# POWER PURCHASE AND LICENSE AGREEMENT

# BETWEEN

# GENERAL ELECTRIC INTERNATIONAL, INC.

AND

# CONNECTICUT STATE COLLEGES AND UNIVERSITIES

DATED AS OF MAY 16, 2017

# TABLE OF CONTENTS

ARTICLE 1.	DEFINED TERMS; RULES OF INTERPRETATION	1
1.1	Defined Terms	1
1.2	Rules of Interpretation	
		-
ARTICLE 2.	TERM	2
2.1	Term	2
2.2	Conditions Precedent	2
2.3	Notice of Commercial Operation	2
2.4	Survival	
ARTICLE 3.	PURCHASE AND SALE; DELIVERY, GOVERNMENTAL	
	CHARGES, PURCHASE OPTION	3
3.1	Purchase and Sale of Energy Output	2
3.2	Price for Energy Output	2
3.3	Energy Payment Rate	
3.3	Title and Risk of Loss of Energy Output	
3.4		
	Governmental Charges	
3.6	Minimum Output Requirements	
3.7	Insolation.	
3.8	Maintenance of Premises; Alterations to Premises	
3.9	Grant of Purchase Option.	
3.10	Determination of Purchase Price	
3.11	Terms and Date of SEF Purchase	
3.12	Interconnection Agreement	6
ARTICLE 4.	ENVIRONMENTAL ATTRIBUTES AND TAX BENEFITS	6
4.1	Title to Environmental Attributes and Tax Benefits	6
4.1		
4.2	Further Assurances	
4.5	Promotion and Branding	1
ARTICLE 5.	CONSTRUCTION, MAINTENANCE AND MONITORING	7
5.1	Construction, Maintenance, Monitoring and Removal of SEF by Seller	7
5.2	Buyer's Obligations	
5.3	Telemetry	
		-
ARTICLE 6.	METERING DEVICE AND METERING	9
6.1	Metering Equipment	9
6.2	Measurements	
6.3	Testing and Correction	
6.4	Live Meter Maintenance	

# TABLE OF CONTENTS (continued)

ARTICLE 7.	LOSS, DAMAGE OR DESTRUCTION OF SEF; INSURANCE; FORCE MAJEURE; PAYMENTS FOR TEMPORARY SHUT	
	DOWN 1	1
7.1	SEF Loss	1
7.2	Insurance	2
7.3	Performance excused by Force Majeure 1	2
7.4	Termination due to Force Majeure 1	12
7.5	Extension of PPA 1	
7.6	Security of the Premises, SEF Security	13
ARTICLE 8.	EVENTS OF DEFAULT; REMEDIES	13
8.1	Events of Default 1	13
8.2	Buyer Remedies 1	4
8.3	Seller Remedies 1	
8.4	Termination Payment Notice	
8.5	Remedies Cumulative	
8.6	Unpaid Obligations 1	15
ARTICLE 9.	INVOICING AND PAYMENT 1	15
9.1	Invoicing and Payment	15
9.2	Disputed Amounts 1	
9.3	No Setoff	
9.4	Records and Audits 1	15
9.5	Currency	6
ARTICLE 10		
	ACKNOWLEDGEMENT	
10.1	Representations and Warranties	16
10.2	Buyer Acknowledgement Regarding Inapplicability of Bankruptcy Code	
	Section 366	6
ARTICLE 11	INDEMNITY; LIMITATIONS	16
11.1	Sovereign Immunity	16
11.2	Limitation of Remedies, Liability and Damages	
11.3	Limitations on Warranties.	
11.4	Duty to Mitigate	
ARTICLE 12	NOTICES	17
12.1	Notices	17
ARTICLE 13	ASSIGNMENT AND FINANCING	18

# TABLE OF CONTENTS (continued)

13.1	Assignment; Binding Effect	. 18
13.2	Cooperation with Financing	. 18
ARTICLE 14.	FINANCING PARTY ACCOMMODATIONS	. 18
14.1	Buyer Acknowledgment	. 18
14.2	Consent to Assignment	. 18
14.3	Financing Party's Rights Following an Event of Default	. 19
14.4	Financing Party's Right to Cure	. 19
14.5	Notice of Defaults and Events of Default	. 20
ARTICLE 15.	MISCELLANEOUS	. 20
15.1	Governing Law	. 20
15.2	Entire Agreement; Amendments	. 20
15.3	Non-Waiver	. 20
15.4	Severability	. 20
15.5	No Third Party Beneficiaries	
15.6	No Recourse to Affiliates.	. 20
15.7	Relationship of Parties	. 21
15.8	Counterparts	. 21
15.9	Further Assurances	. 21
15.10	General Interpretation	. 21
15.11	Removal of Liens	. 21
15.12	Forward Contract	. 21
15.13	Dispute Resolution	. 21
15.14	Freedom of Information Act	. 22
15.15	Nondiscrimination	. 22
15.16	Executive Orders	.24
15.17	Summary of State Ethics Laws	. 25
15.18	Whistleblower Law	. 25
15.19	Disclosure of Records	. 25
15.20	Campaign Contribution Restrictions	. 25

# EXHIBITS

Exhibit A	Solar Energy Facility
Exhibit B	Property
Exhibit C	Premises
Exhibit D	Schedule of Definitions and Rules of Interpretation
Exhibit E	Energy Payment Rate
Exhibit F	Multiplier for Shutdown(s)
Exhibit G	Request for Proposal

#### POWER PURCHASE AND LICENSE AGREEMENT

THIS POWER PURCHASE AND LICENSE AGREEMENT (as may be amended, extended, restated or otherwise modified, the "**PPA**") is made and entered into by and between General Electric International Inc., a Delaware corporation with offices at 1 River Road, Schenectady, NY 12345 ("**Seller**"), and Connecticut State Colleges and Universities on behalf of Southern Connecticut State University, a public institution of the state system of higher education with offices at 61 Woodland Street, Hartford, CT 06105 ("**Buyer**") as of May [/6], 2017 (the "**Effective Date**"). Seller and Buyer are sometimes hereinafter referred to individually as a Party and collectively as the Parties.

#### RECITALS

A. Buyer has the supervision, care and control of all that certain real property together with all improvements, buildings, and other structures thereon known as 501 Crescent Street, New Haven, CT, 06515, as more particularly described on <u>Exhibit B</u> attached hereto (the "*Property*") and which includes the area on which the SEF (as defined below) will be installed, as more particularly described on <u>Exhibit C</u> attached hereto (the "*Premises*");

B. Buyer agrees to grant Seller a license to the Premises and across the Property to access the Premises, as further described herein;

C. Seller agrees to finance, own and operate a solar energy facility, as more particularly described in Exhibit <u>A</u> (the "SEF") and Exhibit <u>G</u> (the Request for Proposals) on the Premises; and

D. Seller desires to sell to Buyer, and Buyer desires to purchase from Seller, all of the Energy generated by the SEF during the Term and otherwise in accordance with the terms of this PPA.

E. Buyer is authorized to enter this PPA under provisions of Sections 10a-6, 4a-52a and 10a-151b of the General Statues of the State of Connecticut.

#### AGREEMENT

In consideration of the foregoing recitals, the mutual agreements, representations, warranties and covenants set forth in this PPA and the Schedules and Exhibits hereto, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Seller and Buyer agree as follows:

## ARTICLE 1. DEFINED TERMS; RULES OF INTERPRETATION

1.1 <u>Defined Terms</u>. Capitalized terms used in this PPA shall have the meanings ascribed to them in the Schedule of Definitions and Rules of Interpretation attached hereto as <u>Exhibit D</u> and made a part of this PPA by this reference, or elsewhere in this PPA.

**1.2** <u>Rules of Interpretation</u>. The rules of interpretation in the Schedule of Definitions and Rules of Interpretation shall apply to this PPA unless expressly provided otherwise.

## ARTICLE 2. TERM

2.1 <u>Term</u>. The initial term of this PPA (the "*Term*") shall commence on the Effective Date and shall be in effect until the twentieth (20<sup>th</sup>) anniversary of the Commercial Operation Date, provided that, upon the subsequent mutual agreement in writing of the Parties, the Term may be extended by an additional five (5) years. At the end of the contract term or earlier termination of this PPA, Seller shall remove the SEF from the Premises in accordance with Section 5.1(g).

2.2 <u>Conditions Precedent</u>. The respective rights and obligations of the Parties under this PPA (subject to Section 2.4) are conditioned upon the satisfaction in full (or waiver by Seller) within three hundred and sixty-five (365) days after the Effective Date of (i) the receipt by Seller of final approval from Buyer's Serving Utility to operate and interconnect the SEF, and (ii) the following:

(a) Seller shall have received financing sufficient to enable it to purchase, construct, operate and maintain the SEF as required by this PPA on terms acceptable to the Seller in its sole discretion;

(b) Seller shall have obtained all Governmental Approvals and approvals from Buyer's Serving Utility, which approvals shall include conditions and terms satisfactory to Seller in its sole discretion, which discretion shall include the right to terminate this PPA if capital improvements are required to be made as a condition to receiving an interconnection agreement from Buyer's Serving Utility and such improvements exceed \$0.10/watt and/or are otherwise not economically acceptable to Seller;

(c) Seller shall have entered into an Interconnection Agreement with Buyer's Serving Utility that qualifies under applicable net metering programs, under which any over-production of energy is carried as a credit on Buyer's utility bill against later shortfalls in production of the SEF compared to Buyer's electricity consumption; and

(d) Completion of a physical inspection of the Premises, including, if applicable, geotechnical work, and real estate due diligence to confirm the suitability of the Premises for the SEF.

2.3 <u>Notice of Commercial Operation</u>. Unless otherwise agreed by the Parties, and subject to the remaining provisions of this PPA, Seller shall notify Buyer when the SEF has achieved Commercial Operation (the "*Notice of Commercial Operation*").

(a) <u>Construction Commencement Notice</u>. Seller shall coordinate with Buyer a schedule mapping out permitting, Buyer approvals, project milestones and time frames prior to the start of construction activities of the SEF.

(b) <u>Construction Completion Deadline</u>. If Commercial Operation of the SEF does not occur on or before the date that is five hundred and forty-eight (548) days after the date construction commenced as referenced in the notice provided pursuant to Section 2.3(a) herein, either Party hereto shall have the right to terminate this PPA by providing written notice to the other at any time prior to the date upon which Commercial Operation is achieved.

2.4 <u>Survival</u>. The terms and conditions of this PPA shall survive the termination or expiration of this PPA only (i) to the extent necessary to enforce any rights and obligations of the Parties, including payment obligations and with respect to indemnification; and/or (ii) as otherwise specified herein.

## **ARTICLE 3.**

# PURCHASE AND SALE; DELIVERY, GOVERNMENTAL CHARGES, PURCHASE OPTION

3.1 <u>Purchase and Sale of Energy Output</u>. During the Term, Seller shall deliver to Buyer, and Buyer shall take delivery of and consume, at the Delivery Point, all of the Energy in accordance with the terms of this PPA.

**3.2** <u>Price for Energy Output</u>. Buyer shall pay Seller for all of the Energy delivered to the Delivery Point, as metered at the Metering Device, at the applicable Energy Payment Rate plus any Lost Seller Revenue. The payment to be made by Buyer to Seller shall equal the Energy for the relevant period multiplied by the Energy Payment Rate for such period plus any Lost Seller Revenue.

3.3 <u>Energy Payment Rate</u>. Seller shall sell to Buyer and Buyer shall purchase from Seller all of the Energy, as and when the same is produced, at the Energy Payment Rate in effect at the time of delivery, as detailed in Exhibit E, attached hereto and made a part hereof. Seller shall deliver the Energy to the Delivery Point, and Buyer shall accept the Energy delivered for the full Contract Term. Seller shall not make or add any demand, delivery or other incidental charges to the Energy Payment Rate.

3.4 <u>Title and Risk of Loss of Energy Output</u>. Title to and risk of loss of the Energy will pass from Seller to Buyer at the Delivery Point. As between the Parties, Seller shall be deemed to be in exclusive control of all Energy prior to the Delivery Point, and Buyer shall be deemed to be in exclusive control of all Energy at and from the Delivery Point. Except as otherwise provided herein, Seller warrants that it will deliver the Energy to Buyer at the Delivery Point, free and clear of all liens, security interests, claims, and other encumbrances created by Seller.

# 3.5 Governmental Charges.

(a) Except as set forth in Section 3.5(b), Seller is responsible for paying all local, state and federal income taxes attributable to Seller for income received under this PPA.

(b) The Parties shall use reasonable efforts to administer this PPA and implement its provisions so as to minimize Governmental Charges. In the event any of the sales of Energy hereunder are to be exempted from or not subject to one or more Governmental Charges, the applicable Party shall, promptly upon the other Party's request therefor, provide the applicable Party with all necessary documentation to evidence such exemption or exclusion.

### 3.6 Minimum Output Requirements.

(a) Buyer shall be entitled to the entire Energy output of the SEF. The Parties anticipate that the SEF will be a 942kW AC system. Based on this size, from and including the Commercial Operation Date until the first anniversary thereof, the SEF shall produce a minimum amount of Energy equivalent to ninetypercent (90%) of the expected output of the SEF or 1,318,500 kilowatt-hours (the "Minimum Energy Output Requirements"). The Minimum Energy Output Requirements shall decline by an assumed one half percent (0.5%) in each subsequent year thereafter for the Term of this PPA to account for natural degradation of the SEF. Buyer agrees that such Minimum Energy Output Requirements for any given year shall be subject to the following adjustments to address their negative impact on the SEF and its ability to meet the Minimum Energy Output Requirements: (i) weather normalization due to the lack of Insolation on the SEF, (ii) any Buyer Act, (iii) acts of third parties and (iv) Force Majeure events. Seller shall use commercially reasonable efforts to remedy any shortfall should the SEF fail to produce the Minimum Energy Output Requirements and this failure not be attributable to the foregoing adjustment factors. The Minimum Energy Output Requirements may be satisfied, at the Seller's discretion, either by (i) SEF performance or (ii) by Seller's delivery of substitute renewable energy sufficient to meet such requirements, provided that any substitute energy must be provided at the Energy Payment Rate provided for in Section 3.3.

(b) The Parties agree that the Minimum Energy Output Requirements are based on estimated output, and that the SEF size and output of a SEF may be modified prior to Commercial Operation of such SEF due to any applicable Law or Utility Requirements. Any such adjustment of the SEF size and output shall result in a modification of the applicable Minimum Energy Output Requirements as reasonably determined by the Seller.

(c) Seller shall not be required to meet the Minimum Energy Output Requirement to the extent the failure to meet such Minimum Energy Output Requirement arises out of or results from: (i) a Person other than Seller or its approved service providers installing, removing or repairing the SEF; (ii) destruction, damage, modification or alteration to the SEF or its ability to produce energy (including but not limited to reduction in Insolation) not caused by Seller or its approved service providers while servicing the SEF; (iii) Buyer's failure to perform, or breach of, its obligations under this PPA; (iv) any Buyer Act that reduces the output of the SEF; (v) any event of Force Majeure; (vi) a power or voltage surge caused by a Person other than Seller or its approved service providers while servicing the SEF; (vii) theft of all or any part of the SEF.

# 3.7 Insolation.

(a) Buyer understands that unobstructed access to sunlight ("Insolation") is essential to Seller's performance of its obligations and a material term of this PPA. Seller acknowledges that in the future, Buyer may be obligated by the State, its governing body or other entities or persons that have the power to affect the actions of the Buyer (each a "Controlling Entity"), to construct a building or take other actions that may negatively impact the Insolation on the SEF. Therefore, Buyer shall take no action nor permit any interferences to the SEF's Insolation, provided that, if a Controlling Entity obligates Buyer to take an action that may negatively impact the Insolation on the SEF that Buyer must comply with, Buyer shall mitigate such negative impact on the SEF and Seller by either (i) compensating Seller for the reduced output of the SEF by payment for Lost Seller Revenue or (ii) providing an alternate location for the SEF in accordance with Section 3.7(b). If Buyer becomes aware of any activity or condition that could diminish the Insolation levels. Seller may inspect site on a quarterly basis and notify Buyer of perceived activity that is interfering with the SEF's Insolation. Buyer agrees that any interference with SEF's Insolation, caused or permitted by any Buyer Act and which Insolation interference has been documented by Seller in good faith, shall be a Buyer Event of Default.

(b) If Buyer elects to provide an alternative location for the SEF on the Property, Buyer shall promptly provide Seller with a mutually agreeable substitute premises in a location with similar or better solar insolation than the current Premises ("Substitute Premises"). Buyer shall provide at least one hundred and eighty (180) days' written notice prior to the date on which it desires to effect such substitution of the Premises ("Substitution Notice Period"). In connection with such substitution, Buyer and Seller shall work in good faith to amend the PPA to reflect the terms of such substitution. If Buyer and Seller fail, in good faith, to reach an agreement and execute an amendment to the PPA within the Substitution Notice Period, unless such period is extended at Seller's sole discretion, the substitution shall not be allowed and Buyer shall compensate Seller in accordance with Section 3.7(a)(i).

3.8 <u>Maintenance of Premises; Alterations to Premises</u>. Buyer shall, at its sole cost and expense, maintain the Premises in good condition and repair. Buyer will make reasonable efforts to ensure that the Premises remains interconnected to the local utility grid and shall limit instances of cessation of electric service

to the Premises from the local utility. Buyer is fully responsible for the maintenance and repair of the Premises' electrical system opposite the SEF side of the Metering Device and of all of Buyer's equipment that utilizes the SEF's outputs. Buyer shall make reasonable efforts to maintain in working order Buyer's electric supply or generation equipment that Buyer may shut down while utilizing the SEF. Buyer shall notify Seller of any matters of which it is aware pertaining to any damage to or loss of use of the SEF or that may adversely affect the SEF. Seller acknowledges that in the future, Buyer may be obligated by a Controlling Entity, Law, or its own policies and procedures, to take actions or undertake alterations or repairs that may negatively impact the SEF's location or its ability to continually generate energy and Environmental Attributes. Therefore, Buyer shall provide Seller reasonable notice of any such planned or contemplated actions, alterations or repairs to the Premises which may adversely affect the operation and maintenance of the SEF and shall negotiate in good faith with Seller to amend this PPA within sixty (60) Business Days to restore the allocation of economic benefits and burdens contemplated hereunder, taking into account the effects of Buyer's actions, alterations or repairs to the Premises on the operations and maintenance of the SEF. If such an agreement is not achieved within this timeframe, Seller shall pay to Buyer the amount of any Lost Seller Revenue, in each case, that arises from such actions, alterations or repairs. If Buyer wishes to make substantial alterations or repairs to the Premises, Buyer shall give prior written notice to Seller, setting forth the work to be undertaken (except for emergency repairs, for which notice may be given by telephone), and give Seller the opportunity to advise Buyer in making such alterations or repairs in a manner that avoids damage to the SEF, but, notwithstanding any such advice, Buyer shall be responsible for all damage to the SEF caused by Buyer or its contractors. To the extent that temporary disconnection or removal of the SEF is necessary to perform such alterations or repairs, such work and any replacement of the SEF after completion of Buyer's alterations and repairs shall be done by Seller or its contractors at Buyer's cost. All of Buyer's alterations and repairs will be done in a good and workmanlike manner and in compliance with all applicable Laws, codes and permits. Seller shall maintain and assure all equipment on the SEF Side of the Metering Device is in good working order to prevent the backflow of Buyer's electricity into the SEF.

**3.9** <u>Grant of Purchase Option</u>. Seller hereby grants to Buyer the right and option to purchase all of the Seller's right, title, and interest in and to the SEF on the terms set forth herein ("<u>Purchase Option</u>"). Buyer may exercise the Purchase Option on the seventh (7th) anniversary of the Commercial Operation Date and on each successive third (3rd) anniversary therefore during the remainder of the Contract Term, or simultaneously with the termination of this Agreement pursuant to <u>Section 8.2</u> (collectively, the "<u>Purchase Option Dates</u>"), provided that no Buyer Event of Default, or any event which with the passage of time will become a Buyer Event of Default, has then occurred and is ongoing.

Determination of Purchase Price. Buyer may, at any time within thirty (30) days following each 3.10 Purchase Option Date, request a determination of the purchase price under the Purchase Option (the "Purchase Price"). The Parties shall attempt to determine the Purchase Price by mutual agreement. If the Parties have not agreed on the Purchase Price within thirty (30) days after Buyer's request for a Purchase Price determination, then the Purchase Price shall be the fair market value of the SEF, as determined by an independent appraiser retained by the Parties (the "Independent Appraiser"), provided that the Purchase Price shall in no event be less than the Termination Payment that would be due from Buyer to Seller if the PPA was terminated due to Buyer Event of Default at the Purchase Option Date. The Independent Appraiser shall be an individual who is a member of a national accounting, engineering or energy consulting firm qualified by education, experience, and training to determine the value of solar generating facilities of the size and age and with the operational characteristics of the SEF, and who specifically has prior experience valuing solar energy generating facilities. The Independent Appraiser shall be reasonably acceptable to Seller. Except as may be otherwise agreed by the Parties, the Independent Appraiser shall not be (or within three (3) years before his or her appointment have been) a director, officer, or an employee of, or directly or indirectly retained as consultant or adviser to, either of the Parties or their respective affiliates. The fair market value assessment of the SEF shall consider, among other things, the income and savings associated with the SEF for the remaining portion of the Contract Term, and the SEF's past and projected performance. The Independent Appraiser shall make a determination of the Purchase Price within thirty (30) days of appointment (the "<u>Price Determination</u>"). Upon making the Price Determination, the Independent Appraiser shall provide a written notice thereof to both Seller and Buyer, along with all supporting documentation detailing the method of calculation of the Purchase Price. Except in the event of fraud or manifest error, the Price Determination shall be a final and binding determination of the fair market value. If Buyer wishes to exercise the Purchase Option following the Price Determination, it shall deliver an exercise notice to Seller within thirty (30) days of receipt of the Price Determination (the "<u>Exercise Period</u>"). Any such exercise notice shall be irrevocable once delivered. If Buyer does not exercise the Purchase Option during the Exercise Period, then the Price Determination shall be null and void, and Buyer may not request a new determination of the Purchase Price until the next Purchase Option Date. Each Price Determination by an Independent Appraiser shall be at Buyer's expense, provided that in the event Buyer exercises the Purchase Option, the applicable Price Determination shall be at Seller's expense

3.11 <u>Terms and Date of SEF Purchase</u>. The Parties shall consummate the sale of the SEF to Buyer no later than forty-five (45) days following Buyer's exercise of the Purchase Option. On the effective date of such sale (the "<u>Transfer Date</u>"): (a) Seller shall surrender and transfer to Buyer all of Seller's right, title, and interest in and to the SEF and shall retain all liabilities arising from or relating to the SEF that arose prior to the Transfer Date; (b) Buyer shall pay the Purchase Price to Seller in readily available funds, and shall assume all liabilities arising from or relating to the SEF as of and after the Transfer Date; and (c) both the Seller and the Buyer shall (i) execute and deliver a bill of sale and assignment of contract rights, together with such other conveyance and transaction documents as are reasonably required to fully transfer and vest title to the SEF in Buyer, and (ii) deliver ancillary documents, including releases, resolutions, certificates, third-party consents and approvals, and such similar documents as may be reasonably necessary to complete and conclude the sale of the SEF to Buyer. The purchase and sale of the SEF shall be on an "as-is, where-is" basis, and Seller shall not be required to make any warranties or representations with regard to the SEF, but Seller shall, to the extent reasonably possible, transfer or assign to Buyer all manufacturer and third-party warranties with respect to the SEF or any part thereof.

**3.12** Interconnection Agreement. Notwithstanding anything to the contrary in the Interconnection Agreement, Seller shall forego all of its rights and responsibilities under such Interconnection Agreement, or agree in writing to a termination thereof, should Buyer elect to exercise the Purchase Option.

# ARTICLE 4. ENVIRONMENTAL ATTRIBUTES AND TAX BENEFITS

4.1 <u>Title to Environmental Attributes and Tax Benefits</u>. All Environmental Attributes relating to the SEF or the Energy will be and shall remain property of Seller including, without limitation, Solar Renewable Energy Certificates or any comparable instruments. All Tax Benefits will be and shall remain property of Seller. Buyer shall assign to Seller all rights to and income from rebates, credits, or reimbursements attributable to the SEF. Buyer shall not report to a Person that any Environmental Attributes, Tax Benefits, rebates, credits, or reimbursements as assigned to Seller herein belong to any Person other than Seller. Seller shall be the sole owner and title holder of the SEFs at all times during the Term of this PPA, which SEFs shall (i) at all times retain the legal status of personal property of Seller as defined under Article 9 of the Uniform Commercial Code and (ii) not attach to or be deemed a part of, or fixture to, the Premises. Without limiting the generality of the foregoing, Seller may file one or more precautionary financing statements, including fixture filings in such jurisdictions as it deems appropriate with respect to the SEFs to protect Seller's rights therein. Buyer shall take no position on any tax return or other filings suggesting that it is anything other than a purchaser of electricity from the SEFs.

In this regard, the Parties intend this PPA to be treated as a "service contract" within the meaning of section 7701(e)(3) of the Internal Revenue Code.

4.2 <u>Further Assurances</u>. Promptly upon Seller's request and provided Seller is not in default hereunder, Buyer shall execute such documents and instruments reasonably necessary or desirable to effect, evidence or transfer to Seller all right, title and interest in and to the Environmental Attributes and Tax Benefits. If the standards used to qualify the Environmental Attributes to which Seller is entitled under this PPA are changed or modified, Buyer shall promptly upon Seller's request and without cost to Buyer use all commercially reasonable efforts to cause the Environmental Attributes to comply with new standards as changed or modified.

4.3 <u>Promotion and Branding</u>. Nothing in this PPA is intended to preclude Buyer from distributing advertising or other promotional material highlighting the purchase and use of renewable energy from the SEF for commercial or branding purposes. Nothing in this PPA is intended to preclude Seller from distributing advertising or other promotional material highlighting the purchase and use of renewable energy from the SEF for commercial or branding purposes. Subject to the foregoing, Buyer and Seller are mutually permitted to use the SEF for promotional purposes, which shall be limited to distribution of written materials, and may not include site visits or signs. Notwithstanding the foregoing, neither Party will use the other Party's (or any Financing Party's) corporate name, logo or other identification in any marketing, promotion or branding without the express written permission of the other Party.

# ARTICLE 5. CONSTRUCTION, MAINTENANCE AND MONITORING

#### 5.1 Construction, Maintenance, Monitoring and Removal of SEF by Seller.

(a) Seller shall, at its sole cost and expense, (i) on or before one (1) year after the Effective Date, construct the SEF and achieve Commercial Operation in a good and workmanlike manner and in accordance with all Laws and Prudent Utility Practices in all material respects, (ii) maintain the SEF in good condition (including any necessary cleaning of solar panels) and repair in accordance with Prudent Utility Practices and the terms of this PPA and all Laws in all material respects, and (iii) monitor the SEF's performance to ensure that any SEF malfunction causing a loss of Energy will be discovered and rectified in accordance with Prudent Utility Practices in all material respects. Buyer hereby consents to the construction of the SEF's connection to the Property, including, without limitation, mounting substrates or supports, wiring and connections, power inverters, service equipment, Metering Devices and equipment and utility interconnections, and, in the case of metering equipment and utility interconnections, on portions of the Property and surrounding property so long as Seller does not unreasonably interfere with Buyer's ability to conduct its business. Seller shall have the right to take reasonable action, subject to Buyer's approval, to restrict the right of persons to obtain access to the SEF.

(b) Buyer grants to Seller a license that will run with the Premises (the "License") for access to, on, over, under and across the Premises for the purposes of (i) installing, constructing, operating, owning, maintaining, accessing, removing and replacing the SEF; (ii) performing the Seller's obligations and enforcing the Seller's rights set forth in this PPA; (iii) installing, using and maintaining electric lines and equipment, including inverters and meters, necessary to interconnect the SEF to Buyer's electric system at the Premises and/or to the utility's electric distribution system or that otherwise may from time to time be useful or necessary in connection with the construction, installation, operation, maintenance or repair of the SEF; and (iv) solar use rights for the free passage of solar irradiation to the SEF. Seller shall promptly notify Buyer prior to entering the Premises except in situations where there is imminent risk of damage to persons or property or otherwise requiring Emergency Repairs. The term of the License shall continue until the date that is ninety (90) days following the date of expiration or termination of this PPA (the "License Term"). Seller acknowledges that in the future, Buyer may be obligated by a Controlling Entity to take actions that may negatively impact the License. Therefore, unless obligated by a Controlling Entity, during the License Term, Buyer shall ensure that Seller's rights under the License and Seller's access to the Premises are preserved and protected and shall not interfere with or permit any third parties to interfere with such rights or access. In the event that a Controlling Entity requires Buyer to take an action or fail to take actions, in each case that would materially and negatively effect the License, Seller shall be entitled to terminate this PPA pursuant to Section 8.1 and obtain a Termination Payment from Buyer in accordance with Section 8.3. The grant of the License shall survive termination of this PPA by either Party. Buyer agrees that Seller, subject to approval by Buyer, may record a memorandum of license in the land records respecting the License in form and substance reasonably acceptable to the Parties.

(c) Seller shall provide Buyer reasonable notice of all activities conducted by or on behalf of Seller on the Premises. During any such activities, Seller, and its sub-contractors, agents, consultants, and representatives shall comply with Buyer's safety, insurance and security procedures (as may be reasonably promulgated from time to time), and Seller and its sub-contractors, agents, consultants and representatives shall conduct such activities in such a manner and such a time and day as to not unreasonably interfere with Buyer's activities. This requirement of access shall not be construed to confer a leasehold on the Seller.

(d) Notwithstanding any provision of Section 5.1(b) or 5.1(c) to the contrary, Seller shall have access to the Premises to effect Emergency Repairs of the Interconnection Equipment located on the Premises immediately upon, or as soon as practicable after, notice to Buyer of the need for access. For purposes of this PPA, "Emergency Repairs" means any maintenance or repair necessary to address or prevent an unplanned interruption or reduction of Energy transmitted through the Interconnection Equipment from the SEF.

(e) Seller may curtail deliveries (inclusive of discontinuing or reducing Energy) at no cost to Buyer if Seller reasonably believes that curtailment is necessary to construct, install, repair, replace, remove, maintain or inspect any of its equipment or facilities; or in connection with an emergency or an event of Force Majeure. To the extent practical, all maintenance and repairs shall be performed during off-peak hours and in a manner that would not require a complete interruption in Energy of the SEF. Seller shall promptly notify Buyer of any curtailments of which Seller has advance knowledge, and will endeavor to mitigate the time periods and causes of such curtailments to the extent that such cause is within Seller's reasonable control. Subject to available sunlight, Seller shall resume deliveries of Energy as soon as is reasonably possible and safe in accordance with Prudent Utility Practices.

(f) Seller may modify, alter, expand or otherwise change the SEF with the prior written consent of Buyer, or without the prior written consent of Buyer as required by applicable Law or Utility Requirements, so long as such modifications, alterations, expansions or other changes do not result in a material change in the capacity of the SEF or a material adverse impact on the operations of the SEF or the SEF's capability to operate. Each Party shall promptly notify the other Party if it becomes aware of any Hazardous Substance on or about the Premises generally or any deposit, spill or release of any Hazardous Substance.

(g) Upon the expiration or earlier termination of this PPA (provided Buyer does not exercise its purchase option), Seller shall, at its expense, remove all of its tangible property comprising the SEF from the Premises on a mutually convenient date, but in no event later than ninety (90) days after the expiration of the Term. Excluding ordinary wear and tear, the Premises shall be returned to its original condition including the removal of the SEF mounting pads or other support structures. In no case shall Seller's removal of the SEF affect the integrity of Buyers' Premises, and, when applicable, if involving a roof mount, which shall be as leak proof as it was prior to removal of the SEF and shall be flashed and/or patched to existing roof specifications. Seller shall leave the Premises in neat and clean order. If Seller fails to remove or commence substantial efforts to remove the SEF by such agreed upon date, Buyer shall have the right, at its option, to remove the SEF to a public warehouse and restore the Premises to its original condition (other than ordinary wear and tear) at Seller's cost. Buyer shall provide sufficient space for the temporary storage and staging of tools, materials and equipment and for the parking of construction crew vehicles and temporary construction trailers and facilities reasonably necessary during the SEF removal.

## 5.2 **Buyer's Obligations**.

(a) Buyer shall maintain the Premises and, in accordance with Section 3.7, shall not take any actions on the Premises that would cause shading of the SEF or otherwise interfere with the operation of the SEF, reduce the production of Energy from the SEF or damage or otherwise increase the cost of maintenance of the SEF.

(b) Buyer shall provide or assist Seller and its agents and contractors in obtaining convenient access to and from the Interconnection Equipment located on the Premises during normal business hours as is reasonably necessary or appropriate for Seller to complete the electrical interconnection to the Property.

(c) Buyer shall assist Seller and cooperate with Seller, as reasonably necessary and appropriate, to acquire and maintain the Governmental Approvals required for the construction, operation, maintenance and repair of the SEF's connection to the Property, including, but not limited to, signing the Interconnection Agreement or any applications or consents for permits, local utility interconnection, SREC creation and verification, and rebate applications as are required to be signed by a person in the position of Buyer and reasonably approved by Buyer's counsel.

(d) Buyer shall maintain Buyer's Site Electrical System in good condition and repair so as to be able to receive the Energy. Buyer will maintain its connection and service contract(s) with Buyer's Serving Utility or any successors thereto, so that the SEF may continuously generate and deliver Energy and so that Buyer may procure its full requirements for electricity that are not served by the SEF.

(e) Buyer shall not cause, or allow any Person under Buyer's control to cause the SEF's equipment on the Premises to be disconnected or shut down, temporarily or otherwise without Seller's consent, unless in the case of emergency or as a result of an event of Force Majeure. In the event of a disconnect or shut down on the Premises of a portion of the SEF caused by any Buyer Act, the Parties shall extend the PPA pursuant to the terms of Section 7.5, subject to the limits therein. For any losses of Seller that are not able to be mitigated by the extension of the PPA under Section 7.5, Buyer shall pay the amount of any Lost Seller Revenue caused by a such a disconnect or shut down.

**5.3** <u>Telemetry</u>. Seller shall provide a means for Buyer to access real-time data or telemetry with respect to the SEF's performance through means that may reasonably be incorporated into advertising and promotional materials. Subject to Section 4.3 above, Seller retains the right to use telemetry and other monitoring data concerning the performance of the SEF for evaluative, maintenance, and promotional purposes.

## ARTICLE 6. METERING DEVICE AND METERING

6.1 <u>Metering Equipment</u>. Seller shall provide, install, own, operate and maintain the Metering Device with the ability and right for Buyer to access real-time via internet connection to monitor the Metering Device. Buyer grants Seller a right of access to the Metering Device on the Property as needed to inspect, repair and maintain such Metering Device during normal business hours. Buyer shall allow for the installation of necessary communication lines in connection with the Metering Device and shall reasonably cooperate in providing access for such installation. The Metering Device shall be kept under seal, such seal to be broken only

by Seller when the Metering Device is to be tested, adjusted, modified or relocated. In the event that Seller or Buyer breaks a seal, the applicable Party shall notify the other as soon as practicable.

