

**NEW CANAAN PUBLIC WORKS FACILITY
139 LAKEVIEW AVENUE
NEW CANAAN, CT 06840
203-594-4000**

**REQUEST FOR PROPOSAL (RFP)
WASTEWATER TREATMENT PLANT CHP SYSTEM**

The Town of New Canaan is soliciting proposals for the implementation and maintenance of a natural-gas fired combined heat and power (CHP) system(s) to be installed to provide baseload electricity and heat for the Wastewater Treatment Plant and ancillary buildings located at 394 Main Street, New Canaan, CT 06840. Proposals are sought from qualified engineering, procurement and construction (EPC) contractors to install and maintain the equipment on a turnkey, design-build basis.

Note: there is a natural gas expansion plan currently underway in the Town of New Canaan and it is expected that the gas line will be extended to the Wastewater Treatment Plant and the Department of Public Works (DPW) campus, subject to the anticipated implementation of a CHP system. The location of gas service will be informed by the optimal location of the CHP equipment.

The Town of New Canaan reserves the right to reject any and all proposals, or separate parts thereof, requested herein. The Town of New Canaan is exempt from the payment of Federal Excise Taxes, Connecticut Sales and Use Tax according to State Statute. Such taxes must not be included in bid prices nor added to any items specified.

INSTRUCTIONS ON RFP DEADLINES AND REQUIREMENTS:

NAME OF RFP: Wastewater Treatment Plant CHP System

TYPE OF RFP: Sealed Proposal

MANDATORY WALK-THROUGH: March 19, 2020 **TIME:** 10:30 AM

PROPOSAL DEADLINE: April 14, 2020 **TIME:** 10:30 AM

LOCATION TO FORWARD RFP:	Tiger Mann, Director of Public Works New Canaan Town Hall 77 Main Street New Canaan, CT 06840
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RFP SECURITY: Required _____ Not Required X

PREVAILING WAGE: Required X Not Required _____

FORMS TO COMPLETE RFP: Submit one (1) original and five (5) copies of all required documentation in a sealed envelope pursuant to detailed instructions provided.

SUBMISSION REQUIREMENTS: Identify name of RFP on sealed envelope: Wastewater Treatment Plant CHP System. Only fully completed proposals will be accepted. Refer to Section 1.6 for the requirements for a complete proposal.

**REQUEST FOR PROPOSALS (RFP)
NEW CANAAN PUBLIC WORKS CHP PROJECT**

The Town of New Canaan is soliciting proposals for an engineering, procurement and construction contractor (“**EPC Contractor**”) to implement a CHP system at The New Canaan Wastewater Treatment Plant located at 394 Main Street, New Canaan, CT 06840.

1.0 INTENT TO RESPOND AND QUESTIONS CONCERNING RFP

Interested respondents should email Mark Robbins, of MHR Development, LLC (the “**Consultant**”) at markrobbins@mhrdevelopment.com and Joe Zagarenski at joe.zagarenski@newcanaanct.gov by 3/16/2020 indicating an intent to respond to the RFP and attend the mandatory bidder conference / mandatory walk-through scheduled for 3/19/2020 at 10:30 a.m. An email indicating the intent to respond does not obligate respondent to provide a submission.

No alleged “verbal interpretation” of the project shall be held valid. Every request for an interpretation shall be made via email to at joe.zagarenski@newcanaanct.gov. The deadline for submission of questions and requests for interpretation is 3/27/2020. Responses to questions and requests for interpretation will be made available to all interested parties by 4/2/2020.

All submissions must be received by 4/14/2020 by 10:30 a.m. (the “**Proposal Deadline**”).

The Town of New Canaan reserves the right to reject any or all proposals, to waive any informality in the RFP process, or to terminate the RFP process at any time, if deemed to be in the Town of New Canaan’s best interest.

1.1 OVERVIEW

The Town of New Canaan is soliciting proposals from qualified EPC Contractors to design, fabricate, deliver, install, and maintain a combined heat and power system (“**CHP**”) at the Wastewater Treatment Plant. See **Appendix H** for equipment abstracts, site map and site photos. The scope of work shall also include securing all necessary permits and approvals, all labor, taxes, services, permit fees and equipment necessary to produce a fully operational CHP system.

The EPC Contractor will be responsible for applying for and complying with all relevant environmental and utility incentive programs to maximize the economic efficiency of owning and operating the system. The EPC Contractor will be required to execute and fulfill all required applications as well as utility incentives for the benefit of the Town of New Canaan, including Class III zero renewable energy credits (ZRECs) and the Distributed Generation (DG) Rider. [Note, the Town of New Canaan is tax exempt and will not charge municipal permit fees in connection with the project.]

The proposals should include a schematic design of the CHP system detailing interconnections to the existing building infrastructure, equipment specifications, a cash flow analysis detailing projected energy yield (kWh and Btu), and economic savings. See **Appendix I** for a copy of a recent electric invoice and an oil consumption summary.

Schedule is as follows:

Release RFP	March 5, 2020
Bidder Conference / Mandatory Walk-through	March 19, 2020 at 10:30 a.m.
Deadline for Submitting Written Questions	March 27, 2020
Proposal Deadline	April 14, 2020 by 10:30 a.m.
Determination of Proposal Selection	TBD: Anticipated selection by April 30, 2020

The EPC Contractor engaged pursuant to this RFP will work with the Consultant, to fulfill the objectives set forth in this RFP and pursuant to an engineering, procurement and construction agreement (“**EPC Agreement**”) to be entered into by the Town and the EPC Contractor.

The Town of New Canaan reserves the following rights:

1. Not to award a contract pursuant to this RFP;
2. To award a contract to other than the lowest bidder or a bidder that does not respond to all items contained in this RFP;
3. To rescind an award at any time upon written notice to the successful respondent;
4. To retain all proposals submitted and not permit withdrawal for a period of 90 days subsequent to the deadline for receiving proposals;
5. To negotiate the fees proposed by all respondents and to suspend negotiations if the negotiations are not, in the opinion of the Town of New Canaan, successfully concluded within a reasonable timeframe, as determined by the Town of New Canaan;
6. To reject and not consider any proposal that does not meet the requirements of this RFP, including but not limited to incomplete proposals, proposals offering alternate or non-requested services and proposals deemed non-responsive;
7. Prior to award, to revise, change, alter or amend any of the instructions, terms, conditions and/or specifications in the RFP or in any attachment, addendum or drawing; and
8. To advertise for new proposals or to proceed otherwise in the case of rejection of all proposals.

The Town of New Canaan will not be liable for any cost incurred for the preparation of proposals by firms submitting proposals for the work requested in this RFP.

1.2 PARTICIPATION QUALIFICATION REQUIREMENTS

- Attend mandatory pre-proposal conference and walk-through
 - Note, each respondent is considered to have examined the work site(s) to be fully acquainted with the existing conditions relating to the work and to fully understand the work involved and the difficulties and restrictions regarding the proposed work. The submission of a proposal will be considered as conclusive evidence that the respondent has made such examination
- Submit a proposal that meets the threshold review criteria outlined in Section 1.6 on pages 6 – 9
- Provide a complete proposal submission by the Proposal Deadline

1.3 SERVICES TO BE PROVIDED BY EPC CONTRACTOR

A. Design, Engineering, Permitting and Installation

- Supply design documents that provide the minimum information outlined in Section 1.6 Part 4 and Part 8
- All engineering associated with structural, mechanical and electrical connections
- Maintain performance of equipment components, and subsystems
- EPC Contractor will be required to provide building interconnection, integration of CHP(s) with existing power source(s), and tie-in to existing building HVAC and controls

Note, all plans and specifications by EPC Contractor may be subject to a peer review by a consulting engineer selected by the Town of New Canaan.

B. Installation / Construction

- Supply all equipment, materials, and labor necessary to install the CHP system at the building(s) and integrate the system with other energy sources
- The EPC Contractor shall provide photography documenting electrical connections that may be obscured when CHP is complete
- In the proposal, include the construction plan for the CHP installation, describe the delivery, storage, and security for all materials and equipment while on site
- In addition to meeting all necessary municipal and state codes, EPC Contractor shall restore the property to its preinstallation condition. Any penetrations or modifications to the building (envelope, structure, equipment, etc.) must be described in initial plan and approved by the Town of New Canaan

C. Electrical Interconnections

Supply and install all equipment required to interconnect the CHP(s) at the building(s) to designated meter(s) and points of thermal connection. The EPC Contractor will fulfill all applications, studies, and testing procedures to complete the interconnection process. All costs associated with utility interconnection shall be borne by the EPC Contractor. Refer to Section 1.6 Part 8 and **Appendix H** for details.

D. Incentives and Net Energy Metering

It is the Town's understanding that CHP of this scale is not currently eligible for net-metering in the State of Connecticut, but if respondent believes otherwise, please explain. However, the project will be eligible for various energy incentives, mainly Class III Renewable Energy Credits and the DG Rider (see appendix). The intent is for respondent to facilitate necessary applications to secure those incentives in the name of the Project Owner, therefore the subsidies will help offset the initial project cost and can contribute to the long-term economics of the proposed CHP installation.

E. Commissioning and Acceptance Testing

During the start-up, the EPC Contractor shall coordinate with the Consultant to commission the CHP system and to facilitate measurement and verification to confirm operation as planned.

F. Operation and Maintenance (O&M)

The CHP unit shall be subject to ongoing maintenance to ensure continuous operation of all components. The operation and maintenance responsibilities shall include:

- Reporting of problems to the Town of New Canaan; and
- Expeditiously repair or replace any non-functioning equipment (expeditious is defined as 24 hours)

G. Monitoring

Provide the equipment and services to allow the Town of New Canaan to monitor, analyze, and display historical and live electric and heat generation data, along with system operation monitoring. The regularly collected data should reflect, but not be limited to, the following:

- System performance
- System availability
- Current, daily, and accumulated output

The monitoring shall be designed for turnkey, remote operation. Refer to Section 1.6 Part 9 for details.

H. Warranties and Guarantees

Identify the warranties and operating documents to be transferred to the Town of New Canaan. Describe the terms (or expected terms) of the warranties and/or guarantees on major equipment that the respondent is proposing to utilize.

I. Licensing / Certification

The EPC Contractor and all subcontractors must be properly licensed in the State of Connecticut. A copy of the license(s) shall be included in the proposal together with evidence of the expiration date. Proposals shall include proof that properly certified installers will be performing the installation services.

J. Permitting and Approvals

The EPC Contractor will secure, at its own expense, all required rights, permits, approvals, and interconnection agreements from governing agencies and the prevailing utility company. Refer to Section 1.6 Part 7 for details.

1.4 EPC CONTRACTOR'S RESPONSIBILITIES

If subcontractors are to be used during the project, their identity and work scope should be clearly outlined in the proposal. The EPC Contractor will be responsible for all elements of performance under the EPC Agreement, whether or not subcontractors are engaged.

Relevant experience, skills, and capabilities must be included in the proposal for each proposed subcontractor. The proposal must also include copies of any agreements to be executed between the EPC Contractor and any subcontractors in the event of contract award. The Town of New Canaan reserves the right to approve all subcontractors.

Non-Discrimination Clause

The awarded EPC Contractor must agree to the following Non-Discrimination Clause:

- A. That in the hiring of employees for the performance of work under the EPC Agreement or any subcontract hereunder, no contractor, subcontractor, nor any person acting on behalf of such contractor or subcontractor, shall by reason of race, creed, color, sex, age, physical disability or national origin discriminate against any individual who is qualified and available to perform the work to which the employment relates; and
- B. That no contractor, subcontractor, nor any person on his or her behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of work under the EPC Agreement on account of race, creed, color, sex, age, physical disability or national origin.

Background Check

All personnel of the EPC Contractor and all subcontractors working on building sites will be subject to a background check to be made available to the Town of New Canaan and will be subject to approval at their discretion.

