

Interior Gas Utility

Board of Directors
Special Business Meeting
August 26, 2015
4:00PM – 6:00PM
100 Cushman Street, Ste. 501, Fairbanks, Alaska

AGENDA

I. Call to Order

- Roll call
- Approval of Agenda

II. Special Business Meeting

• Increase the Change Order Authority for IFB 2015-G-02 Phase 1, Zone B construction contract by \$300,000

III. Directors Comments

IV. Adjourn



Interior Gas Utility BOARD MEMORANDUM No. 2015-13

Meeting Date: August 26, 2015

From: General Manager, IGU

Subject: Recommendation for the increase of Change Order Authority for the contract

with Utility Technologies, Inc. for the construction of the distribution System

Phase 1 – Zone B (IFB 2015-G-02) (\$300,000)

IGU has competitively solicited an Invitation for Bid for the above referenced project and received six (6) bids.

The work is for the installation of approximately 145,000 linear feet of Owner-Furnished and Contractor installed 2-inch, 4-inch, and 8-inch HDPE pipe, installing valves, fittings, locate wire and related appurtenances in Zone B of Phase 1 near the City of North Pole, Alaska.

On March 27, 2015, the IGU Board awarded a contract to Utility Technologies, Inc. (UTI) in the amount not to exceed \$4,478,900.00 along with a change order authority of \$300,000 without further Board action. (BM 2015-06). The Change Order authority represented approximately 7% of the initial contract value to adjustments for the purposes of benefitting the project. The amendment under consideration recommends an increase of contract change order authority by the amount of \$300,000.

Construction began in mid-May 2015 with substantial completion scheduled for September 15, 2015.

As work has progressed, the increased quantities in Zone B project are the result of two major pay quantities. First is the total length of installed gas main crossings under driveways as the widths of the driveways in the Zone B portion of the Phase 1 project were substantially longer than the original estimated 20 feet for each driveway. Secondly the quantities for additional restoration necessary in the Alaska Department of Transportation and Public Facilities (ADOT) rights-of-ways (ROW) substantially increased. This was the result of the project not receiving the final issued ROW permits from the ADOT until after the pipe installation contracts were awarded and under contract. The final ROW permit requirements called for a standard of restoration more stringent and atypical of ADOT ROW permits issued previously for other work within their ROWs.

It is recommended that the Board approve this amendment to Utility Technologies, Inc., for a not to exceed increase in the amount of \$300,000.00 for a new total contract amount not to exceed \$5,078,900.00.

The Project Manager, with concurrence of the General Manager, requests additional change order authority without further Board approval in the not to exceed amount of \$300,000.00 for a total change order authority of \$600,000.00. This increased authority represents approximately 6.7% of the initial contract value to address unknown changes and adjustments for purposes of benefiting the project.

Prepared by: David J. Prusak, PE Project Manager, Submitted by: Steve Haagenson, P.E., General Manager

Approved:

Michael T. Meeks Date

Chair, IGU Board of Directors





MEMORANDUM

То	David Prusak	From	Keith Hanneman/Wesley Hopwood								
Firm	Interior Gas Utility	Date	August 24, 2015								
		Project #									
RE	August 2015 End of Project Budget Projections										

As requested, we have updated the cost projections for each project so that you can review with the board and request adjustments of the change order authority as needed.

We are on track to close out the project with under a 1% increase for the construction project. This estimate includes a budget allowance for each zone for the final restoration of the Alaska Department of Transportation and Public Facilities (ADOT) rights-of-ways (ROW) as well as other potential costs to closeout. When taken with the fact that the clearing contract was about \$150K under budget the overall project delivery is anticipated to be approximately 1% of the bid price.