**6.2** <u>Measurements</u>. Readings of the Metering Device shall be conclusive as to the amount of Energy output; *provided, however*, that if the Metering Device is out of service, is discovered to be inaccurate pursuant to Section 6.3, or registers inaccurately, measurement of Energy to the Delivery Point shall be determined in the following sequence: (a) by estimating by reference to quantities measured during periods of similar conditions when the Metering Device was registering accurately; or (b) if no reliable information exists as to the period of time during which such Metering Device was registering inaccurately, the Parties shall deem the measurement of Energy to the Delivery Point to have been in accordance with a technical analysis of expected generation during such time period, as provided by Seller, subject to Buyer's good faith review and approval, using accepted industry practice for such estimations.

#### 6.3 <u>Testing and Correction</u>.

(a) Upon Buyer's reasonable request, Seller shall inspect and test the Metering Device for accuracy (with such inspection and testing at Buyer's sole expense if requested more than once within a twelve (12) month period). Each Party and its consultants and Representatives shall have the right to witness each test of the Metering Device to verify the accuracy of its measurements and recordings. Seller shall provide at least five (5) days prior written notice to Buyer of the date upon which any such test is to occur. Seller shall prepare a written report setting forth the results of each such test, and shall provide Buyer with copies of such written report not later than ten (10) days after completion of such test. Subject to Section 6.3(b) below, Seller shall bear the cost of the testing of the Metering Device and the preparation of the Metering Device test reports.

(b) Metering Device:

- The following steps shall be taken to resolve any disputes regarding the accuracy of the
- (i) If either Party disputes the accuracy or condition of the Metering Device, such Party shall so advise the other Party in writing.
- (ii) Seller shall, within fifteen (15) days after receiving such notice from Buyer or Buyer shall, within such time after having received such notice from Seller, advise the other Party in writing as to its position concerning the accuracy of such Metering Device and state reasons for taking such position.
- (iii) If the Parties are unable to resolve the dispute through reasonable negotiations, then either Party may cause the Third Party Monitor to test the Meter.
- (iv) If the Metering Device is found to be inaccurate by not more than two percent (2%), any previous recordings of the Metering Device shall be adjusted in accordance with Section 6.2(b)(i) and the party claiming such inaccuracy shall bear the cost of inspection and testing of the Metering Device.
- (v) If the Metering Device is found to be inaccurate by more than two percent (2%) or if such Metering Device is for any reason out of service or fails to register, then (A) Seller shall promptly cause any Metering Device found to be inaccurate to be adjusted to correct, to the extent practicable, such inaccuracy, (B) the Parties shall estimate the correct amounts of Energy delivered during the periods affected by such inaccuracy, service outage or failure to register as provided in Section 6.2, and (C) Seller shall bear the cost of inspection and testing of the Metering Device. If as a result of such adjustment the quantity of Energy

output for any period is decreased, Seller shall reimburse Buyer within thirty (30) days for the amount paid by Buyer in consideration for the decrease. If as a result of such adjustment the quantity of Energy output for any period is increased, Buyer shall pay Seller within thirty (30) days for the additional quantity of Energy at the Energy Payment Rate applicable during the applicable period.

**6.4** <u>Live Meter Maintenance</u>. Buyer acknowledges and understands that the SEF is installed behind the current electric utility meter located on the Premises (the "*Meter*") and that the Meter remaining live is critical to the proper operation of the SEF. Therefore, Buyer agrees that, in the event Buyer defaults in an obligation to Buyer's Serving Utility, becomes insolvent, Bankrupt, or enters into any condition that threatens the live nature of the Meter, Seller shall have the unilateral and exclusive right to transfer the account for the Meter into Seller's name for the duration of the Term.

## **ARTICLE 7.**

# LOSS, DAMAGE OR DESTRUCTION OF SEF; INSURANCE; FORCE MAJEURE; PAYMENTS FOR TEMPORARY SHUT DOWN

# 7.1 SEF Loss.

(a) Seller shall bear the risk of any SEF Loss excluding, however, any SEF Loss arising out of or resulting from (i) any acts or omissions of Buyer or Buyer's agents, Affiliates or Representatives (including any decision by Buyer to provide Substitute Premises and move the SEF to address diminution of Insolation pursuant to Section 3.7(b)) or (ii) any breach of the PPA by Buyer (collectively, the circumstances set forth in clause (i) or (ii), "*Buyer Act*").

(b) In the event of any SEF Loss that, in the reasonable judgment of Seller, results in less than total damage, destruction or loss of the SEF and more than five (5) years remains in the Term, this PPA will remain in full force and effect and Seller will, at Seller's sole cost and expense, subject to Section 7.1(c) below, repair or replace the SEF as quickly as practicable.

(c) To the extent that any SEF Loss, which in the reasonable judgment of both Buyer and Seller, results in less than total damage or destruction or loss of the SEF, and is caused by Buyer Act, Buyer shall promptly upon demand therefor from Seller pay any and all costs and expenses of such repair or replacement.

(d) In the event of any SEF Loss that, in the reasonable judgment of Seller, results in total damage, destruction or loss of the SEF, or to the extent the SEF is damaged during the last five (5) years of the Term, Seller shall, within thirty (30) Business Days following written notice from the Buyer of the occurrence of such SEF Loss, notify Buyer whether Seller is willing, notwithstanding such SEF Loss, to repair or replace the SEF, it being understood that in such instance, Seller shall have no obligation to restore the SEF.

(e) In the event that Seller notifies Buyer that Seller is not willing to repair or replace the SEF, this PPA will terminate automatically effective upon the effectiveness of such notice unless Buyer agrees to pay the restoration cost. If such SEF Loss has been caused solely by Buyer Act, Buyer shall, within ten (10) Business Days following such termination, pay to Seller, as liquidated damages, the Termination Payment applicable as of such termination date.

(f) In the event that Seller notifies Buyer that Seller is willing to repair or replace the SEF, the following shall occur: (A) this PPA will remain in full force and effect, and (B) Seller will repair or replace the SEF as quickly as practicable but in any event within six (6) months of the casualty and, in addition, if such SEF

Loss has been caused, in total or partially, by Buyer Act, Buyer shall promptly upon demand therefor from Seller pay any and all costs and expenses of such repair or replacement caused by such Buyer Act.

# 7.2 Insurance.

(a) Each Party will, at its own cost and expense, maintain commercial general liability insurance with limits not less than \$3,000,000 for injury to or death of one or more persons in any one occurrence and \$1,000,000 for damage or destruction to property in any one occurrence, with aggregate limits of \$5,000,000. Coverage may be part of a blanket and/or umbrella policy.

(b) Buyer and Seller (or Seller's subcontractors), will maintain worker's compensation and employer's liability insurance, including stop gap coverage, in compliance with applicable Laws. The limits of employers' liability insurance shall not be less than \$1,000,000.

(c) Each Party will name the other Party as an additional insured in each such policy provided in this Section 7.2 using the form CG 2010 or the equivalent. The policies insuring a Party against loss or destruction to property shall waive any right of subrogation against the other Party. As to each such policy, the insured Party shall furnish to the other Party a certificate of insurance from the insurer, which certificate shall evidence the insurance coverage required by this Section 7.2. At the request of a Party, the other Party shall furnish to such Party applicable endorsements evidencing the required coverages.

(d) The provision of this PPA shall not be construed so as to relieve any insurer of its obligation to pay any insurance proceeds in accordance with the terms and conditions of valid and collectible insurance policies.

(e) Seller shall be permitted to satisfy the insurance requirements in this Section 7.2 with any combination of general liability and umbrella policies or self-insured retentions.

7.3 <u>Performance excused by Force Majeure</u>. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this PPA and such Party (the "*Claiming Party*") gives notice and details of the Force Majeure event to the other Party as soon as practicable after obtaining knowledge of the occurrence of the claimed Force Majeure event, then the Claiming Party will be excused from the performance of its obligations under this PPA affected by the Force Majeure event (other than the obligation to make payments under this PPA) for a period equal to the effect of the disabling Force Majeure circumstances. The Party affected by Force Majeure will use commercially reasonable efforts to eliminate or avoid the Force Majeure and resume performing its obligations; *provided, however*, that neither Party is required to settle any strikes, lockouts or similar disputes except on terms acceptable to such Party, in its sole discretion.

7.4 <u>Termination due to Force Majeure</u>. If a Claiming Party claims a Force Majeure for a consecutive period of twelve (12) calendar months or longer, the non-Claiming Party may terminate this PPA, in whole or in part, without any liability to the Claiming Party as a result of such termination (except with respect to payment of amounts accrued prior to termination and actions or omissions that occur prior to termination) by providing written notice of such termination at any time prior to the date upon which the obligation prevented by such Force Majeure has been satisfied. Without limiting the generality of the foregoing, if Seller does not deliver Energy from the SEF to Buyer for a continuous period of twelve (12) months for any reason other than Buyer's default hereunder, Buyer shall have the right to terminate this PPA by delivering written notice of such termination at any time prior to fenergy.

## 7.5 Extension of PPA.

(a) Periodically, Buyer may be required to temporarily shut down or decrease the energy delivered from the SEF due to required maintenance of Buyer's onsite electric equipment. The cumulative length of time of any such disconnect(s) or shutdown(s) pursuant to this section in any given calendar year shall not exceed seven (7) days.

(b) In the event any Buyer Act which requires or causes the shutdown of the SEF or a decrease in energy generated by or delivered from the SEF, the Parties agree to extend this PPA for the length of time necessary for Seller to recover the sum of all lost PPA revenues, including but not limited to the lost value of any Environmental Attributes. The specific length of time of any extension pursuant to this Section shall be determined by Seller in its sole discretion, with supporting documentation to be provided to Buyer, by estimating by reference to the sum received during periods of similar conditions to the periods of such disconnect(s) or shutdown(s) and, based on the year of such disconnect(s) or shutdown(s), as multiplied to account for the time value of money according to Exhibit F attached hereto. In no event shall the cumulative length of time that the PPA is extended by the Parties for all extensions pursuant to this Section 7.5 exceed one (1) year.

(c) For any Buyer Act which requires or causes the shutdown of the SEF or a decrease in energy generated by or delivered from the SEF that is not addressed through the extension of the PPA, the Buyer shall pay the amount of any Lost Seller Revenue caused by such Buyer Act.

# 7.6 Security of the Premises, SEF Security.

(a) Buyer shall provide reasonable measures for the security of the Premises consistent with the process and intent of its current security program, including restricting access to the area on which the SEF is located and providing monitoring of the Premises' security alarms, if applicable. Buyer shall maintain the Premises in a structurally sound and safe condition consistent with Laws. If Buyer becomes aware of any circumstances relating to the SEF that creates an imminent risk of damage or injury to the SEF or any person, Buyer shall promptly notify Seller.

(b) Buyer acknowledges and agrees that Seller may install all security measures that Seller determines are or may be reasonably necessary for the SEF, subject to the consent of Buyer, such consent not to be unreasonably delayed or withheld. Such measures shall be subject to applicable Laws and may, but will not necessarily, include security fencing with security wire, warning signs, closed and locked gates, alarms, closed circuit television cameras and other measures appropriate and reasonable to protect against damage or destruction of the System or injury or damage to persons or property resulting from the System.

## ARTICLE 8. EVENTS OF DEFAULT; REMEDIES

8.1 <u>Events of Default</u>. An Event of Default means, with respect to a Party (a "*Defaulting Party*"), the occurrence of any of the following:

(a) the failure to make, when due, any payment required under this PPA if such failure is not remedied within ten (10) Business Days after receipt of written notice from the Party claiming the failure (a "Non-Defaulting Party");

(b) any representation or warranty made by such Party in this PPA is intentionally false or misleading in any material respect when made or when deemed made or repeated;

(c) the failure to perform any material covenant or obligation set forth in this PPA if such failure is not remedied within thirty (30) days after receipt of written notice from the Non-Defaulting Party; provided, however, that, if despite due diligence such default is not capable of cure within said thirty (30) days, the Defaulting Party shall have ninety (90) days to cure such default, provided the Defaulting Party diligently pursues such cure and substantially completes same within said ninety (90) days after the receipt of such notice. The Parties may mutually agree in writing that the Defaulting Party shall have additional time as is reasonably necessary to cure such default;

(d) such Party becomes Bankrupt; or

(e) solely as to Buyer, (i) the closure or shutdown of Buyer's operations or other shutdown or materially detrimental change in the generation of the SEF caused by Buyer Act; (ii) Buyer loses its rights to occupy and enjoy the Premises; or (iii) Buyer prevents Seller from installing the SEF without good cause or otherwise fails to perform in a way that prevents the delivery of electronic energy from the SEF.

8.2 <u>Buyer Remedies</u>. Upon the occurrence and during the continuance of an Event of Default where Seller is the Defaulting Party (a "Seller Event of Default"), Buyer shall have all rights available to it at law and in equity; however, notwithstanding the foregoing, it is agreed that Buyer shall have the right to terminate this PPA as a result of a Seller Event of Default only in the event such Seller Event of Default is a monetary Event of Default or a material non-monetary Event of Default that has resulted in substantial harm, economically or otherwise, to Buyer (each such default being a "Seller Termination Default"). In the event any Seller Termination Default remains uncured following any applicable notice and cure period, Buyer shall have the right to provide Seller with written notice of its intent to terminate this PPA or exercise the Purchase Option. In the event such specified Seller Termination Default and any other subsequent termination event is not cured within forty-five (45) days of Seller's receipt of such notice of intent to terminate (which notice shall specify the exact Seller Termination Default and any other being claimed) then thereafter, and only thereafter, Buyer shall have the right to (i) terminate this PPA as of such date by providing written notice of such termination to Seller or (ii) exercise the Purchase Option. Upon termination of this PPA, Seller shall remove the SEF as set forth herein.

#### 8.3 Seller Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default where Buyer is the Defaulting Party (a "Buyer Event of Default"), Seller shall have the right to (i) obtain from Buyer, and Buyer shall pay, a Termination Payment to Seller, and (ii) pursue any and all additional claims against Buyer in accordance with Section 8.3.(b). In the event any Buyer Event of Default remains uncured following any applicable notice and cure period, Seller shall have the right to provide Buyer with written notice of its intent to terminate this PPA forty-five (45) days after Buyer's receipt of such notice; provided that, for terminations relating to payment of amounts owed by Buyer, Seller may terminate forty-five (45) days after Buyer's receipt of such notice.

(b) Seller agrees that the sole and exclusive means for the presentation of any claim against the Buyer arising from this PPA shall be in accordance with Chapter 53 of the Connecticut General Statutes (Claims Against the State), and Seller further agrees not to initiate legal proceedings in any state or federal court in addition to, or in lieu of, said Chapter 53 proceedings.

**8.4** <u>Termination Payment Notice</u>. In the event that Seller elects to require payment of the Termination Payment by Buyer as provided in Section 8.3, then, as soon as practicable after calculation of the Termination Payment by Seller, Seller will notify Buyer of the amount of the Termination Payment and any amount otherwise due and outstanding under this PPA. Such notice will include a written statement explaining in reasonable detail the calculation of such amount. Buyer shall pay the Termination Payment and any amount

otherwise due and outstanding under this PPA to Seller forty-five (45) Business Days after the effectiveness of such notice. For the avoidance of any doubt, Buyer's failure to make the Termination Payment pursuant to this Section 8.4 shall not effect or preclude Seller's right or claim to such Termination Payment in a claim against Buyer pursuant to Section 8.3(b) above.

**8.5** <u>Remedies Cumulative</u>. Except as specifically provided to the contrary, the rights and remedies contained in this Article 8 are cumulative with the other rights and remedies available under this PPA or at law or in equity.

8.6 <u>Unpaid Obligations</u>. The Non-Defaulting Party shall be under no obligation to prioritize the order with respect to which it exercises any one or more rights and remedies available under this PPA. Notwithstanding anything to the contrary herein, the Defaulting Party shall in all events remain liable to the Non-Defaulting Party for any amount payable by the Defaulting Party in respect of any of its obligations remaining outstanding after any such exercise of rights or remedies.

# ARTICLE 9. INVOICING AND PAYMENT

**9.1** <u>Invoicing and Payment</u>. Seller will issue monthly invoices within ten (10) days after the conclusion of the preceding calendar month for deliveries made during that month. Except as specifically provided to the contrary herein or by written amendment by the Parties, all invoices under this PPA will be due and payable not later than forty-five (45) days after receipt of the applicable invoice. Each Party will make payment by check, or by other mutually agreeable method(s), to the account designated by the other Party. Any amounts due under this PPA and not paid shall accrue interest at the Late Payment Interest Rate until paid in full to the extent permitted by Law.

9.2 Disputed Amounts. A Party may in good faith dispute the correctness of any invoice (or any adjustment to any invoice) under this PPA at any time within twelve (12) months following the date the invoice (or invoice adjustment) was rendered. In the event that either Party disputes any invoice or invoice adjustment, such Party will nonetheless be required to pay the full amount of the applicable invoice or invoice adjustment (except any portions thereof that are manifestly inaccurate or are not reasonably supported by documentation, payment of which amounts may be withheld subject to adjustment as hereinafter set forth) on the applicable payment due date, except as expressly provided otherwise elsewhere in this PPA, and to give notice of the objection to the other Party. Any required payment will be made within forty-five (45) Business Days after resolution of the applicable dispute, together with interest accrued at the Late Payment Interest Rate from the due date to the paid date to the extent permitted by Law.

**9.3** <u>No Setoff</u>. Except as otherwise set forth herein, each Party hereby waives all rights to set-offs of amounts due hereunder. The Parties agree that all amounts due hereunder are independent obligations and shall be made without set-off for other amounts due or owed hereunder.

9.4 <u>Records and Audits</u>. Each Party will keep, for a period not less than two (2) years after the expiration or termination of any Transaction, records sufficient to permit verification of the accuracy of billing statements, invoices, charges, computations and payments for such Transaction. During such period each Party may, at its sole cost and expense, and upon reasonable notice to the other Party, examine the other Party's records pertaining to Transactions during such other Party's normal business hours. Notwithstanding the foregoing, in the event that Buyer conducts an audit and discovers an inaccuracy in Seller's invoices, charges, computations and payments required for a Transaction in an amount in excess of five percent (2%), Buyer shall be entitled to recover the cost and expense of the audit in addition to the other corrective actions required as a result of said audit.

9.5 <u>Currency</u>. All pricing offered, payments made and amounts referenced hereunder are and will be in U.S. dollars.

#### **ARTICLE 10.**

# **REPRESENTATIONS AND WARRANTIES; BUYER ACKNOWLEDGEMENT**

10.1 Representations and Warranties. Each Party represents and warrants to the other Party that: (a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation; (b) the execution, delivery and performance of this PPA are within its powers, have been duly authorized by all necessary action, do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any Law applicable to it and do not require the consent of any third party; (c) this PPA and each other document executed and delivered in accordance with this PPA constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any bankruptcy, insolvency, reorganization and other Laws affecting creditors' rights generally, and with regard to equitable remedies, the discretion of the applicable court; (d) it is acting for its own account, and has made its own independent decision to enter into this PPA, and is not relying upon the advice or recommendations of the other Party in so doing; (e) it is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this PPA; and (f) it understands that the other Party is not acting as a fiduciary for or an advisor to it or its Affiliates. Buyer represents and warrants to Seller that: (i) to its knowledge, there are no site conditions or construction requirements that would increase the cost of installing the Interconnection Equipment at the planned locations or increase any liabilities in connection with the Interconnection Equipment; (ii) the information provided to Seller pursuant to this PPA as of the Effective Date is true and accurate in all material respects; (iii) Buyer has the supervision, care and control of the Premises; (iv) no electricity generated by the SEF will be used to heat a swimming pool; (v) Buyer is not a public utility or a public utility holding company and is not subject to regulation as a public utility or a public utility holding company and (vi) each Party has no knowledge of any facts or circumstances that could materially and adversely affect their respective ability to perform their obligations hereunder.

10.2 <u>Buyer Acknowledgement Regarding Inapplicability of Bankruptcy Code Section 366</u>. Buyer acknowledges and agrees that, for purposes of this PPA, Seller is not a "utility" as such term is used in Section 366 of the United States Bankruptcy Code and Buyer agrees to waive and not to assert the applicability of the provisions of Section 366 in any bankruptcy proceeding wherein Buyer is a debtor.

## ARTICLE 11. INDEMNITY; LIMITATIONS

11.1 <u>Sovereign Immunity</u>. The Parties acknowledge and agree that nothing in this PPA shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by Federal Law or the Laws of the State of Connecticut to the State or any of its officers and employees, which they may have had, now have or will have with respect to all matters arising out of this PPA. To the extent that this section conflicts with any other section, this section shall govern.

11.2 Limitation of Remedies, Liability and Damages. The Parties confirm that with respect to the matters specified herein and to the extent specified the express remedies and measures of damages provided in this PPA satisfy the essential purposes hereof. Without prejudice to the calculation of the amount of any Termination Payment, payment for Lost Seller Revenue, and/or indemnity claims arising out of claims by third parties, neither Party will be liable for consequential, incidental, punitive, special exemplary or indirect damages, by statute, in tort or under contract under any indemnity provisions or otherwise; provided however, that notwithstanding the foregoing, in no event will the foregoing limitations of liability be applied to limit the extent

of the liability of either Party to the other for intentional misconduct. The limitations imposed herein or remedies and the measure of damages are without regard to the applicable cause or causes, including the negligence of any Party, whether such negligence be sole, joint or concurrent, or active or passive. Notwithstanding any provision of this PPA to the contrary, Seller's maximum liability to the Buyer, except for indemnity obligations in respect of personal injury, property damage and intellectual property infringement claims, under this PPA will be limited, in the aggregate to the difference between the amount Buyer actually pays to utility for electricity used by Buyer and the amount Buyer would have had to pay to Seller for electricity supplied by Seller over the remaining term of the Agreement.

11.3 <u>Limitations on Warranties</u>. Except as expressly provided in this PPA, Seller hereby disclaims any and all representations, warranties and guarantees, express or implied, including warranties of merchantability and fitness for a particular purpose.

11.4 <u>Duty to Mitigate</u>. Buyer and Seller shall each have a duty to mitigate damages pursuant to this PPA, and each shall use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's non-performance of this PPA, including with respect to termination of this PPA.

## ARTICLE 12. NOTICES

12.1 <u>Notices</u>. All notices, requests, statements or payments will be made to the addresses and persons specified below. All notices, requests, statements or payments will be made in writing. Notices required to be in writing will be delivered by hand delivery, overnight delivery or regular, certified, or registered mail, return receipt requested. All notices shall be deemed to have been properly given or made upon the earliest to occur of: (a) actual delivery; (b) two (2) days after being sent by overnight courier service; (c) five (5) days after being deposited in the mail addressed as aforesaid; and (d) one (1) day after being sent by e-mail; provided that in the case of notice by e-mail such notice is followed promptly by the sending of the original of such notice by overnight courier service. A Party may change its address by providing notice of the same in accordance with the provisions of this section.

If to Seller:	General Electric International, Inc.
	1 River Road
	Schenectady NY, 12345
	Attention: General Counsel
If to Buyer:	Southern Connecticut State University
	501 Crescent Street
	New Haven, CT 06515
	Attention: Executive Vice President, Finance & Administration
With some tax	
With copy to:	Connecticut State Colleges and Universities
	61 Woodland Street
	Hartford, CT 06105
	Attention: Vice President for Facilities, Real Estate, and Infrastructure Planning

# ARTICLE 13. ASSIGNMENT AND FINANCING

## 13.1 Assignment; Binding Effect.

(a) Except for assignments to Affiliates, neither Buyer nor Seller shall, without the prior written consent of the other, which consent will not be unreasonably withheld, conditioned or delayed, assign, pledge or transfer all or any part of, or any right or obligation under, this PPA, whether voluntarily or by operation of Law, and any such assignment or transfer without such consent will be null and void.

(b) Notwithstanding the foregoing, Seller may: (i) may finance the SEF with a combination of construction and/or long-term financing facilities, including structured tax equity and/or securitization financings, (ii) may assign (collaterally or directly) the PPA to any Affiliate of Seller or to Onyx Development Group, LLC ("Onyx") or Onyx's Affiliates or to CEFIA Holdings, LLC, and (iii) may assign (collaterally or directly) the PPA to any person in connection with the financings described in clause (i) above, including to Solstice Investments LP ("Solstice") and any Affiliate of Solstice or Onyx or CEFIA Holdings, LLC without Buyer's prior written consent (each, a "Permitted Transfer"). Any assignment contemplated in the preceding sentence may only occur if Seller, an Affiliate of Seller or an entity that has the appropriate experience and financial ability to operate and maintain photovoltaic solar systems manages (by contract with the assignee or otherwise) the day-to-day operation of the SEF(s). Seller shall deliver notice of any Permitted Transfer to Buyer in writing within thirty (30) days. Buyer agrees, with approval of the State's Attorney General, to execute such reasonable consents to assignment and other documents, and to provide such information, as is requested by Seller in connection with any Permitted Transfer.

(c) Subject to the foregoing restrictions on assignment, this PPA will inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns.

13.2 <u>Cooperation with Financing</u>. Buyer acknowledges that Seller will be financing the construction of the SEF and Buyer agrees that it shall reasonably cooperate with Seller and its Financing Parties in connection with such financing for the SEF, including (a) the furnishing of such public information; (b) the giving of such certificates;(c) providing of an officer's certificate of Buyer or its affiliate that this PPA was duly authorized, executed and delivered by Buyer, (d) the obtaining of any lien waivers, the execution of commercial law forms and such other documents, all as reasonably requested by Seller or any Financing Party to secure such Financing Party's collateral position in the SEF or in Seller's rights under this PPA; *provided, however*, that the foregoing undertaking shall not obligate Buyer to change any rights of benefits, or increase any burdens, liabilities or obligations of Buyer, under this PPA to the Financing Parties except as specifically provided herein.

# ARTICLE 14. FINANCING PARTY ACCOMMODATIONS

14.1 <u>Buyer Acknowledgment</u>. Buyer acknowledges that Seller shall have the right to finance the SEF with financing accommodations from a Financing Party and that Seller's obligations will be secured by, among other collateral, a pledge or collateral assignment of this PPA and a first security interest in the SEF. In order to facilitate such necessary financing, Buyer agrees as set forth below.

14.2 <u>Consent to Assignment</u>. Notwithstanding any contrary term or provision of this PPA, Seller shall have the right to assign this PPA in connection with the financing or refinancing of the SEF, and Buyer consents to the assignment by Seller to the Financing Party of Seller's right, title and interest in and to this PPA. Notwithstanding any contrary term or provision contained in this PPA, any assignment of this PPA to a Financing Party for financing or refinancing of the SEF shall not require Buyer's consent. In addition, Buyer shall in good

faith work with Seller and Seller's Financing Party upon request to agree upon consent by Buyer to the assignment of this PPA, provided that any such consent does not require Buyer to alter its rights and obligations pursuant to this PPA in any way.

14.3 <u>Financing Party's Rights Following an Event of Default</u>. Notwithstanding any contrary term or provision of this PPA:

(a) The Financing Party, as assignee, shall be entitled to exercise, in the place and stead of Seller, any and all rights and remedies of Seller under this PPA in accordance with the terms of this PPA, provided that such Financing Party also satisfies the obligations of Seller hereunder. The Financing Party shall also be entitled to exercise all rights and remedies of secured parties generally with respect to this PPA and the SEF.

(b) The Financing Party shall have the right, but not the obligation, to pay all sums due under this PPA and to perform any other act, duty or obligation required of Seller hereunder or cause to be cured any default or Seller Event of Default in the time and manner provided by the terms of this PPA. Nothing herein requires the Financing Party to cure any Seller Event of Default (unless the Financing Party has succeeded to Seller's interests) to perform any act, duty or obligation of Seller, but Buyer hereby gives the Financing Party the option to do so.

(c) Upon the exercise of remedies under its security interest in the SEF, including any sale thereof by the Financing Party, whether by judicial proceeding or under any power of sale, or any conveyance from Seller to the Financing Party, Buyer's consent shall not be required, however, the Financing Party will give notice to Buyer of the transferee or assignee of this PPA; *provided, further*, that any sale, transfer or other disposition of the SEF by the Financing Party, whether by judicial proceeding or otherwise, shall be made solely to a Qualified Assignee. Any such exercise of remedies shall not constitute an Event of Default.

(d) Upon any rejection or other termination of this PPA pursuant to any process undertaken with respect to Seller under the United States Bankruptcy Code, at the request of Financing Party made within sixty (60) days of such termination or rejection, Buyer will enter into a new PPA with Financing Party or its Qualified Assignee, on the same terms and conditions as hereunder.

(e) In the event that a Financing Party becomes the owner of the SEF as a result of the exercise of remedies under subsections (c) or (d) above, whether as a result of the exercise of its remedies as a secured party or in connection with the bankruptcy of Seller, the Financing Party shall agree not to disturb the Buyer's rights to purchase Energy under this PPA, pursuant to the terms and conditions hereof, and further agrees to sell its right in the SEF or the PPA to a Qualified Assignee purchaser only if such purchaser agrees to continue to provide Buyer with Energy under this PPA in accordance with the terms and conditions thereof.

# 14.4 Financing Party's Right to Cure.

(a) Upon receipt from Financing Party of its invocation of the rights provided for in this Section 14.4 and the name and address of the Financing Party entitled to notice, Buyer will not exercise any right to terminate this PPA unless Buyer has given the Financing Party prior written notice at the address provided to Buyer in writing of any event giving rise to Buyer's right to terminate this PPA. Buyer's notice of an intent to terminate this PPA must specify the condition giving rise to such right. Notwithstanding any contrary term or provision in this PPA, Financing Party shall have forty-five (45) days beyond the cure period provided to Seller pursuant to this PPA to cure the condition. Buyer's and Seller's obligations under this PPA will otherwise remain in effect and required to be fully performed during any cure period.

(b) If the Financing Party or its Qualified Assignee (including any purchaser which meets the definition of a Qualified Assignee) has commenced and is diligently pursuing judicial proceedings to acquire title to or control of the SEF, or has acquired title to or taken control of the SEF, and in either event cures all existing Seller Events of Default that are capable of being cured by Financing Party or its Qualified Assignee subject to and within the time allowed by Section 14.4(a) and assumes in writing the obligations of Seller hereunder, then this PPA will continue in full force and effect.

14.5 <u>Notice of Defaults and Events of Default</u>. Upon and at any relevant time after receipt of the notice provided for in Section 14.4(a), Buyer agrees to deliver to the Financing Party a copy of any notice of a Seller's default simultaneously with the delivery of such notice by Buyer to Seller.

# ARTICLE 15. MISCELLANEOUS

15.1 <u>Governing Law</u>. This PPA will be governed by the Laws of the State in which the SEF is located, without giving effect to principles of conflicts of Laws.

15.2 Entire Agreement; Amendments. This PPA (including the exhibits, any written schedules, supplements or amendments) constitutes the entire agreement between the Parties, and shall supersede any prior oral or written agreements between the Parties, relating to the subject matter hereof. Without limiting the generality of the foregoing, the Parties acknowledge and agree that, as of the Effective Date of the PPA, (a) any and all prior agreements between the Parties relating to the subject matter of the PPA, including the Initial PPA (collectively, the "*Prior Agreements*") are superseded in their entirety by the PPA, (b) the Prior Agreements are of no further force or effect and no longer the legal obligation of either Party, (c) no Party had, nor now has, any claim against, or liability or obligation to, the other Party under the Prior Agreements, and (d) no asset or property of either Party was, or now is, bound by, or subject to, any encumbrance, lien or other restriction by reason of the Prior Agreements. Except as otherwise expressly provided in this PPA, any amendment, modification or change to this PPA will be void unless in writing and executed by both Parties and approved by the Office of the Attorney General of the State of Connecticut, if applicable.

15.3 <u>Non-Waiver</u>. No failure or delay by either Party in exercising any right, power, privilege, or remedy hereunder will operate as a waiver thereof. No waiver by either Party of a breach of any term or provision contained herein shall be effective unless signed and in writing and signed by the waiving Party. No consent by either Party to, or waiver of a breach by either Party, whether express or implied, shall be construed operate as or constitute a consent to waiver of, or excuse of any other or subsequent or succeeding breach by either Party.

15.4 <u>Severability</u>. If any part, term, or provision of this PPA, is determined by a court of competent jurisdiction to be invalid, illegal, or unenforceable, such determination shall not affect or impair the validity, legality or enforceability of any other part, term, or provision of this PPA, and shall not render this PPA unenforceable or invalid as a whole. Rather the part of this PPA that is found invalid or unenforceable will be amended, changed, or interpreted to achieve as nearly as possible the same objectives and economic effect as the original provision, or replaced to the extent possible, with a legal enforceable, and valid provision that is as similarly in tenor to the stricken provision, within the limits of applicable Law, and the remainder of this PPA will remain in full force.

15.5 <u>No Third Party Beneficiaries</u>. Nothing in this PPA will provide any benefit to any third party or entitle any third party to any claim, cause of action, remedy or right of any kind.

15.6 <u>No Recourse to Affiliates</u>. This PPA is solely and exclusively between the Parties, and any obligations created herein on the part of either Party shall be the obligations solely of such Party. No Party shall

have recourse to any parent, subsidiary, partner, member, Affiliate, lender, director, officer or employee of the other Party for performance or non-performance of any obligation hereunder unless such obligations were assumed in writing by the Person against whom recourse is sought.

15.7 <u>Relationship of Parties</u>. The Parties are independent contractors, and will not be deemed to be partners, joint venturers or agents of each other for any purpose unless expressly stated otherwise herein.

15.8 <u>Counterparts</u>. This PPA may be executed in several counterparts, each of which is an original and all of which together constitute one and the same instrument. A signature on a copy of this PPA received by either Party by facsimile or other electronic transmissions (such as an email .pdf file) is binding upon the other Party as an original.

15.9 <u>Further Assurances</u>. The Parties shall at their own cost and expense do such further acts, perform such further actions, execute and deliver such further or additional documents and instruments as may be reasonably required or appropriate to consummate, evidence, or confirm the agreements an understandings contained herein and to carry out the intent and purposes of this PPA.

15.10 <u>General Interpretation</u>. The terms of this PPA have been negotiated by the Parties hereto and the language used in this PPA shall be deemed to be the language chosen by the Parties hereto to express their mutual intent. This PPA shall be construed without regard to any presumption or rule requiring construction against the Party causing such instrument of any portion thereof to be drafted, or in favor of the party receiving a particular benefit under the PPA. No rule of strict construction will be applied against any person.

15.11 <u>Removal of Liens</u>. Seller shall be entitled to, and is hereby authorized to, file one or more precautionary Uniform Commercial Code financing statements or fixture filings, as applicable, in such jurisdictions as it deems appropriate with respect to the SEF in order to protect its rights in the SEF.

15.12 <u>Forward Contract</u>. The Parties acknowledge and agree that this PPA and the transactions consummated under this PPA constitute a "forward contract" within the meaning of the United States Bankruptcy Code and that each Party is a "forward contract merchant" within the meaning of the United States Bankruptcy Code.

#### 15.13 Dispute Resolution.

(a.) Good Faith Negotiations. In the event that any question, dispute, or difference arises out or in connection with this PPA, including any question regarding its existence, validity, performance or termination (a "Dispute"), then senior management personnel from both Seller and Buyer shall meet and diligently attempt in good faith to resolve the Dispute for a period of thirty (30) days following one Party's written request to the other Party for such a meeting.