Working Hours

The selected EPC Contractor shall abide by the working hours of 7:00 AM to 6:00 PM, Monday through Friday.

1.5 FORMAT OF PROPOSALS

All proposals must be in sealed envelopes, addressed and delivered as indicated in the Legal Notice for this RFP. The respondent's name and address must appear on the envelope. Proposals should provide full, accurate, and complete information, as required by this request. Respondents should create their submissions in 8½" x 11" document size. Refer to Section 1.6 for a detailed outline of required content.

Proposal should include, at a minimum, all items outlined within this Section. You may include any additional information that demonstrates your qualifications for this work.

One (1) original, five (5) copies and one (1) electronic copy (thumb drive / USB drive) of all required documentation must be received in a sealed envelope by Tiger Mann, Director of Public Works, Department of Public Works Office, 77 Main Street, New Canaan, CT 06840 by the date and time listed on the proposal response page.

Proposals submitted after the Proposal Deadline will be disqualified.

1.6 REQUIRED CONTENT

The organization and contents of the proposal should be organized into the following Parts:

- 1) Letter of Introduction
- 2) Table of Contents
- 3) Respondent's Profile and Required Documents
- 4) System Information and Key Economics
- 5) Operational Parameters
- 6) Scope of Services and Proposed Schedule
- 7) Permit Acquisition Plan and Class III Certification
- 8) Siting, Interconnection, and Deliverability
- 9) Remote Monitoring Requirement
- 10) Operation and Maintenance
- 11) Proposed Form of EPC Agreement
- 12) Appendix and Supporting Information

See following pages for details on each Part

Part 1 – Letter of Introduction

This Part shall be a signed cover letter stating the highlights and distinguishing points of the respondent's proposal. This shall include the name and address of the respondent submitting the proposal, together with the name, address and telephone numbers of the contact person who will be authorized to make representations for the organization, the organization's federal tax identification number, and a list of local subcontractors, if any.

Part 2 – Table of Contents

Part 2 shall be a detailed table of contents and shall include a detailed outline of the proposal submission document identified by sequential page numbers and by Part reference number and Part title information as described herein.

Part 3 – Respondent's Profile and Required Documents

- Description of the respondent's firm, including number of employees, gross revenue and office location(s). Highlight relevant experience, skills, and capabilities necessary to undertake the project, including, but not limited to demonstrated experience.
- Provide references for at least three (3) or more similar CHP system applications installed by the EPC Contractor over the last five (5) years and project backgrounds (include phone and email contact information).
- Describe the demonstrated experience of the respondent in the development, designing and installation of commercial and municipal CHP system(s). Describe how your experience on previous projects relates to the project.
- Licensing: Describe the licensing and certifications held by the respondent in general and specifically those licenses or certificates held by your proposed key project team members
- Provide name, contact information, and contractor license numbers for all subcontractors that the respondent intends to employ during the project (subcontractors). Any other licenses or certifications required by the State of Connecticut.
- Include a description of any and all government citations for safety violations issued within the past five years. Provide relevant OSHA logs pertaining to any reportable incidents.
- Describe any previous or pending litigations, judgments, or regulatory actions against the respondent.
- Provide track record of actual production relative to projected generation for similar CHP units.
- Fill out and sign Hold Harmless Agreement (See **Appendix A**).
- Fill out and sign Drug-Free Workplace Certificate (See **Appendix C**).
- Provide evidence of insurance according to **Appendix D**.

Part 4 – System Information and Key Economics

Provide the following information on the proposed CHP system:

1. System Description (include equipment details / specification sheets)
 - a. System Size (kW)
 - b. Thermal and Electrical Output of System (MMBtu and kWh / year)
 - c. Run Hours / Projected Uptime (%)
 - d. Sound Level (A-weighted decibels, dBA)
 - e. Unit Schematics
 - f. Manufacturer
 - g. Warranties
2. System Cost (include turnkey installed)
3. Future Electrical Demand of DPW Campus
 - a. CHP Generated Electricity Used on Site (kWh)
 - b. Grid Purchased Electricity (kWh)
4. Future Thermal Demand of DPW Campus
 - a. CHP Thermal Generated (MMBtu / year)
 - b. Thermal Savings (MMBtu / year)
 - c. Heat Wasted During Cooling Season
5. Fuel Requirements
 - a. Natural Gas Requirement Profile (Ccf and pressure)
 - b. Future Natural Gas Cost (assume DG gas rate of \$0.55 / Ccf)
6. Cost Savings
 - a. Thermal Cost Savings (assume an oil rate of \$2.036 / gallon and a DG gas rate of \$0.55 / Ccf)
 - b. Electric Cost Savings (assume an electric rate of \$0.137 / kWh)
 - c. Maintenance Cost of CHP System
 - d. Net Annual Operating Cost Savings
7. Available Class III RECs (\$ / year)

In addition, provide a chart that illustrates a 20-year projection of total operating costs (cost of fuel, maintenance costs, etc.) and the net value of generated thermal and electrical energy.

Part 5 – Operational Parameters

- Maintenance Outage Requirements – Specify planned outages required for maintenance in weeks or days. In addition, list the number of months required for the cycle to repeat (e.g., list time interval of minor and major overhauls, and the duration of overhauls).
- Operating Constraints – Specify all the expected operating constraints and operational restrictions for the project (e.g., limits on the number of hours a unit may be operated per year or unit of time).

Part 6 – Scope of Services and Proposed Schedule

Address all necessary work tasks in narrative form and prepare a project schedule illustrating the timeline for completion of the work. Describe in detail the post installation maintenance schedule and customer service program.

Identify the elements on the critical path and the start and end date of each. The schedule should include, at a minimum, facility contracts, start of construction, construction schedule, siting, fuel supply, engineering and procurement, federal, state and/or local permits, licenses, environmental assessments and/or environmental impact statements (including anticipated permit submittal and approval dates) and any other requirements that could influence the project schedule and the commercial operation date, including requirements pertaining to the generator interconnection process.

Part 7 – Permit Acquisition Plan and Class III Certification

This Part will address permitting and other regulatory issues associated with the project site, development and operations.

Provide a list of all the permits, licenses, and environmental assessments and/or environmental impact statements required.

- Include a list of all Federal, state and local permits, licenses, and environmental assessments and/or environmental impact statements required to construct and operate the project.
- Identify the governmental agencies that will issue or approve the required permits, licenses, and environmental assessments and/or environmental impact statements.
 - Specify the anticipated timeline for seeking and receiving the required permits, licenses and environmental assessments. Include a project approval assessment that describes, in narrative form, each segment of the process, the required permit or approval, the status of the request or application and the basis for projection of success by the proposed milestone date.
- Provide documentation demonstrating that the project will be qualified as an RPS Class III REC source.
- Identify any existing, preliminary or pending claims or litigation, or matters before any federal agency or any state legislature or regulatory agency that might affect the feasibility of the project or the ability to obtain or retain the required permits for the project.
- Provide a chart projecting the value of Class III Renewable Energy Credit over the projected useful life of the CHP unit (see example chart below).

Price for Class III RECs		
Contract Year	Price for RECs (\$ / REC)	Total REC Income
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Part 8 – Siting, Interconnection and Deliverability

- Provide a site plan (including a map of the site). Using **Appendix H** as a guide, identify optimal location for the CHP system equipment and its related components, control systems and emergency disconnect that will meet the following criteria:
 - Indicate where the CHP system will be installed (location, electrical tie-in, etc.)
 - Represent the optimal energy production and distribution within the site
 - Describe how the intended location will maximize the efficiency of the thermal energy obtained by the CHP system
 - Specify the size (height, width and length) of the system and how it will fit in the intended location; show any assumed right-of-way width of the CHP system. Express the ease of maintenance and

- monitoring due to the proposed location of the system
 - Identify the anticipated electric interconnection point
 - Address the compatibility with existing facility: equipment location, electrical service, architectural and aesthetic compatibility, quiet and minimally invasive operation, etc.
- In addition to providing the required map for the system location, provide a site layout plan that illustrates the location of all major equipment and facilities on the site and how the CHP system will connect to any relevant existing equipment. Additionally, indicate the right-of-way if an extension to the natural gas delivery system is required to interconnect the project.
- Provide evidence that the CHP system and interconnection route will be properly zoned or permitted. If need be, identify present and required zoning and/or land use designations and permits and provide a permitting plan and timeline to secure the necessary approvals.

Part 9 – Remote Monitoring Requirement

Describe the monitoring system that will be used to display remote system performance monitoring via internet access dashboard throughout the life of the system. Data shall be made accessible through the internet to both the Town of New Canaan and the Consultant.

Part 10 – Operation and Maintenance

Included in the EPC Agreement must be a maintenance agreement covering all CHP system diagnostic, equipment replacement and related labor cost to keep the system operational and performing to production guarantees. Provide an O&M plan for the project that demonstrates the long-term operational viability of the proposed project. Provide as-built drawings as PDF documents, these requirements shall be delivered prior to acceptance of the CHP system. Describe in detail the proposed O&M cost to support planned and unplanned O&M requirements.

Of specific concern is how promptly the respondent handles issues once a system has been installed.

Additionally, provide examples of the respondent's experience with O&M services for other similar projects.

Part 11 – Proposed Form of EPC Agreement

The proposed form shall not include a clause limiting the EPC Contractor's liability for personal injury and property damage or requiring the Town of New Canaan to indemnify or hold harmless the EPC Contractor for personal injury or property damage, except for claims that may arise out of the presence of hazardous materials existing at a site prior to the signed date of the EPC Agreement. The EPC Agreement shall include the Municipal Government Addendum Form Non-Appropriation attached as **Appendix B**.

Part 12 – Appendix and Supporting Information

This Part should include any supporting information, such as resumes, references or other data that will support the respondent as the best respondent for the project.

Note: Familiarity with the Work – Each respondent is considered to have examined the job site to fully acquaint itself with the exact existing conditions relating to the work and to have fully understood the work involved and the difficulties and restrictions regarding the proposed work. The submission of a proposal will be considered as conclusive evidence that the respondent has made such examination.

1.7 PROPOSAL EVALUATION CRITERIA

The Town of New Canaan will review the proposals received and will evaluate them, using the following criteria. The Town of New Canaan reserves the right to examine any other criteria and take the same under consideration and to reject any respondent or proposals despite its compliance with these criteria if it determines that to do so would be in its best interests.

Proposal submissions will be evaluated at the sole discretion of the Town of New Canaan based on, but not limited to, the following criteria:

1. CHP system price, 20-year annual production estimates (kWh and Btus), inclusion of 20-year maintenance, equipment insurance and production guarantees. The performance or production guarantee should clearly specify the % of output guaranteed and the penalty payment for underperformance of the system(s);
2. The respondent's qualifications, experience, and demonstrated familiarity with municipal projects in general and specifically projects of a similar, size, scope, and nature;
3. The respondent's experience (track record) and demonstrated familiarity with the Connecticut Class III RECs and DG Rider programs;
4. The proposed project approach and how staff and consultants will be organized and utilized throughout the key phases of the project;
5. Extent of services offered, and depth and extent of overall resources that can be put to use to ensure the timely success of the project;
6. Quality of references from previous clients;
7. Preliminary schedule of time needed to initiate and complete; and
8. The key personnel to be assigned to the project and their present workload

Provisions of this RFP and the contents of the successful proposal will be used to establish final contractual obligations. The Town of New Canaan retains the option of canceling the award if the successful respondent fails to accept such obligations.

1.8 INSURANCE COVERAGE AND BONDING REQUIREMENTS

The Town of New Canaan will require insurance coverage as listed below for this work:

At least five days before the EPC Agreement is signed and executed and prior to commencement of work thereunder the EPC Contractor will be required to file with the Town of New Canaan a certificate of insurance, executed by an authorized representative of the insurance company satisfactory to the Town of New Canaan and in an acceptable form. The policy shall name the Town of New Canaan as an Additional Insured and state that, with respect to the award, the EPC Contractor carries insurance in accordance with the requirements detailed in **Appendix D**. The EPC Contractor shall verify and confirm that all subcontractors maintain insurance coverage meeting the requirements in **Appendix D** for the duration of the performance of their work.

