## A G E N D A REGULAR MEETING OF THE BOARD OF THE ALLEGHENY COUNTY SANITARY AUTHORITY THURSDAY, JULY 28, 2022

## I. Roll Call

Pledge of Allegiance

## II. Information Items

- A. Report on 2022 Operating Costs and Revenues compared to the budget as per attached **Exhibit A** Karen Fantoni
- B. 2022 Capital Budget Status Report as per attached **Exhibit B** Kim Kennedy
- C. ALCOSAN Open House, Saturday, September 10<sup>th</sup> Joey Vallarian
- D. Report of actions by the Executive Director in approval of construction change orders less than \$30,000.00 and a cumulative total change order value to date of less than five percent of the original contract amount: **Exhibit C** 
  - 1. Change Order No. 3 (Final), under Contract 1711, "Annual Interceptor Cleaning Contract", from Jet Jack, Inc., a credit in the amount of (\$616,737.96) to balance out final quantities and add 268 days to the Contract. The current amount of the contract is \$3,697,424.50. The final value of the contract including this change order is \$3,080,686.54.
  - 2. No. 2, under Contract 1723-E, "North End Facilities" from Bronder Technical Services, for the amount of \$700.00. These costs are associated with repairs to a substation circuit breaker. The original amount of the contract was \$3,455,555.00. The current value of the contract including this change order is \$3,481,489.00.
  - 3. No. 5, under Contract 1735-G, "ALCOSAN Parking Garage," from Mike Coates Construction Co., for the amount of \$5,711.39. These costs are associated with modifications to the stairs within the parking garage, as directed. The original amount of the contract was \$10,221,843.05. The current value of the contract including this change order is \$10,469,930.06.
  - 4. No. 2, under Contract 1735-E, "ALCOSAN Parking Garage", from Bronder Technical Services, for the amount of \$3,508.54. This change order includes providing power to a split system condensate pump and modifications to accommodate additional charging stations for electric vehicles. The original amount of the contract was \$1,149,217.00. The current value of the contract including this change order is \$1,139,527.64.

## III. Action Items

- A. Approval of the minutes of the Regular Board Meeting of June 23, 2022.
- B. Consider authorizing payment of invoices in excess of \$20,100.00, processed during the period of June 16, 2022 to July 18, 2022, and review the summary report of expenses in excess of \$10,900.00, processed during the same period as per attached: **Exhibit D**
- C. Motion to award the following contract:
  - 1. Contract No. 1759-G "Environmental Compliance Facility," to Hudson Companies at the price of \$18,405,200.00, which includes the base contract bid of \$16,732,000.00 and a 10% contingency of \$1,673,200.00. Bids received are indicated on **Exhibit E**
  - Contract No. 1759-E "Environmental Compliance Facility," to Bronder Technical Services at the price of \$3,720,970.00, which includes the base contract bid of \$3,382,700.00 and a 10% contingency of \$338,270.00. Bids received are indicated on <u>Exhibit F</u>
  - 3. Contract No. 1759-H "Environmental Compliance Facility," to Guy's Mechanical at the price of \$10,007,800.00, which includes the base contract bid of \$9,098,000.00 and a 10% contingency of \$909,800.00. Bids received are indicated on **Exhibit G**
  - 4. Contract No. 1759-P "Environmental Compliance Facility," to SSM Industries at the price of \$3,374,800.00, which includes the base contract bid of \$3,068,000.00, and a 10% contingency of \$306,800.00. Bids received are indicated on **Exhibit H**
  - 5. Contract No. 1765 "CCTV Inspection of ALCOSAN Drop Shafts" Robinson Pipe Cleaning Company at the price of \$510,950.00, which includes the base contract bid of \$464,500.00 and a 10% contingency of \$46,450.00. Bids received are indicated on <a href="Exhibit I">Exhibit I</a>
  - 6. Contract No. 1767 "Furnish and Deliver Sodium Bisulfite" to Southern Ionics, Inc at the price of \$0.2031 per pound. Bids received are indicated on **Exhibit J**
  - 7. Contract No. 1768 "Furnish and Deliver Chemicals and Technical Service for Treatment of Boiler Water, Steam and Condensate" to Rochester Midland at the price indicated on <a href="Exhibit K">Exhibit K</a>
- D. Motion to authorize the preparation of specifications and advertisements for bids for the following contracts: **Exhibit L** 
  - 1. Contract No. 1771, "Furnish and Deliver Teflon Tubing for Industrial Waste Sampling"
  - 2. Contract No. 1772, "Emergency Sewer Contract 2022-2023"

- 3. Contract No. 1773, "Sheraden Park Ecosystem Maintenance"
- 4. Contract No. 1774, "Furnish and Deliver Incinerator Bed Sand"
- E. Motion to approve the following change orders that exceed \$30,000.00 in value or whose cumulative total value with previously approved change orders is greater than five percent of the original contract amount: **Exhibit M** 
  - 1. No. 5, under Contract 1728-G, "Return Activated Sludge (RAS) Pipe and Pump Replacement" from Kokosing Construction, for the amount of \$59,139.59. These costs are associated with roof and wall modifications necessary to set the new west side pumps and to provide two 42" couplings for installation onto the RAS piping installed on the aeration tank decks. The original amount of the contract was \$14,166,850.00. The current value of the contract including this change order is \$14,436,661.36.
  - 2. No. 1, under Contract 1747, "Temporary Primary Disinfection" from Kokosing Construction, for the amount of \$28,250.00. These costs are associated with changing the flow switch to a pressure switch at the chlorine analyzer, adding a rotometer meter, piping, and valves at the discharge point into primary classifiers, the addition of a flow meter at the sodium hypo pump discharge, and for installation of overhead electric to sampling shed. This cost also includes a credit for re-routing the bisulfite piping and reducing the road ramp length. The original amount of the contract was \$502,000.00. The current value of the contract including this change order is \$530,250.00.
- F. Motion for modification of Service Authorization 314 for Keystone Acquisition Services, under the agreement for Engineering Consultant Services, for an additional one (1) year no cost extension of services, to continue their work associated with Property and Right of Way Acquisition Services.
- G. Motion for modification of Service Authorization 316 for Hanna Langholz Wilson Ellis, under the agreement for Engineering Consultant Services, for an additional one (1) year no cost extension of services, to continue their work associated with Property and Right of Way Acquisition Services.
- H. Motion for modification Service Authorization 350 for AEWorks for the construction phase services and some additional scope items associated with the design of the Environmental Compliance Facility for an amount not to exceed \$939,000.00.
- I. Motion for modification Service Authorization 353 for G. Stephens for additional work associated with the construction management services of the ALCOSAN Parking Garage and the construction management services of the Environmental Compliance Facility for an amount not to exceed \$2,389,266.00.
- J. Motion to authorize payment for acquired personal property assets (machinery and equipment) to Battaglia Motors and Battaglia Auto Recycling, as appraised, in the amount of \$143,090.00.

