



MEMORANDUM

Ordinance 25-61, An Ordinance of the City Council of Homer, Alaska, Appropriating an Additional \$5,000 from the Water Capital Asset Repair Maintenance Allowance (CARMA) Fund to the Paintbrush Booster Pump Station Project. City Manager/Public Works Director.

Item Type: Backup Memorandum
Prepared For: Mayor Lord and City Council
Date: September 3, 2025
From: Leon Galbraith, P.E., City Engineer
Through: Melissa Jacobsen, City Manager

Summary:

Appropriation of an additional \$5,000 from the Water CARMA Fund to the Paintbrush Booster Pump Station Project.

Background:

The FY24/25 Capital Budget included \$250,000 to upgrade the Paintbrush Booster Station. A booster station is a pump that “boosts” the pressure in a water main that is on the low pressure side of a pressure zone. A couple of years ago the pump in the Paintbrush Station failed, leaving over a dozen homes located on Paintbrush Street without water. The City delivered cases of bottled water to the customers up there and scrambled to fix the problem. The problem was a burned out relay switch, which was so old that we could not get replacement parts. The staff dug in our stashes of old parts that had been salvaged from other repair projects and found a relay switch that had been removed from the waste water treatment plant. The relay fit and we were able restore water service. This put the City on notice that more comprehensive upgrades were needed as soon as possible. That’s why funding was requested in the FY24 Capital Budget.

A task order was issued to RESPEC Engineering, LLC for \$47,000 to perform design engineering, which was authorized by Resolution 23-077. Then, a contract was awarded to Beachy Construction for \$276,300 authorized by Resolution 24-085. Ordinance 24-33 was passed at the same time as Resolution 24-085 appropriating an additional \$73,300 from the Water CARMA Fund to cover the construction contract award.

An additional \$5,000 is needed to hire a water truck to provide supplemental water and system pressure in order to maintain water service to the residences while mechanical and electrical equipment is being replaced. The use of the water truck to provide this supplemental water and system pressure is intermittent throughout the project. The Public Works Department plans to hire

Moore & Moore Services, Inc. for this purpose. Because this purchase will be less than \$5,000, it will count as an incidental procurement according to the City of Homer Procurement Policy Manual and will therefore not require any formal competitive process.

Recommendation:

Therefore, the Public Works Department is requesting an additional appropriation of \$5,000 to facilitate maintaining water service to residents while changing out mechanical and electrical equipment.

Attachments:

Ordinance 23-23(A-3)
Resolution 23-077
Resolution 23-085
Ordinance 24-33

Capital Budget Ordinance

**CITY OF HOMER
HOMER, ALASKA**

City Manager

ORDINANCE 23-23(A-3)

AN ORDINANCE OF THE CITY COUNCIL OF HOMER, ALASKA
APPROPRIATING THE FUNDS FOR THE FISCAL YEARS 2024 AND
2025 CAPITAL BUDGET.

WHEREAS, Capital projects that have been closed through the FY24/25 capital budget planning process are outlined in Memorandum CC-23-153.

NOW, THEREFORE, THE CITY OF HOMER ORDAINS:

Section 1. Pursuant to the authority of Alaska Statutes Title 29, the following appropriations are made for the fiscal year ending June 2024:

Capital Projects Funds:

General Fund Fleet CARMA (152)	\$ 165,000 270,000
General Fund CARMA (156)	\$ 627,397 1,037,136 745,175
Utility CARMA (256)	\$ 1,163,834
Port Fleet Reserves (452)	\$ 115,000
Port Reserves (456)	\$ 335,000
HART Roads (160)	\$ 3,070,667 2,880,667 2,973,667
HART Trails (165)	\$ 386,000 376,314
HAWSP (205)	\$ 0 10,000
<u>General Fund Unassigned (100)</u>	<u>\$20,000 97,500</u>
<u>General Fund Seized Assets (157-0745)</u>	<u>\$16,268.78</u>
 Total Capital Expenditures	 \$ 5,862,898 6,112,637 6,102,758.78

Section 2. Pursuant to the authority of Alaska Statutes Title 29, the following appropriations are made for the fiscal year ending June 2025:

Capital Projects Funds:

General Fund Fleet CARMA (152)	\$ 0
General Fund CARMA (156)	\$ 0
Utility CARMA (256)	\$ 80,000
Port Fleet Reserves (452)	\$ 0
Port Reserves (456)	\$ 0
HART Roads (160)	\$ 0
HART Trails (165)	\$ 0

43 HAWSP (205) \$ 0 150,000
44 General Fund Unassigned (100) \$350,000
45
46 Total Capital Expenditures \$ ~~80,000~~ 580,000
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48 Section 3. The amounts appropriated by this ordinance are appropriated to the
49 purposes stated in the adopted budget.
50

51 Section 4. This Ordinance is limited to approval of the Budget and appropriations for
52 Fiscal Year 2024 and 2025, is a non code Ordinance and shall become effective July 1, 2023.
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54 ENACTED BY THE CITY COUNCIL OF HOMER, ALASKA, this 26 day of June,
55 2023.
56

CITY OF HOMER

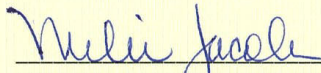
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KEN CASTNER, MAYOR

ATTEST:

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MELISSA JACOBSEN, MMC, CITY CLERK

AYES: 5

NOES: 1

ABSTAIN: 0

ABSENT: 0

First Reading: 4-24-23

Public Hearing: 5-8-23, 5-22-23, 6-12-23, 6-26-23

Second Reading: 6-26-23

Effective Date: 7-1-23

Repair Pond Liner at Sewer Treatment Plant	\$25,000	Waiting for fix on effluent pipe before proceeding	22-29
½ of Utility Financial Management	\$8,646	Original project complete; may conduct one more related plan under contract	21-03