IGU Phase 1 Budget Projection: August 24, 2015										
				%						
	Bid	Projected	Difference	Change						
Zone A	\$ 7,439,993	\$ 7,051,886	\$ (388,107)	-5.2%						
Zone B	\$ 4,478,900	\$ 4,965,225	\$ 486,325	10.9%						
Zone C	\$ 3,594,740	\$ 3,886,011	\$ 291,271	8.1%						
Total	\$15,513,633	\$15,878,121	\$ 389,488	2.5%						

We have also provided the summary sheets for each zone that present the expected final cost for each bid item and a short note as to the reason for the overrun or underrun. I asked the contractors to provide updates on the units installed so that we could then forecast the remaining work and the final cost. This is necessary on a unit price contract as we know the overall pipe length for the project but the lengths required to bore under highways, sloughs, Petroleum Oil Lubricant (POL) lines, etc. are driven by the location of other utilities and other field conditions that are not precisely known until construction.

The advantage of a unit price project is that the contractor gets paid for the units installed and does not have to pad his bid with contingencies as he would if it was a lump sum project. If a utility or POL is deeper than expected then the additional length of pipe required for routing is paid for. It also gives us the flexibility we need to quickly make minor design adjustments and keep the contractor going without negotiating change orders for each change. The project has also benefited in savings from the contractor's generally performing more directional drilling throughout the distribution system than anticipated. This has reduced the restoration and overall costs for the project, and reduced the inconvenience to potential customers and the public.

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<u>For Zone A</u>, we have underruns on some of the "hard restoration" items (i.e. subbase, 2" roadway paving, curb and gutter, and sidewalk) in large part due to our negotiation of an "Owner Directed Bore" pay item that was based on a blended cost of the main, roadway, and driveway costs it replaced. This provided a mechanism to pay the contractor to make long bores under the paved streets, parking lots, and under sidewalks without disturbing often new construction (some from this summer and last) and minimizing the disturbance to the public and business owners. The other major part of the overall underrun is about \$175K for deletion of about 2,500 feet of 8" line along the Old Richardson highway where ADOT is pursuing a shift in the ROW to solve some encroachment issues.

The overruns stemmed mainly from placing the base course gravel which was used because the contractor was allowed to trench across about 200 gravel surfaced driveways to save the project about \$30K. The topsoil overrun was due to the contractor choosing to trench in areas we anticipated during design that they would choose to bore. The asphalt overrun is mainly due to having to remove the pavement to allow for trenching across the driveways of 12 to 15 homes where we could not find the sewer and water services. While more expensive than the boring, the boring could not be done safely without the services located and it was cheaper than repair of unknown damage discovered this winter.

Project wide the drilling conditions below the water table have been found to be difficult due to cobbled soils that do not hold a shape well. In all zones drilling lengths have been extended to allow for shallower entry and exit angles. A shallower angle puts less strain on the pipe and helps to compensate for the difficult soil conditions.

The closeout estimate includes \$135,000 of negotiated change orders and \$265,000 of estimates for potential change orders including a \$175,000 allowance for DOT ROW restoration.

<u>For Zone B</u>, we had estimated a lower amount of "hard restoration" due to its more rural nature when compared to Zone A, but have again underrun these items as the Contractor managed to avoid disturbing many of the driveways.

The overrun is mainly in the 2" driveway crossings pay item. Our estimate was based on the mapping information, however, we are finding approximately 50% more lots than expected are developed to a level that have driveways that needed to be bored under. There are also more multiple driveways than expected. The lesson learned is for the need to count each driveway in the field in the future during the design period. Contributing to the overrun is the fact that the contractor is claiming the work required for the driveway bore is about 50% more than represented in the contract. The lengths were substantially longer than the 20' planned for each driveway due to the driveway configuration in this portion of the North Pole area (i.e. wider), hence the pay quantities will likely be adjusted to cover the additional lengths necessary to cross these driveways.

The closeout estimate includes \$65,000 of negotiated change orders and \$175,000 of estimates for ADOT ROW restoration.

<u>For Zone C</u>, the contractor chose to install most of their pipe by drilling which resulted in very little surface disturbance. Consequently, the use of restoration quantities has been minimal, which has resulted in a large underrun.