(b.) Jurisdiction and Venue. In the event the Parties are unable to resolve a Dispute pursuant to the provisions of Section 15.13(a), the Parties deem this PPA to have been made in the City of Hartford, State of Connecticut. Both parties agree that it is fair and reasonable for the validity and construction of this PPA to be, and it shall be, governed by the Laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of Laws. To the extent that any immunities provided by Federal Law or the Laws of the State of Connecticut do not bar an action against the State, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Seller waives any objection which it

may now have or will have to the laying of venue of any claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

15.14 <u>Freedom of Information Act</u>. Buyer shall comply with all Connecticut Freedom of Information Act ("FOIA") requirements, any Federal, State, or local statute, regulation, ordinance, or State policy that mandates disclosure and may require disclosure for an audit that may become public. Notwithstanding anything herein to the contrary, Buyer shall use best efforts to not disclose any information associated with this PPA which falls under the FOIA exemption enumerated in Section 1-210(b) of the Connecticut General Statutes.

## 15.15 Nondiscrimination.

References in this section to "contract" shall mean this PPA and references to "Contractor" shall mean Seller.

(a) For purposes of this Section, the following terms are defined as follows:

(i) "Commission" means the Commission on Human Rights and Opportunities;

(ii) "Contract" and "contract" include any extension or modification of the Contract or contract;

(iii) "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor;

(iv) "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose;

(v) "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;

(vi) "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;

(vii) "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced;

(viii) "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;

(ix) "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of C.G.S. § 32-9n; and

(x) "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in C.G.S. § 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in C.G.S. § 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

(b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the Laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this Section and C.G.S. §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to C.G.S. §§ 46a-56, 46a 68e and 46a-68f; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and C.G.S. § 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.

(c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.

(d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.

(e) The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with C.G.S. § 46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

(f) The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.

(g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the Laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to C.G.S. § 46a 56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and C.G.S. § 46a-56.

(h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with C.G.S. § 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

15.16 Executive Orders. References in this section to "contract" shall mean this PPA and references to "Contractor" shall mean Seller. This Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. The Contract may also be subject to Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services and to Executive Order No. 49 of Governor Dannel P. Malloy, promulgated May 22, 2015, mandating disclosure of certain gifts to public employees and contributions to certain candidates for office. If Executive Order 14 and/or

Executive Order 49 are applicable, they are deemed to be incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Seller's request, the Buyer shall provide a copy of these orders to the Seller.

15.17 <u>Summary of State Ethics Laws</u>. Pursuant to the requirements of section 1-101qq of the Connecticut General Statutes, the summary of State ethic Laws developed by the State Ethics Commission pursuant to section 1-81b of the Connecticut General Statutes is incorporated by reference into and made a part of this PPA as if the summary had been fully set forth in this PPA.

**15.18** Whistleblower Law. This PPA may be subject to the provisions of Section 4-61dd of the Connecticut General Statutes. In accordance with this statute, if an officer, employee or appointing authority of the Seller takes or threatens to take any personnel action against any employee of the Seller in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, the Seller shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty per cent of the value of this PPA. Each violation shall be a separate and distinct offense and in the case of a continuing violation, each calendar day's continuance of the violation shall be deemed to be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the contractor.

**15.19** Disclosure of Records. This PPA may be subject to the provisions of section 1-218 of the Connecticut General Statutes. In accordance with this statute, each contract in excess of two million five hundred thousand dollars between a public agency and a person for the performance of a governmental function shall (a) provide that the public agency is entitled to receive a copy of records and files related to the performance of the governmental function, and (b) indicate that such records and files are subject to the FOIA and may be disclosed by the public agency pursuant to FOIA. No request to inspect or copy such records or files shall be valid unless the request is made to the public agency in accordance with FOIA. Any complaint by a person who is denied the right to inspect or copy such records or files shall be brought to the Freedom of Information Commission in accordance with the provisions of sections 1-205 and 1-206 of the Connecticut General Statutes.

15.20 <u>Campaign Contribution Restrictions</u>. For all state contracts as defined in Connecticut General Statutes \$9-612(g)(2), as amended by P.A. 10-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Election Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See Notice below.

#### NOTICE TO EXECUTIVE BRANCH STATE CONTRACTORS AND PROSPECTIVE STATE CONTRACTORS OF CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

This notice is provided under the authority of Connecticut General Statutes 9-612(g)(2), as amended by P.A. 10-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined below):

## CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch

or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

On and after January 1, 2011, no state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall **knowingly** solicit contributions from the state contractor's or prospective state contractor's employees or from a subcontractor or principals of the subcontractor on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

#### **DUTY TO INFORM**

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

#### **PENALTIES FOR VIOLATIONS**

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

<u>Civil penalties:</u>Up to \$2,000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of up to \$2,000 or twice the amount of the prohibited contributions made by their principals.

<u>Criminal penalties:</u> Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or not more than \$5,000 in fines, or both.

#### **CONTRACT CONSEQUENCES**

In the case of a state contractor, contributions made or solicited in violation of the above prohibitions may result in the contract being voided.

In the case of a prospective state contractor, contributions made or solicited in violation of the above prohibitions shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State shall not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information may be found on the website of the State Elections Enforcement Commission, www.ct.gov/seec. Click on the link to "Lobbyist/Contractor Limitations."

#### DEFINITIONS

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor or a state contractor or prospective state contractor or a state contractor or prospective state contractor or an employee of any state contractor or prospective state contractor who has managerial or discretionary responsibilities with respect to a state contract, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan, a loan to an individual for other than commercial purposes or any agreement or contract between the state or any state agency and the United States Department of the Navy or the United States Department of Defense.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets

to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D) establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

"Subcontractor" means any person, business entity or nonprofit organization that contracts to perform part or all of the obligations of a state contractor's state contract. Such person, business entity or nonprofit organization shall be deemed to be a subcontractor until December thirty first of the year in which the subcontract terminates. "Subcontractor" does not include (i) a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or (ii) an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a subcontractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a subcontractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a subcontractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a subcontractor, which is not a business entity, or if a subcontractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any subcontractor who has managerial or discretionary responsibilities with respect to a subcontract with a state contractor, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the subcontractor.

#### [SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, intending to be legally bound, Seller and Buyer have signed this PPA through their duly authorized representatives effective as of the date first set forth above.

GENERAL ELECTRIC INTERNATIONAL, INC.

By:

Name: Erik Schiemann Title: Authorized Signatory

Date: May 3 2017

#### CONNECTICUT STATE COLLEGES AND UNIVERSITIES

ene By:

Name: Erika H. Steiner Title: Chief Financial Officer

51810 Date:

OFFICE OF THE ATTORNEY GENERAL OF THE STATE OF CONNECTICUT Approved as to form

By: Joseph Rubin

Title:

Date:

Assistant / Associate Attorney General

# EXHIBIT A

#### SOLAR ENERGY FACILITY

The solar energy facility (SEF) shall consist of an approximately 942 kWdc installation estimated to generate 1,465,000 kWh in its first year in service (the "*Expected System Output*"), installed as a ground mount system, rooftop system, and a carport system using Polar Bear (or equivalent) racking and LG (or equivalent) modules and Sungrow inverters. The SEF shall be interconnected electrically directly to the Delivery Point behind the meter installed on the the Property by Buyer's Serving Utility.

# EXHIBIT B

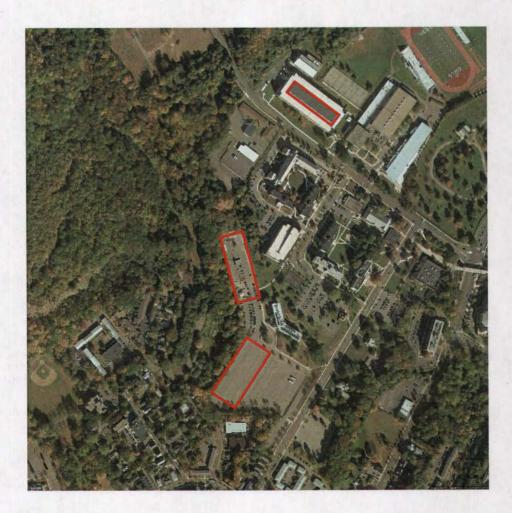
# PROPERTY

The property includes all that certain real property together with all improvements, buildings, and other structures thereon known as 501 Crescent Street, New Haven, CT 06515.

# EXHIBIT C

#### PREMISES

The Premises shall be that portion of the Property on, under and over which the SEF shall be installed, being that approximate 187,000 square foot combined footprint shown in the figure below and on the Southern Connecticut State University Site Plan appearing on the following page, in addition to all portions of the Property where trenching, conduit, and metering equipment are required so as to connect the SEF to the Delivery Point.



#### EXHIBIT D

#### Schedule of Definitions and Rules of Interpretation

1. **Definitions**. The definitions provided below and elsewhere in this PPA will apply to the defined terms used in this PPA:

(a) "Affiliate" means with respect to any entity, such entity's general partner or manager, employee, or any other entity that, directly or indirectly, through one or more intermediaries, controls or is controlled by, or is under common control with, such entity. For purposes of this definition, "control" (including, with its correlative meanings, the terms "controlled by" and "under common control with"), as used with respect to any such person or entity, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such person or entity, whether through the ownership of voting securities or by contract or otherwise.

(b) "Bankrupt" means that a Party or other entity (as applicable): (i) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (ii) is unable to pay its debts generally as they come due or fails (or admits in writing its inability) generally to pay its debts as they become due; (iii) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (iv) has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency Law or other similar Law affecting creditor's rights, or a petition is presented for its winding-up, reorganization or liquidation, which proceeding or petition is not dismissed, stayed or vacated within sixty (60) days thereafter; (v) commences a voluntary proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency Law or other similar Law affecting creditors' rights; (vi) seeks or consents to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets; (vii) has a secured party take possession of all or substantially all of its assets, or has a distress, execution, attachment, or other legal process levied, enforced or sued on or against all or substantially all of its assets; (viii) causes or is subject to any event with respect to it which, under the applicable Laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (i) to (vii) inclusive; or (ix) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts.

- (c) "Buyer" shall have the meaning ascribed to it in the Preamble.
- (d) "Buyer Act" shall have the meaning ascribed to it in Section 7.1.
- (e) "Buyer Event of Default" has the meaning ascribed thereto in Section 8.3.
- (f) "Buyer's Serving Utility" means The United Illuminating Company d/b/a UI.
- (g) Intentionally Left Blank.

(h) "Business Day" means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday.

(i) "*CAMD*" means the Clear Air Markets Division of the United States Environmental Protection Agency or any successor or other agency that is given jurisdiction over a program involving transferability of specific Environmental Attributes.

(j) "Claiming Party" shall have the meaning ascribed to it in Section 7.3.

(k) "Commercial Operation" will begin on the day in which the entire SEF is operating on a sustained basis and producing not less than the Expected System Output and Seller is in receipt of all required approvals, signoffs and permits from any and all Governmental Entities and the Buyer's Serving Utility for the production and sale of Energy (including the resale of Energy to Buyer's Serving Utility).

(1) "Commercial Operation Date" means the date upon which the SEF begins Commercial Operation, as set forth in the Notice of Commercial Operation.

(m) Intentionally Left Blank.

(n) "Controlling Entity" shall have the meaning ascribed to it in Section 3.7.

(o) "Defaulting Party" shall have the meaning ascribed to it in Section 8.1.

(p) "Delivery Point" means the interconnection points on the Property behind the meters installed by Buyer's Serving Utility and before the electrical systems serving the Property. No other delivery points are permitted under this PPA without the permission of the Buyer.

(q) "Discounted Revenue Forecast" means the sum of the present values calculated at the per annum rate of interest equal to four percent (4%) of the following amounts for each year (or part thereof) remaining between the early termination date and the end of the Term: (i) the applicable Energy Payment Rate for such year, if known, or a mutually agreed estimate of the Energy Payment Rate for such year, multiplied by (ii) the average annual output during the previous three (3) years.

(r) "Effective Date" shall have the meaning ascribed to it in the Preamble to this PPA.

(s) "*Energy*" means electric energy (alternating current, expressed in kilowatt-hours) generated by the SEF. Energy does not include any attendant Environmental Attributes.

(t) "Energy Payment Rate" shall have the meaning ascribed to it in Section 3.3.

(u) "Environmental Attributes" means each of the following that is in effect as of the Effective Date: (i) credits, benefits, reductions, offsets and other beneficial allowances, including, to the extent applicable and without limitation, performance based incentives or renewable portfolio standard in the state in which the Premises are located or in other jurisdictions (collectively, "Allowances") attributable to the ownership or operation of the SEF or the production or sale of Energy, (ii) other Allowances howsoever named or referred to, with respect to any and all fuel, emissions, air quality, or other environmental characteristics, resulting from the use of solar generation or the avoidance of the emission of any gas, chemical or other substance into the air, soil or water attributable to the sale of Energy during the Term and in which Seller has

good and valid title, including any credits to be evidence by Solar Renewable Energy Certificates or similar laws or regulations applicable in any jurisdiction, (iii) any such Allowances related to (A) oxides of nitrogen, sulfur, or carbon, (B) particulate matter, soot, or mercury, or (C) the United Nations Framework Convention on Climate Change (the "UNFCCC") or the Kyoto Protocol to the UNFCCC or crediting "early action" with a view thereto, or involving or administered by the CAMD, and (iv) all reporting rights with respect to such allowances under Section 1605(b) of the Energy Policy Act of 1992, as amended from time to time or any successor statute, or any other current or future international, federal, state or local law, regulation or bill, or otherwise. Environmental Attributes shall also include Tax Benefits.

- (v) Intentionally Left Blank.
- (w) Intentionally Left Blank.
- (x) "Event of Default" shall have the meaning ascribed to it in Section 8.1.
- (y) "Exercise Period" shall have the meaning ascribed to it in Section 3.10.
- (z) "Expected System Output" shall have the meaning ascribed to it in Exhibit A.

(aa) "Financing Party" or "Financing Parties" shall mean any and all Persons or successors or assignees thereof lending money or extending credit to Seller or an Affiliate of Seller, or investing equity (including tax equity) in Seller or an Affiliate of Seller: (i) for the construction, term or permanent financing of the SEF; (ii) for working capital or other ordinary business requirement of the SEF (including but not limited to the maintenance, repair, replacement or improvement of the SEF); (iii) for any development financing, bridge financing, credit enhancement, credit support or interest rate protection in connection with the SEF; (iv) for the Seller's operation of the SEF; or (v) for the purchase of the SEF and related rights and obligations of Seller.

(bb) "FOIA" shall have the meaning ascribed to it in Section 15.14.

(cc) "Force Majeure" means any event or circumstance that prevents a Party from performing its obligations under this PPA, which event or circumstance (i) is not within the reasonable control, or is not the result of the negligence or willful misconduct, of the Claiming Party, and (ii) by the exercise of reasonable due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided and shall be deemed to include, but not be limited to, acts of God, acts of civil or military authorities, acts of war or public enemy, insurrections, riots, , fires, explosions, floods, interruption of transportation, embargoes, or other causes of a similar nature. Force Majeure will not be based on (i) Buyer's inability economically to use Energy purchased hereunder or by for such Energy, or (ii) Seller's ability to sell Environmental Attributes at any price or Energy at a price greater than the price of Energy under this PPA.

(dd) "Governmental Approvals" means all applications, permits, licenses, franchises, certificates, concessions, consents, authorizations, approvals, registrations, orders, filings, entitlements and similar requirements of whatever kind and however described which are required to be obtained or maintained by any Person with respect to the development, siting, design, acquisition, construction, equipping, financing, ownership, possession, shakedown, start-up,

testing, operation or maintenance of the SEF, the production and delivery of Energy, and Environmental Attributes, or any other transactions or matter contemplated by this PPA (including those pertaining to electrical, building, zoning, environmental and occupational safety and health requirements).

(ee) "Governmental Charges" means all applicable federal, state and local taxes (other than taxes based on income or net worth but including, without limitation, sales, use, gross receipts or similar taxes), governmental charges, emission allowance costs, duties, tariffs, levies, license fees, permits, assessments, adders or surcharges (including public purposes charges and low income bill payment assistance charges), imposed or authorized by a Governmental Entity, independent system operator, utility, transmission and distribution provider or other similar entity, on or with respect to the Energy or this PPA.

(ff) "Governmental Entity" means any government or any agency, bureau, board, commission, court, department, official, political subdivision, tribunal, program administrator or other instrumentality of any government, whether federal, state or local, domestic or foreign, or any Person, owned, operated, managed or otherwise controlled thereby.

- (gg) Intentionally Left Blank.
- (hh) Intentionally Left Blank.
- (ii) Intentionally Left Blank.
- (jj) "Independent Appraiser" shall have the meaning ascribed to it in Section 3.10.

(kk) "*ITC Credit*" means (i) the energy credit under Section 48 of the Internal Revenue Code of 1986, and (ii) the grant under Section 1603 of the American Recovery and Reinvestment Tax Act of 2009, as each may be amended, supplemented, extended or replaced from time to time, and including all successor enactments or legislation relating thereto.

(11) "Interconnection Agreement" means the agreement for interconnection of the SEF with the distribution system of Buyer's Serving Utility.

(mm) "Interconnection Equipment" means that portion of the SEF, including mounting substrates or supports, wiring and connections, power inverters, service equipment, Metering Devices and equipment and utility interconnections, as required or appropriate to effect the interconnection of the SEF to the Property or to Buyer's Serving Utility, including such as may be located on Buyer's Leased Premises.

(nn) "Late Payment Interest Rate" means, for any date, the lesser of (i) the per annum rate of interest equal to the prime lending rate as may from time to time be published in The Wall Street Journal under "Money Rates" on such day (or, if not published on such day, on the most recent proceeding day on which published), plus 2%, or (ii) the maximum rate permitted by applicable Law.

(00) "Law" means any national, regional, state or local law, statute, rule, regulation, code, ordinance, administrative ruling, judgment, decree, order or directive of any jurisdiction applicable to this PPA or the transaction contemplated hereby.

(pp) "License" shall have the meaning ascribed to it in Section 5.1(b).

(qq) "License Term" shall have the meaning ascribed to it in Section 5.1(b).

(rr) "Lost Seller Revenue" means the sum of (A) the product of the Energy Price times the quantity of Energy that the SEF is or will be prevented from generating or delivering to, or that is not or will not be accepted at, the Delivery Point to the extent caused by Buyer Act and (B) the product of the amount of Environmental Attributes associated with the energy that was not or could not be generated or delivered due to Buyer Act and the price that Seller is or would be receiving for Environmental Attributes that are generated by the SEF. Lost Seller Revenue does not include Energy that (i) the SEF is prevented from generating or delivering to, or that is not accepted at, the Delivery Point to the extent not caused by Buyer Act but (ii) is addressed under the provision providing for the extension of the PPA under Section 7.5. In determining Lost Seller Revenue for which Buyer is obligated to pay Seller, the Parties shall consider Insolation, historical performance, projected output degradation, and the provisions set forth in Section 6.2.

(ss) "Meter" shall have the meaning ascribed to it in Section 6.4.

(tt) "*Metering Device*" means any and all meters at or immediately before the Delivery Point needed for the registration, recording, and transmission of information regarding the Energy and delivered to the Delivery Point.

(uu) "*Minimum Energy Output Requirements*" shall have the meaning ascribed to it in Section 3.6.

(vv) "Non-Defaulting Party" shall have the meaning ascribed to it in Section 8.1(a).

(ww) "Notice of Commercial Operation" shall have the meaning ascribed to it in Section

2.3.

(xx) "Onyx" has the meaning ascribed thereto in Section 13.1.

(yy) "PPA" means this Power Purchase and License Agreement.

(zz) "PPA Extension Limit" shall have the meaning ascribed to it in Section 7.5.

(aaa) "*Parties*" shall mean Buyer and Seller, collectively or individually, as the context may require.

(bbb) "Permitted Transfer" shall have the meaning ascribed to it in Section 14.1(b).

(ccc) "*Person*" means an individual, general or limited partnership, corporation, municipal corporation, business trust, joint stock company, trust, unincorporated association, joint venture, Governmental Entity, limited liability company, or any other entity of whatever nature.

(ddd) "Premises" shall have the meaning ascribed to it in the Recitals.

(eee) "Property" shall have the meaning ascribed to it in the Recitals.

(fff) "Prudent Utility Practices" means those practices, methods, and acts, that are commonly used by a significant portion of the solar powered electric generation industry in the United States using prudent engineering and operations to design and operate solar powered generating facilities and related electric equipment lawfully and with safety, dependability, efficiency, and economy, including all applicable requirements of Law. Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be a spectrum of possible standards, practices, methods or acts expected to accomplish the desired results, having due regard for, among other things, manufacturers' warranties and the requirements of governmental authorities of competent jurisdiction and the requirements of this PPA.

(ggg) "Price Determination" shall have the meaning ascribed to it in Section 3.10.

- (hhh) "Prior Agreements" shall have the meaning ascribed to it in Section 15.2.
- (iii) "Purchase Option" shall have the meaning ascribed to it in Section 3.9.
- (jjj) "Purchase Option Dates" shall have the meaning ascribed to it in Section 3.9.
- (kkk) "Purchase Price" shall have the meaning ascribed to it in Section 3.10.

(lll) "Qualified Assignee" means as it pertains to any assignment of this PPA by Seller, any entity that has competence and experience in the operation and maintenance of solar photovoltaic systems similar in size and type as the SEF and is financially capable of performing Seller's obligations under this PPA, all as reasonably demonstrated to Buyer, and agrees in writing to assume Seller's duties and obligations under the PPA.

(mmm)"*Representatives*" means, in respect of a Person, the officers, directors, employees, agents, advisors, contractors, or other representatives of such Person (for the avoidance of doubt, this does not include students of such Person who do not fall into any of the foregoing categories of such Person).

(nnn) "SEF" means the solar electric generating facility that produces the Energy sold and purchased under this PPA as more particularly defined in <u>Exhibit A</u> hereto, including the Interconnection Equipment.

(000) "SEF Assets" means each and all of the assets of which the SEF is comprised, including Seller's solar energy panels, mounting systems, carports, tracking devices, inverters, integrators and other related equipment and components installed on the Premises, electric lines and conduits required to connect such equipment to the Delivery Point, protective and associated equipment, improvements, and other tangible and intangible assets, permits, property rights and contract rights reasonably necessary for the construction, operation, and maintenance of the SEF.

(ppp) "SEF Loss" means loss, theft, damage or destruction of the SEF or SEF Assets, or any other occurrence or event that prevents or limits the SEF from operating in whole or in part, resulting from or arising out of any cause (including casualty, condemnation or other Force Majeure).

(qqq) "Seller" shall have the meaning ascribed to it in the Preamble.

(rrr) "Seller Event of Default" has the meaning ascribed thereto in Section 8.2.

(sss) "Seller Termination Default" has the meaning ascribed thereto in Section 8.2.

(ttt) "Site Electrical System" means Buyer's existing electrical system for the supply and distribution of electricity to the Property, which system is interconnected with Buyer's Serving Utility.

(uuu) "Solar Renewable Energy Certificates" or "SRECs" means the certificate representing the environmental attributes associated with Energy, as developed under the oversight and regulations of the State of Connecticut Public Utilities Regulatory Authority, including any modifications or revisions thereof adopted by such regulator or any successor agency.

(vvv) "Solstice" has the meaning ascribed thereto in Section 13.1.

(www) "Substitute Premises" has the meaning ascribed thereto in Section 3.7(b).

(xxx) "Substitution Notice Period" has the meaning ascribed thereto in Section 3.7(b).

(yyy) Intentionally Left Blank. .

(zzz) "Tax Benefits" means ITCs attributable to the SEF or Energy (including the ITC Credit), accelerated deprecation attributable to the SEF or any SEF Asset, and any other tax credit or tax write-offs allowed under applicable law attributable to the SEF or Energy, irrespective of whether such Tax Benefits accrue for the benefit of Seller, any Affiliate, or any investor of Seller or any Affiliate of such investor.

(aaaa) "Term" shall have the meaning ascribed thereto in Section 2.1.

(bbbb) "*Termination Payment*" means an amount equal to the sum of (i) Discounted Revenue Forecast applicable through the end of the Initial Term or the applicable extension term, as the case may be, (ii) the value of Environmental Attributes relating thereto, such value determined based on the greater of the value at which Seller had contracted to sell those Environmental Attributes or the spot market value, and (iii) the value of any lost Tax Benefits.

(cccc) "*Third Party Monitor*" means an unaffiliated third party, selected in each case by Seller and reasonably approved by Buyer that provides, installs, operates or maintains the installation, operation, or maintenance of the Metering Device.

(dddd) "Transaction" means any transaction between the Parties under the terms of this PPA.

(eeee) "Transfer Date" has the meaning ascribed thereto in Section 3.11.

(ffff) "Utility Requirements" means any protocols, procedures, or guidelines which apply to the SEF and are implemented, required or otherwise adopted by Buyer's Serving Utility.

2. <u>Rules of Interpretation</u>. In this PPA, unless expressly provided otherwise:

(a) the words "herein," "hereunder" and "hereof" refer to the provisions of this PPA and a reference to a recital, Article, Section, subsection or paragraph of this PPA or any other agreement is a reference to a recital, Article, Section, subsection or paragraph of this PPA or other agreement in which it is used unless otherwise stated;

(b) references to this PPA, or any other agreement or instrument, includes any schedule, exhibit, annex or other attachment hereto or thereto;

(c) reference to any Article, Section, or Exhibits means such Article of this PPA, Section of this PPA, or such Exhibit to this PPA, as the case may be, and references in any Article or Section or definition to any clause means such clause of such Article or Section or definition;

(d) a reference to this PPA, any other agreement or an instrument or any provision of any of them includes any amendment, variation, restatement or replacement of this PPA or such other agreement, instrument or provision, as the case may be;

(e) a reference to a statute or other Law or a provision of any of them includes all regulations, rules, subordinate legislation and other instruments issued or promulgated thereunder as in effect from time to time and all consolidations, amendments, re-enactments, extensions or replacements of such statute, Law or provision;

(f) the singular includes the plural and vice versa;

(g) a reference to a Person includes a reference to the Person's executors and administrators (in the case of a natural person) and successors, substitutes (including Persons taking by novation) and permitted assigns;

(h) words of any gender shall include the corresponding words of the other gender;

(i) "including" means "including, but not limited to," and other forms of the verb "to include" are to be interpreted similarly;

(j) references to "or" shall be deemed to be disjunctive but not necessarily exclusive, (i.e., unless the context dictates otherwise, "or" shall be interpreted to mean "and/or" rather than "either/or");

(k) where a period of time is specified to run from or after a given day or the day of an act or event, it is to be calculated exclusive of such day; and where a period of time is specified as commencing on a given day or the day of an act or event, it is to be calculated inclusive of such day;

(1) a reference to a Business Day is a reference to a period of time commencing at 9:00 a.m. local time on a Business Day and ending at 5:00 p.m. local time on the same Business Day;

(m) if the time for performing an obligation under this PPA expires on a day that is not a Business Day, the time shall be extended until that time on the next Business Day;

(n) a reference to (i) a day is a reference to a calendar day, (ii) a month is a reference to a calendar month, and (iii) a year is a reference to a calendar year;

(o) where a word or phrase is specifically defined, other grammatical forms of such word or phrase have corresponding meanings;

(p) references to any date in this PPA shall be deemed to mean such date as adjusted from time to time as permitted hereunder due to Force Majeure unless expressly stated otherwise; and

(q) if any index used in this PPA at any time becomes unavailable, whether as a result of such index no longer being published or the material alteration of the basis for calculating such index, then Seller and Buyer shall agree upon a substitute index that most closely approximates the unavailable index as in effect prior to such unavailability. If the base date of any such index is at any time reset, then the change to the index resulting therefrom shall be adjusted accordingly for purposes of this PPA.

### EXHIBIT E

#### ENERGY PAYMENT RATE

### Cost of Electricity Per kWH

	Base Term Contract	Contract Extension One	Contract Extension Two
YEAR 1	0.083		
YEAR 2	0.083		
YEAR 3	0.083		
YEAR 4	0.083		
YEAR 5	0.083		
YEAR 6	0.083		
YEAR 7	0.083	and and a state of the state of the	
YEAR 8	0.083		
YEAR 9	0.083	and the stand of the	
YEAR 10	0.083		
YEAR 11	0.083		
YEAR 12	0.083		
YEAR 13	0.083		
YEAR 14	0.083		
YEAR 15	0.083		
YEAR 16	0.083		
YEAR 17	0.083		
YEAR 18	0.083		
YEAR 19	0.083	A SULFACE AND STATE	
YEAR 20	0.083		
YEAR 21		0.083	
YEAR 22		0.083	
YEAR 23		0.083	
YEAR 24		0.083	
YEAR 25		0.083	

### EXHIBIT F

### **MULTIPLIER FOR SHUTDOWN(S)**

	VALUE MULTIPLIER
YEAR 1	2.563
YEAR 2	2.465
YEAR 3	2.37
YEAR 4	2.279
YEAR 5	2.191
YEAR 6	2.107
YEAR 7	2.026
YEAR 8	1.948
YEAR 9	1.873
YEAR 10	1.801
YEAR 11	1.732
YEAR 12	1.665
YEAR 13	1.601
YEAR 14	1.539
YEAR 15	1.480
YEAR 16	1.423
YEAR 17	1.369
YEAR 18	1.316
YEAR 19	1.265
YEAR 20	1.217
YEAR 21	1.170
YEAR 22	1.125
YEAR 23	1.082
YEAR 24	1.040
YEAR 25	1.000



## REQUEST FOR PROPOSALS RFP BOR-1605

# **Solar Photovoltaic System(s)**

## Power Purchase and Licensing Agreement for Southern Connecticut State University (SCSU)

ISSUE DATE: April 4, 2016 RFP NO: RFP-BOR-1605

 DUE DATE:
 April 29, 2016

 TIME:
 12:00 p.m. (EST)

Proposals must be received by the due date and time to be considered

NON-MANDATORY PRE-PROPOSAL CONFERENCE:

1:00pm on Friday, April 15, 2016 at Southern Connecticut State University

#### **Table of Contents**

- 1. **RFP Purpose and Background**
- 2. Instructions to Proposers
- 3. **Scope and Specifications**
- 4. Technical and Narrative Response
- 5. Evaluation of Proposals
- 6. Proposal Submission Requirements
- 7. General Instructions to Proposers
- 8. Rights Reserved to the CSCU System
- 9. **Project Information Statement**
- **10. RFP** Attachments

Attachment A - Contract Proposal

- Attachment B Gift and Campaign Contribution Certification
- Attachment C Consulting Agreement Affidavit
- Attachment D Affirmation of Receipt of State Ethics Laws Summary
- Attachment E Iran Certification Form
- Attachment F Nondiscrimination Certification Affidavit Form C
- Attachment G Commission on Human Rights and Opportunities Form
- Attachment H Contract Provisions
- Attachment I Proposal Submission Checklist
- Attachment J SCSU Partial Lot #9 Site Plan with Utilities and Topo
- Attachment K SCSU Partial Site Plan FEMA Firm Map Panel 0429J
- Attachment L Wintergreen Parking Garage site, architectural, electrical and structural drawings
- Attachment M Photo of Brownell Hall MCC Nameplate
- Attachment N Copy of existing electric utility bill

### 1. RFP PURPOSE AND BACKGROUND

#### 1.1 ORGANIZATIONAL CONTEXT

The Connecticut State Colleges & Universities (CSCU) provide affordable, innovative and rigorous programs for students to achieve their personal and career goals as well as contribute to the economic growth of Connecticut. CSCU System is comprised of four state universities, 12 community colleges and one online state college. The total System includes 92,000 enrolled students and 15,000 graduates annually. For additional information, please visit our website: <a href="http://www.ct.edu/">http://www.ct.edu/</a>

This RFP is for Southern Connecticut State University (SCSU), located in New Haven, CT.

#### **1.2 PROJECT BACKGROUND**

CSCU has a long-standing commitment to energy conservation and sustainability. Examples of this commitment include the purchasing of "Green Electricity" and constructing, utilizing and/or planning for modern central heat/steam generation plants, geothermal heating systems, photovoltaic solar panels, thermal glazing, increasing building insulation, LED lighting, light fixture re-lamping/ballast modifications and room occupancy sensors. Most new CSCU facilities and major building renovations are required to comply with LEED silver energy performance standards or equivalent. CSCU currently has seven (7) buildings certified to a level of LEED, including two (2) LEED Silver and ten (10) new facilities in the planning stage, or Final Closeout Phase, all LEED Silver or equivalent; including2 LEED Gold (1 pending) and 2 LEED Silver buildings on the SCSU campus. CSCU is in the process of awarding a 100-kW AC PV System through a PPA Contract at Middlesex Community College.

#### 1.3 RFP PURPOSE

CSCU is requesting proposals from qualified developers (referred to within this document as "proposer" or "contractor") to finance, design, install, operate, and maintain solar photovoltaic system(s) on building roof(s) and/or ground mount location(s) at SCSU, and to sell the electricity output to SCSU. Proposer will be required to submit for the CSCU to United Illuminating's large LREC/ZREC Program.

The project delivery approach is commonly known as a "power purchase agreement" (PPA). The agreement will not be a "Lease" but a license agreement to put the photovoltaic support systems (pedestals, etc.) on the ground, roof and/or canopy of the proposed location.

Any award(s) arising from this RFP may be extended to other constituent units of higher education, for the installation of similarly sized PV systems at other College or University campus locations at the rates proposed, if mutually agreed upon by both parties.

### 2. INSTRUCTIONS TO PROPOSERS

#### 2.1 MANDATORY PRE-PROPOSAL CONFERENCE

#### A non-mandatory Pre-Proposal Conference will be held at:

# At 1:00pm on Friday April 15, 2016 at SCSU. Proposers shall meet in the Facilities/Operations building, 3<sup>rd</sup> Floor Conference Rm 615 Fitch Street Hamden, CT.

The purpose of the Pre-Proposal Conference will be to clarify the contents of this RFP in order to ensure a thorough understanding of the requirements. The pre-proposal conference will provide a forum by which interested parties will have equal access to relevant site information prior to proposal submission, and an opportunity for questions, which will be recorded and published on the BOR website along with questions received by e-mail.

#### ATTENDANCE IS STRONGLY ENCOURAGED TO THE PRE-PROPOSAL CONFERENCE.

**Register in advance for the pre-proposal conferences**. RSVP to Sharon Kromas via email at <u>kromass@ct.edu</u> with a copy to Chris Dupuis, <u>dupuisc@ct.edu</u> no later than **12:00 Noon on April 14** of your plan to attend the pre-proposal conference. Multiple representatives from each proposer team may attend, but the names and titles of all potential attendees should be included in the RSVP.

#### 2.1.1 NON-MANDATORY FOLLOW UP SITE INSPECTION

Proposers are strongly encouraged to take advantage of the scheduled Follow-Up Site Inspection at 1:00pm on Friday, April 22, 2016 at SCSU to bring additional team members, take notes of existing site conditions, etc...