FY24/25 Proposed Projects

Description	Amount Requested	CM Approved?
Coatings for Digestors	\$300,000	NO
Coatings for Clarifiers	\$450,000	NO
Replace Water Meters	\$50,000	YES – Water CARMA
Million Gallon Water Tank Aeration System	\$60,000	YES – Water CARMA
Raw Water Line Replacement Design	\$86,000	YES – Water CARMA
PRV Replacement West Trunk Line	\$21,000	YES – Water CARMA
Final Design – Beluga Lift Station	\$100,000	YES – Sewer CARMA
Paintbrush Booster Station Pump Upgrade	\$250,000	YES – Water CARMA
WTP Membrane Filter Train FY24	\$80,000	YES – Water CARMA
WTP Membrane Filter Train FY25	\$80,000	YES – Water CARMA
WWTP Aeration Pond Effluent Box	\$73,000	NO
Kachekmak City Septic Pumping Contract	\$55,770	NO
Transfer Switch STP	\$38,500	YES – Sewer CARMA
Dredge Sludge Lagoon at WTP	\$60,000	NO
Design for Replacing 8” Cast Iron Distribution Line	\$90,000	YES – Water CARMA
Master Water & Sewer Plan	\$90,000	NO
Electrical Works for Sewage Lift Station – 30 Acres	\$67,000	NO
Spit Parking Lot Storm Drain Project	\$1,198,628	NO
Fleet Replacement	\$50,000	YES – Water CARMA
Vehicle Replacement (E-131, E-130, E-114)	\$66,667	YES – Water CARMA
Vehicle Replacement (E-131, E-130, E-114)	\$66,667	YES – Sewer CARMA
Jack Gist Park Water/Sewer Extension	\$120,000	N/A – Added by Council – General Fund Unassigned Fund Balance (\$77,500) and HAWSP (\$42,500)
Karen Hornaday Park – Water/Sewer Extension FY24	\$30,000	N/A – Added by Council – General Fund Unassigned Fund Balance (\$20,000) and HAWSP (\$10,000)
Karen Hornaday Park – Water/Sewer Extension FY25	\$500,000	N/A – Added by Council – General Fund Unassigned Fund Balance (\$350,000) and HAWSP (\$150,000)

Utility CARMA – Fund 256

Utility CARMA - Fund 256				
Current Information - as of 6/22/23				
Account Name	Current Balance	Encumbrances	Available Balance	
Water	\$ 2,025,540	\$ 117,260	\$ 1,908,280	
Sewer	\$ 1,876,822	\$ 1,257,532	\$ 619,290	
	\$ 3,902,362	\$ 1,374,792	\$ 2,527,570	

Open Encumbrances - as of 6/22/23			
Description	Requestor	ORD #	Budget Remaining
Fire Hydrant Replacement Program	Water	22-37	\$ 100,000
PR Station Hatch Improvement	Water	21-36(S-2)	\$ 13,385
1/2 of Utility Financial Mgmt	Water	21-03	\$ 3,875
Rehab of Electrical Control Works for Lift Stations	Sewer	22-80	\$ 263,417
Broken Clarifier Belt at Waste Water Treatment Plant	Sewer	22-73(S), 22-55, 22-34(S)	\$ 962,236
Manhole Repair for East Hill Repaving Project	Sewer	22-29	\$ 3,004
Repair Pond Liner at Sewer Treatment Plant	Sewer	21-36(S-2)	\$ 25,000
1/2 of Utility Financial Mgmt	Sewer	21-03	\$ 3,875
			<u>\$ 1,374,792</u>

Requested Projects			
Description	Requestor	Fiscal Year	Budget Amount
Fleet Replacement	Water	FY24	\$ 50,000
Replace Water Meters	Water	FY24	\$ 50,000
Million Gallon Water Tank Aeration System	Water	FY24	\$ 60,000
Raw Water Line Replacement Design	Water	FY24	\$ 86,000
PRV Replacement West Trunk Line	Water	FY24	\$ 21,000
Paint Brush Booster Station Pump Upgrade	Water	FY24	\$ 250,000
WTP Membrane Train	Water	FY24	\$ 80,000
Design for Replacing 8" Cast Iron Distribution Line	Water	FY24	\$ 90,000
Vehicle Replacement (E-131, E-130, E-114)	Water	FY24	\$ 66,667
WTP Membrane Train	Water	FY25	\$ 80,000
Replace Lift Station Access Hatch	Sewer	FY24	\$ 14,000
Fleet Replacement	Sewer	FY24	\$ 50,000
Launch Ramp Lift Station Enclosure	Sewer	FY24	\$ 13,000
WWTP Digester Blowers	Sewer	FY24	\$ 48,000
Transfer Switch, STP	Sewer	FY24	\$ 38,500
Vehicle Replacement (E-131, E-130, E-114)	Sewer	FY24	\$ 66,667
Beluga Lift Station	Sewer	FY24	\$ 100,000
			<u>\$ 1,163,834</u>

Future Fund Activity			
Activity Description	FY23 Amount	FY24 Amount	FY25 Amount
Operating Budget Transfer - Water CARMA ¹	\$ 106,804	\$ 309,240	\$ 316,946
Operating Budget Transfer - Sewer CARMA ²	\$ 234,166	\$ 254,332	\$ 272,020
Utility Operations to Water CARMA Transfer	\$ -	\$ -	\$ -
Utility Operations to Sewer CARMA Transfer	\$ -	\$ -	\$ -
Net Activity	\$ 340,970	\$ 563,572	\$ 588,966

Proposed Future State				
Account Name	Current Balance	Encumbrances	FY23 Net Activity	Available Balance
Water	\$ 2,025,540	\$ 117,260	\$ 106,804	\$ 2,015,084
			FY24 Projects	\$ (753,667)
			FY24 Net Activity	\$ 309,240
			FY24 Ending Balance	\$ 1,570,657
			FY25 Projects	\$ (80,000)
			FY25 Net Activity	\$ 316,946
			FY25 Ending Balance	\$ 1,807,604
Sewer	\$ 1,876,822	\$ 1,257,532	\$ 234,166	\$ 853,456
			FY24 Projects	\$ (330,167)
			FY24 Net Activity	\$ 254,332
			FY24 Ending Balance	\$ 777,621
			FY25 Projects	\$ -
			FY25 Net Activity	\$ 272,020
			FY25 Ending Balance	\$ 1,049,641

Utility CARMA Ending FY25 Balance (Est.):	\$ 2,857,245
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(1) and (2) FY23 Budget transfers are done at end of fiscal year

CITY OF HOMER
HOMER, ALASKA

City Manager
Public Works Director

RESOLUTION 23-077

A RESOLUTION OF THE CITY COUNCIL OF HOMER, ALASKA
APPROVING A CONTRACT WITH RESPEC COMPANY LLC IN THE
NOT TO EXCEED AMOUNT OF \$42,000 TO DESIGN THE
PAINTBRUSH BOOSTER STATION UPGRADES AND AUTHORIZING
THE CITY MANAGER TO NEGOTIATE AND EXECUTE THE
APPROPRIATE DOCUMENTS.

