

GMP Santaquin Zone 11 West Tank, 16 Inch Pipeline to the South, Altitude Valve

VanCon Inc.

1825 North Mountain Springs Pkwy
Springville, UT 84663

Contact: Clint Bastian
Phone: 801-491-8898
Fax: 801-491-8883

Quote To: Santaquin City
Attn Norm Beagley
Phone:
Fax:

Job Name: Santaquin Zone 11 West
Date of Plans: 12-8-21
Revision Date:



ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Mobilization	1.00	LS	170,000.00	170,000.00
2	Pipeline	1.00	LS	675,000.00	675,000.00
3	Tank	1.00	LS	1,693,000.00	1,693,000.00
4	Tank Backfill Import Material	1.00	LS	266,000.00	266,000.00
5	Altitude Valve Vault	1.00	LS	72,000.00	72,000.00
6	Electrical/SCADA/Instrumentation Budget Tank Area	1.00	LS	50,000.00	50,000.00
7	24 & 16 Inch Pipe & Valve Materials PO #1	1.00	LS	1,255,964.56	1,255,964.56
8	DIP Fitting PO #2	1.00	LS	83,725.99	83,725.99
9	Markup 7%	1.00	LS	298,598.34	298,598.34
10	Contingency 2.5%	1.00	LS	114,107.22	114,107.22
GRAND TOTAL					\$4,678,396.11

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM	= 100	CLIENT# = 1									
Description =	Mobilization				Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		1.000
1000.100	GR General Requirements		Quan:		1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 8227		
9GR	General Requirements	1.00	1.00 LS		5,000.000			5,000			**Unreviewed 5,000
1010.100	Bonds/Permits		Quan:		1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 8810		
9PERMITS	Permits	1.00	1.00 LS		1,000.000			1,000			**Unreviewed 1,000
1215.100	TF Temporary Facilites/Security		Quan:		16.00 MON	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
9OFFICE	Office Trailer & Utilities	1.00	12.00 MO		250.000			3,000			**Unreviewed 3,000
9SECURITY	Security	1.00	1.00 LS	1.0000	1,000.000			1,000			1,000
\$4,000.00					[]			4,000			4,000
1220.100	TD Toilet/Dumpster		Quan:		12.00 MO	Hrs/Shft:	10.00	Cal: 510	WC: 8227		
9TT07	Temp Toilets	2.00	24.00 MO		100.000			2,400			**Unreviewed 2,400
9TT08	Dumpster	2.00	12.00 MO		195.000			2,340			2,340
\$4,740.00					[]			4,740			4,740
1230.150	T Transporting		Quan:		225.00 HR	Hrs/Shft:	10.00	Cal: 510	WC: 5516		
<u>MTC</u>	Transporting Crew			225.00 CH	Prod:	10.0000 US	Lab Pcs:	1.00	Eqp Pcs:	1.00	**Unreviewed
8TLB	Lowboy Truck	1.00	225.00 HR		146.010			32,852			32,852
FD	Foreman Driver	1.00	225.00 MH		31.000	10,371					10,371
\$43,222.86	1.0000 MH/HR		225.00 MH		[34.1]	10,371		32,852			43,223
1510	S Surveying		Quan:		180.00 HR	Hrs/Shft:	10.00	Cal: 510	WC: 5606		
<u>SC</u>	Survey Crew			180.00 CH	Prod:	10.0000 US	Lab Pcs:	2.00	Eqp Pcs:	2.00	**Unreviewed
8MSUR	Survey Equipment	1.00	180.00 HR		30.000			5,400			5,400
8TPU	Pickup Trucks	1.00	180.00 HR		23.710			4,268			4,268
CAD	Draftsman	1.00	180.00 MH		40.000	10,764					10,764
PM	Project Manger	1.00	180.00 MH		75.000	19,236					19,236
\$39,667.80	2.0000 MH/HR		360.00 MH		[126.5]	30,000		9,668			39,668
1520	TEST Testing		Quan:		1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 8227		
4TST	Testing Subcontractor	1.00	1.00 LS		18,575.000				18,575		**Unreviewed 18,575
1530	ENG Engineering		Quan:		1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 5606		
9ENG	Engineering	1.00	1.00 LS	1.0000	4,200.000			4,200			**Unreviewed 4,200
1930	MC Misc. Cleanup		Quan:		100.00 HR	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>PWWS</u>	Water/Irrig Service Crew			100.00 CH	Prod:	10.0000 US	Lab Pcs:	2.00	Eqp Pcs:	2.50	**Unreviewed
8EXMINI	Mini Series Trackhoe	1.00	100.00 HR		86.300			8,630			8,630
8LSL	Skid Loader	0.50	50.00 HR		66.750			3,338			3,338
8TPU	Pickup Trucks	1.00	100.00 HR		23.710			2,371			2,371
FP	Foreman Pipe	1.00	100.00 MH		38.000	8,984					8,984
PL	Pipelaye Lead	1.00	100.00 MH		26.000	7,305					7,305
\$30,627.94	2.0000 MH/HR		200.00 MH		[70.4]	16,289		14,339			30,628
1940	PL Punch List Work		Quan:		100.00 HR	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>PF1</u>	Pipe Fitting No Machine			100.00 CH	Prod:	10.0000 US	Lab Pcs:	2.00	Eqp Pcs:	1.00	**Unreviewed

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 100 CLIENT# = 1											
Description =	Mobilization				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		1.000
8TPU	Pickup Trucks	1.00	100.00	HR	23.710				2,371		2,371
FP	Foreman Pipe	1.00	100.00	MH	38.000	8,984					8,984
PL	Pipelayer Lead	1.00	100.00	MH	26.000	7,305					7,305
\$18,660.44	2.0000 MH/HR		200.00	MH	[70.4]	16,289			2,371		18,660
=====> Item Totals: 100 - Mobilization											
\$169,694.04	985.0000 MH/LS		985.00	MH	[44522.5]	72,949		18,940	59,230	18,575	169,694
169,694.040	1 LS					72,949.49		18,940.00	59,229.55	18,575.00	169,694.04

PARENT ITEM = 200 CLIENT# = 2											
Description =	Pipeline				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		1.000

Listing of Sub-Biditems of Parent Item 200:

BID ITEM = 300											
Description =	16" DIP Transmission Line				Unit = LF	Takeoff Quan:		2,982.000	Engr Quan:		0.000

2400	IPL Furnish 16" Pipe & Fittings				Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6229	
21622	16" MJ 22.5 Be@106.75%	1.00	13.00	EA	1.000		14				14
21690	16" MJ 90 Bend@106.75%	1.00	1.00	EA	1.000		1				1
216902	16" Flg 90 Ben@106.75%	1.00	1.00	EA	1.000		1				1
216BELLRESTR	16" Bell Resta@106.75%	1.00	41.00	EA	352.160		15,413				15,413
216DIP	16" DIP Pipe@106.75%	1.00	2,988.00	LF	1.000		3,190				3,190
216MLD	16" Megalug DI@106.75%	1.00	35.00	EA	1.000		37				37
216SFP10	16" Flg x PE S@106.75%	1.00	1.00	EA	2,945.620		3,144				3,144
216SL	16" MJ Sleeve@106.75%	1.00	1.00	EA	831.400		888				888
216T2	16" Flg Tee@106.75%	1.00	1.00	EA	1.000		1				1
2FMG	FM Grease@106.75%	1.00	1.00	EA	279.190		298				298
2PIPELUBE	Pipe Lube@106.75%	1.00	1.00	LS	19.290		21				21
2POLYS	Polywrap - 20@106.75%	1.00	7.00	EA	322.980		2,413				2,413
2TW	Tracer Wire@106.75%	1.00	3,000.00	LF	0.380		1,217				1,217
2VB	Valve Box Asse@106.75%	1.00	3.00	EA	149.310		478				478
2VBKX	Valve Box Key @106.75%	1.00	3.00	EA	50.000		160				160
2VBR	Valve Box Rise@106.75%	1.00	3.00	EA	30.000		96				96
3MISCP	Miscellaneous @106.75%	1.00	1.00	LS	5,000.000			5,338			5,338
\$32,710.20					[]		27,373	5,338			32,710

3000	CNC 16" Pipe Encasement Materials / Thru				Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 5213	
2C6	Concrete 6-Bag@106.75%	1.00	20.00	CY	160.000		3,416				**Unreviewed 3,416
2CKL	Thrust Block, @106.75%	1.00	14.00	EA	200.000		2,989				2,989
3FORMS	Concrete Form @106.75%	1.00	20.00	CY	40.000			854			854
\$7,259.00					[]		6,405	854			7,259

2400.1	IPL 16" DIP L&E avg depth to inv = 7.2'				Quan:	2,982.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217	
<u>PWPL</u>	Water Pipe Laying Crew		100.00	CH	Prod:	298.2000 US	Lab Pcs:	4.00	Eqp Pcs:	8.50	
8EX200	200 Series Trackhoe	1.00	100.00	HR	141.020			14,102		14,102	
8EX300	300 Series Trackhoe	1.00	100.00	HR	182.620			18,262		18,262	
8L70	70 Series Loader	0.50	50.00	HR	104.600			5,230		5,230	
8MCW	Compaction Wheel	1.00	100.00	HR	48.280			4,828		4,828	
8MGB	Gravel Bin	1.00	100.00	HR	36.110			3,611		3,611	
8MTB	Trench Boxes	1.00	100.00	HR	6.750			675		675	
8MTP	Trench Plates	1.00	100.00	HR	1.500			150		150	
8TPU	Pickup Trucks	2.00	200.00	HR	23.710			4,742		4,742	