As in Zone B, driveways in Zone C were underestimated which resulted in an overrun for those units. Difficult drilling conditions resulted in longer drill lengths under sloughs and petroleum pipelines.

August 2015 End of Project Budget Projections August 24, 2015 Page 3

The more gradual angles for directional drilling in the gas mains that did cross under these obstacles aided the contractor in reducing the friction in pulling the pipe through the cobbled soil successfully.

The connection point to Phase 2 was moved to further East on the Richardson Highway. This resulted in the substitution of one road of 2" pipe to 4". This resulted in a cost increase of about \$75,000.

The closeout estimate includes \$65,000 of negotiated change orders and \$175,000 allowance for ADOT ROW restoration.

Zon				e A 2015-G-01: Budget Update: 8/18/2015								
			Central Envir	ronmental, Inc.								
	Work Description	Units	Bid Qty.	Unit Bid Price	Total Bid Price	Quantity Installed Through 8/20 85% Complete	8/20 End of Project Quantity Projection	Unit Price	8/20 Budget Projection Price	Difference	% of Bid	Notes
017300 - 01	Alignment Staking	Mile	25.5	\$1,787.70	\$45,586.35	25.5	26.0	\$1,787.70	\$46,480.20	\$893.85	102%	Additional staking required for realignments to solve conflicts in City and ADOT permit areas
312000 - 01	Base Course	TON	150	\$54.96	\$8,244.00	750	882	\$54.96	\$48,494.12	\$40,250.12	588%	More base course used because Contractor allowed to trench across nearly 200 gravel surface driveways instead of boring. Net \$60% savings
312000 - 02	Bedding	TON	400	\$43.16	\$17,264.00	257	302	\$43.16	\$13,049.55	(\$4,214.45)	76%	Most used around valves with some used for piping at frost susceptible/non-frost susceptible soil interface.
312000 - 03	Subbase Type "A"	TON	3,400	\$49.48	\$168,232.00	1,350	2,475	\$49.48	\$122,463.00	(\$45,769.00)	73%	Mainly used at intersection tie-ins.
321216 - 01	1.5-Inch Asphalt Paving	SY	100	\$59.59	\$5,959.00	200	600	\$59.59	\$35,754.00	\$29,795.00	600%	Removed asphalt across lower portion of about a dozen driveways to allow trenching since sewer and water services could not be found.
321216 - 02	2-Inch Asphalt Paving	SY	400	\$71.81	\$28,724.00		200	\$71.81	\$14,362.00	(\$14,362.00)	50%	Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
321313 - 01	Concrete Curb and Gutter	LF	1,500	\$64.05	\$96,075.00		100	\$64.05	\$6,405.00	(\$89,670.00)	7%	Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
321313 - 02	Concrete Sidewalk	SF	9,000	\$15.05	\$135,450.00	-	500	\$15.05	\$7,525.00	(\$127,925.00)	6%	Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
329200 - 01	Topsoil	SY	5,000	\$19.30	\$96,500.00	15,000	15,000	\$19.30	\$289,500.00	\$193,000.00	300%	Contractor elected to trench across nice lawns that we anticipated they would elect to bore under.
330523 - 01	Open Cut 14-Inch Casing Installation	LF	400	\$571.65	\$228,660.00	335	358	\$571.65	\$204,650.70	(\$24,009.30)	90%	Distance shifted to trenchless installation
330523 - 02	Trenchless 14-Inch Casing Installation	LF	580	\$830.27	\$481,556.60	642	622	\$830.27	\$516,427.94	\$34,871.34	107%	Distance shifted from open trench installation
330524 - 01	2-Inch HDD Road Crossing	LF	7,500	\$39.67	\$297,525.00	6,090	7,250	\$39.67	\$287,607.50	(\$9,917.50)	97%	More road crossings than anticipated
330524 - 02	4-Inch HDD Road Crossing	LF	800	\$86.99	\$69,592.00	540	800	\$86.99	\$69,592.00	\$0.00	100%	Anticipated to be on bid quantity
