UNIT MH			
950X					HCOST TRAVEL & LIVING EXPENSES				\$5,100		
					TOTAL - NON-MANUAL LABOR				\$32,700		
					OTHER COSTS - MANAGED BY HED						
		STLS			HCOST SMALL TOOLS	17122	MHRS		\$1.45		\$24,827
		CONS			HCOST CONSUMABLES	17122	MHRS		\$0.60		\$10,273
		OSUP			HCOST OFFICE SUPPLIES AND EXPENSES						
					TOTAL-COST MANAGED BY HED						\$35,101

TVA HEAVY EQUIPMENT														
Note: 1st Shift rate shown - 2nd shift rate is a lookup														
MATERIAL	MAT. CODE	WORK ORDER	CODE	ACT SCH	CODE	DESCRIPTION	QTY	UNIT	UNIT MH	MAN HOURS	WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
			HED		HED	HCOST AIR TUGGERS 10000 # WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST AIR TUGGERS 4000 # WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST AIR TUGGERS 2000 # WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST AIR TUGGERS 1000 # WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST SKYCLIMBERS WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST BASKETS WEEKLY RENTAL		WK	N/A					
			HED		HED	HCOST PICKS WEEKLY RENTAL		1ST	2ND	145				
			HED		HED	HCOST 60' JLG		1ST	2ND	54				
			HED		HED	HCOST GAS WELDER		1ST	2ND	55				
			HED		HED	HCOST FORKLIFTS 8000 #		1ST	2ND	45				\$1,350
			HED		HED	HCOST FORKLIFT 6000 #	30	1ST	2ND	350				
			HED		HED	HCOST YARD CRANE 65 TON		1ST	2ND	205				
			HED		HED	HCOST YARD CRANE 35 TON		1ST	2ND	160				
			HED		HED	HCOST YARD CRANE 20 TON		1ST	2ND	50				
			HED		HED	HCOST AIR COMPRESSOR 350 CFM		1ST	2ND	95				
			HED		HED	HCOST AIR COMPRESSOR 750 CFM		1ST	2ND	150				
			HED		HED	HCOST AIR COMPRESSOR 1800 CFM		1ST	2ND	43				
			HED		HED	HCOST LIGHT PLANT		1ST	2ND	40				
			HED		HED	HCOST FARM TRACTOR		1ST	2ND	90				
			HED		HED	HCOST JD 350		1ST	2ND	200		\$5,000		
			HED		HED	HCOST D4-XL	25	1ST	2ND	261		\$9,135		
			HED		HED	HCOST D6M - LGP	35	1ST	2ND	474				
			HED		HED	HCOST D8N		1ST	2ND	332				
			HED		HED	HCOST D8K		1ST	2ND	480				
			HED		HED	HCOST SCRAPER 631(2EA)		1ST	2ND	412				
			HED		HED	HCOST SCRAPER 621-E (3 EA)		1ST	2ND	215		\$4,300		
			HED		HED	HCOST MOTOR GRADER		1ST	2ND	190		\$6,650		
			HED		HED	HCOST DYNAPAC 22.5 TON - SMOOTH DRUM	20	1ST	2ND	220		\$6,650		
			HED		HED	HCOST SHEEPPHOO - REX 350	35	1ST	2ND	220				
			HED		HED	HCOST CRAWLER FRONT END LOADER		1ST	2ND	225				
			HED		HED	HCOST WHEEL LOADER		1ST	2ND	140				
			HED		HED	HCOST TRUCK TRACTOR		1ST	2ND	30				
			HED		HED	HCOST TRAILER FOR TRUCK		1ST	2ND	140		\$7,840		
			HED		HED	HCOST TANDEM DUMP TRUCKS (4)	20	1ST	2ND	284		\$5,680		
			HED		HED	HCOST DUMP TRUCK - 769	50	1ST	2ND	110		\$5,500		
			HED		HED	HCOST BACKHOE - 430	28	1ST	2ND	280		\$7,840		
			HED		HED	HCOST TRACK HOE - 270 KOMATSU	35	1ST	2ND	280		\$9,800		
			HED		HED	HCOST TRACK HOE - 325 CATERPILLAR		1ST	2ND	60				
			HED		HED	HCOST STACKBODY		1ST	2ND	480		\$24,000		
			HED		HED	HCOST GREASE TRUCK		1ST	2ND	65				
			HED		HED	HCOST WATER TRUCK		1ST	2ND					

MAT. CODE	CODE ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	MAN HOURS	WAGE RATE	TOTAL LABOR	TOTAL MATERIAL
		HED	HED	CRFT	HCOST FUEL TRUCK	50	1ST	2ND	59	\$2,950	
		HED	HED		HCOST PICKUP - FLATBED 2 TON	50	1ST	2ND	57	\$2,850	
		HED	HED		HCOST FIXED 65 TON		1ST	2ND	340		
		HED	HED		HCOST FIXED 100 TON		1ST	2ND	475		
		HED	HED		HCOST 4100 AND RINGER		1ST	2ND	1,000		
		HED	HED		HCOST 4100		1ST	2ND	540		
		HED	HED		HCOST 4100 AND TOWER		1ST	2ND	790		
		HED	HED		HCOST 815 CAT COMPACTOR		1ST	2ND	310		
		HED	HED		HCOST CRAWLER FRONT END LOADER		1ST	2ND	360	\$21,600	
		HED	HED		HCOST BOBCAT (3)	120	1ST	2ND	180	\$2,800	
		HED	HED		HCOST KAWASAKI MULE - 1EA.	100	1ST	2ND	28	\$2,500	
		HED	HED		HCOST TRENCHER - DITCH SWITCH	25	1ST	2ND	100		
		HED	HED		HCOST CREW TRAILERS (1)	1	1ST	2ND	28		
		HED	HED		HCOST TRENCHING MACHINE RENTAL	3	MO	2ND	36,500	\$91,250	
3RD PARTY HEAVY EQUIPMENT											
TAGGED TOOLS											
TOTAL - HEAVY EQUIPMENT \$217,695											
		TLS	TLS		HCOST ABATEMENT EQUIPMENT SHOWER, 2 MAN, PORTABLE		WKS		\$25		
		TLS	TLS		HCOST ABATEMENT HEPA VAC - ELECTRIC, 5 GAL WITH SCALER, FILTERS EXTRA CHARGE		WKS		\$75		
		TLS	TLS		HCOST ABATEMENT HEPA VAC-ELEC OPRTED 110V W/10 FT KOSE, 16 GAL, FILTERS EXT CKG		WKS		\$94		
		TLS	TLS		HCOST ABATEMENT TORNADO HEPA VAC-AIR OPRTD SCALER 16 GAL CAP, FILTERS EXT CKG		WKS		\$94		
		TLS	TLS		HCOST AIR CONDITIONING UNIT, 10 TON		WKS		\$932		
		TLS	TLS		HCOST AIR MANIFOLD LARGE 12 OUTLETS		WKS		\$20		
		TLS	TLS		HCOST AIR MANIFOLD SMALL 4 OUTLETS		WKS		\$10		
		TLS	TLS		HCOST AIR MANIFOLD SMALL 6 OUTLETS		WKS		\$14		
		TLS	TLS		HCOST AIR RECEIVING TANK 1060 GALLONS		WKS		\$500		
		TLS	TLS		HCOST BAG - LIFTING, 22 TON AIR OPERATED 20' X 20' X 1"		WKS		\$30		
		TLS	TLS		HCOST BAG - LIFTING, 32 TON AIR OPERATED 24' X 24' X 1"		WKS		\$30		
		TLS	TLS		HCOST BAG - LIFTING, 44 TON AIR OPERATED, 28' X 28' X 1"		WKS		\$30		
		TLS	TLS		HCOST BAG - LIFTING, 73 TON AIR OPERATED, 36' X 36' X 1"		WKS		\$40		
		TLS	TLS		HCOST BENDER CONDUIT ELECTRIC GREENLEE 555 1/2"-2" SHOES		WKS		\$100		
		TLS	TLS		HCOST BENDER CONDUIT ENERPAC 2-1/2"-4" EMT #B-448 W/PUMP		WKS		\$125		
		TLS	TLS		HCOST BENDER CONDUIT GREENLEE 880 1/2"-2"		WKS		\$165		
		TLS	TLS		HCOST BENDER CONDUIT GREENLEE 881 2-1/2"-4" EMT, IMC, RIGID CONDUIT		WKS		\$125		
		TLS	TLS		HCOST BENDER CONDUIT GREENLEE 884 1-1/4"-4" RIGID CONDUIT		WKS		\$130		
		TLS	TLS		HCOST BENDER CONDUIT GREENLEE 885 1-1/4"-5" RIGID CONDUIT		WKS		\$140		
		TLS	TLS		HCOST BENDER CONDUIT MECHANICAL OPERATED W/LEVER 1-1/4"-1-1/2"		WKS		\$85		
		TLS	TLS		HCOST BENDER CONDUIT TABLE ENERPAC		WKS		\$43		
		TLS	TLS		HCOST BENDER CONDUIT TABLE FOR 881 GREENLEE BENDER		WKS		\$43		

MAT. CODE	CODE WORK ORDER	CODE ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
							MAN HOURS	UNIT MH				
		TLS		HCOST BENDER CONDUIT TABLE FOR 884, 885 GREENLEE BENDER		WKS			\$43			
		TLS		HCOST BENDER EMT CONDUIT GREENLEE 882 1 1/4"-2" W/OUT PUMP		WKS			\$180			
		TLS		HCOST BENDER hyd PUMP GREENLEE MDL 960 10000PSI ELEC USED W/1"-4" BENDERS		WKS			\$60			
		TLS		HCOST BENDER HYD PUMP GREENLEE MDL 980 10000PSI ELEC USED W/1"-5" BENDERS		WKS			\$45			
		TLS		HCOST BENDER HYDRAULIC PUMP ENERPAC		WKS			\$25			
		TLS		HCOST BEVEL MACHINE AIR 1/2"-2" H&S MODEL J		WKS			\$157			
		TLS		HCOST BEVEL MACHINE AIR 2"-8" H&S MODEL MT		WKS			\$290			
		TLS		HCOST BEVEL MACHINE AIR 5000 H&S MODEL MKS		WKS			\$215			
		TLS		HCOST BEVEL MACHINE AIR 5/8"-3" H&S MODEL BR		WKS			\$157			
		TLS		HCOST BEVEL MACHINE AIR 7/8"-4" H&S MODEL MB		WKS			\$54			
		TLS		HCOST BEVEL MACHINE AIR CADDY H&S		WKS			\$60			
		TLS		HCOST BEVEL MACHINE AIR H&S HEAVY DUTY		WKS			\$396			
		TLS		HCOST BEVEL MACHINE AIR H&S BEVELMASTER-212B		WKS			\$395			
		TLS		HCOST BEVEL MACHINE AIR H&S MODEL MFT		WKS			\$155			
		TLS		HCOST BEVEL MACHINE AIR H&S MODEL MSX		WKS			\$175			
		TLS		HCOST BEVEL MACHINE CLAMSHHELL NB-16 H&S		WKS			\$803			
		TLS		HCOST BEVEL MACHINE, MINI B, H&S		WKS			\$153			
		TLS		HCOST BLOCK SNATCH DBL, KK-12T, 6", 3/4"		WKS			\$29			
		TLS		HCOST BLOCK SNATCH DBL, SKK-12T, 6", 3/4"		WKS			\$24			
		TLS		HCOST BLOCK SNATCH SGL, KK-12T, 6", 3/4"		WKS			\$25			
		TLS		HCOST BLOCK SNATCH SGL, KK-15T, 6", 7/8"		WKS			\$26			
		TLS		HCOST BLOCK SNATCH SGL, KK-20T, 8", 1"		WKS			\$23			
		TLS		HCOST BLOCK SNATCH SGL, SKK-12T, 6", 3/4"		WKS			\$31			
		TLS		HCOST BLOCK SNATCH SGL, SKK-15T, 6", 7/8"		WKS			\$26			
		TLS		HCOST BLOCK SNATCH SGL, SKK-20T, 8", 1"		WKS			\$22			
		TLS		HCOST BLOCK SNATCH SHACKLE 12 T DOUBLE Sheaf		WKS			\$23			
		TLS		HCOST BLOCK SNATCH TRIPLE, KK-12-1/2T, 6", 3/4"		WKS			\$23			
		TLS		HCOST BLOCK SNATCH TRIPLE, SKK-12-1/2T, 6", 5/8"		WKS			\$22			
		TLS		HCOST BLOWER-COPPIUS 10" ELECTRIC OPERATED, 115 VOLT		WKS			\$60			
		TLS		HCOST BLOWER-COPPIUS 12" ELECTRIC OPERATED, 115 VOLT		WKS			\$70			
		TLS		HCOST BLOWER-COPPIUS 16" ELECTRIC, 115 VOLT		WKS			\$107			
		TLS		HCOST BLOWER-COPPIUS 16" ELECTRIC, 480 VOLT		WKS			\$85			
		TLS		HCOST BLOWER-COPPIUS 6" ELECTRIC OPERATED, 115 VOLT		WKS			\$40			
		TLS		HCOST BLOWER-COPPIUS 8" ELECTRIC OPERATED, 115 VOLT		WKS			\$50			
		TLS		HCOST BUCKET CONCRETE - 1 YARD CAPACITY CLAM GATE		WKS			\$125			
		TLS		HCOST BUCKET CONCRETE 1 YARD CAPACITY LAYDOWN		WKS			\$60			
		TLS		HCOST BUCKET CONCRETE 1/2 YARD CAPACITY CLAM GATE		WKS			\$85			
		TLS		HCOST BUCKET CONCRETE 1-1/2 YARD CAPACITY CLAM GATE		WKS			\$217			
		TLS		HCOST BUCKET CONCRETE 3/4 YARD, SET-UP FOR FORKLIFT		WKS			\$20			
		TLS		HCOST CABLE ASSEMBLY, Y TYPE, 440 VOLT W/2 FEMALE CONNECTORS		WKS			\$6			
		TLS		HCOST CAUTION LIGHT FLASHING		WKS			\$29			
		TLS		HCOST CERAMIC TILE CUTTER 8 INCH		WKS			\$45			
		TLS		HCOST CLAMP BEAM 5 TON 6"-12"		WKS			\$50			
		TLS		HCOST CLAMP BEAM 8 TON 8"-18"		WKS			\$150			
		TLS		HCOST CLAMP WALLBANGER TUBE 1.25"		WKS			\$400			
		TLS		HCOST CLAMP WALLBANGER TUBE 1.75"		WKS			\$250			
		TLS		HCOST CLAMP WALLBANGER TUBE 1-3/8X2"		WKS			\$535			
		TLS		HCOST CLAMP WALLBANGER TUBE 2.5"		WKS			\$253			
		TLS		HCOST CLAMP PIPE 10"-36"		WKS			\$90			
		TLS		HCOST CLEANER-STEAM-KEROSENE ELEC OPR 110 V, 2.2 GPM @ 1200 PSI		WKS			\$100			
		TLS		HCOST COMPACTOR PLATE 18"X18" GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$115			
		TLS		HCOST COMPACTOR PLATE 21X24" GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$7			
		TLS		HCOST CONCRETE FORM 12"X10" STEEL W/3 EA, 7/8" HEAVY DUTY STAK		WKS			\$45			
		TLS		HCOST CONVERTER PDC 480/120 (SMALL)		WKS			\$150			
		TLS		HCOST CONVERTER PDC 480/240/120		WKS			\$150			
		TLS		HCOST CRANE FLOOR 1 TON		WKS			\$150			

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN HOURS	UNIT MH				
		TLS	TLS		HCOST CRANE FLOOR 2 TON, HYDRAULIC MANUAL PUMP EXTENDIBLE		WKS			\$175			
		TLS	TLS		HCOST CRIMPER HYDRAULIC DIELESS #4 THRU 1000MCM		WKS			\$70			
		TLS	TLS		HCOST CRIMPER HYDRAULIC W/ DIES		WKS			\$100			
		TLS	TLS		HCOST CRIMPER HYSPRESS BUNDRY MOD # Y60BKU		WKS			\$170			
		TLS	TLS		HCOST CRIMPER WIRE 8-750MCM		WKS			\$75			
		TLS	TLS		HCOST CRIMPER WIRE DIELESS #9AWG-750MCM TBM 14M		WKS			\$25			
		TLS	TLS		HCOST CRIMPER 15 TON HYDRAULIC T&B 2/0-500 MCM		WKS			\$175			
		TLS	TLS		HCOST CRIMPER-REBAR		WKS			\$330			
		TLS	TLS		HCOST CUTTER CABLE HYDRAULIC 3/8"-2"		WKS			\$90			
		TLS	TLS		HCOST CUTTER CABLE HYDRAULIC HEAD, 3/8" TO 4" ENERPAC/WKC-4000		WKS			\$90			
		TLS	TLS		HCOST CUTTER CABLE HYDRAULIC W/PUMP		WKS			\$90			
		TLS	TLS		HCOST CUTTER PIPE 2-1/2"-8" MOD. 258XL W/2 EA. PIPE SUPPORTS 2800		WKS			\$642			
		TLS	TLS		HCOST CUTTER PIPE 8"-12" MOD. 258XL W/2 EA. PIPE SUPPORTS AND 1 EA. ADP		WKS			\$642			
		TLS	TLS		HCOST DETECTOR METAL WALK THRU PORTABLE		WKS			\$180			
		TLS	TLS		HCOST DETECTOR PIPE AND CABLE		WKS			\$50			
		TLS	TLS		HCOST DITCH SWITCH		WKS			\$565			
		TLS	TLS		HCOST DOLLY ROLLER 10 TON (SET OF 4) HILLMAN		WKS			\$30			
		TLS	TLS		HCOST DOLLY ROLLER 100 TON (SET OF 4) HILLMAN		WKS			\$75			
		TLS	TLS		HCOST DOLLY ROLLER 15 TON (SET OF 4) HILLMAN		WKS			\$35			
		TLS	TLS		HCOST DOLLY ROLLER 25 TON (SET OF 4) HILLMAN		WKS			\$45			
		TLS	TLS		HCOST DOLLY ROLLER 30 TON (SET OF 4) HILLMAN		WKS			\$55			
		TLS	TLS		HCOST DOLLY ROLLER 40 TON (SET OF 4) HILLMAN		WKS			\$60			
		TLS	TLS		HCOST DOLLY ROLLER 50 TON (SET OF 4) HILLMAN		WKS			\$60			
		TLS	TLS		HCOST DOLLY ROLLER 7.5 TON (SET OF 4) HILLMAN		WKS			\$25			
		TLS	TLS		HCOST DOLLY ROLLER 8 TON (SET OF 4) HILLMAN		WKS			\$25			
		TLS	TLS		HCOST DRILL HAMMER HILTI TE-74 ELECTRIC OPERATED 115 VOLT		WKS			\$30			
		TLS	TLS		HCOST DRILL HAMMER HILTI TE-74 ELECTRIC OPERATED 115 VOLT		WKS			\$60			
		TLS	TLS		HCOST DRILL JACK-LEG 60 LB AIR OPERATED		WKS			\$140			
		TLS	TLS		HCOST DRILL ROCK AIR W/SPLICERS		WKS			\$214			
		TLS	TLS		HCOST DRILL TUNNEL G/D MOD. S83F17		WKS			\$45			
		TLS	TLS		HCOST DRILL-CHAIN BASE 1/2" ELECTRIC		WKS			\$95			
		TLS	TLS		HCOST DRILL-ELECT 1" CORE W/WATER TANK		WKS			\$90			
		TLS	TLS		HCOST DRILL-ELECT 1-1/4" CORE 230 V. VERT. WATER CLD BIT W/PUMP		WKS			\$90			
		TLS	TLS		HCOST DRILL-ELECT 1-1/4" CORE HILTI 115 V		WKS			\$50			
		TLS	TLS		HCOST DRILL-ELECT HAMMER TE-82 115 VOLT HILTI		WKS			\$100			
		TLS	TLS		HCOST DRILL-ELECT. MAGNETIC 1/2"-KEIGHT 14" #424S		WKS			\$70			
		TLS	TLS		HCOST DRILL-ELECT. PRESS 1-1/4", MAGNETIC 115 VOLT		WKS			\$35			
		TLS	TLS		HCOST DRILL-ELECT. PRESS, 1/2" FLOOR 115 VOLT		WKS			\$35			
		TLS	TLS		HCOST DRILL-ELECT. PRESS, 1/2" MAGNETIC 115 VOLT		WKS			\$40			
		TLS	TLS		HCOST DRILL-ELECT. PRESS, 3/4" MAGNETIC 115 VOLT		WKS			\$65			
		TLS	TLS		HCOST DRILL-ELECT. STEEL HAWG MAGNETIC 115 VOLT		WKS			\$70			
		TLS	TLS		HCOST FAN BOX 48" HI-VOLUME		WKS			\$170			
		TLS	TLS		HCOST FEEDER WIRE LINCOLN LN-25 ELECTRIC OPERATED		WKS			\$33			
		TLS	TLS		HCOST FEEDER WIRE. ELECTRIC MILLER WELDING - S-22P12, MIG		WKS			\$33			
		TLS	TLS		HCOST FLOOR SCRUBBER 32"		WKS			\$450			
		TLS	TLS		HCOST FLOOR TILE STRIPPER ELECTRIC		WKS			\$200			
		TLS	TLS		HCOST FLOOR TILE STRIPPER, ELECTRIC		WKS			\$115			
		TLS	TLS		HCOST GENERATOR 5000 WATT, GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$115			
		TLS	TLS		HCOST GENERATOR 6000 WATT, GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$132			
		TLS	TLS		HCOST GILBRATOR W/CHARGER (FOR CALIBRATION OF AIR SAMPLE PUMP)		WKS			\$20			
		TLS	TLS		HCOST GROOVER PIPE, VICTAULIC, 5" COMPLETE		WKS			\$304			
		TLS	TLS		HCOST GROOVER, PIPE, VICTAULIC, ELEC 6"-10"		WKS			\$335			
		TLS	TLS		HCOST GUN HOG RING AIR OPERATED 1/2"		WKS			\$25			
		TLS	TLS		HCOST GUN HOG RING SPENAX-AIR OPERATED 3/4"		WKS			\$30			
		TLS	TLS		HCOST GUN SPOOLMATIC W/CONTROL BOX		WKS			\$154			
		TLS	TLS		HCOST HAMMER JACK 70 LB ROTARY AIR		WKS			\$150			
		TLS	TLS		HCOST HAMMER PAVEMENT BREAKER 90LB AIR OPERATED		WKS			\$55			
		TLS	TLS		HCOST HAMMER, SCARIFIER - AIR		WKS			\$97			
		TLS	TLS		HCOST HOIST 20' 20 TON MANUAL OPERATED		WKS			\$214			
		TLS	TLS		HCOST HOIST CHAIN, 10' 1 TON AIR OPERATED		WKS			\$87			

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	DESCRIPTION	QTY	UNIT	MAN HOURS	WAGE RATE	TOTAL LABOR	TOTAL MATERIAL
		TLS	TLS	HOIST HOIST CHAIN 10' 1 TON ELECTRIC OPERATED		WKS		\$95		
		TLS	TLS	HOIST HOIST CHAIN 10' 1 TON MANUAL OPERATED		WKS		\$12		
		TLS	TLS	HOIST HOIST CHAIN 10' 1/2 TON MANUAL OPERATED		WKS		\$10		
		TLS	TLS	HOIST HOIST CHAIN 10' 10 TON MANUAL OPERATED		WKS		\$104		
		TLS	TLS	HOIST HOIST CHAIN 10' 1-1/2 ton AIR OPERATED		WKS		\$81		
		TLS	TLS	HOIST HOIST CHAIN 10' 1-1/2 TON MANUAL OPERATED		WKS		\$14		
		TLS	TLS	HOIST HOIST CHAIN 10' 15 TON MANUAL OPERATED		WKS		\$196		
		TLS	TLS	HOIST HOIST CHAIN 10' 2 TON ELECTRIC OPERATED		WKS		\$110		
		TLS	TLS	HOIST HOIST CHAIN 10' 2 TON MANUAL OPERATED		WKS		\$19		
		TLS	TLS	HOIST HOIST CHAIN 10' 2 TON MANUAL OPERATED		WKS		\$24		
		TLS	TLS	HOIST HOIST CHAIN 10' 3 TON MANUAL OPERATED		WKS		\$266		
		TLS	TLS	HOIST HOIST CHAIN 10' 5 TON AIR OPERATED		WKS		\$85		
		TLS	TLS	HOIST HOIST CHAIN 10' 5 TON MANUAL OPERATED		WKS		\$95		
		TLS	TLS	HOIST HOIST CHAIN 10' 6 TON MANUAL OPERATED		WKS		\$120		
		TLS	TLS	HOIST HOIST CHAIN 10' 10 TON MANUAL OPERATED		WKS		\$100		
		TLS	TLS	HOIST HOIST CHAIN 20' 1 ton AIR OPERATED		WKS		\$14		
		TLS	TLS	HOIST HOIST CHAIN 20' 1 TON MANUAL OPERATED		WKS		\$98		
		TLS	TLS	HOIST HOIST CHAIN 20' 1/2 ton AIR OPERATED		WKS		\$90		
		TLS	TLS	HOIST HOIST CHAIN 20' 1/2 TON ELECTRIC OPERATED		WKS		\$12		
		TLS	TLS	HOIST HOIST CHAIN 20' 1/2 TON MANUAL OPERATED		WKS		\$162		
		TLS	TLS	HOIST HOIST CHAIN 20' 10 TON MANUAL OPERATED		WKS		\$173		
		TLS	TLS	HOIST HOIST CHAIN 20' 11 TON MANUAL OPERATED		WKS		\$100		
		TLS	TLS	HOIST HOIST CHAIN 20' 1-1/2 ton AIR OPERATED		WKS		\$17		
		TLS	TLS	HOIST HOIST CHAIN 20' 1-1/2 TON MANUAL OPERATED		WKS		\$185		
		TLS	TLS	HOIST HOIST CHAIN 20' 15 TON MANUAL OPERATED		WKS		\$144		
		TLS	TLS	HOIST HOIST CHAIN 20' 2 TON ELECTRIC OPERATED		WKS		\$247		
		TLS	TLS	HOIST HOIST CHAIN 20' 2 TON MANUAL OPERATED		WKS		\$116		
		TLS	TLS	HOIST HOIST CHAIN 20' 3 ton AIR OPERATED		WKS		\$33		
		TLS	TLS	HOIST HOIST CHAIN 20' 3 TON MANUAL OPERATED		WKS		\$165		
		TLS	TLS	HOIST HOIST CHAIN 20' 5 TON MANUAL OPERATED		WKS		\$208		
		TLS	TLS	HOIST HOIST CHAIN 20' 6 ton AIR OPERATED		WKS		\$116		
		TLS	TLS	HOIST HOIST CHAIN 20' 6 TON MANUAL OPERATED		WKS		\$539		
		TLS	TLS	HOIST HOIST CHAIN 25' 10 ton AIR OPERATED		WKS		\$100		
		TLS	TLS	HOIST HOIST CHAIN 30' 1 TON AIR OPERATED		WKS		\$105		
		TLS	TLS	HOIST HOIST CHAIN 30' 1 TON ELECTRIC OPERATED		WKS		\$17		
		TLS	TLS	HOIST HOIST CHAIN 30' 1 TON MANUAL OPERATED		WKS		\$100		
		TLS	TLS	HOIST HOIST CHAIN 30' 1/2 TON AIR OPERATED		WKS		\$16		
		TLS	TLS	HOIST HOIST CHAIN 30' 1/2 TON MANUAL OPERATED		WKS		\$127		
		TLS	TLS	HOIST HOIST CHAIN 30' 10 TON MANUAL OPERATED		WKS		\$110		
		TLS	TLS	HOIST HOIST CHAIN 30' 1-1/2 TON AIR OPERATED		WKS		\$22		
		TLS	TLS	HOIST HOIST CHAIN 30' 1-1/2 TON MANUAL OPERATED		WKS		\$150		
		TLS	TLS	HOIST HOIST CHAIN 30' 12 TON MANUAL OPERATED		WKS		\$144		
		TLS	TLS	HOIST HOIST CHAIN 30' 2 TON ELECTRIC OPERATED		WKS		\$110		
		TLS	TLS	HOIST HOIST CHAIN 30' 3 TON AIR OPERATED		WKS		\$33		
		TLS	TLS	HOIST HOIST CHAIN 30' 3 TON MANUAL OPERATED		WKS		\$222		
		TLS	TLS	HOIST HOIST CHAIN 30' 5 TON AIR OPERATED		WKS		\$116		
		TLS	TLS	HOIST HOIST CHAIN 30' 5 TON MANUAL OPERATED		WKS		\$289		
		TLS	TLS	HOIST HOIST CHAIN 30' 6 TON AIR OPERATED		WKS		\$173		
		TLS	TLS	HOIST HOIST CHAIN 30' 6 TON MANUAL OPERATED		WKS		\$90		
		TLS	TLS	HOIST HOIST CHAIN 30' 8 TON MANUAL OPERATED		WKS		\$100		
		TLS	TLS	HOIST HOIST CHAIN 40' 1/2 TON AIR OPERATED		WKS		\$116		
		TLS	TLS	HOIST HOIST CHAIN 40' 1-1/2 TON AIR OPERATED		WKS		\$120		
		TLS	TLS	HOIST HOIST CHAIN 40' 3 TON AIR OPERATED		WKS		\$116		
		TLS	TLS	HOIST HOIST CHAIN 50' 1-1/2 TON AIR OPERATED		WKS		\$144		
		TLS	TLS	HOIST HOIST CHAIN 50' 2 TON MANUAL OPERATED		WKS		\$427		
		TLS	TLS	HOIST HOIST CHAIN 50' 8 TON AIR OPERATED		WKS		\$511		
		TLS	TLS	HOIST HOIST CHAIN 75' 5 TON AIR OPERATED		WKS		\$539		
		TLS	TLS	HOIST HOIST CHAIN 75' 6 TON AIR OPERATED		WKS		\$501		
		TLS	TLS	HOIST HOIST CHAIN 80' 15 TON ELECTRIC OPERATED		WKS				