WHEREAS, The FY24 Capital Budget includes \$250,000 to upgrade the Paintbrush
Booster Station; and

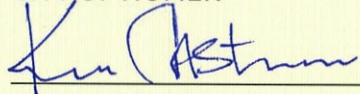
WHEREAS, the City asked RESPEC Company LLC (RESPEC), represented by Homer's
only professional mechanical engineer, to provide a proposal for designing the Booster Station
Upgrades because RESPEC had already consulted with City staff to make emergency repairs
when the Booster Station failed last year; and

WHEREAS, RESPEC proposed to provide more detailed investigations and
specifications for new equipment, for the estimated cost of \$41,819.65; and

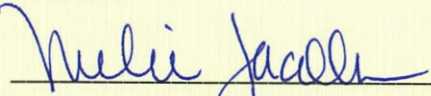
NOW THEREFORE BE IT RESOLVED that the Homer City Council hereby authorizes
issuance of a Task Order to RESPEC, in the Not to Exceed amount of \$42,000 to prepare provide
professional services to help the City upgrade the Paintbrush Booster Station and authorizes
the City Manager to negotiate and execute the appropriate documents.

PASSED AND ADOPTED by the Homer City Council this 14th day of August, 2023.

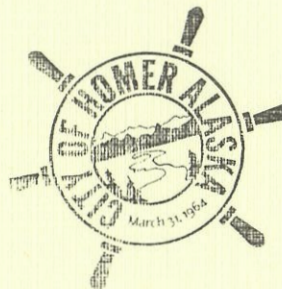
CITY OF HOMER


KEN CASTNER, MAYOR

ATTEST:


MELISSA JACOBSEN, MMC, CITY CLERK

Fiscal note: FY24 Capital Budget





MEMORANDUM

Resolution 23-077, A Resolution of the City Council of Homer, Alaska Approving a Task Order with RESPEC Company LLC in the Not to Exceed Amount of \$42,000 to Design the Paintbrush Booster Station Upgrades and Authorizing the City Manager to Negotiate and Execute the Appropriate Documents. City Manager/Public Works Director.

Item Type: Backup Memorandum
Prepared For: City Council
Date: July 18, 2023
From: Janette Keiser, PE, Public Works Director/City Engineer
Through: Rob Dumouchel, City Manager

I. Issue: The purpose of this Memorandum is to recommend the award a Task Order to RESPEC Company LLC (RESPEC) to design renovations to the Paintbrush Booster Station.

II. Background:

The FY24 Capital Budget includes \$250,000 to upgrade the Paintbrush Booster Station. A booster station is a pump that “boosts” the pressure in a water main that is on the low pressure side of a pressure zone. Last winter, the pump in the Paintbrush station failed, leaving over a dozen homes without water. We delivered cases of bottled water to the customers up there and scrambled to fix the problem. The problem was a burned out relay switch, which was so old, we could not get replacement parts. The staff dug in our stashes of old parts that had been salvaged from other repair projects and found a relay switch that had been removed from the waste water treatment plant. It was our lucky day! The relay fit and we were able restore water service. But, this put us on notice that more comprehensive upgrades were needed as soon as possible. That’s why we requested funding in the FY24 Capital Budget.

A local mechanical engineer, employed by RESPEC) helped us scope out and estimate the costs of a more permanent solution. Once we got the project funded, we asked RESPEC to submit a proposal to provide more comprehensive engineering services to implement the permanent solution. They’ve proposed to do this work for the Not to Exceed cost of \$42,000.

III. RECOMMENDATION: That the City Council award a Task Order to RESPEC in the Not To Exceed amount of \$42,000.



STATEMENT OF SERVICES

CITY OF HOMER — BOOSTER PUMP STATION UPGRADES



AUGUST 2023



CITY OF HOMER – BOOSTER PUMP STATION UPGRADES

The City of Homer (CITY) has requested that RESPEC Company, LLC and S&B, Inc. (ENGINEER) provide engineering services to upgrade the Paintbrush potable water booster pump station serving the Homer distribution network. This Statement of Services serves to identify the proposed scope, deliverables, assumptions, owner's responsibilities, schedule, and fee.

1.0 PROJECT SCOPE SUMMARY

- A. Paintbrush Booster Pump Station
 - a. Replace existing pump skid with like sized variable speed pumps (VFD's not integral to pump)
 - b. Replace pumping system accessories
 - i. Pressure transmitter on inlet header
 - ii. Pressure gauge on inlet header
 - iii. Pressure transmitter on outlet header
 - iv. Pressure gauge on outlet header
 - v. Isolation valves x4
 - vi. Check Valves x3
 - vii. Pressure Tank x1
 - c. Add level (float) switch in vault for flood detection
 - d. Add temperature sensors in vault for high/low temperature alarms
 - e. Add control panel with cellular telemetry for remote monitoring and alarms
 - i. Pumps (New)
 - 1. High/Low Inlet Pressure
 - 2. High/Low Outlet Pressure
 - 3. Pump Fault
 - 4. Pump Hours
 - ii. Vault
 - 1. High water level (flood)
 - 2. High/Low Temp
 - 3. Station Intrusion
 - 4. Smoke Detection
 - f. Replace power service equipment (meter/main, and panelboard)
 - g. Add surge protection device (Type 2 SPD)

2.0 ENGINEERING REQUIREMENTS

Upon this Agreement becoming effective, the ENGINEER shall perform the tasks:

- / Design development submittal, Pre-final design document submittal, Construction documents submittal
- / RESPEC Project Management
 - » Coordinate project design with RESPEC and S&B engineers to develop a singular complete ready-for-construction design package.
- / Mechanical
 - » Replace booster pumps, inlet and outlet pipe headers, valves, and pressure tank at the Paintbrush BPS

- » Support Electrical and I&C upgrades.