330524 - 03	8-Inch HDD Road Crossing	LF	900	\$135.67	\$122,103.00	870	930	\$135.67	\$126,173.10	\$4,070.10	103%	Anticipated to be near bid quantity
330524 - 04	2-Inch HDD Driveway Crossing	LF	15,300	\$60.06	\$918,918.00	3,780	4,447	\$60.06	\$267,090.35	(\$651,827.65)	29%	Nearly 200 driveways (4,000 ft) with gravel surfaces were trenched across instead of bored. Shifted additional length to ODB pay item
330524 - 05	4-Inch HDD Driveway Crossing	LF	2,000	\$96.30	\$192,600.00	500	1,000	\$96.30	\$96,300.00	(\$96,300.00)	50%	Shifted 4" to run through Carr's Parking Lot eliminating driveway and wide access crossings. Shifted additional length to ODB pay item
330524 - 06	8-Inch HDD Driveway Crossing	LF	3,300	\$160.50	\$529,650.00	160	750	\$160.50	\$120,375.00	(\$409,275.00)	23%	Shifted length to ODB pay item
330524 - 07	2-Inch HDD Slough/POL Crossing	LF	500	\$36.21	\$18,105.00		-	\$36.21	\$0.00	(\$18,105.00)	0%	This was to cover upsizing of Carey slough crossing which is now 4" and POL crossing such as Canol which went away
330524 - 08	4-Inch HDD Slough/POL Crossing	LF	650	\$54.58	\$35,477.00	586	1,050	\$54.58	\$57,309.00	\$21,832.00	162%	Increase due to switching Carey slough crossing to 4"
330524 - 09	8-Inch HDD Slough/POL Crossing	LF	3,450	\$106.87	\$368,701.50	2,830	4,000	\$106.87	\$427,480.00	\$58,778.50	116%	Longer lengths required for boring under POL lines and sloughs than planned
330524 - 10	8-Inch TAPS Crossing	LF	NIC	NIC					\$0.00	\$0.00		
330524 - 011	2-Inch ODB	LF	-	\$0.00	\$0.00	2,500	5,038	\$49.00	\$246,862.00	\$246,862.00		Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
330524 - 012	4-Inch ODB	LF	-	\$0.00	\$0.00	557	1,687	\$65.00	\$109,655.00	\$109,655.00		Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
330524 - 013	8-Inch ODB	LF	-	\$0.00	\$0.00	324	490	\$117.00	\$57,330.00	\$57,330.00		Minimized street, sidewalk, and businsess disturbance by negotiating Owner Directed Bore (ODB) locations
335100 - 01	2-Inch HDPE Main	LF	76,000	\$33.05	\$2,511,800.00	72,408	80,204	\$33.05	\$2,650,740.26	\$138,940.26	106%	Quantity shifted from Road, Driveway, Slough/POL crossing
335100 - 02	4-Inch HDPE Main	LF	9,100	\$41.69	\$379,379.00	6,159	7,637	\$41.69	\$318,386.53	(\$60,992.47)	84%	Quantity shifted to ODB and Slough/POL crossing
335100 - 03	8-Inch HDPE Main	LF	13,200	\$51.81	\$683,892.00	11,379	10,875	\$51.81	\$563,433.75	(\$120,458.25)	82%	Quantity shifted to ODB. Slough/POL, and road crossing
CHANGE	A-02 Additional Clearing					1			\$18,440.00	\$18,440.00		Additional clearing in easements obtained after bidding or alignment shifts after clearing
CHANGE	A-03 - Additional restoration								\$65,000.00	\$65,000.00		2400 sy chip/slash removal, 2400 sy city cleanup (similar to chip slash but scattered over more area), 100 stumps to grind, 500 sy group stump grinding
CHANGE	Future - Potholing in asphalt								\$15,000.00	\$15,000.00		Est of T&M for pothole repair in the City Streets
CHANGE	Future - Potholing								\$50,000.00	\$50,000.00		Est of T&M for potential claim for potholes
CHANGE	Future - DOT Restoration								\$175,000.00	\$175,000.00		Est of T&M for restoration in DOT ROW.
CHANGE	Future - Misc. Costs								\$25,000.00	\$25,000.00		Est of T&M for the miscellaneous items due to changes or unforseen conditions (buried propane tanks, etc.)
	TOTAL				\$7,439,993.45				\$7,051,886.00	(\$388,107.45)		