The Town of New Canaan will require a performance bond and a labor & materials payment bond in connection with the installation of the CHP system.

1.9 LOCAL LEVY AND COLLECTIONS OF TAXES

Withholding of municipal payments for failure to pay property taxes. Pursuant to Section 12-146b, any municipality, as defined in CGS Section 12-41 (a), may withhold any payment, or portion thereof, due to any business enterprise pursuant to any contract entered into on or after October 1, 1991, if any taxes levied by such municipality against any property owned by such business enterprise are delinquent and have been so delinquent for a period of not less than one year, provided no such amount withheld shall exceed the amount of tax, plus penalty and interest, outstanding at the time of withholding.

2.0 PREVAILING WAGE LAW AND PAYROLL CERTIFICATION

The project is subject to the Connecticut prevailing wage law. The EPC Contractor will be required to submit a payroll certification accompanied by a certified statement of compliance on a weekly basis to the Town. In addition, prior to commencing work, the EPC Contractor is required by law to complete and return to the Connecticut Department of Labor the Contractor's Wage Certification Form.

The current schedule of prevailing wage rates to be used on this project, Connecticut Department of Labor Contractors Wage Certification Form, Payroll Certification Forms, Certified Statement of Compliance Form are attached as **Appendix K**.

The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker to be done under the contract documents and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Connecticut General Statutes Section 31-53, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the Town. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

Pursuant to Connecticut General Statutes Section 31-53, the EPC Contractor and every subcontractor performing work on the project shall post the prevailing wage scale, as determined by the Labor Commissioner, in prominent and easily accessible locations at the job site, protected from the elements, or at such place or places as are used to pay its employees their wages. The EPC Contractor's attention is called to the requirement to pay, for the duration of the project, the annually adjusted prevailing wage rates in effect July 1st of each year, and the EPC Contractor's responsibility to acquire the annually adjusted prevailing wage rates.

2.1 PROPOSAL RESPONSE FORM, CHP SYSTEM(S)

Firm Name:	
Address:	
Phone:	Email:
Principal:	Fed ID#:

Non-Collusion: In submitting this proposal, the undersigned declares that the proposal is made without any connection with any persons making another proposal on the same RFP; that the proposal is in all respects fair and without collusion, fraud or mental reservation; and that no official or the Town of New Canaan, or any person in the employ of the Town of New Canaan is directly or indirectly interested in said proposal or in the supplies or work to which it relates, or in any portion of the profits thereof.

The undersigned also hereby declares that he/she or they have carefully considered objectives of each element of this project, the desired end result, the environment in which services and or products are to perform and are satisfied as to all the quantities and conditions, and understands that in signing this proposal all right to plead any misunderstanding regarding the same is waived.

The undersigned further understands and agrees that he/she will furnish and provide all the necessary material, machinery, implements, tools, labor, services, and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to carry out the EPC Agreement. It is further understood and agreed that all information included in, or attached to, the proposal shall be public record upon delivery to the Town of New Canaan.

INSURANCE INFORMATION:

Agency Name:	
Agency Address:	

Submitted by:		
Authorized Agent of Company (name and title)		Date

2.2 APPENDICES

Appendix A

Hold Harmless Agreement

Appendix B

Municipal Government Addendum Form Non-Appropriation

Appendix C

Drug-Free Workplace Certificate

Appendix D

Insurance Requirements

Appendix E

Terms and Conditions

Appendix F

Connecticut Renewable Portfolio Standard (RPS) – Class III Renewable Energy Credits (RECs)

Appendix G

Distributed Generation (DG) Delivery Rebate

Appendix H

Site Plan
Building Location Map
Heating Sources Map
Location of Major Equipment
Existing Generators

Appendix I

Utility Consumption and Cost Summary
Electrical Bill
Electrical Usage
On-Peak / Off-Peak Annual Data
Oil Consumption History

Appendix J

Existing Solar System Layout Plan
Existing Solar System Details

Appendix K

Connecticut Department of Labor Contractors Wage Certification Form, Payroll Certification Forms,
Certified Statement of Compliance Form

APPENDIX A

HOLD HARMLESS AGREEMENT

The undersigned covenants and agrees to and shall at all times indemnify, protect and hold harmless the Town of New Canaan, and its consultant, MHR Development, LLC, from and against all costs or expenses resulting from any and all losses, damages, detriments, claims, demands, cost and charges including attorney's fees the Town of New Canaan may directly or indirectly suffer, sustain or be subjected to by reason or on account of the work to be performed pursuant to this RFP or any activities in connection with the EPC Agreement entered into pursuant to this RFP whether such losses and damages be suffered or sustained by the Town of New Canaan directly or by their respective employees, licenses or invitees or be suffered or sustained by other persons or corporations who may seek to hold the Town of New Canaan liable therefore.

The EPC Contractor shall comply with the provisions of the Immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987, which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The EPC Contractor shall hold the Town of New Canaan harmless for the failure of the EPC Contractor to comply with the provisions of said Act.

IN WITNESS WHEREOF, this agreement was executed and made effective on the ____ day of _____.

EPC Contractor:

Name:
Title:

State of Connecticut)
) ss:
County of)

I, the undersigned Notary Public, do hereby certify that on this ____ day of _____, 2020, _____, whose name is signed to the foregoing instrument, has this day personally appeared before and acknowledged the same before me.

Notary Public
Date commission expires: _____

APPENDIX B

MUNICIPAL GOVERNMENT ADDENDUM FORM NON-APPROPRIATION

This Municipal Government Addendum (this "Addendum") is made part of the Agreement dated _____, 2020 ("Agreement") between _____ ("we" "us" and "ours") and The Town of New Canaan ("you" and "your"). Capitalized terms used but not defined will have the meaning given to them in the Agreement. If there is any conflict between the terms of this Addendum and the terms of the Agreement, the terms of this Addendum will control and prevail. The parties hereby agree as follows.

1. **Funding Intent.** You reasonably believe that funds can be obtained sufficient to make all payments set forth in the Agreement and any other amounts owed during the term of the Agreement. You agree that your chief executive officer will provide for funding for such payments in your annual budget request submitted to your governing body. You covenant that you will do all things lawfully within your power to obtain, maintain and properly request and pursue funds from which the payments may be made, including making provisions for such payments to the extent necessary in each budget submitted for the purpose of obtaining funding, using your best efforts to have such portion of the budget approved and exhausting all available administrative reviews and appeals in the event such portion of the budget is not approved. If your governing body chooses not to appropriate funds for such payments, you agree that your governing body will evidence the non-appropriation by omitting funds for the payments due during the applicable fiscal period from the budget that it adopts. You and we agree that your obligation to make payments under the Agreement will be your current expense and will not be interpreted to be a debt in violation of applicable law or constitutional limitations or requirements. Nothing contained in the Agreement will be interpreted as a pledge of your general tax revenues, funds or moneys.

2. **Non-Appropriation of Funds.** If (a) sufficient funds are not appropriated and budgeted by your governing body in any fiscal period for payments set forth in the Agreement and (b) you have exhausted all funds legally available for such payments (together, a "Non-Appropriation Event"), then you will give us written notice (a "Termination Notice") and the Agreement will terminate as of the last day of your fiscal period for which funds for such payments are available ("Termination Date"). You agree that, to the extent permitted by law, you will not terminate the Agreement if any funds are appropriated by you for the acquisition or use of equipment or services performing functions similar to the equipment provided by us during your fiscal period in which the termination would occur. You shall (i) provide in the Termination Notice a certification of a responsible official that a Non-Appropriation Event has occurred, and (ii) pay us all sums payable to us under the Agreement up to and including the Termination Date. We agree that a termination of the Agreement, properly effectuated by you in accordance with this Paragraph 2, shall be without any surcharge, expense or penalty, whether characterized as an early termination fee, liquidated damages, or otherwise. You acknowledge and agree that, in the event of the termination of the Agreement, you shall have no interest whatsoever in the equipment provided by us or the proceeds thereof and we shall be entitled to retain for our own account the proceeds resulting from any disposition or releasing of the equipment along with any advance rentals, security deposits or other sums previously paid by you pursuant to the terms of the Agreement.

3. **Authority and Authorization.** You represent and agree that: (a) you are a political subdivision of a state; (b) the entering into and performance of the Agreement is authorized under your state laws and Constitution and does not violate or contradict any judgment, law, order, or regulation, or cause any default under any agreement to which you are party; (c) you have complied with applicable bidding requirements and, where necessary, have properly presented the Agreement for approval and adoption as a valid obligation on your part; and (d) you have sufficient appropriated funds or other moneys available to pay all amounts due under the Agreement for your current fiscal period. Upon our request, you agree to provide us with an incumbency certificate in a form satisfactory to us.

4. **Government Use.** You agree that the use of the equipment is essential for your proper, efficient and economic operation, you will be the only entity to use the equipment during the term of the Agreement and you will use the equipment only for your governmental purposes.

5. **Choice of Law.** Regardless of any conflicting provision in the Agreement, **THE AGREEMENT WILL BE GOVERNED BY THE LAWS OF THE STATE IN WHICH YOU ARE LOCATED.**

6. This Addendum supplements and amends the Agreement only to the extent and in the manner set forth, and in all other respects, the Agreement will remain in full force and effect.

IN WITNESS WHEREOF the parties hereto, by their authorized signatories, have executed this Addendum at the date set forth below their respective signatures.

CUSTOMER: THE TOWN OF NEW CANAAN

By: _____

Print
Name: _____

Title: _____

Date: _____

By: _____

Print
Name: _____

Title: _____

Date: _____

APPENDIX C

DRUG-FREE WORKPLACE CERTIFICATE

I hereby certify that this company:

1. Has a published statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and that this statement specifies the actions which will be taken against employees for violations of such prohibition.
2. Has a written policy informing employees about the dangers of drug abuse in the workplace, the firm's policy of maintaining a drug free workplace, any available counseling, rehabilitation, and employee assistance programs, and the penalties which may be imposed upon employees for drug abuse violations.
3. Each employee engaged in providing the commodities or contractual services which are being bid was given a copy of the statements specified in paragraphs 1 and 2, above.
4. In the statement specified in paragraph 1, the employees have been notified that, as a condition of working on the commodities or contractual services which are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of "guilty" or of "nolo contendere" to any violation of any controlled substance law of the United States or of any state, for a violation occurring in the workplace no later than five (5) days after such conviction or plea.
5. This firm will impose a sanction on or require the satisfactory participation in a drug abuse assistance program or a rehabilitation program, if such are available in the employee's community, by any employee who is so convicted.
6. This firm will make a good faith effort to continue to maintain a drug free workplace.

As the person authorized to sign this statement, I certify that this firm fully complies with the above requirements.

Signature: _____ **Date:** _____

Print Name: _____

Company: _____

APPENDIX D

INSURANCE REQUIREMENTS

The EPC Contractor will be required to purchase from and maintain, for the life of the Contract, in a company or companies with a Best's financial rating of A or better, such insurance as will protect the Town of New Canaan from claims set forth below which may arise out of or result from the EPC Contractor's obligation under the EPC Agreement, whether such obligation is the EPC Contractor's or a subcontractor or any person or entity directly or indirectly.

Worker's Compensation

EPC Contractor shall provide workers compensation insurance required by law with employer's liability limits for at least the amounts of liability for bodily injury by accident of \$500,000 each accident and bodily injury by disease of \$500,000.