All site visits, including the visit on April 22<sup>nd</sup> and any additional visits must be coordinated in advance via email to Eric Lessne, elessne@commnet.edu with a copy to Sharon Kromas, <u>kromass@ct.edu and Chris Dupuis, dupuisc@ct.edu</u>. All site visits must be coordinated through Eric Lessne. Additional site visit requests outside of the 4/22/16 opportunity may not be granted. No site visit requests will be considered after April 22, 2016.

#### 2.2 ISSUING OFFICE AND CSCU CONTACT

This RFP is being issued by the CSCU Real Estate, Facilities & Infrastructure Planning Department which is the only office authorized to change, modify, clarify, etc., the provisions of this RFP and to award any contract(s) resulting from the RFP.

The point of contact for administrative issues regarding this RFP is:

E-mail kromass@ct.edu

Sharon Kromas Associate for Contract Compliance and Procurement Board of Regents for Higher Education 39 Woodland Street Hartford, CT 06105

All questions related to this RFP must be submitted in writing via E-mail according to Section 2.5. All other questions will not be responded to.

#### 2.3 PROJECT SCHEDULE

Issuance of RFP	April 4, 2016
SCSU Non-Mandatory Pre-Proposal Conference	1:00pm, April 15, 2016
SCSU Non-Mandatory Follow Up Site Inspection	1:00pm, April 22, 2016
Deadline for Questions regarding RFP	2:00pm, April 25, 2016
Publication of Questions & Answers	on or before April 26, 2016
Proposal Due Date and Time	12:00pm, April 29, 2016
Opening of Proposals (attendance non-mandatory <sup>1</sup> )	
Anticipated Contract Commencement	September 1, 2016
Anticipated Project Completion	April 30, 2017

Note: The above dates are subject to change at the discretion of CSCU

<sup>1</sup>Attendance at the proposal opening is non-mandatory. There shall be no discussion of any proposals submitted. Only the names of the firms submitting proposals will be read aloud.

#### 2.4 PROPOSAL RECEIPT

Proposals are to be addressed and delivered as follows:

#### 7 original hardcopies and 2 USB Drives:

Sharon Kromas Associate for Contract Compliance and Procurement Board of Regents for Higher Education 39 Woodland Street Hartford, CT 06105

Proposals shall be in a sealed envelope marked:

#### Name and Address of Proposer RFP Title and Number BOR-1605 Date and Time Proposal Due

No telephone, email, or facsimile proposals will be considered. Proposals received after the time for closing will not be considered for this Bid. **CSCU is not responsible for delivery delays or errors by any type of delivery carrier.** 

### 2.5 PROPOSER QUESTIONS

Proposers are expected to exercise their best professional independent judgment in analyzing the requirements of this RFP to ascertain whether additional clarification is necessary or desirable before responding. If there are any discrepancies in, or omissions to the RFP, or if there are any questions as to any information provided in the RFP or by any other source, a request must be submitted via email for clarification, interpretation or correction by the date listed in Section 2.3 Project Schedule. Such inquiries must be directed to the CSCU Designee listed below.

<u>Questions regarding this RFP must be submitted via email to Sharon Kromas, kromass@ct.edu</u> with a copy to Douglas Ginsberg, <u>ginsbergd@ct.edu</u> on or before the deadline stated in Section 2.3, Project Schedule. Include the RFP #1605 in the subject line.

Questions with answers will be posted on the CSCU website, <u>www.ct.edu/about/rfp</u> as stated in Section 2.3. It is the responsibility of proposers to visit the website to retrieve questions and answers.

#### 2.6 **RESTRICTION ON COMMUNICATIONS**

Except for the designated contact(s) listed above, Proposers are not permitted to communicate with College or University staff regarding this solicitation during the period between the Request for Proposal issue date and the announcement of awards, except during:

- The course of the non-mandatory Pre-Proposal Conference.
- The course of the non-mandatory Follow Up Site Inspection.

Proposers are strongly encouraged to take advantage of the scheduled Follow Up Site Inspectons on 4/22/16 to bring additional team members, take notes of existing site conditions, etc... Any requests for additional site visits must be submitted via email to Eric Lessne, <u>elessne@commnet.edu</u> with a copy to Sharon Kromas, <u>kromass@ct.edu and Chris Dupuis</u>, <u>dupuisc@ct.edu</u>. All site visits must be coordinated through Eric Lessne. Additional site visit requests outside of the 4/22/16 opportunity may not be granted. No site visit requests will be considered after April 22, 2016.

If a Proposer is found to be in violation of this provision, CSCU reserves the right to reject the bid.

#### 2.7 PROPOSAL FORMAT AND REQUIRED SUBMITTALS

Proposers are to provide a written proposal addressing the full scope specified under this RFP.

Proposals shall be submitted in the following format. Proposals in any other format will be considered informal and will be rejected. Conditional proposals will not be considered. **An individual authorized to extend a formal proposal must sign all proposals**. If the proposer fails to provide any of the following information, CSCU may at its sole option, ask the proposer to provide the missing information or evaluate the proposal without the missing information. Proposals must include all of the elements listed, be clearly indexed and assembled (in accordance with the numbers and order listed below) and reference the corresponding RFP Sections and paragraphs.

- 1. <u>Table of Contents</u> Proposals must include a table of contents with page numbers covering all parts including exhibits and addenda, with sufficient detail to facilitate easy reference to all requested information.
- 2. <u>Company Introduction and Management Overview</u> This section should present an introduction and general description of the company's background, nature of business activities, and experience in providing the required products and related services. This section should also provide a statement of the Proposer's understanding of the major objectives of the solicitation and the Proposer's approach to fulfilling CSCU requirements.
- 3. <u>Technical Response</u> as required by RFP Section 4, Technical and Narrative Response, inclusive of sections 4.1 through 4.11
- 4. Complete Proposal Submission Requirements, RFP Section 6
- 5. Completed Project Information Statement, RFP Section 9
- 6. <u>Terms and Conditions Acceptance</u> Indicate acceptance/compliance with all items in RFP including Section 4, Paragraph 4.8 and Attachment 8, contract provisions
- 7. Identify any <u>RFP Exceptions</u> as described in Section 4.8
- 8. <u>Supplementary Information and Additional Comments</u> as desired

#### 2.8 PROPOSAL MODIFICATIONS OR WITHDRAWAL

No modification of submitted proposals will be permitted in any form. Any proposal may be withdrawn prior to the time set for the receipt of proposals. No proposal shall be withdrawn for a period of one hundred twenty (120) calendar days thereafter.

#### 2.9 PROPOSER REPRESENTATION

Each proposer, by submitting a proposal, represents that he/she has:

- Read and completely understands the RFP and associated documents.
- Based the proposal upon the requirements described in the RFP.

#### 2.10 SIMPLICITY OF PREPARATION

Proposals should be prepared simply and economically, providing a straightforward, concise description of the Proposer's capability to satisfy the requirements of the RFP. Emphasis should be on completeness and clarity of content. Promotional materials are especially discouraged.

#### 2.11 COMPLETE PROPOSALS

All proposals must be full and complete at the time of due date submission. Lack of compliance will be at the CSCU's sole discretion.

#### 2.12 SPECIFICATIONS

Proposers are expected to meet or exceed the specifications in their entirety. Each proposal shall be in accordance with this specification. If products and/or services as proposed do not comply with specifications as written, proposer shall attach to proposal a complete detailed itemization and explanation for each and every deviation or variation from these specifications. Absence of any such itemization and explanation shall be understood to mean that proposer proposed to meet all details of these specifications. Successful proposer delivering products and/or services pursuant to these specifications shall guarantee that they meet specifications as set forth herein. If it is found that materials/equipment and/or services delivered do not meet requirements of this specification, the successful proposer shall be required to correct same at proposer's own expense.

#### 2.13 AMENDMENTS TO RFP BEFORE DUE DATE

No individual is authorized to amend any part of this RFP in any respect, by an oral statement, or to make any representation of interpretation in conflict with provision of this RFP prior to the proposal submission date. However, if necessary, supplemental information in addenda form will be published on the CSCU website, <u>www.ct.edu/about/rfp</u>. **It is the responsibility of any potential proposer to visit this website to retrieve any addenda.** Failure of any Proposer to receive such addenda shall not relieve the Proposer from any obligation under their proposal as submitted. All addenda so issued shall become part of this RFP.

#### 2.14 FIRM PROPOSALS

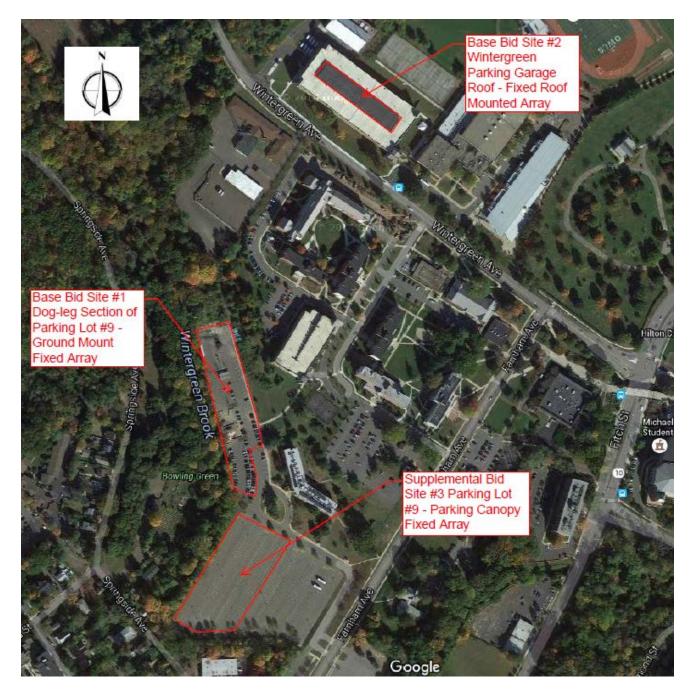
All Proposals shall be firm and fixed for 120 days following the deadline for RFP submissions, or until a contract is signed which establishes future pricing/discounts, whichever comes first. The Proposer warrants that the prices offered herein are equal to or lower than those offered for equivalent quantities of products or services to similar institutional accounts. If Proposer offers a general price reduction that lowers the cost for any product or service below the cost provided in a resulting contract, the Proposer shall offer the appropriate cost reductions to CSCU.

### **3** SCOPE AND SPECIFICATIONS

The intent of these specifications is to describe our contract requirements for the furnishing and delivering of photovoltaic systems under power purchase and licensing agreements between both parties.

#### 3.1 SOLAR PROJECTS

SCSU Project Location Map:



Base bid:

The base bid shall consist of two project site locations as further described below. Site #1 is a ground mounted array in the "Dog-leg" section of Parking Lot #9. Site #2 is a roof mounted array on the upper roof section of the Wintergreen Parking Garage. It is the intent to maximize the total capacity of the arrays at both locations to get as close to the Large ZREC program upper limit of 1,000 KW AC as possible. Proposers must submit a base bid response that includes both the Site #1 and Site #2 locations. Both locations are within SCSU's west side medium voltage loop and are located "behind" the same utility company electric meter.

At SCSU Site #1, a ground mounted photovoltaic system is being considered for installation within the existing interior curb line limits of the "Dog-leg" section of Parking Lot #9, near Brownell Hall,

as further defined by the limit lines shown. The approximate 72,000-sf footprint is shown in the figure below.

- It is anticipated that a nominal 400 500KW AC ground mounted PV system shall be configured for grid interactive tie-in with United Illuminating. Proposer shall determine capacity of system.
- The point of connection (POC) shall be determined by the developer. The nearest campus building is Brownell Hall. A photo of the Brownell Hall motor control center nameplate information is provided in Section 10, Attachment M for your convenience.
- Additionally, there are two nearby electric manholes that contain portions of the University's 13,800V medium voltage cable distribution system. These manhole locations are shown more clearly in Section 10, Attachment J.
- Upon approval of CSCU, the proposed system should fit within the limits shown on the image below. A more detailed site plan is included in Section 10, Attachment J.
- Both the 100-yr and 500-yr floodplain limits cover portions of Lot #9, including the "Dogleg" section. A partial copy of FEMA Firm Map Panel 0429J is included in Section 10, Attachment K.
- Based upon the 2013 FEMA Flood Insurance Study, the 100-year floodplain elevation ranges from 18.5' to 19.4'. The 500-year floodplain elevation ranges from 19.4' to 20.8'.



At SCSU Site #2, a roof mounted photovoltaic system is being considered for installation on the existing roof of the upper level of the Wintergreen Parking Garage, as further defined by the limit lines shown. The approximate 20,000-sf footprint is shown in the figure below.

- It is anticipated that a nominal 100 150KW AC roof mounted PV system shall be configured for grid interactive tie-in with United Illuminating. Proposer shall determine capacity of system.
- The point of connection (POC) shall be determined by the developer. The nearest campus building is the Energy Center located to the north of the garage.
- In Section 10, Attachment L, there are several as-built drawings of the Wintergreen Parking Garage that show relevant site, structural, electrical and architectural features.

• Upon approval of CSCU, the proposed system should fit within the limits shown on the image below. More detailed plans are included in Section 10, Attachment L.



#### Supplemental Bid:

At SCSU Site #3, a parking canopy fixed photovoltaic system is being considered for installation over approximately 335 parking spaces in Lot #9, as further defined by the limit lines shown. The approximate 95,000-sf footprint is shown in the figure below.

- It is anticipated that a nominal 650 750KW AC Parking Canopy fixed PV system shall be configured for grid interactive tie-in with United Illuminating. Proposer shall determine capacity of system.
- The point of connection (POC) shall be determined by the developer. The nearest campus building is Brownell Hall. A photo of the Brownell Hall motor control center nameplate information is provided in Section 10, Attachment M for your convenience.
- Additionally, there are two nearby electric manholes that contain portions of the University's 13,800V medium voltage cable distribution system. These manhole locations are shown more clearly in Section 10, Attachment J.
- Upon approval of CSCU, the proposed system should fit within the limits shown on the image below. A more detailed site plan is included in Section 10, Attachment J.
- Both the 100-yr and 500-yr floodplain limits cover portions of Lot #9, including the "Dogleg" section. A partial copy of FEMA Firm Map Panel 0429J is included in Section 10, Attachment K.

- Based upon the 2013 FEMA Flood Insurance Study, the 100-year floodplain elevation ranges from 18.5' to 19.4'. The 500-year floodplain elevation ranges from 19.4' to 20.8'.
- It is anticipated that the parking canopy structure shall have a complete, water-tight roof system with drainage and gutters as required, underneath the array.
- The number of parking spaces to be displaced by the canopy structure system shall be minimized.



#### 3.2 GENERAL SCOPE AND SPECIFICATIONS

3.2.1 Scope shall include a "turnkey" system that includes all engineering, design, materials, labor, equipment, electric panels, breakers, services, permits, approvals, taxes, financing, procurement, installation, construction, operation, maintenance, monitoring, billing, and incidentals necessary to install, operate and maintain a complete solar photovoltaic generation system as specified hereinafter, and including, but not limited to, the work included in this RFP. Any/All existing facility structural enhancements and roofmodifications required for a code compliant installation and to protect the facilities integrity are to be included within the "turnkey" system.

3.2.2 The Proposer will be responsible for the delivery of electricity to the institution under a long term power purchase agreement. SCSU intends to contract for production from the project site for a 20-year base contract term.

3.2.3 At a minimum, the system shall consist of the supply and installation of a solar photovoltaic generation system, mounting structure, terminal and combiner box(es), quick-connect electrical connectors, conduit, DC wiring, DC disconnect, grid-connected inverter, AC disconnect, AC wiring, all metering equipment, a system monitoring and data retrieval system, and everything necessary to interconnect with each institution's electrical distribution system.

3.2.4 Each Proposer is responsible for ascertaining relevant site conditions and making their own findings as to site conditions and appropriate system size during the site visits.

3.2.5 The selected Proposer shall prepare and submit all of the required incentive paperwork and reporting in support of any potential incentives available from State of Connecticut energy programs/initiatives. Unless otherwise noted, all incentives shall be received by the Proposer.

3.2.6 All current Connecticut Building Codes including, but not limited to the Connecticut Department of Energy and Environmental Protection standards and regulations, and all other applicable codes shall apply. Any Solar Photovoltaic Installation Guidelines issued by the Office of the State Building Inspector (OSBI) shall apply. The system shall be designed to meet all applicable Local, State, and Federal seismic and wind-load requirements. Please note, however, project construction is not subject to permitting or inspection by the City of New Haven, County of New Haven. OSBI and CSCU will review the design documents before authorizing construction documents, and review construction documents and specifications of the project and shall inspect the installation of the system for compliance and code issues.

3.2.7 The solar photovoltaic generation system or system installation activities shall not negate or invalidate any existing roof warranties on any of the building roofs on which the system is installed. 3.2.7.1 Should any of the roofing warranties be negated and / or invalidated by the solar photovoltaic generation system and / or the work done to install the photovoltaic generation system, the selected Proposer shall provide a new warranty for the affected roof(s) at no cost to the institution. 3.2.8 The selected Proposer shall ensure that the integrity of the roofing systems will remain intact. Any damages caused by the installation or use of the solar photovoltaic generation system to any of the roofing materials of any project building, shall be repaired or replaced at no cost to the institution by the selected proposer.

3.2.9 The panel installation design documents will also require approval from the States' Insurance provider, F.M. Global (or current provider at the time of submission). Compliance with F.M. Global is to be included as part of this "turnkey" project. Some of the F.M. Global requirements include but are not limited to minimum standards set forth in FM Global Property Loss Prevention Data Sheets 7-106: Ground Mounted Solar Voltaic Power, 1-28 Wind Design and 1-54 Roof Loads. Proposers are strongly encouraged to visit FM Global's website and to familiarize themselves with all of their design standards. Access to their data sheets is free and only requires a no cost registration to access these data sheets: https://www.fmglobal.com/research-and-resources/fm-global-data-sheets

#### 3.3 SOLAR PHOTOVOLTAIC GENERATION SYSTEM DESIGN

3.3.1 The solar photovoltaic systems will be installed on the ground and the building roof locations identified in Section 3.1.

3.3.2 The systems shall be interconnected to the SCSU medium voltage electricity distribution system. Proposers should include all equipment required for interconnection in the proposal. Supplier to suggest the most feasible connection option provided they meet all applicable design, metering and connectivity requirements. The project must include all equipment and modifications to the existing campus distribution systems to accommodate the photovoltaic systems.

3.3.3 While the distribution system is owned by the institution, the interconnection must comply with all metering and interconnection standards including public utility requirements. The proposed

system must include all provisions to provide safe, reliable power that is fully integrated with the campus distribution system.

3.3.4 Any necessary upgrades or modifications to the existing main electrical panels, wiring, etc or new panels as required for the proper operation of the solar photovoltaic system shall be included.

3.3.5 Major electrical components, including the inverter, isolation transformer, and metering shall be installed in enclosures.

3.3.6 A system monitoring and data retrieval system shall be furnished and installed, integrated to the campus energy management control system (EMCS)/building management system (BMS).

3.3.7 Structural engineering analysis and documentation (stamped and signed by a Structural Engineer registered in the State of Connecticut) shall be provided certifying that the solar photovoltaic system can support any loads resulting from local applicable seismic and wind-load activity in addition the facilities structural integrity can support the revised roof loading.

3.3.8 The project design will be reviewed by CSCU System Office and SCSU. The seismic component of the design will also be subject to a peer review, which will be arranged and funded by CSCU. Plans must be approved by the State Fire Marshal and DCS, Office of the State Building Official and FM Global. CSCU staff will assist in taking the design through any required review.

#### 3.4 MATERIALS

3.4.1 General

3.4.1.1 All aspects of construction shall meet the more stringent of Federal, State, and Local building codes.

3.4.1.2 All components shall be new and direct from the respective manufacturer; used or refurbished materials are not permitted.

3.4.1.3 Materials shall be designed to withstand year-round temperatures and conditions to which they are exposed (sunlight, heat, rain, cold, etc.).

3.4.1.4 All PV systems structural components shall be designed in a manner commensurate with attaining a minimum 30 year design life.

3.4.1.5 All required disconnect and over-current protection devices shall be included in the system and accessible for maintenance.

3.4.1.6 All systems shall include all equipment necessary to interconnect with the utility and meet all of the utility's requirements for protection equipment, etc.

#### 3.4.2 Modules

3.4.2.1 PV modules specified must conform to any Connecticut Department of Energy & Environmental Protection's regulations/requirements and must qualify for eligibility under any State of Connecticut Solar Initiatives.

3.4.2.2 System must comply with IEEE 1262 "Recommended Practice for Qualifications of Photovoltaic Modules."

3.4.2.3 Modules shall use crystalline silicon technology. Thin film/amorphous technologies will not be allowed.

3.4.2.4 The solar module manufacturer shall provide a warranty on the solar modules for the duration of this agreement rated with at least 85 percent power output guaranteed over 25 years.

3.4.2.5 The solar module manufacturer shall confirm that the warranty applies on an "as installed basis," i.e., it will confirm the panels were installed according to its requirements and specifications for installation.

3.4.3 Mounts

3.4.3.1 Photovoltaic mounts for systems on roofs (if/when applicable) must not require penetrating the roof.

3.4.4 Electric Power Requirements:

3.4.4.1 Power provided must be compatible with the onsite distribution system.

3.4.4.2 Power capacity should be measured at the inverter AC output using the PVUSA Test Conditions (PTC), i.e. 1,000 Watts/m220 degree C ambient temperature and wind speed of 1 m/s.

3.4.4.3 Systems must be designed and installed using UL or ETL listed components, including mounting systems

3.4.4.4 Modules must be certified to UL 1703 – "Flat-Plate Photovoltaic Modules and Panels"

3.4.4.5 Inverters must comply with the following requirements:

- IEEE 929-2000 "Recommended Practice for Utility Interface of Photovoltaic Systems"
- UL 1741 "Standard for Static Inverters and Charge Controllers for use in Photovoltaic Systems" listed on the CEC list of eligible inverters

3.4.4.6 All Balance of Systems (wiring, component, wiring, conduits, and connections) must be suited for conditions for which they are to be installed. Inverters shall be installed in all-weather enclosures (NEMA 4) suitable for exterior location. An interval data meter must be installed to measure the AC output of the inverter. This meter should be located in close proximity to the billing meter and in a location accessible to institution facilities personnel.

3.4.4.7 Interconnection must comply with "Rule 21" affecting the IOUs in Connecticut. Interconnection must be acceptable to the distribution utility. Licensee will assist the institutions in preparing and submitting appropriate interconnection agreements with the local utility company. This shall be done at no cost or liability to the institution.

3.4.5 Structural Requirements

3.4.5.1 All structures, including array structures, shall be designed to resist dead load, live load, plus wind and seismic loads to the geographic area.

3.4.5.2 Solar photovoltaic systems must be able to withstand wind speeds of at least 110 mph.

3.4.5.3 Thermal loads caused by fluctuations of component and ambient temperatures must be combined with all the above load combinations.

3.4.5.4 All structural components, including array structures, shall be designed in a manner commensurate with attaining a minimum 30 year design life. Particular attention shall be given to the prevention of corrosion at the connections between dissimilar metals.

3.4.5.5 The structural design should provide for easy and cost effective repair or replacement of the roof. Licensee shall expect to remove and replace roof mounted solar systems no more than one time per building during the contract period at no expense to the institution.

#### 3.4.6 Metering

3.4.6.1 Revenue grade Interval Data Recording (IDR) meters shall be provided complete with industry standard telemetry for communication with Ethernet, cellular or other common output capabilities.

3.4.6.2 Meters must provide minimum 1-minute intervals.

3.4.6.3 Meters shall conform to any requirements of DEEP metering, programs, and all other applicable State and Federal incentive programs.

#### 3.4.7 Fencing

3.4.7.1 Fencing shall conform to any minimum requirements of utility company interconnection agreements, governing code requirements, LREC/ZREC funding programs, OSBI and FM Global requirements.

3.4.7.2 Fencing shall be chain link, at least 6' high, black coated vinyl, 9-gauge minimum mesh, with top and bottom rails, concrete footings for support posts and a sufficient number of vehicular gates to facilitate proper maintenance access within the limits of the ground mounted array area as determined by SCSU.

#### 3.4.8 Lighting

3.4.8.1 The existing four (4) 4-head parking lot light poles that serve the "Dog-leg" section of Lot #9 shall be retrofitted by the Proposer with the SCSU standard Cree LED retrofit light fixture with equal lighting foot-candle output and throw coverage as part of this project.

3.4.8.2 For the duration of the PPA agreement, the Proposer shall be responsible for the operation, maintenance and replacement of these light fixtures at no additional cost to SCSU.

3.4.8.3 Any existing parking lot lighting that needs to be removed in Lot #9 for the bid supplement option (Site #3) Parking Lot Canopy array shall be replaced with suitable LED lighting fixtures as

needed on the underside of the parking canopy structure to provide foot-candle output and throw coverage equal to or greater than the existing lighting output in the same area.

#### 3.5 ENVIRONMENTAL PERMITTING

Proposers are responsible for any required environmental permitting process and should determine whether the project is subject to any DEEP environmental impact assessment/report.

Proposers shall design, furnish and install and operate the system to accommodate the existing known floodplain elevations that cover a portion of the existing parking lot #9, including the "dog-leg" section, and the proposed PV ground and parking canopy array project areas.

#### 3.6 PROJECT MANAGEMENT

Proposers are expected to provide a dedicated project manager who will guide the implementation of the project from contract execution through to operation. The institution will expect regular meetings and sufficient documentation during the project implementation to verify progress against a schedule and to effectively identify and resolve issues during the implementation process. The Proposer's contractor must maintain qualified on-site project management/supervision whenever work is proceeding on site.

### 3.7 QUALITY ASSURANCE

3.7.1 All generating equipment shall be certified by Underwriter Laboratories (UL). The system shall be comprised of UL listed components or in cases where a UL listed component is not available; the component shall be listed by another OSHA recognized National Recognized Testing Laboratory (NRTL).

3.7.2 All installations shall meet or exceed Conn-OSHA requirements for safety and equipment access.

3.7.3 The design, construction, and finalized installation shall be completed in accordance with the latest applicable version of the National Electrical Code (NEC), Uniform Building Code (UBC), California Building Code (CBC), International Building Code (IBC), American Society of Civil Engineers (ASCE), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), American National Standards Institute (ANSI), Underwriters Laboratory (UL), Institute of Electrical and Electronics Engineers (IEEE), American Concrete Institute (ACI), Connecticut Occupational Safety and Health (Conn-OSHA), all Federal, State, and Local construction and interconnections codes, and all other incentive and rebate programs.

3.7.4 Contractor shall submit to the institutions a copy of its quality assurance/quality control (QA/QC) plan for review not later than 45 days after contract execution for review and comment. The system shall be managed in accordance with the program. The QA/QC program shall include, but is not limited to, such procedures and systems as the following:

- All wire insulation testing—Megger testing or very low frequency testing
- Mechanical system— mounting structures

- Factory testing of inverters and transformers by the manufacturer
- PV source open-circuit measurements—VOC at combiner boxes
- Fuse tests
- Termination pull testing
- All visual inspections
- Grounding continuity testing
- Earth-ground resistivity testing
- PV module inspection and manufacturer documentation of factory test per the manufacturer's existing program
- Metering and instrumentation calibration testing
- Step-up transformer testing
- Inverter phase rotation and matching with utility if required
- Relay settings at the point of interconnection to institutions if required
- Other Contractor-prescribed procedures

All QA/QC testing procedures onsite shall be witnessed and documented by a qualified representative of Contractor. The institutions shall observe and witness QA/QC as necessary and at its discretion. A qualified engineer of Contractor or Designee, shall date and sign documentation indicating completion and acceptance of each onsite QA/QC test procedure.

#### 3.8 PROPOSER / INSTALLER CONTRACTOR EXPERIENCE

The selected Proposer and/or any installer shall be licensed with the Connecticut Contractors State License Board to perform all phases of system construction, shall be approved by the equipment manufacturer to install each component and have no less than five (5) years experience installing similar systems. Additionally, any subcontractors shall be licensed by the Connecticut Contractors State License Board to perform any and all ancillary work that may be required, including but not limited to concrete, trenching, etc.

#### 3.9 INSTALLATION

- 1. The Designee shall meet and confer with CSCU and SCSU staff throughout the installation process (from design through final signoff) to ensure that the installed PV equipment and auxiliaries do not create problems for the operation and maintenance of SCSU's operations. At two points during the Contractor's design process, namely Preliminary Engineering (SD), and Detail Engineering (DD), the Contractor shall submit design documents to CSCU with sufficient information to allow CSCU to determine if the proposed design is compatible with campus operations. CSCU technical approvals will consist of PV equipment placement, interconnections with existing equipment and utilities, interface with existing conditions, verification that developer will obtain required approvals and inspections and permits, safe conditions and access to existing equipment are maintained, developers proposal appears practical and feasible. The Developer shall respond to all review comments made by CSCU.
- 2. The Contractor shall provide a critical path schedule of the PV project. The critical path time schedule will include no fewer than the following major project phases. (The

Contractor's construction activities shall adhere to the Project Schedule set forth in Section I of this RFP.)

- a. Pre-construction:
  - (i) The Contractor shall obtain, at its expense, all permits and/or certificates required for installation and operation of the photovoltaic system(s); and
  - (ii) The Contractor shall obtain all approvals from CSCU, SCSU, FM Global, OSBI and any other third parties necessary for installation and operation of the PV Systems;
- b. Delivery of the PV;
- c. Installation of the PV; and
- d. Complete PV testing and commissioning.
- 3. The Contractor will be solely responsible for all work, including but not limited to: (i) all professional fees, permits costs, and material and labor expenses related to the installation, commissioning, maintenance, operation and decommissioning of the PV System; and (ii) all auxiliary equipment required to provide a fully operational system that meets the requirements of this RFP.
- 4. The Contractor shall provide a measurement and verification (M&V) plan showing all associated instrumentation and data collection to CSCU for approval.
- 3.9.1 General

3.9.1.1 All safety, electric, building, and labor code requirements at the Federal, State, and Local levels shall be met.

3.9.1.2 The installation shall be completed per the Manufacturer's written installation manual.

3.9.1.3 All cables, conduit, exposed conductors, and electrical boxes shall be secured and supported according to code requirements.

3.9.1.4 All applicable environmental regulations shall be met.

3.9.1.5 The Supplier shall obtain all required approvals.

3.9.2 System Electrical

3.9.2.1 Electrical construction shall meet all Federal, State, and Local electric codes.

3.9.2.2 All outdoor panel enclosures shall be weatherproof and capable of surviving intact under the site environmental conditions.

3.9.2.3 All electrical/electronic equipment shall have surge and lightning protection. All electrical/electronic equipment and metal surfaces shall be properly grounded as required in the NEC and as required by the equipment manufacturer for protection of personnel and equipment due to fault.

3.9.2.4 Other technical codes that will apply include:

3.9.2.5 AMSE PTC 50 (solar PV performance)

- ANSI Z21.83 (solar PV performance and safety)
- NFPA 853 (solar PVs near buildings)
- NEPA 70 (electrical components)
- IEEE 1547 (interconnections)
- National Electrical Safety Code ANSI C2 1999
- All applicable State Building Codes and requirements

#### 3.9.3 Installation Standards

3.9.3.1 The Supplier shall obtain appropriate certifications from a Professional Engineer for all structural, seismic, building code, fire code, FM Global, and wind-loading requirements for the specific application and provide them as part of the post-installation package.

3.9.3.2 System installation shall conform to Manufacturers' installation manuals and approved project drawings and specifications.

3.9.3.3 Mounting hardware shall be compatible with the site considerations and environment.

3.9.4 Meters, Monitoring, And Data Acquisition System

3.9.4.1 The Supplier shall develop and provide a remote monitoring program that will allow the College to monitor the performance of the solar photovoltaic generation system in historical and real-time for the life of the equipment.

3.9.4.2 Meters shall be integrated to the institution's Energy Management Control System (EMCS)/BMS for the purposes of metering, monitoring and data collection of electricity production.

3.9.5 System Start-Up

3.9.5.1 All start-up and testing activities shall be witnessed by the institution's Project Manager, Construction Inspector, and/or other appropriate Designees.

3.9.5.2 The Supplier shall thoroughly inspect the installation to ensure compliance with all applicable safety regulations and requirements and obtain approval of institutional staff or Designee, prior to operation.

3.9.5.3 Start-up shall be per all manufacturers' instruction.

3.9.5.4 The system shall be started and tested in accordance with any regulations of the local utility and net metering programs.

3.9.5.5 Contractor shall supply the University with all manuals and/or handbooks (in printable electronic format) that provide, either in a single manual or handbook or collectively, complete operating and maintenance instructions (including inventories of spare parts and tools and parts lists with ordering instructions) for each major piece of equipment and system.

#### 3.9.6 System Commissioning

Complete a system commissioning per the Specifications and equipment manufacturer's written instructions. System commissioning shall meet all requirements of utility and state rebate programs. Contractor shall provide the proposed commissioning and startup plan for the installation. Contractor shall coordinate with the institution to develop an acceptable commissioning plan that includes a checkout and startup procedure.

This work will assure that:

- Systems are activated in a manner that is safe for personnel as well as for the equipment;
- Contractor work is complete and according to the contract documents;
- Systems perform as required by the contract documents and are ready to be turned over to the institution.

As the construction and installation of the systems nears completion, Contractor shall prepare punch lists and conduct system walk-downs, sub-system and system checkouts, startups, testing, and turnovers.

The final approved Acceptance Test and Commissioning Procedures shall, at minimum, include the following:

- Safety plan during startup and commissioning
- Review of all QA/QC testing on the DC and AC sides of inverters
- Detailed procedure for PV System startup, including switching sequencing
- Confirm testing and energizing inverters in conformance with manufacturer's recommended procedures; note operating voltages; and confirm inverter is performing as expected
- Under full sun conditions, and after at least 15 minutes of operation, taking and recording
- PV System operating data—such as but not limited to MWDC, MWAC, VDC, VAC, IDC, IAC, Solar Radiation, etc.
- Testing the system control and monitoring system to verify that it is performing correctly
- Testing the communication system for offsite monitoring
- Testing the installation of metering and protective relaying to verify they meet utility requirements
- Detailed procedure for interface and initialization with the grid
- Documentation of successful startup and commissioning procedure
- Written notification submitted by Contractor to University that the completion of Acceptance Testing and Commissioning has occurred

Upon successful completion of energizing and startup, the system will be considered operable. The system will then move to the Interim Operating Period where Contractor shall make the installations ready for Capacity Testing.

#### 3.9.7 Final Installation and Commissioning Tasks

Contractor shall perform the following tasks without limitation prior to final acceptance by the College:

3.9.7.1 Identify punch-list items and provide timeline for completion. Contractor shall complete the items on the punch-list in accordance with the standards described herein, and as quickly as reasonably practical. Contractor shall coordinate with the institution regarding continued site access.

3.9.7.2 Conduct a final clean-up of the Site.

3.9.7.3 Remove all materials and equipment belonging to the Contractor or its subcontractor(s) from the site (other than equipment, supplies, and materials necessary or useful to the operation or maintenance of the site, and equipment, supplies, and materials directed by College to remain at the site).