/ Electrical

- » Replace electrical service equipment, panelboard, and booster pumps.
- » Provide surge protection device at panelboard (Type 2 SPD).
- » Support Mechanical and I&C upgrades.
- » Coordinate power service modifications with local utility, HEA.

/ Instrumentation and Controls (S&B Inc.)

- » Support Mechanical and Electrical upgrades and replace booster pumps.
- » Provide cellular telemetry and remote monitoring for alarms.

2.1 65% DESIGN DEVELOPMENT

- / Review as-built drawings and photos of the site to determine existing conditions.
- / Develop design documents to upgrade BPS and replace booster pumps, per Project Scope summary listed above.
 - » Design narrative/ design criteria document
 - » Drawings
 - Mechanical plans
 - Electrical site and vault layout plans, schedules, one-line and details
 - I&C Block Diagrams, Network Diagrams, and Panel Elevations
 - » Mechanical and Electrical Specifications (on the drawings)

2.2 95% PRE-FINAL DESIGN DOCUMENTS

- / Update the design based on comments received from 65% design and further develop for construction.
 - » Design narrative/ design criteria document
 - » Drawings
 - Mechanical plans
 - Electrical site and vault layout plans, schedules, one-line and details
 - I&C Block Diagrams, Network Diagrams, and Panel Elevations
 - » Mechanical and Electrical Specifications (on the drawings)
 - » I&C Specifications
 - 40 61 00 – Control Systems Integration
 - 40 61 10 – Control Narratives (May be provided on Block Diagrams)

2.3 CONSTRUCTION DOCUMENTS

- / Update the design based on comments received from 95% design and finalize design and issue signed Construction Documents.
 - » Design narrative/ design criteria document
 - » Drawings
 - Mechanical plans
 - Electrical site and vault layout plans, schedules, one-line and details
 - I&C Block Diagrams, Network Diagrams, and Panel Elevations
 - » Mechanical and Electrical Specifications (on the drawings)
 - » I&C Specifications
 - 40 61 00 – Control Systems Integration
 - 40 61 10 – Control Narratives (May be provided on Block Diagrams)

3.0 ASSUMPTIONS

1. No demolition plans/drawings. Demo work will be covered via notes and within specifications if needed.
2. Site work is limited to intercepting the underground feeder at the service equipment – no additional site work is anticipated.
3. P&ID's will not be included in the design package.
4. Permitting support and services during construction are excluded from this Statement of Services and can be covered by a separate scope of work that is to be developed at the City's request.

4.0 OWNER RESPONSIBILITIES

1. Provide record drawings for the booster pump station.
2. Drawings in AutoCAD format of the site for use as the Project base plans.
3. Access to booster pump station for on-site investigations as needed.

5.0 SCHEDULE

The schedule for the project is as follows, or to be determined, pending coordination with the OWNER:

- | | |
|-----------------------------------|---|
| 1. Notice-to-Proceed: | TBD |
| 2. 65% Design Development | 10 weeks after NTP |
| 3. 95% Pre-Final Design Documents | 8 weeks after receiving comments on 65% |
| 4. Construction Documents | 3 weeks after receiving comments on 95% |



6.0 METHOD OF PAYMENT

The Consultant will perform the services on a lump sum basis for \$41,819.65. See attachment for additional information.

END OF STATEMENT OF SERVICES



The prices quoted are valid and in effect for 90 days. After 90 days, prices are subject to change in accordance with RESPEC's commercial practices.

Homer - Booster Pump Station Upgrades
08/03/23
SUMMARY

			Subconsultant		
Phase		Mechanical	Electrical	S&B, Inc.	Total
1	#420 - Design Development (65%)	\$7,590.00	\$4,570.00	\$7,313.30	\$20,204.63
2	#430 - Pre-Final Design (95%)	\$5,820.00	\$3,760.00	\$4,161.38	\$14,157.52
3	#440 - Construction Documents (100%)	\$2,825.00	\$1,305.00	\$3,025.00	\$7,457.50
Subtotal		\$16,235.00	\$9,635.00	\$14,499.68	\$41,819.65
Est Tax					\$0.00
Total					\$41,819.65



Phase

#420 - Design
Development (65%)

	Senior Mech Eng	Project Mech Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$205.00	\$170.00	\$125.00		
Task				0	\$0.00
Site Visits, Review Record Information, Reference material		4		4	\$680.00
General Correspondence; Coordination & Meetings (Client, Internal, and Subconsultant)		4		4	\$680.00
Project Setup			2	2	\$250.00
Design Analysis, Criteria Narrative		4		4	\$680.00
Drawings - Paintbrush Vault Plan and Sections		4	8	12	\$1,680.00
Drawing - Legend, Notes, Details		2	4	6	\$840.00
Specifications (Sheet specs)		4	2	6	\$930.00
Vendor Coordination		2		2	\$340.00
QA/QC	2	1	1	4	\$705.00
Multi-Discipline Submittal Compiling		4	1	5	\$805.00
Hourly Subtotal	2	29	18	49	
Cost	\$410.00	\$4,930.00	\$2,250.00		\$7,590.00

Phase

#430 - Pre-Final Design
(95%)

	Senior Mech Eng	Project Mech Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$205.00	\$170.00	\$125.00		
Task				0	\$0.00
General Correspondence; Coordination & Meetings (Client, Internal, and Subconsultant)		4		4	\$680.00
Design Analysis, Criteria Narrative, Calcs		2		2	\$340.00
Drawings - Paintbrush Vault Plan and Sections		4	6	10	\$1,430.00
Drawing - Legend, Notes, Details		1	1	2	\$295.00
Specifications (Sheet specs)		2	1	3	\$465.00
Vendor Coordination		2		2	\$340.00
Client Review Meeting		1		1	\$170.00
Review Comment Resolution		2	2	4	\$590.00