Commercial General Liability Insurance:

EPC Contractor shall provide commercial general liability insurance policy with an edition of 1986 or later including products and complete operations. Limits should be at least: Bodily injury and property with an occurrence limit of \$1,000,000; Personal & advertising injury limit of \$1,000,000 per occurrence; General aggregate limit of \$2,000,000 (other than products and completed operations); Products and completed operations aggregate limit of \$2,000,000. Coverage will continue three years after the completion of the work.

- The policy shall name The Town of New Canaan as an additional insured and include ISO Form CG2010 (07/04) and CG 2037 (07/04)
- Coverage will be provided on an occurrence basis, and will be primary, and shall not contribute in any way to any insurance or self-insured retention carried by The Town of New Canaan
- The policy shall contain a waiver of liability in favor of The Town of New Canaan
- Coverage shall contain a broad form contractual liability endorsement or wording within the policy form to comply with the hold harmless and indemnity provision of the EPC Agreement
- A per project aggregate limit of liability endorsement shall apply for any construction contract
- Deductible and self-insured retentions shall be declared and are subject to approval by the Town of New Canaan

Commercial Automobile Insurance:

EPC Contractor shall provide commercial automobile insurance for any owned autos (symbol 1 or equivalent) in the amount of \$1,000,000 each accident covering bodily injury and property damage on a combined single limit basis. Coverage shall also include hired and non-owned automobile coverage. The policy shall name the Town of New Canaan as an additional insured.

Umbrella Liability Insurance:

EPC Contractor shall provide an umbrella or excess liability policy (without restriction or limitation). The policy shall contain limits of liability in the amount of \$5,000,000 each occurrence and \$5,000,000 in the aggregate.

As to the insurance required, the insurer(s) and/or their authorized agents shall provide the Town of New Canaan certificates of insurance prior to execution of the agreement by the Town of New Canaan describing the coverage.

APPENDIX E

TERMS AND CONDITIONS

This is a request for proposals and the Town of New Canaan reserves the right to negotiate and contract with anyone or no one in the best interests of the town.

Unless otherwise modified, the following terms and conditions will apply to services rendered. The respondent may use a standard form of agreement incorporating the following provisions.

Services to be Provided

The winning EPC Contractor shall provide services as set forth in the RFP and in accordance with the terms identified herein. The services provided will be performed on behalf of and solely for the Town of New Canaan and any information, tests, reports, correspondence, and conclusions shall not be released to other parties unless authorized by The Town of New Canaan or in accordance with any applicable state or federal law.

Court Litigation and Waiver of Jury Trial

Notwithstanding the existence of any provision for arbitration of disputes in the EPC Agreement or any legislation providing for arbitration, any dispute arising under the EPC Agreement shall not be submitted to arbitration and the parties shall be left to the remedies at law. It is further expressly agreed that both parties waive and relinquish their right to a trial by jury of any dispute arising out of the EPC Agreement. The intent of the parties is not to have a jury decide any aspect of any dispute which may arise under the EPC Agreement.

Mediation

All claims, disputes or other matters in question between the parties to this EPC Agreement arising out of or relating to this EPC Agreement or breach thereof shall be submitted to non-binding mediation. On the written notice of either party to the other of the election to submit any dispute under this EPC Agreement to mediation, each party shall designate its representative and shall meet at the New Canaan Town Hall within ten (10) days after the service of notice. The parties themselves shall then attempt to resolve the dispute within ten (10) days of meeting. Should the parties themselves be unable to agree on a resolution of this dispute, then the parties shall appoint a third party, who shall be a competent and impartial party and who shall be acceptable to each party, to mediate the dispute. Each party shall pay the fees and expenses of the party mediator and such costs shall be borne equally by both parties. Upon agreement of the parties, either party may waive the first step in the mediation process and appoint a mutually acceptable mediator. Any third-party mediator designated to serve in accordance with the provisions of the EPC Agreement shall be disinterested and shall be qualified to evaluate the performance of both parties. This process shall be considered as a condition precedent to moving to court.

Equitable Relief

Nothing herein shall prevent either party from obtaining a court order enforcing the mediation process or such other temporary or equitable relief until such time that the dispute is settled or finally adjudicated.

NOTE: By submitting a proposal for this EPC Agreement, the EPC Contractor agrees that any or all past clients may be contacted by The Town of New Canaan. EPC Contractors submitting proposals in response to the RFP also agree to release and discharge, for the EPC Contractor him/herself, his/her heirs executors administrators and assigns, release acquit and forever discharge the Town of New Canaan, its Department of Public Works and all employees and any or all other persons, firms and corporations of and from any and all actions, causes of actions, claims or demands for damages, costs, loss of services, expenses, compensation, consequential damage or any other thing whatsoever, on account of, or in any way growing out of any former client contacted by the Town of New Canaan to obtain an opinion regarding any work performed by your company. The above release shall also include and apply to any former client contacted.

APPENDIX F

CONNECTICUT RENEWABLE PORTFOLIO STANDARD (RPS) – CLASS III RECS

The Connecticut Renewable Portfolio Standard (RPS) is a state policy that requires electric providers to obtain a specified percentage or amount of the energy they generate or sell from renewable sources.

This policy creates a financial incentive for development of renewable energy projects by ensuring a market and steady stream of revenue for renewable generators.

Owners of electricity generation projects that qualify as renewable under one of the three classes of Connecticut's RPS receive one renewable energy certificate (REC) for every megawatt-hour (MWh) of electricity they produce. These RECs are tradable commodities that allow the environmental attribute of the renewable energy to be bought and sold separately from the energy commodity itself. A renewable generator can either contract to sell its energy — “bundled” with the accompanying attribute value directly to an electricity provider (usually at a premium above the wholesale electricity price), or it can “unbundle” the REC and the energy and sell them separately in regional wholesale markets.

Separate portfolio standards are required for energy sources classified as "Class I," "Class II," or "Class III.

Class III source, as defined in Conn. Gen. Stat. §16-1(a)(38), means:

- the electricity output from combined heat and power systems with a minimum operating efficiency of 50% that are part of customer-side distributed resources developed at commercial and industrial facilities in Connecticut on or after January 1, 2006;
- a waste heat recovery systems installed on or after April 1, 2007, that produces electrical or thermal energy by capturing preexisting waste heat or pressure from industrial or commercial processes;
- the electricity savings from conservation and load management programs that started on or after January 1, 2006 (on and after January 1, 2014, programs supported by ratepayers are not eligible);
- and, any demand-side management project awarded a contract pursuant to §16-243m (eligibility is based on the term of the contract).

Required Annual Renewable Energy Percentages:

Year	Class I	Class II or Class I (add'l)	Class III	Total
2018	17.0%	4.0%	4.0%	25.0%
2019	19.5%	4.0%	4.0%	27.5%
2020	21.0%	4.0%	4.0%	29.0%
2021	22.5%	4.0%	4.0%	30.5%
2022	24.0%	4.0%	4.0%	32.0%
2023	26.0%	4.0%	4.0%	34.0%
2024	28.0%	4.0%	4.0%	36.0%
2025	30.0%	4.0%	4.0%	38.0%
2026	32.0%	4.0%	4.0%	40.0%
2027	34.0%	4.0%	4.0%	42.0%
2028	36.0%	4.0%	4.0%	44.0%
2029	38.0%	4.0%	4.0%	46.0%
2030	40.0%	4.0%	4.0%	48.0%

Source: <https://www.ct.gov/pura/cwp/view.asp?a=3354&q=415186>

APPENDIX G

DISTRIBUTED GENERATION (DG) DELIVERY REBATE

Availability:

Service under this Rider is available to Customers who take service under Rate 01, 02, 02-SE, 03, 03-SE, 10, 10-SE, 20, 20-SE, 30, 30-SE, IS, or a Public Utilities Regulatory Authority (“the Authority”) approved special contract, and whose retail electric distribution service is provided by an electric distribution company (“EDC”) as defined in Connecticut General Statute §16-1(a)(29) and whose operating distributed generation (DG) unit has been approved by the applicable EDC.

To qualify for service under this Rider, the Customer must be an approved natural gas fired customer-side distributed resource unit as defined in Section 2, Part A of Public Act 05-01, and have added electric capacity on or after January 1, 2006. Only approved DG units are eligible for the EDC Gas Rebate Program under this Rider.

Definitions:

Customer Side Distributed Resource means (A) the generation of electricity from a unit with a rating of not more than sixty-five megawatts on the premises of a retail end user within the transmission and distribution system including, but not limited to, fuel cells, photovoltaic systems or small wind turbines, or (B) a reduction in the demand for electricity on the premises of a retail end user in the distribution system through methods of conservation and load management including, but not limited to, peak reduction systems and demand response systems.

Distributed Generation means Customer Side Distributed Resources that meet the part (A) definition above.

Terms and Conditions:

The service rendered under this Rider shall be subject to the terms, conditions, and regulations of the firm or interruptible rate to which the Customer would otherwise be subject.

Enrollment in the EDC Gas Rebate Program requires the execution of a three-party agreement among the Customer, the Company, and the EDC. This agreement is attached to this Rider as Exhibit 1. The agreement identifies relevant customer account information and specific program protocols, procedures and responsibilities of each party. In the agreement, the Customer is also responsible for attesting to the eligibility of its DG unit. The agreement also specifies that the Customer remains financially responsible for any costs incurred by the Company to provide service to the DG unit in the event that it terminates service prior to the contractual term date established in the Service Agreement for the DG billing account.

Metering:

- 1.) Each eligible DG unit will be separately metered and a separate billing account will be established.
- 2.) A Daily Demand Meter may be required, in accordance with the Customer’s applicable tariff, for all Customers taking service under this Rider.

Charges Eligible for Rebate:

For both firm service and interruptible service the Rider DG rebate will be included in the bill rendered for the service period. Firm Service:

If service is taken under Rate 01, 02, 02-SE, 03, 03-SE, 10, 10-SE, 20, 20-SE, 30 or 30-SE, the following delivery charges as reflected under Monthly Delivery Rate in the applicable tariff will be rebated:

- Customer Service Charge
- Daily Demand Meter Charge (applicable for Rates 3, 10, 20 and 30)
- Delivery Charge per Ccf
- Demand Charge (if applicable)
- Any other delivery-related charges or credits (e.g., an interim volumetric surcharge)
- System Expansion Reconciliation (SER) mechanism

Interruptible Service (IS):

If sales service is taken under Rate IS, the Company and the DG customer will negotiate the portion of the charge

per Ccf that is associated with the Company's local delivery service. This negotiated delivery rate component, as well as the Customer Service Charge will be rebated at the same time the bill is rendered.

If transportation service is taken under Rate IS, no natural gas commodity is provided by the Company, thus the Customer Service Charge, and the total delivery Charge per Ccf will be rebated at the same time the bill is rendered.

Monthly Invoicing:

1. Company will immediately credit each eligible DG Customer the applicable retail delivery charge rebate as a credit on that month's bill;
2. Company will invoice the applicable electric distribution company for the retail delivery charge rebated to the DG Customer; and
3. Electric distribution company will then reimburse the Company for the amount of the retail delivery charge rebate.

Applicability of Sales Tax:

Pursuant to the State of Connecticut sales tax policy on rebates, even though the EDC Gas Rebate Program under Rider DG reduces the amount paid by the Customer, it may not be used to reduce the measure of the sales tax. Sales tax is to be imposed on the total sales price before any rebate is applied (as per *State of Connecticut Department of Revenue Services, Policy Statement 98 (1.1), Sales Tax Treatment of Coupons, Scan Cards, Cash Equivalents, Promotional Items and Rebates*).