- K. Motion to authorize the Executive Director to enter into a second Coordination Agreement with the Pittsburgh Water and Sewer Authority in a form acceptable to the Solicitor for the purposes of sharing sensitive information that is exempt from disclosure under the Pennsylvania Right-to-Know Law during the implementation of the Clean Water Plan and PWSA's long-term wet weather control plan.
- L. Motion to approve an agreement with First Student, Inc. to continue providing shuttle services for employees to and from two off-site temporary parking lots and the ALCOSAN campus during construction of the Parking Garage from September 1, 2022, until October 31, 2022, in an amount not to exceed \$78,500.00.
- M. Motion to authorize payment to Sherwin Williams or its approved contractors for costs associated with repaving, fencing and security equipment arising from acquisition of real property for implementation of the Clean Water Plan, in an amount not to exceed \$327,193.00.
- N. Motion to adopt Resolution 2022-7-01 authorizing the Executive Director to execute the Project Management Plan with U.S. Army Corp of Engineers and a Project Partnership Agreement with the Department of the Army for work associated with the Spring Garden Stream Mitigation Project in accordance with requirements for a Non-Federal Sponsor under Section 313 of the Water Resources Development Act.
- O. Motion to adopt Resolution 2022-7-02 authorizing the Executive Director to enter into certain agreements with Norfolk Southern Railway Company for work within the railroad right-of-way as part of the Ohio River Tunnel project.
- P. Motion to adopt Resolution No. 2022-7-03 authorizing the Executive Director to execute a non-reimbursement agreement with the Pennsylvania Department of Transportation regarding minor adjustments to seven manholes on State Route 2128.

## IV. New Business

Adjournment (Next meeting: September 22, 2022)

**CURRENT EXPENSES** 

	ANNIIAI	JANUARY 1, 2022	THRU	JUNE 30, 2022	BUDGET
7	APPROPRIATION	APPROPRIATIONS	EXPENDITURES	BALANCE	USED TO DATE
INTERCEPTOR MAINTENANCE	\$12,227,100	\$6,113,550	\$3,398,472	\$2,715,078	27.8%
PLANT OPERATIONS	25,857,700	12,928,850	12,608,473	320,377	48.8%
ENVIRONMENTAL COMPLIANCE	5,405,900	2,702,950	2,001,040	701,910	37.0%
CUSTOMER SERVICE & BILLING	3,824,200	1,912,100	1,985,795	-73,695	51.9% LS
MANAGEMENT INFORMATION SERVICE	3,562,600	1,781,300	1,854,706	-73,406	52.1%
PLANT MAINTENANCE	10,336,800	5,168,400	4,980,865	187,535	48.2%
ADMINISTRATION AND ENGINEERING	15,729,600	7,864,800	6,087,424	1,777,376	38.7%
PROFESSIONAL	1,165,000	582,500	278,933	303,567	23.9%
EMPLOYEE BENEFITS	26,035,500	13,017,750	11,307,894	1,709,856	43.4%
TOTAL ALL DEPARTMENTS		\$52,072,200		25	42.7%
DEBT SERVICE (AMORTIZED) rev for rfnd		\$30,458,150	\$30,458,150		
I	\$165,060,700	\$82,530,350	\$74,961,752	\$7,568,598	45.4%

PERCENT OF ANNUAL PROJECTION	TO DATE	52.8%
JUNE 30, 2022	EXCESS	\$3,619,081
THRU	ACTUAL	\$101,869,993
JANUARY 1, 2022	PROJECTIONS ACTUAL	\$98,250,913
AMMIA	PROJECTION	\$192,878,300
		EVENUES
		CURRENT REVENUES