QA/QC	2	1	1	4	\$705.00
Multi-Discipline Submittal Compiling		4	1	5	\$805.00
Hourly Subtotal	2	23	12	37	
Cost	\$410.00	\$3,910.00	\$1,500.00		\$5,820.00

Phase

#440 - Construction Documents (100%)

	Senior Mech Eng	Project Mech Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$205.00	\$170.00	\$125.00		
Task				0	\$0.00
Address review &/or client comments		2	2	4	\$590.00
General Correspondence; Coordination & Meetings (Client, Internal, and Subconsultant)		2		2	\$340.00
Finalize and Stamp Drawings		2	2	4	\$590.00
				0	\$0.00
QA/QC	1	1	1	3	\$500.00
Submittal Compiling		4	1	5	\$805.00
Hourly Subtotal	1	11	6	18	
Cost	\$205.00	\$1,870.00	\$750.00		\$2,825.00

Mechanical Hours	5	63	36	104	
Mechanical Cost	\$1,025.00	\$10,710.00	\$4,500.00		\$16,235.00



Phase

#420 - Design

Development (65%)

	Lead Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$185.00	\$155.00	\$125.00		
Task				0	\$0.00
Review Record Information, Reference material		2		2	\$310.00
General Correspondence; Coordination & Meetings		2		2	\$310.00
Project Setup			1	1	\$125.00
Design Analysis, Criteria Narrative, Calcs		2		2	\$310.00
Drawings - Site and Vault Power, Schedules, Diagrams		4	6	10	\$1,370.00
Drawing - Legend, Notes, Details		2	4	6	\$810.00
Specifications (Sheet specs)		4	1	5	\$745.00
				0	\$0.00
QA/QC	1	1	1	3	\$465.00
Submittal Compiling			1	1	\$125.00
Hourly Subtotal	1	17	14	32	
Cost	\$185.00	\$2,635.00	\$1,750.00		\$4,570.00

Phase

#430 - Pre-Final Design

(95%)

	Lead Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$185.00	\$155.00	\$125.00		
Task				0	\$0.00
General Correspondence; Coordination & Meetings		2		2	\$310.00
HEA & COH Coordination		2		2	\$310.00
Design Analysis, Criteria Narrative, Calcs		2		2	\$310.00
Drawings - Site and Vault Power, Schedules, Diagrams		2	4	6	\$810.00
Drawing - Legend, Notes, Details		1	2	3	\$405.00
Specifications (Sheet specs)		2		2	\$310.00
				0	\$0.00
Client Review Meeting		1		1	\$155.00
Review Comment Resolution		2	2	4	\$560.00
				0	\$0.00
QA/QC	1	1	1	3	\$465.00
Submittal Compiling			1	1	\$125.00
Hourly Subtotal	1	15	10	26	
Cost	\$185.00	\$2,325.00	\$1,250.00		\$3,760.00



Phase

#440 - Construction
Documents (100%)

	Lead Elec. Eng	Staff Elec. Eng	Lead Eng Tech	Hourly Subtotal	Cost
Billing Rate	\$185.00	\$155.00	\$125.00		
Task				0	\$0.00
Address review &/or client comments		1	1	2	\$280.00
General Correspondence; Coordination & Meetings		1		1	\$155.00
Finalize and Stamp Drawings		1	1	2	\$280.00
				0	\$0.00
QA/QC	1	1	1	3	\$465.00
Submittal Compiling			1	1	\$125.00
Hourly Subtotal	1	4	4	9	
Cost	\$185.00	\$620.00	\$500.00		\$1,305.00

Electrical Hours	3	36	28	67	
Electrical Cost	\$555.00	\$5,580.00	\$3,500.00		\$9,635.00



S&B inc. 13200 SE 30th St., Beaverton, Washington 98005 (425) 644-1700 FAX (425) 746-9312

August 3, 2023

RESPEC Design Team

via email: Luke Rubalcava [Luke.Rubalcava@respec.com]

Subject: City of Home, AK
Booster Pump Station – Design for Paintbrush
I&C Systems Engineering Services

Dear Design Team:

We are pleased to provide the following scope of work for your review and consideration as you plan for the overall efforts in design for the planned one rehabilitated pressure pump station (Paintbrush) added to the City's water SCADA system. Our scope of work provides control system integration in the form of instrumentation, SCADA system additions, and modifications to the existing SCADA infrastructure. We envision our role as a niche technical resource for your planning and design efforts for the overall automation and control. We provided the control system integration for the City's Water system and are therefore familiar with the current features and requirements of the water system. We bring a knowledge base about the existing control system operation and should minimize your time spent integrating the new facilities with the legacy systems.

S&B proposes to participate with your design team to provide drawings, specifications and attend preliminary design and review meetings as part of the overall control system package for this project. The specifications will include an operating narrative that will describe operation of the control system, narrative may be included on block diagram drawing set. Our control system drawing delivery package will include:

- Control system block diagrams
- Network diagrams
- CSI type Specifications for Control Systems and network connected devices.

Please note that the instrumentation and control system specification will include a paragraph stating:

The I&C and telemetry system scope of work is an addition and modification to the Owner's existing system, which was designed and furnished by S&B, Inc. For compatibility with their comprehensive system, I&C design and control system integration will be provided by the Owner's I&C Consultant/Integrator, S&B, Inc.

Pricing is estimated at least three times during the design process: the first at the 65% submittal, second pre-final design, and final for pre-bid final design drawing and specification benchmarks. The pricing will provide detailed information for field sensors, and SCADA equipment. The scope of work and pricing letter may be included in the bid document if requested by the City.

We are confident that we will successfully work with your selected Engineer and City of Homer design team to meet your expectations for quality and cost efficiency. As part of the collaborative effort in

design, we will allocate time for project conference calls and provide assistance where needed by your design team.