	Utilities Technologies, Inc											
	Work Description	Units	Bid Qty.	Unit Bid Price	Total Bid Price	Quantity Billed Through 8/09 84% Complete	8/20 End of Project Quantity Projection	Unit Price	8/23 Budget Projection Price	Difference	% of Bid	Notes
017300 - 01	Alignment Staking	Mile	29.5	\$5,300.00	\$156,350.00	19.9	30.5	\$5,300.00	\$161,650.00	\$5,300.00	103%	Additional staking required for relagnments to solve ADOT permit issues
312000 - 01	Base Course	TON	150	\$25.00	\$3,750.00	98	150	\$25.00	\$0.00	(\$3,750.00)	100%	No significant change anticipated
312000 - 02	Bedding	TON	800	\$40.00	\$32,000.00	8	20	\$40.00	\$800.00	(\$31,200.00)	3%	Only used around valves. None used for piping at frost susceptible/non-frost susceptible soil interface since nearly 100% was bored.
312000 - 03	Subbase Type "A"	TON	3,900	\$15.00	\$58,500.00	21	600	\$15.00	\$9,000.00	(\$49,500.00)	15%	Minimal driveway and pavement disturbance
321216 - 01	1.5-Inch Asphalt Paving	SY	NIC		NIC		NIC		\$0.00	\$0.00		
321216 - 02	2-Inch Asphalt Paving	SY	650	\$135.00	\$87,750.00		100	\$135.00	\$13,500.00	(\$74,250.00)	15%	Minimal driveway and pavement disturbance
321313 - 01	Concrete Curb and Gutter	LF	NIC		NIC		NIC		\$0.00	\$0.00		
321313 - 02	Concrete Sidewalk	SF	NIC		NIC		NIC		\$0.00	\$0.00		
329200 - 01	Topsoil	SY	3,000	\$12.00	\$36,000.00	252	3,000	\$12.00	\$36,000.00	\$0.00	100%	10% used to dated. May underrun if DOT doesn't require a lot along Hurst Road
330523 - 01	Open Cut 14-Inch Casing Installation	LF	NIC		NIC		NIC		\$0.00	\$0.00		
330523 - 02	Trenchless 14-Inch Casing Installation	LF	NIC		NIC		NIC		\$0.00	\$0.00		
330524 - 01	2-Inch HDD Road Crossing	LF	7,400	\$78.50	\$580,900.00	6,590	7,753	\$78.50	\$608,605.88	\$27,705.88	105%	More road crossings than anticipated
330524 - 02	4-Inch HDD Road Crossing	LF	1,700	\$100.00	\$170,000.00	776	913	\$100.00	\$91,294.12	(\$78,705.88)	54%	Shifted 4" to north along portions of Hurst reduced number of road crossings