MAT. CODE	WORK ORDER	CODE	ACT	DESCRIPTION	QTY	UNIT	UNIT	HOURS	RATE	LABOR	MATERIAL
		TTLS	SCH	HCOST HOIST CHAIN 10' 1/2 TON AIR OPERATED		WKS			\$81		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 10' 1-1/2 TON		WKS			\$14		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 10' 3 TON		WKS			\$17		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 10' 3/4 TON		WKS			\$10		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 10' 6 TON		WKS			\$31		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 20' 1-1/2 TON		WKS			\$16		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 20' 3/4 TON		WKS			\$19		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 20' 6 TON		WKS			\$10		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 30' 1-1/2 TON		WKS			\$45		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 30' 3 TON		WKS			\$17		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 30' 3/4 TON		WKS			\$22		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 30' 6 TON		WKS			\$12		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 5' 1-1/2 TON		WKS			\$50		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 5' 3 TON		WKS			\$12		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 5' 3/4 TON		WKS			\$16		
		TTLS	SCH	HCOST HOIST PULLER MANUAL OPERATED 5' 6 TON		WKS			\$9		
		TTLS	SCH	HCOST HOPPER DUMP 2 CUBIC YD FORKLIFT TYPE		WKS			\$29		
		TTLS	SCH	HCOST JACK 10-20 TON HYDRAULIC TOE		WKS			\$35		
		TTLS	SCH	HCOST JACK 10-20 TON HYDRAULIC 100 TON 3" STROKE		WKS			\$108		
		TTLS	SCH	HCOST JACK PALLET 2 TON BATTERY OPERATED W/CHARGER		WKS			\$25		
		TTLS	SCH	HCOST JACK PALLET 2-1/2 TON BATTERY OPERATED WITH CHARGER		WKS			\$130		
		TTLS	SCH	HCOST JACK PALLET 5 TON BATTERY OPERATED WITH CHARGER		WKS			\$135		
		TTLS	SCH	HCOST JACK REEL STAND 10 TON MANUAL OPERATED		WKS			\$230		
		TTLS	SCH	HCOST JACK STEAM BOAT 20 TON 40' MANUAL-RENTAL		WKS			\$35		
		TTLS	SCH	HCOST JUMP SHEAR		WKS			\$15		
		TTLS	SCH	HCOST LASER LEVEL W/TRIPOD AND ROD		WKS			\$50		
		TTLS	SCH	HCOST LASER MOTORIZED SHAFT ALIGNMENT SYSTEM		WKS			\$175		
		TTLS	SCH	HCOST LEVEL AUTO SURVEY		WKS			\$480		
		TTLS	SCH	HCOST LEVEL LASER RED BEAM		WKS			\$70		
		TTLS	SCH	HCOST LEVEL LASER SURVEY W/TRIPOD DTMAS		WKS			\$154		
		TTLS	SCH	HCOST LEVEL LASER THEODOLITE LR2020D		WKS			\$130		
		TTLS	SCH	HCOST LEVEL ROD 25 FEET		WKS			\$276		
		TTLS	SCH	HCOST LEVEL TRANSIT		WKS			\$20		
		TTLS	SCH	HCOST LIFT VERTICAL 10' 750 LB MATERIAL HANDLING MANUAL OPERATED		WKS			\$60		
		TTLS	SCH	HCOST MIXER CONCRETE ELECTRIC		WKS			\$75		
		TTLS	SCH	HCOST MIXER CONCRETE, ELECTRIC OPERATED 110 VOLT		WKS			\$150		
		TTLS	SCH	HCOST MIXER CONCRETE, ELECTRIC, 1/2 BAG		WKS			\$85		
		TTLS	SCH	HCOST MIXER CONCRETE, ELECTRIC, 2 CUBIC FEET		WKS			\$35		
		TTLS	SCH	HCOST MIXER CONCRETE, GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$53		
		TTLS	SCH	HCOST MIXER MORTAR, ELECTRIC OPERATED 110 VOLT		WKS			\$85		
		TTLS	SCH	HCOST MIXER MORTAR, GASOLINE OPERATED 4 CYCLE ENGINE		WKS			\$105		
		TTLS	SCH	HCOST MULTIPLIER TORQUE 1" DR 2,000 LB		WKS			\$105		
		TTLS	SCH	HCOST PIPE FUSION MACK, W/GENERATOR 24"		WKS			\$20		
		TTLS	SCH	HCOST PULLER ELECT CABLE 6000LB, ELECTRIC OPERATED 115 VOLT		WKS			\$40		
		TTLS	SCH	HCOST PULLER FLOOR MOUNT GREENLEE 6037 FOR 805/201640/6001 MODELS		WKS			\$3,900		
		TTLS	SCH	HCOST PULLER-CABLE 4500LB, ELECTRIC OPERATED 115 VOLT		WKS			\$110		
		TTLS	SCH	HCOST PULLER-CABLE FIBER OPTIC, ELEC 110 VOLT		WKS			\$25		
		TTLS	SCH	HCOST PULLER-SUPER TUGGER ELECTRIC COMPLETE #60000		WKS			\$95		
		TTLS	SCH	HCOST PUMP 3" DIESEL OPERATED MANUAL START - HOSE EXTRA CHARGE		WKS			\$625		
		TTLS	SCH	HCOST PUMP AIR SAMPLE HIGH VOLUME		WKS			\$160		
		TTLS	SCH	HCOST PUMP DIAPHRAGM 3" GAS OPERATED - HOSE EXTRA CHARGE		WKS			\$125		
		TTLS	SCH	HCOST PUMP HYDRO TEST 3000 PSI AIR OPERATED		WKS			\$30		
		TTLS	SCH	HCOST PUMP HYDRO TEST 500 PSI AIR OPERATED		WKS			\$95		
		TTLS	SCH	HCOST PUMP HYDROSTATIC 1000 PSI		WKS			\$130		
		TTLS	SCH	HCOST PUMP HYDROSTATIC 6000 PSI AIR OPERATED		WKS			\$110		
		TTLS	SCH	HCOST PUMP HYDROSTATIC 800 PSI		WKS			\$60		
		TTLS	SCH	HCOST PUMP SUMP 2" 480 V ELECTRIC OPRTD HEAVY DUTY, 7 HP 3450 RPM-HOSE EXT CHG		WKS			\$40		
		TTLS	SCH			WKS			\$70		
		TTLS	SCH			WKS			\$75		

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN HOURS	UNIT MH				
		TLS	TLS	CRFT	HOIST PUMP SUMP 2" AIR OPERATED - HOSE EXTRA CHARGE		WKS		\$90				
		TLS	TLS		HOIST PUMP SUMP 2", HEAVY DUTY, 115 VOLT ELECTRIC - HOSE EXTRA CHARGE		WKS		\$100				
		TLS	TLS		HOIST PUMP SUMP 2-1/2" AIR OPERATED - HOSE EXTRA CHARGE		WKS		\$90				
		TLS	TLS		HOIST PUMP SUMP 3" AIR OPERATED - HOSE EXTRA CHARGE		WKS		\$100				
		TLS	TLS		HOIST PUMP SUMP 3" ELECTRIC OPERATED - HOSE EXTRA CHARGE		WKS		\$120				
		TLS	TLS		HOIST PUMP SUMP 4" ELECTRIC OPERATED - HOSE EXTRA CHARGE		WKS		\$150				
		TLS	TLS		HOIST PUMP SUMP 6" ELECTRIC OPERATED - HOSE EXTRA CHARGE		WKS		\$595				
		TLS	TLS		HOIST PUMP SUMP 8" ELECTRIC OPERATED 480 VOLT - HOSE EXTRA CHARGE		WKS		\$795				
		TLS	TLS		HOIST PUMP TRASH 3" GASOLINE OPERATED 4 CYCLE - HOSE EXTRA CHARGE		WKS		\$120				
		TLS	TLS		HOIST PUMP TRASH 4" DIESEL OPERATED - HOSE EXTRA CHARGE		WKS		\$178				
		TLS	TLS		HOIST PUMP TRASH 4" GASOLINE OPERATED 4 CYCLE - HOSE EXTRA CHARGE		WKS		\$105				
		TLS	TLS		HOIST PUMP WATER 3" GASOLINE OPERATED 4 CYCLE - HOSE EXTRA CHARGE		WKS		\$100				
		TLS	TLS		HOIST PUMP-GROUT GASOLINE OPERATED 4 CYCLE WHOSES & MIXING TRAY		WKS		\$30				
		TLS	TLS		HOIST PUNCH KNOCKOUT 1/2-4", HYDRAULIC/MANUAL OPERATED		WKS		\$35				
		TLS	TLS		HOIST PUNCH KNOCKOUT, 35 TON HYDRAULIC OPERATED		WKS		\$22				
		TLS	TLS		HOIST RADIO HANDHELD 4-8 CHAN. UHF BAT. OPRTD W/CHRG & MICROPHONE		WKS		\$22				
		TLS	TLS		HOIST RADIO HANDHELD 4-8 CHAN. VHF BAT. OPRTD W/CHRG & MICROPHONE		WKS		\$22				
		TLS	TLS		HOIST RADIO HANDHELD 4-8 VHF NEW MDL BAT. OPRTD W/CHRG/MICROPHONE		WKS		\$50				
		TLS	TLS		HOIST RADIO HEADSET VOX FIG. E PCS TYPE		WKS		\$128				
		TLS	TLS		HOIST RAM 100 TON 7 3/4" HYDRAULIC		WKS		\$110				
		TLS	TLS		HOIST RAM CYLINDER PANCAKE 4" 100 TON		WKS		\$1,017				
		TLS	TLS		HOIST RAM HYD 100T 7/8" 4 POINT LIFT SYS. WHYD. PUMP & HOSES		WKS		\$520				
		TLS	TLS		HOIST RAM HYD 14" 100 TON W/PUMP		WKS		\$73				
		TLS	TLS		HOIST RAM HYDRAULIC CYLINDER 14" 100 TON		WKS		\$54				
		TLS	TLS		HOIST RAMMER, SAND W/TAIL HOSE		WKS		\$195				
		TLS	TLS		HOIST RIVET BUSTER #9001		WKS		\$285				
		TLS	TLS		HOIST RIVET GUN AIR HUCK BOLT		WKS		\$80				
		TLS	TLS		HOIST ROTO-ROOTER MODEL K-3800		WKS		\$165				
		TLS	TLS		HOIST ROTO-ROOTER, SEC 9061 CLASS		WKS		\$75				
		TLS	TLS		HOIST ROUSTABOUT 2000LB, LFTNG DEVC MDL 7150, WRATCKET TYPE CABLE		WKS		\$575				
		TLS	TLS		HOIST SAND BLASTING POT WITH HOSES & HOODS		WKS		\$300				
		TLS	TLS		HOIST SAW ABRASIVE 14" - 1" ARBOR, ELECT 110 VOLT		WKS		\$75				
		TLS	TLS		HOIST SAW ABRASIVE 16" ELECT OPERATED 115 VOLT		WKS		\$80				
		TLS	TLS		HOIST SAW ABRASIVE 20" ELECT OPERATED 115 VOLT		WKS		\$100				
		TLS	TLS		HOIST SAW CONCRETE 14" AIR OPERATED		WKS		\$30				
		TLS	TLS		HOIST SAW CUT OFF 14" GASOLINE		WKS		\$290				
		TLS	TLS		HOIST SAW FLOOR 14" CONCRETE, ELECTRIC OPERATED		WKS		\$110				
		TLS	TLS		HOIST SAW FLOOR 14" CONCRETE, GASOLINE OPERATED 4 CYCLE		WKS		\$180				
		TLS	TLS		HOIST SAW FLOOR 18" CONCRETE, GASOLINE OPERATED 4 CYCLE		WKS		\$321				
		TLS	TLS		HOIST SAW FLOOR 20" CONCRETE, GASOLINE OPERATED 4 CYCLE		WKS		\$330				
		TLS	TLS		HOIST SAW FLOOR 24" CONCRETE, GASOLINE OPERATED 4 CYCLE		WKS		\$350				
		TLS	TLS		HOIST SAW H&S MEMBRANE PTD-MS		WKS		\$290				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$350				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$260				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$124				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$75				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$85				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$115				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$36				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$46				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$50				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$100				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$95				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$170				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$135				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$250				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$128				
		TLS	TLS		HOIST SAW H&S TRACK MODEL PTS-3		WKS		\$40				

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		TOTAL LABOR	TOTAL MATERIAL
								MAN HOURS	WAGE RATE		
		TLS	TLS	HCOST SHEAR SHEET METAL 4"			WKS		\$50		
		TLS	TLS	HCOST SHEET METAL BEADER			WKS		\$20		
		TLS	TLS	HCOST SHEET METAL BREAK 10'			WKS		\$271		
		TLS	TLS	HCOST SHEET METAL BREAK 4'			WKS		\$74		
		TLS	TLS	HCOST SHEET METAL ROLLER			WKS		\$40		
		TLS	TLS	HCOST SHEET METAL SLITTER 4'			WKS		\$216		
		TLS	TLS	HCOST SOD REMOVAL MACHINE			WKS		\$390		
		TLS	TLS	HCOST SPRAYER PAINT AIRLESS 500 ELEC OPRTD 115 V W/IMP, HOSE & SPRY			WKS		\$190		
		TLS	TLS	HCOST STOMPER CLAY/SOIL 120 LB GAS OPRTD 2 CYC ENG REQ OIL/GAS MIX			WKS		\$100		
		TLS	TLS	HCOST STOMPER CLAY/SOIL 175 LB GAS OPRTD 2 CYC ENG REQ OIL/GAS MIX			WKS		\$120		
		TLS	TLS	HCOST STOMPER GAS/CLAY SOIL 150LB			WKS		\$136		
		TLS	TLS	HCOST TESTER INSULATION 0-1000V			WKS		\$40		
		TLS	TLS	HCOST TESTER MEGGER 0-1000V HANDCR			WKS		\$65		
		TLS	TLS	HCOST THREADER PIPE GEARED 2-1/2"-4"			WKS		\$30		
		TLS	TLS	HCOST THREADER PIPE GEARED 4"-6"			WKS		\$45		
		TLS	TLS	HCOST THREADING MACK 1/4" 6" RIGID, ELEC OPR 115 V W/6 DIES, 2 HLD			WKS		\$120		
		TLS	TLS	HCOST THREADING MACHINE PIPE 1/2"-2", ELEC OPRTD 115 V W/6 DIES, 2			WKS		\$100		
		TLS	TLS	HCOST THREADING MACHINE POWER DRIVE 300 ELECTRIC TRI-STAND TYPE			WKS		\$60		
		TLS	TLS	HCOST TORCH CUTTING STRAIGHT 48" OXYGEN/PROPANE USE ONLY FOR DEMOLITION			WKS		\$25		
		TLS	TLS	HCOST TORCH CUTTING STRAIGHT 72" OXYGEN/PROPANE USE ONLY FOR DEMOLITION			WKS		\$134		
		TLS	TLS	HCOST TORCH TRACK FOR PIPE W/TRACK			WKS		\$30		
		TLS	TLS	HCOST TORCH TRACK, ELECTRIC OPRTD 115 V W/TRACK & TRAVELING MOTOR			WKS		\$301		
		TLS	TLS	HCOST TRASH CHUTE			WKS		\$49		
		TLS	TLS	HCOST TRENCH SHIELD SPACERS 3 FT			WKS		\$145		
		TLS	TLS	HCOST TRENCH SHIELD SPREADER 144" W/PIPS			WKS		\$276		
		TLS	TLS	HCOST TRENCH SHIELDS 10X20			WKS		\$250		
		TLS	TLS	HCOST TRENCH SHIELDS 6X12			WKS		\$260		
		TLS	TLS	HCOST TRENCH SHIELDS 8X12			WKS		\$125		
		TLS	TLS	HCOST TRENCH SHIELDS 8X16			WKS		\$47		
		TLS	TLS	HCOST TROLLEY 3 TON (RENTAL 1 MO. MINIMUM)			WKS		\$40		
		TLS	TLS	HCOST TROLLEY I-BEAM 12 TON			WKS		\$30		
		TLS	TLS	HCOST TROLLEY I-BEAM 5 TON			WKS		\$82		
		TLS	TLS	HCOST TROLLEY I-BEAM 6 TON			WKS		\$155		
		TLS	TLS	HCOST TROLLEY I-BEAM 8 TON			WKS		\$95		
		TLS	TLS	HCOST TROWEL CONCRETE WHIRLYBIRD, GASOLINE OPERATED 4 CYCLE ENGINE			WKS		\$30		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3'X 10', AIR OPERATED			WKS		\$30		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3'X 12', AIR OPERATED			WKS		\$30		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3'X 15', AIR OPERATED			WKS		\$30		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3'X 6', AIR OPERATED			WKS		\$30		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3-1/2'X 10', AIR OPERATED			WKS		\$130		
		TLS	TLS	HCOST VIBRATOR CONCRETE 3-1/2'X 12', AIR OPERATED			WKS		\$78		
		TLS	TLS	HCOST VIBRATOR CONCRETE ELECTRIC 1-3/8'X14			WKS		\$220		
		TLS	TLS	HCOST VIBRATOR PACKER ROLLER 1100 LB, DIESEL OPERATED			WKS		\$200		
		TLS	TLS	HCOST VIBRATOR PACKER ROLLER 24" SMOOTH DRUM, GAS OPERATED			WKS		\$190		
		TLS	TLS	HCOST VIBRATOR PACKER ROLLER 30'X 19-1/2", GAS OPRTD 4 CYCLE ENGINE			WKS		\$230		
		TLS	TLS	HCOST VIBRATOR PACKER ROLLER 1800 LB, DOUBLE ROLLER DIESEL		2	WKS		\$1,840		
		TLS	TLS	HCOST WASHER PRES. 3000 PSI, GAS OPRTD 4 CYC ENG W/25' HSE, NOZ, WD			WKS		\$75		
		TLS	TLS	HCOST WASHER, PRESSURE ELECTRIC 1400 PSI W/50' HOSE			WKS		\$95		
		TLS	TLS	HCOST WELDER 225 AMP, GAS OPRTD, PORTABLE 4 CYC ENG-8000 WATT GEN		1	WKS		\$120		
		TLS	TLS	HCOST WELDER 250 AMP GAS			WKS		\$60		
		TLS	TLS	HCOST WELDER 300 AMP 480 VOLT STICK			WKS		\$60		
		TLS	TLS	HCOST WELDER 300 AMP INVERTER 480 VOLT STICK, TIG, MIC			WKS		\$90		
		TLS	TLS	HCOST WELDER 400 AMP 480 VOLT STICK			WKS		\$100		
		TLS	TLS	HCOST WELDER 600 AMP 480 VOLT INVERTER			WKS		\$140		
		TLS	TLS	HCOST WELDER 8-PACK 480 VOLT 8 EACH 200 AMP, MULTIPLE OPERATOR			WKS		\$95		
		TLS	TLS	HCOST WELDER PIN, STUD ELECTRIC 110 VOLT			WKS		\$85		
		TLS	TLS	HCOST WELDER PLASMA ARC, 480 VOLT			WKS		\$60		
		TLS	TLS	HCOST WELDER POWCON 400 SS V VARIABLE SELECTION			WKS		\$593		

MAT. CODE	CODE	ACT	DESCRIPTION	QTY	UNIT	UNIT MH	MAN HOURS	WAGE RATE	TOTAL LABOR	TOTAL MATERIAL
	CRFT									
		TLS	HCOST WELDER PVC 120 V, ELECT 8" THRU 12"		WKS			\$635		
		TLS	HCOST WELDER PVC 120 V, ELECTRIC CP 2" 3" 5-3/4" 6" 7" AND 8"		WKS			\$375		
		TLS	HCOST WELDER STUD		WKS			\$100		
		TLS	HCOST WELDER, PLASMA CUTTER - STAR CUT		WKS			\$120		
		TLS	HCOST WELDER-RACK 4 PK W/BKRS, 20' PWR CORD/PLUG - USE W/300 AMP		WKS			\$15		
		TLS	HCOST WHEELBARROW MITRD CONCRETE, GAS OPRTD 4 CYC ENG, 1 YD CAP		WKS			\$125		
		TLS	HCOST WRENCH ANGLE 1/2" DRIVE TORQUE AIR OPERATED		WKS			\$68		
		TLS	HCOST WRENCH ANGLE 3/4", AIR OPERATED		WKS			\$40		
		TLS	HCOST WRENCH ANGLE 5/8", AIR OPERATED		WKS			\$35		
		TLS	HCOST WRENCH HYDRAULIC TORQUE W/PUMP		WKS			\$430		
		TLS	HCOST WRENCH IMPACT 1" DRIVE, AIR OPERATED		WKS			\$60		
		TLS	HCOST WRENCH IMPACT 1-1/2" DRIVE, AIR OPERATED		WKS			\$125		
		TLS	HCOST WRENCH IMPACT 1-1/4" SQUARE DRIVE		WKS			\$100		
		TLS	HCOST WRENCH IMPACT 2-1/2" DRIVE 12-25,000, AIR OPERATED		WKS			\$600		
		TLS	HCOST WRENCH IMPACT 2-1/2" DRIVE 4-10,000, AIR OPERATED		WKS			\$300		
		TLS	HCOST WRENCH IMPACT 3/4" ADJUSTABLE TORQUE, AIR OPERATED		WKS			\$150		
		TLS	HCOST WRENCH TORQUE 1/2" DRIVE 0-150 FT. LB	1	4 WKS			\$68	\$272	