**CURRENT REVENUES** 

PERCENT OF YEAR EXPIRED

20.0%

## **ALCOSAN 2022 Capital Budget**

## STATUS REPORT July 28, 2022

Capital Number	Project/Program Description	Current Total Estimated Costs	Total Expended thru 2021	2022 Capital Budget	2022 Expenditures to Date
	Existing Plant Projects				
\$408	Biosolids Strategic Plan	1,525,600	142,716	500,000	120
\$423	Plant Energy Efficiency Upgrades	2,319,000	1,154,703	200,000	10,786
\$464	Environmental Compliance Facility and Parking Garage	54,000,000	6,528,754	20,000,000	6,418,650
\$472	Plant Facilities and Safety Upgrades (2020-2023)	3,150,000	872,675	1,775,000	76,194
\$473	Energy Recovery Facility Improvements (2020-2022)	1,200,000	16,520	1,200,000	-
\$481	Aeration Tank Diffusers	5,000,000	742,701	3,500,000	1,305,201
\$487	Effluent Flushing Water System Improvements	6,600,000	TO THE OWNER OF THE PARTY OF TH	684,000	10,399
Subtotal	Existing Plant Projects	73,794,600	9,458,068	27,859,000	7,821,230
	Existing Interceptor System Projects				
\$469	CIPP Lining of the Mon-Sub-Aqueous Inter. & SMR Inter.	20,614,500	1,534,176	13,555,000	6,693,135
\$470	Flap Gate & Misc. Regulator Improvements at Various Loc.	3,122,000	494,941	1,000,000	1,254,593
\$471	Remote Pump Station Improvements	6,076,000	568,580	4,828,000	97,742
\$474	New Access Shaft Manholes Near A-40 and M-49 Crossing	4,876,000	212,321	2,000,000	61,828
\$483	Conveyance Rehabilitation and Enhancements (2021-2023)	2,970,000	4,145	1,859,500	62,252
\$491	Upper Saw Mill and Lower Ohio Interceptor Lining	6,616,000	-	500,000	-
Subtotal	Existing Interceptor System Projects	44,274,500	2,814,162	23,742,500	8,169,550
	Municipal Source Control Projects				
\$437	Ravine St Stream Removal and Sewer Separation	5,015,800	14,024	2,465,000	38,364
\$438	Four Mile Run Regulator (M29) & Outfall Improvements	2,804,000	258,189	2,626,500	9,553
\$440	Green Revitalization of Our Waterways Program	1,879,300	1,121,490	270,000	45,188
S447	Municipal Source Control Program	6,399,600	7,725,657	472,600	265,005
\$455	Green Infrastructure Program Manager	4,996,800	4,887,126	945,000	272,973
\$480	Spring Garden Grit Chamber	1,129,700	2,783	92,000	-
\$484	Delafield Avenue DSI	10,724,600	135,094	1,283,000	255,134
Subtotal	Municipal Source Control Projects	32,949,800	14,144,363	8,154,100	886,216
	Wet Weather Plant Expansion Projects				
\$430	Wet Weather Plant Expansion Program	49,000,000	17,925,864	5,000,000	3,488,190
\$461	North End Facilities	162,400,000	53,886,436	40,000,000	27,120,813
\$462	East Headworks	118,500,000	18,810,222	40,000,000	15,222,893
\$463	Solids Thickening and Dewatering Improvements	33,000,000	11,567	1,000,000	13,086
\$466	CSO Bypass and Disinfection	78,600,000	2,080,665	16,500,000	867,367
S467	Primary Tanks	48,100,000	2,256	200,000	_
\$468	Electrical Distribution System Upgrade	25,000,000	1,105,266	10,000,000	4,648,221
\$489	Wet Weather Pump Station	152,900,000	-	20,000	1,502
Subtotal	Wet Weather Plant Expansion Projects	667,500,000	93,822,276	112,720,000	51,362,072
	Interim Wet Weather Plan Regional Projects				
S446	Regionalization	79,520,000	27,402,385	4,750,000	1,083,528
\$448	Interim Wet Weather Planning Compliance	22,850,000	12,752,386	1,500,000	1,024,933
\$451	Property Acquisitions	41,029,000	7,684,130	9,000,000	1,225,843
\$475	Tunnel Program Management	25,481,000	2,416,448	6,370,800	
S477	Water Quality Monitoring Program	2,883,300	3,959	84,000	
\$478	Flow Targets	3,880,900	2,008	167,000	
\$485	Ohio River Tunnel (ORT) Final Design	28,950,000	20,901	8,000,000	
\$486	Allegheny River Tunnel (ART) Consolidation Sewer A72-A78	57,275,000	-	1,045,300	
S488	Ohio River Tunnel (ORT) Construction	446,450,000	-	50,000	
Subtotal	Interim Wet Weather Plan Regional Projects	708,319,200	50,282,217	30,967,100	6,631,527
\$482	Other Capital Improvements				
	Other Capital Improvements  Mobile Equipment (2022)	1,980,000	- -	1,980,000	165,450
S000		1,980,000 2,419,500	- -	1,980,000 2,419,500	
Subtotal	Mobile Equipment (2022)				1,399,147

**EXHIBIT** 

## **Change Order Exhibit**

**Allegheny County Sanita** 

**Contract No.:** 

1711

Annual Interceptor Cleaning Contract - 1711

**Change Order Number:** 

1711-CO-003

Project Name: Contractor:

Jet Jack, Inc.

Date Issued:

07.13.2022

**PCO**: PCO - 00005 Over / Under **Value of Change:**-\$616,737.96

**Description of Change:** 

Project Close Out

Reason for Change:

Project Close Out

PCO: PCO - 00004 Contract 1711 Contractor Contract Extension Request

Value of Change:

\$.00

**Description of Change:** 

Due to unforeseen weather impacts a submission for a No Cost Change Order has been requested by Jet Jack to extend the Contract 268 days from Original Completion Date of 7/12/21

Reason for Change:

Extend the existing contract term by 268 calendar days from original Finish date of 7/12/21. This will be the completion date for this contract, 4/6/2022. The other 2 PCO's 2 and 3 are for documentation only.

	-\$616,737.96
Total Add/ <deduction>:</deduction>	268 Calendar
	Days

Jamie North

Construction Manager, DLZ

## **Change Order Exhibit**

**Allegheny County Sanitary Authority** 

**Contract No.:** 

1723E

**Change Order Number:** 

1723E-CO-002

**Project Name:** 

North End Facilities

Date Issued:

07.18.2022

**Contractor:** 

**Bronder Technical Services** 

PCO: PCO - 00030 Substation Circuit Breaker Repair

Value of Change: \$700.00

**Description of Change:** 

Repair/refurbishment of Alcosan power circuit breakers in the Secondary Substation (932).

**Reason for Change:** 

Mascaro Construction Company contracted with Bronder Technical Services to install the electrical service for Mascaro's groundwater dewatering system being powered from Alcosan's Secondary Substation (923). Prior to the startup of Mascaro's dewatering system, Bronder had ABM on site to check out the (2) power circuit breakers in Alcosan's Secondary Substation (923) that are being used for the dewatering system. Mascaro paid for the testing however the breakers failed and needed to be repaired.

> \$700.00 Total Add/<Deduction>: 0 Calendar Days

Construction Manager, G. Stephens, Inc.

## **Change Order Exhibit**

**Allegheny County Sanitary Authority** 

Contract No.:

1735G

**Change Order Number:** 

1735G-CO-005

**Project Name:** 

ALCOSAN Parking Garage

Date Issued:

07.20.2022

**Contractor:** 

Mike Coates Construction Co

PCO: PCO - 00013 Stair 1 Concrete Details

Value of Change:

\$5,711.39

## **Description of Change:**

Please see the attached. The changes depict revisions to the RFI 83 responses.

## Reason for Change:

Clarifications and revisions of Stair 1 concrete details in response to contractor's questions originating in RFI 83.

- 1. Clarified that a Beam 3 was not required at each elevation. Rebar was called out but sections did not show a beam.
- 2. DBRs were accepted enabling decoupling the stairs and landings from the elevator wall.
- 3. Clarification of a minor connection detail not needed yet shown.
- 4. Control joints/construction joints eliminated at levels 2, 3, and 4.
- 5. Section profile provided thru beam ledge along DD line expansion joint.
- 6. Steel angle supports added at PT slab cantilevers.
- 7. Bearing pad detail added along DD line expansion joint.
- 8. Location of construction joint clarified and additional rebar required at all Stair 1 construction joints.

Total Add/ <deduction>:</deduction>	\$5,711.39
Total Add/\Deduction/.	0 Calendar Days

Mike Raig

Construction Manager, G. Stephens, Inc.