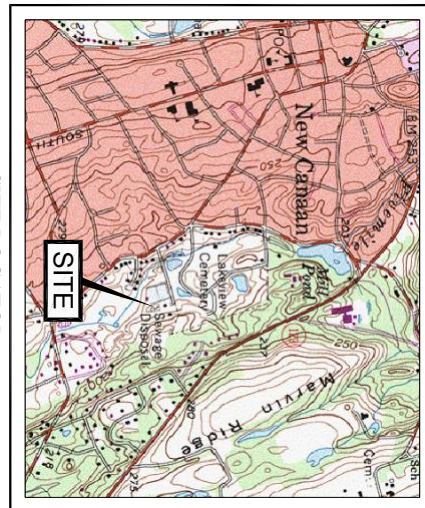
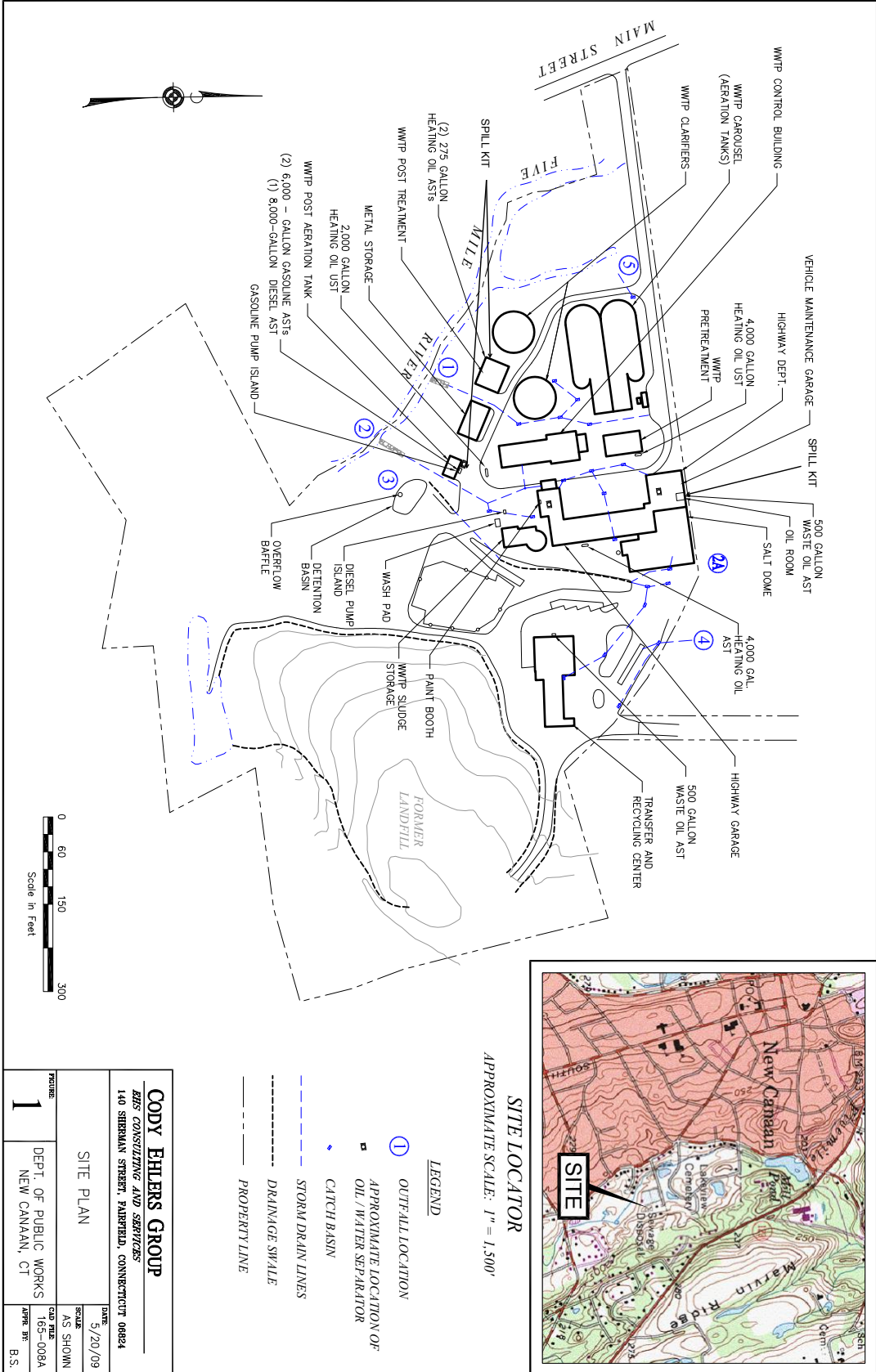
Term of Service:

Customer must abide by the term of service as defined or established in the firm or interruptible tariff in which they are receiving service. The gas rebate program will continue under Public Act 05-01 as long as it is required by legislation or until it is modified or repealed or disallowed by the Authority.

Source: https://www.eversource.com/content/docs/default-source/rates-tariffs/dg-distributed-generation-delivery-rebate.pdf?sfvrsn=8033fc62_2

APPENDIX H

SITE PLAN



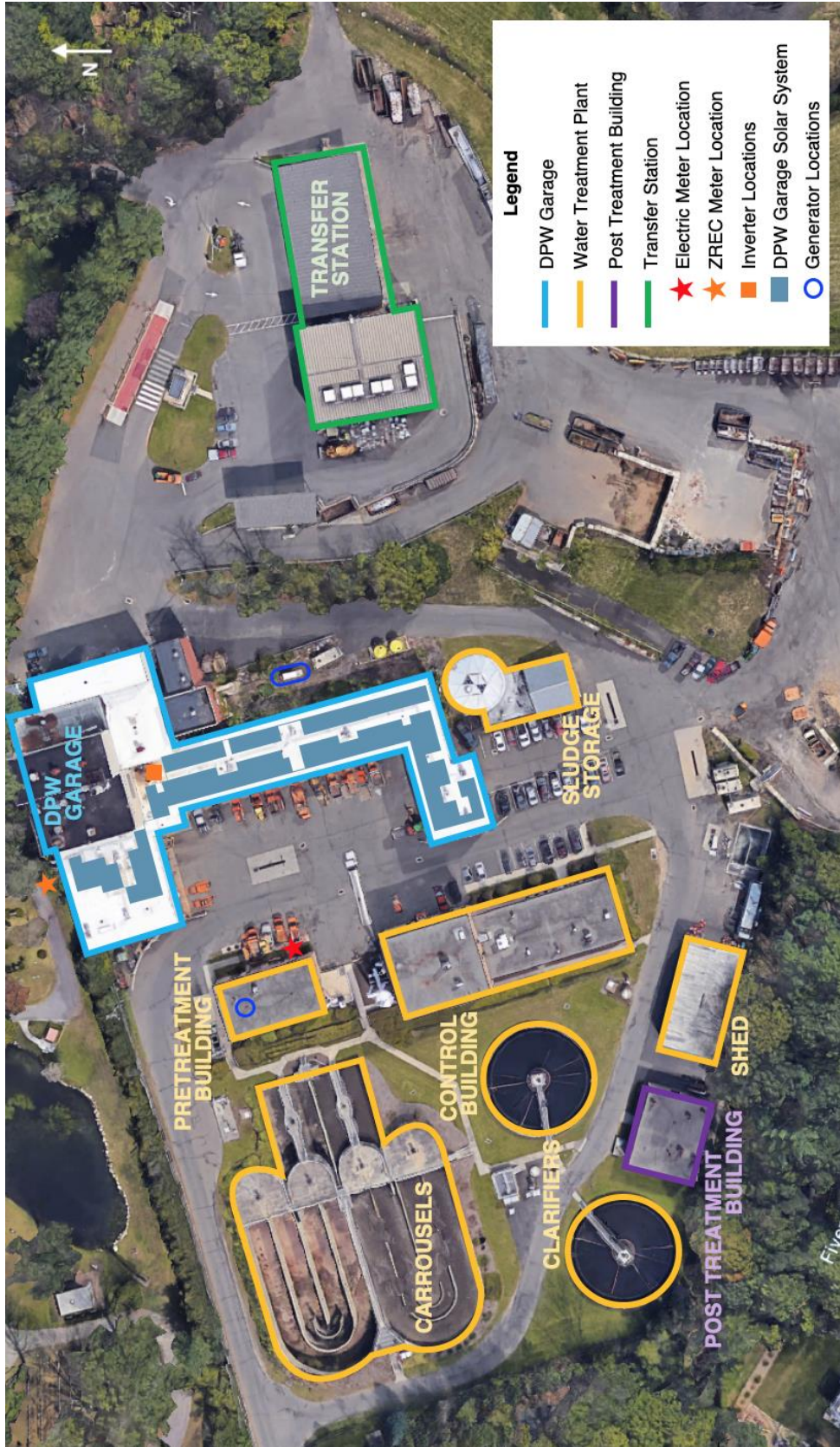
SITE LOCATOR
APPROXIMATE SCALE: 1" = 1,500'

- LEGEND**
- ① OUT-FALL LOCATION
 - APPROXIMATE LOCATION OF OIL/WATER SEPARATOR
 - CATCH BASIN
 - STORM DRAIN LINES
 - DRAINAGE SWALE
 - PROPERTY LINE

CODY EHLERS GROUP		CONSULTING AND SERVICES	
140 SHERMAN STREET, FAIRFIELD, CONNECTICUT 06824			
PROJECT:	1	DATE:	3/20/09
TITLE:	SITE PLAN	SCALE:	AS SHOWN
PREPARED BY:	DEPT. OF PUBLIC WORKS NEW CANAAN, CT	CAD FILE:	163-008A
DATE:		APPR. BY:	B.S.

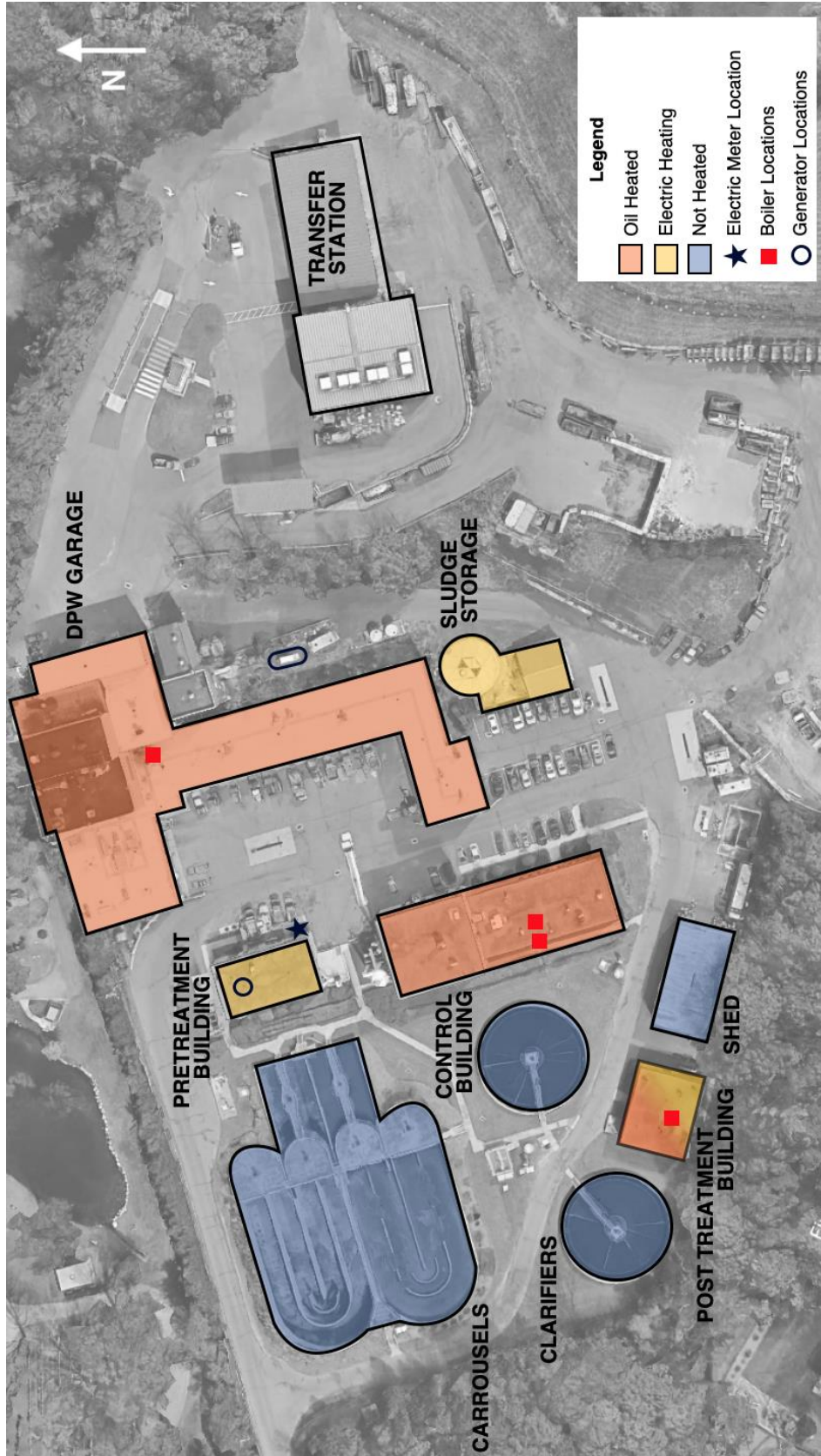
APPENDIX H (cont.)