Control System Approach:

The control system will utilize a programmable logic controller (PLC), cellular communication method to the WWTP, instrumentation, and field sensors. The SCADA system will provide control, monitoring and alarms for the following system parameters: Pump operation, pressure, vault flood, station intrusion, smoke detection, and various ancillary conditions as defined by the Design team.

Design Meetings

We anticipate the following meetings with City of Homer staff and pertinent design team members along with the stated output summaries. Meetings will be suitable for online participation using Teams or similar platform. Three group meetings are described below:

Conceptual design meeting for automation system to affirm the level of networked automation devices, size of HMIs, types of PLC IO and processors, etc. The meeting will result with a direction for network topology, automation hardware, automation features and types of instruments we should use for flow, pressure, and analytical measurements. We anticipate 1 hrs of meeting time and 30 minutes to review and approve meeting minutes as output from this work.

A 65% design meeting to review the control system block diagrams and automation system control narratives. We estimate 2 hrs of preparation time to review our design drawings and written document information and prepare questions, 2 hours for meeting discussion / Q&A and 15 minutes to review our meeting minutes and drawing markups.

A pre-final design meeting to review the control system block diagrams and automation system control narratives. We estimate 1 hrs of preparation time to review our design drawings and written document information and prepare questions, 1 hours for meeting discussion / Q&A and 15 minutes to review our meeting minutes and drawing markups.

Final design meeting with project staff to review control narratives, review how system will provide operators and mechanics access to the control of the system. This meeting will review interlocks (hardware and process as applicable), affirm methods and resulting process states (fail-safes) following an event trigger. Staff should estimate 1 hr of prep time, and up to 2 hrs of large group meeting time.

Small group meetings may be requested by the Owner to review 65%, pre-final, and 100% cost estimates of the automation system as prepared by S&B. The design team electrical engineer lead or manager should assume up to 2 hrs for the 65% and up to 1 hour for pre-final and 100% submittals.

Control System Engineering Deliverables

We propose to supply the following deliverables as part of the project:

Pre-Bid Deliverables

Drawings:

Block diagrams provide details of PLC I/O, wiring/cabling, control panel construction. The content of these diagrams will include:

Control Systems general requirements, wiring methods, color standards for display of controlled devices, device installation details.

- Instrument installation details.
- Control System Block Diagrams for Pressure Pump stations.
- Network Diagram
- Panel Elevations: PLC, HMI.

Specifications:

40 61 00 Control System Integration / I&C
40 61 10 Control Narratives (may be provided on blocks)

Project Assumptions:

Working as a specialty sub-consultant on this project we require a basis of design report (BODR) to begin the control system strategy and design work. We ask that RESPEC provide coordination of drawings, schedules and meetings for interdisciplinary work, as required. For this project work we require working lead times of ten weeks for 65%, and eight weeks for pre-final and three weeks for 100% drawing releases or a mutually agreed upon time schedule. P&ID drawings are not included in our scope of work, however we will provide review of the upper band information related to SCADA integration.

Design Budget Estimate

The budget is organized by deliverable in project origination work, 65%, pre-final, and 100% product deliverables with a not to exceed price of **\$14,499.68** as summarized in the attached table 'Attachment A'. Hourly fees are in accordance with our July 2023 fees that are used by our firm for current work with City of Homer as 'Attachment B'.

Excluded from Design and Estimate

Equipment

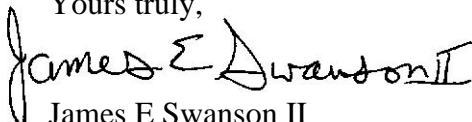
SCADA / RTU Control Panel
Field Sensors and Instrumentation

Services

PLC and SCADA graphic software
Commissioning
Field Startup and Acceptance Testing
System narrative and O&M
As Built / As Commissioned Control System Drawings

Thank you for the opportunity to work with this engineering team.

Yours truly,



James E Swanson II
Vice President
S&B Inc.



13200 SE 30th Street, Bellevue, WA 98005 (425) 644-1700 FAX (425) 746-9312

Attachment "A"

Design Services

City of Homer Pressure Pump Station Design

Provide professional services for I&C portion for Paintbrush Booster Pump Station. Paintbrush is a complete rehabilitation of the station with control and monitoring added into the City's SCADA system. This includes design, engineering, plan set drawings and specifications

Sub-Task 1	Planning, pre-design, and meetings
Sub-Task 2	I&C 65% design - Plans, Specs and Estimate
Sub-Task 3	I&C Pre-Final design - Plans, Specs and Estimates
Sub-Task 4	I&C Final design - Plans, Specs and Estimates

Fee Schedule

Principal -RTS
 Principal -JES
 Technician / CAD -EDS
 Office / Support Personnel -DML

Sub-Task 1	Sub-Task 2	Sub-Task 3	Sub-Task 4	Totals
0.00 hrs	0.00 hrs	3.35 hrs	4.00 hrs	7.35 hrs
10.00 hrs	7.40 hrs	6.70 hrs	4.00 hrs	28.10 hrs
0.00 hrs	14.90 hrs	8.38 hrs	5.00 hrs	28.28 hrs
2.00 hrs	2.00 hrs	2.00 hrs	1.00 hrs	7.00 hrs
12.00 hrs	24.30 hrs	20.43 hrs	14.00 hrs	
\$ 3,000.00	\$ 4,313.30	\$ 4,161.38	\$ 3,025.00	\$ 14,499.68

Total hours

Total Fees

Delivery Schedule

50% Design Date
 90% Design Date
 Final Design Date

Sub-Task 1	Sub-Task 2	Sub-Task 3	Sub-Task 4
	*note S1	*note S1	*note S1
	*note S1	*note S1	*note S1
*note S1	*note S1	*note S1	*note S1

dates index from notice to proceed:

Project Assumptions

- Design documents will be transmitted in electronic format as pdf
- RESPEC provides BODR as starting basis for block diagram drawing development, P&ID dwgs are not required
- S&B provides 65% and Final drawings and specification releases
- Owner provides preference for control features via scheduled meeting, S&B summarizes with meeting minutes

Schedule Notes

S1 Dates established by mutual acceptance

Attachment "B"