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity	Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 300												
Description =	16" DIP Transmission Line				Unit =	LF	Takeoff Quan:		2,982.000	Engr Quan:		0.000
FP	Foreman Pipe	1.00	100.00	MH		38.000	8,984					8,984
OP	Operator	1.00	100.00	MH		27.000	7,694					7,694
PI	Pipelay	1.00	100.00	MH		24.000	7,046					7,046
PL	Pipelay Lead	1.00	100.00	MH		26.000	7,305					7,305
\$82,629.67	0.1341 MH/LF		400.00	MH		[4.242]	31,030			51,600		82,630
2400.2 IPL 16" Fittings L&E												
			Quan:			59.00 EA	Hrs/Shft:	10.00	Cal:	510	WC:	6217
PF	Pipe Fitting Crew Large			84.28	CH	Prod:	7.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	
8EX200	200 Series Trackhoe	1.00	84.29	HR		141.020			11,887			11,887
8TPU	Pickup Trucks	1.00	84.29	HR		23.710			1,999			1,999
FP	Foreman Pipe	1.00	84.29	MH		38.000	7,573					7,573
PI	Pipelay	1.00	84.29	MH		24.000	5,939					5,939
PL	Pipelay Lead	1.00	84.29	MH		26.000	6,158					6,158
\$33,554.75	4.2859 MH/EA		252.87	MH		[138.293]	19,670			13,885		33,555
2400.3 IPL Connect to Existing L&E												
			Quan:			2.00 EA	Hrs/Shft:	10.00	Cal:	510	WC:	6217
PF	Pipe Fitting Crew Large			30.00	CH	Prod:	0.6667 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	
8EX200	200 Series Trackhoe	1.00	30.00	HR		141.020			4,231			4,231
8TPU	Pickup Trucks	1.00	30.00	HR		23.710			711			711
FP	Foreman Pipe	1.00	30.00	MH		38.000	2,695					2,695
PI	Pipelay	1.00	30.00	MH		24.000	2,114					2,114
PL	Pipelay Lead	1.00	30.00	MH		26.000	2,192					2,192
\$11,942.62	45.0000 MH/EA		90.00	MH		[1452]	7,001			4,942		11,943
3000.1 CNC 16" Pipe Encasement L&E												
			Quan:			20.00 CY	Hrs/Shft:	10.00	Cal:	510	WC:	6217
CF3	Concrete Foreman + 3 Guys			20.00	CH	Prod:	10.0000 US	Lab Pcs:	4.00	Eqp Pcs:	2.00	**Unreviewed
8TPU	Pickup Trucks	2.00	40.00	HR		23.710			948			948
FC	Foreman Concrete	1.00	20.00	MH		36.000	1,649					1,649
LC	Concrete Laborer	3.00	60.00	MH		26.000	4,005					4,005
\$6,603.02	4.0000 MH/CY		80.00	MH		[125.4]	5,655			948		6,603
2610 PT Pressure Test												
			Quan:			50.00 HR	Hrs/Shft:	10.00	Cal:	510	WC:	6319
PT	Pressure Testing Crew			50.00	CH	Prod:	10.0000 US	Lab Pcs:	2.00	Eqp Pcs:	1.75	**Unreviewed
8PTP	Trash Pumps	0.50	25.00	HR		27.595			690			690
8TPU	Pickup Trucks	1.00	50.00	HR		23.710			1,186			1,186
8TWT	Water Truck	0.25	12.50	HR		102.890			1,286			1,286
FP	Foreman Pipe	1.00	50.00	MH		38.000	4,492					4,492
PI	Pipelay	1.00	50.00	MH		24.000	3,523					3,523
\$11,176.64	2.0000 MH/HR		100.00	MH		[68.2]	8,015			3,161		11,177
2700.150 SG Sand & Gravel												
			Quan:			10,550.00 TON	Hrs/Shft:	10.00	Cal:	510	WC:	4000
2ABS	Bedding Sand@106.75%	1.00	3,200.00	TON		4.350		14,860				14,860
2AEF	E-Fill (6" Min@106.75%	1.00	7,350.00	TON		6.600		51,784				51,784
\$66,644.03						[]		66,644				66,644
2750.150 H Hauling												
			Quan:			10,550.00 TON	Hrs/Shft:	10.00	Cal:	510	WC:	4000
HT	Hauling Truck & Pup Crew			422.00	CH	Prod:	250.0000 US	Lab Pcs:	1.00	Eqp Pcs:	1.00	
8TTP	Dump Truck & Pup	1.00	422.00	HR		109.700			46,293			46,293
DR	Driver	1.00	422.00	MH		28.000	32,732					32,732
\$79,025.83	0.0400 MH/TON		422.00	MH		[1.232]	32,732			46,293		79,026
2760.150 HO Haul Onsite												
			Quan:			412.00 LOA	Hrs/Shft:	10.00	Cal:	510	WC:	4000

**Unreviewed

Direct Cost Report

7100	IMP 16" Drinking Water Tank Fill L&E	Quan:	1.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 5183	**Unreviewed
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Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 400											
Description =	16" DIP Drinking Water Line				Unit = LF	Takeoff Quan:		50.000	Engr Quan:		0.000
<u>PF12</u>	Pipe Fitting with Machine		20.00	CH	Prod:	0.5000 US	Lab Pcs:		3.00	Eqp Pcs:	2.00
8TBT	Boom Truck	1.00	20.00	HR	60.900				1,218		1,218
8TPU	Pickup Trucks	1.00	20.00	HR	23.710				474		474
FP	Foreman Pipe	1.00	20.00	MH	38.000	1,797					1,797
PL	Pipelayer Lead	2.00	40.00	MH	26.000	2,922					2,922
\$6,411.15	60.0000 MH/EA		60.00	MH	[1980]	4,719			1,692		6,411
2400.2 IPL Fittings L&E											
Quan:						13.00 EA	Hrs/Shft:	10.00	Cal:	510	WC: 6217
<u>PF</u>	Pipe Fitting Crew Large		18.57	CH	Prod:	7.0000 US	Lab Pcs:		3.00	Eqp Pcs:	2.00
8EX200	200 Series Trackhoe	1.00	18.57	HR	141.020				2,619		2,619
8TPU	Pickup Trucks	1.00	18.57	HR	23.710				440		440
FP	Foreman Pipe	1.00	18.57	MH	38.000	1,668					1,668
PI	Pipelayer	1.00	18.57	MH	24.000	1,309					1,309
PL	Pipelayer Lead	1.00	18.57	MH	26.000	1,357					1,357
\$7,392.47	4.2853 MH/EA		55.71	MH	[138.275]	4,333			3,059		7,392
2700.150 SG Sand & Gravel											
Quan:						200.00 TON	Hrs/Shft:	10.00	Cal:	510	WC: 4000
2ABS	Bedding Sand@106.75%	1.00	75.00	TON	4.350		348				348
2AEF	E-Fill (6" Min@106.75%	1.00	125.00	TON	6.600		881				881
\$1,228.96					[]		1,229				1,229
2750.150 H Hauling											
Quan:						200.00 TON	Hrs/Shft:	10.00	Cal:	510	WC: 4000
<u>HT</u>	Hauling Truck & Pup Crew		8.00	CH	Prod:	250.0000 US	Lab Pcs:		1.00	Eqp Pcs:	1.00
8TTP	Dump Truck & Pup	1.00	8.00	HR	109.700				878		878
DR	Driver	1.00	8.00	MH	28.000	621					621
\$1,498.12	0.0400 MH/TON		8.00	MH	[1.232]	621			878		1,498
2760.150 HO Haul Onsite											
Quan:						7.00 LOA	Hrs/Shft:	10.00	Cal:	510	WC: 4000
<u>HO</u>	Haul Off Truck Only		4.66	CH	Prod:	15.0000 US	Lab Pcs:		1.00	Eqp Pcs:	1.00
8TED	End Dump	1.00	4.67	HR	94.070				439		439
DR	Driver	1.00	4.67	MH	28.000	362					362
\$801.52	0.6671 MH/LOAD		4.67	MH	[20.549]	362			439		802
====> Item Totals: 400 - 16" DIP Drinking Water Line											
\$77,446.25	5.0676 MH/LF		253.38	MH	[162.996]	19,741	41,118		16,587		77,446
1,548.925	50 LF					394.83	822.36		331.74		1,548.93

BID ITEM = 500											
Description =	18" DIP Tank Overflow				Unit = LF	Takeoff Quan:		132.000	Engr Quan:		0.000
2400 IPL Furnish 18" DIP Tank Overflow M											
Quan:						10,000.00 LS	Hrs/Shft:	10.00	Cal:	510	WC: 6229
18GASKETSRES	18" Pipe Restraint Gaskets	1.00	6.00	EA	504.130			3,025			3,025
21810T	18" x 10" MJ T@106.75%	1.00	1.00	EA	1,787.210		1,908				1,908
21822	18" MJ 22.5 Be@106.75%	1.00	2.00	EA	1,059.480		2,262				2,262
218902	18" Flg 90 Ben@106.75%	1.00	1.00	EA	2,458.170		2,624				2,624
218BFV2	18" Flg Butter@106.75%	1.00	1.00	EA	9,188.500		9,809				9,809
218DIP	18" DIP@106.75%	1.00	126.00	LF	79.220		10,655				10,655
218FA	18" Flange Ada@106.75%	1.00	2.00	EA	1,336.500		2,853				2,853
218FL	18" flange@106.75%	1.00	1.00	EA	998.970		1,066				1,066
218FPSS	18" Flg Pack S@106.75%	1.00	7.00	EA	140.680		1,051				1,051
218MLD	18" Megalug DI@106.75%	1.00	10.00	EA	294.450		3,143				3,143