## **Change Order Exhibit**

Allegheny County Sanitary Authority

Contract No.: Project Name:

Contractor:

1735E

ALCOSAN Parking Garage

Bronder Technical Services

Change Order Number:

1735E-CO-002

Date Issued:

07.20.2022

PCO: PCO - 00015 Split System Condensate Drainage	Value of Change
Description of Change:	\$1,139.38
Provide a 20A/1P simplex receptacle adjacent to the FCU condensate pump and connect to the	
receptacle circuit in the room (GLA/10).	
Reason for Change:	
To provide electrical power to condensate pump discharge for the CU-2/FCU-2 split	
system.located in the elevator room 108. Pump to be F&I by Gunning Mechanical.	
PCO: PCO - 00016 Electric Vechicle Charging Updates	
opauces	Value of Change:
Description of Change:	\$2,369.16
Change all panel GLB breakers feeding vehicle chargers from 40A to 20A.	
Change EV-1 to be 16A Single Port.	
Change EV-2 and EV-3 to be 16A Power Share Dual Port.	
Reason for Change:	
Alcosan would like to accommodate additional EV charging stations in the future, which requires downsizing the capacity of current chargers to 16 Amps. This will set a charger standard that is scalable for future expansion within the limits of what power substation USS025-404 can provide.	

Total Add/ <deduction>:</deduction>	\$3,508.54
	0 Calendar Days

Mike Raig

Construction Manager, G. Stephens, Inc.

## MINUTES REGULAR MEETING OF THE BOARD OF THE ALLEGHENY COUNTY SANITARY AUTHORITY THURSDAY, JUNE 23, 2022

The meeting was called to order at 4:30 p.m. in the office of the Authority, 3300 Preble Avenue, Pittsburgh, Pennsylvania. Those participating were Board Members: Ms. Sylvia Wilson, Ms. Emily Kinkead (remotely); Messrs. Corey O'Connor, Harry Readshaw, Mr. Paul Klein (remotely); and Dr. Shannah Tharp-Gilliam, and Mr. Jack Shea, were absent from the meeting. Also participating were Ms. Arletta Scott Williams; Ms. Kimberly Kennedy, Ms. Julie Motely-Williams, Ms. Jeanne Clark, Ms. Michelle Buys, Ms. Karen Fantoni. Messrs. Doulas Jackson, Michael Lichte and Joseph Vallarian (Authority Staff) and Mr. Max Junker (Babst Calland),

Everyone stood for the Pledge of Allegiance.

There is no public comment today.

An Executive Session was held this afternoon at approximately 3:30 p.m. to discuss pending legal issues (Note: votes are never taken during the Executive Session).

Ms. Karen Fantoni, Director of Accounting, presented the status report of the Operating Cost and Revenues of the Authority, as of May 31st, we have completed 5 months out of the year and 41.7%, into 2022. We have collected 42.3% of our revenues and expended approximately 36.4% of our operating budget. The Authority continues to operate in a sound and fiscal manner.

Ms. Kimberly Kennedy, Director of Engineering and Construction, presented the WWTP Expansion Cost Report. As of the end of June 2022, the CSO Bypass and Disinfection Project is out to bid. The information can be found on the ALCOSAN website, and the bids are due August 31, 2022. There will be a General, Electrical, HVAC and Plumbing contract associated with the CSO Bypass and Disinfection. We are moving into the design phase of the Solids Thickening and Dewatering improvements project. The RFQ (Request for Qualifications), is on the ALCOSAN website. Qualifications packages on are due on August 5, 2022.

Ms. Arletta Williams, Executive Director and Ms. Kimberly Kennedy, Director of Engineering and Construction, presented the North End Plant Expansion Construction update regarding a significant change order that is before the Board today, and the ongoing issues with soils. Ms. Kennedy provided a PowerPoint presentation of the North End Plant Expansion Summary. The slides showed when the project was awarded, in May 2020 and the (4) contracts: General, Electrical, HVAC, and Plumbing, that were awarded as well. Drone images, from August 2021, November 2021, show major milestones that were being reached in the progress of the project. As of May 2022, you can really see the progress that was made in the excavation for the Chlorine Contact Tank, base elevation is approximately 695.00. There is a dispute with Mascaro regarding the soils. Mascaro bid the project assuming that all soil excavation, handling, hauling and disposal at the Project site included in the bid price was assumed to be clean fill. ALCOSAN intended work to be bid as if all excavated

material was Residual Waste and all Residual Waste was disposed off-site. After negotiations, ALCOSAN and Mascaro agreed to a unit price of \$40.00/ton, for excavation, handling, hauling, and disposal of Residual Waste below the initial cut, which is estimated to be 80,000 tons. The Change Order No. 11 is on the agenda tonight for Board consideration.

Report of actions by the Executive Director in approval of construction change orders less than \$30,000.00 and a cumulative total change order value to date of less than five percent of the original contract amount

1. No. 1, under Contract 1735-H, "ALCOSAN Parking Garage" from Gunning, Inc., for the amount of \$2,205.00. These costs are associated with the addition of a condensate pump and drain piping. The original amount of the contract was \$51,602.00. The current value of the contract including this change order is \$53,807.00.

Upon motion of Mr. Readshaw, seconded by Mr. O'Connor, the Board approved the minutes of the Regular Board Meeting of May 19, 2022, and the Board authorized payment of invoices in excess of \$20,100.00 processed during the period of May 10, 2022, through June 15, 2022, and reviewed the summary report of expenses in excess of \$10,900.00 processed during the same period, a copy of which will be made part of these minutes.

Upon motion of Mr. Readshaw, seconded by Mr. O'Connor, the Board authorized to award the following contract:

1. Contract No. 1766 "Furnish and Deliver Sulfuric Acid" to SAL Chemical Company, Inc. at the price of \$0.41, per pound. Bids received are indicated on: **Exhibit E** 

Upon motion of Mr. O'Connor, and seconded by Mr. Klein, the Board approved the Board approved the motion to authorize the preparation of specifications and advertisement for bids for the following contracts: **Exhibit F** 

- 1. Contract No. 1769, "Bulk Purchase of Process Enhancement Product"
- 2. Contract No. 1770, "Various Improvements to the Ella Street and Corliss Pump Stations"

Upon motion of Mr. O'Connor, and seconded by Representative Kinkead, the Board approved the following change orders that exceed \$30,000.00 in value or whose cumulative total value with previously approved change orders is greater than five percent of the original contract amount: **Exhibit G** 

1. No. 11, under Contract 1723-G, "North End Facilities" from Mascaro Construction Company, Inc., for the amount of \$3,355,321.00. These costs are associated with excavation, handling, hauling and soil disposal classified as Residual Waste below the initial cut and additional rock excavation and stone subbase costs in the area of the chlorine contact tank. The original amount of the contract was \$94,124,350.00. The current value of the contract including this change order is \$108,380.503.42.

