

RESOLUTION NO. 2019-307

RESOLUTION AUTHORIZING THE EXECUTION OF A PROFESSIONAL SERVICES AGREEMENT WITH WALDRON ENGINEERING AND CONSTRUCTION, INC. EXETER, NEW HAMPSHIRE, FOR PROFESSIONAL ENGINEERING SERVICES FOR INTEGRATION OF ULSD FUEL TO CLAYVILLE UNIT OPERATIONS

WHEREAS, the City of Vineland Municipal Electric Utility is in need of professional engineering services for the integration of ULSD fuel to the Clayville Generation Unit as a backup available fuel to operate said unit; and

WHEREAS, Waldron has submitted a proposal for Professional Engineering Services for the City of Vineland in accordance with a fair and open process and was awarded a contract in accordance with Resolution 2019-52, Contract Number C19-0052; and

WHEREAS, Waldron Engineering and Construction, Inc., Exeter, New Hampshire, (Waldron) has been engineer-of-record for the Clayville unit and is familiar with its design; and

WHEREAS, the Director of the Vineland Municipal Utilities has recommended the City award a Professional Services Agreement with Waldron in accordance with Contract Number C19-0052 in an amount not to exceed \$598,000.00; and

WHEREAS, the Chief Financial Officer has certified the availability of funds.

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Vineland as follows:

1. That the Mayor and Clerk are hereby authorized and directed to execute a Professional Services Agreement with Waldron Engineering and Construction, Inc. Exeter, New Hampshire for professional engineering services in accordance with the proposal attached hereto and made a part hereof and in accordance with Contract Number C19-0052 at a cost not to exceed \$598,000.00 together with a contingency of \$59,800.00, should the same be needed for the reasons set forth by the Director of the Municipal Utilities.

Adopted:

---

President of Council

ATTEST:

---

City Clerk

**REQUEST FOR RESOLUTION FOR CONTRACT AWARDS  
UNDER 40A:11-5 EXCEPTIONS  
(PROFESSIONAL SERVICES, EUS, SOFTWARE MAINTENANCE, ETC)**

7/5/2019

\_\_\_\_\_  
(DATE)

1. Service (detailed description): Engineering Services for Integration of ULSD Fuel to Clayville Unit Operations
2. Amount to be Awarded: \$ 657,800.00 (see attachment)  
 Encumber Total Award  
 Encumber by Supplemental Release
3. Amount Budgeted: \$ 700,000.00
4. Budgeted: By Ordinance No. 2019-32  
Or Grant: Title & Year \_\_\_\_\_
5. \*\*Account Number to be Charged: C-06-00-000-1932-72000
6. Contract Period: 7/23/2019 - 12/31/1020
7. Date To Be Awarded: 7/23/2019
8. Recommended Vendor and Address: Waldron Engineering & Construction, Inc.  
37 Industrial Drive, Suite1, Exeter, NH 03883
9. Justification for Vendor Recommendation:(attach additional information for Council review)  
Waldron was the Engineer-of-Record for both the Down Unit # 11 and Clayville unit original projects. Additional engineering services for these two operating were provided on an as needed basis. With their experience and familiarity with with our units, their services for this project will be provided at the lowest costs.  
 Non-Fair & Open (Pay-to-Play documents required)  
 Fair & Open: How was RFP advertised? \_\_\_\_\_
10. Evaluation Performed by: P. Kudless J. Ragsdale
11. Approved by: T. Dunmore  
J. Lillie
12. Attachments:  
 Awarding Proposal  
 Other: Scope of Work (SOW)

- Send copies to:  
Purchasing Division  
Business Administration

\*\* If more than one account #, provide break down

## Award Breakdown

<b>Cost of Services</b>	\$598,000.00
<b>10% Contingency</b>	\$59,800.00
<b>Total Award</b>	<b>\$657,800.00</b>

**VMEU RFP**  
**Engineering Services for Integration of Ultra-Low Sulfur Distillate Capability**

**5. PROJECT COSTS**

---

Waldron Engineering & Construction, Inc. offers the following project cost summary:

<b>Project Controls Breakdown</b>		
Contract Value	\$	598,000
Project Proposal/Allocation	\$	598,000
Project Gap		<b>(\$0)</b>
<b>Base Design Effort</b>		
<b>Discipline</b>	<b>Manhours</b>	<b>Cost</b>
Mechanical	300	\$ 45,790
Civil/Structural	268	\$ 43,500
I&C	284	\$ 43,780
Electrical	404	\$ 60,820
Multidiscipline	142	\$ 21,872
Base Design Totals	1,398	\$ 215,762
	<b>Manhours</b>	<b>Cost</b>
<b>Construction Support</b>	272	\$ 42,620
<b>Commissioning</b>	60	\$ 8,850
<b>Closeout</b>	60	\$ 9,220
Non-Design Totals	392	\$ 60,690
<b>Technical Subcontractors</b>		\$ 165,214
<b>Tech Sub w/Fee</b>		\$ 165,214
<b>Est. Equivalent MHs</b>	1,271	
<b>Travel/Expenses</b>		\$ 9,945
<b>Project Management/Admin</b>	291	\$ 68,389
% of Waldron Direct	16%	25%
% of Waldron Direct+Subs	10%	15%

Waldron clarifies that its cost summary is based on the following:

- All total costs are presented as “not-to-exceed”
- All costs associated with City of Vineland/NJ-DEP/NJ-DECA are presented as not-to-exceed based on previous experience with these entities
- Site plan package
- Preliminary and final engineering packages
- Air permit package

**VMEU RFP**  
**Engineering Services for Integration of Ultra-Low Sulfur Distillate Capability**

- Construction and commissioning bid packages
- Bid evaluations
- All bid documents provided in MS word on media
- All drawings provide in AutoCAD on media, 2 size "D" paper copies
- Contingency represents money that will be spent on unforeseen items
- Additional services will be per rate sheet submitted

Specific Cost items:

- Up to ten (10) paper copies of specific drawing packages will be provided upon request, at no additional charge
- The per meeting cost requested for briefing/city meeting is \$2,100, eight (8) such meetings have been included per RFP
- The milestone payment schedule in %

Invoice Month	% of Total
Aug-19	18%
Sep-19	22%
Oct-19	9%
Nov-19	6%
Dec-19	4%
Jan-20	4%
Feb-20	3%
Mar-20	3%
Apr-20	3%
May-20	3%
Jun-20	3%
Jul-20	3%
Aug-20	4%
Sep-20	4%
Oct-20	5%
Nov-20	6%
Dec-20	0%
<b>Sum</b>	<b>100%</b>

**Project Manhour Estimate Recap & Stats**

**VMEU C1 Fuel Oil Firing**

**Project Controls Breakdown**

Contract Value	\$	598,000
Project Proposal/Allocation	\$	598,000
Project Gap		<b>(\$0)</b>

**Base Design Effort**

Discipline	Manhours	Cost	% of Base	
			Manhours	Cost
Mechanical	300	\$ 45,790	21%	21%
Civil/Structural	268	\$ 43,500	19%	20%
I&C	284	\$ 43,780	20%	20%
Electrical	404	\$ 60,820	29%	28%
Multidiscipline	142	\$ 21,872	10%	10%
<b>Base Design Totals</b>	<b>1,398</b>	<b>\$ 215,762</b>		

	Manhours	Cost
<b>Construction Support</b>	272	\$ 42,620
<b>Commissioning</b>	60	\$ 8,850
<b>Closeout</b>	60	\$ 9,220
<b>Non-Design Totals</b>	<b>392</b>	<b>\$ 60,690</b>