330524 - 03	8-Inch HDD Road Crossing	LF	600	\$135.50	\$81,300.00	421	495	\$135.50	\$67,112.35	(\$14,187.65)	83%	Projected length to complete final work across Hurst which has
330524 - 04	2-Inch HDD Driveway Crossing	LF	6,300	\$78.50	\$494,550.00	13,297	14,000	\$78.50	\$1,099,000.00	\$604,450.00	222%	More lots developed and more multiple driveways per lot than expected, paying actuals rather than 20' per driveway, at the time of this estimate closer to 95% of 2" was complete, remaining 10% to completion was 4"/8"
330524 - 05	4-Inch HDD Driveway Crossing	LF	1,000	\$100.00	\$100,000.00	625	735	\$100.00	\$73,529.41	(\$26,470.59)	74%	Shifted 4" to north along portions of Hurst reduced number of road crossings
330524 - 06	8-Inch HDD Driveway Crossing	LF	400	\$135.50	\$54,200.00	203	239	\$135.50	\$32,360.59	(\$21,839.41)	60%	Fewer crossings along Newby than anticipated
330524 - 07	2-Inch HDD Slough/POL Crossing	LF	NIC		NIC		NIC		\$0.00	\$0.00		
330524 - 08	4-Inch HDD Slough/POL Crossing	LF	NIC		NIC		NIC		\$0.00	\$0.00		
330524 - 09	8-Inch HDD Slough/POL Crossing	LF	NIC		NIC		NIC		\$0.00	\$0.00		
330524 - 10	8-Inch TAPS Crossing	LF	370	\$100.00	\$37,000.00		680	\$100.00	\$68,000.00	\$31,000.00	184%	Longer lengths required for boring under POL lines than planned and length extended during construction to avoid any digging in Alyeska ROW
335100 - 01	2-Inch HDPE Main	LF	113,500	\$16.00	\$1,816,000.00	74,818	105,246	\$16.00	\$1,683,936.94	(\$132,063.06)	93%	Quantity shifted to Road, Driveway, Slough/POL crossing
335100 - 02	4-Inch HDPE Main	LF	17,300	\$32.00	\$553,600.00	6,588	17,751	\$32.00	\$568,024.47	\$14,424.47	103%	Quantity shifted from Road, Driveway, Slough/POL crossing
335100 - 03	8-Inch HDPE Main	LF	6,200	\$35.00	\$217,000.00	5,434	6,069	\$35.00	\$212,410.88	(\$4,589.12)	98%	Quantity shifted to Road, Driveway, Slough/POL crossing
CHANGE	B-01 - Additional Restoration								\$65,000.00	\$65,000.00		
CHANGE	Future - DOT Restoration								\$175,000.00	\$175,000.00		
	TOTAL				\$4,478,900.00				\$4,965,224.65	\$486,324.65		