3.9.7.4 Tear down and remove all temporary structures on the site built by Contractor or its subcontractors and restore such areas to a condition consistent with that of a newly constructed solar PV system, except as required by any provision of this Agreement.

3.9.7.5 Remove all waste, rubbish, and hazardous material from and around the site.

3.9.7.6 Provide College with copies of all O&M manuals and warranties for the installed systems.

3.9.7.7 Provide final as-built documents upon completion.

3.9.8 Interim Operating Period

Following successful completion of the startup and commissioning of the systems, the Contractor shall have a maximum of 45 days "Interim Operating Period" to resolve any operating issues. The College designated operating and maintenance team shall receive training regarding the systems during this period. After the successful execution of the Interim operating period, the Contractor shall perform a capacity test procedure to verify the rated output for the system. Contractor is not required to use the maximum 45 days, rather it is an allowance of time. For example, Contractor may be ready for capacity testing after 10 days.

#### 3.10 FINAL ACCEPTANCE DATE

3.10.1 The institution shall determine when the system is working and acceptable per the specifications, scope, terms and conditions as specified by this RFP document and the resultant agreement.

3.10.2 At least 30 days before the expected Final Acceptance Date, selected proposer shall train the institution in the operation and recommended maintenance of the PV systems. It is expected that training will be provided for Facilities Maintenance staff and other interested institution personnel to promote understanding, monitoring, and maintenance of the system. A portion of this training shall specifically include how to properly and safely isolate the PV system from the existing institutionally owned and operated equipment and systems that the institutions will need to continue to maintain and service.

#### 3.11 MAINTENANCE REPAIRS

3.11.1 The proposer shall be responsible for all maintenance and repairs of the system. However, the institution does understand that some regular, maintenance and repair activity is required. The institution will provide access to the facilities interior, when needed, as soon as feasible but the Proposer should anticipate a minimum 24 hour notice to gain access for interior maintenance/repair work.

3.11.2 Selected proposer shall supply institution with all manuals and/or handbooks (in printable electronic format) that provide, either in a single manual or handbook or collectively, complete operating and maintenance instructions (including inventories of spare parts and tools and parts lists with ordering instructions) for each major piece of equipment and system that is a responsibility of the institution.

#### 3.12 EMERGENCY SHUT-OFF TRAINING

Selected proposer will train the institution's Facilities Maintenance staff on how to perform emergency shut-off procedures.

### 4 TECHNICAL & NARRATIVE RESPONSE

#### 4.1 TECHNICAL DESCRIPTION

Provide a technical description of the system. Information to be included in the description:

- Power capacity (DC kW) measured at the inverter(s) input
- Power capacity (AC kW) measured at the electrical interconnection point
- Total System efficiency
- Annual expected minimum output AC kWh production with a description of the estimation methodology used. This must be consistent with values provided in the price proposal.
- Output demand and energy data by month and time of use period. This level of output data is considered optional for Proposers but will be helpful to the Institutions in accurately assessing the value of the system.
- A description of the equipment deployed, including manufacturer, model number, efficiency, and warranty
- A description of the interconnection with the campus electricity distribution system
- A description of other balance of system components
- A description of the mounting and structural support systems for the system.
- Note that the aesthetic character of the mounting structure and overall system installation will be considered. Thus, the proposal should include enough information to assess the solution's aesthetic characteristics. Inclusion of photographs, photo simulations, material samples, and architectural elevations are required under this item. Please include the height of the proposed system. For the ground mount system, include all relevant details of the fencing system and components to be used to enclose and secure the PV system area. For the roof mounted

system, include any and all required roof guards necessary along the perimeter of the proposed system.

#### 4.2 **PROJECT TEAM**

Describe the proposed project team, including:

- Contact information for the lead of the proposal team, responsible for the response submittal. This person will be contacted with questions and communications regarding the RFP response.
- An organizational chart that includes all key project members. Members provided as part of the proposal shall be identified by name and title (and organization if required for clarity). The organization chart should include all components of the project including contract management, design, equipment sourcing, system integration, installation, financing, metering, and billing.
- A description of the roles and responsibilities for each team member.

#### 4.3 PROJECT APPROACH

Give a detailed description of your approach to project delivery, including an overview of the project implementation process. This overview should describe specific implementation phases or steps that will be conducted to deliver the product.

#### 4.4 **PROJECT SCHEDULE**

Provide a schedule for the project that includes major work streams and milestones. The format should be a list of project activities with start and end dates. Include a schedule section pertaining to each of the project locations.

#### 4.5 MONITORING AND DATA PRESENTATION

Provide a description of the monitoring system for the project including:

- Monitoring systems what systems will be included in the proposed system to monitor, diagnose, and track the solar photovoltaic output of the system. At a minimum, a dashboard shall be created and/or linked to the SCSU sustainability website, details to be determined during the project submittal process.
- Access to and presentation of data.
- EMCS Integration how monitoring data is integrated to the institution's building energy management and control system.

## 4.6 OPERATIONS AND MAINTENANCE

Provide a complete description of all operations and maintenance activities that will be provided for the system. Please:

- List and describe each maintenance activity
- Include the frequency at which the activity will be performed
- Identify any O&M activity that is required of University personnel
- Identify maintenance and repair costs that will not be covered in the proposal.
- Describe training that is included in the proposal.
- Provide warranty periods for any parts of the system as applicable.

## 4.7 PAST PROJECT EXPERIENCE

Provide a list of past projects completed by the proposed team that are similar in scope as that proposed. The description for each project/program should include:

- The project name
- Location
- Project size (total cost and project capacity in kW (DC))
- Project delivery type for example, provided for direct purchase, lease or provided through a power purchase agreement
- Year completed
- Name of client contact and contact information
- Brief physical description of the project (equipment manufacturer, model, etc.)

# 4.8 TERMS AND CONDITIONS ACCEPTANCE AND EXCEPTIONS

Please indicate any exceptions to the RFP documents, including all exhibits. Also, please confirm acceptance of all remaining portions of the RFP including all exhibits, not identified as an exception.

- Technical Exceptions: The Proposer shall clearly describe any and all deviations in its Proposal from the functional requirements stated in this RFP and also describe any product enhancements that could be made by the Proposer to satisfy those requirements.
- General Exceptions: The Proposer shall also clearly state its objections, exceptions, or alternatives to the general (non-technical) requirements stated in this RFP, including the provisions of Attachment H, Contract Provisions. If the Proposer has no general exceptions to present, this fact should be stated in the Proposal.
- CSCU will not consider the submission of the Proposer's standard software license and maintenance agreements to be a presentation of exceptions. Every exception must be stated as such in the document mentioned above.
- Proposers are cautioned that if CSCU is unwilling or unable to approve a request for exception to the RFP requirements and the Proposer does not withdraw the request, the proposal will be deemed to be non-responsive and ineligible for contract award.

Please indicate any known CSCU and/or Southern Connecticut State University employees or near relatives that own or control more than a ten percent (10%) interest in your organization. If there are none, so state.

## 4.9 PRICE PROPOSAL

Proposers should make the following assumptions as part of their pricing:

- Taxes on Solar Power Sales: Proposers shall assume that institution facilities will not pay property, city energy or utility user's tax on solar energy purchased or on proposers equipment.
- Renewable Energy Credits (RECs): Ownership of Renewable Energy Credits, Green Tags, or similar credits generally, "RECs" associated with the project shall go to the Proposer.
- The proposer shall submit a minimum of 4 pricing proposal as detailed below:
  - One base bid and one supplemental bid pricing proposal shall carry the following assumptions for all proposers to facilitate an equalized proposal comparison:
    - Large ZREC bid pricing shall be \$50/REC.
    - PPA contract term shall be 20-years, fixed pricing.
  - At least two additional pricing proposal(s) shall be submitted by all proposers with their recommended ZREC bid pricing, PPA duration and pricing structure one each for the base bid option and the supplemental bid option. A brief summary description of the recommended ZREC bid pricing shall be included to demonstrate the Proposer's understanding of the ZREC market and their risk/reward logic of their proposed alternative ZREC pricing structure.
- Innovative Pricing Structures or Additional Pricing Information: Proposers should clearly and concisely outline and explain their proposed pricing structure to the institutions. The institution will consider, contract terms that may include, but are not limited to, floor and ceiling prices, prices indexed to market or tariff rates, short and long term transactions, purchase and sale of renewable energy credits, and other provisions that will optimize the financial benefits to the institutions and ensure project viability for the Proposers. In any case, the institutions ask that Proposers provide a reasonable representation of the pricing in their proposal.

## 4.10 BILLING

Provide a description of the billing process. Please include:

- Options for bill access (mail, e-mail, on-line)
- A description of any true-up billing processes

## 4.11 FINANCING

- 1. The Proposer will be responsible for obtaining any federal tax credits and carbon offsets available to it.
- 2. It is presently anticipated that the term of the Energy Purchase Agreement to be negotiated and executed by the Proposer and the institution will be twenty (20) years, with the option of one (1) five-year contract extension if agreed upon by the parties. However, CSCU realizes that the useful life of PV components vary depending upon the manufacturer. Accordingly, if a proposer determines that the anticipated contract term described in this section is not optimal, it may propose an alternate contract term of lesser or greater length (not to exceed a total base and extended contract length of twenty-five years). Any proposer proposing an alternate contract term should provide an explanation for its proposal.
- 3. The Proposer will be paid an agreed-upon fee by the institution on a monthly basis for electricity by operation of the PV systems. The amount of the monthly invoice will be stated by the Proposer within the "Project Information Statement."
- 4. The Proposer is encouraged to seek supplemental grant funding that will reduce the overall program cost to the institution.

CSCU and SCSU make no representations regarding the potential of any available grant funding. Neither CSCU nor WCSU will provide information regarding the availability of grant funding or respond to questions asked regarding such funding.

## 4.12 PROPOSAL SUBMITTALS

The following submittals shall be provided with the proposal:

- Solar photovoltaic system layout, preliminary design documents and ground/roof plans.
- System description including dimensions, type of installation, product data sheets, single line electrical diagram, structural engineer certification.
- Description of the anchorage structures showing details of how the system will be anchored.
- System annual electricity output.
- A summary of all anticipated approvals that will be required for the proposed project.
- Schematic and preliminary designs
- Project implementation and completion schedule.
- Product description information
- Equipment details, descriptions, and specifications
- Equipment/system decommissioning plan

# 5. EVALUATION OF PROPOSALS

Proposals will be evaluated by a CSCU Committee against the following criteria:

### 5.1. EVALUATION OF PROPOSAL:

Twenty Five percent (25%) of the evaluation of submitted proposals will concern the strength of the financial commitment demonstrated by the proposal. Factors demonstrating the strength of the financial commitment include, but are not limited to:

- Examples of similar projects that include cost details, operating performance data and owner contract information;
- Experience, length of service providing similar projects
- Strength of funding commitment (funding commitment sources are to be identified);
- Project readiness (a shorter timeline for project implementation is preferred); and
- Schematic design, written project outline, and product information.
- Locality of project team members, offices & relevant projects.

### 5.2. COST EFFECTIVENESS:

Seventy Five percent (75%) of the evaluation of submitted proposals will concern the cost-effectiveness of the project. Factors demonstrating cost-effectiveness include, but are not limited to:

- Minimum yearly kilowatt-hours of PV system electricity to be provided to SCSU for twelve consecutive months as stated in Section 9.2; and
- Generation cost per each kilowatt-hour of electricity.

# CSCU RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSALS IRRESPECTIVE OF SCORE.

# 6. PROPOSAL SUBMISSION REQUIREMENTS

**6.1** Each proposer must provide the following information:

- Provide information on its company, including a minimum of three (3) client references and any relevant certifications for similar installations
- The name, title, telephone number, and e-mail address of the appropriate person to contact concerning the proposal
- The location of the office that will be serving CSCU
- The number of years the proposing company has been in business under this name
- If the company is a subsidiary of another company, the name of the parent company
- Financial rating of the company, or other indicator of financial strength and stability
- Completed RFP Attachments A through G, inclusive
- Information on factory approved installers (if system is not installed by Proposer)
- Identify all project partners, including but not limited to significant subcontractors, subconsultants, financers and their respective roles to be used on this project.

*NOTE:* Missing or non-notarized affidavits may result in proposal rejection. Be sure that all affidavits are completed and notarized. New affidavits must be submitted with a response to this RFP. Previously submitted affidavits may not be used to satisfy this requirement.

# 7. GENERAL INSTRUCTIONS TO PROPOSERS

## 7.1 GENERAL

- A. RFP responses must be submitted in sealed envelopes upon which must be written: (i) the proposer's name and address (ii) the RFP title and number (iii) the date and time the proposal is due
- B. In order for its proposal to be considered, the proposer must answer all questions and supply all required materials.
- C. Because the State of Connecticut is exempt from the payment of state and federal excise, transportation, and sales taxes, such taxes must not be included in prices proposed.
- D. If the proposer is a business entity, an authorized official of the entity must sign the proposal and the proposal must include the names, titles, addresses, telephone numbers

and e-mail addresses of individuals with authority to negotiate and contractually bind the entity.

- E. General Conditions:
  - 1. The State of Connecticut reserves the right to accept or reject any or all proposals submitted for consideration. All proposals will be kept sealed until the date, time and place of public opening.
  - 2. The State of Connecticut reserves the right to make an award in whole or in part, and to contract with one or more proposers for services.
  - 3. Any contract awarded as a result of this RFP must be in full conformance with statutory requirements of the State of Connecticut and the federal government.
  - All proposals submitted in response to this RFP will become the property of the 4. State of Connecticut and subject to the provisions of section 1-210, et. seq, of the Connecticut General Statutes (the Connecticut Freedom of Information Act). Due regard will be given for the protection of proprietary or confidential information contained in all proposals received. However, all materials associated with this RFP are subject to the terms of the Connecticut Freedom of Information Act ("FOIA") and all applicable rules, regulations and administrative decisions. If a firm is interested in preserving the confidentiality of any part of its proposal, it will not be sufficient merely to state generally that the proposal is proprietary or confidential in nature and not, therefore, subject to release to third parties. Instead, those particular sentences, paragraphs, pages or sections that a firm believes to be exempt from disclosure under FOIA must be specifically identified as such. Convincing explanation and rationale sufficient to justify each exemption consistent with Section 1-210(b) of FOIA must accompany the proposal. The rationale and explanation must be stated in terms of the reasons the materials are legally exempt form release pursuant to FOIA. Firms should not require that their entire proposal, note the majority of the proposal, be confidential. Any submitted proposal, once execution of a contract is complete and any completed contract will be considered public information. The Board of Regents has no obligation to initiate, prosecute or defend any legal proceeding or to seek a protective order or other similar relief to prevent disclosure of any information that is sought pursuant to a FOIA request. The contractor has the burden of establishing the availability of any FOIA exemption in any proceeding where it is an issue. In no event shall the Board of Regents have any liability for the disclosure of any documents or information in its possession which the Board of Regents believes are required to be disclosed pursuant to FOIA or other requirements of law.
  - 5. Any proposal must be valid for a period of 120 days from the due date.
  - 6. CSCU reserves the right to amend or cancel this RFP prior to the due date and time, if it is in the best interests of CSCU to do so.

- 7. CSCU reserves the right to reject the proposal of any proposer who or which is in default of any prior contract or for misrepresentation.
- 8. CSCU reserves the right to correct inaccurate awards resulting from its clerical errors.
- 9. Proposals are subject to rejection in whole or part if they limit or modify any of the terms and conditions and/or specifications of the RFP.
- 10. A proposer, if requested to do so, must be prepared to present evidence of experience, ability, service facilities, and financial standing necessary to satisfactorily meet the requirements set forth or implied in its proposal.
- 11. No additions or changes to the original proposal will be allowed after submittal. While changes are not permitted, clarification at the request of the agency may be required at the proposer's expense.
- 12. By responding, the proposer implicitly states that the proposal is not made in connection with any competing proposer submitting a separate response to the RFP, and is in all respects fair and without collusion or fraud. It is further implied that the proposer did not participate in the RFP development process, had no knowledge of the specific contents of the RFP prior to its issuance, and that no employee of CSCU participated directly or indirectly in the preparation of the proposal.
- 13. The proposer shall bear all costs associated with its response to this RFP, including the costs of any presentations and/or demonstrations.
- 14. The proposal must include a summary of the proposer's affirmative action plan and a copy of the proposer's affirmative action policy statement.

Regulations of Connecticut State Agencies Section 4-114a-3(10) requires agencies to consider the following factors when awarding a contract:

- a. The proposer's success in implementing an affirmative action plan
- b. The proposer's success in developing an apprenticeship program complying with Section 46a-68-1 to 46a-68-17 of the Connecticut General Statues, inclusive;
- c. The proposer's promise to develop and implement a successful Affirmative Action Plan;
- d. The proposer's submission of EE0-1 data indicating that the composition of its work force is at or nearby parity when compared to the racial and sexual composition of the work force in the relevant labor market area, and
- e. The proposer's promise to set aside a portion of the contract for legitimate small contractors and minority enterprises.

15. The State reserves the right to award in part, to reject any and all proposals in whole or in part, and to waive technical defects, irregularities and omissions if, in its judgment, the best interest of the State will be served thereby.

# 8. RIGHTS RESERVED TO CSCU SYSTEM

CSCU reserves the right to reject any and all proposals in whole or in part, award in part, award to multiple contractors, and waive technical defects, irregularities and omissions if, in its judgment, the best interest of CSCU is served. CSCU reserves the right to negotiate with any proposer prior to awarding a contract and to negotiate with the proposer to which an award is made the terms of the contract to be entered into between that proposer and CSCU. It is anticipated that the details of the final ZREC pricing to be submitted to the United Illuminating large LREC/ZREC program shall be negotiated between the Proposer and CSCU.

CSCU reserves the right to negotiate a buyout of the PV system at any time during the contract duration and/or to negotiate additional extension(s) of the contract duration.

Any award(s) arising from this RFP may be extended to other constituent units of higher education, for the installation of similarly sized PV systems at other College or University campus locations at for the rates proposed, if mutually agreed upon by both parties.

# 9. PROJECT INFORMATION STATEMENT

## 9.1 PROJECT INFORMATION STATEMENT FOR SOUTHERN (SCSU)

- 1. Provide a brief description of the technology proposed to be used and value to SCSU for that technology.
- 2. Discuss how and to what degree your proposal will technically benefit SCSU.

3. Discuss how and to what degree your proposal will economically benefit SCSU.

4. Describe maintenance needs and any projected down time required of the PV systems.

5. What is the service life of the PV system?

6. What is the system's electrical power output?

7. How does the system operate relative to the power grid?

8. What is the reliability record of the system?

9. What is the annual degradation of the system for each year of operation over a 25-year life? Provide annual % decrease and total expected system capacity at the 25-year milestone.

10. Explain the efficiency of a proposed PV panel.

- 11. The proposer will guarantee a PV availability rate of \_\_\_\_\_% that accounts for \_\_\_\_\_% total annual hours.
- 13. The proposer will provide no less than \_\_\_\_\_kWh of electrical energy on a yearly basis at the voltage at the Point(s) of Interconnection.
- 14. Annual cost to Southern (SCSU):
  - a. The proposer shall issue a single monthly invoice to Southern for all useable electricity Page 35

supplied to Southern from the PV system. No other payments will be made to the proposer. Respondent shall fill in the matrix boxes below (Table 9.1.14.a) for the total cost per kWH per year for each proposed contract year.

- 16. The proposal is contingent on the Proposer obtaining ZREC funds for each project. Since the proposal submission costs listed in item 14 of this section, "IX Project Information Statement," are contingent of supplemental funding that would be provided from the United Illuminating Large LREC/ZREC program then the proposer shall include in their proposal a minimum of four (4) pricing proposals:
  - a. Table 9.1.14.a Proposer shall use an assumed value of (\$50/REC) that may be submitted to the Large ZREC program for the base bid option
  - b. Table 9.1.14.b Proposer shall use their preferred REC value for the base bid option.
  - c. Table 9.1.14.c Proposer shall use an assumed value of (\$50/REC) that may be submitted to the Large ZREC program for the supplemental bid option
  - d. Table 9.1.14.d Proposer shall use their preferred REC value for the supplemental bid option.
  - e. Additionally, Proposer shall use Table 9.1.14.e to show the individual unit costs of the 3 different site locations and array types for all of their pricing proposal options. If additional pricing options are submitted beyond the four (4) minimum requested Proposers shall submit a breakdown in a similar format to Table 9.1.14.e for the additional pricing proposals.
  - f. The final REC value to be submitted by the Proposer on behalf of the CSCU shall be negotiated. Final pricing to be submitted shall be determined solely by the CSCU.
- 17. Discuss the proposed system decommissioning process and how the proposer will restore the site to its original conditions including the complete removal of all of system equipment including ancillary system components.

# Table 9.1.14.a Cost of Electricity Per kWH – BaseBid \$50/REC, Fixed Price (SCSU): Site #1(ground array) & Site #2(roof array)

	Base Term Contract (Fixed Pricing)	Contract Extension One
YEAR 1		
YEAR 2		
YEAR 3		
YEAR 4		
YEAR 5		
YEAR 6		
YEAR 7		
YEAR 8		
YEAR 9		
YEAR 10		
YEAR 11		
YEAR 12		
YEAR 13		
YEAR 14		
YEAR 15		
YEAR 16		
YEAR 17		
YEAR 18		
YEAR 19		
YEAR 20		
YEAR 21		
YEAR 22		
YEAR 23		
YEAR 24		
YEAR 25		

ZREC Value for this table shall be \$50/REC, fixed 20-year pricing for equalized proposal comparison and may be used for submission to the United Illuminating Large LREC/ZREC program.

# Table 9.1.14.b Cost of Electricity Per kWH – BaseBid Proposer defined \$ /REC (SCSU): Site #1(ground array) & Site #2(roof array)

	Base Term Contract	Contract Extension One
YEAR 1		
YEAR 2		
YEAR 3		
YEAR 4		
YEAR 5		
YEAR 6		
YEAR 7		
YEAR 8		
YEAR 9		
YEAR 10		
YEAR 11		
YEAR 12		
YEAR 13		
YEAR 14		
YEAR 15		
YEAR 16		
YEAR 17		
YEAR 18		
YEAR 19		
YEAR 20		
YEAR 21		
YEAR 22		
YEAR 23		
YEAR 24		
YEAR 25		

ZREC Value for this table shall be determined by Proposer \$\_\_\_\_/REC and may be used for submission to the United Illuminating Large LREC/ZREC program.

# Table 9.1.14.c Cost of Electricity Per kWH – Supplemental Bid \$50/REC, Fixed Price (SCSU): Site #3 (Parking Canopy Array)

	Base Term Contract (Fixed Pricing)	Contract Extension One
YEAR 1		
YEAR 2		
YEAR 3		
YEAR 4		
YEAR 5		
YEAR 6		
YEAR 7		
YEAR 8		
YEAR 9		
YEAR 10		
YEAR 11		
YEAR 12		
YEAR 13		
YEAR 14		
YEAR 15		
YEAR 16		
YEAR 17		
YEAR 18		
YEAR 19		
YEAR 20		
YEAR 21		
YEAR 22		
YEAR 23		
YEAR 24		
YEAR 25		

ZREC Value for this table shall be \$50/REC, fixed 20-year pricing for equalized proposal comparison and may be used for submission to the United Illuminating Large LREC/ZREC program.

# Table 9.1.14.d Cost of Electricity Per kWH – Supplemental Bid Proposer defined\$ /REC (SCSU): Site #3 (Parking Canopy Array)

	Base Term Contract	Contract Extension One
YEAR 1		
YEAR 2		
YEAR 3		
YEAR 4		
YEAR 5		
YEAR 6		
YEAR 7		
YEAR 8		
YEAR 9		
YEAR 10		
YEAR 11		
YEAR 12		
YEAR 13		
YEAR 14		
YEAR 15		
YEAR 16		
YEAR 17		
YEAR 18		
YEAR 19		
YEAR 20		
YEAR 21		
YEAR 22		
YEAR 23		
YEAR 24		
YEAR 25		

ZREC Value for this table shall be determined by Proposer \$\_\_\_\_/REC and may be used for submission to the United Illuminating Large LREC/ZREC program.

# Table 9.1.14.e SCSU PPA PV Array Proposal Detail Summary

Base Bid	- CSCU Defined ZREC Unit Price of \$50/REC, 20-	yr fixed price			
		Available	PV Size/	Yr 1 Unit	
		Space	Capacity	Elec. Cost	
Site #	Description	Area (sf)	(AC-kW)	(\$/kwh)	
1	Lot #9 Dogleg - Ground Mounted Array	72,000-sf			
2	Wintergreen Garage - Roof Mounted Array	20,000-sf			
3	Lot #9 - Solar Parking Canopy	N/A - N	ot part of b	ase bid	
		Blended Yr 1	Unit Cost		
Base Bid	- Proposer Defined ZREC Unit Price of \$	/REC			
		Available	PV Size/	Yr 1 Unit	
		Space	Capacity	Elec. Cost	
Site #	Description	Area (sf)	(AC-kW)	(\$/kwh)	
1	Lot #9 Dogleg - Ground Mounted Array	72,000-sf			
2	Wintergreen Garage - Roof Mounted Array	20,000-sf			
3	Lot #9 - Solar Parking Canopy	N/A - N	ot part of b	ase bid	
		Blended Yr 1	. Unit Cost		
Supplem	ental Bid - CSCU Defined ZREC Unit Price of \$5	0/REC, 20-year	fixed price		
		Available	PV Size/	Yr 1 Unit	
		Space	Capacity	Elec. Cost	
Site #	Description	Area (sf)	(AC-kW)	(\$/kwh)	
1	Lot #9 Dogleg - Ground Mounted Array	N/A - Not pa	art of suppl	emental bio	
2	Wintergreen Garage - Roof Mounted Array	N/A - Not pa	art of suppl	emental bio	
3	Lot #9 - Solar Parking Canopy	95,000-sf			
Supplem	ental Bid - Proposer Defined ZREC Unit Price o	f \$/REC			
		Available	PV Size/	Yr 1 Unit	
		Space	Capacity	Elec. Cost	
Site #	Description	Area (sf)	(AC-kW)	(\$/kwh)	
1	Lot #9 Dogleg - Ground Mounted Array	N/A - Not pa	art of suppl	emental bio	
2	Wintergreen Garage - Roof Mounted Array	N/A - Not pa	N/A - Not part of supplemental bi		
3	Lot #9 - Solar Parking Canopy	95,000-sf			

				A	Attachment A	A
ONTRACT COPOSAL ease read refully	Finance 39 Woo	of Regents for Highe e Department odland Street d, CT 06105-2337	r Educatio	٦	BE RET	RM MUST TURNED ROPOSAL
RFP NUMBER	DATE OF OPENING	TIME OF OPENING	AMOUNT OF SU	IRETY (if required)	DAT	E ISSUED
BOR-1605	April 29, 2016	12:15 P.M. E.S.T.	- None		Ар	ril 4, 2016
COMMODITY CLASS/SU	BCLASS AND DESCRIPTION		-PROPOSAL SITE			
OONTACT: Sharon Kroma	as	E-MAIL: kromass@c	edu			
FOR			CONTRACT PE			
Board of Rege	ents for Higher Education	REQUEST FOR P	To be de	termined		
	visions of Sections 10a-151b and 4-2 Finance Department of the Board of	217 of the General Statutes	of Connecticuton, for furnishin			SALS WILL BE
and conditions 2. That should an an earlier date proposal is ma proposal be d conditioned up	osal is executed and signed with full s listed herein. hy part of this proposal be accepted in for acceptance is specified in proposade, at the rates offered and fee sche elayed beyond the period of one hund bon proposer's acceptance.	n writing by the Board within sal schedule, said proposer dule proposed, and in comp dred twenty (120) days or a	n one hundred will furnish and pliance with the n earlier date s	twenty (120) cale d deliver the com provisions listed pecified in propo	endar days from the nodities and / or difference of the difference	he date of opening unle services for which this award of any part of thi h award shall be
	<ul> <li>The undersigned, accepting the co e agency or state agencies named in</li> </ul>				ce therewith, to fur	mish and deliver the
	TYPE OR PRINT NAME OF INDIVIDUAL				BUSINESS AS (Trade N	lame)
SIGNATURE WHEN PROPOSER	BUSINESS ADDRESS STREET		TATE	ZIP CODE		
IS AN INDIVIDUAL	WRITTEN SIGNATURE OF INDIVIDUAL SIGN	NING THIS PROPOSAL	SOCIAL SECUI	RITY NUMBER		DATE EXECUTED
	TYPEWRITTEN NAME		•		TELEPHONE NUM	/BER
	NAME (Type or print names of all partners)	TITLE	NAME			TITLE
	NAME	TITLE	NAME			TITLE
SIGNATURE WHEN PROPOSER	DOING BUSINESS AS (Trade Name)	В	USINESS ADDRES	S STREET	CITY ST/	ATE ZIP COE
IS A FIRM	WRITTEN SIGNATURE OF PARTNER SIGNI	NG THIS PROPOSAL	F.E.I. NU	IMBER	ſ	DATE EXECUTED
	TYPEWRITTEN NAME				TELEPHONE NUM	/BER
	FULL NAME OF CORPORATION				INCORPORATED	IN WHAT STATE
SIGNATURE WHEN PROPOSER	BUSINESS ADDRESS STREET CITY STATE ZIP CODE			F.E.I. NUMBER		
IS A CORPORATION	PRESIDENT SECRETARY TREASURER					
	WRITTEN SIGNATURE OF CORPORATE OF CORPORATION	FICIAL OR PERSON DULY AUTHC	RIZED TO SIGN P	ROPOSALS ON BEH	ALF OF THE ABOVE	TITLE
	TYPEWRITTEN NAME		TELEPH	ONE NUMBER		DATE EXECUTED
FOR ALL PROPOSERS	NAME AND TITLE OF INDIVIDUAL TO CONT	ACT CONCERING THE PROPOSA	- E-MAIL			TELEPHONE



Written or electronic certification to accompany a State contract with a value of \$50,000 or more, pursuant to C.G.S. §§ 4-250, 4-252(c) and 9-612(f)(2) and Governor Dannel P. Malloy's Executive Order 49.

#### INSTRUCTIONS:

Complete all sections of the form. Attach additional pages, if necessary, to provide full disclosure about any lawful campaign contributions made to campaigns of candidates for statewide public office or the General Assembly, as described herein. Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of initial contract execution and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or proposal for a contract, whichever is earlier. Such person shall also submit an accurate, updated certification not later than fourteen days after the twelve-month anniversary of the most recently filed certification or updated certification.

CHECK ONE: Initial Certification I 2 Month Anniversary Update (Multi-year contracts only.)



Updated Certification because of change of information contained in the most

recently filed certification or twelve-month anniversary update.

#### GIFT CERTIFICATION:

As used in this certification, the following terms have the meaning set forth below:

- "Contract" means that contract between the State of Connecticut (and/or one or more of it agencies or instrumentalities) and the Contractor, attached hereto, or as otherwise described by the awarding State agency below;
- 2) If this is an Initial Certification, "Execution Date" means the date the Contract is fully executed by, and becomes effective between, the parties; if this is a twelve-month anniversary update, "Execution Date" means the date this certification is signed by the Contractor;
- 3) "Contractor" means the person, firm or corporation named as the contactor below;
- "Applicable Public Official or State Employee" means any public official or state employee described in C.G.S. §4-252(c)(1)(i) or (ii);
- 5) "Gift" has the same meaning given that term in C.G.S. § 4-250(1);
- 6) "Principals or Key Personnel" means and refers to those principals and key personnel of the Contractor, and its or their agents, as described in C.G.S. §§ 4-250(5) and 4-252(c)(1)(B) and (C).

I, the undersigned, am a Principal or Key Personnel of the person, firm or corporation authorized to execute this certification on behalf of the Contractor. I hereby certify that, no gifts were made by (A) such person, firm, corporation, (B) any principals and key personnel of the person firm or corporation who participate substantially in preparing bids, proposals or negotiating state contracts or (C) any agent of such, firm, corporation, or principals or key personnel who participates substantially in preparing bids, proposals or negotiating state contracts or quasi-public agency soliciting bids or proposals for state contracts who participates substantially in the preparation of bid solicitations or request for proposals for state contracts or the negotiation or award of state contracts or (ii) any public official or state employee of any other state agency, who has supervisory or appointing authority over such state agency or quasi-public agency.

I further certify that no Principals or Key Personnel know of any action by the Contractor to circumvent (or which would result in the circumvention of) the above certification regarding **Gifts** by providing for any other Principals, Key Personnel, officials, or employees of the Contractor, or its or their agents, to make a **Gift** to any Applicable Public Official or State Employee. I further certify that the Contractor made the bid or proposal for the Contract without fraud or collusion with any person.

#### CAMPAIGN CONTRIBUTION CERTIFICATION:

I further certify that, on or after January 1, 2011, neither the Contractor nor any of its principals, as defined in C.G.S. § 9-612(f)(1), has made any **campaign contributions** to, or solicited any contributions on behalf of, any exploratory committee, candidate committee, political committee, or party committee established by, or supporting or authorized to support, any candidate for statewide public office, in violation of C.G.S. § 9-612(f)(2)(A). I further certify that **all lawful campaign contributions** that have been made on or after January 1, 2011 by the Contractor or any of its principals, as defined in C.G.S. § 9-612(f)(1), to, or solicited on behalf of, any exploratory committee, candidate committee, or party committee established by, or supporting or authorized to support any candidate for statewide public office, and the state of the stat

#### Lawful Campaign Contributions to Candidates for Statewide Public Office:

Contribution Date	Name of Contributor	<u>Recipient</u>	Value	Description
.awful Campaign C	ontributions to Candida	ites for the Genera	al Assembly:	
Contribution Date	Name of Contributor	Recipient	Value	Description
Sworn as true to the	best of my knowledge and	I belief, subject to th	ne penalties of false	statement.
Printed Contractor Na	ame	Printed	Name of Authoriz	ed Official
Signature of Autho	rized Official			
	nowledged before me t	his day of		, 20
	Com	missioner of the S	uperior Court (or	Notary Public)
		ommission Expire	 S	



# STATE OF CONNECTICUT CONSULTING AGREEMENT AFFIDAVIT

Affidavit to accompany a bid or proposal for the purchase of goods and services with a value of \$50,000 or more in a calendar or fiscal year, pursuant to Connecticut General Statutes §§ 4a-81(a) and 4a-81(b). For sole source or no bid contracts the form is submitted at time of contract execution.

#### INSTRUCTIONS:

If the bidder or vendor has entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete all sections of the form. If the bidder or contractor has entered into more than one such consulting agreement, use a separate form for each agreement. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public. If the bidder or contractor has not entered into a consulting agreement, as defined by Connecticut General Statutes § 4a-81(b)(1): Complete only the shaded section of the form. Sign and date the form in the presence of a Commissioner of the form. Sign and date the form in the presence of a Commissioner of the Superior Court or Notary Public.

Submit completed form to the awarding State agency with bid or proposal. For a sole source award, submit completed form to the awarding State agency at the time of contract execution.