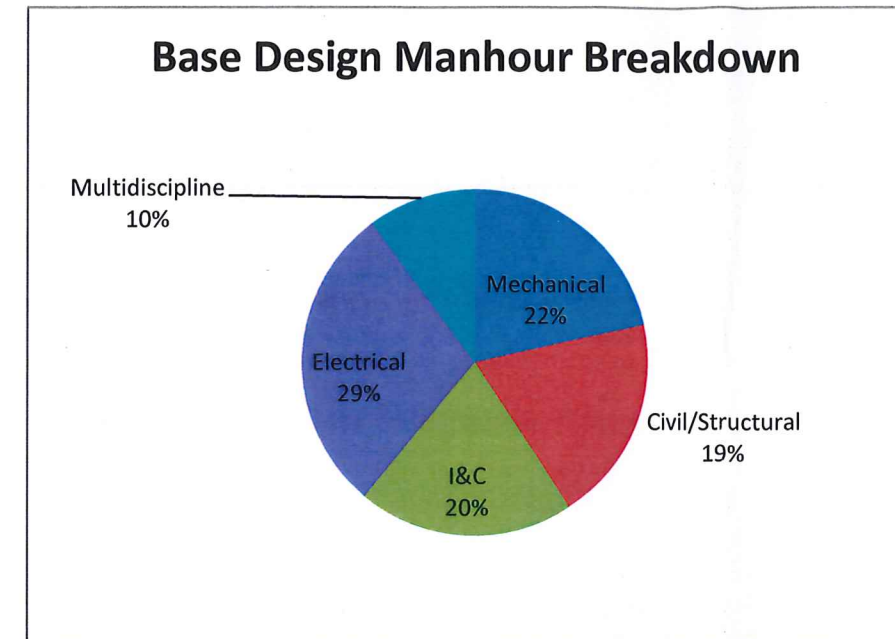
<b>Technical Subcontractors</b>	\$ 165,214
<b>Tech Sub w/Fee</b>	\$ 165,214
<b>Est. Equivalent MHs</b>	1,271

<b>Travel/Expenses</b>	\$ 9,945
------------------------	----------

<b>Project Management/Admin</b>	291	\$ 68,389
% of Waldron Direct	16%	25%
% of Waldron Direct+Subs	10%	15%

**Project Cost Forecast**

Waldron Eng'g Total Cost %	Forecasted Total Project Value
20	\$ 2,990,000
16	\$ 3,737,500
12	\$ 4,983,333
10	\$ 5,980,000



**Project Engineering Manhour Estimate**

			PM	CM	SPE/LDE/DM	Staff Eng	Des. Eng	Designer	Con. Sup	Com. Eng	Admin		
<b>Contract Value</b>	<b>\$ 598,000</b>												
Contingency Value	\$ -	Baseline-	235	210	190	155	155	140	179	180	76		
Project Plan Contingency-%	0.00	Typical											
"Project Proposal / Allocation"	\$ 598,000	Proj. Hrs	(\$0)	<< Contract Gap								Manhour Summary	Group Costs
<b>Mechanical</b>													
Pre-Job Planning					6	16		12					34
Site Visits													0
Study/Report													0
Demolition Dwgs													0
Process Diagrams													0
Piping Dwgs & Details					4	36		60					100
Site Plans, GAs & Equip Location Plans					6	20		30					56
HVAC Dwgs													0
Duct Work Dwgs & Details													0
Mech General Notes & Details					4	16		20					40
P&IDs (motor & equip lists?)					6	20							26
Specifications-Equipment					2	16							18
Specifications-Installation					4	22							26
													0
LDE Supervision													0
	Subtotal Hrs =		0	0	32	146	0	122	0	0	0	300	
	Subtotal Cost =		\$ -	\$ -	\$ 6,080	\$ 22,630	\$ -	\$ 17,080	\$ -	\$ -	\$ -		\$ 45,790
<b>Civil/Structural Activities (P6)</b>													
Pre-Job Planning/Design Criteria					4	16							20
Site Visits													0
Bldg Structural Inspection/Report													0
General Notes Dwg-Civil/Structural					2	16							18
Site Civil Dwgs													0
Demolition Dwgs													0
Foundations Dwgs					8	46							54
Steel Dwgs					4	16							20
Architectural Dwgs					16	32							48
Specifications-Equipment													0
Specifications-Installation					4	16							20
Develop Rqmts and Review Sp. Inspections by 3rd Party					2	4							6
Modeling (RISA)					4	46							50
Equipment Anchorage					4	8							12
Design Checking													0
Interface with Civil Sub					8	12							20
LDE Supervision													0
	Subtotal Hrs =		0	0	56	212	0	0	0	0	0	268	
	Subtotal Cost =		\$ -	\$ -	\$ 10,640	\$ 32,860	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 43,500
<b>I&amp;C/Fire</b>													