BUILDING LOCATION MAP



APPENDIX H (cont.)

HEATING SOURCES MAP



APPENDIX H (cont.)

LOCATION OF MAJOR EQUIPMENT

Pretreatment Building

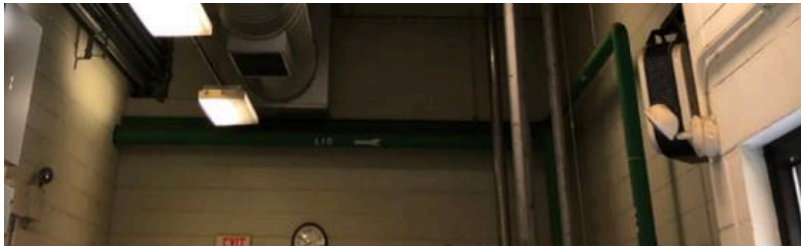
Heated: Electric Heaters

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
Grit Blowers	2	1	1	Marathon Electric		2	24
Septage Blowers	2	1	1	Marathon Electric		10	24
Fine Bar Screen	1	1	0			3	12
Course Bar Screen	1	1	0			2	12

Equipment	Total	Make	Model	Notes
Generator	1	Kohler	81237416	Three-phase; 600 kW; 2 back-to-back Detroit diesel engines

Heating Method	Total	Used	Unused	Make	Model	Notes
Electric Heaters	5	2	3			

Pretreatment Building Electric Heaters:



APPENDIX H (cont.)

LOCATION OF MAJOR EQUIPMENT (cont.)

Carrousel

(Not heated)

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
Aerators	4	2	2	Baldor Reliance	B612672	30	24
Mixers	2	1	1	Eimco	E45825	7.5	24

Sludge Storage

Gross Area: 5,376 ft²
 Living Area: 2,688 ft²
 Heated: Electric Heaters

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
WAS Blowers	2	1	1	Marathon Electric		75	24
GBT Feed Pumps	2	1	1	Aridyne Syncrogear	H17112		6

Heating Method	Total	Used	Unused	Make	Model	Notes
Electric Heaters	3	2	1			
Electric Heater				Qmark	MUH154	3 Phase; 480 Volts AC; 34 Amp

Sludge Storage Electric Heaters:



APPENDIX H (cont.)

LOCATION OF MAJOR EQUIPMENT (cont.)

Post Treatment Building

Gross Area: 2,880 ft²
 Living Area: 2,880 ft²
 Heated: Oil Boiler
 Electric Heaters

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
Post Aeration Blowers	2	1	1			15	24
RAS Pumps	3	2	1			20	24
WAS Pumps	3	1	2			30	24
UV System	2	2	0	Trojan System UV 4000	UV 4000E- SCC	90	24
Plant Water System	2	1	1			15	24

Heating Method	Total	Used	Unused	Make	Model	Notes
Electric Heaters	?	?	?			
Boiler				Burnham	PV76WC-TBWN	

Post Treatment Building Boiler and Electric Heaters:



APPENDIX H (cont.)

LOCATION OF MAJOR EQUIPMENT (cont.)

Control Building

Gross Area: 20,728 ft²
 Living Area: 12,252 ft²
 Heated: Oil Boilers (2)
 Cooled: Yes

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
TWAS Blowers	2	1	1		VB2-63	20	24

Heating Method	Total	Make	Model	Notes
Boilers	2	Viessman Vitola 200	VB2-63	Shut off during the summer
Water Heater	1	Bock	VB2-63	Shut off during the summer

Control Building Boiler:



Electrical Unit Heaters Summary

Equipment	Total	Used	Unused	Make	Model	HP	Hours / Day
Electrical Unit Heater	12	6	6			16.75	12

30 x 7 x 12 = 2,520 hours; 210 days
 Engineering Estimates 16.75 HP per Unit

APPENDIX H (cont.)

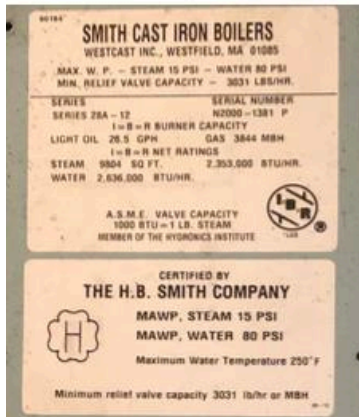
LOCATION OF MAJOR EQUIPMENT (cont.)

Public Works Garage

Gross Area: 34,587 ft²
 Living Area: 18,899 ft²
 Heated: Oil Boiler
 Radiant Floors

Heating Method	Total	Make	Model	Notes
Boilers	1	Smith Cast Iron Boilers	C3-C	
Radiant Floor				
Water Heater	1	Bock	120E	Oil-fired

Public Works Garage Boiler, Radiant Floor and Hot Water Heater:



APPENDIX H (cont.)

EXISTING GENERATORS

Location	Total	Make	Model	Notes
Pretreatment Building	2	Kohler	81237416	2 back-to-back Detroit diesel engines
Outside of DPW Garage	1	Kohler		

Existing Generators:



APPENDIX I

UTILITY CONSUMPTION AND COST SUMMARY

SERVICE	DPW GARAGE	WWTP	TRANSFER STATION	TOTAL
Electric	15%	78%	7%	100%
	258,642 kWh	1,385,579 kWh	132,163 kWh	1,776,384 kWh
	\$35,008	\$187,542	\$17,889	\$240,439
Oil	65%	35%	0%	100%
	18,662 gallons	10,219 gallons	0 gallons	28,881 gallons
	\$37,103	\$20,871	\$0	\$57,974

Electric data (assumed) from 5/22/19 statement

Oil data from 7/1/18 – 6/1/19

OIL CONSUMPTION BY BUILDING

BUILDING	ANNUAL OIL	ANNUAL THERMS	ANNUAL COST	PERCENTAGE
DPW Garage	18,662 gallons	26,127 therms	\$37,103	65%
Treatment Plant (Control Building)	8,875 gallons	12,425 therms	\$17,972	30%
Post Treatment Building	1,345 gallons	1,883 therms	\$2,899	5%
Total Oil Cost	28,882 gallons	40,435 therms	\$57,974	100%

ELECTRICAL USAGE BY BUILDING

BUILDING	ANNUAL USE	ANNUAL COST	PERCENTAGE
DPW Garage	258,641 kWh	\$35,008	15%
Transfer Station	132,163 kWh	\$17,889	7%
Water Treatment Plant	1,385,580 kWh	\$187,542	78%
Total Electric Cost	1,776,384 kWh	\$240,439	100%

APPENDIX I (cont.)

ELECTRICAL BILL (cont.)

Payments/Adjustments

Date	Amount		Date	Amount		Date	Amount	
05-14-2019	\$16.48	DPC	05-02-2019	-\$20,662.15	PAY	04-23-2019	-\$2,658.53	MC C
04-11-2019	\$17.44	DPC	04-05-2019	-\$23,040.59	PAY	03-27-2019	-\$24,371.22	PAY
03-27-2019	-\$24,371.20	PAY	03-27-2019	-\$23,682.22	PAY	03-13-2019	\$475.17	DPC
02-12-2019	\$475.17	DPC	01-14-2019	\$475.17	DPC	12-04-2018	-\$20,563.77	PAY
11-15-2018	-\$18,827.63	PAY	11-09-2018	\$284.55	DPC	10-12-2018	-\$19,123.26	PAY
10-12-2018	\$71.02	DPC	09-13-2018	\$63.45	DPC	09-10-2018	-\$21,639.74	PAY
08-31-2018	-\$20,293.86	PAY	08-14-2018	\$286.24	DPC	08-02-2018	-\$19,641.22	PAY
07-24-2018	-\$20,955.61	PAY	07-13-2018	\$480.55	DPC	06-29-2018	\$2,606.86	TRF
06-26-2018	-\$242.55	DPC	06-26-2018	-\$272.85	DPC	06-26-2018	-\$300.76	DPC
06-26-2018	-\$514.19	DPC	06-26-2018	-\$255.13	DPC	06-26-2018	-\$509.05	DPC
06-26-2018	-\$272.25	DPC	06-26-2018	-\$261.53	DPC	06-26-2018	-\$300.76	DPC
06-26-2018	-\$261.53	DPC	06-26-2018	-\$246.27	DPC	06-26-2018	-\$514.25	DPC
06-21-2018	-\$39.27	DPC	06-21-2018	-\$17.05	DPC	06-21-2018	-\$35.41	DPC
06-21-2018	-\$11.70	DPC	06-21-2018	-\$19.80	DPC	06-13-2018	\$272.85	DPC
05-31-2018	-\$22,205.70	PAY	05-14-2018	\$272.25	DPC	04-18-2018	-\$22,086.90	PAY
04-13-2018	\$255.13	DPC	03-26-2018	-\$23,622.35	PAY	03-14-2018	\$246.27	DPC
02-26-2018	-\$24,434.73	PAY	02-12-2018	\$242.55	DPC	02-05-2018	-\$2,606.86	TRF
01-24-2018	-\$25,079.91	PAY	01-12-2018	\$514.25	DPC	12-21-2017	-\$19,691.20	PAY
12-12-2017	\$514.19	DPC	11-28-2017	-\$19,942.71	PAY	11-10-2017	-\$19,404.90	PAY
11-09-2017	\$509.05	DPC	10-12-2017	\$300.76	DPC	09-13-2017	\$300.76	DPC
09-11-2017	-\$21,087.82	PAY	08-17-2017	-\$21,144.79	PAY	08-14-2017	\$261.53	DPC
07-13-2017	\$261.53	DPC	06-13-2017	\$39.27	DPC	06-05-2017	-\$22,241.42	PAY
06-05-2017	-\$23,318.16	PAY	05-11-2017	\$17.05	DPC	04-12-2017	-\$24,493.42	PAY
04-11-2017	\$35.41	DPC	03-23-2017	-\$22,622.94	PAY	03-13-2017	\$11.70	DPC
02-08-2017	-\$25,001.55	PAY	01-13-2017	\$19.80	DPC	12-15-2016	-\$20,163.87	PAY
12-13-2016	\$19.60	DPC	11-02-2016	-\$21,283.95	PAY	10-14-2016	-\$22,466.47	PAY
09-09-2016	-\$23,345.31	PAY	08-15-2016	-\$21,546.94	PAY	07-11-2016	-\$23,234.02	PAY
06-15-2016	-\$20,448.56	PAY	06-14-2016	\$19.60	DPC	05-10-2016	-\$21,500.55	PAY
04-11-2016	-\$25,699.20	PAY	03-21-2016	-\$23,165.86	PAY	02-24-2016	-\$23,568.32	PAY
01-14-2016	-\$21,194.53	PAY						

Legend: PAY = Payment, TRF = Transfer, DPC = Late Payment Charge, MCC = Adjustment, TTX = Tax

APPENDIX I (cont.)