This affidavit must be amended if there is any change in the information contained in the most recently filed affidavit not later than (i) thirty days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

AFFIDAVIT: [Number of Affidavits Sworn and Subscribed On This Day: \_\_\_\_]

I, the undersigned, hereby swear that I am a principal or key personnel of the bidder or contractor awarded a contract, as described in Connecticut General Statutes § 4a-81(b), or that I am the individual awarded such a contract who is authorized to execute such contract. I further swear that I have not entered into any consulting agreement in connection with such contract, **except for the agreement listed below**:

Consultant's Name and Title		Na	me of Firm (if applic	cable)	
Start Date	End Da	ate	Cost		
Description of Services F	Provided:				
Is the consultant a form	er State employ	ee or former public o	fficial?	ES	
If YES: Name of Former	r State Agency		Termination D	Date of Emp	ployment
Sworn as true to the bes	st of my knowled	lge and belief, subjec	t to the penalties of	false state	ement.
Printed Name of Bidder	or Contractor	Signature of Prine	cipal or Key Perso	nnel	Date
		Printed Name (of al	oove)		Awarding State Agency
Sworn and subscribed	l before me on	this day o	of,	, 20	

Commissioner of the Superior Court or Notary Public



# **STATE OF CONNECTICUT** AFFIRMATION OF RECEIPT OF STATE ETHICS LAWS SUMMARY

Written or electronic affirmation to accompany a large State construction or procurement contract, having a cost of more than \$500,000, pursuant to Connecticut General Statutes §§ 1-101mm and 1-101qq

#### INSTRUCTIONS:

Complete all sections of the form. Submit completed form to the awarding State agency or contractor, as directed below.

#### CHECK ONE:

- □ I am a person seeking a large State construction or procurement contract. I am submitting this affirmation to the awarding State agency with my bid or proposal. [Check this box if the contract will be awarded through a competitive process.]
- □ I am a contractor who has been awarded a large State construction or procurement contract. I am submitting this affirmation to the awarding State agency at the time of contract execution. [Check this box if the contract was a sole source award.]
- □ I am a subcontractor or consultant of a contractor who has been awarded a large State construction or procurement contract. I am submitting this affirmation to the contractor.
- □ I am a contractor who has already filed an affirmation, but I am updating such affirmation either (i) no later than thirty (30) days after the effective date of any such change or (ii) upon the submittal of any new bid or proposal, whichever is earlier.

#### **IMPORTANT NOTE:**

Within fifteen (15) days after the request of such agency, institution or quasi-public agency for such affirmation contractors shall submit the affirmations of their subcontractors and consultants to the awarding State agency. Failure to submit such affirmations in a timely manner shall be cause for termination of the large State construction or procurement contract.

#### AFFIRMATION:

I, the undersigned person, contractor, subcontractor, consultant, or the duly authorized representative thereof, affirm (1) receipt of the summary of State ethics laws\* developed by the Office of State Ethics pursuant to Connecticut General Statutes § 1-81b and (2) that key employees of such person, contractor, subcontractor, or consultant have read and understand the summary and agree to comply with its provisions.

\* The summary of State ethics laws is available on the State of Connecticut's Office of State Ethics website.

Signature	Date		
Printed Name	Title		
Firm or Corporation (if applicable)			
Street Address	City	State	Zip
	Awarding State	Agency	

#### OPM Iran Certification Form 7 (Rev. 3-28-14)

11



#### *TE OF CONNECTICUT*

in or electronic PDF copy of the written certification to accompany a large state contract pursuant to P.A. 3-162 (Prohibiting State Contracts With Entities Making Certain Investments In Iran)

**Respondent Name:** 

#### **INSTRUCTIONS:**

CHECK ONE:

Initial Certification. Amendment or renewal.

A. Who must complete and submit this form. Effective October 1, 2013, this form must be submitted for any large state contract, as defined in section 4-250 of the Connecticut General Statutes. This form must always be submitted with the bid or proposal, or if there was no bid process, with the resulting contract, regardless of where the principal place of business is located.

Pursuant to P.A. No. 13-162, upon submission of a bid or prior to executing a large state contract, the certification portion of this form must be completed by any corporation, general partnership, limited partnership, limited liability partnership, joint venture, nonprofit organization or other business organization whose principal place of business is located outside of the United States. United States subsidiaries of foreign corporations are exempt. For purposes of this form, a "foreign corporation" is one that is organized and incorporated outside the United States of America.

#### Check applicable box:

C Respondent's principal place of business is within the United States or Respondent is a United States subsidiary of a foreign corporation. Respondents who check this box are not required to complete the certification portion of this form, but must submit this form with its Invitation to Bid ("ITB"), Request for Proposal ("RFP") or contract package if there was no bid process.

Respondent's principal place of business is outside the United States and it is not a United States subsidiary of a foreign corporation. CERTIFICATION required. Please complete the certification portion of this form and submit it with the ITB or RFP response or contract package if there was no bid process.

#### B. Additional definitions.

- 1) "Large state contract" has the same meaning as defined in section 4–250 of the Connecticut General Statutes;
- "Respondent" means the person whose name is set forth at the beginning of this form; and 2)
- 3) "State agency" and "quasi-public agency" have the same meanings as provided in section 1-79 of the Connecticut General Statutes.

#### C. Certification requirements.

No state agency or quasi-public agency shall enter into any large state contract, or amend or renew any such contract with any Respondent whose principal place of business is located outside the United States and is not a United States subsidiary of a foreign corporation unless the Respondent has submitted this certification.

Complete all sections of this certification and sign and date it, under oath, in the presence of a Commissioner of the Superior Court, a Notary Public or a person authorized to take an oath in another state.

#### CERTIFICATION:

I, the undersigned, am the official authorized to execute contracts on behalf of the Respondent. I certify that:

Respondent has made no direct investments of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010.

Respondent has either made direct investments of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, or Respondent made such an investment prior to October 1, 2013 and has now increased or renewed such an investment on or after said date, or both.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Respondent Name

Printed Name of Authorized Official

Signature	of	Authorized	Official
Signature	01	Authonizeu	Oniciai

Subscribed and acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_, 20\_\_\_\_,

Commissioner of the Superior Court (or Notary Public)

My Commission Expires

Form C 01-13-2016



STATE OF CONNECTICUT NONDISCRIMINATION CERTIFICATION – <u>Affidavit By Entity</u> For Contracts Valued at \$50,000 or More

Documentation in the form of an <u>affidavit signed under penalty of false statement by a chief</u> <u>executive officer, president, chairperson, member, or other corporate officer duly authorized to</u> <u>adopt corporate, company, or partnership policy</u> that certifies the contractor complies with the nondiscrimination agreements and warranties under Connecticut General Statutes §§ 4a-60 and 4a-60a, as amended

#### INSTRUCTIONS:

For use by an <u>entity</u> (corporation, limited liability company, or partnership) when entering into any contract type with the State of Connecticut valued at <u>\$50,000 or more</u> for any year of the contract. Complete all sections of the form. Sign form in the presence of a Commissioner of Superior Court or Notary Public. Submit to the awarding State agency prior to contract execution.

#### AFFIDAVIT:

I, the undersigned, am over the age of eighteen (18) and understand and appreciate the obligations of

an oath. I am	of	an entity
Signatory's Title	Name of Entity	
duly formed and existing under the laws of		
	Name of State or Commonwealth	
I certify that I am authorized to execute and del	liver this affidavit on behalf of	
	and that	
Name of Entity	Name of Entity	
General Statutes §§ 4a-60 and 4a-60a, as amen	discrimination agreements and warranties of Conne nded.	
Authorized Signatory		
Printed Name		
Sworn and subscribed to before me on this	day of 20	<u>.</u>
Commissioner of the Superior Court/ Notary Publi	lic Commission Expiration Date	

### COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES CONTRACT COMPLIANCE REGULATIONS NOTIFICATION TO BIDDERS

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to "aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials." "Minority business enterprise" is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: "(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n." "Minority" groups are defined in Section 32-9n of the Connecticut General Statutes as "(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4)Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . ." An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder's qualifications under the contract compliance requirements:

- (a) the bidder's success in implementing an affirmative action plan;
- (b) the bidder's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder's promise to develop and implement a successful affirmative action plan;
- (d) the bidder's submission of employment statistics contained in the "Employment Information Form", indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder's promise to set aside a portion of the contract for legitimate minority business enterprises. <u>See</u> Section 46a-68j-30(10)(E) of the Contract Compliance Regulations.

#### INSTRUCTIONS AND OTHER INFORMATION

The following <u>BIDDER CONTRACT COMPLIANCE MONITORING REPORT</u> must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder's []]good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

#### 1) Definition of Small Contractor

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding ten million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page 2)

**MANAGEMENT:** Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

**LEGAL OCCUPATIONS:** In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

**COMPUTER SPECIALISTS:** Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

**OFFICE AND ADMINISTRATIVE SUPPORT:** All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

**PRODUCTION WORKERS:** The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

<u>White</u> (not of Hispanic Origin)- All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.	
Black(not of Hispanic Origin)- All persons having origins in any of the Black racial groups of Africa.	*
<u>Hispanic</u> - All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or	American Indian or Alaskan Native- All persons having origins in any of the original peoples of North America, and
origin, regardless of race.	who maintain cultural identification through tribal affiliation or community recognition.

#### BIDDER CONTRACT COMPLIANCE MONITORING REPORT

#### PART I - Bidder Information

Company Name Street Address City & State Chief Executive	Bidder Federal Employer Identification Number Or Social Security Number
Major Business Activity (brief description)	Bidder Identification (response optional/definitions on page 1) -Bidder is a small contractor. Yes_No_ -Bidder is a minority business enterprise Yes_No_ (If yes, check ownership category) Black_Hispanic_Asian American_American Indian/Alaskan Native_Tberian Peninsula Individual(s) with a Physical Disability Female
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes_ No_
Other Locations in Ct. (If any)	

#### PART II - Bidder Nondiscrimination Policies and Procedures

<ol> <li>Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 &amp; 4a-60a Conn. Gen. Stat.? Yes No</li> </ol>
10_10_
8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? YesNo
9. Does your company have a mandatory retirement age for all employees? YesNo
10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? YesNoNA
11. If your company has apprenticeship programs, do they meet the Affirmative         Action/Equal Employment Opportunity requirements of the apprenticeship standards         of the Ct. Dept. of Labor?       Yes_No_NA_
12. Does your company have a written affirmative action Plan? Yes_No_ If no, please explain.
13. Is there a person in your company who is responsible for equal

1. Will the work of this contract include subcontractors or suppliers? Yes\_No\_

la. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

Yes\_No\_

JOB CATEGORY *	OVERALL TOTALS		HTE Hispanic )	BLA (not of H origin)	ispanic	HISPA	ANIC	ASIAN of ISLAND	PACIFIC SR	AMERICAN ALASKAN N	
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

Date:

#### PART IV - Bidder Employment Information

\*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

#### PART V - Bidder Hiring and Recruitment Practices

ART V - Bidder Hiring and Recruitment Practices				(Page 5)			
<ol> <li>Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)</li> </ol>			<ol> <li>Check (X) any of the below listed requirements that you use as a hiring qualification</li> <li>(X)</li> </ol>		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination		
SOURCE	YES	NO	% of applicants provided by source				
State Employment Service					Work Experience		
Private Employment Agencies					Ability to Speak or Write English		
Schools and Colleges					Written Tests		
Newspaper Advertisement					High School Diploma		
Walk Ins					College Degree		
Present Employees					Union Membership		
Labor Organizations					Personal Recommendation		
Minority/Community Organizations					Height or Weight		
Others (please identify)					Car Ownership	]	
					Arrest Record		
					Wage Garnishments		
						•	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)

### **Contract Provisions**

#### 1. Professional Standards:

In rendering services under this contract, the Contractor shall conform to high professional standards of work and business ethic. The Contractor warrants that the services shall be performed: 1) in a professional and workmanlike manner; and 2) in accordance with generally and currently accepted principles and practices. During the term of this contract, the Contractor agrees to provide to the College in a good and faithful manner, using its best efforts and in a manner that shall promote the interests of said College, such services as the College requests, provided in this contract.

#### 2. Quality Surveillance, Examination of Records and Inspection of Work:

Pursuant to C.G.S. §§ 4e-29 and 4e-30, all services performed by the Contractor and all records pertaining to this contract shall be subject to the inspection and approval of the State and the State Contracting Agency at reasonable times.

#### 3. Assignment:

This contract shall not be assigned by either party without the express prior written consent of the other.

#### 4. Confidential Information

(a) The Contractor acknowledges that it may have access to Confidential Information (as hereinafter defined). The Contractor agrees that it will use the Confidential Information solely for the purpose of performing its duties as a consultant and agrees that it will not divulge, furnish, publish or use for its own benefit or for the direct or indirect benefit of any other person or entity, whether or not for monetary gain, any Confidential Information.

(b) For purposes of this Agreement, the term "Confidential Information" shall mean (i) all information related to the business operations, marketing plans, financial position and (ii) other business information and any other information disclosed to the Contractor. Confidential Information shall not include information which (i) is or becomes part of the public domain through no act or omission attributable to the Contractor, (ii) is released after prior written authorization or (iii) the Contractor receives from any third party who is unrelated to it and who is not under any obligation to maintain the confidentiality of such information.

#### 5. Family Educational Rights and Privacy Act (FERPA):

In all respects, Contractor shall comply with the provisions of the Family Educational Rights and Privacy Act (FERPA). For purposes of this contract, FERPA includes any amendments or other relevant provisions of federal law, as well as all requirements of Chapter 99 of Title 34 of the Code of Federal Regulations, as amended from time to time. Nothing in this agreement may be construed to allow Contractor to maintain, use, disclose or share student information in a manner not allowed by federal law or regulation or by this contract. Contractor agrees that it shall not provide any student information obtained under this contract to any party ineligible to receive data protected by FERPA. This section shall survive the termination, cancellation or expiration of the contract.

#### 6. Claims Against The State:

The Contractor agrees that the sole and exclusive means for the presentation of any claim against the State arising from this Agreement shall be in accordance with Chapter 53 of the Connecticut General Statutes (Claims Against the State) and the Contractor further agrees not to initiate legal proceedings in any state or federal court in addition to, or in lieu of, said Chapter 53 proceedings.

#### 7. Indemnification and Insurance:

(a) The Contractor shall indemnify, defend and hold harmless the State and its officers, representatives, agents, servants, employees, successors and assigns from and against any and all (1) claims arising, directly or indirectly, in connection with the Contract, including the acts of commission or omission (collectively, the "Acts") of the Contractor or contractor parties; and (2) liabilities, damages, losses, costs and expenses, including but not limited to, attorneys' and other professionals' fees, arising, directly or indirectly, in connection with claims, Acts or the contract. The Contractor shall use counsel reasonably acceptable to the State in carrying out its obligations under this section. The Contractor's obligations under this section to indemnify, defend and hold harmless against claims includes claims concerning confidentiality of any part of or all of the Contractor's bid, proposal or any records, any intellectual property rights, other proprietary rights of any person or entity, copyrighted or uncopyrighted compositions, secret processes, patented or unpatented inventions, articles or appliances furnished or used in the performance.

- (b) The Contractor shall not be responsible for indemnifying or holding the State harmless from any liability arising due to the negligence of the State or any third party acting under the direct control or supervision of the State.
- (c) The Contractor shall reimburse the State for any and all damages to the real or personal property of the State caused by the Acts of the Contractor or any contractor parties. The State shall give the Contractor reasonable notice of any such claims.
- (d) The Contractor's duties under this section shall remain fully in effect and binding in accordance with the terms and conditions of the Contract, without being lessened or compromised in any way, even where the Contractor is alleged or is found to have merely contributed in part to the Acts giving rise to the claims and/or where the State is alleged or is found to have contributed to the Acts giving rise to the claims.
- (e) The Contractor shall carry and maintain at all times during the term of the Contract, and during the time that any provisions survive the term of the Contract, sufficient general liability insurance to satisfy its obligations under this Contract. The Contractor shall cause the State to be named as an additional insured on the policy and shall provide (1) a certificate of insurance, (2) the declaration page and (3) the additional insured endorsement to the policy to the Client Agency prior to the Effective Date of the Contract evidencing that the State is an additional insured. The Contractor shall not begin Performance until the delivery of these 3 documents to the Client Agency. State shall be entitled to recover under the insurance policy even if a body of competent jurisdiction determines that State is contributorily negligent.
- (f) This section shall survive the termination of the contract and shall not be limited by reason of any insurance coverage.

#### 8. Sovereign Immunity:

The parties acknowledge and agree that nothing in this Contract shall be construed as a modification, compromise or waiver by the State of any rights or defenses of any immunities provided by Federal law or the laws of the State of Connecticut to the State or any of its officers and employees, which they may have had, now have or will have with respect to all matters arising out of this Contract. To the extent that this section conflicts with any other section, this section shall govern.

#### 9. Contracting with State Employees or Related Family/Business:

Section 1-84 (i) of the Connecticut General Statutes prohibits the College to engage in contracts over \$100 with State employees and certain related family or businesses as defined by Sections 1-79 (b) and (f), unless awarded through an open and public process. Contractor has disclosed to State whether it is an employee, related family member or associated business as defined by the statute. The Contractor and State each represent that they have fully complied with all applicable requirements of this statute, which is set forth below (emphasis added), or as it may be amended from time to time:

C.G.S. § 1-84 (i) No public official or state employee or member of the official or employee's immediate family or a business with which he is associated shall enter into any contract with the state, valued at one hundred dollars or more, other than a contract of employment as a state employee, or a contract with a public institution of higher education to support a collaboration with such institution to develop and commercialize any invention or discovery, or pursuant to a court appointment, <u>unless the contract has been awarded through an open and public process</u>, including prior public offer and subsequent public disclosure of all proposals considered and the contract awarded. In no event shall an executive head of an agency, as defined in section 1-79, or the executive head's immediate family or a business with which he is associated enter into any contract with that agency or quasi-public agency. Nothing in this subsection shall be construed as applying to any public official who is appointed as a member of the executive branch or as a member or director of a quasi-public agency and who receives no compensation other than per diem payments or reimbursement for actual or necessary expenses, or both, incurred in the performance of the public official's duties unless such public official has authority or control over the subject matter of the contract. Any contract made in violation of this subsection shall be voidable by a court of competent jurisdiction if the suit is commenced not later than one hundred eighty days after the making of the contract.

C.G.S. § 1-79 (b) provides: "<u>Business with which he is associated</u>" means any sole proprietorship, partnership, firm, corporation, trust or other entity through which business for profit or not for profit is conducted in which the public official or state employee or member of his immediate family is a director, officer, owner, limited or general partner, beneficiary of a trust or holder of stock constituting five per cent or more of the total outstanding stock of any class, provided, a public official or state employee, or member of his immediate family, shall not be deemed to be associated with a not for profit entity solely by virtue of the fact that the public official or state employee or member of his

immediate family is an unpaid director or officer of the not for profit entity. "Officer" refers only to the president, executive or senior vice president or treasurer of such business.

C.G.S. 1-79 (f) provides: "<u>Immediate family</u>" means any spouse, children or dependent relatives who reside in the individual's household.

#### 10. Forum and Choice of Law:

The parties deem the Contract to have been made in the City of Hartford, State of Connecticut. Both parties agree that it is fair and reasonable for the validity and construction of the contract to be, and it shall be, governed by the laws and court decisions of the State of Connecticut, without giving effect to its principles of conflicts of laws. To the extent that any immunities provided by Federal law or the laws of the State of Connecticut do not bar an action against the State, and to the extent that these courts are courts of competent jurisdiction, for the purpose of venue, the complaint shall be made returnable to the Judicial District of Hartford only or shall be brought in the United States District Court for the District of Connecticut only, and shall not be transferred to any other court, provided, however, that nothing here constitutes a waiver or compromise of the sovereign immunity of the State of Connecticut. The Contractor waives any objection which it may now have or will have to the laying of venue of any claims in any forum and further irrevocably submits to such jurisdiction in any suit, action or proceeding.

#### 11. Termination:

- (a) Notwithstanding any provisions in this contract, the College, through a duly authorized employee, may terminate the contract whenever the College makes a written determination that such termination is in the best interests of the State. The College shall notify the Contractor in writing of termination pursuant to this section, which notice shall specify the effective date of termination and the extent to which the Contractor must complete its performance under the contract prior to such date.
- (b) Notwithstanding any provisions in this contract, the College, through a duly authorized employee, may, after making a written determination that the Contractor has breached the contract, terminate the contract in accordance with the following breach provision.
  - i. <u>Breach</u>. If either party breaches the contract in any respect, the non-breaching party shall provide written notice of the breach to the breaching party and afford the breaching party an opportunity to cure within ten (10) days from the date that the breaching party receives the notice. In the case of a Contractor breach, any other time period which the College sets forth in the notice shall trump the ten (10) days. The right to cure period shall be extended if the non-breaching party is satisfied that the breaching party is making a good faith effort to cure but the nature of the breach is such that it cannot be cured within the right to cure period. The notice may include an effective contract termination date if the breach is not cured by the stated date and, unless otherwise modified by the non-breaching party in writing prior to the termination date, no further action shall be required of any party to effect the termination as of the stated date. If the notice does not set forth an effective contract termination date, then the non-breaching party may terminate the contract by giving the breaching party no less than twenty four (24) hours' prior written notice. If the College believes that the Contractor has not performed according to the contract, the College may withhold payment in whole or in part pending resolution of the performance issue, provided that the College notifies the Contractor in writing prior to the date that the payment would have been due.
- (c) The College shall send the notice of termination via certified mail, return receipt requested, to the Contractor at the most current address which the Contractor has furnished to the College for purposes of correspondence, or by hand delivery. Upon receiving the notice from the College, the Contractor shall immediately discontinue all services affected in accordance with the notice, undertake all College all records. The records are deemed to be the property of the College and the Contractor shall deliver them to the College no later than thirty (30) days after the termination of the contract or fifteen (15) days after the Contractor receives a written request from the College for the records. The Contractor shall deliver those records that exist in electronic, magnetic or other intangible form in a non-proprietary format, such as, but not limited to, ASCII or .TXT.
- (d) Upon receipt of a written notice of termination from the College, the Contractor shall cease operations as the College directs in the notice, and take all actions that are necessary or appropriate, or that the College may reasonably direct, for the protection, and preservation of the goods and any other property. Except for any work which the College directs the Contractor to perform in the notice prior to the effective date of termination, and except as otherwise provided in the notice, the Contractor shall terminate or conclude all existing subcontracts and purchase orders and shall not enter into any further subcontracts, purchase orders or commitments.
- (e) The College shall, within forty-five (45) days of the effective date of termination, reimburse the Contractor for its performance rendered and accepted by the College in accordance with the terms of this contract, in addition to all actual and reasonable costs incurred after termination in completing those portions of the performance which

the notice required the Contractor to complete. However, the Contractor is not entitled to receive and the College is not obligated to tender to the Contractor any payments for anticipated or lost profits. Upon request by the College, the Contractor shall assign to the College, or any replacement Contractor which the College designates, all subcontracts, purchase orders and other commitments, deliver to the College all records and other information pertaining to its performance, and remove from State premises, whether leased or owned, all of Contractor's property, equipment, waste material and rubbish related to its performance, all as the College may request.

- (f) For breach or violation of any of the provisions in the section concerning representations and warranties, the College may terminate the contract in accordance with its terms and revoke any consents to assignments given as if the assignments had never been requested or consented to, without liability to the Contractor or Contractor parties or any third party.
- (g) Upon termination of the contract, all rights and obligations shall be null and void, so that no party shall have any further rights or obligations to any other party, except with respect to the sections which survive termination. All representations, warranties, agreements and rights of the parties under the contract shall survive such termination to the extent not otherwise limited in the contract and without each one of them having to be specifically mentioned in the contract.
- (h) Termination of the contract pursuant to this section shall not be deemed to be a breach of contract by the College.

#### 12. Entire Agreement:

This written contract shall constitute the entire agreement between the parties and no other terms and conditions in any document, acceptance or acknowledgment shall be effective or binding unless expressly agreed to in writing by College. This contract may not be changed other than by a formal written contract amendment signed by the parties hereto and approved by the Connecticut Attorney General.

#### 13. Nondiscrimination:

(a) For purposes of this Section, the following terms are defined as follows:

- i. "Commission" means the Commission on Human Rights and Opportunities;
- ii. "Contract" and "contract" include any extension or modification of the Contract or contract;
- iii. "Contractor" and "contractor" include any successors or assigns of the Contractor or contractor;
- iv. "Gender identity or expression" means a person's gender-related identity, appearance or behavior, whether or not that gender-related identity, appearance or behavior is different from that traditionally associated with the person's physiology or assigned sex at birth, which gender-related identity can be shown by providing evidence including, but not limited to, medical history, care or treatment of the gender-related identity, consistent and uniform assertion of the gender-related identity or any other evidence that the gender-related identity is sincerely held, part of a person's core identity or not being asserted for an improper purpose;
- v. "good faith" means that degree of diligence which a reasonable person would exercise in the performance of legal duties and obligations;
- vi. "good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements;
- vii. "marital status" means being single, married as recognized by the state of Connecticut, widowed, separated or divorced;
- viii. "mental disability" means one or more mental disorders, as defined in the most recent edition of the American Psychiatric Association's "Diagnostic and Statistical Manual of Mental Disorders", or a record of or regarding a person as having one or more such disorders;
- ix. "minority business enterprise" means any small contractor or supplier of materials fifty-one percent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise, and (3) who are members of a minority, as such term is defined in subsection (a) of Connecticut General Statutes § 32-9n; and
- x. "public works contract" means any agreement between any individual, firm or corporation and the State or any political subdivision of the State other than a municipality for construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, or which is financed in whole or in part by the State, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

For purposes of this Section, the terms "Contract" and "contract" do not include a contract where each contractor is (1) a political subdivision of the state, including, but not limited to, a municipality, (2) a quasi-public agency, as defined in Conn. Gen. Stat. Section 1-120, (3) any other state, including but not limited to any federally recognized Indian tribal governments, as defined in Conn. Gen. Stat. Section 1-267, (4) the federal government, (5) a foreign government, or (6) an agency of a subdivision, agency, state or government described in the immediately preceding enumerated items (1), (2), (3), (4) or (5).

- (b) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the State of Connecticut; and the Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by the Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission; (3) the Contractor agrees to provide each labor union or representative of workers with which the Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which the Contractor has a contract or understanding, a notice to be provided by the Commission, advising the labor union or workers' representative of the Contractor's commitments under this section and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this Section and Connecticut General Statutes §§ 46a-68e and 46a-68f and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes §§ 46a-56, 46a-68e and 46a-68f; and (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this Section and Connecticut General Statutes § 46a-56. If the contract is a public works contract, the Contractor agrees and warrants that he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works projects.
- (c) Determination of the Contractor's good faith efforts shall include, but shall not be limited to, the following factors: The Contractor's employment and subcontracting policies, patterns and practices; affirmative advertising, recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission may prescribe that are designed to ensure the participation of minority business enterprises in public works projects.
- (d) The Contractor shall develop and maintain adequate documentation, in a manner prescribed by the Commission, of its good faith efforts.
- (e) The Contractor shall include the provisions of subsection (b) of this Section in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

- (f) The Contractor agrees to comply with the regulations referred to in this Section as they exist on the date of this Contract and as they may be adopted or amended from time to time during the term of this Contract and any amendments thereto.
- (g) (1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or the State of Connecticut, and that employees are treated when employed without regard to their sexual orientation; (2) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining Agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (3) the Contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said Commission pursuant to Connecticut General Statutes § 46a-56; and (4) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the Commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor which relate to the provisions of this Section and Connecticut General Statutes § 46a-56.
- (h) The Contractor shall include the provisions of the foregoing paragraph in every subcontract or purchase order entered into in order to fulfill any obligation of a contract with the State and such provisions shall be binding on a subcontractor, vendor or manufacturer unless exempted by regulations or orders of the Commission. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions including sanctions for noncompliance in accordance with Connecticut General Statutes § 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission, the Contractor may request the State of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the State and the State may so enter.

#### 14. Executive Orders:

The Contract is subject to the provisions of Executive Order No. Three of Governor Thomas J. Meskill, promulgated June 16, 1971, concerning labor employment practices, Executive Order No. Seventeen of Governor Thomas J. Meskill, promulgated February 15, 1973, concerning the listing of employment openings and Executive Order No. Sixteen of Governor John G. Rowland promulgated August 4, 1999, concerning violence in the workplace, all of which are incorporated into and are made a part of the Contract as if they had been fully set forth in it. The Contract may also be subject to Executive Order No. 14 of Governor M. Jodi Rell, promulgated April 17, 2006, concerning procurement of cleaning products and services and to Executive Order No. 49 of Governor Dannel P. Malloy, promulgated May 22, 2015, mandating disclosure of certain gifts to public employees and contributions to certain candidates for office. If Executive Order 14 and/or Executive Order 49 are applicable, they are deemed to be incorporated into and are made a part of the Contract as if they had been fully set forth as if they had been fully set forth the Order 49 are applicable, they are deemed to be incorporated into and are made a part of the Contract as if they had been fully set forth in it. At the Contractor's request, CSCU shall provide a copy of these orders to the Contractor

#### 15. SEEC:

For all state contracts as defined in Connecticut General Statutes §9-612(g)(2), as amended by P.A. 10-1 having a value in a calendar year of \$50,000 or more or a combination or series of such agreements or contracts having a value of \$100,000 or more, the authorized signatory to this Agreement expressly acknowledges receipt of the State Election Enforcement Commission's notice advising state contractors of state campaign contribution and solicitation prohibitions, and will inform its principals of the contents of the notice. See Notice below.

# NOTICE TO EXECUTIVE BRANCH STATE CONTRACTORS AND PROSPECTIVE STATE CONTRACTORS OF CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

This notice is provided under the authority of Connecticut General Statutes 9-612(g)(2), as amended by P.A. 10-1, and is for the purpose of informing state contractors and prospective state contractors of the following law (italicized words are defined below):

#### CAMPAIGN CONTRIBUTION AND SOLICITATION LIMITATIONS

No state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee (which includes town committees).

In addition, no holder or principal of a holder of a valid prequalification certificate, shall make a contribution to (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of State senator or State representative, (ii) a political committee authorized to make contributions or expenditures to or for the benefit of such candidates, or (iii) a party committee.

On and after January 1, 2011, no state contractor, prospective state contractor, principal of a state contractor or principal of a prospective state contractor, with regard to a state contract or state contract solicitation with or from a state agency in the executive branch or a quasi-public agency or a holder, or principal of a holder of a valid prequalification certificate, shall **knowingly** *solicit* contributions from the state contractor's or prospective state contractor or principals of the subcontractor on behalf of (i) an exploratory committee or candidate committee established by a candidate for nomination or election to the office of Governor, Lieutenant Governor, Attorney General, State Comptroller, Secretary of the State or State Treasurer, (ii) a political committee.

#### DUTY TO INFORM

State contractors and prospective state contractors are required to inform their principals of the above prohibitions, as applicable, and the possible penalties and other consequences of any violation thereof.

#### PENALTIES FOR VIOLATIONS

Contributions or solicitations of contributions made in violation of the above prohibitions may result in the following civil and criminal penalties:

<u>Civil penalties:</u> Up to \$2,000 or twice the amount of the prohibited contribution, whichever is greater, against a principal or a contractor. Any state contractor or prospective state contractor which fails to make reasonable efforts to comply with the provisions requiring notice to its principals of these prohibitions and the possible consequences of their violations may also be subject to civil penalties of up to \$2,000 or twice the amount of the prohibited contributions made by their principals.

<u>Criminal penalties:</u> Any knowing and willful violation of the prohibition is a Class D felony, which may subject the violator to imprisonment of not more than 5 years, or not more than \$5,000 in fines, or both.

#### CONTRACT CONSEQUENCES

In the case of a state contractor, contributions made or solicited in violation of the above prohibitions may result in the contract being voided.

In the case of a prospective state contractor, contributions made or solicited in violation of the above prohibitions shall result in the contract described in the state contract solicitation not being awarded to the prospective state contractor, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

The State shall not award any other state contract to anyone found in violation of the above prohibitions for a period of one year after the election for which such contribution is made or solicited, unless the State Elections Enforcement Commission determines that mitigating circumstances exist concerning such violation.

Additional information may be found on the website of the State Elections Enforcement Commission, www.ct.gov/seec. Click on the link to "Lobbyist/Contractor Limitations."

#### DEFINITIONS

"State contractor" means a person, business entity or nonprofit organization that enters into a state contract. Such person, business entity or nonprofit organization shall be deemed to be a state contractor until December thirty-first of the year in which such contract terminates. "State contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Prospective state contractor" means a person, business entity or nonprofit organization that (i) submits a response to a state contract solicitation by the state, a state agency or a quasi-public agency, or a proposal in response to a request for proposals by the state, a state agency or a quasi-public agency, until the contract has been entered into, or (ii) holds a valid prequalification certificate issued by the Commissioner of Administrative Services under section 4a-100. "Prospective state contractor" does not include a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a state contractor or prospective state contractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a state contractor or prospective state contractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a state contractor or prospective state contractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor, which is not a business entity, or if a state contractor or prospective state contractor who has *managerial or discretionary responsibilities with respect to a state contract*, (v) the spouse or a *dependent child* who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization that is the state contractor or prospective state contractor.

"State contract" means an agreement or contract with the state or any state agency or any quasi-public agency, let through a procurement process or otherwise, having a value of fifty thousand dollars or more, or a combination or series of such agreements or contracts having a value of one hundred thousand dollars or more in a calendar year, for (i) the rendition of services, (ii) the furnishing of any goods, material, supplies, equipment or any items of any kind, (iii) the construction, alteration or repair of any public building or public work, (iv) the acquisition, sale or lease of any land or building, (v) a licensing arrangement, or (vi) a grant, loan or loan guarantee. "State contract" does not include any agreement or contract with the state, any state agency or any quasi-public agency that is exclusively federally funded, an education loan, a loan to an individual for other than commercial purposes or any agreement or contract between the state or any state agency and the United States Department of the Navy or the United States Department of Defense.

"State contract solicitation" means a request by a state agency or quasi-public agency, in whatever form issued, including, but not limited to, an invitation to bid, request for proposals, request for information or request for quotes, inviting bids, quotes or other types of submittals, through a competitive procurement process or another process authorized by law waiving competitive procurement.

"Managerial or discretionary responsibilities with respect to a state contract" means having direct, extensive and substantive responsibilities with respect to the negotiation of the state contract and not peripheral, clerical or ministerial responsibilities.

"Dependent child" means a child residing in an individual's household who may legally be claimed as a dependent on the federal income tax of such individual.

"Solicit" means (A) requesting that a contribution be made, (B) participating in any fund-raising activities for a candidate committee, exploratory committee, political committee or party committee, including, but not limited to, forwarding tickets to potential contributors, receiving contributions for transmission to any such committee or bundling contributions, (C) serving as chairperson, treasurer or deputy treasurer of any such committee, or (D)

establishing a political committee for the sole purpose of soliciting or receiving contributions for any committee. Solicit does not include: (i) making a contribution that is otherwise permitted by Chapter 155 of the Connecticut General Statutes; (ii) informing any person of a position taken by a candidate for public office or a public official, (iii) notifying the person of any activities of, or contact information for, any candidate for public office; or (iv) serving as a member in any party committee or as an officer of such committee that is not otherwise prohibited in this section.