**Project Engineering Manhour Estimate**

			PM	CM	SPE/LDE/DM	Staff Eng	Des. Eng	Designer	Con. Sup	Com. Eng	Admin		
<b>Contract Value</b>	<b>\$ 598,000</b>												
Contingency Value	\$ -	Baseline-	235	210	190	155	155	140	179	180	76		
Project Plan Contingency-%	0.00	Typical											
"Project Proposal / Allocation"	\$ 598,000	Proj. Hrs	(\$0)	<< Contract Gap								Manhour Summary	Group Costs
Pre-Job Planning					8	12		12				32	
Site Visits												0	
Control Architecture					4	8		24				36	
Panel Dwgs & Diagrams					8	16		24				48	
Site Plans/GAs & Equip Location Plans					4	8		16				28	
I&C General Notes & Details					2	4		8				14	
Instrument List					2	4		8				14	
Loop Diagrams												0	
Specifications-Equipment					8	16		36				60	
Specifications-Installation					4	8						12	
Report												0	
CEMs/PEMs					8	32						40	
Training preparation-procedures, functions, alarms, etc												0	
Coordinate with sub-contractor (I&C/fire)												0	
	Subtotal Hrs =		0	0	48	108	0	128	0	0	0	284	
	Subtotal Cost =		\$ -	\$ -	\$ 9,120	\$ 16,740	\$ -	\$ 17,920	\$ -	\$ -	\$ -		\$ 43,780
<b>Electrical</b>													
Pre-Job Planning					8	12		20				40	
Site Visits												0	
Load Flow Study, E-Tap					4	8		24				36	
Short Circuit Study, E-Tap					8	16		46				70	
Protective Device Coordination Study					4	8		16				28	
Arc Flash Study					2	4		8				14	
Standard Symbols/Details & Notes					2	4		8				14	
One Lines					2	4		8				14	
Elect. Hazardous Classification Plan												0	
Equip Configuration/Elev & Elementaries					4	8		24				36	
Site Plans/GAs & Equip Location Plans					4	8		12				24	
Grounding Plans/Lightning Protection					4	8		8				20	
Conduit & Raceway Dwgs					4	12		46				62	
Lighting & Misc Power Plans					2	4		6				12	
Demolition Dwgs												0	
Specifications-Equipment					2	4		6				12	
Specifications-Installation					2	4		6				12	
install details					2			8				10	
LDE Supervision												0	
	Subtotal Hrs =		0	0	54	104	0	246	0	0	0	404	
	Subtotal Cost =		\$ -	\$ -	\$ 10,260	\$ 16,120	\$ -	\$ 34,440	\$ -	\$ -	\$ -		\$ 60,820
Design Phase Subtotal Hrs =			0	0	190	570	0	496	0	0	0	1256	