FEE SCHEDULE - PROFESSIONAL SERVICES

July 2023 - June 2024	Standard
Principal -RTS	\$280.00 /hr
Principal -JES	\$280.00 /hr
Senior Engineer - DGT	\$209.00 /hr
Senior Engineer - EHD	\$209.00 /hr
Senior Field Engineer - unfilled	\$209.00 /hr
Engineer / Programmer - RPR	\$181.00 /hr
Engineer / Programmer - unfilled	\$181.00 /hr
SCADA / planner - JRS	\$181.00 /hr
Technician / CAD -EDS	\$137.00 /hr
Technician / CAD II -unfilled	\$137.00 /hr
Office / Support Personnel -DML	\$100.00 /hr
Office / Support Personnel -JAB	\$100.00 /hr
Office / Support Personnel -RKP	\$100.00 /hr
TRAVEL EXPENSES	
AUTO (Up to 100 miles per day)	No Charge
AUTO (Over 100 miles per day)	Per Mile \$ 0.585
AIR TRAVEL	Actual Cost + 10%
OVERNIGHT TRAVEL	Actual Cost + 10%
MATERIALS	
PRINTING	Actual Cost + 10%
OFFICE SUPPLIES, COPIES, Etc.	Generally No Charge
SPECIAL EQUIPMENT AND/OR SERVICES	
EQUIPMENT AND MATERIALS	Actual Cost + 30%
CONTRACTED SERVICES	Actual Cost + 10%

**CITY OF HOMER
HOMER, ALASKA**

City Manager
Public Works Director

RESOLUTION 23-085

A RESOLUTION OF THE CITY COUNCIL OF HOMER, ALASKA
APPROVING A CONTRACT TO EAST ROAD SERVICES, INC. TO
COMPLETE THE LEE AVENUE TRAIL IN THE NOT TO EXCEED
AMOUNT OF \$15,456 AND AUTHORIZING THE CITY MANAGER TO
NEGOTIATE AND EXECUTE THE APPROPRIATE DOCUMENTS.

WHEREAS, The FY24 Capital Budget includes \$20,000 to complete the Lee Avenue Trail,
a project which was started last year with the help of Homer Drawdown volunteers; and

WHEREAS, The Homer Drawdown group cleared the brush and established the route
for the trail and completing the trail requires some drainage work, laying down filter fabric and
placing gravel; and

WHEREAS, We invited local contractors to submit bids on this project and two bids were
received; and

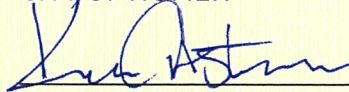
WHEREAS, The lowest responsive, responsible bidder was East Road Services, Inc., with
a bid of \$13,440, based on the estimated quantities set forth in the invitation to bid; and

WHEREAS, Actual prices may vary slightly, so we are asking for a 15% contingency
bringing the total amount requested to \$15,456.

NOW THEREFORE BE IT RESOLVED that the Homer City Council hereby authorizes
issuance of a contract to East Road Services LLC., in the not to exceed amount of \$15,456 to
complete the Lee Avenue Trail.

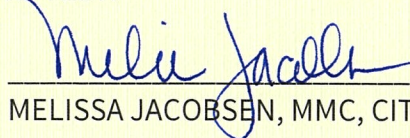
PASSED AND ADOPTED by the Homer City Council this 28th day of August, 2023.

CITY OF HOMER

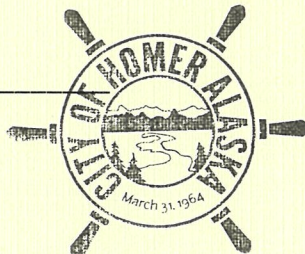


KEN CASTNER, MAYOR

ATTEST:



MELISSA JACOBSEN, MMC, CITY CLERK





MEMORANDUM

Resolution 23-085, A Resolution of the City Council of Homer, Alaska Awarding a Contract to East Road Services, Inc. in the Amount of \$15,456 to Complete the Lee Avenue Trail and Authorizing the City Manager to Negotiate and Execute the Appropriate Documents. City Manager/Public Works Director.

Item Type: Backup Memorandum
Prepared For: City Council
Date: August 15, 2023
From: Janette Keiser, PE, Public Works Director/City Engineer
Through: Rob Dumouchel, City Manager

I. Issue: The purpose of this Memorandum is to recommend award of a contract to East Road Services, Inc. to complete the Lee Avenue Trail.

II. Background:

The FY24 Capital Budget includes \$20,000 to complete the Lee Avenue Trail, a project which was started last year with the help of Homer Drawdown volunteers. Drawdown cleared the brush and established the route for the trail. Completing the trail requires some drainage work, laying down filter fabric and placing gravel.

We invited local contractors to submit bids on this project and two bids were received. The lowest responsive, responsible bidder was East Road Services, Inc., with a bid of \$13,440, based on the estimated quantities set forth in the invitation to bid. Actual prices may vary slightly, so we are asking for a 15% contingency bringing the total amount requested to \$15,456.

III. RECOMMENDATION: That the City Council award a contract to East Road Services, Inc. in the not to exceed in the Not To Exceed amount of \$15,456 to complete the Lee Avenue Trail.

**CITY OF HOMER
HOMER, ALASKA**

City Manager/
City Engineer

ORDINANCE 24-33

AN ORDINANCE OF THE CITY COUNCIL OF HOMER, ALASKA,
AMENDING THE FY25 CAPITAL BUDGET BY APPROPRIATING AN
ADDITIONAL \$73,300 FROM THE WATER CAPITAL ASSET REPAIR
AND MAINTENANCE ALLOWANCE (CARMA) FUND FOR THE
PAINTBRUSH BOOSTER PUMP STATION PROJECT.

WHEREAS, Ordinance 23-23(A-3) appropriated \$250,000 from the FY24/25 Capital Budget for a total project balance of \$250,000; and

WHEREAS, The project is a high priority for our water system operations and has already experienced a recent critical pump failure; and

WHEREAS, RESPEC provided consultant services to complete the project design in the amount of \$42,000 and will provide construction assistance for \$5,000 for a total of \$47,000; and

WHEREAS, The Paintbrush Booster Pump Station Project has been put out to competitive bid and Public Works received a single construction bid in the amount of \$276,300; and

WHEREAS, An additional \$73,300 is necessary to award and complete this important project.