ELECTRICAL USAGE

From Date	To Date	# of Days	kWh	kW	Rate	Total Charge
5/14/18	6/13/18	30	129,408	221.6	\$0.139	\$18,040
4/30/18	5/14/18	14	62,256	248.1	\$0.138	\$8,565
4/13/18	4/30/18	17	75,600	248.1	\$0.136	\$10,291
3/14/18	4/13/18	30	147,840	261.5	\$0.136	\$20,050
2/12/18	3/14/18	30	153,984	263.0	\$0.135	\$20,761
1/12/18	2/12/18	31	168,960	274.6	\$0.133	\$22,430
12/31/17	1/12/18	12	67,486	283.8	\$0.133	\$8,980
12/12/17	12/31/17	19	106,851	283.8	\$0.135	\$14,453
11/9/17	12/12/17	33	175,872	272.3	\$0.134	\$23,610
10/12/17	11/9/17	28	131,328	241.2	\$0.141	\$18,506
9/13/17	10/12/17	29	135,168	232.7	\$0.140	\$18,924
8/14/17	9/13/17	30	130,944	226.6	\$0.140	\$18,377
7/13/17	8/14/17	32	145,152	228.1	\$0.138	\$19,994
6/30/17	7/13/17	13	63,061	233.1	\$0.138	\$8,717
6/13/17	6/30/17	17	82,475	233.1	\$0.135	\$11,165
Total			1,776,384			\$242,861

Interval data available upon request

APPENDIX I (cont.)

ON-PEAK / OFF-PEAK ANNUAL DATA

Read Date	Time	End Read	Usage	Demand
7/13/17	Peak	8,235	35,712	230
	Off-Peak	25,736	109,824	233.1
8/14/17	Peak	8,323	33,792	228.1
	Off-Peak	26,026	111,360	227.3
9/13/17	Peak	8,406	31,872	215.8
	Off-Peak	26,284	99,072	226.6
10/12/17	Peak	8,492	33,024	228.1
	Off-Peak	26,550	102,144	232.7
11/9/17	Peak	8,573	31,104	239.2
	Off-Peak	26,811	100,224	241.2
12/12/17	Peak	8,680	41,088	260
	Off-Peak	27,162	134,784	272.3
1/12/18	Peak	8,794	43,776	274.9
	Off-Peak	27,502	130,560	283.8
2/12/18	Peak	8,895	38,784	274.6
	Off-Peak	27,841	130,176	273
3/14/18	Peak	8,993	37,632	256.5
	Off-Peak	28,144	116,352	263
4/13/18	Peak	9,086	35,712	254.6
	Off-Peak	28,436	112,128	261.5
5/14/18	Peak	9,166	30,720	237.3
	Off-Peak	28,715	107,136	248.1
6/13/18	Peak	9,248	31,488	219.3
	Off-Peak	28,970	97,920	221.6
Totals	Peak	104,891	424,704	
	Off-Peak	328,177	1,351,680	
Total		433,068	1,776,384	

7/13/17 – 6/13/18

APPENDIX I (cont.)

OIL CONSUMPTION HISTORY

DPW Garage

Date	Fuel Type	Quantity (gal)	Unit Price	Tax Total	Total Charge
1/16/13	2	2,214.2	\$2.939	\$6.42	\$6,513.95
1/31/13	2	1,506.6	\$2.939	\$4.37	\$4,432.27
2/11/13	2	697.3	\$2.939	\$2.02	\$2,051.38
2/14/13	2	1,301.4	\$2.939	\$3.77	\$3,828.58
2/19/13	2	1,533.8	\$2.939	\$4.44	\$4,512.28
3/15/13	2	2,132.8	\$2.939	\$6.18	\$6,274.48
4/18/13	2	1,099.2	\$2.939	\$3.19	\$3,233.74
6/20/13	2	1,843.5	\$2.939	\$5.34	\$5,423.39
11/6/13	2	1,044.5	\$2.939	\$3.02	\$3,072.81
11/26/13	2	2,301.9	\$3.175	\$6.67	\$7,314.05
12/9/13	2	1,009.6	\$3.175	\$2.93	\$3,207.91
12/26/13	2	1,923.0	\$3.175	\$5.57	\$6,110.13
1/14/14	2	1,001.0	\$3.175	\$2.90	\$3,180.57
1/17/14	2	1,937.0	\$3.175	\$5.62	\$6,154.63
1/31/14	2	2,015.6	\$3.175	\$5.85	\$6,404.37
2/14/14	2	2,241.7	\$3.175	\$6.50	\$7,122.78
3/3/14	2	1,419.8	\$3.175	\$4.12	\$4,511.28
3/14/14	2	2,060.6	\$3.175	\$5.98	\$6,547.35
4/2/14	2	1,525.0	\$3.175	\$4.43	\$4,845.54
4/23/14	2	1,419.6	\$3.175	\$4.12	\$4,510.64
6/5/14	2	1,943.3	\$3.175	\$5.63	\$6,174.64
10/3/14	2	1,000.0	\$3.175	\$2.90	\$3,177.40
11/17/14	2	1,865.8	\$3.290	\$5.42	\$6,144.65
1/7/15	2	1,003.0	\$3.290	\$2.91	\$3,303.18
1/15/15	2	705.1	\$3.290	\$2.05	\$2,322.11
1/29/15	2	1,992.0	\$3.290	\$5.77	\$6,560.25
12/8/14	2	1,325.9	\$3.290	\$3.85	\$4,366.59
12/23/14	2	1,519.9	\$3.290	\$4.41	\$5,005.49
2/9/15	2	1,711.2	\$3.290	\$4.96	\$5,635.49
2/23/15	2	2,325.4	\$3.290	\$6.75	\$7,658.25
3/6/15	2	992.0	\$3.290	\$2.87	\$3,266.95
3/12/15	2	1,731.6	\$3.290	\$5.02	\$5,702.68
4/9/15	2	2,010.5	\$3.290	\$5.83	\$6,621.18
5/26/15	2	1,635.8	\$2.307	\$4.75	\$3,778.70
4/6/16	2	1,682.0	\$3.288	\$4.89	\$5,534.96
5/17/16	2	762.5	\$3.288	\$2.22	\$2,509.16

APPENDIX I (cont.)

OIL CONSUMPTION HISTORY (cont.)

DPW Garage (cont.)

1/5/17	2	1,528.0	\$2.153	\$4.80	\$3,294.58
1/12/17	2	1,268.0	\$2.153	\$3.99	\$2,733.99
2/6/17	2	1,400.2	\$2.153	\$4.40	\$3,019.03
2/22/17	2	2,533.2	\$2.153	\$7.96	\$5,461.94
3/15/17	2	1,917.4	\$2.153	\$6.03	\$4,134.19
4/6/17	2	2,156.3	\$1.787	\$6.78	\$3,860.30
8/10/17	2	1,246.0	\$1.985	\$3.92	\$2,477.48
12/15/17	2	2,435.3	\$1.985	\$7.65	\$4,842.22
12/28/17	2	1,514.6	\$1.985	\$4.76	\$3,011.54
1/10/18	2	1,948.3	\$1.985	\$1.95	\$3,869.72
1/30/18	2	2,162.3	\$1.985	\$2.16	\$4,294.76
2/27/18	2	2,714.7	\$1.985	\$2.71	\$5,391.93
3/27/18	2	2,064.9	\$2.197	\$6.49	\$4,543.08
4/3/18	2	452.1	\$2.173	\$1.42	\$983.61

Wastewater Treatment Plant Control Building

Date	Fuel Type	Quantity (gal)	Unit Price	Tax Total	Total Charge
1/7/13	2	1,093.5	\$2.939	\$3.17	\$3,216.97
2/14/13	2	800.7	\$2.939	\$2.32	\$2,355.58
3/8/13	2	800.8	\$2.939	\$2.32	\$2,355.87
4/26/13	2	133.4	\$2.939	\$0.38	\$392.44
5/23/13	2	359.4	\$2.939	\$1.04	\$1,057.32
5/23/13	2	472.6	\$2.939	\$1.37	\$1,390.34
12/18/13	2	568.8	\$3.175	\$1.65	\$1,807.31
1/17/14	2	751.3	\$3.175	\$2.18	\$2,387.18
2/17/14	2	1,280.1	\$3.175	\$3.71	\$4,067.39
3/25/14	2	850.1	\$3.175	\$2.47	\$2,701.11
1/12/17	2	1,757.2	\$2.153	\$5.52	\$3,788.78
2/6/17	2	600.3	\$2.153	\$1.89	\$1,294.34
2/20/17	2	301.2	\$2.153	\$0.95	\$649.43
3/9/17	2	816.2	\$2.153	\$2.57	\$1,759.85
4/6/17	2	815.9	\$1.787	\$2.56	\$1,460.66
11/20/17	2	1,011.4	\$1.985	\$3.18	\$2,011.01
12/21/17	2	1,001.8	\$1.985	\$3.15	\$1,991.92
1/6/18	2	1,058.9	\$1.985	\$1.06	\$2,103.19
1/29/18	2	1,040.0	\$1.985	\$1.04	\$2,065.65
2/22/18	2	1,002.5	\$1.985	\$1.00	\$1,991.16
3/27/18	2	1,006.3	\$2.197	\$3.16	\$2,214.01

APPENDIX I (cont.)

OIL CONSUMPTION HISTORY (cont.)

Wastewater Treatment Plant Post Treatment Building

Date	Fuel Type	Quantity (gal)	Rate (\$ / gal)	Tax Total	Total Charge
1/29/13	2	322.2	\$2.939	\$0.93	\$947.88
3/4/13	2	346.3	\$2.939	\$1.01	\$1,018.79
4/18/13	2	254.1	\$2.939	\$0.73	\$747.53
11/22/13	2	249.3	\$3.175	\$0.72	\$792.12
12/26/13	2	271.8	\$3.175	\$0.79	\$863.62
1/27/14	2	316.8	\$3.175	\$0.92	\$1,006.60
2/28/14	2	354.0	\$3.175	\$1.02	\$1,124.79
4/7/14	2	349.8	\$3.175	\$1.01	\$1,111.45
10/20/14	2	24.8	\$3.175	\$0.07	\$78.80
1/13/15	2	305.0	\$3.290	\$0.89	\$1,004.46
12/9/14	2	292.0	\$3.290	\$0.84	\$961.64
2/9/15	2	296.5	\$3.290	\$0.86	\$976.46
3/9/15	2	311.1	\$3.290	\$0.90	\$1,024.54
4/29/15	2	282.7	\$2.132	\$0.82	\$603.45
1/5/17	2	227.4	\$2.153	\$0.71	\$490.31
1/27/17	2	206.0	\$2.153	\$0.65	\$444.17
3/2/17	2	273.7	\$2.153	\$0.86	\$590.14
4/21/17	2	312.7	\$1.985	\$0.98	\$621.75
12/11/17	2	270.9	\$1.985	\$0.85	\$538.64
1/15/18	2	366.6	\$1.985	\$0.37	\$728.14
2/22/18	2	349.8	\$1.985	\$0.35	\$694.77
4/12/18	2	395.6	\$2.295	\$1.24	\$909.11

APPENDIX J (cont.)

EXISTING SOLAR SYSTEM DETAILS

OUTDOORS: WEST WALL OF DPW GARAGE
(SEE PVI.0 SITE PLAN FOR REF.)