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 500										
Description =	18" DIP Tank Overflow		Unit =	LF	Takeoff Quan:		132.000	Engr Quan:		0.000
218SF156	18" Flg Spool @106.75%	1.00	1.00 EA	4,626.050		4,938				4,938
218SF3	18" Flg Spool @106.75%	1.00	1.00 EA	2,191.750		2,340				2,340
218SFP86	18" Flg x PE S@106.75%	1.00	1.00 EA	2,489.750		2,658				2,658
218SL	18" Sleeve@106.75%	1.00	1.00 EA	1,096.520		1,171				1,171
218SS	18" Stainless @106.75%	1.00	1.00 EA	665.000		710				710
2FNW	Fabric, Non-Wo@106.75%	1.00	1.00 ROLL	656.750		701				701
2VB	Valve Box Asse@106.75%	1.00	1.00 EA	149.310		159				159
2VBKX	Valve Box Key @106.75%	1.00	1.00 EA	50.000		53				53
2VBR	Valve Box Rise@106.75%	1.00	1.00 EA	30.000		32				32
3MISCP	Miscellaneous @106.75%	1.00	1.00 LS	500.000			534			534
\$51,693.11				[]		48,135	3,559			51,693
3000 CNC Furnish 18" Pipe Encasement / Thrust Quan: 1.00 LS Hrs/Shft: 10.00 Cal: 510 WC: 5213										
2C6	Concrete 6-Bag@106.75%	1.00	20.00 CY	160.000		3,416				3,416
2CKL	Thrust Block, @106.75%	1.00	4.00 EA	200.000		854				854
3FORMS	Concrete Form @106.75%	1.00	20.00 CY	40.000			854			854
\$5,124.00				[]		4,270	854			5,124
2400.1 IPL 18" DIP Tank Overflow L&E Quan: 132.00 LF Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>PWPL</u>	Water Pipe Laying Crew		17.50 CH	Prod:	75.4286 US	Lab Pcs:	4.00	Eqp Pcs:	8.00	
8EX200	200 Series Trackhoe	1.50	26.25 HR	141.020			3,702		3,702	
8L70	70 Series Loader	0.50	8.75 HR	104.600			915		915	
8MCW	Compaction Wheel	1.00	17.50 HR	48.280			845		845	
8MGB	Gravel Bin	1.00	17.50 HR	36.110			632		632	
8MTB	Trench Boxes	1.00	17.50 HR	6.750			118		118	
8MTP	Trench Plates	1.00	17.50 HR	1.500			26		26	
8TPU	Pickup Trucks	2.00	35.00 HR	23.710			830		830	
FP	Foreman Pipe	1.00	17.50 MH	38.000	1,572				1,572	
OP	Operator	1.00	17.50 MH	27.000	1,346				1,346	
PI	Pipelayer	1.00	17.50 MH	24.000	1,233				1,233	
PL	Pipelayer Lead	1.00	17.50 MH	26.000	1,278				1,278	
\$12,498.25	0.5303 MH/LF		70.00 MH	[16.771]	5,430		7,068		12,498	
2400.2 IPL Fittings L&E Quan: 19.00 EA Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>PF</u>	Pipe Fitting Crew Large		38.00 CH	Prod:	5.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	
8EX200	200 Series Trackhoe	1.00	38.00 HR	141.020			5,359		5,359	
8TPU	Pickup Trucks	1.00	38.00 HR	23.710			901		901	
FP	Foreman Pipe	1.00	38.00 MH	38.000	3,414				3,414	
PI	Pipelayer	1.00	38.00 MH	24.000	2,678				2,678	
PL	Pipelayer Lead	1.00	38.00 MH	26.000	2,776				2,776	
\$15,127.31	6.0000 MH/EA		114.00 MH	[193.6]	8,868		6,260		15,127	
2400.3 IPL Install Rip Rap on Drain Channel - Quan: 180.00 SF Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>PF</u>	Pipe Fitting Crew Large		5.00 CH	Prod:	360.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	
8EX200	200 Series Trackhoe	1.00	5.00 HR	141.020			705		705	
8TPU	Pickup Trucks	1.00	5.00 HR	23.710			119		119	
FP	Foreman Pipe	1.00	5.00 MH	38.000	449				449	
PI	Pipelayer	1.00	5.00 MH	24.000	352				352	
PL	Pipelayer Lead	1.00	5.00 MH	26.000	365				365	
\$1,990.43	0.0833 MH/SF		15.00 MH	[2.689]	1,167		824		1,990	
3000.1 CNC 18" Pipe Encasement L&E Quan: 20.00 CY Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>CF3</u>	Concrete Foreman + 3 Guys		10.00 CH	Prod:	20.0000 US	Lab Pcs:	4.00	Eqp Pcs:	2.00	
8TPU	Pickup Trucks	2.00	20.00 HR	23.710			474		474	

**Unreviewed

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 500											
Description =	18" DIP Tank Overflow				Unit = LF	Takeoff Quan:		132.000	Engr Quan:		0.000
FC	Foreman Concrete	1.00	10.00 MH		36.000	825					825
LC	Concrete Laborer	3.00	30.00 MH		26.000	2,003					2,003
\$3,301.51	2.0000 MH/CY		40.00 MH		[62.7]	2,827			474		3,302
2700.150 SG Sand & Gravel Quan: 60.00 TON Hrs/Shft: 10.00 Cal: 510 WC: 4000											
2ABS	Bedding Sand@106.75%	1.00	60.00 TON		4.350		279				279
2ARRL	Rip Rap (12" t@106.75%	1.00	25.00 TON		27.250		727				727
\$1,005.85					[]		1,006				1,006
2750.150 H Hauling Quan: 85.00 TON Hrs/Shft: 10.00 Cal: 510 WC: 4000											
<u>HT</u>	Hauling Truck & Pup Crew			3.40 CH	Prod:	250.0000 US	Lab Pcs:		1.00	Eqp Pcs:	1.00
8TTP	Dump Truck & Pup	1.00	3.40 HR		109.700				373		373
DR	Driver	1.00	3.40 MH		28.000	264					264
\$636.69	0.0400 MH/TON		3.40 MH		[1.232]	264			373		637
====> Item Totals: 500 - 18" DIP Tank Overflow											
\$91,377.15	1.8363 MH/LF		242.40 MH		[58.598]	18,556	53,410	4,413	14,999		91,377
692.251	132 LF					140.57	404.62	33.43	113.63		692.25

BID ITEM = 600											
Description =	10" DIP Tank Drain				Unit = LF	Takeoff Quan:		110.000	Engr Quan:		0.000
2400 IPL Furnish Pipe Materials Quan: 1.00 LS Hrs/Shft: 10.00 Cal: 510 WC: 6229											
21022	10" MJ 22.5 Be@106.75%	1.00	2.00 EA		367.130		784				784
21090	10" MJ 90 Bend@106.75%	1.00	1.00 EA		423.850		452				452
21090FLXFLAR	10" 90 Flanged@106.75%	1.00	1.00 EA		1,126.550		1,203				1,203
210BP	10" MJ Bolt Pa@106.75%	1.00	1.00 EA		68.260		73				73
210DIP	10" DIP Pipe@106.75%	1.00	126.00 LF		52.270		7,031				7,031
210FA	10" Flange Ada@106.75%	1.00	1.00 EA		386.980		413				413
210GV	10" MJ Gate Va@106.75%	1.00	1.00 EA		1,762.080		1,881				1,881
210JTREST	10" Joint Rest@106.75%	1.00	8.00 EA		186.930		1,596				1,596
210MLD	10" Megalug DI@106.75%	1.00	12.00 EA		91.410		1,171				1,171
210SL	10" MJ Sleeve@106.75%	1.00	1.00 EA		323.470		345				345
2VB	Valve Box Asse@106.75%	1.00	1.00 EA		149.310		159				159
2VBKX	Valve Box Key @106.75%	1.00	1.00 EA		50.000		53				53
2VBR	Valve Box Rise@106.75%	1.00	1.00 EA		30.000		32				32
3MISCP	Miscellaneous @106.75%	1.00	1.00 LS		500.000			534			534
\$15,727.63					[]		15,194	534			15,728
3000 CNC Furnish 10" Pipe Encasement / Thrust Quan: 10.00 LF Hrs/Shft: 10.00 Cal: 510 WC: 5213											
2C6	Concrete 6-Bag@106.75%	1.00	5.00 CY		160.000		854				854
2CKM	Thrust Block, @106.75%	1.00	2.00 EA		150.000		320				320
3FORMS	Concrete Form @106.75%	1.00	5.00 CY		40.000			214			214
\$1,387.75					[]		1,174	214			1,388
2400.1 IPL 10" Tank Drain Quan: 110.00 LF Hrs/Shft: 10.00 Cal: 510 WC: 6217											
<u>PWPL</u>	Water Pipe Laying Crew			20.00 CH	Prod:	55.0000 US	Lab Pcs:		4.00	Eqp Pcs:	8.00
8EX200	200 Series Trackhoe	1.50	30.00 HR		141.020				4,231		4,231
8L70	70 Series Loader	0.50	10.00 HR		104.600				1,046		1,046
8MCW	Compaction Wheel	1.00	20.00 HR		48.280				966		966
8MGB	Gravel Bin	1.00	20.00 HR		36.110				722		722