ADD ABOVE THIS LINE IF NECESSARY
DO NOT DELETE THIS LINE UNLESS THE PRE-OUTSIDE SECTION OF ESTIMATE

TAGGED TOOLS

TOTAL - TAGGED TOOLS

END END END END END

END END END END END

TOTAL - TAGGED TOOLS

END END END END END

END

END END END END END

END

MATERIAL

DREDGE CELL DIKE RESTORATION
KINGSTON

W.O.#
PA #

0
0

#	QT	DESCRIPTION	COST	TOTAL
55	CY	CONCRETE - 4000 PSI	\$80.00	\$4,400.00
	CY	CONCRETE - SLOP BLOCK MIX	\$62.00	\$0.00
	LOT	CONCRETE FORM MATERIALS	\$4,200.00	\$0.00
	LF	PVC WATER STOP	\$2.15	\$0.00
	EA	6" KEYWAY	\$3.20	\$0.00
	5-GAL	BLACK BUTYL MASTIC SEALANT	\$21.00	\$0.00
	LF	WATER STOP	\$0.85	\$0.00
1	EA	60" X 15' DEEP MANHOLE	\$12,000.00	\$12,000.00
	EA	WIRE MESH (roll)	\$26.00	\$0.00
	EA	BLOCK (12" X 16")	\$1.47	\$0.00
	EA	BLOCK (12" HALVES)	\$1.21	\$0.00
	TN	SAND	\$10.50	\$0.00
	BAG	TYPE "S" MORTAR	\$7.45	\$0.00
	BOXES	ANCHOR BOLTS FOR GREEN PLATE	\$28.50	\$0.00
	EA	HORIZONTAL TRUSS WIRE	\$2.20	\$0.00
	EA	2" X 4" X 16' TREATED LUMBER	\$12.50	\$0.00
	EA	REBAR SAFETY CAPS (5/8")	\$1.50	\$0.00
	SY	12 OZ. GEOTEXTILE LINER (SETTLING POND)	\$1.25	\$0.00
30	LF	36" CMP PIPE	\$34.00	\$1,020.00
30	LF	24" CMP PIPE	\$48.00	\$1,440.00
12258	SY	MARAFI HP 370 MONOFILAMENT		\$27,580.50
10700	SY	NON-WOVEN GEOTEXTILE (12 OZ PER CY)		\$26,750.00
				\$0.00
	TN	1/4" STONE	\$10.05	\$0.00
	TN	1/2" WASHED STONE CHIPS	\$10.05	\$0.00
	TN	3/4" - 1" STONE	\$9.05	\$0.00
	TN	1" - 2" WASHED STONE W/ NO FINES	\$9.05	\$0.00
	TN	2" - 4" STONE	\$9.05	\$0.00
20734	TN	6" -12" RIP RAP	\$11.00	\$228,074.00
1781	TN	1032 CRUSHER RUN (610) W/ 6% MOISTURE	\$10.25	\$18,255.25
4721	TN	1081 CRUSHED STONE	\$10.25	\$48,390.25
700	TN	3" STONE	\$10.50	\$7,350.00
	CY	COMPOST	\$15.70	\$0.00
	EA	#4 REBAR STAKES	\$2.50	\$0.00
	EA	GROUT (NON-SHRINK, NON-METALLIC)	\$30.00	\$0.00
400	LB	PER. RYE	\$2.00	\$800.00
400	LB	KY-31 TALL FESCUE	\$2.00	\$800.00
300	LB	10-10-10 FERTILIZER	\$0.90	\$270.00
300	EA	STRAW BALES	\$4.20	\$1,260.00
60	ROLL	CURLEX	\$49.00	\$2,940.00
36	EA	6" DIA. PIPE BOLLARDS	\$135.00	\$4,860.00
80	ROLL	SILT FENCE (100' ROLL)	\$48.00	\$3,840.00
1	LS	WOVEN WIRE FENCING	\$3,000.00	\$3,000.00
40	ROLL	CONSTRUCTION FENCE (100' ROLL)	\$32.00	\$1,280.00
	LF	4" HDPE NON-PERF PIPE - SMOOTH WALL	\$0.65	\$0.00
	EA	4" HDPE COUPLINGS	\$0.90	\$0.00
	EA	4" HDPE PLUG	\$1.09	\$0.00
	EA	(4" x 4") PVC SAMPLE WELL	\$6.50	\$0.00
	EA	6" X 6" X 4" HDPE REDUCING TEE	\$24.00	\$0.00
	EA	6" X 4" HDPE REDUCING CROSS TEE	\$35.00	\$0.00
	EA	6" X 4" HDPE REDUCER	\$12.00	\$0.00
	EA	6" HDPE TEE	\$15.00	\$0.00
	EA	6" HDPE COUPLING	\$2.50	\$0.00
	EA	6" HDPE 30 DEGREE BEND	\$12.00	\$0.00
	EA	6" HDPE 45 DEGREE ELBOW	\$12.00	\$0.00
	EA	6" HDPE 45 DEGREE WYE	\$15.00	\$0.00
	LF	6" HDPE NON-PERF PIPE - SMOOTH WALL	\$1.45	\$0.00
	LF	6" HDPE PERF PIPE - SMOOTH WALL	\$1.45	\$0.00
	EA	6" FERNCO COUPLING	\$13.00	\$0.00
	EA	6" HDPE PLUG	\$5.00	\$0.00
	LF	6" CL200 PVC PIPE	\$2.64	\$0.00
	EA	8" X 6" HDPE REDUCER	\$16.00	\$0.00
	EA	8" HDPE TEE	\$25.00	\$0.00
90	EA	8" 4-WAY TEE	\$40.00	\$3,600.00
	EA	8" HDPE COUPLING	\$3.00	\$0.00
	EA	8" HDPE 45 DEGREE ELBOW	\$22.00	\$0.00
2400	LF	8" FORCED MAIN PIPING HDPE	\$5.40	\$12,960.00
	EA	8" HDPE 45 DEGREE WYE	\$24.00	\$0.00
2339	LF	8" HDPE NON-PERF PIPE - SMOOTH WALL	\$4.60	\$10,759.40
16500	LF	8" HDPE PERF PIPE - SMOOTH WALL	\$4.85	\$80,025.00
	EA	8" HDPE PLUG	\$18.00	\$0.00
	EA	10" X 8" HDPE REDUCER	\$23.00	\$0.00
	LF	8" CL200 PVC PIPE	\$4.15	\$0.00
	EA	8" CL200 PVC CAP	\$18.90	\$0.00
	EA	8" CL200 PVC BLIND FLANGE ADAPTOR	\$65.75	\$0.00
	EA	8" X 8" X 8" CL200 PVC DI TEE MJ	\$91.56	\$0.00

MATERIAL

MATERIAL

	EA	8" CL200 PVC 90 DEGREE MJ FITTING	\$60.58	\$0.00
	EA	8" CL200 PVC 11.25 DEGREE MJ FITTING	\$50.33	\$0.00
	EA	8" CL200 PVC 22.5 DEGREE MJ FITTING	\$58.72	\$0.00
	EA	8" CL200 PVC 45 DEGREE MJ FITTING	\$53.95	\$0.00
	EA	8" X 6" X 6" CL200 PVC MJ TEE	\$107.14	\$0.00
	EA	10" X 12" HDPE REDUCER	\$39.00	\$0.00
	EA	10" HDPE TEE	\$58.00	\$0.00
	EA	10" HDPE COUPLING	\$3.40	\$0.00

MATERIAL

	EA	10" HDPE 45 DEGREE ELBOW	\$29.00	\$0.00
	EA	10" HDPE 45 DEGREE WYE	\$78.00	\$0.00
	LF	10" HDPE NON-PERF PIPE - SMOOTH WALL	\$3.40	\$0.00
	LF	10" HDPE PERF PIPE - SMOOTH WALL	\$3.40	\$0.00
	EA	10" HDPE PLUG	\$26.00	\$0.00
	LF	10" CL200 PVC PIPE	\$6.50	\$0.00
	LF	12" HDPE NON-PERF PIPE - SMOOTH WALL	\$4.50	\$0.00
	EA	12" HDPE COUPLINGS	\$4.50	\$0.00
	EA	12" HDPE TEE	\$68.00	\$0.00
	LF	12" C900 PVC PIPE	\$11.79	\$0.00
	EA	12" C900 PVC 90 DEGREE MJ FITTING	\$112.00	\$0.00
	LF	14" CL905 PVC PIPE	\$15.66	\$0.00
	EA	14 X 14" X 10" CL905 PVC TEE	\$464.24	\$0.00
	EA	14" CL905 PVC MJ BLIND FLANGE W/ ADAPTOR	\$276.97	\$0.00
	LF	16" CARBON STEEL PIPE (COATED)	\$51.78	\$0.00
	LF	18" HDPE NON-PERF PIPE -SMOOTH WALL	\$8.00	\$0.00
	EA	6" GATE VALVE MJ X MJ - AMERICAN FLOW CONTROL SERIES 2500 - EQUAL	\$306.98	\$0.00
	EA	8" GATE VALVE MJ X MJ - AMERICAN FLOW CONTROL SERIES 2500 - EQUAL	\$462.41	\$0.00
	EA	6" TRENCH BOX ADAPTOR	\$28.55	\$0.00
	EA	8" TRENCH BOX ADAPTOR	\$28.55	\$0.00
1500	EA	METAL T POSTS	\$5.00	\$7,500.00
1	EA	60" PRE-CAST MANHOLE	\$5,000.00	\$5,000.00
900	SY	12 OZ GEOTEXTILE LINER	\$2.45	\$2,205.00
1	EA	SUBMERSIBLE PUMP @ "TEVCARVA"	\$1,650.00	\$1,650.00
	EA	INSULATED FIBERGLASS VALVE BOX	\$2,256.20	\$0.00
		TOTAL		\$518,009.40

NGSTON		RELOCATE/ PER DIEM EXPENSES		MONTHLY TRIPS HOME		OUTAGE DOLLARS		NON-OUTAGE DOLLARS		TOTAL STAFF DOLLARS		PRE-OUTAGE DUR (WKS)		OUTAGE DUR (WKS)		POST-OUT DUR (WKS)		TOTAL MANHOURS		RUN DATE:	
		RATE										40		40		40		600		19-May-05	
EDGE CELL DIKE RESTORATION																					
TRAVEL & LIVING EXPENSES (Relocation, Per Diem, Expenses, Mon)													\$5,100								
TOTAL STAFF DOLLARS													\$27,600								
TOTAL STAFF MANHOURS													600								
****SUMMARY****																					
TE MANGER		\$67.65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ENERAL SUPT.		\$63.90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ILER SUPT		\$49.90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
LECT SUPT		\$49.90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ECHANICAL SUPT		\$49.90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
VIL SUPT		\$46.00	\$5,100	\$0	\$0	\$0	\$27,600	\$0	\$27,600	\$27,600	\$0	\$0	15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	600
SULATION SUPT		\$49.90	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
JST SPECIALIST		\$37.72	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
STIMATING MGR		\$55.65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ELD TECH SPECLST		\$48.73	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ELD ADMIN MGR.		\$32.65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
SULATION SERV MGR.		\$51.94	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
AD FIELD ADMIN MGR		\$44.15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ATERIAL COORD.		\$22.26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
YROLL/TIMEKEEPER		\$22.08	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
VQC INSPECTOR		\$44.52	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
AFETY COORDINATOR		\$40.73	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
AFETY SUPERVISOR		\$48.23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
CHEDULE ANALYST		\$50.45	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
CHEDULELER		\$41.55	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ECRETARY		\$17.81	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
TE PROJ CTRL MGR		\$51.65	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
ICHP SUPPORT		\$26.09	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
MEKEEPER		\$16.32	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0
TOTALS			\$5,100	\$0	\$0	\$0	\$27,600	\$0	\$27,600	\$27,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	600

P
Post Outage

0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0
		0				0	0
		0				0	0
0	0	0	0	0	0	0	0
0		0	0	0		0	0
0	0	0	0	0	0	0	0
		0				0	1.188
		0				0	3.6
0	0	0	0	0	0	0	30
		0				0	0
		0				0	0
0	0	0	0	0	0	0	0
		0				0	0
0	0	0	0	0	0	0	0
		0				0	0
0	0	0	0	0	0	0	0
		0				0	0
0	0	0	0	0	0	0	797.8333
		0				0	6648.611
0	0	0	0	0	0	0	8531.251
		0				0	0
0	0	0	0	0	0	0	0
		0				0	0
		0				0	0
0	0	0	0	0	0	0	0
		0				0	0
0	0	0	0	0	0	0	1888.392
0	0	0	0	0	0	0	24
0	0	0	0	0	0	0	17925

CLARIFICATIONS

DREDGE CELL DIKE RESTORATION
 KINGSTON
 CLARIFICATIONS TO TVA-HED PROJECT ESTIMATE.

0

1	ALL JOURNEYMEN RATES ARE PER THE APPR. UTILIZATION FACTOR OF 10% APPR. FOR 90% JOURNEYMEN
2	WAGE RATES ARE PER FY2005 CRAFT AUGMENTED RATES AND NO ESCALATION IS INCLUDED FOR WAGES.
3	ALL MATERIALS ARE INCLUDED EXCEPT AS NOTED OTHERWISE.
4	NO "IRON FILINGS" MATERIAL COSTS ARE INCLUDED IN ESTIMATE.
5	ESTIMATE IS BASED ON 40 HOURS PER WEEK
6	ESTIMATE HAS BEEN REVISED TO REFLECT CHANGES TO ORIGINAL DESIGN SCOPE OF WORK.
7	MATERIAL AND SUBCONTRACT UNIT COST INCREASES ARE DUE TO INFLATION ABOVE ORIGINAL ESTIMATE.
8	ESTIMATE IS A PHASE (3).
10	ESTIMATE INCLUDES GEOTEXTILE FABRIC & LINER INSTALLATION SUB-CONTRACTS.
11	ALL OTHER WORK TO BE COMPLETED BY TVA - HED PROJECT SERVICES.
12	INITIAL SURVEY - LAYOUT / CONTROL / BENCH LOOP COSTS ARE INCLUDED. (TVA SURVEYORS).
13	GEOTECHNICAL ENGINEERING ESTIMATED COSTS ARE INCLUDED. ACTUAL COSTS ABOVE ESTIMATED SHALL BE INVOICED AS "EXTRA" COST TO PROJECT IN ADDITION TO TVA-HED ESTIMATED COST HEREIN.
14	ESTIMATE BASED UPON WORKING IN PERMISSIBLE WEATHER CONDITIONS.
15	NO CONTINGENCIES FOR WEATHER RELATED PROJECT DELAY COSTS ARE INCLUDED IN ESTIMATE.
16	ESTIMATE IS BASED UPON ONE TVA-HED MOBILIZATION AND ONE DEMOBILIZATION OF PROJECT.
17	ESTIMATE ASSUMES ALL MATERIAL FOR BUILDING PONDS SHALL BE FROM EXISTING MATERIALS ON SITE AS SPECIFIED IN GENERAL NOTES. NO OFF SITE BORROWING OF MATERIALS TO INCLUDE BUT NOT LIMITED TO CLAY SOIL FOR POND MATERIAL, OR TOPSOIL FOR SLOPES IS INCLUDED IN ESTIMATE.
18	ESTIMATE ASSUMES ALL EXISTING MATERIAL IS SUITABLE BUILDING MATERIAL TO OBTAIN SPECIFIED COMPACTION RATE PER GENERAL DESIGN NOTES.
19	ESTIMATE IS PROVIDED WITH NO SUPPORTING "SUBSURFACE EXPLORATION REPORT" BY GEO. ENG.
20	ESTIMATE ASSUMES ALL TOPOGRAPHICAL CONTOURS ON DESIGN DRAWINGS ARE ACCURATE, AND THAT ALL FINISH GRADE ELEVATIONS SHOWN ON DRAWINGS ARE FINAL.
21	NO ROCK REMOVAL IS INCLUDED IN ESTIMATE.
22	OVERTIME WORK IN EXCESS OF 40 HOURS PER WEEK SHALL BE AT THE DISCRETION OF TVA - HED AT ANY TIME DURING THE PROJECT UNLESS BY SIGNED / APPROVED CHANGE CONTROL BY OWNER.
23	QUANTITY OF CRAFT EMPLOYEES, EQUIPMENT UTILIZED AND SUPERVISION SHALL BE AT THE DISCRETION OF TVA-HED PROJECT SERVICES.
24	INCREASES TO PROJECT SCOPE OF WORK SHALL BE APPROVED WITH SIGNED CHANGE CONTROL PRIOR TO TVA-HED COMMENCING WORK FOR SAID SCOPE INCREASE.
25	ESTIMATE PRICING IS BASED UPON PRODUCING A COMPLETE PROJECT PER THE PROVIDED DESIGN DRAWINGS, AND MATERIAL INSTALLATION QUANTITIES IDENTIFIED WITHIN THIS ESTIMATE / PARSONS.
26	ESTIMATE IS BASED UPON ALL CRAFT TRAILERS FOR THIS PROJECT TO BE LOCATED AT PROJECT SITE.
27	ESTIMATE IS BASED UPON ALL MATERIAL STORAGE TO BE STAGED AT PROJECT SITE.
28	ESTIMATE IS BASED UPON ALL CRAFT PORTABLE SANITARY FACILITIES FOR THIS PROJECT TO BE LOCATED AT PROJECT SITE.
29	NO CONTINGENCIES FOR STOLEN / BORROWED MATERIAL AND OR EQUIPMENT FROM ONGOING PROJECTS AT THE KINGSTON FOSSIL SITE ARE INCLUDED.
30	ESTIMATE BASED UPON A CONTINUOUS PROJECT TO BE STARTED AND FULLY COMPLETED ACCORDING TO PROVIDED DESIGN DRAWINGS.
31	ALL PERMITS REQUIRED TO ALLOW PROJECT TO COMMENCE ARE TO BE PROVIDED BY OTHERS.
32	ESTIMATE IS BASED UPON KINGSTON DREDGE CELL DIKE RESTORATION PROJECT ONLY.
33	ESTIMATE ASSUMES RE-USING EXISTING PUMPS.

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION**

Project name KIF/05410/FRENCH DRAINS

Engineer Stan Haber

Estimator C. L. Toney

Project French Drains

Plant KIF

Estimate # 05410

PCN # KIF530

Requesting Engr Stan Haber

Option 0

Revision 0

Phase 3

Estimate Type Detailed

Estimate Accuracy +/- 10%

Est. Issue Date 05/26/05

Funding Type Capital

Outage(Y/N) N

Notes This is total rollop cost estimate.

Construction part of estimate provided by HED.

Wage rates are per FY2005 craft augmented rates and no escalation is included for wages.

Estimate is based on 40 hours per week.

Report format Sorted by 'Location/Activity'
Detail summary

Spreadsheet Report
KIF-05410/FRENCH DRAINS

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount	
PHASE 3 - HED	Installation	Construction Labor	1.00 ls	17,122.000	17,122.00 mh	576,510	-	-	-	-	576,510.00	576,510	
		Non Manual Labor	1.00 ls	800.000	800.00 mh	21,600	-	-	-	-	-	27,600.00	27,600
		Partner Purchased Material	1.00 ls	-	-	-	518,009	-	-	-	-	518,009.00	518,009
		Construction Heavy Equipment	1.00 ls	-	-	-	-	-	217,695	-	-	217,695.00	217,695
		Partner Subcontracts	1.00 ls	-	-	-	-	-	386,010	-	-	386,010.00	386,010
		Construction Tagged & 3rd Party Rental Equipment	1.00 ls	-	-	-	-	-	-	4,702	-	4,702.00	4,702
		Travel & Living Expenses	1.00 ls	-	-	-	-	-	-	-	5,100	5,100.00	5,100
		Installation				17,722.00 hrs	604,110	518,009	386,010	222,397	5,100	1,735,626	1,735,626
						17,722.00 hrs	604,110	518,009	386,010	222,397	5,100	1,735,626	1,735,626
				PHASE 3 - HED									

Lynn 6704
Mike Hooper 2783

Estimate Totals

Labor	604,110			17,722,000	hrs
Material	518,009				
Subcontract	386,010				
Equipment	222,397				
Other	5,100				
	1,735,626				
Small Tools Expense P	24,827				
Consumables & Expendables P	10,273				
	35,100				
TVA-MED - Central Command	76,274				
	76,274				
Engineering - Phase 1 (Sunk)	200,000				
	200,000				
				25,870	% @ 42.00 A
Engineering - Phase 2	125,000				
	125,000				
				16,794	% @ 42.00 A
Engineering - Phase 3	25,000				
	25,000				
				3,359	% @ 42.00 A
Contingency Total Project	203,000				
	203,000				
				2,400,000	
				2,400,000	

OH1 STAYS ON 218 - SPENT 122
FES 489 - SPENT 367
489
CIVIL \$10,000
ELECTS \$12,000
PARSONS \$30,000
52,000

check will sign

~~RE-100HOUR
PCC 2A
PCE 2B
PCS 2C
FRM 16
CAD Drawings 77,000 HOURS =
180 HOURS @ 42.00 = 7560~~

NOTE:
FES PH 1 - REMAIN ~ \$10K (GEO) + \$10K (FES)
\$72K

SHAWL
GEO-SYNTEC 98,000 - \$1,000 PM
SUM-TEC PAID 85,428 PM

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR) INCLUDES HED CONSTRUCTION**

Estimate Number 05410 Option: 0 PCN Number: KIF530
 Plant: KIF Revision: 0 Estimate Type: Detailed
 Cost Engineer: C. L. Toney Unit #: Estimate Accuracy: +/- 10%
 Requesting Engr: Stan Haber Phase: 3 Estimate Issue Date 05/26/05

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering (Sunk Cost)		\$200,000
Partner (Non-Manual)		\$0
Other / Other Organizations		\$0
<u>Total Phase I</u>		<u>\$200,000</u>
<u>Phase II</u>		
Engineering		\$125,000
Long Lead Procurement		\$0
Partner (Non-Manual)		\$0
Other / Other Organizations		\$0
<u>Total Phase II</u>		<u>\$125,000</u>
<u>Phase III</u>		
Construction (Partner)		\$518,009
Permanent Material		\$576,510
Labor (T&L)	17,122.00	\$27,600
Labor (Non-Manual)	600.00	\$222,397
Equipment		\$386,010
Subcontracts		\$76,274
Partner Fee		\$0
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$40,200
Other		\$1,847,000
Total Construction Cost		<u>\$25,000</u>
Engineering		\$0
Direct plant support + TVA Other Costs		\$203,000
Project Contingency Dollars		\$0
Other / Other Organizations		\$0
<u>Total Phase III</u>		<u>\$2,075,000</u>
<u>All Phases</u>		
Construction Partner	17,722.00	\$1,847,000
Long Lead Procurement		\$0
Engineering		\$350,000
Other / Other Organizations		\$0
Total Contingency Dollars		\$203,000
<u>Total Project Costs</u>	<u>17,722.00</u>	<u>\$2,400,000</u>
For Information only Total Environmental		\$0
For Information only Total Demolition Costs		\$0

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR)**

KINGSTON FOSSIL PLANT
DREDGE CELL FRENCH DRAINS
SEEPAGE REPAIR

Estimate Number 05359R1 **Option:** 0 **PCN Number:** KIF530
Plant: KIF **Revision:** 1 **Estimate Type:** Conceptual
Cost Engineer: C. L. Toney **Unit #:** **Estimate Accuracy:** +/- 30%
Requesting Engr: S. M. Haber **Phase:** 1 **Estimate Issue Date** 3/31/2005

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$15,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase I</u>		<u>\$15,000</u>
<u>Phase II</u>		
Engineering		\$112,258
Long Lead Procurement		\$0
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase II</u>		<u>\$112,258</u>
<u>Phase III</u>		
Construction (Partner)		
Permanent Material		\$469,106
Labor (TL)	21,186.85	\$515,453
Labor (Non-Manual)	2,650.00	\$132,500
Equipment		\$214,019
Subcontracts		\$85,700
Partner Fee		\$32,398
Partner Insurance		\$19,439
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$34,127
Total Construction Cost		\$1,502,742
Engineering		\$23,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
<u>Total Phase III</u>		<u>\$1,525,742</u>
<u>All Phases</u>		
Construction Partner	23,836.85	\$1,502,742
Long Lead Procurement		\$0
Engineering		\$150,258
Other / Other Organizations		\$0
Total Risk Dollars		\$0
<u>Total Project Costs</u>	<u>23,836.85</u>	<u>\$1,653,000</u>
<u>For Information only Total Environmental Costs</u>		<u>\$0</u>
<u>For Information only Total Demolition Costs</u>		<u>\$0</u>

23,837 MH
 - 1,439 MH CF
 - 2,650 MH NH

 19,748 MH
 19,748 / 61120 / 8 HR / 20 HR
 SEE 10 MARCH 2005

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR)**

Project name KIF/05359R1/FRENCH DRAINS

Engineer DAN SMITH

Estimator C. L. Toney

Labor rate table KIF 40 ST 2005

Equipment rate table TVA Equipment

Project Plant French Drains
 Estimate # KIF
 PCN # 05359R1
 Requesting Engr KIF530
 S. M. Haber
 Option 0
 Revision 1
 Phase 1
 Estimate Type Conceptual
 Estimate Accuracy +/- 30%
 Est. Issue Date 3/31/2005
 Funding Type Capital
 Outage(Y/M) N

Notes Estimate Assumptions:

All costs are based in 2005 dollars.

Single phase power for pump installed for dredge cell seepage retrofit.
 3-phase power is assumed not to be required.

Existing pumps will be reused.

Engineering (including TVA over sight, subcontracts, and additional geotechnical investigation) - assumes 10% of construction costs.

Estimate has been revised to reflect comments from Dan Smith e-mail on March 30, 2005.