"Subcontractor" means any person, business entity or nonprofit organization that contracts to perform part or all of the obligations of a state contractor's state contract. Such person, business entity or nonprofit organization shall be deemed to be a subcontractor until December thirty first of the year in which the subcontract terminates. "Subcontractor" does not include (i) a municipality or any other political subdivision of the state, including any entities or associations duly created by the municipality or political subdivision exclusively amongst themselves to further any purpose authorized by statute or charter, or (ii) an employee in the executive or legislative branch of state government or a quasi-public agency, whether in the classified or unclassified service and full or part-time, and only in such person's capacity as a state or quasi-public agency employee.

"Principal of a subcontractor" means (i) any individual who is a member of the board of directors of, or has an ownership interest of five per cent or more in, a subcontractor, which is a business entity, except for an individual who is a member of the board of directors of a nonprofit organization, (ii) an individual who is employed by a subcontractor, which is a business entity, as president, treasurer or executive vice president, (iii) an individual who is the chief executive officer of a subcontractor, which is not a business entity, or if a subcontractor has no such officer, then the officer who duly possesses comparable powers and duties, (iv) an officer or an employee of any subcontractor who has managerial or discretionary responsibilities with respect to a subcontract with a state contractor, (v) the spouse or a dependent child who is eighteen years of age or older of an individual described in this subparagraph, or (vi) a political committee established or controlled by an individual described in this subparagraph or the business entity or nonprofit organization.

<u>16. Summary of State Ethics Laws:</u> Pursuant to the requirements of section 1-101qq of the Connecticut General Statutes, the summary of State ethic laws developed by the State Ethics Commission pursuant to section 1-81b of the Connecticut General Statutes is incorporated by reference into and made a part of the contract as if the summary had been fully set forth in the contract.

#### 17.Whistleblower:

This contract may be subject to the provisions of Section 4-61dd of the Connecticut General Statutes. In accordance with this statute, if an officer, employee or appointing authority of the Contractor takes or threatens to take any personnel action against any employee of the Contractor in retaliation for such employee's disclosure of information to any employee of the contracting state or quasi-public agency or the Auditors of Public Accounts or the Attorney General under the provisions of subsection (a) of such statute, the Contractor shall be liable for a civil penalty of not more than five thousand dollars for each offense, up to a maximum of twenty per cent of the value of this contract. Each violation shall be a separate and distinct offense. The State may request that the Attorney General bring a civil action in the Superior Court for the Judicial District of Hartford to seek imposition and recovery of such civil penalty. In accordance with subsection (f) of such statute, each large state contractor, as defined in the statute, shall post a notice of the provisions of the statute relating to large state contractors in a conspicuous place which is readily available for viewing by the employees of the contractor.

#### 18. Disclosure of Records:

This Contract may be subject to the provisions of section 1-218 of the Connecticut General Statutes. In accordance with this statute, each contract in excess of two million five hundred thousand dollars between a public agency and a person for the performance of a governmental function shall (a) provide that the public agency is entitled to receive a copy of records and files related to the performance of the governmental function, and (b) indicate that such records and files are subject to the Freedom of Information Act (FOIA) and may be disclosed by the public agency pursuant to FOIA. No request to inspect or copy such records or files shall be valid unless the request is made to the public agency in accordance with FOIA. Any complaint by a person who is denied the right to inspect or copy such records or files shall be brought to the Freedom of Information Commission in accordance with the provisions of sections 1-205 and 1-206 of the Connecticut General Statutes.

#### CONNECTICUT STATE COLLEGES & UNIVERSITIES 39 WOODLAND STREET HARTFORD, CT 06105-2337

#### PROPOSAL SUBMISSION CHECK LIST

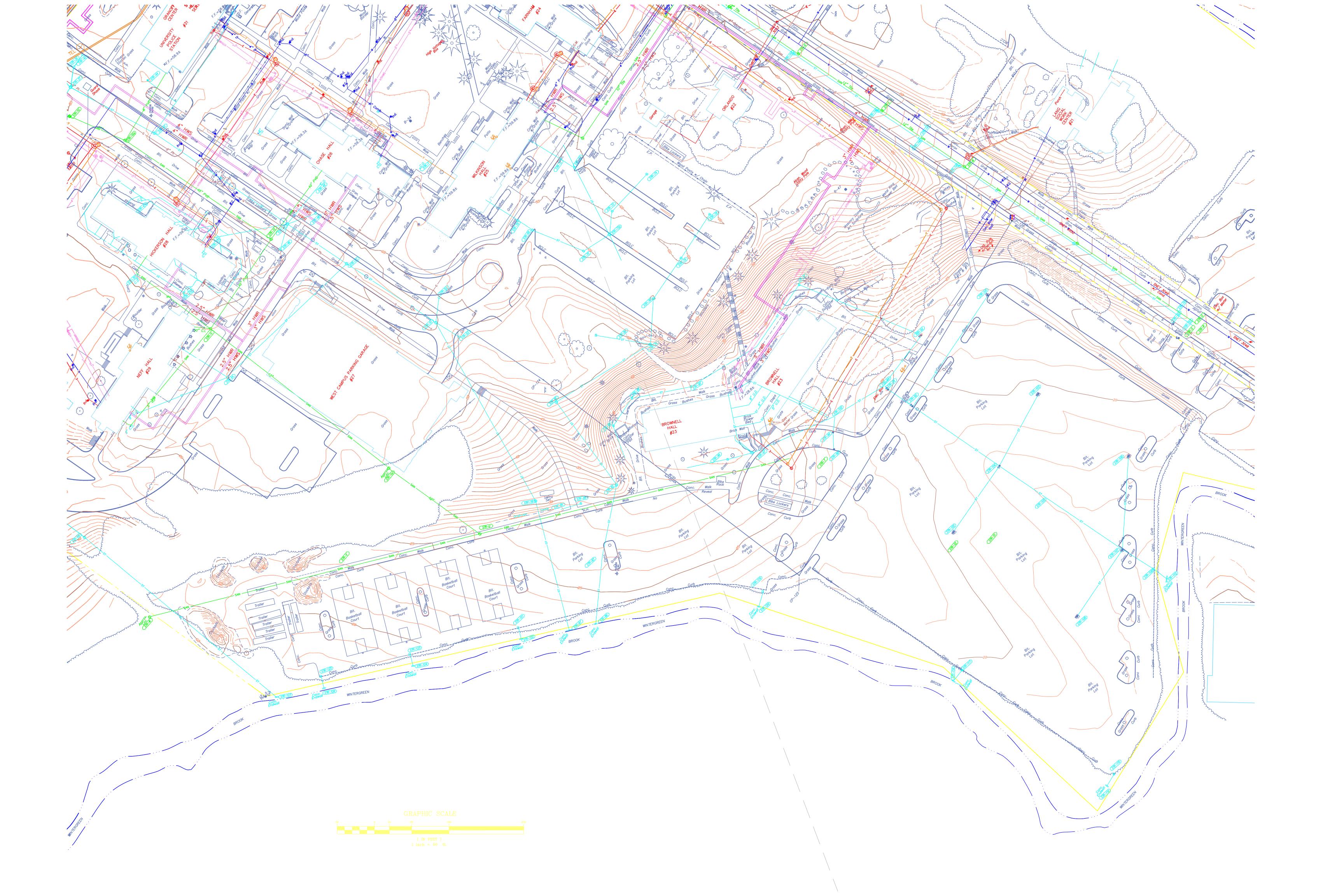
This form need not be returned with your proposal. It is suggested that you review and check off each action as you complete it.

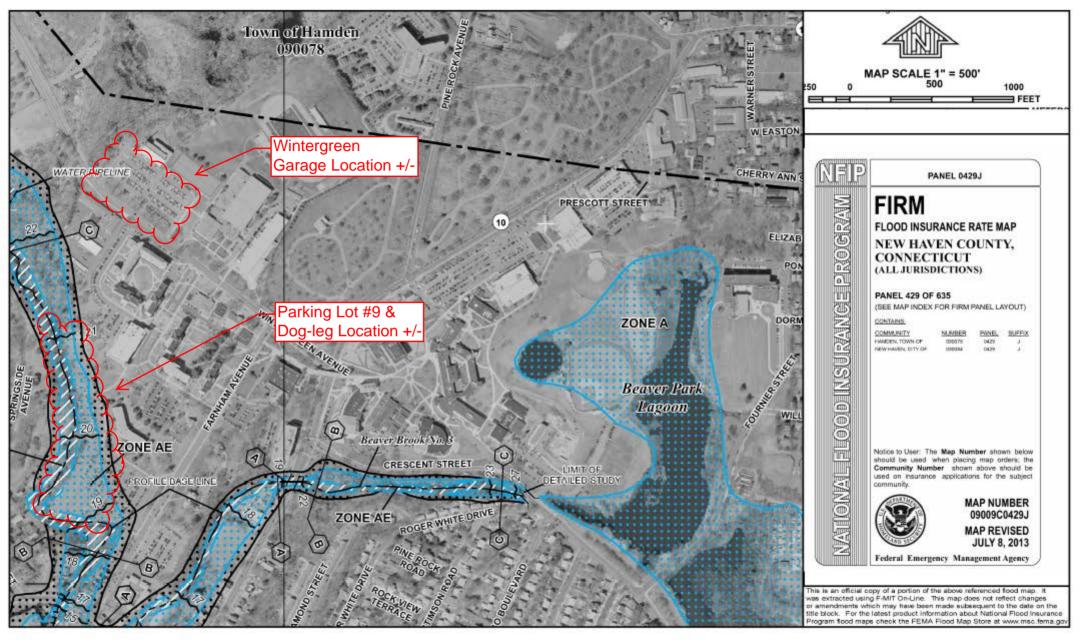
- 1. The proposal includes all requested information and follows the format set forth in Section 2.7.
- \_\_\_\_\_2. The name, title, telephone number, and e-mail address of the appropriate person to contact concerning the proposal is clearly stated and easily identifiable.
- 3. The prices you have offered have been reviewed and verified.
- 4. If applicable, price extensions and totals have been checked. (In case of discrepancy between unit prices and total prices, the unit price will govern the evaluation.)
- 5. Any technical or descriptive literature, drawings or samples that are required have been included with the proposal.
- 6. The Contract Proposal, included as Attachment A, is complete and has been signed by a person duly authorized to sign on behalf of the firm or corporation.
- 7. The forms included as Attachments B through G are completed, notarized when applicable, and included in the proposal package.
- 8. The envelope(s) containing the proposal(s) are addressed to:

Sharon Kromas Associate for Contract Compliance and Procurement Board of Regents for Higher Education 39 Woodland Street Hartford, CT 06105

- 9. The outermost envelope containing the proposal has been clearly marked with the name and address of the proposer, RFP title and number, the date and time the proposal is due.
- 10. If multiple copies of the proposal are required, the original is clearly marked.
- 11. The proposal has been mailed or hand-delivered in time to be received no later than the designated opening date and time.



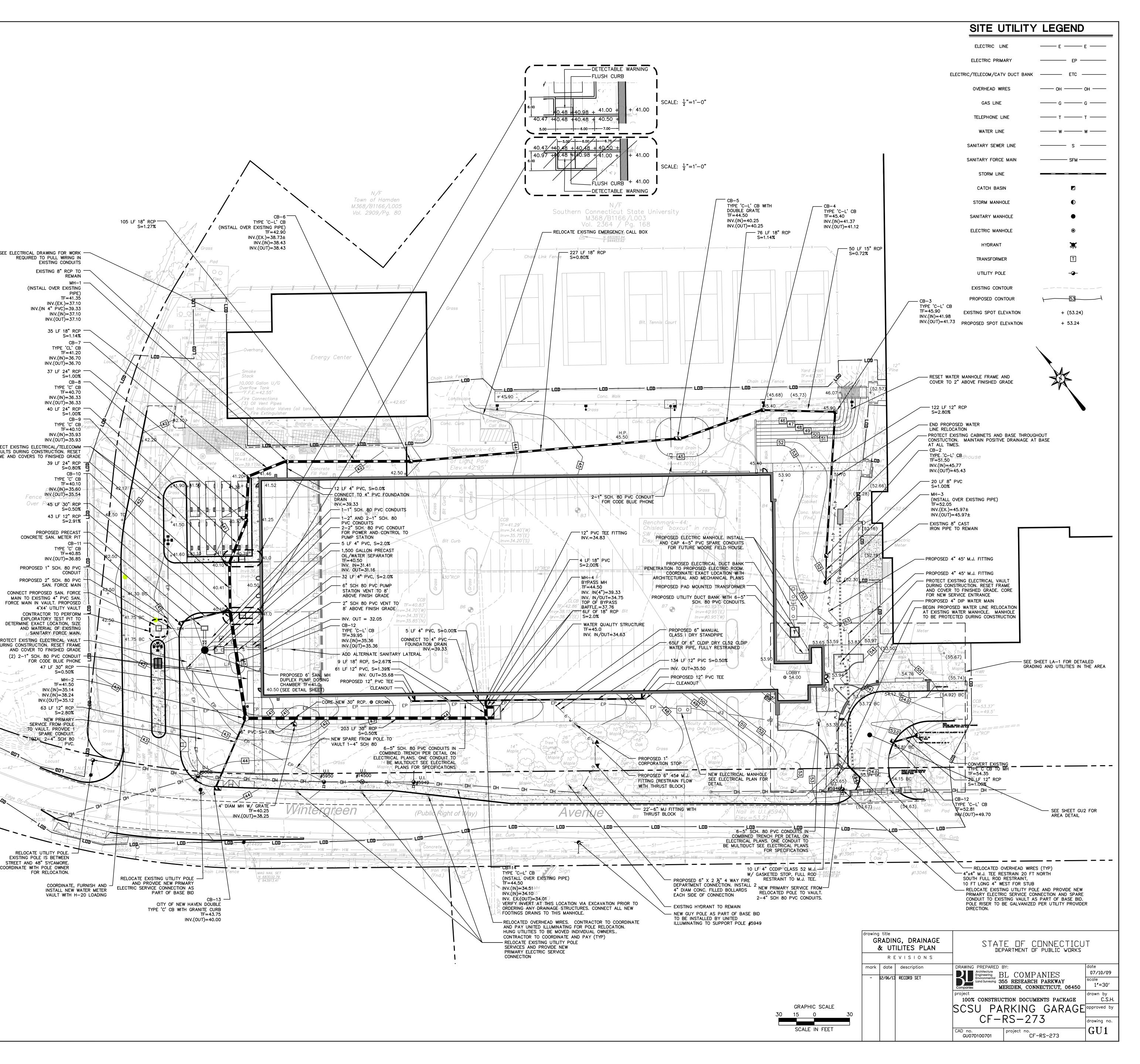


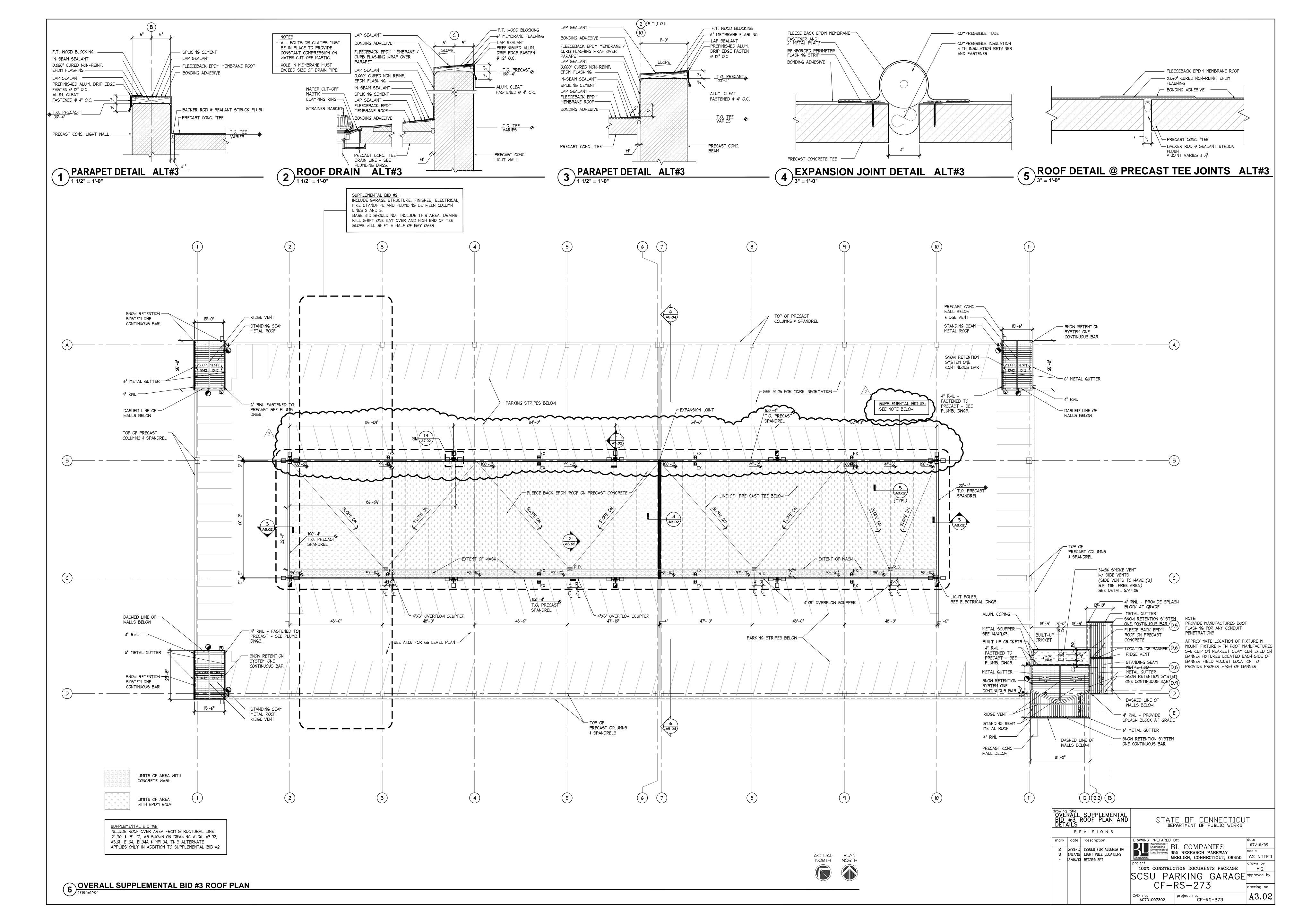




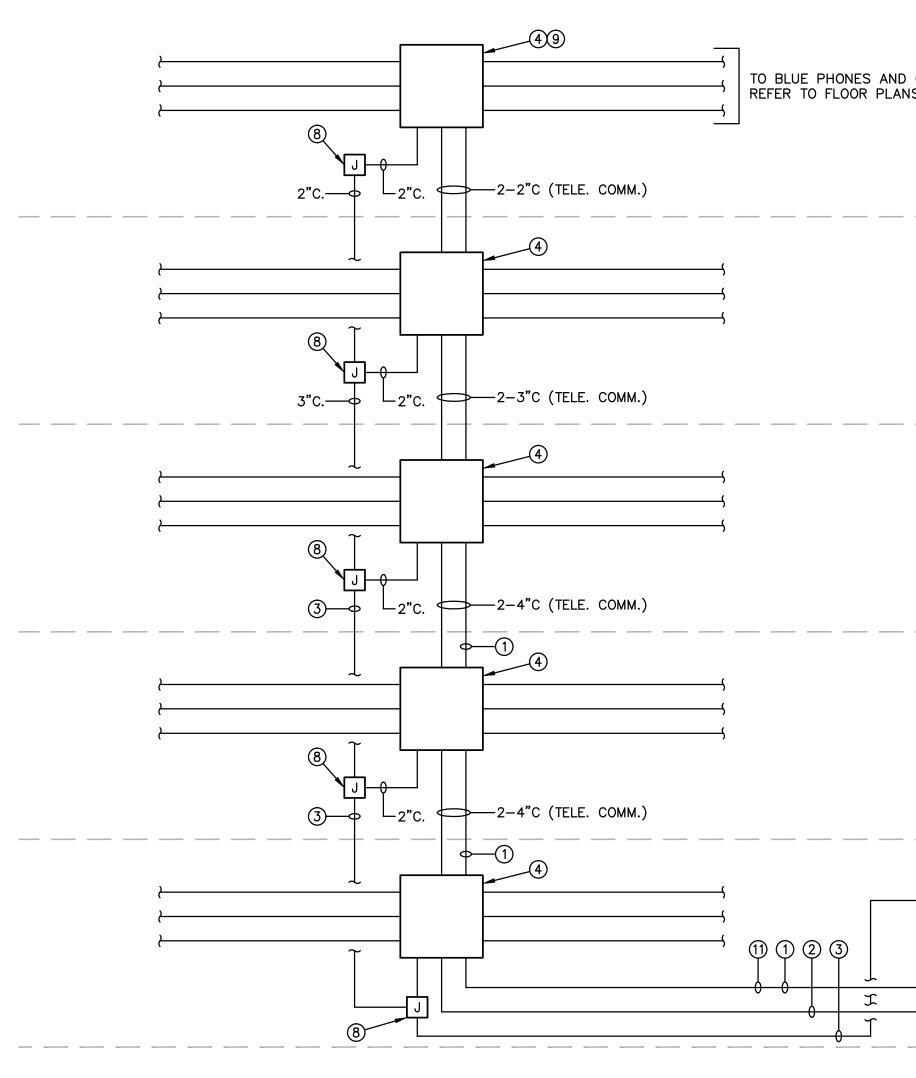
27. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS TO REMAIN WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE OWNERS, THE PROJECT ENGINEER, UTILITY COMPANIES AND GOVERNING AUTHORITIES.

28. ANY EXISTING POTABLE WELL AND SEPTIC TANKS/ABSORPTION AREAS SHALL BE ABANDONED AND REMOVED PER THE CTDEP AND CT HEALTH CODE REQUIREMENTS. 29. INSTALL CONCRETE ENCASEMENT ON PRIMARY ELECTRIC CONDUITS.





# 2 SECURITY SYSTEM RISER DIAGRAM



/OLTA( PHASE ENCLO		1		MAIN E MAIN E MAIN S	DEVICE			225 MLO	A	MOUN LOCA INTER		IG RAT	ING:	SURFACE ELECTRICAL ROC 22 KAIR RMS SYN	
CKT No	DESCRIPTION	WIRE SIZE	CB TRIP	POLES	K\ A		PER B	PHASE	E C		POLES	CB TRIP	WIRE SIZE	DESCRIPTION	CK No
1	LTG. G1 - P1	6	20	1	3.0	3.0					1	20	6	LTG. G2 - P1	2
3	LTG. G1 - P2	6	20	1			3.0	3.0			1	20	6	LTG. G2 - P2	4
5	LTG. G3 - P1	6	20	1					3.0	3.0	1	20	6	LTG. G4 - P1	6
7	LTG. G3 - P2	6	20	1	3.0	3.0					1	20	6	ltīg. g4 - p2	8
9	LTG. G5 - L1	6	20	1			3.0	3.0			1	20	6	LTG. G5 - L4	10
11	LTG. G5 - L2	6	20	1					3.0	3.0	1	20	6	LTG. G5 - L5	12
13	LTG. G5 - L3	6	20	1	3.0	3.0					1	20	6	LTG. G2 - L	14
15	LTG. G1 - L	6	20	1			2.6	3.0			1	20	6	LTG. G2 - L	16
17	LTG. G1 - L	6	20	1					2.0	3.0	1	20	6	LTG. G4 - L	18
19	LTG. G3 - L	6	20	1	3.0	3.0					1	20	6	LTG. G4 - L	20
21	LTG. G3 - L	6	20	1			3.0	1.5			1	20	8	LTG. BOLLARDS	22
23	CONTACTOR COIL	12	20	1					0.0	2.0	1	20	8	LTG. BOLLARDS	24
25	SPARE		20	1	0.0	1.0					1	20	8	ltg. Shrubs	26
27	SPARE		20	1			0.0	0.5			1	20	8	LTG. SIGN L AND M	28
29	SPARE		20	1					0.0	2.1	1	20	6	LTG. ENTRANCE POLE	30
31	SPARE		20	1	0.0	2.0					1	20	8	LTG. POLE MOUNTED	32
33	SPARE		20	1			0.0	0.0			1	20		SPARE	34
35	SPARE		20	1					0.0	0.0	1	20		SPARE	36
37	SPARE		20	1	0.0	0.0					1	20		SPARE	38
39	SPARE		20	1			0.0	0.0			1	20		SPARE	40
<b>4</b> 1	SPARE		20	1			,	,	0.0	0.0	1	20		SPARE	42
					12.0	15.0	11.6	11.0	8.0	13.1	TOTAL	KVA	:	70.7	
NOTES	:				27.0		22.6		21.1		TOTAL		<u>.</u>	85.0	

							PAN	EL RF	P1									
VOLTAC PHASE ENCLOS	3	WIRE:	/120 4 NEMA 1			MAIN E MAIN E MAIN S	DEVICE		:	225 MCB 225		MOUN LOCA		IG RAT	ING:	22	SURFACE ELECTRICAL ROO KAIR RMS SYMM	M 103
СКТ	D	ESCRIPTIO	N	WIRE	CONTRACTOR OF	POLES	10.000	carlo carl	PER	PHAS			POLES	CB	WIRE	D	ESCRIPTION	СКТ
No	04.050			SIZE	TRIP		A		B		С			TRIP	SIZE	00.0500		No
1	G1 SEC			6	15		1.2	1.2	10				1	15	6	G2 SECU		2
3	G1 SEC			6	15				1.2	1.2	1.0	1.0	1	15	6	G2 SECU		4
5	G1 SEC			6	15						1.2	1.2	1	15	6	G2 SECU		6
7	G3 SEC			6	15		1.2	1.2	1.0	1.0			1	15	6	G2 SECU		8
9	G3 SEC			6	15				1.2	1.2	4.00	1.0	1	15	6	G2 SECU		10
11 13	G3 SEC			6	15 15		4.0	0.5			1.20	1.2	1	15	6	G2 SECU		12 14
15	G5 SEC			6	15		1.2	0.5	1.2	0.2			1	20 20	8 12			14
	G5 SEC				15				1.2	U.Z	1.0	0.2	1	1000	1.1.1.1.1.1.1	TELECON		
17 19		LUE PHONE W	TOT	6 6	20		0.5	1.0			1.2	0.2	1	20 20	12			18 20
21		LUE PHONE W		6	20		0.0	1.2	0.5	0.2			1	20	12 12			20
23		a sta a traca		12	20				0.5	0.2		0.5	1	1000	252	1942 Mar	IM ROOM	22
25	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	ELEV. LOBB		12	20		0.0	0.0			0.4	0.5	1	20 20	12 12	FACP	000	24
25		LOBBY 202		12	20		0.8	0.6	0.0	0.5			1	20	6	WAITING		20
29		LOBBY 202		12	20	~~~			0.8	0.0	0.6	0.5	1	20	10			30
31			1 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1	12	20		0.2	0.5			0.6	0.5	1	20	10			30
33		. ELEV. MACH		12	20		0.2	0.5	0.5	0.5			1	20	12	LIGHT. EL	NAME AND DECIMAL	34
				12	20				0.5	0.5	0.5	0.5	1	20	12		ND PS-300 NAL SIGNS	36
37			OOPCTP	8	20		1.0	10.2			0.5	0.5		20	2	DIRECTIO		38
39	GUARD			1	125		1.0	10.2	2.5	11.8			3	125	2	RP2		40
41	GUARD			1	120	-			2.0	11.0	2.5	10.9		120	2	111 2		42
-11	JUNIU	boom		U			6.1	15.4	7.9	15.6	7.6		TOTAL	KVA		67.6		74
NOTES:							21.5	10.4	23.5	10.0	22.6	10.0		AMPS		187.6		
		ully Rated N	Jain Circu	uit Brea	ker		21.0		20.0		22.0		TOTAL			107.0		_
Tovide		uny rated r																

							PAN	EL R	P2								
VOLTAC PHASE ENCLOS	3	WIRE:	/120 4 NEMA 1			MAIN E MAIN E MAIN S	DEVICE			125 MLO	A	LOCA	NTING: TION: RRUPTIN		ING:	SURFACE ELECTRICAL ROO 22 KAIR RMS SYI	
	SURE														ing.		VIIVI
CKT	D	ESCRIPTIO	N	WIRE		POLES	K	/A	PER	PHAS			POLES	CB	WIRE	DESCRIPTION	CK
No				SIZE	TRIP		A		B		С			TRIP	SIZE		No
1	G1 SEC	URITY OR SY	STEM	6	15	1	1.5	1.5					1	15	6	G3 SECURITY OR SYSTEM	2
3	G2 SEC	URITY OR SY	STEM	6	15	1			1.5	1.5			1	15	6	G4 SECURITY OR SYSTEM	4
5	AC-1			12	15	2					0.1	1.5	1	15	6	G5 SECURITY OR SYSTEM	6
7				12			0.1	0.4							8		8
9	CU-1			12	30	2			1.7	0.4			3	20	8	SANITARY PUMP	10
11				12							1.7	0.4			8		12
13	CHARG	ER #1		8	40	2	3.1	0.5					1	20	12	MAIN FACP	14
15				8					3.1	0.5			1	20	12	MAIN FACP	16
17	CHARG	ER #2		8	40	2					3.1	1.0	1	20	12	REMOTE COMMAND CENTER	18
19				8			3.1	0.0								SPACE	20
21	CHARG	ER 3#		8	40	2			3.1	0.0						SPACE	22
23				8							3.1	0.0				SPACE	24
25																	26
27																	28
29																	30
31											-						32
33																	34
35																	36
37																	38
39																	40
41																	42
-11							7.8	2.4	9,4	2.4	8.0	2.9	TOTAL	KVA		33.0	-12
NOTES:							10.2	2.4	11.8	2.4	10.9	2.5	TOTAL			91.7	_
UTES:							10.2		11.8		10.9		TOTAL		».	51.7	

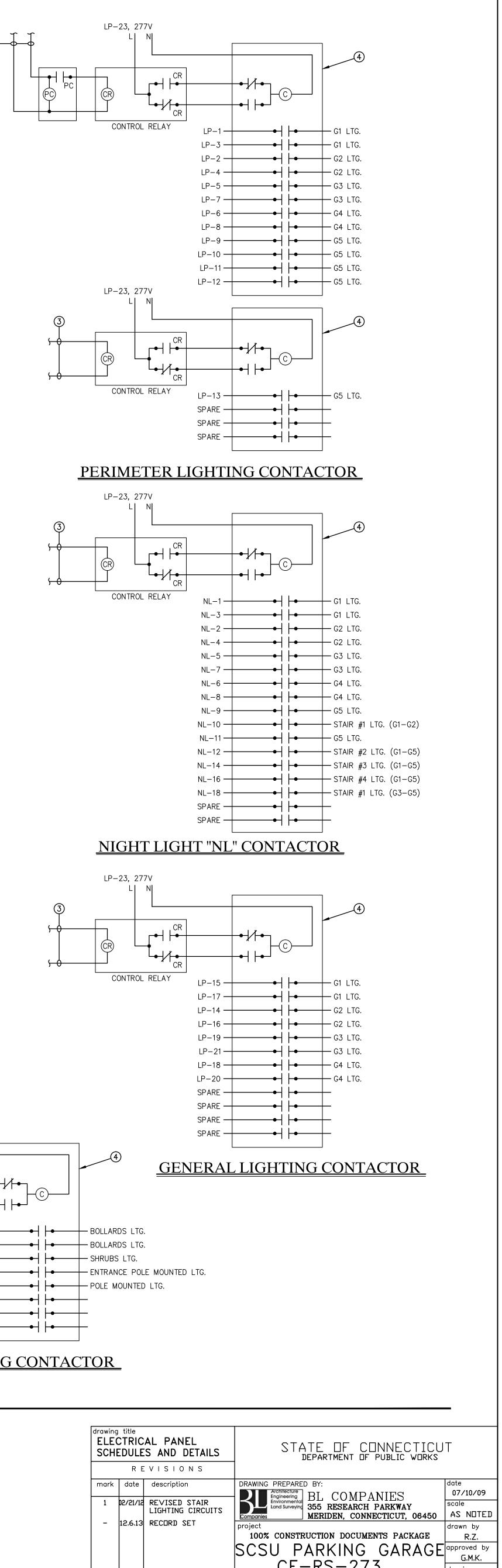
						BUS RATING: DEVICE TYPE: SIZE:			125 A MOUI MLO LOCA INTEF			IG RAT	1NG:	SURFACE ELECTRICAL ROOM 103 22 KAIR RMS SYMM		
CKT No	DESCRIPTION	WIRE SIZE	CB TRIP	POLES	K' A		PER B	PHASE	E C		POLES	CB TRIP	WIRE SIZE	DESCRIPTION	CK No	
	LTG. G1 - NL1	6	20	1	1.6	1.4			-	I	1	20	6	LTG. G2 - NL1	2	
3	LTG. G1 - NL2	6	20	1			1.6	1.4			1	20	6	LTG. G2 - NL2	4	
5	LTG. G3 - NL1	6	20	1					1.4	1.4	1	20	6	LTG. G4 - NL1	6	
7	LTG. G3 - NL2	6	20	1	1.4	1.4					1	20	6	LTG. G4 - NL2	8	
9	LTG. G5 - NL1	6	20	1		4	3.0	1.3			1	20	8	LTG STAIR #1 (G1-G2)	10	
11	LTG. G5 - NL2	6	20	1				1	2.0	1.3	1	20	6	LTG STAIR #2 (G1-G5)	12	
13	SPARE		20	1	0.0	1.4					1	20	6	LTG STAIR #3 (G1-G5)	14	
15	SPARE		20	1			0.0	3.1			1	20	8	LTG STAIR #4 (G1-G5)	16	
17	SPACE							1	0.0	3.0	1	20	8	LTG STAIR #3 (G3-G5)	18	
19	SPACE				<b>0</b> .0	0.0								SPACE	20	
21	SPACE						0.0	0.0						SPACE	22	
23	SPACE								0.0	0.0				SPACE	24	
25															26	
27															28	
29															30	
31															32	
33															34	
35															36	
37															38	
39															40	
41												-			42	
					3.0	4.2	4.6	5.8	3.4	5.7	TOTAL	KVA	:	26.7		
OTES:					7.2		10.4		9.1		TOTAL	AMPS	s:	32.1		

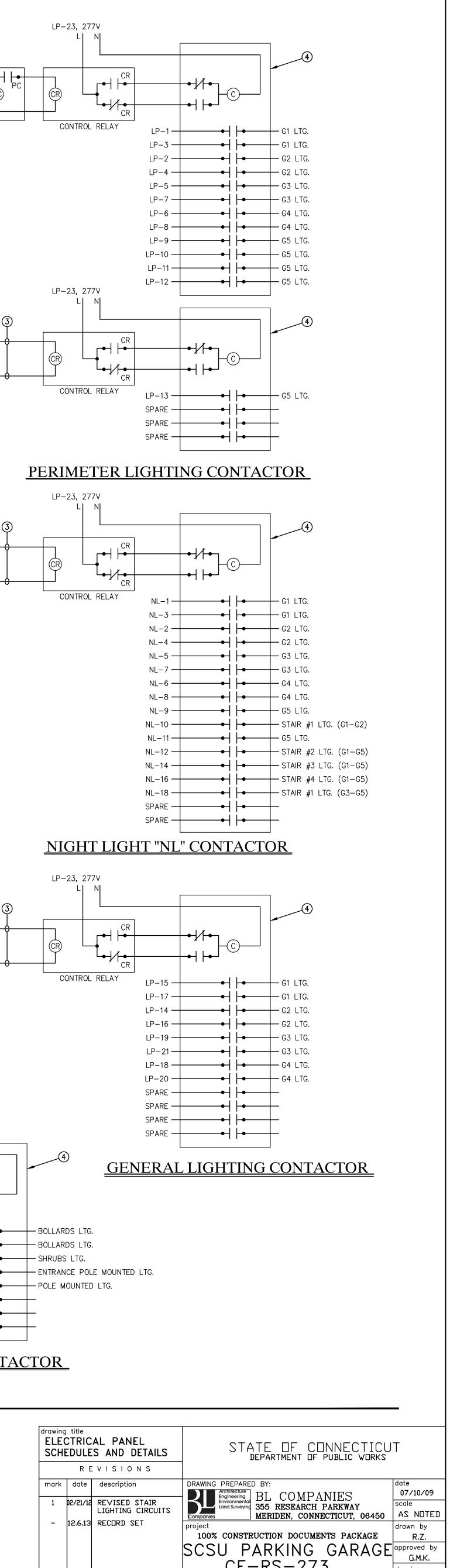
TO BLUE PHONES AND CAMERAS TYPICAL. REFER TO FLOOR PLANS FOR DETAILS.