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 600											
Description =	10" DIP Tank Drain				Unit = LF	Takeoff Quan:		110.000	Engr Quan:		0.000
8MTB	Trench Boxes	1.00	20.00	HR	6.750				135		135
8MTP	Trench Plates	1.00	20.00	HR	1.500				30		30
8TPU	Pickup Trucks	2.00	40.00	HR	23.710				948		948
FP	Foreman Pipe	1.00	20.00	MH	38.000	1,797					1,797
OP	Operator	1.00	20.00	MH	27.000	1,539					1,539
PI	Pipelaye	1.00	20.00	MH	24.000	1,409					1,409
PL	Pipelaye Lead	1.00	20.00	MH	26.000	1,461					1,461
\$14,283.72	0.7272 MH/LF		80.00	MH	[23]	6,206			8,078		14,284
2400.2 IPL Install Fittings & Joint Restraints											
					Quan:	15.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6217	
PF	Pipe Fitting Crew Large			21.42	CH	Prod:	7.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00
8EX200	200 Series Trackhoe	1.00	21.43	HR	141.020				3,022		3,022
8TPU	Pickup Trucks	1.00	21.43	HR	23.710				508		508
FP	Foreman Pipe	1.00	21.43	MH	38.000	1,925					1,925
PI	Pipelaye	1.00	21.43	MH	24.000	1,510					1,510
PL	Pipelaye Lead	1.00	21.43	MH	26.000	1,566					1,566
\$8,530.98	4.2860 MH/EA		64.29	MH	[138.295]	5,001			3,530		8,531
3000.1 CNC 10" Pipe Encasement L&E											
					Quan:	10.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217	
CF3	Concrete Foreman + 3 Guys			5.00	CH	Prod:	20.0000 US	Lab Pcs:	4.00	Eqp Pcs:	2.00
8TPU	Pickup Trucks	2.00	10.00	HR	23.710				237		237
FC	Foreman Concrete	1.00	5.00	MH	36.000	412					412
LC	Concrete Laborer	3.00	15.00	MH	26.000	1,001					1,001
\$1,650.75	2.0000 MH/LF		20.00	MH	[62.7]	1,414			237		1,651
2700.150 SG Sand & Gravel											
					Quan:	100.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000	
2ABS	Bedding Sand@106.75%	1.00	100.00	TON	4.350		464				464
2750.150 H Hauling											
					Quan:	100.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000	
HT	Hauling Truck & Pup Crew			4.00	CH	Prod:	250.0000 US	Lab Pcs:	1.00	Eqp Pcs:	1.00
8TTP	Dump Truck & Pup	1.00	4.00	HR	109.700				439		439
DR	Driver	1.00	4.00	MH	28.000	310					310
\$749.06	0.0400 MH/TON		4.00	MH	[1.232]	310			439		749
====> Item Totals: 600 - 10" DIP Tank Drain											
\$42,794.25	1.5299 MH/LF		168.29	MH	[48.678]	12,931	16,832	747	12,284		42,794
389.039	110 LF					117.55	153.02	6.79	111.67		389.04

BID ITEM = 700											
Description =	2" Air Vent Piping				Unit = EA	Takeoff Quan:		2.000	Engr Quan:		0.000
2400 IPLFurnish 2" Air Vent Piping											
					Quan:	2.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6229	
22G90	2" Galv. Thrd @106.75%	1.00	4.00	EA	20.230		86				86
22GN.5	2" Galv. Thrd.@106.75%	1.00	2.00	EA	21.430		46				46
22GN10	2" Galvm. Thrd@106.75%	1.00	2.00	EA	229.070		489				489
22GN6	2" Galv. Thrd.@106.75%	1.00	2.00	EA	137.440		293				293
22GTF	2" Galv. Thrd.@106.75%	1.00	2.00	EA	41.000		88				88
22PVC40	2" PVC Sch 40 @106.75%	1.00	60.00	LF	1.750		112				112
22PVC40T	2" PVC Sch. 40@106.75%	1.00	2.00	EA	4.850		10				10
22RC	2" Romac Clamp@106.75	1.00	2.00	EA	380.730		813				813
22SS	2" Stainless S@106.75%	1.00	2.00	EA	41.000		88				88

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 700											
Description =	2" Air Vent Piping				Unit = EA	Takeoff Quan:		2.000	Engr Quan:		0.000
22TC	2" PVC to Glav@106.75%	1.00	2.00 EA		110.000		235				235
3MISCP	Miscellaneous @106.75%	1.00	1.00 LS		500.000			534			534
\$2,793.60					[]		2,260	534			2,794
2400.1 IPL Install 2" PVC Pipe & Galv Pipe Ass											
						Quan:	60.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217
<u>PIPL</u>	Irriagtion Pipe Laying Crew			20.00 CH	Prod:	30.0000 US	Lab Pcs:		4.00	Eqp Pcs:	4.00
8EX200	200 Series Trackhoe	1.00	20.00 HR		141.020				2,820		2,820
8L70	70 Series Loader	1.00	20.00 HR		104.600				2,092		2,092
8TPU	Pickup Trucks	2.00	40.00 HR		23.710				948		948
FP	Foreman Pipe	1.00	20.00 MH		38.000	1,797					1,797
OP	Operator	1.00	20.00 MH		27.000	1,539					1,539
PI	Pipelayer	1.00	20.00 MH		24.000	1,409					1,409
PL	Pipelayer Lead	1.00	20.00 MH		26.000	1,461					1,461
\$12,066.72	1.3333 MH/LF		80.00 MH		[42.167]	6,206			5,861		12,067
2700.150 SG Sand & Gravel											
						Quan:	50.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000
2ABS	Bedding Sand@106.75%	1.00	50.00 TON		4.350		232				**Unreviewed 232
2750.150 H Hauling											
						Quan:	50.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000
<u>HT</u>	Hauling Truck & Pup Crew			2.64 CH	Prod:	188.9930 US	Lab Pcs:		1.00	Eqp Pcs:	1.00
8TTP	Dump Truck & Pup	1.00	2.65 HR		109.700				291		291
DR	Driver	1.00	2.65 MH		28.000	206					206
\$496.23	0.0530 MH/TON		2.65 MH		[1.632]	206			291		496
====> Item Totals: 700 - 2" Air Vent Piping											
\$15,588.73	41.3250 MH/EA		82.65 MH		[1305.81]	6,411	2,492	534	6,151		15,589
7,794.365	2 EA					3,205.73	1,246.02	266.88	3,075.75		7,794.37

BID ITEM = 800											
Description =	4" Footing Pipe and Drain				Unit = LS	Takeoff Quan:		1.000	Engr Quan:		0.000
2400 IPL Furnish Foundation Drain											
						Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6229
24ADS	4" ADS Pipe@106.75%	1.00	120.00 LF		2.410		309				**Unreviewed 309
24ADSC	4" ADS Coupler@106.75%	1.00	5.00 EA		35.300		188				188
2FNW	Fabric, Non-Wo@106.75%	1.00	1.00 EA		798.000		852				852
2PP04	4" Perf Pipe w@106.75%	1.00	600.00 LF		1.830	1,172					1,172
3MISCF	Misc. Fabric@106.75%	1.00	1.00 EA		250.000			267			267
\$2,788.00					[]		2,521	267			2,788
2200.2 DPL Install Perf Pipe & Fabric											
						Quan:	630.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217
<u>PWWS</u>	Water/Irrig Service Crew			30.00 CH	Prod:	210.0000 US	Lab Pcs:		2.00	Eqp Pcs:	2.50
8EXMINI	Mini Series Trackhoe	1.00	30.00 HR		86.300				2,589		2,589
8LSL	Skid Loader	0.50	15.00 HR		66.750				1,001		1,001
8TPU	Pickup Trucks	1.00	30.00 HR		23.710				711		711
FP	Foreman Pipe	1.00	30.00 MH		38.000	2,695					2,695
PL	Pipelayer Lead	1.00	30.00 MH		26.000	2,192					2,192
\$9,188.38	0.0952 MH/LF		60.00 MH		[3.352]	4,887			4,302		9,188
2700.150 SG Sand & Gravel											
						Quan:	275.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000
2A34	3/4" Gravel@106.75%	1.00	275.00 TON		14.200		4,169				**Unreviewed 4,169

\$675,610.37	2,560.8100 MH/LS	2,560.81 MH	[81371.78]	198,396	258,899	12,152	206,164	675,610
675,610.370	1 LS			198,395.89	258,899.03	12,151.91	206,163.54	675,610.37