Report format

Sorted by Location/Activity
 Detail summary

Spreadsheet Report
KIF05359R1/FRENCH DRAINS

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount			
11	Erosion Controls/S P	Erect Silt Fence	4,500.00 lf	0.069	309.57 mh	7,832	2,223	-	-	1,398	-	2.48	11,154		
		Strip 1 Foot Soil Off Slope (Temporary Stockpile)	911.00 cy	0.025	22.78 mh	691	712	-	-	712	-	1.43	1,303		
		Excavate 3:1 Slope in Ash Slope To Provide Space For Pond	800.00 cy	0.120	96.00 mh	2,408	960	-	-	960	-	4.11	3,288		
		Excavate For Temporary Sediment Pond / Permanent Pond	1,400.00 cy	0.103	144.00 mh	3,612	1,320	-	-	1,320	-	3.52	4,932		
		Install Temporary Pond Dewatering Structure	1.00 ea	64.000	64.00 mh	1,880	304	2,000	-	304	-	4,184.34	4,184.34		
		Place Temporary Geotextile Staple To Side Of Pond Next To Dredge Cell	611.00 sy	0.065	39.72 mh	951	2,332	-	-	951	-	5.57	3,402		
		D50 6" Riprap For Temporary Check Dams	84.00 tn	0.400	33.60 mh	844	530	-	-	530	-	2.36	2,362		
		Replace 1 Foot Cf Soil On Slope Adjacent To Pond	911.00 cy	0.160	145.76 mh	3,656	1,008	-	-	1,008	-	5.48	4,992		
		Seed And Mulch Replaced Soil	1.00 ac	36.000	36.00 mh	923	1,436	-	-	923	-	2,703.15	2,703.15		
		Erosion Controls/S P	3,000.00 sy	0.020	60.00 mh	1,436	180	1,000	-	180	-	2,906	2,906		
		01			950.42 hrs	23,834	9,903	7,510	-	7,510	-	0.97	41,247	41,247	
12	Access Road (Gravel)	Allowance To Maintain Wear And Tear On Existing Road	1.00 lot	0.120	211.20 mh	5,804	15,708	-	-	2,033	-	0.00	23,545		
		1032 Crushed Stone Base 3" Depth (110 pct)	1,780.00 tn		211.20 hrs	5,804	15,708	-	-	2,033	-	13.38	23,545		
		02				5,804	15,708	-	-	2,033	-		23,545		
		13	Instl Dms/Swan Pond	6" Dia Pipe Bollards	36.00 ea	1.500	54.00 mh	1,307	7,200	-	380	-	246.32	8,867	
				Strip 1 Foot Cover (Drainage System Installation)	11,745.00 cy	0.023	224.90 mh	6,098	7,341	-	-	7,341	-	1.14	13,439
				8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 775)	692.00 lf	0.200	128.40 mh	2,890	526	-	-	526	-	7.29	4,610
				Crushed Stone, Bedding 6" Depth	21.00 tn	0.500	10.50 mh	234	186	-	-	35	-	23.13	486
				8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 780)	779.00 lf	0.200	155.80 mh	3,952	649	-	-	649	-	7.30	5,682
				Crushed Stone, Bedding 6" Depth	26.00 tn	0.500	13.00 mh	315	243	-	-	43	-	23.13	601
				8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 796)	928.00 lf	0.200	185.60 mh	4,243	773	-	-	773	-	7.30	6,769
				Crushed Stone, Bedding 6" Depth	31.00 tn	0.500	15.50 mh	375	290	-	-	52	-	23.13	717
Cut For 8" Dia Non-Perforated HDPE (1,093 bcy)	1,300.00 cy			0.200	260.00 mh	6,295	2,167	-	-	2,167	-	6.61	8,461		
Backfill For 8" Dia Non-Perforated HDPE (796 bcy)	910.00 cy			0.250	227.50 mh	5,508	2,675	-	-	2,675	-	6.99	8,183		
Cut For 8" Dia Perforated HDPE (7,296 bcy)	6,755.00 cy			0.200	1,351.00 mh	42,392	14,592	-	-	14,592	-	5.51	56,984		
14	Instl Comp Geonet	Backfill For 8" Dia Perforated HDPE (5,107 bcy)	6,129.00 cy	0.250	1,532.25 mh	37,096	-	-	-	-	-	7.30	11,156		
		8" Dia Perforated HDPE Perimeter Underdrain (EL. 765)	4,275.00 lf	0.200	855.00 mh	19,545	8,080	-	-	3,659	-	10.10	31,184		
		1081 Crushed Stone	899.00 tn	0.190	121.20 mh	2,834	228	-	-	228	-	2.55	6,485		
		Geotextile Woven Monofilament	3,335.00 sy	0.021	68.40 mh	1,637	6,620	-	-	3,367	-	7.29	29,506		
		8" Dia Perforated HDPE Perimeter Underdrain (EL. 775)	4,045.00 lf	0.200	809.00 mh	18,494	7,845	-	-	3,267	-	13.81	10,582		
		1081 Crushed Stone	765.00 tn	0.190	114.75 mh	2,778	6,620	-	-	856	-	2.55	8,028		
		Geotextile Woven Monofilament	3,146.00 sy	0.021	64.71 mh	1,549	6,264	-	-	216	-	7.30	27,719		
		8" Dia Perforated HDPE Perimeter Underdrain (EL. 780)	3,800.00 lf	0.200	760.00 mh	17,374	7,192	-	-	3,164	-	9.913	30,913		
		1081 Crushed Stone	718.00 tn	0.150	107.70 mh	2,607	6,408	-	-	898	-	2.55	7,544		
		Geotextile Woven Monofilament	2,956.00 sy	0.021	60.80 mh	1,855	5,865	-	-	203	-	7.30	26,552		
		8" Dia Perforated HDPE Perimeter Underdrain (EL. 786)	3,640.00 lf	0.200	728.00 mh	16,842	3,030	-	-	3,030	-	13.81	9,459		
15	Instl Riprap Ditches	1081 Crushed Stone	688.00 tn	0.150	103.20 mh	2,498	6,140	-	-	860	-	7.225	357,288		
		Geotextile Woven Monofilament	2,831.00 sy	0.021	58.23 mh	1,394	5,637	-	-	194	-	2.85	357,288		
		Instl Dms/Swan Pond	199.241		8,417.45 hrs	199,241	93,130	-	-	64,917	-	0.00	357,288		
		03				199,241	93,130	-	-	64,917	-		357,288		
		16	Instl Comp Geonet	Between 765 & 775 Bench	1.00 lot									0	
				Strip 1 Foot Soil And Stockpile	10,000.00 cy	0.020	200.00 mh	5,192	-	-	-	6,250	-	1.14	11,442
				Place Composite Geonet	32,700.00 sy	0.050	1,635.00 mh	39,134	161,865	-	-	4,088	-	8.27	205,086
				Place 1 Foot Soil	10,000.00 cy	0.060	600.00 mh	15,050	3,425	-	-	5,500	-	2.06	20,550
				Place Thickened Soil Layer At Toe To Tie Into Ditch	1,000.00 cy	0.100	100.00 mh	2,508	3,425	-	-	917	-	3.43	4,680
				Seed And Mulch Replaced Soil	6.00 ac	36.000	216.00 mh	5,539	6,000	-	-	3,425	-	2,703.15	16,216
				Instl Comp Geonet	6.00 ac		2,751.00 hrs	67,423	167,865	-	-	21,434	-		256,722
04						67,423	167,865	-	-	21,434	-		256,722		
17	Instl Riprap Ditches			Final Grading Of Ditches (Allowance)	250.00 cy	0.096	24.00 mh	581	-	-	200	-	3.12	781	
				Over Excavate Ditch For Riprap	8,040.00 cy	0.200	1,608.00 mh	38,930	7,341	-	-	20,100	-	7.34	59,030
				Install Non-Woven Needle-punched Geotextile, 8 oz	1,000.00 sy	0.016	16.00 mh	383	1,315	-	-	53	-	1.81	1,811
		Place D50 3" Riprap	9,500.00 tn	0.320	3,040.00 mh	76,385	47,979	-	-	25,029	-	25.09	238,344		
		Place Additional Riprap At Toe	4,000.00 tn	0.320	1,280.00 mh	32,154	20,202	-	-	88,534	-	25.09	100,455		
		Instl Riprap Ditches	1,000.00 tn		5,968.00 hrs	148,412	163,375	-	-	88,534	-		400,321		
		05				148,412	163,375	-	-	88,534	-		400,321		
		18	Const Permanent Pond	Submersible Pumping Station Equipment Package	1.00 lot									0	
				Relocate Submersible Pumps	2.00 ea	40.000	80.00 mh	2,519	1,599	-	-	556	-	3.176	2,730
				Instl New Submersible Pump	1.00 ea	30.000	30.00 mh	982	1,599	-	-	209	-	2,729.84	2,730

Spreadsheet Report
KIF/05359R1/FRENCH DRAINS

stimate Company

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount
	Const Permanent Pond	Remove Existing Temporary Dewatering Structure	1.00 ls	48.000	48.00 mth	12.66	-	-	-	-	1,655.00	1,655
		60" Diameter Prestressed Concrete Manholes (15 Ft Depth)	1.00 ea	60.000	60.00 mth	1,532	3,000	-	-	-	4,980.96	4,981
		Cut For 8" Dia Forced Main HDPE (1,111 bcy)	1,333.00 cy	0.200	266.60 mth	8,454	2,222	-	-	-	6,876	8,676
		8" Dia Forced Main HDPE Perimeter Underdrain (EL. 763)	2,400.00 lf	0.150	480.00 mth	10,973	4,525	-	-	-	7.30	17,507
		1081 Crushed Stone	264.00 tn	0.150	39.60 mth	999	2,395	-	-	-	13.81	3,645
		Backfill For 8" Dia Forced Main HDPE (778 bcy)	954.00 cy	0.250	233.50 mth	5,653	2,146	-	-	-	8.98	8,399
		Allowance For Electrical Scope Of Pumps Relocation	1.00 lot	-	-	-	-	15,000	-	-	15,000.00	15,000
		Geotextile (Line Pond To Minimize Erosion)	889.00 sy	0.018	16.00 mth	383	1,173	-	-	-	1.80	1,597
		3" Stone (Line Pond To Minimize Erosion)	440.00 tn	0.096	42.24 mth	1,121	3,927	-	-	-	12.97	5,708
		Chain Link Fence (5' Fence With 3 Strands Of Barbed Wire Along Top)	4,500.00 lf	-	-	-	-	67,500	-	-	15.00	67,500
		Personal Gates	2.00 ea	-	-	-	-	700	-	-	350.00	700
		Swing Gates	2.00 ea	-	-	-	-	2,500	-	-	1,250.00	2,500
		Const Permanent Pond			1,295.94 hrs	31,884	16,532	85,700	9,658	-	2,500	143,774
		06			1,295.94 hrs	31,884	16,532	85,700	9,658	-	2,500	143,774
17	Erosion Control/PK	Erect Silt Fence	1,200.00 lf	0.069	82.28 mth	2,009	593	-	-	-	2.48	2,974
		Final Seeding	2.00 ac	36.000	72.00 mth	1,846	2,000	-	-	-	2,705.15	5,406
		Erosion Control/PK			154.28 hrs	3,855	2,593	-	-	-	1,933	8,361
		07			154.28 hrs	3,855	2,593	-	-	-	1,933	8,361
(CONST FACILITY	Construct Facilities	Mobilize, Drug Test, Misc Other, & Demobilize	1.00 ls	1,438.553	1,438.55 mth	35,000	-	-	-	0	53,000.00	53,000
		Construct Facilities			1,438.55 hrs	35,000	-	-	-	-	18,000	53,000
		XCONST FACILITY			1,438.55 hrs	35,000	-	-	-	-	18,000	53,000
(NON MANUAL	Non-Manual	Non Manual	1.00 ls	2,650.000	2,650.00 mth	132,500	-	-	-	-	132,500.00	132,500
		(NON MANUAL			2,650.00 hrs	132,500	-	-	-	-	132,500.00	132,500

Estimate Totals

Labor	647,953	23,836,845	his	
Material	469,106			
Subcontract	85,700			
Equipment	214,019	8,116,086	his	
	<u>1,416,778</u>	1,416,778		
Small Tools Expense	9,534		0.450 \$/hr	H
Consumables & Expendables	19,439		4.000 %	C
Office Supplies & Expense	3,975		3.000 %	C
	<u>34,127</u>	1,450,905		
Partner Insurance (FY05)	19,439		3.000 %	C
Partner Award Fee (FY05)	32,398		5.000 %	C
	<u>51,837</u>	1,502,742		
Fossil Engineering - Phase 1	15,000		0.874 % @ 72.00 A	208
	<u>15,000</u>	1,517,742		
Fossil Engineering - Phase 2	112,253		6.541 % @ 72.00 A	1,559
	<u>112,253</u>	1,630,000		
Fossil Engineering - Phase 3	23,000		1.340 % @ 72.00 A	319
	<u>23,000</u>	1,653,000		
Rounding		1,653,000		L
		<u>1,653,000</u>		
		Total		
		1,653,000		

Toney, Calvin L.

From: Smith, Daniel R [Daniel.R.Smith@worleyparsons.com]
Sent: Wednesday, March 30, 2005 7:40 AM
To: Toney, Calvin L.
Cc: Melton, Gary; Petty, Harold L.; Hughes, Michael
Subject: Review of cost estimate for drain installation to mitigate seepage at KIF Dredge Cell-

Comments are directed at the detailed estimate (location) except where noted.

02 - Access Road - this is an allowance to address wear and tear on the existing road.

05 - Place additional riprap - this quantity should be 4000 tons, not 9450 tons.

06 - Add additional cost of transformer replacement (see attachment)

Also, for phase 3 engineering cost, assume 3% of construction cost (10% is too high). *OK per discussion on 5/2/05*

An additional comment would be that the phase 1 and phase 2 costs are already appropriated. I'll defer to Lynn/Mike as to whether these should be included in the estimate or not. If they want to recoup the costs for engineering spent (or appropriated to be spent) already during this FY, they have that information. Or, if they want to leave what you have as an allowance, ok by me.

Please contact me if you have any questions.



RE: KIF French
Drains Cost Est...

Please note new email address: Daniel.R.Smith@worleyparsons.com

Daniel R. (Dan) Smith, P.E.

Parsons E & C

Phone: (423) 757-8088

633 Chestnut St, Suite 400 Fax: (423) 266-0922

Chattanooga, TN 37450

Cell: (423) 364-1679

Email: Daniel.R.Smith@worleyparsons.com

Toney, Calvin L.

From: Tolen, Ronald [Ronald.Tolen@worleyparsons.com]
Sent: Monday, March 28, 2005 3:04 PM
To: Smith, Daniel R
Subject: RE: KIF French Drains Cost Estimate

Dan,

The attached memo is documenting my conversation with Steve Ladd (HUB) on the cost of the transformer changeout it required. It appears that the transformer in place will be sufficient though. Anyway the price is \$498 (see Memo)

Ron

From: Smith, Daniel R
Sent: Monday, March 28, 2005 11:08 AM
To: Melton, Gary; Tolen, Ronald
Subject: FW: KIF French Drains Cost Estimate

Please review the appropriate sections of the cost estimate relative to your discipline. I need your comments by the COB today.

thanks

Dan

-----Original Message-----

From: Toney, Calvin L. [mailto:cltoney@tva.gov]
Sent: Friday, March 25, 2005 3:05 PM
To: Petty, Harold L.; Hughes, Michael; Smith, Daniel R
Subject: KIF French Drains Cost Estimate

Please review and if you have any comments or questions call me at x7666 or e-mail me.

Calvin L. Toney
LP 2P-C
Cost Estimator
Phone 751-7666
Fax 751- 4295

03/30/2005

TVA-00028958

Page 1 of 1 Message

PARSONS E & C

TELEPHONE AND CONFERENCE MEMORANDUM

PROJECT: KIF Seepage Intercept Project

DATE: 3-28-05

BY: Ron Tolen

JOB NO.: 51020101

PAGE: 1 OF 1

Phone No.: 865-882-3242 x235

FILE NO:

TELEPHONE CALL

CONFERENCE:

WITH: Steve Ladd

ORGANIZATIONS: Harriman Utilities (HUB)

SUBJECT: 240/120Vac Transformer powering Seepage Intercept Project & Nextel Tower

I talked with Steve about the transformer that is currently powering the Sump Pumps. Steve did confirm that it was a 15kVA and would be sufficient to power a 200A service (we have a 100A panel installed now). This should be sufficient for our system, even if we doubled the number of pumps that we now have. In the instance we did upsize the installation beyond that, Steve said the only charge would be for a 25kVA transformer and he quoted a budgetary price of \$498. There is a good possibility that they will not charge anything, but we should use the budgetary quote in case they have a charge.

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR)**

Estimate Number 05359 Option: 0 PCN Number: KIF530
 Plant: KIF Revision: 0 Estimate Type: Conceptual
 Cost Engineer: C. L. Toney Unit #: Estimate Accuracy: +/- 30%
 Requesting Engr: S. M. Haber Phase: 1 Estimate Issue Date 3/25/2005

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$17,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase I</u>		<u>\$17,000</u>
<u>Phase II</u>		
Engineering		\$125,704
Long Lead Procurement		\$0
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase II</u>		<u>\$125,704</u>
<u>Phase III</u>		
Construction (Partner)		
Permanent Material		\$534,506
Labor (T&L)	23,050.31	\$562,262
Labor (Non-Manual)	2,880.00	\$144,000
Equipment		\$243,544
Subcontracts		\$83,300
Partner Fee		\$35,313
Partner Insurance		\$21,188
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$37,183
Total Construction Cost		\$1,661,296
Engineering		\$24,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
<u>Total Phase III</u>		<u>\$1,685,296</u>
<u>All Phases</u>		
Construction Partner	25,930.31	\$1,661,296
Long Lead Procurement		\$0
Engineering		\$166,704
Other / Other Organizations		\$0
Total Risk Dollars		\$0
<u>Total Project Costs</u>	<u>25,930.31</u>	<u>\$1,828,000</u>
<u>For Information only Total Environmental</u>		<u>\$0</u>
<u>For Information only Total Demolition Costs</u>		<u>\$0</u>

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR)**

Project name KIF05359/FRENCH DRAINS

Engineer DAN SMITH

Estimator C. L. Toney

Labor rate table KIF 40 ST 2005

Equipment rate table TVA Equipment

Project French Drains

Plant KIF

Estimate # 05359

PCN # KIF530

Requesting Engr S. M. Haber

Option 0

Revision 1

Phase Conceptual

Estimate Accuracy +/- 30%

Est. Issue Date 3/24/2005

Funding Type Capital

Outage(Y/N) N

Notes Estimate Assumptions:

All costs are based in 2005 dollars.

Single phase power for pump installed for dredge cell seepage retrofit.

3-phase power is assumed not to be required.

Existing pumps will be reused.

Engineering (including TVA over sight, subcontracts, and additional

geotechnical investigation) - assumes 10% of construction costs.

Sorted by 'Location/Activity'

'Detail' summary

Report format

Spreadsheet Report
KIF/05359/FRENCH DRAINS

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Equip Amount	Other Amount	Total Cost/Unit	Total Amount		
1	Erosion Controls S.P	Erect Silt Fence	4,500.00 lf	0.069	308.57 mh	7,532	2,223	1,399	-	2.48	11,154		
		Strip 1 Foot Soil Off Of Slope (Temporary Stockpile)	911.00 cy	0.025	22.78 mh	591	-	712	-	1.43	1,303		
		Strip 1 Foot Soil In Ash Slope To Provide Space For Pond	800.00 cy	0.120	96.00 mh	2,408	-	880	-	4.11	3,288		
		Excavate For Temporary Seepage Pond / Permanent Pond	1,400.00 cy	0.103	144.00 mh	3,832	-	1,320	-	3.52	4,932		
		Install Temporary Geotextile Dewatering Structure	1.00 ea	64.000	64.00 mh	1,880	-	304	-	4,184.34	4,184		
		Place Temporary Geotextile/Staple To Side Of Pond Next To Dredge Cell	611.00 cy	0.065	39.72 mh	951	-	80	-	5.57	3,402		
		D50 6" Riprap For Temporary Check Dams	64.00 mh	0.400	33.60 mh	844	-	530	-	28.36	2,382		
		Replace 1 Foot Of Soil On Slope Adjacent To Pond	911.00 cy	0.180	145.78 mh	3,656	-	1,395	-	5.48	4,992		
		Seed And Mulch Replaced Soil	1.00 ac	35.000	36.00 mh	923	-	780	-	2,703.15	2,703		
		Conlux Blanket	3,000.00 sy	0.020	60.00 mh	1,436	-	150	-	0.87	2,006		
		Erosion Controls S.P				23,834	9,903	7,510	-	-	-	41,247	
		01				23,834	9,903	7,510	-	-	-	41,247	
		2	Access Road (Gravel)	1032 Crushed Stone Base 3" Depth (110 pdf)	1,760.00 tn	0.120	211.20 hrs	5,804	15,708	2,033	-	13.38	23,545
				Access Road (Gravel)			211.20 hrs	5,804	15,708	2,033	-	-	23,545
		3	Instl Dms/Swan Pond	6" Dia Pipe Bollards	39.00 ea	1.500	54.00 mh	1,307	7,200	360	-	246.32	8,067
Strip 1 Foot Cover (Drainage System Installation)	11,745.00 cy			0.020	234.90 mh	6,098	-	7,341	-	1.14	13,439		
8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 775)	632.00 lf			0.200	126.40 mh	2,880	1,184	528	-	7.29	4,610		
Crushed Stone, Bedding 6" Depth	21.00 tn			0.500	10.50 mh	254	-	186	-	23.13	486		
8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 780)	779.00 lf			0.200	155.80 mh	3,682	1,472	649	-	7.30	5,692		
Crushed Stone, Bedding 6" Depth	26.00 tn			0.500	13.00 mh	315	-	243	-	23.13	601		
8" Dia Non-Perf HDPE Corrugated Tubing Lateral Outlet Pipes (EL. 799)	928.00 lf			0.200	185.60 mh	4,243	1,754	52	-	23.13	6,769		
Crushed Stone, Bedding 6" Depth	31.00 tn			0.500	15.50 mh	375	-	290	-	23.13	717		
Cut For 8" Dia Non-Perforated HDPE (1,083 bcy)	1,300.00 cy			0.200	260.00 mh	6,255	2,167	899	-	6.51	8,461		
Backfill For 8" Dia Non-Perforated HDPE (758 bcy)	910.00 cy			0.200	182.00 mh	4,508	2,975	899	-	8.99	8,183		
Cut For 8" Dia Perforated HDPE (7,298 bcy)	8,759.00 cy			0.250	1,751.80 mh	42,392	14,592	55,115	-	5.51	56,994		
Backfill For 8" Dia Perforated HDPE (5,107 bcy)	6,129.00 cy			0.250	1,323.25 mh	37,098	19,019	55,115	-	8.99	55,115		
1081 Crushed Stone	908.00 tn			0.150	85.20 mh	19,545	19,545	31,184	-	7.30	31,184		
Geotextile Woven Monofilament	3,325.00 sy			0.021	121.20 mh	2,934	8,080	1,156	-	13.81	11,156		
8" Dia Perforated HDPE Perimeter Underdrain (EL. 775)	4,045.00 lf			0.150	60.60 mh	1,849	6,520	228	-	2.55	8,483		
1081 Crushed Stone	765.00 tn			0.150	90.90 mh	18,494	7,645	10,562	-	7.29	29,506		
Geotextile Woven Monofilament	3,146.00 sy			0.021	114.75 mh	2,178	6,828	959	-	13.81	10,562		
8" Dia Perforated HDPE Perimeter Underdrain (EL. 780)	3,800.00 lf			0.150	64.71 mh	1,549	5,284	216	-	2.55	8,028		
1081 Crushed Stone	718.00 tn			0.150	76.00 mh	17,374	7,182	7,719	-	7.30	27,719		
Geotextile Woven Monofilament	2,956.00 sy			0.021	107.70 mh	2,697	6,498	913	-	13.81	9,913		
8" Dia Perforated HDPE Perimeter Underdrain (EL. 799)	3,640.00 lf			0.150	60.80 mh	1,455	5,885	730	-	2.55	7,544		
1081 Crushed Stone	585.00 tn			0.150	78.00 mh	16,642	6,880	26,552	-	7.30	26,552		
Geotextile Woven Monofilament	2,831.00 sy			0.021	103.20 mh	2,498	6,140	949	-	13.81	9,499		
Instl Dms/Swan Pond						199,241	93,130	64,917	-	-	-	357,288	
03						199,241	93,130	64,917	-	-	-	357,288	
4	Install Comp Geonet	Between 765 & 775 Bench	1.00 lot							0.00	0		
		Strip 1 Foot Soil And Stockpile	10,000.00 cy	0.020	200.00 mh	5,192	-	6,250	-	1.14	11,442		
		Place Composite Geonet	32,000.00 sy	0.050	1,635.00 mh	39,134	161,985	4,088	-	6.27	205,086		
		Place 1 Foot Soil	10,000.00 cy	0.060	600.00 mh	15,050	-	5,900	-	2.06	20,550		
		Place Thickened Soil Layer At Toe To Tie Into Ditch	1,000.00 cy	0.100	100.00 mh	2,508	-	917	-	3.43	3,425		
		Seed And Mulch Replaced Soil	6.00 ac	36.000	216.00 mh	5,539	6,000	4,600	-	2,703.15	16,219		
		Install Comp Geonet			2,751.00 hrs	67,423	167,865	21,434	-	-	256,722		
		04				67,423	167,865	21,434	-	-	-	256,722	
		5	Instl Riprap Ditches	Final Grading Of Ditches (Allowance)	250.00 cy	0.098	24.00 mh	581	-	200	-	3.12	781
				Over Excavate Ditch For Riprap	8,040.00 cy	0.200	1,608.00 mh	38,930	-	20,100	-	7.34	59,030
Install Non-Woven Needlepunched Geotextile, 5 oz	1,000.00 sy			0.016	16.00 mh	383	-	53	-	1.81	1,811		
Place D50 9" Riprap	9,450.00 in			0.320	3,040.00 mh	76,385	114,000	47,979	-	25.09	239,344		
Place Additional Riprap At Toe	9,450.00 in			0.320	3,040.00 mh	75,963	113,400	47,726	-	25.09	237,089		
Instl Riprap Ditches					7,712.00 hrs	192,221	116,088	116,058	-	-	537,055		
05						192,221	116,058	116,058	-	-	-	537,055	
6	Concret Permanent Pond			Submersible Pumping Station Equipment Package	1.00 lot							0.00	0
				Relocate Submersible Pumps	2.00 ea	40.000	80.00 mh	2,619	-	556	-	1,587.79	3,176
				Install New Submersible Pump	1.00 ea	30.000	30.00 mh	982	-	209	-	2,729.84	2,730
		Remove Existing Temporary Dewatering Structure	1.00 ls	48.000	48.00 mh	1,216	-	440	-	1,655.80	1,656		

Location	Activity	Description	Takeoff Quantity	Labor Productivity	Labor Quantity	Labor Amount	Material Amount	Sub Amount	Equip. Amount	Other Amount	Total Cost/Unit	Total Amount		
CONST FACILITY	Const Permanent Pond	60" Diameter Precast Concrete Manhole (15 Ft Depth)	1.00 ea	60.000	60.00 mh	1,523	3,000	-	458	-	4,980.95	4,981		
		Cut For 8" Dia Forced Main HDPE (1.11 lcy)	1,333.00 cy	0.200	266.60 mh	6,454	-	-	2,222	6.51	-	6,460	6,460	
		8" Dia Forced Main HDPE Penstock Underdrain (EL. 763)	2,420.00 lf	0.200	480.00 mh	10,973	-	4,536	-	1,958	7.30	17,907	17,907	
		1081 Crushed Stone	234.00 tn	0.150	39.60 mh	959	-	2,356	-	330	13.81	3,645	3,645	
		Backfill For 8" Dia Forced Main HDPE (778 lcy)	934.00 cy	0.250	233.50 mh	5,653	-	-	12,600	2,746	-	15,346	15,346	
		Allowance For Electrical Scope Of Pumps Relocation	1.00 tot	0.018	16.00 mh	383	-	1,173	-	40	1.80	-	1,997	1,997
		Geotextile (Line Pond To Minimize Erosion)	899.00 sy	0.096	42.24 mh	1,121	-	3,927	-	660	12.97	5,708	5,708	
		3" Stone (Line Pond To Minimize Erosion)	440.00 tn	0.096	42.24 mh	1,121	-	3,927	-	660	12.97	5,708	5,708	
		Chain Link Fence (5 Fence With 3 Strands Of Barbed Wire Along Top)	4,500.00 lf	-	-	-	-	-	-	-	-	-	-	-
		Personal Gates	2.00 ea	-	-	-	-	-	-	-	-	-	-	-
		Swing Gates	2.00 ea	-	-	-	-	-	-	-	-	-	-	-
		Const Permanent Pond					31,884	16,532	63,300	9,658	350.00	1,250.00	2,500	144,374
		06					1,295.94 hrs	31,884	16,532	63,300	9,658	350.00	1,250.00	144,374
		7					1,295.94 hrs	31,884	16,532	63,300	9,658	350.00	1,250.00	144,374
		CONST FACILITY	Erosion Control/6 Pit	Erect Silt Fence	1,200.00 lf	0.069	82.28 mh	2,009	593	-	373	-	2,974	2,974
Final Seeding	2.00 ac			35.000	72.00 mh	1,846	2,000	-	1,560	-	-	5,406	5,406	
Erosion Control/6 Pit						3,855	2,593	-	1,933	-	2,705.15	8,381	8,381	
07														
					154.28 hrs	3,855	2,593	-	1,933	-	8,381	8,381		
					154.28 hrs	3,855	2,593	-	1,933	-	8,381	8,381		
NON MANUAL	Construct Facilities	Mobilize, Drug Test, Misc Other, & Demobilize	1.00 ls	1,558.016	1,558.02 mh	38,000	-	-	20,000	0	58,000.00	58,000		
		Construct Facilities				38,000	-	-	20,000	-	-	58,000	58,000	
					1,558.02 hrs	38,000	-	-	20,000	-	58,000	58,000		
					1,558.02 hrs	38,000	-	-	20,000	-	58,000	58,000		
NON MANUAL	Non-Manual	Non Manual	1.00 ls	2,880.000	2,880.00 mh	144,000	-	-	-	-	144,000.00	144,000		
		Non-Manual				144,000	-	-	-	-	-	144,000	144,000	
					2,880.00 hrs	144,000	-	-	-	-	144,000	144,000		
					2,880.00 hrs	144,000	-	-	-	-	144,000	144,000		

Estimate Totals

Labor	706,292	25,930,308	hrs	
Material	534,506			
Subcontract	83,300	8,573,470	hrs	
Equipment	243,544			
	1,567,612			
Small Tools Expense	10,373	0.450 \$/hr	H	
Consumables & Expendables	22,490	4.000 %	C	
Office Supplies & Expense	4,320	3.000 %	C	
	37,183			
Partner Insurance (FY05)	21,188	3.000 %	C	
Partner Award Fee (FY05)	35,313	5.000 %	C	
	56,501			
Fossil Engineering - Phase 1	17,000	0.911 % @ 72.00 A	A	236
	17,000			
Fossil Engineering - Phase 2	125,704	6.733 % @ 72.00 A	A	1,746
	125,704			
Fossil Engineering - Phase 3	24,000	1.286 % @ 72.00 A	A	333
	24,000			
Rounding				L
	1,828,000			
Total	1,828,000			

Ø5359

Toney, Calvin L.