89L
200A LOCKABLE
PV SOLAR
AC DISCONNECT
NEMA3R,
FUSIBLE

200A ZREC
PRODUCTION
METER

AC DISCONNECT
NON-FUSIBLE

UNDERGROUND
CABLE TO
BUILDING #B
LOADS

400A

600A

600A

POINT OF
UTILITY/SOLAR
INTERCONNECT

UTILITY
METER

2000A 480V,
THREE PHASE
UTILITY
SERVICE

600A

3000A

CTA

TO BUILDING
MECHANICAL ROOM
#A LOADS

400A

400A

600A

TO BUILDING
MECHANICAL ROOM
#B LOADS

400A

200A

100A

OUTSIDE: ON ROOF

JA SOLAR 375w
PV Modules

OPEN AIR
#12 USE-2

STRING #A1 - 16 MODULES EACH

STRING #A2 - 16 MODULES EACH

STRING #A3 - A4, 16 MODULES EACH

STRING #A5 - A6, 16 MODULES EACH

STRING #A7 - A8, 16 MODULES EACH

STRING #A9 - A10, 16 MODULES EACH

STRING #B1 - 16 MODULES EACH

STRING #B2 - 16 MODULES EACH

STRING #B3 - B4, 16 MODULES EACH

STRING #B5 - B6, 16 MODULES EACH

STRING #B7 - B8, 16 MODULES EACH

STRING #B9 - B10, 16 MODULES EACH

EQUIPMENT GROUND

INVERTER #A
SMA Tripower
Core1 50kw L1

INVERTER #B
SMA Tripower
Core1 50kw L1

TO INTERNET
SOLAR
MONITOR

TO BUILDING
MECHANICAL ROOM
#A LOADS

TO BUILDING
MECHANICAL ROOM
#B LOADS

RECOMMENDED WIRE AND CONDUIT SIZING.

Inv.#	Box	Current Rated Type Amps (A)	1-way Dist. (ft)	Wire Size /k ft	Ohms /k ft	# of Strings	Total Modules	STC watts	Voltage mpppt	Current mpppt	Voltage Vos	Current Ics	Min. OCPD
A or B	STR to JB	DC 9.4	10	1.24	850	0.11%	21	PV wire	NA	NA			
A or B	JB to Inv.	DC 9.4	15	220	10	1.24	850	0.61%	21	PV wire	2"	EMT	
A & B	Inv. To sub	AC 60	75	20	4	0.31	480	0.15%	5	THWN-2	1.25"	EMT	
	sub to tap	AC 120	150	90	2/0	0.10	480	0.44%	5	THWN-2	2.0"	EMT	
Worst Case Voltage Drop 1.31%													
NEW CANAAN DPW GARAGE - ELECTRICAL CALCULATIONS													
DC Circuits			# of Modules	# of Strings	Total Modules	STC watts	Voltage mpppt	Current mpppt	Voltage Vos	Current Ics	Min. OCPD		
JASolar			1	1	16	6,000	39.75	9.44	48.45	9.98	12.5		
	String Calculations		16	1	16	6,000	636	9.44	775	9.98	12.5		
	String Calculations		18	1	18	6,750	716	9.44	872	9.98	12.5		
	SMA Tripower 50 Specification					t	480-850	max=38A/mppt	995				
	Inverter Input		16	2	32	12,000	716	18.9	32		40.0		
	Input to Inverters		18	2	36	13,500	636	18.9	36		40.0		
	Inverter #A Input (2x32)+(3x36)				172	64500			985				
	Inverter #B Input (3x32)+(2x36)				168	63000			985				
	Total				340	127,500							
AC Circuits - (All 3 Phase 480V)			Output Watts	AC Voltage	AC Current	Min. OCPD							
	#A - SMA Tripower 50kw		50,000	480	60	75	Standard OCPD						
	#B - SMA Tripower 50kw		50,000	480	60	75							
	Total AC		100,000	480	120	151							

Northeast Smart Energy
SOLAR SPECIALISTS
52 Citronah St., Ridgefield, CT 06877
TEL: 203 733-1154

NOTES:
127.5kw DC PHOTOVOLTAC
SOLAR SYSTEM
100kw AC OUTPUT
340 MODULES - JA SOLAR 375 watt



SYMBOL	DATE	DESCRIPTION

CUSTOMER:
NEW CANAAN DPW GARAGE
400 MAIN ST.
NORWALK, CT 06840

SHEET TITLE:
**1-LINE DIAGRAM
PV SOLAR ARRAY**

PROJECT NUMBER:
ISSUED:
DRAWN BY:
CHECKED BY:
SCALE:
NSA



PV 2.0

APPENDIX K

**CONNECTICUT DEPARTMENT OF LABOR CONTRACTORS WAGE CERTIFICATION FORM,
PAYROLL CERTIFICATION FORMS, CERTIFIED STATEMENT OF COMPLIANCE FORM**

Minimum Rates and Classifications for Building Construction

ID#: 20-10553

**Connecticut Department of Labor
Wage and Workplace Standards Division**

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: CHP System Project

Project Town: New Canaan

State#: CHP System

FAP#: CHP System

Project: CHP System Project 030520

CLASSIFICATION	Hourly Rate	Benefits
1b) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters.**See Laborers Group 7**		
1c) Asbestos Worker/Heat and Frost Insulator	40.21	30.99
2) Boilermaker	38.34	26.01
3a) Bricklayer, Cement Mason, Concrete Finisher (including caulking), Stone Masons	35.71	34.34 + a
3b) Tile Setter	34.9	25.87
3c) Terrazzo Mechanics and Marble Setters	31.69	22.35
3d) Tile, Marble & Terrazzo Finishers	26.7	21.75
3e) Plasterer	33.48	32.06
-----LABORERS-----		
4) Group 1: Laborers (common or general), acetylene burners, carpenter tenders, concrete specialists, wrecking laborers, fire watchers.	30.75	20.84
4a) Group 2: Mortar mixers, plaster tender, power buggy operators, powdermen, fireproofers/mixer/nozzleman (Person running mixer and spraying fireproof only).	31.0	20.84

4b) Group 3: Jackhammer operators/pavement breaker, mason tender (brick), mason tender (cement/concrete), forklift operators and forklift operators (masonry).	31.25	20.84
4c) **Group 4: Pipelayers (Installation of water, storm drainage or sewage lines outside of the building line with P6, P7 license) (the pipelayer rate shall apply only to one or two employees of the total crew who primary task is to actually perform the mating of pipe sections) P6 and P7 rate is \$26.80.	31.75	20.84
4d) Group 5: Air track operator, sand blaster and hydraulic drills.	31.5	20.84
4e) Group 6: Blasters, nuclear and toxic waste removal.	33.75	20.84
4f) Group 7: Asbestos/lead removal and encapsulation (except it's removal from mechanical systems which are not to be scrapped).	31.75	20.84
4g) Group 8: Bottom men on open air caisson, cylindrical work and boring crew.	29.03	20.84
4h) Group 9: Top men on open air caisson, cylindrical work and boring crew.	28.49	20.84
4i) Group 10: Traffic Control Signalman	18.0	20.84
5) Carpenter, Acoustical Ceiling Installation, Soft Floor/Carpet Laying, Metal Stud Installation, Form Work and Scaffold Building, Drywall Hanging, Modular-Furniture Systems Installers, Lathers, Piledrivers, Resilient Floor Layers.	33.53	25.66
5a) Millwrights	34.94	26.19
6) Electrical Worker (including low voltage wiring) (Trade License required: E1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	40.0	36.15
7a) Elevator Mechanic (Trade License required: R-1,2,5,6)	53.37	33.705+a+b
-----LINE CONSTRUCTION-----		
Groundman	26.5	6.5% + 9.00
Linemen/Cable Splicer	48.19	6.5% + 22.00
8) Glazier (Trade License required: FG-1,2)	38.18	21.80 + a

9) Ironworker, Ornamental, Reinforcing, Structural, and Precast Concrete Erection	36.67	35.77
-----OPERATORS-----		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer 2 drums or over, front end loader (7 cubic yards or over), work boat 26 ft. and over and Tunnel Boring Machines. (Trade License Required)	40.97	24.80 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	40.64	24.80 + a
Group 3: Excavator; Backhoe/Excavator under 2 cubic yards; Cranes (under 100 ton rated capacity), Grader/Blade; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade. (slopes, shaping, laser or GPS, etc.). (Trade License Required)	39.88	24.80 + a
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper).	39.48	24.80 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24	38.87	24.80 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller; Pile Testing Machine.	38.87	24.80 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	38.55	24.80 + a
Group 7: Asphalt roller, concrete saws and cutters (ride on types), vermeer concrete cutter, Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24	38.2	24.80 + a
Group 8: Mechanic, grease truck operator, hydroblaster; barrier mover; power stone spreader; welding; work boat under 26 ft.; transfer machine.	37.79	24.80 + a
Group 9: Front end loader (under 3 cubic yards), skid steer loader regardless of attachments, (Bobcat or Similar): forklift, power chipper; landscape equipment (including Hydroseeder).	37.34	24.80 + a
Group 10: Vibratory hammer; ice machine; diesel and air, hammer, etc.	35.24	24.80 + a
Group 11: Conveyor, earth roller, power pavement breaker (whiphammer), robot demolition equipment.	35.24	24.80 + a

Group 12: Wellpoint operator.	35.18	24.80 + a
Group 13: Compressor battery operator.	34.58	24.80 + a
Group 14: Elevator operator; tow motor operator (solid tire no rough terrain).	33.41	24.80 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	32.99	24.80 + a
Group 16: Maintenance Engineer/Oiler.	32.32	24.80 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	36.76	24.80 + a
Group 18: Power safety boat; vacuum truck; zim mixer; sweeper; (Minimum for any job requiring a CDL license).	34.26	24.80 + a
-----PAINTERS (Including Drywall Finishing)-----		
10a) Brush and Roller	34.62	21.80
10b) Taping Only/Drywall Finishing	35.37	21.80
10c) Paperhanger and Red Label	34.12	21.05
10e) Blast and Spray	36.62	21.05
11) Plumber (excluding HVAC pipe installation) (Trade License required: P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2)	43.62	32.06
12) Well Digger, Pile Testing Machine	37.26	24.05 + a
Rofer: Cole Tar Pitch	41.5	17.00 + a
Rofer: Slate, Tile, Composition, Shingles, Singly Ply and Damp/Waterproofing	40.0	17.00 + a
15) Sheetmetal Worker (Trade License required for HVAC and Ductwork: SM-1,SM-2,SM-3,SM-4,SM-5,SM-6)	44.74	42.48
16) Pipefitter (Including HVAC work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4, G-1, G-2, G-8 & G-9)	43.62	32.06

-----TRUCK DRIVERS-----

17a) 2 Axle	29.51	24.52 + a
17b) 3 Axle, 2 Axle Ready Mix	29.62	24.52 + a
17c) 3 Axle Ready Mix	29.67	24.52 + a
17d) 4 Axle, Heavy Duty Trailer up to 40 tons	29.72	24.52 + a
17e) 4 Axle Ready Mix	29.77	24.52 + a
17f) Heavy Duty Trailer (40 Tons and Over)	29.98	24.52 + a
17g) Specialized Earth Moving Equipment (Other Than Conventional Type on-the-Road Trucks and Semi-Trailers, Including Euclids)	29.77	24.52 + a
18) Sprinkler Fitter (Trade License required: F-1,2,3,4)	45.57	24.33 + a
19) Theatrical Stage Journeyman	25.76	7.34

Welders: Rate for craft to which welding is incidental.

**Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.*

***Note: Hazardous waste premium \$3.00 per hour over classified rate*

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$4.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)***
- 2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson***
- 3) Cranes (under 100 ton rated capacity)***

Crane with 150 ft. boom (including jib) - \$1.50 extra

Crane with 200 ft. boom (including jib) - \$2.50 extra

Crane with 250 ft. boom (including jib) - \$5.00 extra

Crane with 300 ft. boom (including jib) - \$7.00 extra

Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol. For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

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~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

As of: February 27, 2020