Direct Cost Report

Activity Resource	Desc	Quantity Pcs	Unit MH/Unit	Unit Cost	Perm Labor	Constr Material	Equip Matl/Exp	Sub- Contract	Total
PARENT ITEM = 1000 CLIENT# = 3									
Description =	Tank		Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		1.000
Listing of Sub-Biditems of Parent Item 1000:									
BID ITEM = 1100									
Description =	Earthwork & Mirafi6000		Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		0.000
2400 IPL Furnish Fabrics under slab / Miradra									
Quan: 1.00 LS Hrs/Shft: 10.00 Cal: 510 WC: 6229									
2FMD6000	Miradrain 6000@106.75%	1.00	7.00 EA	279.000		2,085			2,085
2FNW	Fabric, Non-Wo@106.75%	1.00	7.00 EA	798.000		5,963			5,963
3MISCC	Miscellaneous @106.75%	1.00	1.00 LS	1,500.000			1,601		1,601
3MISCF	Misc. Fabric@106.75%	1.00	1.00 EA	250.000			267		267
\$9,916.02				[]		8,048	1,868		9,916
2080 EXS Excavate for Tank									
Quan: 4,500.00 CY Hrs/Shft: 10.00 Cal: 510 WC: 6217									
26000sf x 10' = 9629 cy , allow slope 9000 cy = allowance 18000cy ex									
<u>EX1</u>	Excavation Crew + Loader		50.00 CH	Prod:	900.0000 US	Lab Pcs:	3.00	Eqp Pcs:	4.00
8D6	D6 Dozer	1.00	50.00 HR	149.820			7,491		7,491
8EX400	400 Series Trackhoe	1.00	50.00 HR	266.270			13,314		13,314
8L70	70 Series Loader	1.00	50.00 HR	104.600			5,230		5,230
8TPU	Pickup Trucks	1.00	50.00 HR	23.710			1,186		1,186
FP	Foreman Pipe	1.00	50.00 MH	38.000	4,492				4,492
OP	Operator	1.00	50.00 MH	27.000	3,847				3,847
PI	Pipelayer	1.00	50.00 MH	24.000	3,523				3,523
\$39,082.13	0.0333 MH/CY	150.00 MH		[1.088]	11,862		27,220		39,082
2010 RG Rough Grade Site									
Quan: 37,690.00 SF Hrs/Shft: 10.00 Cal: 510 WC: 6217									
scarify & compact native under tank, grade site after backfill									
<u>GRBL</u>	Grading Subgrade/RB Large		30.00 CH	Prod:	1,256.3333 UH	Lab Pcs:	4.00	Eqp Pcs:	2.00
8D6	D6 Dozer	1.00	30.00 HR	149.820			4,495		4,495
8EX300	300 Series Trackhoe	0.25	7.50 HR	182.620			1,370		1,370
8RSD	Smooth Drum Rollers	0.50	15.00 HR	77.260			1,159		1,159
8TWT	Water Truck %50	0.25	7.50 HR	102.890			693		693
OL	Foreman Earthwork	1.00	30.00 MH	36.000	2,149				2,149
OP	Operator	2.00	60.00 MH	27.000	4,616				4,616
PI	Pipelayer	1.00	30.00 MH	24.000	2,114				2,114
\$16,595.76	0.0031 MH/SF	120.00 MH		[0.1]	8,880		7,716		16,596
2010.1 RG Place 6" Structural Fill Under Tank									
Quan: 21,150.00 SF Hrs/Shft: 10.00 Cal: 510 WC: 6217									
<u>GRBL</u>	Grading Subgrade/RB Large		30.00 CH	Prod:	7,050.0000 US	Lab Pcs:	3.00	Eqp Pcs:	3.00
8G140	140 Grader	1.00	30.00 HR	162.760			4,883		4,883
8L70	70 Series Loader	0.25	7.50 HR	104.600			784		784
8RSD	Smooth Drum Rol %50	0.50	15.00 HR	77.260			903		903
8TPU	Pickup Trucks	1.00	30.00 HR	23.710			711		711
8TWT	Water Truck %50	0.25	7.50 HR	102.890			693		693
OL	Foreman Earthwork	1.00	30.00 MH	36.000	2,149				2,149
OP	Operator	1.00	30.00 MH	27.000	2,308				2,308
PI	Pipelayer	1.00	30.00 MH	24.000	2,114				2,114
\$14,546.17	0.0042 MH/SF	90.00 MH		[0.136]	6,572		7,975		14,546
2010.2 RG Place 6" Gravel & Fabric									
Quan: 21,150.00 SF Hrs/Shft: 10.00 Cal: 510 WC: 6217									
<u>GRSW</u>	Grade Sidewalk Crew		30.00 CH	Prod:	705.0000 UH	Lab Pcs:	5.10	Eqp Pcs:	4.35
8L70	70 Series Loader	1.00	30.00 HR	104.600			3,138		3,138
8LSL	Skid Loader	1.00	30.00 HR	66.750			2,003		2,003
8RSD	Smooth Drum Rollers	0.25	7.50 HR	77.260			579		579

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1100										
Description =	Earthwork & Mirafi6000		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
8TPU	Pickup Trucks	2.00	60.00 HR	23.710				1,423		1,423
8TWT	Water Truck	0.10	3.00 HR	102.890				309		309
DR	Driver	0.10	3.00 MH	28.000	233					233
OL	Foreman Earthwork	1.00	30.00 MH	36.000	2,149					2,149
OP	Operator	2.00	60.00 MH	27.000	4,616					4,616
PI	Pipelaye	2.00	60.00 MH	24.000	4,228					4,228
\$18,677.53	0.0072 MH/SF		153.00 MH	[0.22]	11,226			7,451		18,678
2010.3 RG Install Roadbase Access Parking Quan: 1,865.00 SF Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>GRSW</u>	Grade Sidewalk Crew		5.00 CH	Prod: 3,730.0000 US			Lab Pcs:	5.10	Eqp Pcs:	4.35
8L70	70 Series Loader	1.00	5.00 HR	104.600				523		523
8LSL	Skid Loader	1.00	5.00 HR	66.750				334		334
8RSD	Smooth Drum Rollers	0.25	1.25 HR	77.260				97		97
8TPU	Pickup Trucks	2.00	10.00 HR	23.710				237		237
8TWT	Water Truck	0.10	0.50 HR	102.890				51		51
DR	Driver	0.10	0.50 MH	28.000	39					39
OL	Foreman Earthwork	1.00	5.00 MH	36.000	358					358
OP	Operator	2.00	10.00 MH	27.000	769					769
PI	Pipelaye	2.00	10.00 MH	24.000	705					705
\$3,112.92	0.0136 MH/SF		25.50 MH	[0.415]	1,871			1,242		3,113
2800 BFST Place Miradrain Fabric on Walls (4 Quan: 497.00 LF Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>BEC</u>	Framing Crew		50.00 CH	Prod: 99.4000 US			Lab Pcs:	3.00	Eqp Pcs:	2.00
8MSL	Scissor Lift	1.00	50.00 HR	14.900				745		745
8TPU	Pickup Trucks	1.00	50.00 HR	23.710				1,186		1,186
FC	Foreman Concrete	1.00	50.00 MH	36.000	4,123					4,123
LC	Concrete Laborer	2.00	100.00 MH	26.000	6,675					6,675
\$12,729.37	0.3018 MH/LF		150.00 MH	[9.738]	10,799			1,931		12,729
2800.1 BFST Backfill 2:1 Tank w/ native @ 92% c Quan: 22,500.00 CY Hrs/Shft: 10.00 Cal: 510 WC: 6217										
<u>EX2</u>	Excavation Backfill Crew		100.00 CH	Prod: 225.0000 UH			Lab Pcs:	3.50	Eqp Pcs:	5.00
8D6	D6 Dozer	1.00	100.00 HR	149.820				14,982		14,982
8EX400	400 Series Trackhoe	1.00	100.00 HR	266.270				26,627		26,627
8L70	70 Series Loader	0.50	50.00 HR	104.600				5,230		5,230
8MCW	Compaction Wheel	1.00	100.00 HR	48.280				4,828		4,828
8TPU	Pickup Trucks	1.00	100.00 HR	23.710				2,371		2,371
8TWT	Water Truck	0.50	50.00 HR	102.890				5,145		5,145
DR	Driver	0.50	50.00 MH	28.000	3,878					3,878
FP	Foreman Pipe	1.00	100.00 MH	38.000	8,984					8,984
OP	Operator	1.00	100.00 MH	27.000	7,694					7,694
PL	Pipelaye Lead	1.00	100.00 MH	26.000	7,305					7,305
\$87,044.14	0.0155 MH/CY		350.00 MH	[0.513]	27,862			59,183		87,044
2700.150 SG Sand & Gravel Quan: 1,500.00 TON Hrs/Shft: 10.00 Cal: 510 WC: 4000										
2A34	3/4" Gravel@106.75%	1.00	650.00 TON	14.200		9,853				9,853
2AEF	E-Fill (6" Min@106.75%	1.00	750.00 TON	6.600		5,284				5,284
2ARB	Road Base Stat@106.75%	1.00	100.00 TON	8.500		907				907
\$16,044.54				[]		16,045				16,045
2750.150 H Hauling Quan: 1,500.00 TON Hrs/Shft: 10.00 Cal: 510 WC: 4000										
allow 32tons/load = 2 hrs/RT										
<u>HT</u>	Hauling Truck & Pup Crew		79.36 CH	Prod: 189.0000 US			Lab Pcs:	1.00	Eqp Pcs:	1.00
8TTP	Dump Truck & Pup	1.00	79.37 HR	109.700				8,707		8,707
DR	Driver	1.00	79.37 MH	28.000	6,156					6,156