From: Melton, Gary [Gary.Melton@worleyparsons.com]
Sent: Wednesday, March 23, 2005 8:42 PM
To: Toney, Calvin L.
Cc: Tolen, Ronald; Petty, Harold L.
Subject: Kingston Seepage Repair Quantity Takeoffs

Calvin,
The attached file is quantity takeoffs for the seepage repair at KIF. Ron Tolen will send the remaining electrical portion in the morning. If you have any questions please contact Dan or myself at the office. We will be out of the office on Thursday and Friday of this week and can be reached on Dan's cell (423-364-1679).

Thank You,

Gary Melton
WorleyParsons

*** WorleyParsons Group Notice ***

"This email is confidential. If you are not the intended recipient, you must not disclose or use the information contained in it. If you have received this email in error, please notify us immediately by return email and delete the email and any attachments. Any personal views/ opinions expressed by the writer may not necessarily reflect the views/ opinions of the company."

03/24/2005

TVA-00028965

PRELIMINARY

KIF Dredge Cell - Seepage Repair Quantity Takeoff

ITEM	DESCRIPTION	UNITS	QUANTITY	T-1 Spec	Comments/Assumptions
1.000	Erosion Controls/ Sediment Pond				
1.001	Erect silt fence	lf	4500	571	Install along Swan Pond Road and Plant Access road
1.002	Strip 1 ft soil off of slope	cy	911		Temporarily stockpile
1.003	Excavate 3:1 slope in ash slope to provide space for the pond	cy	800		Spoil ash on top of dredge cell - 180 ft long and 120 sq ft area
1.004	Excavate for temporary sediment pond/permanent pond	cy	1400	120	Spoil soil/ash on top of dredge cell
1.005	Install temporary pond dewatering structure	ea	1		Construct from corrugated metal. Assume 10' of 36" CMP, tee section of 24 CMP, and concrete pad 8x8x1.
1.006	Place temporary geotextile and staple to side of pond next to dredge cell	sy	611		Place non-woven needle punched geotextile and secure to prevent erosion of ash
1.007	D50 6" Riprap for temporary check dams	ton	84		Place along ditches to catch sediment. Assume 50 cf/ck dam and 8 total ck dams & 105 pcf
1.008	Replace 1 ft of soil on slope adjacent to pond	cy	911		Obtain from temporary stockpile
1.009	Seed and mulch replaced soil	ac	1		
1.010	Curlex blanket	sy	3000		
2.000	Access Road Maintenance (gravel)				
2.001	1032 crushed stone base 3 in depth (110 pcf)	ton	1760	305	assume existing road upgrade Assume 1.5 miles of roadway (8000 lf); road is 16 ft wide
3.000	Install Drains for Swan Pond Road				Incorporate in Dredge Cell Cost
3.001	6" dia Pipe Bollards	ea	36		Four for each monitoring well
3.002	Strip 1 ft cover	cy	11745		Drainage system installation
3.003	8" dia Non-Perforated HDPE Corrugated Tubing Lateral outlet pipes @ 200' O.C. (EL. 775)	lf	632		TOM FOX (865) 414-9695 cell (865) 693-4356 office
3.004	Crushed stone, bedding 6" depth	ton	21		1081
3.005	8" dia Non-Perforated HDPE Corrugated Tubing Lateral outlet pipes @ 200' O.C. (EL. 780)	lf	779		
3.006	Crushed stone, bedding 6" depth	ton	26		1081
3.007	8" dia Non-Perforated HDPE Corrugated Tubing Lateral outlet pipes @ 200' O.C. (EL. 796)	lf	928		

Page 1
 13,230
 3031
 1032
 1075/15
 1904
 2.12

new payback 2,339
 inflated 15,760

Item ID	Description	Unit	Quantity	Location
3.008	Crushed stone, bedding 6" depth	ton	31	1081
3.009	Cut For 8" dia Non-Perforated HDPE	cy	1083	El. 765, 775, 780, 796
3.010	Backfill for 8" dia Non-Perforated HDPE	cy	758	El. 765, 775, 780, 796
3.011	Cut For 8" dia Perforated HDPE	cy	7296	El. 765, 775, 780, 796
3.012	Backfill for 8" dia Perforated HDPE	cy	5107	El. 765, 775, 780, 796
3.013	8" dia Perforated HDPE perimeter underdrain (El. 765)	lf	4275	
3.014	1081 crushed stone	ton	808	
3.015	Geotextile woven monofilament	sy	3325	Trench, Mirafi HP 370
3.016	8" dia Perforated HDPE perimeter underdrain (El. 775)	lf	4045	
3.017	1081 crushed stone	ton	765	
3.018	Geotextile woven monofilament	sy	3146	Trench, Mirafi HP 370
3.019	8" dia Perforated HDPE perimeter underdrain (El. 780)	lf	3800	
3.020	1081 crushed stone	ton	718	
3.021	Geotextile woven monofilament	sy	2956	Trench, Mirafi HP 370
3.022	8" dia Perforated HDPE perimeter underdrain (El. 796)	lf	3640	
3.023	1081 crushed stone	ton	688	
3.024	Geotextile woven monofilament	sy	2831	Trench, Mirafi HP 370
4.000	Install Composite Geonet between 765 & 775 Bench			
4.001	Strip 1 ft soil and stockpile	cy	10000	
4.002	Place composite geonet	sy	32700	<i>FIELD LAYING SYSTEM Price Geonet Capable #505K</i>
4.003	Place 1 ft soil	cy	10000	
4.004	Place thickened soil layer at toe to tie into ditch	cy	1000	
4.005	Seed and mulch replaced soil	ac	6	
5.000	Install Riprap Ditches			
5.001	Final grading of ditches	cy	250	Allowance
5.002	Over excavate ditch for riprap	cy	6700	Assume 20 ft wide ditch, 2 ft deep, and 4500 ft long
5.003	Install geotextile	sy	10000	Non-woven needlepunched, 8 oz per sq yd
5.004	Place riprap	ton	9500	Machine placed riprap - D50 = 9 in Assume 105 pct

5.005	Place additional riprap at toe	ton	9450	Place along entire ditch for stability (4500 ft) (105 pcf)
6.000	Construct Permanent Pond			
6.001	Submersible pumping station equipment package	ls		Use (2) two existing submersible pumps for no additional cost and purchase (1) submersible pump (\$1539 for pump at Tevcarva). Electrician to rewire panel box and pumps. <i>Notes: see 3D</i>
6.002	Remove existing temporary dewatering structure	ls		
6.003	60" Dia precast concrete manhole	ls		15' Depth
6.004	Cut For 8" dia Forced Main HDPE	cy	1111	
6.005	8" dia Force Main HDPE perimeter underdrain (EI. 763)	lf	2400	
6.006	1081 crushed stone	ton	264	
6.007	Backfill for 8" dia Forced Main HDPE	cy	778	
6.008	Allowance for disconnecting and reconnecting electrical power from existing sump to new manhole	ls		
6.009	Geotextile	sy	889	Line pond to minimize erosion
6.010	3" Stone	ton	440	Line pond to minimize erosion
6.011	Chain Link Fence	lf	4500	5' fence with 3' of barb wire along top
6.012	Personal Gates	ea	2	
6.013	Swing Gates	ea	2	
7.000	Erosion Controls in Borrow Pit			
7.001	Silt fence	lf	1200	Silt fence
7.002	Final Seeding	ac	2	

Assumptions

- (1) All earthwork quantities are in bank cubic yards (bcy) - no shrink or swell factors applied
- (2) Single Phase power is assumed for pump installed for Dredge Cell seepage retrofit. 3-phase power is assumed to not be required.
- (3) Assume that existing pumps will be reused.
- (4) Engineering (Inc. TVA over sight, subcontracts, and additional geotechnical investigation) - Assume 10% of construction costs.

PARSONS E & C
KIF SEEPAGE INTERCEPT PROJECT

PROJECT: KIF Seepage Intercept Project

DATE: 3-24-05

BY: Ron Tolen

JOB NO.: 51020101

PAGE: 1 OF 1

PCN NO: KIF530

Phone No.: 423-757-9956

SUBJECT: Electrical Scope for Seepage Intercept Project

Electrical Scope of Work

The Electrical/I&C Engineering includes engineering and design services as follows:

1. Relocate two sump pumps, the associated controller, level switches and 240Vac single phase power feeder supplying the assembly.
2. Relocate 120Vac single phase power feeder supplying the Nextel communications tower and associated system.

One cost effective source of power is considered for the design of this project.

1. The existing off site power will be utilized for the Seepage Intercept Project. 240/120Vac single phase power is currently powering the pumps and communications system.
 - A. The power is supplied by Harriman Utilities (HUB) and will require no upgrade for operating the two sump pumps currently in use.
 - B. Further Study will be needed to determine the requirement of a larger transformer if additional pumps are added.

Current conditions and assumptions

1. The current horse powers for the sump pumps are 2hp. The transformer supplying power is adequate for the two pumps.
2. The existing power transformer is estimated to be 15kVA, 240/120Vac, single phase. (To be verified by Harriman Utilities)
3. Additional standby/spare pump requirements.
 - A. Redesign of 240Vac feeder to carry additional load.
 - B. May require larger power transformer. (estimated \$600 for a new 25kva).
 - C. Requires additional controller & limit switches.
 - D. May require new 2P feeder breaker.

Add Allowance For Electrical Scope of Pump Relocation \$1200
for amount \$

PARSONS E & C
TELEPHONE AND CONFERENCE MEMORANDUM

PROJECT: KIF Seepage Intercept Project

DATE: 3-24-05

BY: Ron Tolen

JOB NO.: 51020101

PAGE: 1 OF 1

Phone No.: 865-717-2016

FILE NO:

TELEPHONE CALL

CONFERENCE:

WITH: Harold Catlett

ORGANIZATIONS: TVA KIF

SUBJECT: 240/120Vac Transformer powering Seepage Intercept Project & Nextel Tower

I talked with Harold about the arrangement with Harriman Utilities for the transformer that is now powering the Seepage Sump Pumps. He said that Harriman Utilities placed lines, set poles and placed the transformer with agreement that TVA would clear the trees and utilize the HUB power drop for 2 years. TVA's outlay for the tree removal was about \$4-\$5k. HUB ran the line and set the poles and transformer without charging TVA intent on recapturing the cost thru TVA's utilization of the power over the 2 year period. Harold stated that TVA has a very good working relationship with HUB and we need to pose the question of transformer upsize to HUB (Steve Ladd - 865-882-3242 x235). If the transformer does require upsizing, it can probably be completed by HUB for little or no cost to TVA.

Toney, Calvin L.

From: Tolen, Ronald [Ronald.Tolen@worleyparsons.com]
Sent: Thursday, March 24, 2005 11:33 AM
To: Petty, Harold L.; Toney, Calvin L.
Cc: Smith, Daniel R; Marsh, Brian
Subject: KIF SEEPAGE INTERCEPT PROJECT - ELECTRICAL SCOPE OF WORK

Lynn,

I am attaching the electrical scope of work for the KIF Seepage Intercept project. I intended to get a confirmation from Steve Ladd with HUB on the cost if any of changing out the 1Ø pole mounted transformer bringing in off site power for the project, but haven't been able to get in touch with him yet. I did however get a budgetary pricing from ABB for a 25kva transformer (next size larger) should TVA have to purchase one for the project.

The second attachment is my telecom with Harold Catlett that furnishes some insight into the original installation and leads me to believe that the change out of the transformer (if required) will be a minimal cost item.

Thanks,

Ron Tolen
423-757-9956

03/24/2005

TVA-00028971

P	S	Activity ID		Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float	Resp Engr	Prtn Engr	RE	Res ID	Bght Mhrs	Frcst Mhrs	Actual Mhrs
S	E	Activity ID		Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float	Resp Engr	Prtn Engr	RE	Res ID	Bght Mhrs	Frcst Mhrs	Actual Mhrs
T	C	Activity ID		Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float	Resp Engr	Prtn Engr	RE	Res ID	Bght Mhrs	Frcst Mhrs	Actual Mhrs
A		Activity ID		Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float	Resp Engr	Prtn Engr	RE	Res ID	Bght Mhrs	Frcst Mhrs	Actual Mhrs

KIF530 DEVELOP FLY ASH/BOTTOM ASH CAPACITY

Preliminary Engg (Phase 1)

A 30	LDK4K630PA	KIF530 Phase 1 - Prelim Engr Approved	22SEP04A	01OCT04A	SMH	SMH			SMH		SMH		0.00	0.00	0.00
A 30	LDK4K630PS	KIF530 Ph 1 - Project Support Mhrs -Hammock	22SEP04A	29APR05	SMH	SMH	-29		SMH		SMH	FDPE, TS2PC,	280.00	141.00	119.00
A 35	LDK4K630X1	KIF530 Conduct Study (French Drains)	08OCT04A	30MAR05	MSH	MSH	-29		HLP		RDP	FDCEA	120.00	310.00	310.00
A 15	LDK4K630X4	KIF530 Estimates Prep Total Pkg Est (Matrix)	08DEC04A	20DEC04A	CLT	CLT			JLH		RDP	TS2OE	40.00	142.00	142.00
A 30	LDK4K630X3	KIF530 Prepare Ph 2 FPPEP Pkg (French Drain)	24MAR05*	29APR05	SMH	SMH	-29				RDP		0.00	0.00	0.00
A 30	LDK4K630X0	KIF530 Prelim Engr Proj Review Mtg (French Dm)	22APR05*	22APR05	SMH	SMH	-22				RDP		0.00	0.00	0.00
A 30	LDK4K630XC	Preliminary Engr Complete (French Drain)		29APR05*	SMH	SMH	-29	31MAR05			RDP		0.00	0.00	0.00
A 30	LDK4K630X5	KIF530 Submit Ph 2 Pkg for Appr (French Drain)		29APR05*	SMH	SMH	0				RDP		0.00	0.00	0.00

Final Engineering (Phase 2)

A 35	LDK6K630X2	KIF530 Response To TDEC NOCs	08OCT04A	01OCT05	MSH	MSH	0		HLP		RDP	FDCEA	240.00	240.00	0.00
A 35	LDK6K630A1	KIF530 Develop Decision Matrix	01NOV04A	31JAN05A	MSH	MSH			HLP		RDP	FDCE	80.00	0.00	0.00
A 30	LDK6K630PA	KIF530 Receive Phase 2 FPPEP Approval (FR Drain)	30APR05*	07MAY05	SMH	SMH	0				RDP		0.00	0.00	0.00
A 30	LDK6K630PS	KIF530 Ph 2 - Project Support Mhrs (Hammock)	30APR05	09AUG05	SMH	SMH	0				RDP	FDPE, TS2PC,	272.00	272.00	0.00
A 35	LDK6K630AP	KIF530 Prepare DCN KIF-0X-XXX (FR Drain)	08MAY05*	06JUL05	MSH	MSH	0		HLP		RDP	FDCEA	100.00	100.00	0.00
A 35	LDK6K630OR	KIF530 10% DCN Design Review (FR Drain)		08MAY05	MSH	MSH	0		HLP		RDP		0.00	0.00	0.00
A 35	LDK6K630FS	KIF530 50% DCN Design Review		13JUN05	HLP	HLP	0		HLP		RDP		0.00	0.00	0.00
A 35	LDK6K630F9	KIF530 100% DCN Design Review		05JUL05	HLP	HLP	0		HLP		RDP		0.00	0.00	0.00
A 35	LDK6K630W4	KIF530 Award Contract For Long Lead Material		06JUL05	HLP	HLP	0		HLP		RDP		0.00	0.00	0.00
A T2	LDK6K630RU	KIF530 ERU ASSEMBLE AND DISTRIBUTE KIF-0X-XXX	13JUL05	14JUL05	DLT	DLT	0		DLT		RDP	TS2RU	16.00	16.00	0.00
A 35	LDK6K630NN	KIF530 DCN KIF-0X-XXX Issued		14JUL05	HLP	HLP	0		HLP		RDP		0.00	0.00	0.00
A 15	LDK6K630X2	Review Const Estimate & Prepare Total Proj Estim	15JUL05	17JUL05	JLH	JLH	0		JLH		RDP	TS2OE	24.00	24.00	0.00

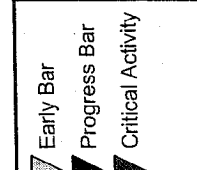
Start Date 01JAN89
Finish Date 02AUG13
Data Date 13MAR05
Run Date 16MAR05 09:45

FHEM

Early Bar
Progress Bar
Critical Activity

P S E T C	Activity ID	Activity Description	Forecast Start	Forecast Finish	Finish Target	Total Float	Resp Engr	Prtn Engr	RE	Res ID	Bdgt Mhrs	Frcst Mhrs	Actual Mhrs
A	30	LDXK630X3	KF530 Prepare Ph 3 FFEP Pkg	03AUG05		0	SMH		RDP		0.00	0.00	0.00
A	30	LDXK630PC	KF530 Final Engineering Complete	04AUG05		0	SMH		RDP		0.00	0.00	0.00
A	36	LDXK630M7	KF530 LL Mail Delivery	02JAN06		36		HLP	RDP		0.00	0.00	0.00
Implementation (Phase 3)													
D	30	LDXK630PA	KF530 Receive Phase 3 FFEP Approval	01FEB06		0	SMH		RDP		0.00	0.00	0.00
D	30	LDXK630PS	KF530 Phase 3 - Project Support Mhrs (Harmon)	01FEB06		0	SMH		RDP	TSZPC, FDPE	260.00	260.00	0.00
D	36	LDXK630X1	KF530 Issue Partner PA	03FEB06		0		HLP	RDP		0.00	0.00	0.00
D	36	LDXK630NS	KF530 Implementation Field Support	03FEB06		0		HLP	RDP	FDCEA	300.00	300.00	0.00
D	36	LDXK630PO	Implementation And Construction Period	10MAR06		0		HLP	RDP		0.00	0.00	0.00
D	36	LDXK630NO	KF530 DCN/KF-0X-XXX-RTD	28JAN08		9		HLP	RDP		0.00	0.00	0.00
D	36	LDXK630PT	KF530 Project Turnover	28JAN08		0		HLP	RDP		0.00	0.00	0.00
D	36	LDXK630ND	KF530 Closure Process of DCN/KF-0X-XXX	30JAN08		9		HLP	RDP	FDCEA	0.00	0.00	0.00
D	T2	LDXK630RU	ERU ASSEMBLE AND DISTRIBUTE KF-0X-XXX	22APR08		7	DLL	DLL	RDP	TSZRU	24.00	24.00	0.00
D	36	LDXK630NC	KF530 DCN/KF-0X-XXX Closed	29APR08		9		HLP	RDP		0.00	0.00	0.00
D	30	LDXK630PC	KF530 Verify Benefits & Close Project	12JAN08		0	SMH		RDP		0.00	0.00	0.00

Sheet 163 of 198
 TENNESSEE VALLEY AUTHORITY
 Layout 70



Start Date 01JAN89
 Finish Date 02AUG13
 Data Date 13MAR05
 Run Date 16MAR05 09:45
 © Primavera Systems, Inc.

KINGSTON DREDGE CELL FRENCH DRAINS ESTIMATE COMPARISON

CES Original Phase 1 Cost Estimate

HED Phase 3 Cost Estimate

<u>Item</u>	<u>Dollars</u>
Engineering	\$15,000
Partner (Non-Manual)	
Other / Other Organizations	\$0
<u>Total Phase I</u>	<u>\$15,000</u>
Engineering	\$112,258
Long Lead Procurement	\$0
Partner (Non-Manual)	
Other / Other Organizations	\$0
<u>Total Phase II</u>	<u>\$112,258</u>
Permanent Material	\$469,106
Labor (T&L) 21,187 Mh's	\$515,453
Labor (Non-Manual) 2,650 Mh's	\$132,500
Equipment	\$214,019
Subcontracts	\$85,700
Partner Fee	\$32,398
Partner Insurance	\$19,439
Escalation	\$0
Construction Risk Dollars	\$0
Other	\$34,127
Total Construction Cost	\$1,502,742
Engineering	\$23,000
Direct plant support + TVA Other Costs	\$0
Project Risk Dollars	\$0
Other / Other Organizations	\$0
<u>Total Phase III</u>	<u>\$1,525,742</u>
Construction Partner 23,837 Mh's	\$1,502,742
Long Lead Procurement	\$0
Engineering	\$150,258
Other / Other Organizations	\$0
Total Risk Dollars	\$0
<u>Total Project Costs</u>	<u>\$1,653,000</u>

<u>Item</u>	<u>Dollars</u>
Engineering	\$15,000
Partner (Non-Manual)	
Other / Other Organizations	\$0
<u>Total Phase I</u>	<u>\$15,000</u>
Engineering	\$112,258
Long Lead Procurement	\$0
Partner (Non-Manual)	
Other / Other Organizations	\$0
<u>Total Phase II</u>	<u>\$112,258</u>
Permanent Material	\$518,009
Labor (T&L) 17,122 Mh's	\$576,510
Labor (Non-Manual) 600 Mh's	\$27,600
Equipment	\$222,397
Subcontracts	\$386,010
TVA-HED - Central Command	\$75,663
Partner Insurance	\$0
Escalation	\$0
Construction Risk Dollars	\$0
Other	\$40,200
Total Construction Cost	\$1,846,389
Engineering	\$23,000
Direct plant support + TVA Other Costs	\$0
Project Risk Dollars	\$0
Other / Other Organizations	\$0
<u>Total Phase III</u>	<u>\$1,869,389</u>
Construction Partner 17,722 Mh's	\$1,846,389
Long Lead Procurement	\$0
Engineering	\$150,258
Other / Other Organizations	\$0
Total Risk Dollars	\$0
<u>Total Project Costs</u>	<u>\$1,996,647</u>

*Compare Estimate
Summary
in Excel
Spreadsheet*

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR)**

Estimate Number 05359R1 Option: 0 PCN Number: KIF530
 Plant: KIF Revision: 1 Estimate Type: Conceptual
 Cost Engineer: C. L. Toney Unit #: Estimate Accuracy: +/- 30%
 Requesting Engr: S. M. Haber Phase: 1 Estimate Issue Date 3/31/2005

<u>Phase I</u>	<u>Hours</u>	<u>Dollars</u>
Engineering		\$15,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase I</u>		<u>\$15,000</u>
<u>Phase II</u>		
Engineering		\$112,258
Long Lead Procurement		\$0
Partner (Non-Manual)		
Other / Other Organizations		\$0
<u>Total Phase II</u>		<u>\$112,258</u>
<u>Phase III</u>		
Construction (Partner)		
Permanent Material		\$469,106
Labor (T&L)	21,186.85	\$515,453
Labor (Non-Manual)	2,650.00	\$132,500
Equipment		\$214,019
Subcontracts		\$85,700
Partner Fee		\$32,398
Partner Insurance		\$19,439
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$34,127
Total Construction Cost		\$1,502,742
Engineering		\$23,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
<u>Total Phase III</u>		<u>\$1,525,742</u>
<u>All Phases</u>		
Construction Partner	23,836.85	\$1,502,742
Long Lead Procurement		\$0
Engineering		\$150,258
Other / Other Organizations		\$0
Total Risk Dollars		\$0
<u>Total Project Costs</u>	<u>23,836.85</u>	<u>\$1,653,000</u>
<u>For Information only Total Environmental</u>		<u>\$0</u>
<u>For Information only Total Demolition Costs</u>		<u>\$0</u>

**KINGSTON FOSSIL PLANT
(KIF530) DREDGE CELL FRENCH DRAINS
(SEEPAGE REPAIR) HED Cost Estimate**

Estimate Number HED Estimate Option: 0 PCN Number: KIF530
 Plant: KIF Revision: 0 Estimate Type: Detailed
 Cost Engineer: C. L. Toney Unit #: Estimate Accuracy: +/- 10%
 Requesting Engr: S. M. Haber Phase: 3 Estimate Issue Date 5/23/2005

	<u>Hours</u>	<u>Dollars</u>
Phase I		
Engineering		\$15,000
Partner (Non-Manual)		
Other / Other Organizations		\$0
		<u>\$15,000</u>
Phase II		
Engineering		\$112,258
Long Lead Procurement		\$0
Partner (Non-Manual)		
Other / Other Organizations		\$0
		<u>\$112,258</u>
Phase III		
Construction (Partner)		
Permanent Material		\$518,009
Labor (T&L)	17,122	\$576,510
Labor (Non-Manual)	600	\$27,600
Equipment		\$222,397
Subcontracts		\$386,010
TVA-HED - Central Command		\$75,663
Partner Insurance		\$0
Escalation		\$0
Construction Risk Dollars		\$0
Other		\$40,200
Total Construction Cost		\$1,846,389
Engineering		\$23,000
Direct plant support + TVA Other Costs		\$0
Project Risk Dollars		\$0
Other / Other Organizations		\$0
		<u>\$1,869,389</u>
All Phases		
Construction Partner	17,722	\$1,846,389
Long Lead Procurement		\$0
Engineering		\$150,258
Other / Other Organizations		\$0
Total Risk Dollars		\$0
	<u>17,722</u>	<u>\$1,996,647</u>
<u>For Information only Total Environmental</u>		\$0
<u>For Information only Total Demolition Costs</u>		\$0