2. No. 4, under Contract 1735-G, "ALCOSAN Parking Garage," from Mike Coates Construction Co., for the amount of \$40,393.00. These costs are associated with parking striping revisions and the addition of signage for parking space numbering. The original amount of the contract was \$10,221,843.05. The current value of the contract including this change order is \$10,504,609.79.

The items denoted with an asterisk (\*) were reviewed by the Professional Services Committee at a publicly advertised meeting on June 16, 2022. The Committee unanimously approved and recommended that these items be submitted to the Board.

\*Upon motion of Mr. O'Connor, seconded by Mr. Readshaw, the Board approved modification of Service Authorization 274 for GAI Consultants to provide additional engineering support services during the on-going stack testing for an amount not to exceed \$43,525.00.

\*Upon motion of Mr. O'Connor, seconded by Mr. Readshaw, the Board approved modification of Services Authorization 325 for ADS Environmental, under the agreement for Professional Services, for an additional six (6) month no cost extension of services, to continue to provide services for the Municipal Source Reduction Program.

\*Upon motion of Mr. Readshaw, seconded by, Mr. Klein, the Board approved modification of Service Authorization 361 for GHD for work associated with additional design tasks required for the CSO Bypass and Disinfection project for an amount not to exceed \$274,005.00.

\*Upon motion of Mr. O'Connor, seconded by, Representative Kinkead, the Board approved the purchase of licenses required for the migration of JD Edwards from World to Enterprise One.

\*Upon motion of Mr. O'Connor, seconded by Representative Kinkead, the Board approved modification to the Grant Agreements for the Green Revitalization of Our Waterways (GROW) Program by extending the Term of the Contract: **Exhibit H** 

\*Upon motion of Mr. Readshaw, seconded by Mr. O'Connor, the Board adopted Resolution 2022-06-01 retaining an investment banking team to underwrite bonds for the potential refinancing of outstanding 2013 Series debt in order to achieve significant interest rate savings and to issue additional bond proceeds under the Sewer Revenue Bonds, Series 2022. The additional proceeds will be used for the continued financing of the Authority's Capital Improvement Program.

\*Upon motion of Mr. O'Connor, seconded by Representative Kinkead, the Board adopted Bond Resolution 2022-06-02 Dated June 25<sup>th</sup> authorizing the Authority to issue its Sewer Revenue Bonds, Series 2022. Proceeds from the Bonds will be used for continued financing of the Authority's Capital Improvement Program and depending on existing market conditions may be used to refinance outstanding 2013 Bonds.

\*Upon motion of Mr. O'Connor, seconded by Representative Kinkead, the Board adopted Resolution No. 2022-06-03 authorizing payments in the amounts of Four Hundred Fifty-Two Thousand Six Hundred and 00/100 Dollars (\$452,600) to purchase a certain 0.917 acres of land; and One Hundred Seventeen Thousand Five Hundred and 00/100 Dollars (\$117,500) to acquire a

temporary construction easement of 0.783 acres, both being parts of Block and Lot Nos. 75-R-275 in the City of Pittsburgh, 27th Ward, now or formerly owned by Engineered Polymer Solutions

The next Board of Directors Meeting will be held on July 28, 2022.

There being no further business, the meeting adjourned at approximately 5:15 p.m.

## INVOICES OVER \$20,100.00

DESCRIPTION		Professional Services Re: Provide Support Services for Regional Wet	Weather Planning Compliance, Service Authorization No. 318, for the Month of June 2022. Invoice No. 6302022 Dated July 1, 2022.		Professional Services Re: Alcosan Regionalization Analysis and Implementation. Service Authorization No. 299. for the Period of	March 26 to April 22, 2022. Invoice No. 57/2000643249 Dated June		Professional Services Re: Alcosan Regionalization Analysis and	Implementation, Service Authorization No. 299, for the Period of	April 23 to May 27, 2022. Invoice No.58/2000641340 Dated June	30, 2022.	Professional Services Re: Wet Weather Plant Expansion, Service	Authorization No. 295, for the Period Ending June 19, 2022. Invoice	No. 34306439 Dated June 1, 2022.		Professional Services Re: Legal Matters for the Month of May 2022.	Invoice Nos. 1519251 to 1519529 Dated June 15, 2022.
OPERATING		81,868.48														51,832.50	
CAPITAL					127,882.23			199,218.02				117,101.67					
	3 Rivers	Wet Weather		AECOM	Technical Services 127,882.23		AECOM	Technical Services				Arcadis			Babst, Calland,	Clements & Zomnir	

## INVOICES OVER \$20,100.00

DESCRIPTION		Professional Services Re: Legal Matters for the Month of June 2022. Invoice Nos. 1520083 to 1520092 Dated July 8, 2022.	Alcosan Parking Garage-Electrical, Contract No. 1735E, Estimate No. 7.	Biosolids Management Services for the Month of May 2022. Invoice No. 2134 Dated June 30, 2022.	Professional Services Re: Wet Weather Program Management and Engineering Support Services, Service Authorization No. 289, for the Period of May 15 to June 11, 2022. Invoice No. 90154425 Dated June 22, 2022.	Upgrades to the JD Edwards System, Service Authorization No. 378. Invoice No. 6PS-524664 Dated July 12, 2022.	Professional Services Re: Property and Right of Way Acquisition, Service Authorization No. 316, for the Period Ending May 31, 2022. Invoice No. 37H Dated June 15, 2022.
<b>OPERATING</b>		47,848.17		147,050.35			
CAPITAL			224,596.80		165,412.08	231,428.57	37,452.78
	Babst, Calland,	Clements & Zomnir	Bronder Technical	Burch Hydro, Inc.	CDM Smith	Grant Thornton	Hanna Langnoiz Wilson Ellis

## INVOICES OVER \$20,100.00

OPERATING

CAPITAL

Professional Services Re: Miscellaneous Engineering Services, Service Authorization No. 342, for the Period Ending June 30, 2021. Invoice No. 90793428 Dated August 18, 2021.	Professional Services Re: North End Facilities New Outfall and Disinfection Facility and New Secondary Clarifiers, Service Authorization No. 322, for the Period of April 24 to May 21, 2022. Invoice No. 1200438338/36 Dated June 6, 2022.	Professional Services Re: RAS Pipe and RAS Pump Replacement, Service Authorization No. 335, for the Period of April 24 to May 21, 2022. Invoice No. 1200438543/28 Dated June 6, 2022.	Flap Gate Replacement. Contract 1724, Estimate No. 3.	Flap Gate Replacement. Contract 1724, Estimate No. 4.	Flap Gate Replacement. Contract 1724, Estimate No. 5.
9,701.38					
20,327.46	46,841.38	43,236.28	254,941.87	353,895.75	148,299.75
Hatch Associates	HDR Engineering	HDR Engineering	Independent Enterprises, Inc.	Independent Enterprises, Inc.	Independent Enterprises, Inc.