**Unreviewed

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1100										
Description =	Earthwork & Mirafi6000		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
\$14,863.22	0.0529 MH/TON	79.37 MH	[1.63]		6,156			8,707		14,863
=====> Item Totals: 1100 - Earthwork & Mirafi6000										
\$232,611.80	1,117.8700 MH/LS	1,117.87 MH	[35783.4]		85,228	24,092	1,868	121,424		232,612
232,611.800	1 LS				85,227.64	24,092.43	1,868.13	121,423.60		232,611.80
BID ITEM = 1200										
Description =	Remove & Replace Fencing		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
2060	FE Remove Fencing		Quan:	165.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
4FENCE	Fencing	1.00	1.00 LS		400.000			400		400
2060.2	FE 12" Wide Double Swing Gate		Quan:	1.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
4FENCE	Fencing	1.00	1.00 EA		1,480.000			1,480		1,480
2060.1	FE 6' Chain Link Fencing		Quan:	725.00 LF	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
4FENCE	Fencing	1.00	725.00 LF		41.200			29,870		29,870
=====> Item Totals: 1200 - Remove & Replace Fencing										
\$31,750.00			[]					31,750		31,750
31,750.000	1 LS							31,750.00		31,750.00
BID ITEM = 1300										
Description =	Concrete		Unit =	CY	Takeoff Quan:		1,398.000	Engr Quan:		0.000
3000.01	CNC Materials		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
2C6	Concrete 6-Bag@106.75%	1.10	1,540.00 CY		160.000		263,032			263,032
2CENV	Environmental @106.75%	1.00	160.00 EA		20.000		3,416			3,416
2CGB	Grout, bag@106.75%	1.00	35.00 EA		15.000		560			560
2CSHURPLUG	Shure Plug@106.75%	1.00	1.00 LS		1,500.000		1,601			1,601
2MM	Moose Milk Bon@106.75%	1.00	1.00 LS		132.000		141			141
2SJ	Sealant Jt@106.75%	1.00	1,000.00 LF		4.000		4,270			4,270
2WS04	4" Waterstop@106.75%	1.00	500.00 LF		4.000		2,135			2,135
2WS09	9" Waterstop P@106.75%	1.00	1,300.00 LF		8.500		11,796			11,796
3FORMR	Wall Form Rent@106.75%	1.00	1.00 LS		5,000.000		5,338			5,338
3FORMS	Concrete Form @106.75%	1.00	1,398.00 CY		41.000		61,187			61,187
3MISCC	Miscellaneous @106.75%	1.00	1.00 LS		2,000.000		2,135			2,135
\$355,610.95					[]		286,951	68,659		355,611
3000.0	CNC Equipment		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
8MFL	==> Extended Reach Fork L	1.00	300.00 HR		76.190			22,857		22,857
8MGEN25	==> Generator 25 KW	1.00	300.00 HR		31.130			9,339		9,339
8MML	==> Man Lift	1.50	300.00 HR		57.280			17,184		17,184
8MSL	==> Scissor Lift	1.00	300.00 HR		14.900			4,470		4,470
8TBT	==> Boom Truck	0.25	300.00 HR		60.900			18,270		18,270
8TFB	==> 2 Ton Flatbed	0.25	300.00 HR		39.805			11,942		11,942
DR	==> Driver	0.25	300.00 MH		28.000	23,270				23,270
\$107,331.03	300.0000 MH/LS	300.00 MH	[9240]		23,270			84,062		107,331

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1300											
Description =	Concrete		Unit =	CY	Takeoff Quan:	1,398.000	Engr Quan:	0.000			
3000.08	Concrete Pump		Quan:	1,540.00 CY	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
											**Unreviewed
Images/Docs	Attached										
4PUMP58CY	58M Conc Pump CY	1.00	1,540.00 CY		4.000				6,160	6,160	
4PUMP58HR	58M Conc Pump (175' Reac	1.00	100.00 HR		295.000				29,500	29,500	
4PUMP58TRIP	58M Conc Pump Trip	1.00	20.00 TRIP		295.000				5,900	5,900	
\$41,560.00					[]				41,560	41,560	
3000.081	CNC Crane for Gang forms		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
4CRANE	Crane Rental	1.00	40.00 DAY		1,350.000				54,000	54,000	
3000.2	CNC Assemble Gang Forms / Disassemble		Quan:	5.00 DAY	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
											**Unreviewed
CF5	Concrete Foreman + 4 Guys		50.00 CH		Prod:	1.0000 US	Lab Pcs:	6.00	Eqp Pcs:	5.00	
8MFL	Extended Reach Fork Li	1.00	50.00 HR		76.190			3,810		3,810	
8MML	Man Lift	1.00	50.00 HR		57.280			2,864		2,864	
8MSL	Scissor Lift	1.00	50.00 HR		14.900			745		745	
8TPU	Pickup Trucks	2.00	100.00 HR		23.710			2,371		2,371	
FC	Foreman Concrete	2.00	100.00 MH		36.000	8,247				8,247	
LC	Concrete Laborer	4.00	200.00 MH		26.000	13,351				13,351	
\$31,387.22	60.0000 MH/DAYS		300.00 MH		[1936]	21,598		9,790		31,387	
3000.02	CNC Tank floor & Thickened Edge Footings		Quan:	20,600.00 SF	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
											**Unreviewed
CF5	Concrete Foreman + 4 Guys		200.00 CH		Prod:	1,030.0000 US	Lab Pcs:	7.00	Eqp Pcs:	3.00	
8TPU	Pickup Trucks	3.00	600.00 HR		23.710			14,226		14,226	
FC	Foreman Concrete	2.00	400.00 MH		36.000	32,988				32,988	
LC	Concrete Laborer	5.00	1,000.00 MH		26.000	66,754				66,754	
\$113,967.65	0.0679 MH/SF		1,400.00 MH		[2.157]	99,742		14,226		113,968	
3000.03	CNC Tank Walls (24' high x 497') with Wa		Quan:	16.00 POU	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
											**Unreviewed
CF5	Concrete Foreman + 4 Guys		250.00 CH		Prod:	0.6400 US	Lab Pcs:	7.00	Eqp Pcs:	3.00	
8TPU	Pickup Trucks	3.00	750.00 HR		23.710			17,783		17,783	
FC	Foreman Concrete	2.00	500.00 MH		36.000	41,235				41,235	
LC	Concrete Laborer	5.00	1,250.00 MH		26.000	83,442				83,442	
\$142,459.57	109.3750 MH/POUR		1,750.00 MH		[3471.875]	124,677		17,783		142,460	
3000.04	CNC Concrete Floor Joints & 4" watersto		Quan:	840.00 LF	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
CF4	Concrete Foreman + 4 Guys		20.00 CH		Prod:	420.0000 US	Lab Pcs:	5.00	Eqp Pcs:	2.00	
8TPU	Pickup Trucks	2.00	40.00 HR		23.710			948		948	
FC	Foreman Concrete	2.00	40.00 MH		36.000	3,299				3,299	
LC	Concrete Laborer	3.00	60.00 MH		26.000	4,005				4,005	
\$8,252.40	0.1190 MH/LF		100.00 MH		[3.929]	7,304		948		8,252	
3000.05	CNC Plug & Patch / Sawcut / Sika Floor		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal:	510	WC:	6217	
CF	Concrete Foreman + 1 Laborer		50.00 CH		Prod:	0.2000 US	Lab Pcs:	2.00	Eqp Pcs:	1.00	
8TPU	Pickup Trucks	1.00	50.00 HR		23.710			1,186		1,186	
FC	Foreman Concrete	1.00	50.00 MH		36.000	4,123				4,123	
LC	Concrete Laborer	1.00	50.00 MH		26.000	3,338				3,338	
\$8,646.67	100.0000 MH/LS		100.00 MH		[3410]	7,461		1,186		8,647	
====>	Item Totals:	1300	- Concrete								
\$863,215.49	2.8254 MH/CY		3,950.00 MH		[89.857]	284,051	286,951	68,659	127,993	95,560	863,215
617.465	1398 CY					203.18	205.26	49.11	91.55	68.35	617.46

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1350											
Description =	Winter Protection			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
3000	CNC Concrete Materials			Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 5213		
<u>CF2</u>	Concrete Foreman +2 Guys		150.00	CH	Prod:	0.0667 US	Lab Pcs:	3.00	Eqp Pcs:	52.50	**Unreviewed
2CHW	Hot Water@106.75%	1.00	1,540.00	CY	7.000	11,508				11,508	
8MCB	Concrete Blankets	50.00	7,500.00	HR	1.000			7,500		7,500	
8MTZ	Thawzall	1.50	225.00	HR	108.730			24,464		24,464	
8TPU	Pickup Trucks	1.00	150.00	HR	23.710			3,557		3,557	
FC	Foreman Concrete	1.00	150.00	MH	36.000	12,370				12,370	
LC	Concrete Laborer	2.00	300.00	MH	26.000	20,026				20,026	
\$79,424.97	450.0000 MH/LS		450.00	MH	[14520]	32,397	11,508		35,521	79,425	
=====> Item Totals: 1350 - Winter Protection											
\$79,424.97	450.0000 MH/LS		450.00	MH	[14520]	32,397	11,508		35,521	79,425	
79,424.970	1 LS					32,396.57	11,507.65		35,520.75	79,424.97	
BID ITEM = 1400											
Description =	Rebar			Unit =	TON	Takeoff Quan:		188.300	Engr Quan:		0.000
3000.14	CNC Rebar Supply & install			Quan:	188.30 TON	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
4REBAR INSTL	Rebar installation	1.00	1.00	LS	380,285.000				380,285	380,285	**Unreviewed
3000.11	CNC Rebar Support			Quan:	100.00 HR	Hrs/Shft:	10.00	Cal: 510	WC: 5213		
<u>BFC</u>	Framing Crew		100.00	CH	Prod:	10.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	**Unreviewed
8MFL	Extended Reach Fork Li	1.00	100.00	HR	76.190			7,619		7,619	
8TPU	Pickup Trucks	1.00	100.00	HR	23.710			2,371		2,371	
FC	Foreman Concrete	1.00	100.00	MH	36.000	8,247				8,247	
LC	Concrete Laborer	2.00	200.00	MH	26.000	13,351				13,351	
\$31,587.72	3.0000 MH/HR		300.00	MH	[96.8]	21,598		9,990		31,588	
=====> Item Totals: 1400 - Rebar											
\$411,872.72	1.5932 MH/TON		300.00	MH	[51.407]	21,598		9,990	380,285	411,873	
2,187.322	188.3 TON					114.70		53.05	2,019.57	2,187.32	
BID ITEM = 1500											
Description =	Sealant			Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
3000	CNC Concrete Materials			Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 5213		
2SEALANT	Sealant@106.75%	1.00	1.00	LS	2,500.000	2,669				2,669	**Unreviewed
3MISC	Miscellaneous @106.75%	1.00	1.00	LS	500.000			534		534	
\$3,202.50					[]	2,669		534		3,203	
3000.1	CNC Apply Sealant			Quan:	1.00 DAY	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>CF</u>	Concrete Foreman + 1 Laborer		20.00	CH	Prod:	0.5000 US	Lab Pcs:	2.00	Eqp Pcs:	1.00	**Unreviewed
8TPU	Pickup Trucks	1.00	20.00	HR	23.710			474		474	
FC	Foreman Concrete	1.00	20.00	MH	36.000	1,649				1,649	
LC	Concrete Laborer	1.00	20.00	MH	26.000	1,335				1,335	
\$3,458.67	40.0000 MH/DAY		40.00	MH	[1364]	2,984		474		3,459	