Project	SOE-JSF03	SOE-JSF04	SOE-GAF02	SOE-GAF03	SHF226	SOE-COF01	SOE-COF04	KIF466(Original)	KIF466	KIF466(Ametek)
Units	1	1	1	1	EGB	1	1	9	9	9
Engineering	\$0		\$0	\$0	\$30,000			\$34,524	\$22,600	\$22,600
Partner (Non-Manual)			\$0	\$0	\$0			\$0	\$0	\$0
Other / Other Organizations	\$0		\$0	\$0	\$30,000			\$34,524	\$22,600	\$22,600
Total Phase I										
Engineering	\$36,000		\$10,000	\$10,000	\$45,000			\$61,286	\$77,246	\$77,246
Long Lead Procurement	\$18,000		\$35,730	\$35,730	\$180,000			\$75,000	\$231,970	\$127,505
Partner (Non-Manual)			\$0	\$0	\$0			\$17,008	\$0	\$0
Other / Other Organizations	\$0		\$0	\$0	\$0			\$153,294	\$309,216	\$204,751
Total Phase II										
Permanent Material	\$34,000		\$4,568	\$4,568	\$0			\$0	\$8,835	\$8,835
Labor (T&L)	\$115,000		\$30,775	\$30,775	\$105,000			\$187,000	\$85,201	\$85,201
Labor (Non-Manual)			\$4,125	\$4,125	\$0			\$0	\$9,500	\$9,500
Equipment	\$2,479		\$570	\$570	\$0			\$0	\$0	\$0
Subcontracts	\$700		\$0	\$0	\$0			\$0	\$0	\$0
Partner Fee	\$5,750		\$1,745	\$1,745	\$0			\$0	\$4,735	\$4,735
Partner Insurance	\$3,450		\$1,047	\$1,047	\$0			\$0	\$2,841	\$2,841
Escalation	\$0		\$3,202	\$3,202	\$0			\$0	\$7,973	\$5,830
Construction Risk Dollars	\$0		\$0	\$0	\$0			\$0	\$0	\$0
Other	\$8,621		\$1,758	\$1,758	\$0			\$0	\$20,715	\$20,715
Total Construction Cost	\$170,000		\$47,790	\$47,790	\$105,000			\$187,000	\$139,800	\$137,657
Engineering	\$35,000		\$25,000	\$25,000	\$15,000			\$41,894	\$63,176	\$47,416
Direct plant support + TVA Other Costs	\$0		\$0	\$0	\$0			\$0	\$5,000	\$5,000
Project Risk Dollars	\$0		\$480	\$480	\$0			\$288	\$10,208	\$8,576
Other / Other Organizations	\$15,000		\$12,000	\$12,000	\$0			\$0	\$0	\$0
Total Phase III								\$229,182	\$218,184	\$198,649
Construction Partner	\$170,000		\$47,790	\$47,790	\$105,000			\$187,000	\$139,800	\$137,657
Long Lead Procurement	\$18,000		\$35,730	\$35,730	\$180,000			\$75,000	\$231,970	\$127,505
Engineering	\$91,000		\$35,000	\$35,000	\$90,000			\$137,704	\$163,022	\$147,262
Other / Other Organizations	\$15,000		\$12,000	\$12,000	\$0			\$17,008	\$5,000	\$5,000
Total Risk Dollars	\$0		\$480	\$480	\$0			\$288	\$10,208	\$8,576
Total Project Costs	\$294,000		\$131,000	\$131,000	\$375,000			\$417,000	\$550,000	\$426,000
Actuals as 5/5/05			\$77,000	\$86,000	\$54,000			\$6,000	\$6,000	\$6,000
Closed Actuals	\$347,000							\$275,000		
# of I/O Points								331	331	331

ESTIMATE SUMMARY

PRELIMINARY ESTIMATE FOR 75% REVIEW

REV # 0

P.A. NO 0

DATE: 19-May-05

MPAC W.O. 0

LOCATION: KINGSTON FOSSIL UNIT NO: 0
 SHORT CODE:

PROJECT DESCRIPTION: DREDGE CELL DIKE RESTORATION

WORKSCOPE:

PHASE	3	TYPE OF FUNDING	
		CAPITAL > 100K	

PREPARED BY: WORKMAN / RADFORD

1. TVA-HED LABOR COSTS			Target Data / Comments
Craft Labor	MANHOURS	17122 ✓	
	COST	\$576,510 ✓	
Non-Manual Labor	MANHOURS	600 ✓	
	COST	\$27,600 ✓	
Contingency 0.00%	MANHOURS	0	
	COST	\$0	
SUBTOTAL TVA-HED LABOR	MANHOURS	17,722	
	COST	✓ \$604,110	
2. TVA-HED OTHER COSTS			
TVA-HED Subcontracts		\$386,010 ✓	
TVA-HED Subcontract fee		\$0	
Travel & Living Expenses		\$5,100 ✓ <i>other</i>	
TVA-HED Material Purchases		\$0	
HED Other Costs		\$0	
Contingency 0%		\$0	
SUBTOTAL TVA-HED OTHER		✓ \$391,110	
TOTAL TVA-HED COSTS		\$995,220	
3. ITEMS MANAGED BY TVA-HED			
Permanent Materials		\$518,009 ✓	
Heavy Equipment		\$217,695 ✓	
Tagged & 3rd Party Rental Equipment		\$4,702 ✓	
Small Tools		\$24,827 ✓ <i>other</i>	
Supplies, Consumables & Expendable Tools		\$10,273 ✓ <i>other</i>	
Office Supplies & Expenses		\$0	
Other TVA-HED Costs		\$0	
TVA subcontracts (By Others)		\$0	
Partner or OCIP Insurance	0.00%	\$0	
TVA-HED - Central Command	5.00%	\$75,661 ✓	
Contingency	0%	\$0	
SUBTOTAL TVA-HED MANAGED		\$851,169	
TOTAL TVA-HED COSTS		\$1,846,389	

APPROVALS: TOTAL 1,847,000

TVA-HED Manager	Date:
TVA-HED Estimator	Date:
TVA - Project Manager	Date:
TVA - Project Engineer	Date:
TVA - Site Environmental Engineer	Date:

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								UNIT MH	MAN HOURS				
					DREDGE CELL DIKE RESTORATION								
					MOBILIZATION / EROSION CONTROL OF PROJECT								
					OEA TRENCH / BACKFILL FOR SILT FENCES	5700	LF	0.04	228	\$40.00	\$9,120		
					LBJ INSTALL SILT FENCE / STRAW BALES AS REQUIRED	5700	LF	0.12	684	\$26.00	\$17,764		
					OEA BUILD EQUIPMENT CONTAINMENT AREA	1	LS	20	20	\$40.00	\$800		
					LBJ BUILD EQUIPMENT CONTAINMENT AREA	1	LS	20	20	\$26.00	\$520		
					LBJ SET UP OFFICE TRAILER AND EQUIPMENT CONNEX	1	LS	30	30	\$26.00	\$780		
					LBJ INSTALL CONSTRUCTION FENCING AS REQUIRED	2000	LF	0.092	184	\$26.00	\$4,784		
					LBJ RECEIVE & INVENTORY MATERIALS	1	LS	40	40	\$26.00	\$1,040		
					SEDIMENT POND								
					OEA EXCAVATE SLOPE TO PROVIDE SPACE FOR POND	960	CY	0.05	48	\$40.00	\$1,920		
					OEA EXCAVATE FOR TEMPORARY / PERIMATE SEDIMENT POND	1680	CY	0.03	50	\$40.00	\$2,016		
					TM3 HAUL MATERIAL TO TOP OF DREDGE CELL	1680	CY	0.06	101	\$32.00	\$3,226		
					LBJ INSTALL TEMPORARY POND DEWATERING STRUCTURE	1	EA	120	120	\$26.00	\$3,120		
					LBJ PLACE TEMPORARY GEOTEXTILE AND PUT @ POND	611	SY	0.09	55	\$26.00	\$1,430		
					OEA INSTALL TEMPORARY CHECK DAMS	100	TN	0.1	10	\$40.00	\$400		
					OEA REPLACE 1' OF TOPSOIL ON SLOPE ADJACENT TO POND	1093	CY	0.03	33	\$40.00	\$1,312		
					TM3 HAUL TOPSOIL	1093	CY	0.06	66	\$32.00	\$2,099		
					LBJ SEED AND MULCH REPLACED SOIL	4	MEN	20	80	\$26.00	\$2,080		
					LBJ INSTALL CURLEK BLANKET	3000	SY	0.062	186	\$26.00	\$4,836		
					ACCESS ROAD MAINTENANCE (GRAVEL)								
					OEA INSTALL 1032 CRUSHED STONE 3" BASE MATERIAL	1760	TN	0.06	106	\$40.00	\$4,224		
					INSTALL DRAINS FOR SWAN POND ROAD								
					OEA INSTALL 6" PIPE BOLLARDS @ NEW WELLS	36	EA	1.5	54	\$40.00	\$2,160		
					LBJ INSTALL 6" PIPE BOLLARDS @ NEW WELLS	36	EA	1.5	54	\$26.00	\$1,404		
					OEA STRIP 1' OF COVER SPOILS	14094	CY	0.03	423	\$40.00	\$16,913		
					OEA TRENCH LATERAL OUTLET PIPES @ 775' 780' & 796'	2339	LF	0.073	171	\$40.00	\$6,830		
					OEA INSTALL 6" BEDDING	100	TN	0.6	60	\$40.00	\$2,400		
					LBJ INSTALL LATERAL OUTLET PIPES	2339	LF	0.2	468	\$26.00	\$12,163		
					OEA BACKFILL TRENCHES	2339	LF	0.07	164	\$40.00	\$6,549		
					OEA TRENCH FOR PERIMETER UNDERDRAINS (4 EA)	15760	LF	0.073	1150	\$40.00	\$46,019		
					LBJ INSTALL WOVEN MARAFI 350 GEOTEXTILE FABRIC	12258	SY	0.042	515	\$26.00	\$13,386		
					LBJ INSTALL 8" PERIMETER ADS UNDERDRAINS	15760	LF	0.2	3152	\$26.00	\$81,952		
					OEA BACKFILL 8" PERIMETER UNDERDRAINS	4721	TN	0.17	803	\$40.00	\$32,103		
					OEA BACKFILL 8" PERIMETER UNDERDRAINS	15760	LF	0.07	1103	\$40.00	\$44,128		
					INSTALL COMPOSITE GEONET BETWEEN 765 AND 775								
					OEA STRIP TOPSOIL AND STOCKPILE FOR REUSE (1')	32700	SY						
					TM3 SCRAPE 1' OF ASH OUT X 5' WIDE	12000	CY	0.035	420	\$40.00	\$16,800		
					TM3 SCRAPE 1' OF ASH OUT X 5' WIDE	1200	CY	0.05	60	\$32.00	\$1,920		
					OEA REPLACE 1' OF SELECTED SOIL & COMPACT	12000	CY	0.075	1800	\$40.00	\$72,000		
					TM3 HAUL SELECTED FILL BACK TO	24000	CY	0.05	1200	\$32.00	\$38,400		
					LBJ SEED AND STRAW TOPSOILED AREAS	6	AC	40	240	\$26.00	\$6,240		
					INSTALL RIP RAP DITCHES								
					OEA FINAL GRADING OF DITCHES	300	CY	0.04	12	\$40.00	\$480		
					OEA OVER EXCAVATE DITCHES FOR RIP RAP	8040	CY	0.035	281	\$40.00	\$11,256		
					TM3 HAUL SPOILS	8040	CY	0.05	402	\$32.00	\$12,864		
					LBJ INSTALL 8 OZ NEEDLE PUNCHED GEOTEXTILE	10000	SY	0.019	190	\$26.00	\$4,940		
					OEA PLACE RIP RAP	9500	TN	0.05	475	\$40.00	\$19,000		

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	CRAFT LABOR		WAGE RATE	TOTAL LABOR	TOTAL MATERIAL
						UNIT	MAN HOURS			
		OEA			PLACE ADDITIONAL RIP RAP AT TOE FOR STABILITY	11150 TN	0.07	\$40.00	\$31,220	
		OEA			INSTALL SEDIMENT TRAP	1 EA.	20	\$40.00	\$800	
		OEA			CONSTRUCT PERMANENT POND					
		OEA			REMOVE TEMPORARY DEWATERING STRUCTURE	1 LS	20	\$40.00	\$800	
		OEA			SET 60" MANHOLE	1 LS	30	\$40.00	\$1,200	
		OEA			EXCAVATE FOR 8" DIA. FORCE MAIN	1333 CY	0.08	\$40.00	\$4,266	
		LBJ			INSTALL 8" FORCE MAIN PIPING	2400 LF	0.098	\$26.00	\$6,115	
		OEA			BACKFILL MAIN	934 CY	0.07	\$40.00	\$2,614	
		LBJ			INSTALL GEOTEXTILE LINER - ASSUMES 12 OZ.	889 SY	0.065	\$26.00	\$1,502	
		LBJ			INSTALL 3" STONE	440 TN	0.15	\$26.00	\$1,716	
		OEA			EROSION CONTROL AND BORROW PIT AREA					
		LBJ			SILT FENCE TRENCHING	1200 LF	0.04	\$40.00	\$1,920	
		LBJ			SILT FENCE INSTALLATION	1200 LF	0.12	\$26.00	\$3,744	
		LBJ			FINAL SEEDING	2 AC	40	\$26.00	\$2,080	
		OEA			INSTALL SEDIMENT TRAP	1 EA.	20	\$40.00	\$800	
					PRE-OUTAGE DIRECT				\$572,094	
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					OUTAGE - DIRECT CRAFT					
					ADD ABOVE THIS LINE IF NECESSARY					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					DREDGE CELL DIKE RESTORATION					
					ADD ABOVE THIS LINE IF NECESSARY					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					POST OUTAGE - DIRECT CRAFT					
					ADD ABOVE THIS LINE IF NECESSARY					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					DREDGE CELL DIKE RESTORATION					
					ADD ABOVE THIS LINE IF NECESSARY					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					TOTALS - DIRECT CRAFT				\$572,094	
					SUPPORT CRAFT					
					(QTY. & UNITS MUST BE INCLUDED FOR EA. LINE ITEM)					
					PRE-OUTAGE - SUPPORT CRAFT					
					JOURNEYMAN SUPPORT - PREOUTAGE					
		912		CAJ	CARPENTER - SCAFFOLDING SUPPORT			\$29.93		
		905		ELJ	ELECTRICAL GENERAL SUPPORT			\$36.66		
		902		LBJ	LABORERS FOR CLEAN - UP			\$22.64		
		902		LBJ	LABORERS FOR WATER DISTRIBUTION			\$22.64		
		930		OEA	OPERATORS FOR CRANES			\$33.60		
		930		OEA	OPERATORS FOR ELEVATORS			\$33.60		
		930		OEA	TUGGER OPERATORS			\$33.60		
		270		PAJ	PAINTER TOUCHUP SUPPORT			\$26.89		
		908		TM3	TEAMSTER TRUCK DRIVERS			\$27.16		
		908		TMW	TEAMSTER TOOL ROOMS			\$26.34		
		908		TMW	TEAMSTER WAREHOUSE			\$26.34		
					PRE-OUTAGE DIRECT				\$572,094	
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					OUTAGE DIRECT					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					POST OUTAGE DIRECT					
					DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE					
					TOTALS - DIRECT CRAFT				\$572,094	
					SUPPORT CRAFT					
					(QTY. & UNITS MUST BE INCLUDED FOR EA. LINE ITEM)					
					PRE-OUTAGE - SUPPORT CRAFT					
					JOURNEYMAN SUPPORT - PREOUTAGE					
		912		CAJ	CARPENTER - SCAFFOLDING SUPPORT			\$29.93		
		905		ELJ	ELECTRICAL GENERAL SUPPORT			\$36.66		
		902		LBJ	LABORERS FOR CLEAN - UP			\$22.64		
		902		LBJ	LABORERS FOR WATER DISTRIBUTION			\$22.64		
		930		OEA	OPERATORS FOR CRANES			\$33.60		
		930		OEA	OPERATORS FOR ELEVATORS			\$33.60		
		930		OEA	TUGGER OPERATORS			\$33.60		
		270		PAJ	PAINTER TOUCHUP SUPPORT			\$26.89		
		908		TM3	TEAMSTER TRUCK DRIVERS			\$27.16		
		908		TMW	TEAMSTER TOOL ROOMS			\$26.34		
		908		TMW	TEAMSTER WAREHOUSE			\$26.34		

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN HOURS	UNIT MH				
					GENERAL FOREMAN SUPPORT - PRE-OUTAGE								
		942		AWG	INSULATOR GENERAL FOREMAN		MEN			\$42.02			
		942		BMG	BOILERMAKER GENERAL FOREMAN		MEN			\$56.70			
		942		ELG	ELECTRICAL GENERAL FOREMAN		MEN			\$43.51			
		942		PFG	PIPEFITTER GENERAL FOREMAN		MEN			\$43.66			
					PRE-OUTAGE SUPPORT								
					SUBTOTALS :								
OUTAGE - SUPPORT CRAFT													
					JOURNEYMAN SUPPORT - OUTAGE								
		912		CAJ	CARPENTER - SCAFFOLDING SUPPORT		MEN			\$29.93			
		905		ELJ	ELECTRICAL GENERAL SUPPORT		MEN			\$36.66			
		902		LBJ	LABORERS FOR CLEAN - UP		MEN			\$22.64			
		902		LBJ	LABORERS FOR WATER DISTRIBUTION		MEN			\$22.64			
		930		OEJ	OPERATORS FOR CRANES		MEN			\$33.60			
		930		OEJ	OPERATORS FOR ELEVATORS		MEN			\$33.60			
		930		OEJ	OPERATORS FORKRLIFTS		MEN			\$33.60			
		930		OEJ	TUGGER OPERATORS		MEN			\$33.60			
		270		PAJ	PAINTER TOUCHUP SUPPORT		MEN			\$26.89			
		908		TM3	TEAMSTER TRUCK DRIVERS		MEN			\$27.16			
		908		TMW	TEAMSTER TOOL ROOMS		MEN			\$26.34			
		908		TMW	TEAMSTER WAREHOUSE		MEN			\$26.34			
					GENERAL FOREMAN SUPPORT - OUTAGE								
		942		AWG	INSULATOR GENERAL FOREMAN		MEN			\$42.02			
		942		BMG	BOILERMAKER GENERAL FOREMAN		MEN			\$56.70			
		942		ELG	ELECTRICAL GENERAL FOREMAN		MEN			\$43.51			
		942		PFG	PIPEFITTER GENERAL FOREMAN		MEN			\$43.66			
					OUTAGE SUPPORT								
					SUBTOTALS :								
POST-OUTAGE - SUPPORT CRAFT													
					JOURNEYMAN SUPPORT - POST OUTAGE								
		912		CAJ	CARPENTER - SCAFFOLDING SUPPORT		MEN			\$29.93			
		905		ELJ	ELECTRICAL GENERAL SUPPORT		MEN			\$36.66			
		902		LBJ	LABORERS FOR CLEAN - UP		MEN			\$22.64			
		902		LBJ	LABORERS FOR WATER DISTRIBUTION		MEN			\$22.64			
		930		OEJ	OPERATORS FOR CRANES		MEN			\$33.60			
		930		OEJ	OPERATORS FOR ELEVATORS		MEN			\$33.60			
		930		OEJ	OPERATORS FORKRLIFTS		MEN			\$33.60			
		930		OEJ	TUGGER OPERATORS		MEN			\$33.60			
		270		PAJ	PAINTER TOUCHUP SUPPORT		MEN			\$26.89			
		908		TM3	TEAMSTER TRUCK DRIVERS		MEN			\$27.16			
		908		TMW	TEAMSTER TOOL ROOMS		MEN			\$26.34			
		908		TMW	TEAMSTER WAREHOUSE		MEN			\$26.34			
					GENERAL FOREMAN SUPPORT - POST OUTAGE								
		942		AWG	INSULATOR GENERAL FOREMAN		MEN			\$42.02			
		942		BMG	BOILERMAKER GENERAL FOREMAN		MEN			\$56.70			
		942		ELG	ELECTRICAL GENERAL FOREMAN		MEN			\$43.51			
		942		PFG	PIPEFITTER GENERAL FOREMAN		MEN			\$43.66			

MAT. CODE	CODE WORK ORDER	ACT SCH	CODE CREF	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
							MAN HOURS	UNIT MH				
ADD ABOVE THIS LINE IF NECESSARY DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE												
MOBILIZATION OF CRAFT												
				POST OUTAGE SUPPORT								
				SUBTOTALS :								
	901		AWJ	ADMINISTRATIVE TIME		2	MEN		\$35.84			
	901		AWJ	SAFETY MEETING		3	MEN		\$35.84			
	901		AWJ	DRUG TEST		1	MEN		\$35.84			
	901		ABJ	ADMINISTRATIVE TIME		2	MEN		\$29.03			
	901		ABJ	SAFETY MEETING		3	MEN		\$29.03			
	901		ABJ	DRUG TEST		1	MEN		\$29.03			
	901		BMJ	ADMINISTRATIVE TIME		2	MEN		\$48.65			
	901		BMJ	SAFETY MEETING		3	MEN		\$48.65			
	901		BMJ	DRUG TEST		1	MEN		\$48.65			
	901		CAJ	ADMINISTRATIVE TIME		2	MEN		\$29.93			
	901		CAJ	SAFETY MEETING		3	MEN		\$29.93			
	901		CAJ	DRUG TEST		1	MEN		\$29.93			
	901		ELJ	ADMINISTRATIVE TIME		2	MEN		\$40.00			\$400
	901		ELJ	SAFETY MEETING		3	MEN		\$40.00			\$600
	901		ELJ	DRUG TEST		1	MEN		\$40.00			\$200
	901		IWJ	ADMINISTRATIVE TIME		2	MEN		\$34.80			
	901		IWJ	SAFETY MEETING		3	MEN		\$34.80			
	901		IWJ	DRUG TEST		1	MEN		\$34.80			
	901		LBJ	ADMINISTRATIVE TIME		2	MEN		\$26.00			\$416
	901		LBJ	SAFETY MEETING		3	MEN		\$26.00			\$624
	901		LBJ	DRUG TEST		1	MEN		\$26.00			\$208
	901		OEA	ADMINISTRATIVE TIME		2	MEN		\$40.00			\$400
	901		OEA	SAFETY MEETING		3	MEN		\$40.00			\$600
	901		OEA	DRUG TEST		1	MEN		\$40.00			\$200
	901		PAJ	ADMINISTRATIVE TIME		2	MEN		\$26.89			
	901		PAJ	SAFETY MEETING		3	MEN		\$26.89			
	901		PAJ	DRUG TEST		1	MEN		\$26.89			
	901		MWJ	ADMINISTRATIVE TIME		2	MEN		\$33.63			
	901		MWJ	SAFETY MEETING		3	MEN		\$33.63			
	901		MWJ	DRUG TEST		1	MEN		\$33.63			
	901		PFJ	ADMINISTRATIVE TIME		2	MEN		\$37.31			
	901		PFJ	SAFETY MEETING		3	MEN		\$37.31			
	901		PFJ	DRUG TEST		1	MEN		\$37.31			
	901		SMJ	ADMINISTRATIVE TIME		2	MEN		\$38.03			
	901		SMJ	SAFETY MEETING		3	MEN		\$38.03			
	901		SMJ	DRUG TEST		1	MEN		\$38.03			
	901		TMW	ADMINISTRATIVE TIME		2	MEN		\$32.00			\$256
	901		TMW	SAFETY MEETING		3	MEN		\$32.00			\$384
	901		TMW	DRUG TEST		1	MEN		\$32.00			\$128

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	E	DESCRIPTION	QTY	UNIT	CRAFT LABOR			TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN	HOURS	WAGE RATE			
					CONSTR FAC & MOB					132		\$4,416	
					SUBTOTALS :								
					MISC. CONSTR FAC								
					SUBTOTALS :								
					TOTAL SUPPORT CRAFT LABOR					132		\$4,416	0.77%
					TOTAL DIRECT CRAFT LABOR					16990		\$572,094	99.23%
					GRAND TOTAL CRAFT LABOR					17122		\$576,510	
					SUBCONTRACTS - HED								
					HCOST ENGINEERING - GEOCOMPOSITE QA/QC - MACTEC							\$15,000	
					HCOST TVA SURVEY / LAYOUT OF CONTROL POINTS							\$11,500	
					HCOST WELL INSTALLATION CONTRACTOR							\$9,510	
					HCOST GEOCOMPOSITE LINER INSTALLATION CONTRACTOR (32,700 SY)							\$165,000	
					HCOST ELECTRICAL PUMP RELOCATION CONTRACTOR							\$20,000	
					HCOST FENCE CONTRACTOR (4500 LF & GATES)							\$165,000	
					HCOST								
					TOTAL - SUBCONTRACTS - HED							\$386,010	
					SUBCONTRACTS - TVA (OTHERS)								
					HCOST								
					HCOST								
					HCOST								
					HCOST								
					HCOST								
					HCOST								
					TOTAL - SUBCONTRACTS - TVA (OTHERS)								
					MATERIALS - TVA PURCHASE								
					SEE MATERIALS LIST								
					HCOST								
					HCOST								
					HCOST								
					TOTAL - MATERIALS - HED PURCHASE							\$518,009	
					MATERIALS - TVA (OTHERS) PURCHASE								
					DO NOT USE								
					HCOST								
					HCOST								
					HCOST								
					TOTAL - MATERIALS - TVA (OTHERS)								
					NON-MANUAL LABOR								
					STAFFING (See Staff Plan for Details)								
					NON PROJECT SPECIFIC STAFF					600		\$27,600	

