

CITY OF HIGH POINT

AGENDA ITEM



Title: Proposal for Eastside WWTP Incinerator Preheat Burner Replacement

From: Terry Houk – Public Services Director
Derrick Boone – Public Services Asst. Director

Meeting Date: September 17, 2018

Public Hearing: N/A

Advertising Date: N/A
Advertised By: On-Call

Attachments: Attachment A – Proposal

PURPOSE: This proposal is for engineering services for the replacement of the preheat burner and the burner management system on the Solid Disposal Incinerator.

BACKGROUND: Federal Maximum Achievable Control Technology (MACT) standards apply to air emissions from the Fluidized Bed Incinerator (FBI). At a later date, it may be appropriate to replace the preheat burner and the burner management system in light of the MACT standards. This replacement, if performed, will not be part of the original project and will not take place until the FBI has been fully operational for several months.

BUDGET IMPACT: Funds for this project are available in the adopted budget.

RECOMMENDATION / ACTION REQUESTED: Public Services Requests Council approve the scope of services to Hazen and Sawyer for Incinerator Preheat Burner Replacement for \$106,980.00.



Hazen and Sawyer
629 Green Valley Rd, Suite 200
Greensboro, NC 27408 • 336.478.3378

July 30, 2018

Terry Houk
Public Services Director
City of High Point
211 S. Hamilton Street
High Point, NC 27261

Re: Scope and Fee Proposal for the Eastside WWTP Incinerator Preheat Burner Replacement

Dear Mr. Houk:

Hazen and Sawyer appreciates the opportunity to submit the enclosed proposal to provide Engineering Design Services as described below for the addition of a new preheat burner for the Fluidized Bed Incinerator at Eastside WWTP.

Background

The City of High Point requests Hazen and Sawyer to provide engineering services for the replacement of the preheat burner system.

Design Services

Task 1 – New Preheat Burner: Hazen and Sawyer will provide design services to replace the existing preheat burner and burner management system. The equipment proposed will be selected to meet all applicable emission requirements set forth by the EPA and NC Division of Air Quality. Subtasks are designated as shown below.

- Task 1.1 Investigate NFPA and other code requirements (Mechanical)
- Task 1.2 Investigate NFPA and other code requirements (Electrical/Instrumentation)
- Task 1.3 Evaluate existing preheat burner blower to ensure compatibility with new preheat burner.
- Task 1.4 Evaluate existing fuel oil system to ensure compatibility with new burner management system
- Task 1.5 Select equipment and controls
- Task 1.6 Detailed Design and Drawing Development
- Task 1.7 Develop Technical Specifications
- Task 1.8 Task 1 QA/QC
- Task 1.9 Develop work change directive for issue to Contractor
- Task 1.10 Startup, testing and commissioning services

Deliverables

The final deliverable for the project will include a complete set of signed and sealed drawings and specifications.



Contract Drawings will be produced on a full size 22" x 34" ANSI D paper. The "Issued for Construction" set will be signed, sealed and provided to the Contractor as a Work Change Directive for pricing.

Technical Specifications: Technical specifications will be produced and issued with the Contract Drawings for pricing by the contractor in the referenced Work Change Directive.

Schedule

The project team will commence work immediately upon Notice to Proceed by Public Services.

Bidding Services

Bidding services are excluded from this scope and fee. The project will be delivered by a Work Change Directive given to the Contractor currently under contract to perform work at the site.

Fee

The scope described above will be provided for a not to exceed fee of \$106,980.00. The fee proposal is summarized below.

Task	Fee	Type
Task 1 – Design new preheat burner and burner management system.	\$106,980	Not to Exceed
Total Contract Value	\$106,980	Not to Exceed



Title	Rate per hour	Title	Rate per hour
Vice President	\$230	Principal Engineer/Engineer	\$130
Associate VP	\$215	Operations Specialist	\$125
Senior Associate	\$195	Principal Designer	\$120
Associate	\$160	Assistant Engineer	\$110
Senior Principal Engineer	\$135	Technician	\$50

Please feel free to contact us at any time if you have any questions or would like to meet to discuss the items enclosed. Thank you again for the opportunity and we look forward to continuing to work with the City of High Point.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Alan L. Stone".

Alan L. Stone, PE
Vice President

cc: Todd Johnson, PE; Barry Bickerstaff, PE



Appendix A
Detailed Cost Breakdown

Solids Handling Facility - Incinerator Restart Project

LABOR COSTS		STAFFING HOURS												
TASK DESCRIPTION	Employee Classification	Vice President	Assoc. Vice President	Sr. Associate	Associate	Sr. Principal Engineer	Principal Engineer	Operations Specialist	Principal Designer	Asst. Engineer	Technician	Subtotal Hours	Subtotal Cost	
Task 1 - Design new preheat burner and burner management system		Average Hourly Rate	\$250.00	\$215.00	\$195.00	\$160.00	\$135.00	\$120.00	\$110.00	\$50.00				
Investigate NEPA and other code requirements - mechanical				24	24							48	\$ 5,520	
Investigate NEPA and other code requirements - electrical / instrumentation				24	24							48	\$ 8,520	
Evaluate existing preheat burner blower to ensure compatibility with new preheat burner.				16	16							32	\$ 5,680	
Evaluate existing fuel oil system to ensure compatibility with new burner management system.				16	16							32	\$ 5,680	
Select equipment and controls				40	80			40		40		200	\$ 25,000	
Detailed Design Drawing Development				16	40				40	16		112	\$ 16,080	
Develop Technical Specifications				40	80					40		160	\$ 25,000	
QA/QC			4	8				8				20	\$ 2,540	
Develop Work Change Directive for issue to Contractor				4	8							12	\$ 2,060	
Startup, testing and commissioning services				40				40				80	\$ 7,800	
												744	\$ 106,980	
		Subtotal Hours	4	8	220	288	0	0	83	40	96	0	744	
OTHER DIRECT COSTS								Qty	Unit	Unit Cost	Wt/Markup (5%)		Cost	
Materials													Included	
Summary of Costs		Total Other Direct Cost: 13 -												
		Total for Labor: \$ 106,980												
		Other Direct Costs: \$												
		Total Estimated Project Cost: \$ 106,980												