**Project Engineering Manhour Estimate**

			PM	CM	SPE/LDE/DM	Staff Eng	Des. Eng	Designer	Con. Sup	Com. Eng	Admin			
<b>Contract Value</b>	\$ 598,000													
Contingency Value	\$ -	Baseline-	235	210	190	155	155	140	179	180	76			
Project Plan Contingency-%	0.00	Typical												
"Project Proposal / Allocation"	\$ 598,000	Proj. Hrs	(\$0)	<< Contract Gap									<b>Manhour Summary</b>	
<b>Multi-Discipline</b>													<b>Group Costs</b>	
Interdiscipline/Submittal Reviews (12%)	0.11		0	0	21	64	0	56	0	0	0	142		
Subtotal Cost =			\$ -	\$ -	\$ 4,072	\$ 9,967	\$ -	\$ 7,833	\$ -	\$ -	\$ -		\$ 21,872	
													<b>Total Design Phase Manhours =</b>	1398
													<b>Total Design Phase Cost =</b>	\$ 215,762
<b>Construction Support</b>														
RFIs					20	40		30						90
Contractor Submittals					30	60		20						110
Site Meetings						36		36						
LDE Supervision														0
Subtotal Hrs =			0	0	50	136	0	86	0	0	0	272		
Subtotal Cost =			\$ -	\$ -	\$ 9,500	\$ 21,080	\$ -	\$ 12,040	\$ -	\$ -	\$ -		\$ 42,620	
<b>Commissioning</b>														
Plans														0
Procedures														0
Comm. Management														0
Training														
Tech assist						30		30						
LDE Supervision														0
Subtotal Hrs =			0	0	0	30	0	30	0	0	0	60		
Subtotal Cost =			\$ -	\$ -	\$ -	\$ 4,650	\$ -	\$ 4,200	\$ -	\$ -	\$ -		\$ 8,850	
<b>Closeout</b>														
Record Dwgs					4	8		24						36
Lessons Learned					4									4
Turnover packages						20								
LDE Supervision														0
Subtotal Hrs =			0	0	8	28	0	24	0	0	0	60		
Subtotal Cost =			\$ -	\$ -	\$ 1,520	\$ 4,340	\$ -	\$ 3,360	\$ -	\$ -	\$ -		\$ 9,220	
<b>Technical Subcontractors</b>													<b>Total Support Phase Manhours =</b>	392
													<b>Total Support Phase Cost =</b>	\$ 60,690
Geotechnical	\$ 11,440	(2 Days drill @ 2950 per day, 2 days tech @ \$800 per day, lab test @ \$840, 19.4 eng. Hour at avg \$160)												
Air Permit	\$ 51,300	(242 labor hours @ \$208 avg, plus \$1,000 in expenses)												
Civil/Site Planning/Survey	\$ 102,474	(600 labor hours @\$168 plus \$1,000 in expenses)												

### Project Engineering Manhour Estimate

Contract Value	\$ 598,000		PM	CM	SPE/LDE/DM	Staff Eng	Des. Eng	Designer	Con. Sup	Com. Eng	Admin			
Contingency Value	\$ -	Baseline-	235	210	190	155	155	140	179	180	76			
Project Plan Contingency-%	0.00	Typical												
"Project Proposal / Allocation"	\$ 598,000	Proj. Hrs	(\$0)	<< Contract Gap								Manhour Summary	Group Costs	
Subcontract Subtotal =		165,214												
WECI Fees (0%)	0.00													
State Sales Tax (5.5%)(typically not for services)														
Subcontract Total =		\$ 165,214												
Equiv Hrs Rate	\$ 130													
<b>Equiv Proj Hrs (for consideration in PM hrs)</b>	1,271													
<b>Travel/Expenses</b>														
Days	17													
Daily Rate	\$ 585													
Expense Subtotal =		\$ 9,945												
<b>Project Management</b>														
Pre-Job Planning													0	
Site Visits													0	
Study/Report													0	
Design coordinator													0	
Cost Opinion													0	
PM-WECI Effort (12%)	0.12		215										215	
<b>PM-Subcontract Effort (6%)</b>	0.06		76										76	
Subtotal Hrs =			291	0	0	0	0	0	0	0	0		291	
Subtotal Cost =			\$ 68,389	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ 68,389	
												<b>Base Project Cost = \$ 520,000</b>		
												Contingency	0.15	\$ 78,000
												Subtotal =	\$ 598,000	
												Subcontractor Fee	0.00	\$ -
												<b>Total Project Cost = \$ 598,000</b>		