MAT CODE	WORK ORDER	CODE	ACT SCH	CODE	DESCRIPTION	CRAFT LABOR	UNIT	QTY	UNIT	MH	WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
					HCOST TRAVEL & LIVING EXPENSES							\$5,100		
					TOTAL - NON-MANUAL LABOR							\$32,700		
OTHER COSTS - MANAGED BY HED														
					HCOST SMALL TOOLS			17122	MHRS		\$1.45	\$24,827		
					HCOST CONSUMABLES			17122	MHRS		\$0.60	\$10,273		
					HCOST OFFICE SUPPLIES AND EXPENSES									
					TOTAL - COST MANAGED BY HED							\$35,101		
TVA HEAVY EQUIPMENT														
Note: 1st SHIFT rate shown - 2nd shift rate is a lookup														
					HCOST AIR TUGGERS 10000 # WEEKLY RENTAL	HED			WK		N/A			
					HCOST AIR TUGGERS 4000 # WEEKLY RENTAL	HED			WK		N/A			
					HCOST AIR TUGGERS 2000 # WEEKLY RENTAL	HED			WK		N/A			
					HCOST AIR TUGGERS 1000 # WEEKLY RENTAL	HED			WK		N/A			
					HCOST SKYCLIMBERS WEEKLY RENTAL	HED			WK		N/A			
					HCOST BASKETS WEEKLY RENTAL	HED			WK		N/A			
					HCOST PICKS WEEKLY RENTAL	HED			WK		N/A			
					HCOST 80' JLG	HED			1ST		2ND	145		
					HCOST GAS WELDER	HED			1ST		2ND	54		
					HCOST FORKLIFTS 8000 #	HED			1ST		2ND	55		
					HCOST FORKLIFT 6000 #	HED			1ST		2ND	45		
					HCOST YARD CRANE 65 TON	HED		30	1ST		2ND	350		\$1,350
					HCOST YARD CRANE 35 TON	HED			1ST		2ND	205		
					HCOST YARD CRANE 20 TON	HED			1ST		2ND	160		
					HCOST AIR COMPRESSOR 350 CFM	HED			1ST		2ND	50		
					HCOST AIR COMPRESSOR 750 CFM	HED			1ST		2ND	95		
					HCOST AIR COMPRESSOR 1800 CFM	HED			1ST		2ND	150		
					HCOST LIGHT PLANT	HED			1ST		2ND	43		
					HCOST FARM TRACTOR	HED			1ST		2ND	40		
					HCOST J/D 350	HED			1ST		2ND	90		
					HCOST D4-XL	HED			1ST		2ND	200		\$5,000
					HCOST D6M - LGP	HED			1ST		2ND	261		\$9,135
					HCOST D8N	HED			1ST		2ND	474		
					HCOST D8K	HED			1ST		2ND	332		
					HCOST SCRAPER 631(2EA)	HED			1ST		2ND	480		
					HCOST SCRAPER 621-E (3 EA)	HED			1ST		2ND	412		
					HCOST MOTOR GRADER	HED			1ST		2ND	215		
					HCOST DYNAPAC 22.5 TON - SMOOTH DRUM	HED			1ST		2ND	190		\$4,300
					HCOST SHEEPFOOT - REX 350	HED			1ST		2ND	190		\$6,650
					HCOST CRAWLER FRONT END LOADER	HED			1ST		2ND	220		\$6,650
					HCOST WHEEL LOADER	HED			1ST		2ND	225		
					HCOST TRUCK TRACTOR	HED			1ST		2ND	140		
					HCOST TRAILER FOR TRUCK	HED			1ST		2ND	30		
					HCOST TANDEM DUMP TRUCKS (4)	HED			1ST		2ND	140		
					HCOST DUMP TRUCK - 769	HED			1ST		2ND	140		\$7,840
					HCOST BACKHOE - 430	HED			1ST		2ND	284		\$5,680
					HCOST TRACK HOE - 270 KOMATSU	HED			1ST		2ND	110		\$5,500
					HCOST TRACK HOE - 325 CATERPILLAR	HED			1ST		2ND	280		\$7,840
					HCOST STACKBODY	HED			1ST		2ND	280		\$9,800
					HCOST GREASE TRUCK	HED			1ST		2ND	60		
					HCOST WATER TRUCK	HED			1ST		2ND	480		\$24,000

MATERIAL	TOTAL MATERIAL	CRAFT LABOR				TOTAL LABOR
		UNIT	MAN HOURS	WAGE RATE		
HCOST FUEL TRUCK		50 1ST	2ND	59	\$2,950	
HCOST PICKUP - FLATBED 2 TON		50 1ST	2ND	57	\$2,850	
HCOST FIXED 65 TON		1ST	2ND	340		
HCOST FIXED 100 TON		1ST	2ND	475		
HCOST 4100 AND RINGER		1ST	2ND	1,000		
HCOST 4100		1ST	2ND	540		
HCOST 4100 AND TOWER		1ST	2ND	790		
HCOST 815 CAT COMPACTOR		1ST	2ND	310		
HCOST CRAWLER FRONT END LOADER		1ST	2ND	360		
HCOST BOBCAT (3)		120 1ST	2ND	180	\$21,600	
HCOST KAWASAKI MULE - 1EA		100 1ST	2ND	28	\$2,800	
HCOST TRENCHER - DITCH SWITCH		25 1ST	2ND	100	\$2,500	
HCOST CREW TRAILERS (1)		1ST	2ND	28		
HCOST TRENCHING MACHINE RENTAL		3 MO	2ND	36,500	\$91,250	
3RD PARTY HEAVY EQUIPMENT						
TAGGED TOOLS						
HCOST ABATEMENT EQUIPMENT SHOWER, 2 MAN, PORTABLE		WKS		\$25		
HCOST ABATEMENT HEPA VAC - ELECTRIC, 5 GAL WITH SCALER, FILTERS EXTRA CHARGE		WKS		\$75		
HCOST ABATEMENT HEPA VAC-ELEC OPRTD 110V W/10 FT KOSE, 16 GAL, FILTERS EXT CKG		WKS		\$94		
HCOST ABATEMENT TORNADO HEPA VAC-AIR OPRTD SCALER 16 GAL CAP, FILTERS EXT CKG		WKS		\$94		
HCOST AIR CONDITIONING UNIT, 10 TON		WKS		\$932		
HCOST AIR MANIFOLD LARGE 12 OUTLETS		WKS		\$20		
HCOST AIR MANIFOLD SMALL 4 OUTLETS		WKS		\$10		
HCOST AIR MANIFOLD SMALL 6 OUTLETS		WKS		\$14		
HCOST AIR RECEIVING TANK 1060 GALLONS		WKS		\$500		
HCOST BAG - LIFTING, 22 TON AIR OPERATED 20" X 20" X 1"		WKS		\$30		
HCOST BAG - LIFTING, 32 TON AIR OPERATED 24" X 24" X 1"		WKS		\$30		
HCOST BAG - LIFTING, 44 TON AIR OPERATED, 28" X 28" X 1"		WKS		\$30		
HCOST BAG - LIFTING, 75 TON AIR OPERATED, 36" X 36" X 1"		WKS		\$40		
HCOST BENDER CONDUIT ELECTRIC GREENLEE 555 1/2"-2" SHOES		WKS		\$100		
HCOST BENDER CONDUIT ENERPAC 2-1/2"-4" EMT #B-448 W/PUMP		WKS		\$125		
HCOST BENDER CONDUIT GREENLEE 880 1/2"-2"		WKS		\$165		
HCOST BENDER CONDUIT GREENLEE 881 2-1/2"-4" EMT, IMC, RIGID CONDUIT		WKS		\$125		
HCOST BENDER CONDUIT GREENLEE 884 1-1/4"-4" RIGID CONDUIT		WKS		\$130		
HCOST BENDER CONDUIT GREENLEE 885 1-1/4"-5" RIGID CONDUIT		WKS		\$140		
HCOST BENDER CONDUIT MECHANICAL OPERATED W/EVER 1-1/4"-1-1/2"		WKS		\$85		
HCOST BENDER CONDUIT TABLE ENERPAC		WKS		\$43		
HCOST BENDER CONDUIT TABLE FOR 881, GREENLEE BENDER		WKS		\$43		
TOTAL - HEAVY EQUIPMENT \$217,695						

A	B	C	D	E	F	G	H	I	J	K	CRAFT LABOR		MATERIAL	TOTAL
											MAN HOURS	WAGE RATE		
MAT. CODE	CODE WORK ORDER	CODE	AGT SCH	CODE CRT	DESCRIPTION	QTY	UNIT	UNIT MH	WKS	WKS	WKS	WKS	WKS	WKS
		TLS	TLS	HCOST	CRANE FLOOR 2 TON, HYDRAULIC MANUAL PUMP EXTENSIBLE									\$175
		TLS	TLS	HCOST	CRIMPER HYDRAULIC DIELESS #4 THRU 1000MCM									\$70
		TLS	TLS	HCOST	CRIMPER HYDRAULIC WIDIES									\$100
		TLS	TLS	HCOST	CRIMPER HYDRESS BUNDRY MOD # Y60BKU									\$170
		TLS	TLS	HCOST	CRIMPER WIRE 8-750MCM									\$75
		TLS	TLS	HCOST	CRIMPER WIRE DIELESS #9AWG-750MCM TBM 14M									\$25
		TLS	TLS	HCOST	CRIMPER-15 TON HYDRAULIC T&B 2/0-500 MCM									\$75
		TLS	TLS	HCOST	CRIMPER-REBAR									\$330
		TLS	TLS	HCOST	CUTTER CABLE HYDRAULIC 3/8"-2"									\$90
		TLS	TLS	HCOST	CUTTER CABLE HYDRAULIC HEAD, 3/8" TO 4" ENERPAC/WKC-4000									\$80
		TLS	TLS	HCOST	CUTTER CABLE HYDRAULIC W/PUMP									\$90
		TLS	TLS	HCOST	CUTTER-PIPE 2-1/2"-8" MOD, 258 W/2 EA. PIPE SUPPORTS 2800									\$642
		TLS	TLS	HCOST	CUTTER-PIPE 8"-12" MOD, 258XL W/2 EA. PIPE SUPPORTS AND 1 EA. ADP									\$180
		TLS	TLS	HCOST	DETECTOR METAL WALK THRU PORTABLE									\$50
		TLS	TLS	HCOST	DETECTOR PIPE AND CABLE									\$565
		TLS	TLS	HCOST	DITCH SWITCH									\$30
		TLS	TLS	HCOST	DOLLY ROLLER 10 TON (SET OF 4) HILLMAN									\$75
		TLS	TLS	HCOST	DOLLY ROLLER 100 TON (SET OF 4) HILLMAN									\$35
		TLS	TLS	HCOST	DOLLY ROLLER 15 TON (SET OF 4) HILLMAN									\$45
		TLS	TLS	HCOST	DOLLY ROLLER 25 TON (SET OF 4) HILLMAN									\$55
		TLS	TLS	HCOST	DOLLY ROLLER 30 TON (SET OF 4) HILLMAN									\$60
		TLS	TLS	HCOST	DOLLY ROLLER 40 TON (SET OF 4) HILLMAN									\$60
		TLS	TLS	HCOST	DOLLY ROLLER 50 TON (SET OF 4) HILLMAN									\$25
		TLS	TLS	HCOST	DOLLY ROLLER 7.5 TON (SET OF 4) HILLMAN									\$30
		TLS	TLS	HCOST	DOLLY ROLLER 8 TON (SET OF 4) HILLMAN									\$60
		TLS	TLS	HCOST	DRILL HAMMER HILTI TE-74 ELECTRIC OPERATED 115 VOLT									\$140
		TLS	TLS	HCOST	DRILL JACK-LEG 60 LB AIR OPERATED									\$214
		TLS	TLS	HCOST	DRILL ROCK AIR W/SPLICERS									\$45
		TLS	TLS	HCOST	DRILL TUNNEL GID MOD, S83F17									\$95
		TLS	TLS	HCOST	DRILL-CHAIN BASE 1/2" ELECTRIC									\$95
		TLS	TLS	HCOST	DRILL-ELECT 1" CORE W/WATER TANK									\$95
		TLS	TLS	HCOST	DRILL-ELECT 1-1/4" CORE 230 V, VERT. WATER CLD BIT W/PUMP									\$50
		TLS	TLS	HCOST	DRILL-ELECT 1-1/4" CORE HILTI 115 V									\$100
		TLS	TLS	HCOST	DRILL-ELECT HAMMER TE-92 115 VOLT HILTI									\$70
		TLS	TLS	HCOST	DRILL-ELECT, MAGNETIC 1/2"-KEIGHT 14" #424S									\$35
		TLS	TLS	HCOST	DRILL-ELECT, PRESS 1-1/4", MAGNETIC 115 VOLT									\$40
		TLS	TLS	HCOST	DRILL-ELECT, PRESS, 1/2", FLOOR 115 VOLT									\$65
		TLS	TLS	HCOST	DRILL-ELECT, PRESS, 1/2", MAGNETIC 116 VOLT									\$70
		TLS	TLS	HCOST	DRILL-ELECT, PRESS, 3/4", MAGNETIC 115 VOLT									\$170
		TLS	TLS	HCOST	DRILL-ELECT, STEEL HAWG MAGNETIC 115 VOLT									\$33
		TLS	TLS	HCOST	FAN BOX 48" HI-VOLUME									\$33
		TLS	TLS	HCOST	FEEDER WIRE LINCOLN LN-25 ELECTRIC OPERATED									\$450
		TLS	TLS	HCOST	FEEDER WIRE, ELECTRIC MILLER WELDING - S-22P12, MIG									\$200
		TLS	TLS	HCOST	FLOOR SCRUBBER 32"									\$115
		TLS	TLS	HCOST	FLOOR TILE STRIPPER ELECTRIC									\$132
		TLS	TLS	HCOST	FLOOR TILE STRIPPER, ELECTRIC									\$20
		TLS	TLS	HCOST	FLOOR TILE STRIPPER, ELECTRIC									\$304
		TLS	TLS	HCOST	GENERATOR 5000 WATT, GASOLINE OPERATED 4 CYCLE ENGINE									\$335
		TLS	TLS	HCOST	GENERATOR 6000 WATT, GASOLINE OPERATED 4 CYCLE ENGINE									\$25
		TLS	TLS	HCOST	GILBRATOR W/CHARGER (FOR CALIBRATION OF AIR SAMPLE PUMP)									\$304
		TLS	TLS	HCOST	GROOVER PIPE, VICTAULIC, 5" COMPLETE									\$335
		TLS	TLS	HCOST	GROOVER, PIPE, VICTAULIC, ELEC 6"-10"									\$30
		TLS	TLS	HCOST	GUN HOG RING AIR OPERATED 1/2"									\$154
		TLS	TLS	HCOST	GUN HOG RING SPENAX AIR OPERATED 3/4"									\$150
		TLS	TLS	HCOST	GUN SPOOLMATIC W/CONTROL BOX									\$65
		TLS	TLS	HCOST	HAMMER JACK 70 LB ROTARY AIR									\$97
		TLS	TLS	HCOST	HAMMER PAVEMENT BREAKER 90LB AIR OPERATED									\$214
		TLS	TLS	HCOST	HAMMER, SCARIFIER - AIR									\$87
		TLS	TLS	HCOST	HOIST 20' 20 TON MANUAL OPERATED									\$87
		TLS	TLS	HCOST	HOIST CHAIN 10' 1 TON AIR OPERATED									\$87

MAT. CODE	CODE	ACT	CODE	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
							MAN HOURS	UNIT MH				
				HCOST HOIST CHAIN 10' 1 TON ELECTRIC OPERATED		WKS			\$95			
				HCOST HOIST CHAIN 10' 1 TON MANUAL OPERATED		WKS			\$12			
				HCOST HOIST CHAIN 10' 1/2 TON MANUAL OPERATED		WKS			\$10			
				HCOST HOIST CHAIN 10' 1/2 TON MANUAL OPERATED		WKS			\$104			
				HCOST HOIST CHAIN 10' 1/2 TON AIR OPERATED		WKS			\$81			
				HCOST HOIST CHAIN 10' 1-1/2 TON AIR OPERATED		WKS			\$14			
				HCOST HOIST CHAIN 10' 1-1/2 TON MANUAL OPERATED		WKS			\$196			
				HCOST HOIST CHAIN 10' 15 TON MANUAL OPERATED		WKS			\$110			
				HCOST HOIST CHAIN 10' 2 TON ELECTRIC OPERATED		WKS			\$19			
				HCOST HOIST CHAIN 10' 2 TON MANUAL OPERATED		WKS			\$24			
				HCOST HOIST CHAIN 10' 3 TON MANUAL OPERATED		WKS			\$266			
				HCOST HOIST CHAIN 10' 5 TON AIR OPERATED		WKS			\$85			
				HCOST HOIST CHAIN 10' 5 TON MANUAL OPERATED		WKS			\$95			
				HCOST HOIST CHAIN 10' 5 TON MANUAL OPERATED		WKS			\$120			
				HCOST HOIST CHAIN 10' 6 TON MANUAL OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 10' 10 TON MANUAL OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 20' 1 TON AIR OPERATED		WKS			\$14			
				HCOST HOIST CHAIN 20' 1 TON ELECTRIC OPERATED		WKS			\$98			
				HCOST HOIST CHAIN 20' 1 TON MANUAL OPERATED		WKS			\$90			
				HCOST HOIST CHAIN 20' 1/2 TON AIR OPERATED		WKS			\$12			
				HCOST HOIST CHAIN 20' 1/2 TON ELECTRIC OPERATED		WKS			\$162			
				HCOST HOIST CHAIN 20' 1/2 TON MANUAL OPERATED		WKS			\$173			
				HCOST HOIST CHAIN 20' 10 TON MANUAL OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 20' 11 TON MANUAL OPERATED		WKS			\$17			
				HCOST HOIST CHAIN 20' 1-1/2 TON AIR OPERATED		WKS			\$165			
				HCOST HOIST CHAIN 20' 1-1/2 TON MANUAL OPERATED		WKS			\$208			
				HCOST HOIST CHAIN 20' 15 TON MANUAL OPERATED		WKS			\$144			
				HCOST HOIST CHAIN 20' 2 TON ELECTRIC OPERATED		WKS			\$247			
				HCOST HOIST CHAIN 20' 2 TON MANUAL OPERATED		WKS			\$116			
				HCOST HOIST CHAIN 20' 3 TON AIR OPERATED		WKS			\$33			
				HCOST HOIST CHAIN 20' 3 TON MANUAL OPERATED		WKS			\$165			
				HCOST HOIST CHAIN 20' 5 TON MANUAL OPERATED		WKS			\$208			
				HCOST HOIST CHAIN 20' 5 TON MANUAL OPERATED		WKS			\$116			
				HCOST HOIST CHAIN 20' 6 TON AIR OPERATED		WKS			\$539			
				HCOST HOIST CHAIN 20' 6 TON MANUAL OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 25' 10 TON AIR OPERATED		WKS			\$105			
				HCOST HOIST CHAIN 30' 1 TON AIR OPERATED		WKS			\$17			
				HCOST HOIST CHAIN 30' 1 TON ELECTRIC OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 30' 1 TON MANUAL OPERATED		WKS			\$16			
				HCOST HOIST CHAIN 30' 1-1/2 TON AIR OPERATED		WKS			\$127			
				HCOST HOIST CHAIN 30' 1-1/2 TON MANUAL OPERATED		WKS			\$110			
				HCOST HOIST CHAIN 30' 1-1/2 TON AIR OPERATED		WKS			\$22			
				HCOST HOIST CHAIN 30' 1-1/2 TON MANUAL OPERATED		WKS			\$150			
				HCOST HOIST CHAIN 30' 12 TON MANUAL OPERATED		WKS			\$144			
				HCOST HOIST CHAIN 30' 2 TON ELECTRIC OPERATED		WKS			\$110			
				HCOST HOIST CHAIN 30' 3 TON AIR OPERATED		WKS			\$33			
				HCOST HOIST CHAIN 30' 3 TON MANUAL OPERATED		WKS			\$222			
				HCOST HOIST CHAIN 30' 5 TON AIR OPERATED		WKS			\$116			
				HCOST HOIST CHAIN 30' 5 TON MANUAL OPERATED		WKS			\$289			
				HCOST HOIST CHAIN 30' 6 TON AIR OPERATED		WKS			\$173			
				HCOST HOIST CHAIN 30' 6 TON MANUAL OPERATED		WKS			\$90			
				HCOST HOIST CHAIN 30' 8 TON MANUAL OPERATED		WKS			\$100			
				HCOST HOIST CHAIN 40' 1/2 TON AIR OPERATED		WKS			\$116			
				HCOST HOIST CHAIN 40' 3 TON AIR OPERATED		WKS			\$120			
				HCOST HOIST CHAIN 40' 3 TON MANUAL OPERATED		WKS			\$116			
				HCOST HOIST CHAIN 50' 1-1/2 TON AIR OPERATED		WKS			\$144			
				HCOST HOIST CHAIN 50' 2 TON AIR OPERATED		WKS			\$427			
				HCOST HOIST CHAIN 50' 2 TON MANUAL OPERATED		WKS			\$511			
				HCOST HOIST CHAIN 50' 8 TON AIR OPERATED		WKS			\$539			
				HCOST HOIST CHAIN 75' 5 TON AIR OPERATED		WKS			\$501			
				HCOST HOIST CHAIN 75' 6 TON AIR OPERATED		WKS						
				HCOST HOIST CHAIN 80' 15 TON ELECTRIC OPERATED		WKS						

MAT CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN HOURS	UNIT MH				
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													

A	B	C	D	E	F	G	H	I	J	K	L	MATERIAL	TOTAL MATERIAL	CRAFT LABOR		TOTAL LABOR	TOTAL MATERIAL
														MAN HOURS	WAGE RATE		
MAT CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	UNIT MH	MAN HOURS	WAGE RATE	TOTAL LABOR	TOTAL MATERIAL	TOTAL MATERIAL				
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	
25																	
26																	
27																	
28																	
29																	
30																	
31																	
32																	
33																	
34																	
35																	
36																	
37																	
38																	
39																	
40																	
41																	
42																	
43																	
44																	
45																	
46																	
47																	
48																	
49																	
50																	
51																	
52																	
53																	
54																	
55																	
56																	
57																	
58																	
59																	
60																	
61																	
62																	
63																	
64																	
65																	
66																	
67																	
68																	
69																	
70																	
71																	
72																	
73																	
74																	
75																	
76																	
77																	
78																	
79																	
80																	
81																	
82																	
83																	
84																	
85																	
86																	
87																	
88																	
89																	
90																	
91																	
92																	
93																	
94																	
95																	
96																	
97																	
98																	
99																	
100																	
101																	
102																	
103																	
104																	
105																	
106																	
107																	

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE ORF	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	TOTAL MATERIAL
								MAN HOURS	UNIT			
2		TLS	TLS	HCOST	SHEAR SHEET METAL 4"		WKS		\$60			
3		TLS	TLS	HCOST	SHEET METAL BEADER		WKS		\$20			
4		TLS	TLS	HCOST	SHEET METAL BREAK 10'		WKS		\$271			
5		TLS	TLS	HCOST	SHEET METAL BREAK 4'		WKS		\$74			
6		TLS	TLS	HCOST	SHEET METAL ROLLER		WKS		\$40			
7		TLS	TLS	HCOST	SHEET METAL SLITTER 4'		WKS		\$216			
8		TLS	TLS	HCOST	SOD REMOVAL MACHINE		WKS		\$390			
9		TLS	TLS	HCOST	SPRAYER PAINT AIRLESS 500 ELEC OPRTD 115 V W/MP, HOSE & SPRY		WKS		\$190			
10		TLS	TLS	HCOST	STOMPER CLAY/SOIL 120 LB GAS OPRTD 2 CYC ENG REQ OIL/GAS MX		WKS		\$100			
11		TLS	TLS	HCOST	STOMPER CLAY/SOIL 175 LB GAS OPRTD 2 CYC ENG REQ OIL/GAS MX		WKS		\$120			
12		TLS	TLS	HCOST	STOMPER GAS/CLAY SOIL 150LB		WKS		\$136			
13		TLS	TLS	HCOST	TESTER INSULATION 0-1000V		WKS		\$40			
14		TLS	TLS	HCOST	TESTER MEGGER 0-1000V HANDCR		WKS		\$65			
15		TLS	TLS	HCOST	THREADER PIPE GEARED 2-1/2"-4"		WKS		\$30			
16		TLS	TLS	HCOST	THREADER PIPE GEARED 4"-6"		WKS		\$45			
17		TLS	TLS	HCOST	THREADING MACK 1/4" 6" RIGID, ELEC OPR 115 V W/6 DIES, 2 HLD		WKS		\$120			
18		TLS	TLS	HCOST	THREADING MACHINE POWER DRIVE 300 ELECTRIC TRI STAND TYPE		WKS		\$100			
19		TLS	TLS	HCOST	TORCH CUTTING STRAIGHT 48" OXYGEN/PROPANE USE ONLY FOR DEMOLITION		WKS		\$60			
20		TLS	TLS	HCOST	TORCH CUTTING STRAIGHT 72" OXYGEN/PROPANE USE ONLY FOR DEMOLITION		WKS		\$20			
21		TLS	TLS	HCOST	TORCH TRACK FOR PIPE W/TRACK		WKS		\$25			
22		TLS	TLS	HCOST	TORCH TRACK, ELECTRIC OPRTD 115 V W/TRACK & TRAVELING MOTOR		WKS		\$134			
23		TLS	TLS	HCOST	TORCH TRACK, ELECTRIC OPRTD 115 V W/TRACK & TRAVELING MOTOR		WKS		\$30			
24		TLS	TLS	HCOST	TRASH CHUTE		WKS		\$301			
25		TLS	TLS	HCOST	TRENCH SHIELD SPACERS 3 FT		WKS		\$49			
26		TLS	TLS	HCOST	TRENCH SHIELD SPREADER 144" WIPINS		WKS		\$145			
27		TLS	TLS	HCOST	TRENCH SHIELDS 10X20		WKS		\$276			
28		TLS	TLS	HCOST	TRENCH SHIELDS 6X12		WKS		\$260			
29		TLS	TLS	HCOST	TRENCH SHIELDS 8X12		WKS		\$125			
30		TLS	TLS	HCOST	TRENCH SHIELDS 8X16		WKS		\$47			
31		TLS	TLS	HCOST	TROLLEY 3 TON (RENTAL 1 MO. MINIMUM)		WKS		\$40			
32		TLS	TLS	HCOST	TROLLEY I-BEAM 12 TON		WKS		\$30			
33		TLS	TLS	HCOST	TROLLEY I-BEAM 5 TON		WKS		\$92			
34		TLS	TLS	HCOST	TROLLEY I-BEAM 6 TON		WKS		\$155			
35		TLS	TLS	HCOST	TROLLEY I-BEAM 8 TON		WKS		\$95			
36		TLS	TLS	HCOST	TROWEL CONCRETE WHIRLYBIRD, GASOLINE OPERATED 4 CYCLE ENGINE		WKS		\$30			
37		TLS	TLS	HCOST	VIBRATOR CONCRETE 3'X 10', AIR OPERATED		WKS		\$30			
38		TLS	TLS	HCOST	VIBRATOR CONCRETE 3'X 12', AIR OPERATED		WKS		\$30			
39		TLS	TLS	HCOST	VIBRATOR CONCRETE 3'X 15', AIR OPERATED		WKS		\$30			
40		TLS	TLS	HCOST	VIBRATOR CONCRETE 3'X 6', AIR OPERATED		WKS		\$30			
41		TLS	TLS	HCOST	VIBRATOR CONCRETE 3-1/2'X 10', AIR OPERATED		WKS		\$130			
42		TLS	TLS	HCOST	VIBRATOR CONCRETE 3-1/2'X 12', AIR OPERATED		WKS		\$78			
43		TLS	TLS	HCOST	VIBRATOR CONCRETE ELECTRIC 1-3/8"X14		WKS		\$220			
44		TLS	TLS	HCOST	VIBRATOR PACKER ROLLER 1100 LB, DIESEL OPERATED		WKS		\$200			
45		TLS	TLS	HCOST	VIBRATOR PACKER ROLLER 24" SMOOTH DRUM, GAS OPERATED		WKS		\$190			
46		TLS	TLS	HCOST	VIBRATOR PACKER ROLLER 30'X 18-1/2", GAS OPRTD 4 CYCLE ENGINE		WKS		\$230		\$1,840	
47		TLS	TLS	HCOST	VIBRATOR PACKER ROLLER, 1800 LB, DOUBLE ROLLER DIESEL		4	WKS	\$110			
48		TLS	TLS	HCOST	WASHER PRES. 3000 PSI, GAS OPRTD 4 CYC ENG W/25 HSE, NOZ, WD		WKS		\$75			
49		TLS	TLS	HCOST	WASHER PRES. 3000 PSI, GAS OPRTD 4 CYC ENG W/25 HSE, NOZ, WD		WKS		\$95			
50		TLS	TLS	HCOST	WASHER PRES. 3000 PSI, GAS OPRTD 4 CYC ENG W/25 HSE, NOZ, WD		WKS		\$120			
51		TLS	TLS	HCOST	WASHER PRES. 3000 PSI, GAS OPRTD 4 CYC ENG W/25 HSE, NOZ, WD		2	WKS	\$80			
52		TLS	TLS	HCOST	WELDER 225 AMP, GAS OPRTD, PORTABLE 4 CYC ENG-8000 WATT GEN		1	WKS	\$60			
53		TLS	TLS	HCOST	WELDER 250 AMP GAS		WKS		\$60			
54		TLS	TLS	HCOST	WELDER 300 AMP 480 VOLT STICK		WKS		\$60			
55		TLS	TLS	HCOST	WELDER 300 AMP INVERTER 480 VOLT STICK, TIG, MIC		WKS		\$90			
56		TLS	TLS	HCOST	WELDER 400 AMP 480 VOLT STICK		WKS		\$100			
57		TLS	TLS	HCOST	WELDER 600 AMP 480 VOLT INVERTER		WKS		\$140			
58		TLS	TLS	HCOST	WELDER 8-PACK 480 VOLT 8 EACH 200 AMP, MULTIPLE OPERATOR		WKS		\$95			
59		TLS	TLS	HCOST	WELDER PIN, STUD ELECTRIC 110 VOLT		WKS		\$85			
60		TLS	TLS	HCOST	WELDER PLASMA ARC, 480 VOLT		WKS		\$60			
61		TLS	TLS	HCOST	WELDER POWCON 400 SS V VARIABLE SELECTION		WKS		\$593			
62		TLS	TLS	HCOST	WELDER PULSE W/WIRE FEEDER		WKS		\$593			