		Z	one C 20:	15-G-03: Budge	t Update: 8/2	23/2015					
		Robinson Brothers	Construction, Inc.								
	Work Description	Units	Bid Qty.	Unit Bid Price	Total Bid Price	8/21 End of Project Quantity Projection	Unit Price	8/21 Budget Projection Price	Difference	% of Bid	Notes
017300 - 01	Alignment Staking	Mile	19	\$7,500.00	\$142,500.00	19	\$7,500.00	\$142,500.00	\$0.00	100.0%	No Change
312000 - 01	Base Course	TON	NIC	NIC			NIC	\$0.00	\$0.00		
312000 - 02	Bedding	TON	600	\$30.00	\$18,000.00	50	\$30.00	\$1,500.00	(\$16,500.00)	8.3%	Only used around valves. None used for piping at frost susceptible/non- frost susceptible soil interface since nearly 100% was bored.
312000 - 03	Subbase Type "A"	TON	2,200	\$65.00	\$143,000.00	-	\$65.00	\$0.00	(\$143,000.00)	0.0%	No pavement disturbance
321216 - 01	1.5-Inch Asphalt Paving	SY	NIC	NIC			NIC	\$0.00	\$0.00		
321216 - 02	2-Inch Asphalt Paving	SY	NIC	NIC			NIC	\$0.00	\$0.00		
321313 - 01	Concrete Curb and Gutter	LF	NIC	NIC			NIC	\$0.00	\$0.00		
321313 - 02	Concrete Sidewalk	SF	NIC	NIC			NIC	\$0.00	\$0.00		
329200 - 01	Topsoil	SY	3,000	\$45.00	\$135,000.00	150	\$45.00	\$6,750.00	(\$128,250.00)	5.0%	Virtually no surface disturbance since nearly 100% was bored
330523 - 01	Open Cut 14-Inch Casing Installation	LF	NIC	NIC			NIC	\$0.00	\$0.00		
330523 - 02	Trenchless 14-Inch Casing Installation	LF	NIC	NIC			NIC	\$0.00	\$0.00		
330524 - 01	2-Inch HDD Road Crossing	LF	4,600	\$69.00	\$317,400.00	5,842	\$69.00	\$403,098.00	\$85,698.00	127.0%	Underestimated road crossings
330524 - 02	4-Inch HDD Road Crossing	LF	100	\$80.00	\$8,000.00	380	\$80.00	\$30,400.00	\$22,400.00	380.0%	Additional road crossings due to rerouting 4" along Probert to connect to new Phase 2 connection point required along Richardson Highway south of Laurance.
330524 - 03	8-Inch HDD Road Crossing	LF	700	\$115.00	\$80,500.00	600	\$115.00	\$69,000.00	(\$11,500.00)	85.7%	some road crossing combined with slough crossings
330524 - 04	2-Inch HDD Driveway Crossing	LF	4,100	\$69.00	\$282,900.00	6,160	\$69.00	\$425,040.00	\$142,140.00	150.2%	More lots developed and more multiple driveways per lot than expected.
330524 - 05	4-Inch HDD Driveway Crossing	LF	100	\$80.00	\$8,000.00	100	\$80.00	\$8,000.00	\$0.00	100.0%	No Change
330524 - 06	8-Inch HDD Driveway Crossing	LF	500	\$115.00	\$57,500.00	710	\$115.00	\$81,650.00	\$24,150.00	142.0%	added drill under Auot repair
330524 - 07	2-Inch HDD Slough/POL Crossing	LF	1,800	\$69.00	\$124,200.00	2,575	\$69.00	\$177,675.00	\$53,475.00	143.1%	Change to accommodate longer lengths required for boring under POL lines than planned, extended HDD lengths to accommodate difficult HDD soils, serveral previously unidentified sloughs were added
330524 - 08	4-Inch HDD Slough/POL Crossing	LF	NIC	NIC			NIC	\$0.00	\$0.00		Reconfiguration around Probert resulted in 4" POL crossing of HTF
330524 - 09	8-Inch HDD Slough/POL Crossing	LF	1,160	\$155.00	\$179,800.00	2,202	\$155.00	\$341,310.00	\$161,510.00	189.8%	Longer lengths required for boring under POL lines than planned. Slough added on Laurance that could not be trenched.
330524 - 10	8-Inch TAPS Crossing	LF	NIC	NIC			NIC	\$0.00	\$0.00		
335100 - 01	2-Inch HDPE Main	LF	78,400	\$20.35	\$1,595,440.00	70,836	\$20.35	\$1,441,512.60	(\$153,927.40)	90.4%	Quantity shifted to Road, Driveway, Slough/POL crossing
335100 - 02	4-Inch HDPE Main	LF	700	\$50.00	\$35,000.00	2,305	\$50.00	\$115,250.00	\$80,250.00	329.3%	Approximately 1,600 feet of 4" added for reroute along Probert to new Phase 2 connection point required along Richardson Highway south of Laurance.
335100 - 03	8-Inch HDPE Main	LF	8,500	\$55.00	\$467,500.00	7,315	\$55.00	\$402,325.00	(\$65,175.00)	86.1%	No Change
CHANGE	C-01 - Additional Restoration							\$65,000.00	\$65,000.00		Restoration in front of residences
CHANGE	Future - DOT Restoration							\$175,000.00	\$175,000.00		Restoration in DOT ROW
	TOTAL				\$3,594,740.00			\$3,886,010.60	\$291,270.60		