## INVOICES OVER \$20,100.00

	CAPITAL	<b>OPERATING</b>	DESCRIPTION
Independent			
Enterprises, Inc.	462,687.88		CIPP Rehabilitation of Portions of the Monongahela Subaqueous
			Interceptor. Contract No. 1726, Estimate No. 6.
Independent			
Enterprises, Inc.	631,865.38		CIPP Rehabilitation of Portions of the Monongahela Subaqueous
			Interceptor. Contract No. 1726, Estimate No. 7.
Integrated			
Corporate Health		20,870.00	Covid Vaccine and Testing Clinics for the Month of June 2022. Invoice
			No. 54522 Dated June 30, 2022.
Jacobs Engineering	45,345.65		Professional Services Re: Green Stormwater Infrastructure and
			Source Controls, Service Authorization No. 302, for the Period of
			April 30 through May 27, 2022. Invoice No. E3X54600-058 Dated
			June 2, 2022.
Jacobs Engineering	157,201.89		Professional Services Re: Tunnel Program Management, Service
			Authorization No. 365, for the Period of April 30 through May 27, 2002 Thurs No. E3884300-016 Dated Time 17, 2002
			FORE: TIMORGE NO. FOXO-010 Dated valle 17, FORE.
Jet Jack, Inc.		512,650.44	Annual Interceptor Cleaning, Contract No. 1711, Estimate No. 14.

## INVOICES OVER \$20,100.00

OPERATING

CAPITAL

## INVOICES OVER \$20,100.00

OPERATING

CAPITAL

Michael Baker	392,761.86		Professional Services Re: Wet Weather Plant Expansion, Service Authorization No. 319, for the Period of May 2 June 1, 2022.
Mike Coates Construction Co.	1,785,289.09		Invoice No. 1150053 Dated June 17, 2022. Alcosan Parking Garage-General. Contract No. 17356, Estimate No. 9.
Mott MacDonald	483,490.13		Professional Services Re: Ohio River Final Tunnel Design, Service Authorization No. 373 for the Month of March 2022. Invoice No. 507452427 Dated May 26, 2022.
MSS Technologies	180,000.00	93,003.99	JD Edwards EnterpriseOne One-Time Licensing and Annual Technical Support. Invoice No. ASC_7022_603 Dated June 23, 2022.
P. J. Dick, Inc.	1,539,222.62		East Headworks Project-General. Contract No. 17266, Estimate No. 11.
Polydyne, Inc.	,	49,450.00	Furnish and Deliver Polymers Per Contract No. 1692. Invoice No. 1650473 Dated June 17, 2022.
Polydyne, Inc.		49,450.00	Furnish and Deliver Polymers Per Contract No. 1692. Invoice No. 1653648 Dated June 29, 2022.

## INVOICES OVER \$20,100.00

<u>OPERATING</u>	298,935.00 Emergency Sewer Televising. Contract No. 1751, Estimate No. 1.	Electrical Distribution System Upgrades-Electrical. Contract No. 1739E, Estimate No. 7.	Aeration Tank Diffuser Replacement. Contract No. 1733, Estimate No. 10.	48,943.94 Professional Services Re: Alcosan Utility Locating Services, Service Authorization No. 370, for the Period Ending April 29, 2022. Invoice No. 608932 Dated June 13, 2022.	42,742.89 Professional Services Re: Alcosan Utility Locating Services, Service Authorization No. 370, for the Period Ending May 27, 2022. Invoice No. 608941 Dated June 14, 2022.	42,697.40 Professional Services Re: Alcosan Utility Locating Services, Service No. Authorization No. 370, for the Period Ending June 24, 2022. Invoice No. 609084 Dated June 29, 2022.
CAPITAL		c 1,155,813.62	al nc. 408,285.90	leers	ieers	leers
	Kobinson Pipe Cleaning Co.	Sargent Electric	Shiloh Industrial Contractors, Inc.	T2 Utility Engineers	T2 Utility Engineers	T2 Utility Engineers

## INVOICES OVER \$20,100.00

OPERATING

CAPITAL

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
Wade Trim	26,667.17	Professional Services Re: Effluent Flushing Water System Improvements Service Authorization No. 356 for the Month of May
		2022. Invoice No. 5004823 Dated June 3, 2022.
Whitman, Requardt		
& Associates	53,016.86	Professional Services Re: Alcosan New East Headworks Facility, Service
		Authorization No. 329, for the Period of May 8 through June 4, 2022.
Whitmoyer		invoice ino. 38-14430.000 dated june 24, 2022.
Auto Group	29,275.00	Furnish and Deliver One (1) 2022 Ford F150 4 X 4 Regular Cab Truck for
		Regional Conveyance, as per CoStars Contract #025-162. Invoice No.
		F5659 Dated May 18, 2022.
Whitmoyer		
Auto Group	29,275.00	Furnish and Deliver One (1) 2022 Ford F150 4 X 4 Regular Cab Truck for
		Regional Conveyance, as per CoStars Contract #025-162. Invoice No.
		FW8518 Dated May 18, 2022.
Zoresco		
Equipment Co.	32,939.00	Furnish and Deliver One (1) Body Uplift for Regional Conveyance Ford F-
		450, as per Costars Contract No. 025-104. Invoice No. 2021001989
		Dated July 5, 2022.