MAT. CODE	CODE WORK ORDER	CODE	ACT SCH	CODE CRFT	DESCRIPTION	QTY	UNIT	CRAFT LABOR		WAGE RATE	TOTAL LABOR	MATERIAL	TOTAL MATERIAL
								MAN HOURS	UNIT MH				
		TLS		HCOST	WELDER PVC 120 V, ELECT 8" THRU 12"		WKS			\$635			
		TLS		HCOST	WELDER PVC 120 V, ELECTRIC OP 2' 3" 5-3/4" 6" 7" AND 8"		WKS			\$375			
		TLS		HCOST	WELDER STUD		WKS			\$100			
		TLS		HCOST	WELDER, PLASMA CUTTER - STAR CUT		WKS			\$120			
		TLS		HCOST	WELDER-RACK 4 PK W/BRKRS, 20' PWR CORD/PLUG - USE W/300 AMP		WKS			\$15			
		TLS		HCOST	WHEELBARROW MTRZD CONCRETE, GAS OPRTD 4 CYC ENG, 1 YD CAP		WKS			\$125			
		TLS		HCOST	WRENCH ANGLE 1/2" DRIVE TORQUE AIR OPERATED		WKS			\$88			
		TLS		HCOST	WRENCH ANGLE 3/4", AIR OPERATED		WKS			\$40			
		TLS		HCOST	WRENCH ANGLE 5/8", AIR OPERATED		WKS			\$35			
		TLS		HCOST	WRENCH HYDRAULIC TORQUE W/PUMP		WKS			\$430			
		TLS		HCOST	WRENCH IMPACT 1" DRIVE, AIR OPERATED		WKS			\$60			
		TLS		HCOST	WRENCH IMPACT 1-1/2" DRIVE, AIR OPERATED		WKS			\$125			
		TLS		HCOST	WRENCH IMPACT 1-1/4" SQUARE DRIVE		WKS			\$100			
		TLS		HCOST	WRENCH IMPACT 2-1/2" DRIVE 12-25,000, AIR OPERATED		WKS			\$600			
		TLS		HCOST	WRENCH IMPACT 2-1/2" DRIVE 4-10,000, AIR OPERATED		WKS			\$300			
		TLS		HCOST	WRENCH IMPACT 3/4" ADJUSTABLE TORQUE, AIR OPERATED		WKS			\$150			
		TLS		HCOST	WRENCH TORQUE 1/2" DRIVE 0-150 FT. LB	1	4 WKS			\$68		\$272	
<small>ADD ABOVE THIS LINE IF NECESSARY DO NOT DELETE THIS LINE UNLESS DELETING PRE-OUTAGE SECTION OF ESTIMATE</small>													
TAGGED TOOLS													
TOTAL - TAGGED TOOLS													\$4,702
END	END	END	END	END	END	END	END	END	END	END	END	END	END

DREDGE CELL DIKE RESTORATION
KINGSTON

DREDGE CELL DIKE RESTORATION
KINGSTON

W.O.#

0

PA #

0

#	QT	DESCRIPTION	COST	TOTAL
55	CY	CONCRETE - 4000 PSI	\$80.00	\$4,400.00
	CY	CONCRETE - SLOP BLOCK MIX	\$62.00	\$0.00
	LOT	CONCRETE FORM MATERIALS	\$4,200.00	\$0.00
	LF	PVC WATER STOP	\$2.15	\$0.00
	EA	6" KEYWAY	\$3.20	\$0.00
	5-GAL	BLACK BUTYL MASTIC SEALANT	\$21.00	\$0.00
	LF	WATER STOP	\$0.85	\$0.00
1	EA	60" X 15' DEEP MANHOLE	\$12,000.00	\$12,000.00
	EA	WIRE MESH (roll)	\$26.00	\$0.00
	EA	BLOCK (12" X 16")	\$1.47	\$0.00
	EA	BLOCK (12" HALVES)	\$1.21	\$0.00
	TN	SAND	\$10.50	\$0.00
	BAG	TYPE "S" MORTAR	\$7.45	\$0.00
	BOXES	ANCHOR BOLTS FOR GREEN PLATE	\$28.50	\$0.00
	EA	HORIZONTAL TRUSS WIRE	\$2.20	\$0.00
	EA	2" X 4" X 16' TREATED LUMBER	\$12.50	\$0.00
	EA	REBAR SAFETY CAPS (5/8")	\$1.50	\$0.00
	SY	12 OZ. GEOTEXTILE LINER (SETTLING POND)	\$1.25	\$0.00
30	LF	36" CMP PIPE	\$34.00	\$1,020.00
30	LF	24" CMP PIPE	\$48.00	\$1,440.00
12258	SY	MARAFI HP 370 MONOFILAMENT		\$27,580.50
10700	SY	NON-WOVEN GEOTEXTILE (12 OZ PER CY)		\$26,750.00
				\$0.00
	TN	1/4" STONE	\$10.05	\$0.00
	TN	1/2" WASHED STONE CHIPS	\$10.05	\$0.00
	TN	3/4" - 1" STONE	\$9.05	\$0.00
	TN	1" - 2" WASHED STONE W/ NO FINES	\$9.05	\$0.00
	TN	2" - 4" STONE	\$9.05	\$0.00
20734	TN	6" - 12" RIP RAP	\$11.00	\$228,074.00
1781	TN	1032 CRUSHER RUN (610) W/ 6% MOISTURE	\$10.25	\$18,255.25
4721	TN	1081 CRUSHED STONE	\$10.25	\$48,390.25
700	TN	3" STONE	\$10.50	\$7,350.00
	CY	COMPOST	\$15.70	\$0.00
	EA	#4 REBAR STAKES	\$2.50	\$0.00
	EA	GROUT (NON-SHRINK, NON-METALLIC)	\$30.00	\$0.00
400	LB	PER. RYE	\$2.00	\$800.00
400	LB	KY-31 TALL FESCUE	\$2.00	\$800.00
300	LB	10-10-10 FERTILIZER	\$0.90	\$270.00
300	EA	STRAW BALES	\$4.20	\$1,260.00
60	ROLL	CURLEX	\$49.00	\$2,940.00
36	EA	6" DIA. PIPE BOLLARDS	\$135.00	\$4,860.00
80	ROLL	SILT FENCE (100' ROLL)	\$48.00	\$3,840.00
1	LS	WOVEN WIRE FENCING	\$3,000.00	\$3,000.00
40	ROLL	CONSTRUCTION FENCE (100' ROLL)	\$32.00	\$1,280.00
	LF	4" HDPE NON-PERF PIPE - SMOOTH WALL	\$0.65	\$0.00
	EA	4" HDPE COUPLINGS	\$0.90	\$0.00
	EA	4" HDPE PLUG	\$1.09	\$0.00
	EA	(4" x 4") PVC SAMPLE WELL	\$6.50	\$0.00
	EA	6" X 6" X 4" HDPE REDUCING TEE	\$24.00	\$0.00
	EA	6" X 4" HDPE REDUCING CROSS TEE	\$35.00	\$0.00
	EA	6" X 4" HDPE REDUCER	\$12.00	\$0.00
	EA	6" HDPE TEE	\$15.00	\$0.00
	EA	6" HDPE COUPLING	\$2.50	\$0.00
	EA	6" HDPE 30 DEGREE BEND	\$12.00	\$0.00
	EA	6" HDPE 45 DEGREE ELBOW	\$12.00	\$0.00
	EA	6" HDPE 45 DEGREE WYE	\$15.00	\$0.00
	LF	6" HDPE NON-PERF PIPE - SMOOTH WALL	\$1.45	\$0.00
	LF	6" HDPE PERF PIPE - SMOOTH WALL	\$1.45	\$0.00
	EA	6" FERNCO COUPLING	\$13.00	\$0.00
	EA	6" HDPE PLUG	\$5.00	\$0.00
	LF	6" CL200 PVC PIPE	\$2.64	\$0.00
	EA	8" X 6" HDPE REDUCER	\$16.00	\$0.00
	EA	8" HDPE TEE	\$25.00	\$0.00
90	EA	8" 4-WAY TEE	\$40.00	\$3,600.00
	EA	8" HDPE COUPLING	\$3.00	\$0.00
	EA	8" HDPE 45 DEGREE ELBOW	\$22.00	\$0.00
2400	LF	8" FORCED MAIN PIPING HDPE	\$5.40	\$12,960.00
	EA	8" HDPE 45 DEGREE WYE	\$24.00	\$0.00
2339	LF	8" HDPE NON-PERF PIPE - SMOOTH WALL	\$4.60	\$10,759.40
16500	LF	8" HDPE PERF PIPE - SMOOTH WALL	\$4.85	\$80,025.00
	EA	8" HDPE PLUG	\$18.00	\$0.00
	EA	10" X 8" HDPE REDUCER	\$23.00	\$0.00
	LF	8" CL200 PVC PIPE	\$4.15	\$0.00
	EA	8" CL200 PVC CAP	\$18.90	\$0.00
	EA	8" CL200 PVC BLIND FLANGE ADAPTOR	\$65.75	\$0.00
	EA	8" X 8" X 8" CL200 PVC DI TEE MJ	\$91.56	\$0.00

MATERIAL

MATERIAL

EA	8" CL200 PVC 90 DEGREE MJ FITTING	\$60.58	\$0.00
EA	8" CL200 PVC 11.25 DEGREE MJ FITTING	\$50.33	\$0.00
EA	8" CL200 PVC 22.5 DEGREE MJ FITTING	\$58.72	\$0.00
EA	8" CL200 PVC 45 DEGREE MJ FITTING	\$53.95	\$0.00
EA	8" X 6" X 6" CL200 PVC MJ TEE	\$107.14	\$0.00
EA	10" X 12" HDPE REDUCER	\$39.00	\$0.00
EA	10" HDPE TEE	\$58.00	\$0.00
EA	10" HDPE COUPLING	\$3.40	\$0.00

MATERIAL

MATERIAL

	EA	10" HDPE 45 DEGREE ELBOW	\$29.00	\$0.00
	EA	10" HDPE 45 DEGREE WYE	\$78.00	\$0.00
	LF	10" HDPE NON-PERF PIPE - SMOOTH WALL	\$3.40	\$0.00
	LF	10" HDPE PERF PIPE - SMOOTH WALL	\$3.40	\$0.00
	EA	10" HDPE PLUG	\$26.00	\$0.00
	LF	10" CL200 PVC PIPE	\$6.50	\$0.00
	LF	12" HDPE NON-PERF PIPE - SMOOTH WALL	\$4.50	\$0.00
	EA	12" HDPE COUPLINGS	\$4.50	\$0.00
	EA	12" HDPE TEE	\$68.00	\$0.00
	LF	12" C900 PVC PIPE	\$11.79	\$0.00
	EA	12" C900 PVC 90 DEGREE MJ FITTING	\$112.00	\$0.00
	LF	14" CL905 PVC PIPE	\$15.66	\$0.00
	EA	14 X 14" X 10" CL905 PVC TEE	\$464.24	\$0.00
	EA	14" CL905 PVC MJ BLIND FLANGE W/ ADAPTOR	\$276.97	\$0.00
	LF	16" CARBON STEEL PIPE (COATED)	\$51.78	\$0.00
	LF	18" HDPE NON-PERF PIPE -SMOOTH WALL	\$8.00	\$0.00
	EA	6" GATE VALVE MJ X MJ - AMERICAN FLOW CONTROL SERIES 2500 - EQUAL	\$306.98	\$0.00
	EA	8" GATE VALVE MJ X MJ - AMERICAN FLOW CONTROL SERIES 2500 - EQUAL	\$462.41	\$0.00
	EA	6" TRENCH BOX ADAPTOR	\$28.55	\$0.00
	EA	8" TRENCH BOX ADAPTOR	\$28.55	\$0.00
1500	EA	METAL T POSTS	\$5.00	\$7,500.00
1	EA	60" PRE-CAST MANHOLE	\$5,000.00	\$5,000.00
900	SY	12 OZ GEOTEXTILE LINER	\$2.45	\$2,205.00
1	EA	SUBMERSIBLE PUMP @ "TEVCARVA"	\$1,650.00	\$1,650.00
	EA	INSULATED FIBERGLASS VALVE BOX	\$2,256.20	\$0.00
		TOTAL		\$518,009.40

*****SUMMARY*****		RUN DATE:		19-May-05					
TRAVEL & LIVING EXPENSES (Relocation, Per Diem, Expenses, Mon				\$5,100					
TOTAL STAFF DOLLARS				\$27,600					
TOTAL STAFF MANHOURS				600					
STAFFING	RELOCATE/ PER DIEM EXPENSES	MONTHLY TRIPS HOME	OUTAGE DOLLARS	NON-OUTAGE DOLLARS	TOTAL STAFF DOLLARS	PRE-OUTAGE DUR (WKS) 40	OUTAGE DUR (WKS) 40	POST-OUT DUR (WKS) 40	TOTAL MANHOURS
SITE MANGER	\$67.65	\$0	\$0	\$0	\$0				0
GENERAL SUPT.	\$63.90	\$0	\$0	\$0	\$0				0
BOILER SUPT	\$49.90	\$0	\$0	\$0	\$0				0
ELECT SUPT	\$49.90	\$0	\$0	\$0	\$0				0
MECHANICAL SUPT	\$49.90	\$0	\$0	\$0	\$0				0
CIVIL SUPT	\$46.00	\$0	\$0	\$27,600	\$27,600	15			600
INSULATION SUPT	\$49.90	\$0	\$0	\$0	\$0				0
COST SPECIALIST	\$37.72	\$0	\$0	\$0	\$0				0
ESTIMATING MGR	\$55.65	\$0	\$0	\$0	\$0				0
FIELD TECH SPECLST	\$48.73	\$0	\$0	\$0	\$0				0
FIELD ADMIN MGR.	\$32.65	\$0	\$0	\$0	\$0				0
INSULATION SERV MGR.	\$51.94	\$0	\$0	\$0	\$0				0
LEAD FIELD ADMIN MGR	\$44.15	\$0	\$0	\$0	\$0				0
MATERIAL COORD.	\$22.26	\$0	\$0	\$0	\$0				0
PAYROLL/TIMEKEEPER	\$22.08	\$0	\$0	\$0	\$0				0
QA/QC INSPECTOR	\$44.52	\$0	\$0	\$0	\$0				0
SAFETY COORDINATOR	\$40.73	\$0	\$0	\$0	\$0				0
SAFETY SUPERVISOR	\$48.23	\$0	\$0	\$0	\$0				0
SCHEDULE ANALYST	\$50.45	\$0	\$0	\$0	\$0				0
SCHEDULER	\$41.55	\$0	\$0	\$0	\$0				0
SECRETARY	\$17.81	\$0	\$0	\$0	\$0				0
SITE PROJ CTRL MGR	\$51.65	\$0	\$0	\$0	\$0				0
TECH SUPPORT	\$26.09	\$0	\$0	\$0	\$0				0
TIMEKEEPER	\$16.32	\$0	\$0	\$0	\$0				0
TOTALS	\$5,100	\$0	\$0	\$27,600	\$27,600				600

DREDGE CELL DIKE RESTORATION
KINGSTON

DREDGE CELL DIKE RESTORATION
KINGSTON

DATE: 01/11/00

0
0
0

CRAFT		Pre-outage				Outage			P Post Outage				
ASBESTOS WORKER	ABJ	0	0	0	0	0	0	0	0	0	0	0	0
BRICKLAYER	BLJ	0	0	0	0	0	0	0	0	0	0	0	0
BOILERMAKER GENERAL FOREMAN	BMG				0				0			0	0
BOILERMAKER FOREMAN	BMF				0				0			0	0
BOILERMAKER	BMJ	0	0	0	0	0	0	0	0	0	0	0	0
CONCRETE MASON	CMJ	0	0	0	0	0	0	0	0	0	0	0	0
CARPENTER FOREMAN	CAF				0				0			0	0
CARPENTERS	CAJ	0	0	0	0	0	0	0	0	0	0	0	0
ELECTRICAL GENERAL FOREMAN	ELG				1.188				0			0	1.188
ELECTRICAL FOREMAN	ELF				3.6				0			0	3.6
ELECTRICAL	ELJ	0	0	30	30	0	0	0	0	0	0	0	30
INSULATOR GENERAL FOREMAN	AWG				0				0			0	0
INSULATOR FOREMAN	AWF				0				0			0	0
INSULATOR	AWJ	0	0	0	0	0	0	0	0	0	0	0	0
IRONWORKER FOREMAN	IWF				0				0			0	0
IRONWORKER	IWJ	0	0	0	0	0	0	0	0	0	0	0	0
MILLWRIGHT FOREMAN	MWF				0				0			0	0
MILLWRIGHT	MWJ	0	0	0	0	0	0	0	0	0	0	0	0
LABOR FOREMAN	LBF				797.8				0			0	797.8333
LABOR	LBJ	6600.6	0	48	6649	0	0	0	0	0	0	0	6648.611
OPERATOR	OEA	8501.3	0	30	8531	0	0	0	0	0	0	0	8531.251
PAINT FOREMAN	PAF				0				0			0	0
PAINTER	PAJ	0	0	0	0	0	0	0	0	0	0	0	0
PIPEFITTER GENERAL FOREMAN	PFG				0				0			0	0
PIPE FOREMAN	PFF				0				0			0	0
PIPEFITTER	PFJ	0	0	0	0	0	0	0	0	0	0	0	0
SHEETMETAL FOREMAN	SMF				0				0			0	0
SHEETMETAL	SMJ	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK DRIVER	TM3	1888.4	0	0	1888	0	0	0	0	0	0	0	1888.392
TEAMISTER	TMW	0	0	24	24	0	0	0	0	0	0	0	24
TOTAL		16990	0	132	802.6	0	0	0	0	0	0	0	17925

CLARIFICATIONS

CLARIFICATIONS

DREDGE CELL DIKE RESTORATION
 KINGSTON
 CLARIFICATIONS TO TVA-HED PROJECT ESTIMATE.

0

1	ALL JOURNEYMEN RATES ARE PER THE APPR. UTILIZATION FACTOR OF 10% APPR. FOR 90% JOURNEYMEN
2	WAGE RATES ARE PER FY2005 CRAFT AUGMENTED RATES AND NO ESCALATION IS INCLUDED FOR WAGES.
3	ALL MATERIALS ARE INCLUDED EXCEPT AS NOTED OTHERWISE.
4	NO "IRON FILINGS" MATERIAL COSTS ARE INCLUDED IN ESTIMATE.
5	ESTIMATE IS BASED ON 40 HOURS PER WEEK
6	ESTIMATE HAS BEEN REVISED TO REFLECT CHANGES TO ORIGINAL DESIGN SCOPE OF WORK.
7	MATERIAL AND SUBCONTRACT UNIT COST INCREASES ARE DUE TO INFLATION ABOVE ORIGINAL ESTIMATE.
8	ESTIMATE IS A PHASE (3).
10	ESTIMATE INCLUDES GEOTEXTILE FABRIC & LINER INSTALLATION SUB-CONTRACTS.
11	ALL OTHER WORK TO BE COMPLETED BY TVA - HED PROJECT SERVICES.
12	INITIAL SURVEY - LAYOUT / CONTROL / BENCH LOOP COSTS ARE INCLUDED. (TVA SURVEYORS).
13	GEOTECHNICAL ENGINEERING ESTIMATED COSTS ARE INCLUDED. ACTUAL COSTS ABOVE ESTIMATED SHALL BE INVOICED AS "EXTRA" COST TO PROJECT IN ADDITION TO TVA-HED ESTIMATED COST HEREIN.
14	ESTIMATE BASED UPON WORKING IN PERMISSIBLE WEATHER CONDITIONS.
15	NO CONTINGENCIES FOR WEATHER RELATED PROJECT DELAY COSTS ARE INCLUDED IN ESTIMATE.
16	ESTIMATE IS BASED UPON ONE TVA-HED MOBILIZATION AND ONE DEMOBILIZATION OF PROJECT.
17	ESTIMATE ASSUMES ALL MATERIAL FOR BUILDING PONDS SHALL BE FROM EXISTING MATERIALS ON SITE AS SPECIFIED IN GENERAL NOTES. NO OFF SITE BORROWING OF MATERIALS TO INCLUDE BUT NOT LIMITED TO CLAY SOIL FOR POND MATERIAL, OR TOPSOIL FOR SLOPES IS INCLUDED IN ESTIMATE.
18	ESTIMATE ASSUMES ALL EXISTING MATERIAL IS SUITABLE BUILDING MATERIAL TO OBTAIN SPECIFIED COMPACTION RATE PER GENERAL DESIGN NOTES.
19	ESTIMATE IS PROVIDED WITH NO SUPPORTING "SUBSURFACE EXPLORATION REPORT" BY GEO. ENG.
20	ESTIMATE ASSUMES ALL TOPOGRAPHICAL CONTOURS ON DESIGN DRAWINGS ARE ACCURATE, AND THAT ALL FINISH GRADE ELEVATIONS SHOWN ON DRAWINGS ARE FINAL.
21	NO ROCK REMOVAL IS INCLUDED IN ESTIMATE.
22	OVERTIME WORK IN EXCESS OF 40 HOURS PER WEEK SHALL BE AT THE DISCRETION OF TVA - HED AT ANY TIME DURING THE PROJECT UNLESS BY SIGNED / APPROVED CHANGE CONTROL BY OWNER.
23	QUANTITY OF CRAFT EMPLOYEES, EQUIPMENT UTILIZED AND SUPERVISION SHALL BE AT THE DISCRETION OF TVA-HED PROJECT SERVICES.
24	INCREASES TO PROJECT SCOPE OF WORK SHALL BE APPROVED WITH SIGNED CHANGE CONTROL PRIOR TO TVA-HED COMMENCING WORK FOR SAID SCOPE INCREASE.
25	ESTIMATE PRICING IS BASED UPON PRODUCING A COMPLETE PROJECT PER THE PROVIDED DESIGN DRAWINGS, AND MATERIAL INSTALLATION QUANTITIES IDENTIFIED WITHIN THIS ESTIMATE / PARSONS.
26	ESTIMATE IS BASED UPON ALL CRAFT TRAILERS FOR THIS PROJECT TO BE LOCATED AT PROJECT SITE.
27	ESTIMATE IS BASED UPON ALL MATERIAL STORAGE TO BE STAGED AT PROJECT SITE.
28	ESTIMATE IS BASED UPON ALL CRAFT PORTABLE SANITARY FACILITIES FOR THIS PROJECT TO BE LOCATED AT PROJECT SITE.
29	NO CONTINGENCIES FOR STOLEN / BORROWED MATERIAL AND OR EQUIPMENT FROM ONGOING PROJECTS AT THE KINGSTON FOSSIL SITE ARE INCLUDED.
30	ESTIMATE BASED UPON A CONTINUOUS PROJECT TO BE STARTED AND FULLY COMPLETED ACCORDING TO PROVIDED DESIGN DRAWINGS.
31	ALL PERMITS REQUIRED TO ALLOW PROJECT TO COMMENCE ARE TO BE PROVIDED BY OTHERS.
32	ESTIMATE IS BASED UPON KINGSTON DREDGE CELL DIKE RESTORATION PROJECT ONLY.
33	ESTIMATE ASSUMES RE-USING EXISTING PUMPS.

KINGSTON FOSSIL PLANT DREDGE CELL RESTORATION	MAY				JUNE				JULY				AUGUST				SEPTEMBER			
	31	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 1	WK 2	WK 3	WK 4	WK 5	WK 1	WK 2	WK 3	WK 4		
MOBILIZATION																				
EROSION CONTROLS																				
SEDIMENT POND																				
ACCESS ROAD MAINTENANCE																				
INSTALL SWAN POND DRAINS																				
REWORK SWAN POND RD DITCH																				
GEO & DIRT 765EL TO 775 EL																				
INSTALL RIP RAP DITCHES																				
BUILD PERMINATE POND																				
SEEDING OF 765' - 775' BENCH																				
DEMobilIZATION																				