NOW, THEREFORE, The City of Homer Ordains:

Section 1: The Homer City Council hereby amends the FY25 Capital Budget by appropriating an additional \$73,300 as follows:

<u>Fund</u>	<u>Description</u>	<u>Amount</u>
256	Water CARMA	\$73,300

Section 2: This is a budget amendment ordinance, is not permanent in nature, and shall not be codified.

ENACTED BY THE CITY COUNCIL OF HOMER, ALASKA, this 19th day of August, 2024.

CITY OF HOMER



KEN CASTNER, MAYOR

ATTEST:



RENEE KRAUSE, MMC, CITY CLERK

YES: 5

NO: 0

ABSTAIN: 0

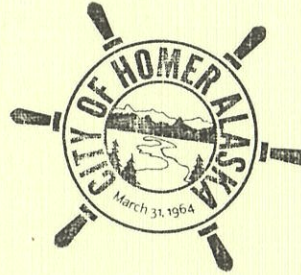
ABSENT: 1

First Reading: 7/22/24

Public Hearing: 8/12/24

Second Reading: 8/19/24

Effective Date: 8/20/24





MEMORANDUM

Ordinance 24-33, An Ordinance of the City Council of Homer, Alaska, Appropriating an Additional \$73,300 from the Water CARMA Fund to the Paintbrush Booster Pump Station Project.

Item Type: Backup Memorandum
Prepared For: Mayor Castner and City Council
Date: July 15, 2024
From: Leon Galbraith, P.E., City Engineer
Through: Melissa Jacobsen, City Manager

Summary:

Appropriation of an additional \$73,300 from the Water CARMA Fund to the Paintbrush Booster Pump Station Project.

Background:

The FY24/25 Capital Budget included \$250,000 to upgrade the Paintbrush Booster Station. A booster station is a pump that “boosts” the pressure in a water main that is on the low pressure side of a pressure zone. A couple of years ago the pump in the Paintbrush Station failed, leaving over a dozen homes located on Paintbrush Street without water. The City delivered cases of bottled water to the customers up there and scrambled to fix the problem. The problem was a burned out relay switch, which was so old that we could not get replacement parts. The staff dug in our stashes of old parts that had been salvaged from other repair projects and found a relay switch that had been removed from the waste water treatment plant. The relay fit and we were able restore water service. This put the City on notice that more comprehensive upgrades were needed as soon as possible. That’s why funding was requested in the FY24 Capital Budget.

A local mechanical engineer employed by RESPEC helped the City scope out and estimate the costs of a permanent solution. Once the project was funded, RESPEC was asked to submit a proposal to provide more comprehensive engineering services to implement the permanent solution. They’ve currently completed this design work task order for the price of \$42,000. We have also issued them a task order to complete the construction assistance task for \$5,000.

RESPEC has also completed an engineer’s construction cost estimate prior to the project bidding. This value was itemized with a small contingency at approximately \$130,000.

At the completion of the competitive bidding process, the PW Department received one bid of \$276,300 which exceeded the engineer’s estimate of \$130,000. The PW Department has considered

the unique nature of this project, the proprietary water control systems and long lead time needed, and the inflationary environment we are still functioning in. We have determined the engineer's estimate was likely underestimating the value of the project. This continues to be a very high priority project for our City's water system operations and will only get more expensive as time goes on if postponed.

Recommendation:

Therefore, the PW Department is requesting an additional appropriation of \$73,300 to enable the award and completion of this important project. This reflects an initially scoped project budget of \$250,000 – \$47,000 to RESPEC + \$73,300 to match the single bid construction price of \$276,300.

CITY OF HOMER
FINANCIAL SUPPLEMENT

PROJECT NAME	<u>Additional Funding - Paintbrush Booster Pump Station</u>	DATE	<u>07/17/2024</u>
DEPARTMENT	<u>Public Works</u>	SPONSOR	<u>City Manager/PW Director</u>
REQUESTED AMOUNT	<u>\$ 73,300</u>		

DESCRIPTION	<p>Ordinance 23-23(A-3) appropriated \$250,000 from the FY24/25 Capital Budget for a total project balance of \$250,000. RESPEC provided consultant services to complete the project design in the amount of \$42,000 and will provide construction assistance for \$5,000 for a total of \$47,000. The Paintbrush Booster Pump Station Project has been put out to competitive bid and Public Works received a single construction bid in the amount of \$276,300.</p> <p>An additional \$73,300 is necessary to award and complete this important project.</p>
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FUNDING SOURCE(S)	OPERATING	GF CARMA	GF FLEET CARMA	PORT RESERVES	WATER CARMA
	0%	0%	0%	0%	100%
	HAWSP	HART-ROADS	HART-TRAILS	PORT FLEET RESERVES	SEWER CARMA
	0%	0%	0%	0%	0%

FUNDING SOURCE 1: WATER CARMA (256-0378)		FUNDING SOURCE 2:		FUNDING SOURCE 3:	
Current Balance	\$ 1,895,742	Current Balance	_____	Current Balance	_____
Encumbered	\$ 1,224,680	Encumbered	_____	Encumbered	_____
Requested Amount	\$ 73,300	Requested Amount	_____	Requested Amount	_____
Other Items on Current Agenda	\$ 0	Other Items on Current Agenda	_____	Other Items on Current Agenda	_____
Remaining Balance	\$ 597,762	Remaining Balance	_____	Remaining Balance	_____
FUNDING SOURCE 4:		FUNDING SOURCE 5:		FUNDING SOURCE 6:	
Current Balance	_____	Current Balance	_____	Current Balance	_____
Encumbered	_____	Encumbered	_____	Encumbered	_____
Requested Amount	_____	Requested Amount	_____	Requested Amount	_____
Remaining Balance	_____	Remaining Balance	_____	Remaining Balance	_____