## INVOICES FROM \$10,900.00 TO \$20,100.00

OPERATING

CAPITAL

Professional Services Re: Bargaining and Management Pension Plans for the Month of June 2022. Invoice No. 22-ACSA-02806 Dated June 30, 2022.	Furnish and Deliver Furniture for New Offices in the Human Resource Department, as per State Contract No. 4400016621. Invoice No. INV150605 Dated April 2, 2022.	Furnish and Deliver Unleaded Fuel. Invoice No. 159941 Dated June 13, 2022.	Furnish and Deliver One (1) Secondary Gear Output Shaft and Four (4) Seal Shaft Rings. Invoice No. 2586511543 Dated July 5, 2022.	Alcosan Parking Garage - HVAC. Contract No. 1735H, Estimate No. 4.	Professional Services Re: Miscellaneous Engineering Services, Service Authorization No. 342, for the Period of May 29 to June 25, 2021. Invoice No. 90789965 Dated July 20, 2021.
14,231.00		11,320.83	18,168.39		3,950.00
	13,130.41			13,414.50	15,956.62
Cowden Associates	Darran Furniture	Export Fuel	Separator	Gunning, Inc.	Hatch Associates

## INVOICES FROM \$10,900.00 TO \$20,100.00

,	CAPITAL	OPERATING	DESCRIPTION
Independent Enterprises, Inc.	18,786.46		Emergency Sewer Contract 2020-2021. Contract No. 1734, Estimate No. 2.
JAT	16,454.12		Professional Services Re: CIPP Rehabilitation of Portions of the Monongahela Subaqueous, Service Authorization No. 364, for the Period Ending March 26, 2022. Invoice No. 11-193034 Dated April 25, 2022.
JMT	13,875.88		Professional Services Re: CIPP Rehabilitation of Portions of the Monongahela Subaqueous, Service Authorization No. 364, for the Period Ending May 21, 2022. Invoice No. 12-194556 Dated June 30, 2022.
Micro Motion, Inc.		13,932.99	Furnish and Deliver Two (2) Primary Sludge Flow Meters. Invoice No. 4692382 Dated July 24, 2022.
MS Consultants	17,823.42		Professional Services Re: Flap Gate Replacement at Various Locations, Service Authorization No. 338 for the Period of April 4 to May 1,

2022. Invoice No. 61-04E57-00-29 Dated Mach 23, 2022.

## INVOICES FROM \$10,900.00 TO \$20,100.00

OPERATING

CAPITAL

Applications for the rection of April 1 inrough June 30, 202.  W. G. Tomko  & Son, Inc.  14,314.12  Alcosan Parking Garage-Plumbing, Contract No. 1735P, Estimate No. 5.
Mythics 11,152.19 Professional Support Services Provided by Oracle for JD Edwards

# UTILITY INVOICES EXCEEDING \$10,900.00 PAID DURING THE PERIOD OF JUNE 16, 2022 THRU JULY 18, 2022

OPERATING

CAPITAL

	2,529,941.28	14,203,600.92	TOTAL
May 2022. Account No. 5130483-1184246.			
Water Service, Treatment Plant, 3300 Preble Avenue for the Month of	25,587.73	Authority	& Sewer Authority
		Water	Pittsburgh Water
May 2022. Account No. 5078224-1000652.			
Water Service, Treatment Plant, 3300 Preble Avenue for the Month of	43,061.29	Authority	& Sewer Authority
		Water	Pittsburgh Water
June 2022. Account No. 5078222-1000581.			
Water Service, Treatment Plant, 3285 Preble Avenue for the Month of	56,710.04	Authority	& Sewer Authority
		Water .	Pittsburgh Water
2022 - Meter No. 617077.			
Gas Service Agreement, 3285 Preble Avenue - May 31 to June 30,	18,750.79	atural Gas	Peoples Natural Gas
Account No. 8737-850-000.			
Electrical Service, 3300 Preble Avenue, May 27 to June 23, 2022.	437,243.42	Light Co.	Duquesne Light Co.
Natural Gas Commodity Charges tor the Month of May 2022. Invoice No. HS23095725. Account 737446-81920.	62,844.90	ergy .	Direct Energy

**CONTRACT: 1759 G - GENERAL** 

## **ENVIRONMENTAL COMPLIANCE FACILITY**

BID OPENING: THURSDAY, JUNE 30, 2022 @ 11:00 A.M.

COMPANY NAME	TOTAL BASE BID
HUDSON COMPANIES	\$16,732,000.00
PJ DICK	\$17,037,436.00
AM HIGLEY	\$17,039,568.00
ALLEGHENY CONSTRUCTION GROUP	\$17,812,355.00

**CONTRACT: 1759 E - ELECTRICAL** 

## **ENVIRONMENTAL COMPLIANCE FACILITY**

BID OPENING: THURSDAY, JUNE 30, 2022 @ 11:00 A.M.

COMPANY NAME	TOTAL BASE BID
BRONDER TECHNICAL SERVICES	\$3,382,700.00
MARE SOLUTIONS	\$3,488,000.00
SARGENT ELECTRIC	\$3,890,000.00
CLISTA ELECTRIC	\$3,959,800.00

WITNESS Ser P. 16

**WITNESS** 

CONTRACT: 1759 H - HVAC

## **ENVIRONMENTAL COMPLIANCE FACILITY**

BID OPENING: THURSDAY, JUNE 30, 2022 @ 11:00 A.M.

COMPANY NAME	TOTAL BASE BID
GUYS MECHANICAL	\$9,098,000.00
WAYNE CROUSE	\$9,176,000.00
MCKAMISH	\$9,357,800.00
LUGAILA MECHANICAL INC.	\$9,400,000.00
SSM INDUSTRIES INC.	\$9,418,000.00

WITNESS Son P. Revenue

WITNESS Hathlack F. Operatorus Re

**CONTRACT: 1759 P - PLUMBING** 

## **ENVIRONMENTAL COMPLIANCE FACILITY**

BID OPENING: THURSDAY, JUNE 30, 2022 @ 11:00 A.M.

COMPANY NAME	TOTAL BASE BID
SSM INDUSTRIES	\$3,068,000.00
W.G. TOMKO & SONS INC.	\$3,193,333.00
FIRST AMERICAN INDUSTRIES	\$3,244,000.00
MCKAMISH	\$4,135,000.00
WAYNE CROUSE	\$4,430,000.00

WITNESS Ser P. Reberra

WITNESS

## **BID TABULATION**

## CONTRACT: 1765

## **CCTV INSPECTION OF ALCOSAN DROP SHAFTS**

BID OPENING: TUESDAY, JULY 12, 2022 @ 11:00 A.M.

## **COMPANY NAME**

## TOTAL BASE BID

Robinson Pipe Cleaning Company

\$ 464,500.00

Jett Jack

\$ 525,490.00

WITNESS

WITNESS

Hayfyn & Banks

EXHIBIT J

## **BID TABULATION**

## **CONTRACT: 1767**

## FURNISH AND DELIVER SODIUM BISULFITE

**BID OPENING:** TUESDAY, JULY 19, 2022 @ 11:00 A.M.

**COMPANY NAME** 

PRICE IN FIGURES

PER POUND

Southern Ionics Inc.

\$0.2031

PVS Chemical Solutions, Inc.