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1500										
Description =	Sealant		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
=====>	Item Totals:	1500	- Sealant							
\$6,661.17	40.0000 MH/LS		40.00 MH	[1364]	2,984	2,669	534	474		6,661
6,661.170	1 LS				2,984.47	2,668.75	533.75	474.20		6,661.17
BID ITEM = 1600										
Description =	Waterproof Tank		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
3000	CNC Materials		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 5183		
2CXYP5	Xypex - 5 gal @106.75%	1.00	90.00 5GAL	235.000		22,578				**Unreviewed
3MISC	Miscellaneous @106.75%	1.00	1.00 LS	500.000			534			22,578
\$23,111.38				[]		22,578	534			534
										23,111
3000.1	CNC Waterproof Tank & Lid		Quan:	32,528.00 SF	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>CF5</u>	Concrete Foreman + 4 Guys		30.00 CH	Prod: 10,842.6667 US			Lab Pcs:	6.00	Eqp Pcs:	2.00
8TPU	Pickup Trucks	2.00	60.00 HR	23.710				1,423		1,423
FC	Foreman Concrete	2.00	60.00 MH	36.000	4,948					4,948
LC	Concrete Laborer	4.00	120.00 MH	26.000	8,010					8,010
\$14,381.23	0.0055 MH/SF		180.00 MH	[0.179]	12,959			1,423		14,381
=====>	Item Totals:	1600	- Waterproof Tank							
\$37,492.61	180.0000 MH/LS		180.00 MH	[5808]	12,959	22,578	534	1,423		37,493
37,492.610	1 LS				12,958.63	22,577.63	533.75	1,422.60		37,492.61
BID ITEM = 1700										
Description =	Leak Test		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
3000.9	CNC Leak Test		Quan:	5.00 DAY	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>CF</u>	Concrete Foreman + 1 Laborer		20.00 CH	Prod: 2.5000 US			Lab Pcs:	2.00	Eqp Pcs:	1.00
8TPU	Pickup Trucks	1.00	20.00 HR	23.710				474		474
FC	Foreman Concrete	1.00	20.00 MH	36.000	1,649					1,649
LC	Concrete Laborer	1.00	20.00 MH	26.000	1,335					1,335
\$3,458.67	8.0000 MH/DAY		40.00 MH	[272.8]	2,984			474		3,459
=====>	Item Totals:	1700	- Leak Test							
\$3,458.67	40.0000 MH/LS		40.00 MH	[1364]	2,984			474		3,459
3,458.670	1 LS				2,984.47			474.20		3,458.67
BID ITEM = 1800										
Description =	Tank Cleaning & Commissioning		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
3000.1	CNC Tank Cleaning		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>CF3</u>	Concrete Foreman + 3 Guys		40.00 CH	Prod: 0.2500 US			Lab Pcs:	4.00	Eqp Pcs:	2.25
8TPU	Pickup Trucks	2.00	80.00 HR	23.710				1,897		1,897
8TWT	Water Truck	0.25	10.00 HR	102.890				1,029		1,029
FC	Foreman Concrete	1.00	40.00 MH	36.000	3,299					3,299
LC	Concrete Laborer	3.00	120.00 MH	26.000	8,010					8,010
\$14,234.94	160.0000 MH/LS		160.00 MH	[5016]	11,309			2,926		14,235

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 1800											
Description =	Tank Cleaning & Commissioning		Unit =	LS	Takeoff Quan:			1.000	Engr Quan:		0.000
3000.2	CNC Tank Testing & Commission		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6217			
											**Unreviewed
<u>PF1</u>	Pipe Fitting No Machine		50.00	CH	Prod:	0.2000 US	Lab Pcs:	2.00	Eqp Pcs:	1.50	
8TPU	Pickup Trucks	1.00	50.00	HR	23.710				1,186		1,186
8TWT	Water Truck	0.50	25.00	HR	102.890				2,572		2,572
FP	Foreman Pipe	1.00	50.00	MH	38.000	4,492					4,492
PL	Pipelayer Lead	1.00	50.00	MH	26.000	3,653					3,653
\$11,902.46	100.0000 MH/LS		100.00	MH	[3520]	8,145			3,758		11,902
=====	Item Totals: 1800		- Tank Cleaning & Commissioning								
\$26,137.40	260.0000 MH/LS		260.00	MH	[8536]	19,454			6,683		26,137
26,137.400	1 LS					19,453.95			6,683.45		26,137.40

Total of Above Sub-Biditems

=====	Item Totals: 1000		- Tank								
\$1,692,624.83	6,337.8700 MH/LS		6,337.87 MH		[202675.4]	461,655	347,798	71,595	303,982	507,595	1,692,625
1,692,624.830	1 LS					461,654.56	347,797.94	71,595.10	303,982.23	507,595.00	1,692,624.83

BID ITEM = 1850			CLIENT# = 4								
Description =	Tank Backfill Import Material		Unit =	LS	Takeoff Quan:			1.000	Engr Quan:		1.000
2700.150.1	SG Fill for Tank Backfill (Less Pipe Spo		Quan:	17,500.00 CY	Hrs/Shft:	10.00	Cal: 510	WC: 6217			
											**Unreviewed
2AGB	Granular Backf@106.75%	1.00	33,250.00	TON	1.000	35,494					35,494
2750.150.1	H Haul in Tank Fill Material		Quan:	33,250.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 6217			
											**Unreviewed
<u>HT</u>	Hauling Truck & Pup Crew		1,231.48	CH	Prod:	270.0000 US	Lab Pcs:	1.00	Eqp Pcs:	1.00	
8TTP	Dump Truck & Pup	1.00	1,231.48	HR	109.700				135,093		135,093
DR	Driver	1.00	1,231.48	MH	28.000	95,520					95,520
\$230,613.10	0.0370 MH/TON		1,231.48	MH	[1.141]	95,520			135,093		230,613
=====	Item Totals: 1850		- Tank Backfill Import Material								
\$266,107.48	1,231.4800 MH/LS		1,231.48	MH	[37929.58]	95,520	35,494		135,093		266,107
266,107.480	1 LS					95,519.75	35,494.38		135,093.35		266,107.48

PARENT ITEM = 1900			CLIENT# = 5								
Description =	Altitude Valve Vault		Unit =	LS	Takeoff Quan:			1.000	Engr Quan:		1.000

Listing of Sub-Biditems of Parent Item 1900:

BID ITEM = 2000											
Description =	Altitude Valve Piping		Unit =	LS	Takeoff Quan:			1.000	Engr Quan:		0.000
2400	IPL Furnish Altitude Valve Piping		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6229			
2166R	16" X 6" MJ Re@106.75%	1.00	2.00	EA	1.000		2				2