\$0.2375

WITNESS

WITNESS

Previous Contract- June 2020

Contract No. 1732: Awarded to JCI Jones Chemical for \$0.1111

## CONTRACT: 1768

## FURNISH AND DELIVER CHEMICALS AND TECHNICAL SERVICE FOR TREATMENT OF BOILER WATER, STEAM, AND CONDENSATE

BID OPENING: WEDNESDAY, JULY 13, 2022 @ 11:00 A.M.

	Total for Item No. 1 (Total of Items 1A, 1B, and 1C)	Item No. 2	Total Estimated Contract Price
Company Name	Total cost for one (1) month Treatment Chemicals, Technical Service, Test Equipment, Reagents and Sampling Equipment	TRAINING The cost for thirty-two (32) Hours of Training (8 hours/Crew X 4 Crews)	For a Twelve (12) Month Period (Total Cost for one (1) month (Total for Item No. 1) times twelve (12) months; plus Item No. 2)
Rochester Midland Corp	\$ 1,426.40	0	\$17,116.80

WITNESS

WITNESS

Previous Contract 2019: 1712A

Awarded to: Rochester Midland Corp

Contract Amount: \$15,651.84/Year

## **AUTHORIZATION OF CONTRACTS FOR ADVERTISEMENT**

1. Contract No. 1771, "Furnish and Deliver Teflon Tubing for Industrial Waste Sampling"

This contract is for furnishing and delivering the teflon tubing used by ALCOSAN Industrial Waste personnel required by the sampling machinery.

2. Contract No. 1772, "Emergency Sewer Contract 2022-2023"

This contract will provide for having a contractor on-call and available to conduct repairs to the Regional Conveyance system as the need arises. The contract is being undertaken to ensure and require a rapid mobilization time (24 hours or less), proper bonding and insurance requirements for any "immediate needs" contractor and to establish competitively bid pricing.

3. Contract No. 1773, "Sheraden Park Ecosystem Maintenance Contract"

This contract is to conduct periodic maintenance and invasive species control for approximately 22 acres in Sheraden Park. As part of the Sheraden Stream Removal Project and the US Army Corp of Engineers Section 206 Sheraden Park Aquatic Ecosystem Restoration Project, ALCOSAN is obligated to conduct inspection, maintenance, invasive species control and plantings to sustain the aquatic ecosystem.

4. Contract No. 1774, "Furnish and Deliver Incinerator Bed Sand"

This contract is for the purchase and delivery of incinerator bed sand that is used in the Energy Recovery Facility.

## **Change Order Exhibit**

Allegheny County Sanitar

EXHIBIT M

Contract No.:

1728G

Replacement

Change Order Number:

1728G-CO-005

Project Name:

Return Activated Sludge (RAS) Pipe and RAS Pump

Date Issued:

07.19.2022

Contractor:

**Kokosing Construction** 

**PCO**: PCO - 00024 FI 21 West RAS Pump Stations Upper Wall Structure Modifications - Pump Setting and Roof Modification

**Value of Change:** \$42,013.96

## **Description of Change:**

Kokosing is to set and level the 6 pumps and motors in the planned position per the contract drawings at the RAS pump stations (W1 and W2) through openings cut into the existing roof. The openings must be large enough to accommodate the size of the pumps and motors. The Contractor will provide an appropriately sized crane for the work and will temporally cover the openings to prevent water from entering the pump stations and will maintain the temporary cover until the final roofing is installed. This work is scheduled to take place on second shift beginning on Monday 3/14/22 at 3:330pm. The center access road will be shut down for this work but must be reopened at the end of the shift. The new CMU walls as described in FI-21 will be installed at a later date and will be part of a separate PCO.

## Reason for Change:

During construction it was discovered that the existing exterior block walls at the RAS pump stations (W1 and W2) would not support the proposed monorail crane. Field Instruction - 21 gives direction on how to address the exterior block wall issues to allow for the installation of the proposed monorail crane. As a result of not having the proposed monorail crane in place Kokosing will have to set the six new pumps (3 at W1 and 3 at W2) with a rented crane through openings cut between the roof beams into the existing roof.

**Value of Change:** \$17,125.63

PCO: PCO - 00026 PCO-26 EBAA Substitution for ROMAC Fitting

## **Description of Change:**

Kokosing is to provide and install two (2) 42" EBAA Mega-Coupling Series 3800 for the east side piping on the aeration deck and will turn over the purchased specified ROMAC fittings to ALCOSAN. This is a material only cost as all labor was included in the bid price.

### Reason for Change:

This is an Owner requested change to the product specified in the Contract Documents.

Total Add/<Deduction>: \$59,139.59

0 Calendar Days

Brian Daughertu

Construction Manager, Michael Baker International

EXHIBIT M

## **Change Order Exhibit**

## Allegheny County Sanitary Authority

**Contract No.:** 

1747

Temporary Primary Disinfection

Change Order Number:

1747-CO-001

Project Name: Contractor:

**Kokosing Construction** 

Date Issued:

07.22.2022

PCO: PCO - 00001 Credits and Adds at sampling shed and hypo piping.

**Value of Change:** \$28,250.00

## **Description of Change:**

Item #1: Credit for re-routing and reducing the road ramp length at crossing point at the east west road from dechlornation to sampling shed.

Item #2: Add for changing the flow switch to pressure switch at the chlorine analyzer.

Item #3; Add for rotometer meter, piping, and valves at the discharge point into primary classifiers.

Item #4: Add for E&H Promag W 400 flow meter and electric at the sodium hypo pump discharge.

Item #5: Add for overhead electric from building 720 to sampling shed to include (2) painted masts, wall anchors, 120v wire, communication wire, sub panel in shed, and crane rental. Item #5a; Credit fro not routing sampling shed wiring from building 720 to the shed via tunnel.

## Reason for Change:

Item #1: By rerouting the bisulfite piping, this reduced the length of the road ramp resulting in a credit.

Item #2: Long term reliability of pressure switch vs a flow switch.

Item #3: Providing flexibility of dosing the hypo into the tanks.

Item #4: Ease of monitoring the hypo usage by sending feedback to our control system, DCS.

Item #5: By re-routing the sample shed electrical service from the tunnel to an overhead electrical service is a safer route will allow ease of removal when shed usage is no longer needed.

Item #5a:To avoid additional electrical wiring and conduit in the tunnel resulting in a credit.

Total Add/<Deduction>:

\$28,250.00

0 Calendar Days

Raymond Stasny

Construction Manager, ALCOSAN