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 2000										
Description =	Altitude Valve Piping		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
216MLD	16" Megalug DI@106.75%	1.00	6.00 EA	205.710		1,318				1,318
216SL	16" MJ Sleeve@106.75%	1.00	2.00 EA	831.400		1,775				1,775
26902	6" Flg 90 Bend@106.75%	1.00	2.00 EA	1.000		2				2
26ALTV	6" Alitude Val@106.75%	1.00	1.00 EA	18,500.000		19,749				19,749
26DJ	6" Dismantling@106.75%	1.00	2.00 EA	1.000		2				2
26FP	6" Flange Pack@106.75%	1.00	18.00 EA	50.100		963				963
26GV2	6" Flg Gate Va@106.75%	1.00	3.00 EA	839.230		2,688				2,688
26MLD	6" Megalug DIP@106.75%	1.00	2.00 EA	45.990		98				98
26PS	6" Pipe Suppor@106.75%	1.00	5.00 EA	479.000		2,557				2,557
26RCA	6" Restrained @106.75%	1.00	2.00 EA	282.380		603				603
26SF1	6" Flg Spool 1@106.75%	1.00	2.00 EA	344.720		736				736
26SF2	6" Flg Spool 2@106.75%	1.00	2.00 EA	372.760		796				796
26SF2TR	6" Flg Spool 2@106.75%	1.00	2.00 EA	485.620		1,037				1,037
26SF3	6" Flg Spool 3@106.75%	1.00	2.00 EA	381.060		814				814
26T2	6" Flg Tee@106.75%	1.00	2.00 EA	1.000		2				2
2PG	Pressure Gauge@106.75%	1.00	2.00 EA	291.440		622				622
\$33,762.35				[]		33,762				33,762
2400.1 IPL Install Fittings										
			Quan:	25.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>PF1</u>	Pipe Fitting No Machine		25.00 CH	Prod:	10.0000 US	Lab Pcs:	2.00	Eqp Pcs:	1.00	
8TPU	Pickup Trucks	1.00	25.00 HR	23.710				593		593
FP	Foreman Pipe	1.00	25.00 MH	38.000	2,246					2,246
PL	Pipelayer Lead	1.00	25.00 MH	26.000	1,826					1,826
\$4,665.10	2.0000 MH/EA		50.00 MH	[70.4]	4,072			593		4,665
=====> Item Totals: 2000 - Altitude Valve Piping										
\$38,427.45	50.0000 MH/LS		50.00 MH	[1760]	4,072	33,762		593		38,427
38,427.450	1 LS				4,072.35	33,762.35		592.75		38,427.45
BID ITEM = 2100										
Description =	Altitude Vault		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		0.000
2500 MH Furnish Vault										
			Quan:	1.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6306		
2VAULT	Vault (8' x 1@106.75%	1.00	1.00 LS	15,000.000		16,013				16,013
3MISCP	Miscellaneous @106.75%	1.00	1.00 LS	500.000			534			534
\$16,546.25				[]		16,013	534			16,546
2080 EXS Excavate Structure										
			Quan:	75.00 CY	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>EX3</u>	Excavation Large		10.00 CH	Prod:	75.0000 US	Lab Pcs:	3.00	Eqp Pcs:	4.00	
8EX400	400 Series Trackhoe	1.00	10.00 HR	266.270				2,663		2,663
8L80	80 Series Loader	1.00	10.00 HR	110.790				1,108		1,108
8MRL	Rotary Laser	1.00	10.00 HR	1.500				15		15
8TPU	Pickup Trucks	1.00	10.00 HR	23.710				237		237
FP	Foreman Pipe	1.00	10.00 MH	38.000	898					898
OP	Operator	1.00	10.00 MH	27.000	769					769
PL	Pipelayer Lead	1.00	10.00 MH	26.000	731					731
\$6,421.05	0.4000 MH/CY		30.00 MH	[13.347]	2,398			4,023		6,421
2400.3 IPL Install 12" gravel under vault & le										
			Quan:	180.00 SF	Hrs/Shft:	10.00	Cal: 510	WC: 6217		
<u>PF</u>	Pipe Fitting Crew Large		5.00 CH	Prod:	360.0000 US	Lab Pcs:	3.00	Eqp Pcs:	2.00	
8EX200	200 Series Trackhoe	1.00	5.00 HR	141.020				705		705
8TPU	Pickup Trucks	1.00	5.00 HR	23.710				119		119

***Unreviewed

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 2100											
Description =	Altitude Vault				Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		0.000
FP	Foreman Pipe	1.00	5.00 MH		38.000	449					449
PI	Pipelay	1.00	5.00 MH		24.000	352					352
PL	Pipelay Lead	1.00	5.00 MH		26.000	365					365
\$1,990.43	0.0833 MH/SF		15.00 MH		[2.689]	1,167			824		1,990
2500.1 MH Install Vault											
						Quan:	1.00 EA	Hrs/Shft:	10.00	Cal: 510	WC: 6217
<u>PMH</u>	Manhole Crew			7.00 CH	Prod:	1.4286 US	Lab Pcs:	4.00	Eqp Pcs:		1.75
8EX400	400 Series Trackhoe	0.50	3.50 HR		266.270				932		932
8L70	70 Series Loader	0.25	1.75 HR		104.600				183		183
8MTB	Trench Boxes	1.00	7.00 HR		6.750				47		47
FP	Foreman Pipe	1.00	7.00 MH		38.000	629					629
OP	Operator	1.00	7.00 MH		27.000	539					539
PI	Pipelay	1.00	7.00 MH		24.000	493					493
PL	Pipelay Lead	1.00	7.00 MH		26.000	511					511
\$3,334.32	28.0000 MH/EA		28.00 MH		[885.5]	2,172			1,162		3,334
2800 BFST Backfill Vault											
						Quan:	30.00 CY	Hrs/Shft:	10.00	Cal: 510	WC: 6217
<u>EX2</u>	Excavation Backfill Crew			10.00 CH	Prod:	30.0000 US	Lab Pcs:	3.00	Eqp Pcs:		3.50
8EX200	200 Series Trackhoe	1.00	10.00 HR		141.020				1,410		1,410
8L70	70 Series Loader	0.50	5.00 HR		104.600				523		523
8MCW	Compaction Wheel	1.00	10.00 HR		48.280				483		483
8TPU	Pickup Trucks	1.00	10.00 HR		23.710				237		237
FP	Foreman Pipe	1.00	10.00 MH		38.000	898					898
OP	Operator	1.00	10.00 MH		27.000	769					769
PL	Pipelay Lead	1.00	10.00 MH		26.000	731					731
\$5,051.45	1.0000 MH/CY		30.00 MH		[33.367]	2,398			2,653		5,051
2700.150 SG Sand & Gravel											
						Quan:	15.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000
2A34	3/4" Gravel@106.75%	1.00	15.00 TON		14.200		227				**Unreviewed 227
2750.150 H Hauling											
						Quan:	15.00 TON	Hrs/Shft:	10.00	Cal: 510	WC: 4000
<u>HT</u>	Hauling Truck & Pup Crew			0.63 CH	Prod:	235.0000 US	Lab Pcs:	1.00	Eqp Pcs:		1.00
8TTP	Dump Truck & Pup	1.00	0.64 HR		109.700				70		70
DR	Driver	1.00	0.64 MH		28.000	50					50
\$119.85	0.0426 MH/TON		0.64 MH		[1.314]	50			70		120
====> Item Totals: 2100 - Altitude Vault											
\$33,690.73	103.6400 MH/LS		103.64 MH		[3391.21]	8,185	16,240	534	8,732		33,691
33,690.730	1 LS					8,185.22	16,239.88	533.75	8,731.88		33,690.73
Total of Above Sub-Biditems											
====> Item Totals: 1900 - Altitude Valve Vault											
\$72,118.18	153.6400 MH/LS		153.64 MH		[5151.21]	12,258	50,002	534	9,325		72,118
72,118.180	1 LS					12,257.57	50,002.23	533.75	9,324.63		72,118.18
BID ITEM = 2200											
Description =	Electrical/SCADA/Instrumentation Budget				Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		1.000

Direct Cost Report

Activity Resource	Desc	Quantity Pcs	Unit MH/Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub- Contract	Total
BID ITEM = 2200	CLIENT# = 6									
Description =	Electrical/SCADA/Instrumentation Budget		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
7900	ELC Electrical Complete		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6325		
4ELE	Electrical Subcontractor	1.00	1.00 LS	50,000.000				50,000		50,000
BID ITEM = 2300	CLIENT# = 7									
Description =	24 & 16 Inch Pipe & Valve Materials PO #		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
2400	IPL Irrigation Pipe Laying		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6229		
2PIPE	Pipe@107.25%	1.00	1.00 LS	1,171,062.530		1,255,965				1,255,965
=====>	Item Totals: 2300 - 24 & 16 Inch Pipe & Valve Materials PO #									
	\$1,255,964.56			[]		1,255,965				1,255,965
	1,255,964.560	1 LS				1,255,964.56				1,255,964.56
BID ITEM = 2400	CLIENT# = 8									
Description =	DIP Fitting PO #2		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
2400	IPL Irrigation Pipe Laying		Quan:	1.00 LS	Hrs/Shft:	10.00	Cal: 510	WC: 6229		
2FITTINGS	Fittings@107.25%	1.00	1.00 LS	78,066.190		83,726				83,726
=====>	Item Totals: 2400 - DIP Fitting PO #2									
	\$83,725.99			[]		83,726				83,726
	83,725.990	1 LS				83,725.99				83,725.99
BID ITEM = 2500	CLIENT# = 9									
Description =	Markup 7%		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
There are no activities in this biditem.										
BID ITEM = 2600	CLIENT# = 10									
Description =	Contingency 2.5%		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
There are no activities in this biditem.										
\$4,265,845.45	*** Report Totals ***	11,268.80	MH		840,777	2,031,884	103,221	713,793	576,170	4,265,845

>>> indicates Non Additive Activity

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

The estimate was prepared with TAKEOFF Quantities.

This report shows TAKEOFF Quantities with the resources.

"Unreviewed" Activities are marked.

Bid Date: 12/10/21 Owner: Engineering Firm:

Estimator-In-Charge:

Vancon, Inc.
21187CITY
Chad

Santquin CMGC #1 Tank/Pipe

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Direct Cost Report

Activity	Desc	Quantity	Unit	MH/Unit	Unit	Labor	Perm	Constr	Equip	Sub-	Total
Resource		Pcs			Cost		Material	Matl/Exp	Ment	Contract	

BID ITEM = 2600 CLIENT# = 10
Description = Contingency 2.5% Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

JOB NOTES

Estimate created on: 08/30/2021 by User#: 6 - David
Source estimate used: R:\EST\ESTMAST

*****Estimate created on: 12/03/2021 by User#: 10 - Doug G
Source estimate used: R:\EST\21152

*****Estimate created on: 12/09/2021 by User#: 2 - Chad
Source estimate used: R:\EST\21187

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

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

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

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

509	5 -9 HOUR DAY
510	5 -10 HOUR DAY (Default Calendar)
511	5 - 11 HOUR DAY
610	6 - 10 HOUR
WE	WEEKEND