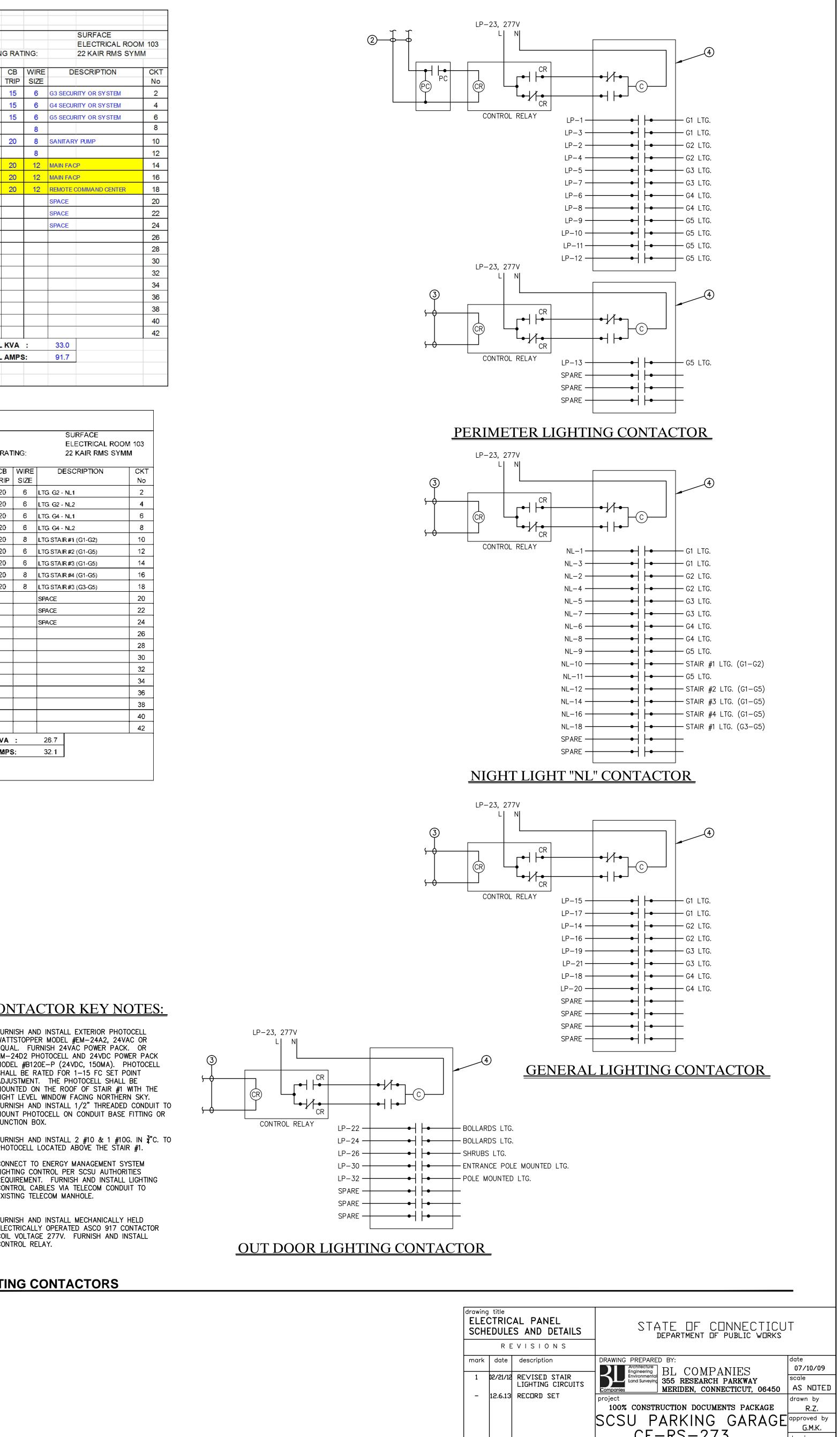
\_\_\_\_

LEVEL_G5		
	SECURITY RISER DIAGRAM KEY NOTES:	
	(1) FURNISH AND INSTALL 4" EMT MULTIGUARD 3 CELL CONDUIT FOR INSIDE THE GARAGE, WITH 3 INNERDUCT EACH 1 1/2"C. CARLON CATALOG #MESS3S-010.	
	(2) 4" EMT CONDUIT TERMINATE IN TELECOMMUNICATION ROOM CABINET PER SCSU.	<u>CONTACT</u>
	(3) 4" EMT CONDUIT, (POWER CIRCUITS). REFER TO PANEL SCHEDULE "RP"	1 FURNISH AND IN
LEVEL_G4	(4) DOUBLE HINGED WALL MOUNT CABINET HOFFMAN CATALOG #PTDHS242424G4 NEMA 4 TYPE. (TYPICAL OF 5).	WATTSTOPPER M EQUAL. FURNISI EM-24D2 PHOTO MODEL #B120E-
	(5) FURNISH AND INSTALL 1-4"CARLON MULTIGUARD MESS3S-010 PVC EMT CONDUIT SUPPLIED WITH THREE 1 1/2" INNERDUCTS, FROM TELECOM ROOM CABINET UP TO STAIRS #4 AS SHOWN ON DWG. EP2.01 INSIDE THE PARKING GARAGE AND ONE 4" PVC SCHEDULE 80 MULTIGUARD WITH 3 INNERDUCTS CARLON #MDSS3S-020 UNDERGROUND TO THE TELECOM MANHOLE. THE DESIGNATED MANHOLE SHALL PROVIDE BACKBONE CONNECTION TO GRANOFF HALL VIA UNDERGROUND CONDUITS.	SHALL BE RATED ADJUSTMENT. T MOUNTED ON TH LIGHT LEVEL WIN FURNISH AND IN MOUNT PHOTOCE JUNCTION BOX.
LEVEL_G3	6 FURNISH AND INSTALL 1-4" EMT CONDUIT FROM TELECOM ROOM UP TO STAIR #4, INSIDE THE GARAGE AND ONE 4" PVC SCHEDULE 80 UNDERGROUND TO THE TELECOM MANHOLE. THE CONDUITS ARE INSTALLED FOR COMMUNICATION, SECURITY COPPER AND OPTICAL FIBER BACKBONE TO GRANOFF HALL.	<ul> <li>(2) FURNISH AND IN PHOTOCELL LOC/</li> <li>(3) CONNECT TO EN</li> </ul>
	(7) EXISTING BACKBONE TO GRANOFF HALL VIA UNDERGROUND CONDUITS.	LIGHTING CONTRO REQUIREMENT.
	(8) POWER WIRING JUNCTION BOX 12" X 12" X 8" (TYPICAL OF 5).	CONTROL CABLES
	9 HOFFMAN CABINET FOR G5 LEVEL SHALL BE MOUNTED UNDER THE G5 LEVEL SLAB. EXACT LOCATION TO BE FIELD VERIFIED.	(4) FURNISH AND IN
	<ul> <li>CABLING:</li> <li>4UTP CATEGORY 6 CABLE FOR CAMERAS (BY OTHERS).</li> <li>4UTP CATEGORY 5E CABLE FOR CODE BLUE PHONES (BY OTHERS).</li> </ul>	ELECTRICALLY OF COIL VOLTAGE 2 CONTROL RELAY.
LEVEL_G2	(1) FURNISH AND INSTALL LIGHTING CONTROL CABLES VIA TELECOM CONDUIT TO EXISTING TELECOM MANHOLE.	
ELECTRICAL ROOM PANEL "RP"	12 ALL WIRING FOR SECURITY CAMERAS AND BLUE PHONES SHALL BE BY SCSU.	1 LIGHTING COI
	① ⑤ ⑥ ⑦	
TELE. COMM. ROOM CABINET	EXISTING MANHOLE TELCOMM.	
LEVEL G1		

\_\_\_\_\_





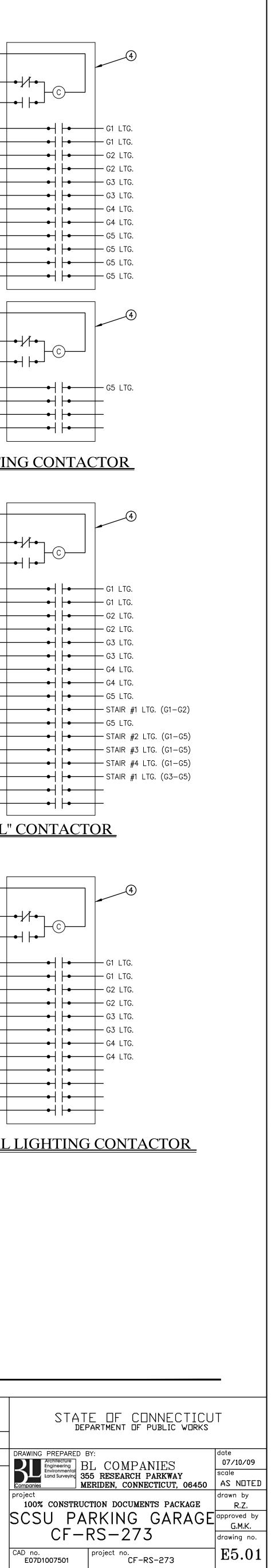


## **ONTACTOR KEY NOTES:**

FURNISH AND INSTALL EXTERIOR PHOTOCELL WATTSTOPPER MODEL #EM-24A2, 24VAC OR EQUAL. FURNISH 24VAC POWER PACK. OR M-24D2 PHOTOCELL AND 24VDC POWER PACK MODEL #B120E-P (24VDC, 150MA). PHOTOCELL HALL BE RATED FOR 1-15 FC SET POINT DJUSTMENT. THE PHOTOCELL SHALL BE IOUNTED ON THE ROOF OF STAIR #1 WITH THE IGHT LEVEL WINDOW FACING NORTHERN SKY. URNISH AND INSTALL 1/2" THREADED CONDUIT TO MOUNT PHOTOCELL ON CONDUIT BASE FITTING OR

- FURNISH AND INSTALL 2 #10 & 1 #10G. IN  $\frac{3}{4}$ "C. TO PHOTOCELL LOCATED ABOVE THE STAIR #1.
- IGHTING CONTROL PER SCSU AUTHORITIES EQUIREMENT. FURNISH AND INSTALL LIGHTING ONTROL CABLES VIA TELECOM CONDUIT TO EXISTING TELECOM MANHOLE.
- URNISH AND INSTALL MECHANICALLY HELD ELECTRICALLY OPERATED ASCO 917 CONTACTOR OIL VOLTAGE 277V. FURNISH AND INSTALL CONTROL RELAY.

# TING CONTACTORS



# **INVERTER SPECIFICATIONS:**

HIGH-LITES MODEL H3FT-24000-U-P-OCB-SEISMIC-MOD-SNMP-FS (OR EQUAL).

INPUT: INPUT VOLTAGES: 277/480 30, 4-WIRE PLUS GROUND VOLTAGE RANGE: +10%, -15%

INPUT FREQUENCY: 60HZ ± 3% POWER FACTOR: 0.5 LEAD/LAG INRUSH CURRENT: 1.25 TIMES NOMINAL INPUT CURRENT. CURRENT LIMIT: 125% OF NOMINAL INPUT CURRENT

CURRENT DISTORTION: <3% THD MAXIMUM FROM 50% TO FULL LOAD SURGE PROTECTION: MEETS ANSI C62.41 (IEEE 587) AND ANSI C62.42.45 (CAT. A&B) STANDARDS

OUTPUT: OUTPUT VOLTAGES: 277/480 3Ø, 4-WIRE PLUS GROUND. STATIC VOLTAGE STABILITY: LOAD CURRENT CHANGE  $\pm$  2% DYNAMIC VOLTAGE STABILITY:  $\pm$  2% FOR 25% STEP LOAD,  $\pm$  3% FOR 50% STEP LOAD. DYNAMIC RECOVERY TIME TO WITHIN 1% OF NOMINAL: 3 HZ

OUTPUT DISTORTION: <3% THD (WITH LINEAR LOAD) OUTPUT FREQUENCY: 60HZ (± .05HZ IN EMERGENCY MODE)

TRANSFER TIME: 2 MS LOAD POWER FACTOR RANGE: 0.5 LEAD TO 0.5 LAG

OUTPUT POWER RATING: KVA = KW OVERLOAD PROTECTION: 110% CONTINUOUS, 115% FOR 5 MINUTES CREST FACTOR: </= 2.8

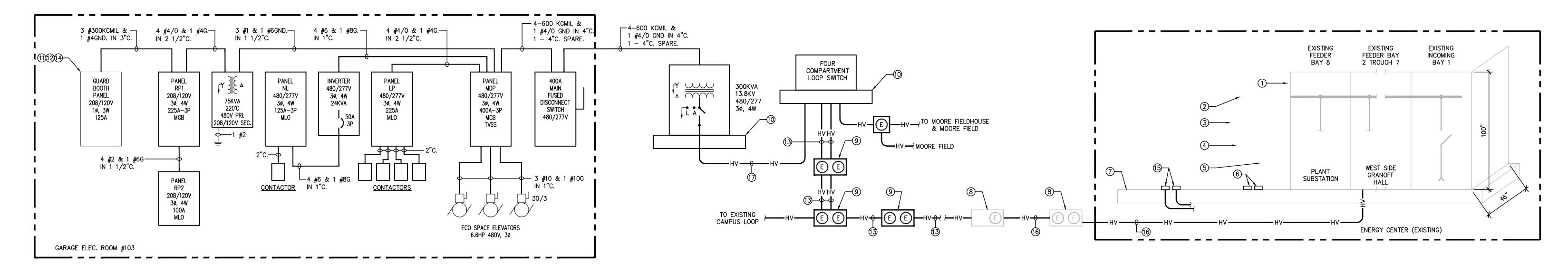
<u>BATTERIES AND CHARGER:</u> CHARGER TYPE: FULLY AUTOMATIC, MICROPROCESSOR CONTROLLED, TEMPERATURE COMPENSATING CHARGER

RECHARGE DUTY CYCLE: 24 HOURS CHARGER PROTECTION: FUSED OUTPUT AND AUTOMATIC LOW VOLTAGE BATTERY DISCONNECT.

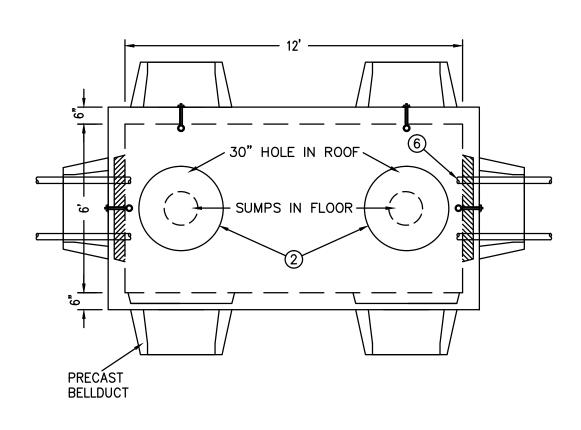
STANDARD BATTERY: SEALED LEAD CALCIUM (10 YEAR LIFE) BATTERY VOLTAGE: 240VDC RUNTIME: 90 MINUTES STANDARD – BASED ON BATTERY PERFORMANCE AT 77°F (25°C).

ENVIRONMENTAL:

ALTITUDE: < 10,000 FEET ABOVE SEA LEVEL WITHOUT DERATING OPERATING TEMPERATURE RANGE: 20 TO 30°C. RELATIVE HUMIDITY: 95% NON-CONDENSING. FURNISH SEISMIC MOUNTING KIT, MEETS ZONE 4 REQUIREMENTS.

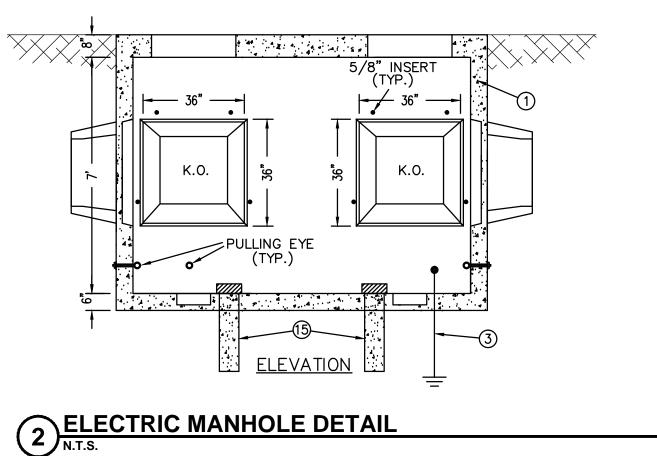


# 1 ONE - LINE RISER DIAGRAM



<u>PLAN VIEW</u>

NOTES: 1. MATERIAL – GRAY CAST IRON ASTM A48–83, CLASS 30B AASHTO HS20–44 HIGHWAY LOADING. 2. BERING SURFACE AT SEAT OF FRAME AND COVER SHALL BE MACHINED FOR UNIFORM FIT. 3. CASTINGS SUPPLIED WITHOUT SURFACE COATING. 4. MANUFACTURER CAMPBELL FOUNDRY COMPANY.



CONTROL PANEL: TYPE: 2X20-CHARACTER DISPLAY WITH TOUCH PAD CONTROL, FIVE LED FUNCTION INDICATORS AND ALARM ANNUNCIATOR WITH RINGBACK FEATURE. COMMUNICATIONS

TYPE: RS-232 PORT (DB9) STANDARD ON ALL MODELS. INSTALLATION:

MOUNTING: FREESTANDING CABINETS BOLT TOGETHER WHEN MORE THAN ONE CABINET IS REQUIRED. A SEISMIC KIT FOR SECURING SYSTEMS SHALL BE INSTALLED.

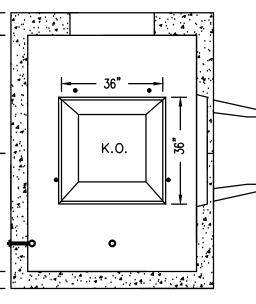
WRING: ALL BATTERY AND INTER-CABINET WIRING IS PROVIDED PRE-CUT AND TERMINATED ALONG WITH THE NECESSARY INTER-CABINET HARDWARE AND ELECTRICAL FITTINGS REQUIRED FOR PROPER INSTALLATION. CODE INFORMATION:

UL924 LISTED AND MEETS NFPA 101 LIFE SAFETY CODE, NFPA 70, NFPA 110, UBC, SBCCI, NEC, OSHA, LOCAL AND STATE CODES WARRANTY:

SYSTEM: 1-YEAR FULL COVERAGE AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FROM DATE OF SHIPMENT BATTERY: STANDARD LEAD CALCIUM BATTERY: 1 YEAR FULL WARRANTY PLUS 9 YEARS OF PRO-RATA COVERAGE.



MANHOLE COVER



<u>END VIEW</u>

## KEY NOTES:

- (1) MANHOLE 12'L X 6'W X 7'D.
- (2) HEAVY DUTY CAST IRON ROUND TRAFFIC RATED WATER TIGHT FRAME AND COVER. 30" MINIMUM DIAMETER LABELED "ELECTRIC".
- (3) GROUND ROD 5/8" DIAMETER X 10' LONG WITH #4/0 BARE COPPER CABLE THROUGH WATERTIGHT SEAL TO INSIDE MANHOLE.
- (4) BOND ALL INTERNAL MANHOLE METAL PARTS WITH #4/0 BARE COPPER CONDUCTOR.
- (5) SUPPORT CABLES WITH CABLE CLAMPS TO MANHOLE WALL.
- 6 CONDUIT END BELL AND SEAL.
- (7) MANHOLE TO SIT ON A MINIMUM OF 12" CRUSHED STONE AND SET LEVEL OF COMPACTED SUB-GRADE WITH A MINIMUM SOIL BEARING CAPACITY OF 1000 LBS PER SQUARE FOOT.
- (8) THIS MANHOLE IS INTENDED FOR THE INSTALLATION OF 600A, 15KV CABLING AND EQUIPMENT. REFER TO UTILITIES DWG. GU-1 FOR QUANTITY REFER TO DWG. EP2.02 AND E6.01.
- (9) CONCRETE 5000 PSI @ 28 DAYS.
  (10) REINFORCEMENT-ASTM, A-615, GR. 60.
- (1) LOADING-HS20-44.
- (12) JOINTS SEALED WITH BUTYL RUBBER.
- (3) CONFORMS TO UNITED ILLUMINATING SPECS.
- (14) MANUFACTURER: ARROW CONCRETE PRODUCTS.
- (5) CAST IRON DRAIN GRATING, 12" SQUARE.
- (16) 6" PIPE 18" LONG FIELD WITH CRUSHED STONE.

					MAIN	N DIS	TRIB	UTION	I PAN	IEL M	DP			TVSS 120KA	
					BUS RATING: DEVICE TYPE: SIZE:			400 A MCB 400 A		MOUNTING: LOCATION: INTERRUPTING RAT			ing:	SURFACE ELECTRICAL ROC 35 KAIR RMS SYMM	
СКТ	DESCRIPTION	WIRE		POLES			PER	PHAS			POLES	СВ	WIRE	DESCRIPTION	CKT
No		SIZE	TRIP		A	·	В		C			TRIP	SIZE		No
1		10			2.2	25.0		1					1		2
3	ELEVATOR 6.6HP	10	20	3			2.2	25.0	-		3	125	1	TX (RP1 AND RP2)	4
5		10				1			2.2	25.0			1		6
7		10			2.2	8.9							6		8
9	ELEVATOR 6.6HP	10	20	3			2.2	8.9			3	50	6	INVERTER (PANEL NL)	10
11		10				,			2.2	8.9			6		12
13		10			2.2	22.9							4/0		14
15	ELEVATOR 6.6HP	10	20	3			2.2	22.9	_	r	3	225	4/0	LIGHTING PANEL (LP)	16
17		10					_		2.2	22.9			4/0		18
19	SPARE		20	1	0.0	1.5					1	20	12	RADIANT PANEL	20
21	SPARE		20	1			0.0	1.5			1	20	12	RADIANT PANEL	22
23	SPARE		20	1			_		0.0	1.5	1	20	12	RADIANT PANEL	24
25	SPARE		20	1	0.0	3.0					1	20	12	HEATER IN ELEC. ROOM	26
27	SPARE		20	1			0.0	0.0			1	20		SPARE	28
29	SPARE		20	1							1	20		SPARE	30
31	SPARE		20	1							1	20		SPARE	32
33	SPACE													SPACE	34
35	SPACE													SPACE	36
37	SPACE													SPACE	38
39	SPACE													SPACE	40
<b>4</b> 1	SPACE								0.0	0.0				SPACE	42
					6.6	61.3	6.6	58.3	6.6	58.3	TOTAL	. KVA	:	197.7	
IOTES	:				67.9		64.9		64.9		TOTAL	. AMPS	5:	237.8	

# SWITCH GEAR SPECIFICATION:

#### 1. THE PROPOSED FEDERAL PACIFIC METAL ENCLOSED SWITCHGEAR SECTION SHALL MATCH THE EXISTING FEDERAL PACIFIC METAL ENCLOSED, AUTOJET SWITCHGEAR, 33TF, SERIAL #H1452A MANUFACTURED DATE 03/03. HEIGHT 100", WIDTH 41" AND DEPTH 46".

- 2. METAL ENCLOSED SWITCHGEAR SHALL BE RATED:
- \* MAIN BUS 1200A. \* VOLTAGE 15 KV
- \* FREQUENCY 60 HZ. \* INSULATION LEVEL 95 KV.
- \* CONTINUOUS CURRENT 600 AMPS. \* LOAD CURRENT 600 AMPS.
- \* 40 KA RMS SYMM. \* MOMENTARY 40 KA RMS ASYM.
- \* FAULT CLOSING 40 KA RMS ASYM.
  \* DIE ELECTRIC STRENGTH WITHSTAND 36 KV.
  \* MVA 3Ø SYM. 650.
- 3. SWITCH SHALL BE MECHANICALLY INTERLOCKED SUCH THAT THE SWITCH SHALL BE IN OPEN STATUS BEFORE ALLOWING ACCESS TO FUSE COMPARTMENT.

4. NAME PLATE SIGN SHALL INDICATE (13,800 VOLTS, FEEDER FOR PARKING GARAGE, POSITION 9).

5. PROVIDE A BLACK PHENOLIC LABEL WITH WHITE LETTERS OR A RED PHENOLIC LABEL WITH WHITE LETTERS ON THE 400A MAIN DISCONNECT SWITCH STATING "OPENING OF THE MAIN DISCONNECT SWITCH WILL CAUSE THE INVERTER TO ENERGIZE".

6. OPENING OF THE MAIN DISCONNECT SWITCH WILL CAUSE THE INVERTER TO ENERGIZE.

#### NOTE: ELECTRICAL CONTRACTOR TO PROVIDE LISTED CHOKES OR BONDING BUSHINGS AS REQUIRED PER NEC WHEN BONDING GROUND CONDUCTORS TO TRANSFORMERS OR BUILDING STEEL.

## <u>KEY NOTES:</u>

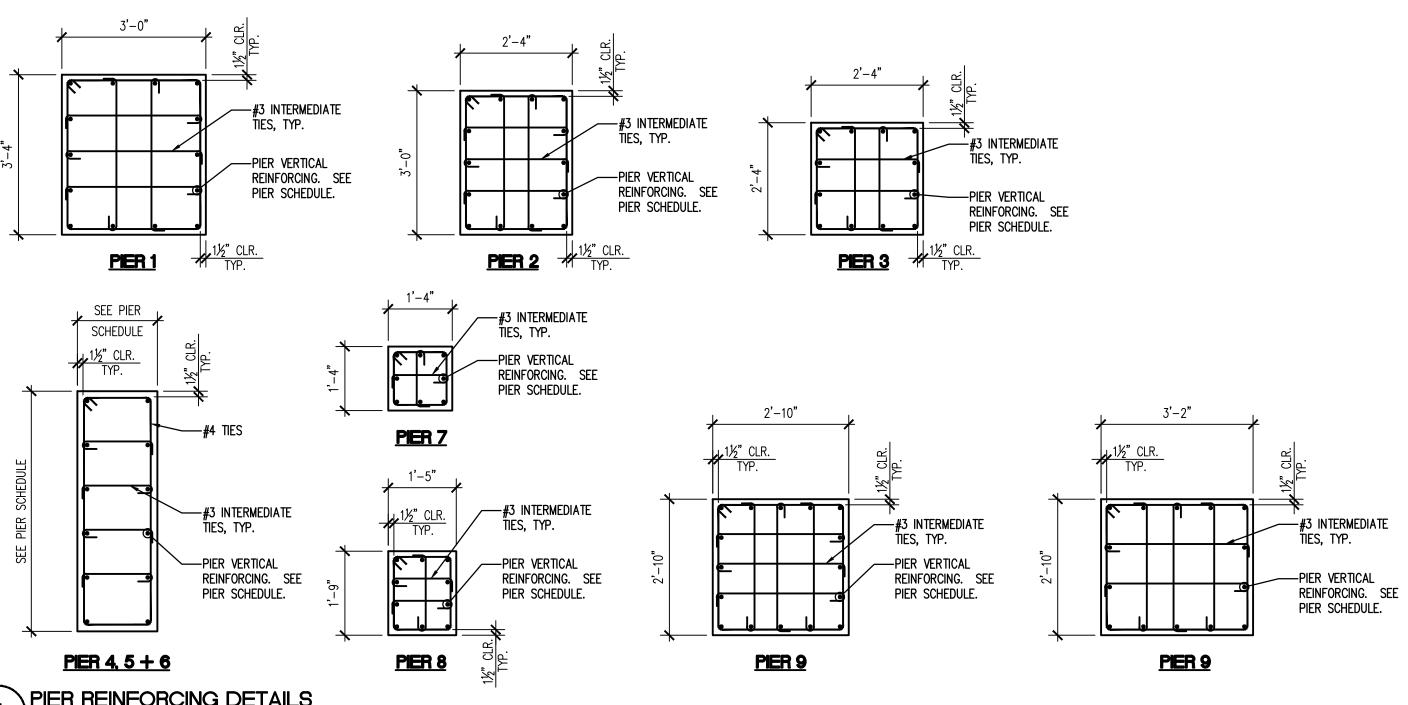
EXISTING METAL ENCLOSED SWITCHGEAR 15KV INDOOR.
 NOT USED.

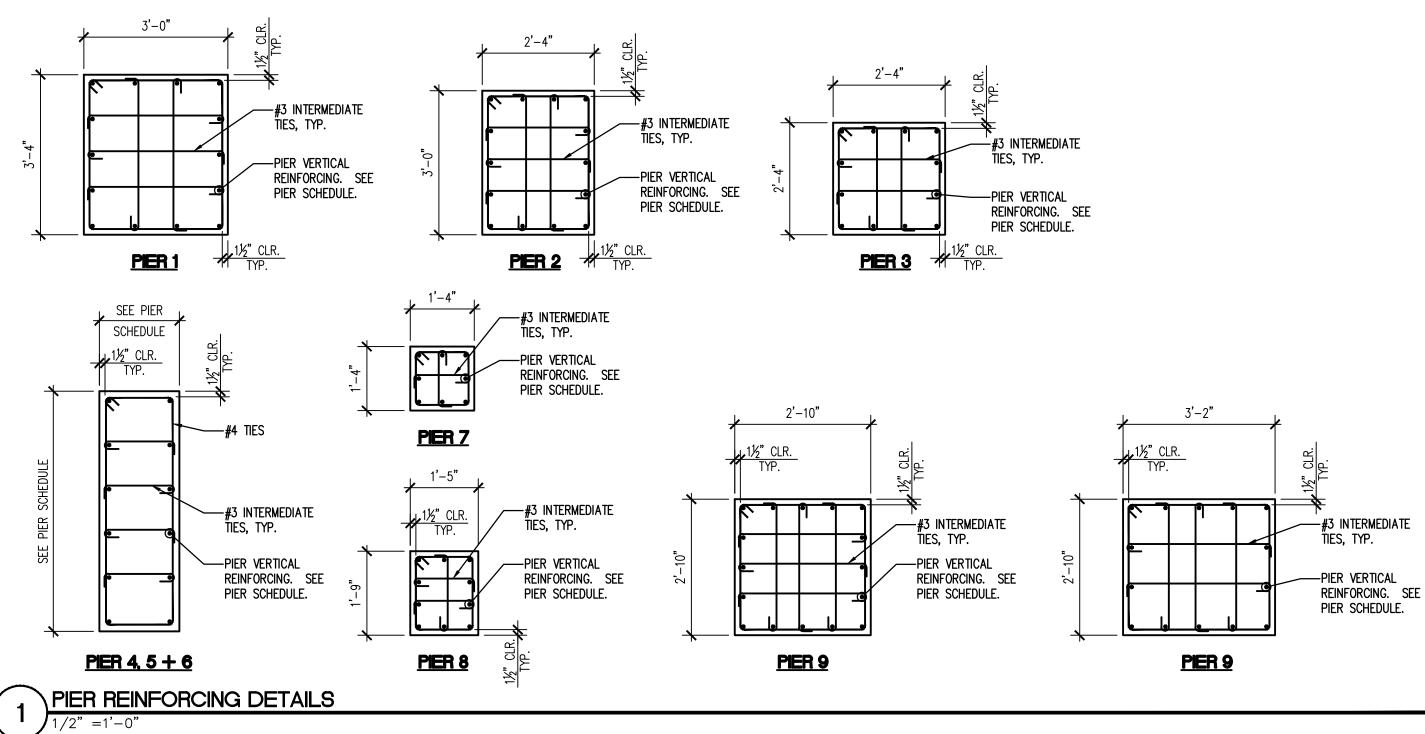
- (3) NOT USED.
- (4) NOT USED.
- 5 NOT USED.
- 6 EXISTING CONDUITS 5" DIA.
- ⑦ EXISTING PAD.
- (8) EXISTING ELECTRIC MANHOLES.(9) PROPOSED MANHOLE. REFER TO DETAILS ON THIS DWG.
- PROPOSED CONCRETE PAD. REFER TO TRANSFORMER PAD DETAILS ON DWG. E4.01 DETAIL #5.
- (1) THE ELECTRICAL CONTRACTOR SHALL INSTALL FEEDER TO GUARD BOOTH AND CONNECT TO PANEL. FURNISH AND INSTALL GROUNDING PER CODE AND SCSU AUTHORITIES. FURNISH EMT CONDUIT INSIDE THE BOOTH.
- DEFINITION OF THE TO BOOTH PANEL.
- 13 FURNISH AND INSTALL PROPOSED 15KV FEEDER 3 #4/0 & 1 #4/0 GND. IN 5"C. 5-5"C. SPARE FOR FUTURE USE.
- (1) BOOTH PANEL SHALL BE SUPPLIED BY BOOTH MANUFACTURER.
- (15) EXISTING TWO 5" DIA. CONDUITS UNDER FLOOR TO GENERATOR
- 16 FURNISH AND INSTALL 3 #2 CU & 1 #4/0 GND. 15KV FEEDER IN EXISTING CONDUIT.
- (7) FURNISH AND INSTALL 15 KV FEEDER 3 #1/0 CU & 1 #4/0 GND IN 5"C. 1-5" SPARE.

# drawing title ELECTRICAL POWER ONE-LINE DIAGRAM & DETAILS R E V I S I O N S mark date description - 12.6.13 RECORD SET P

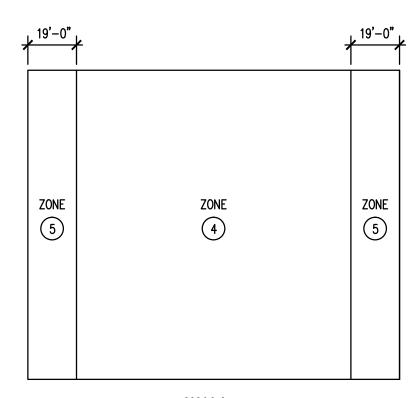


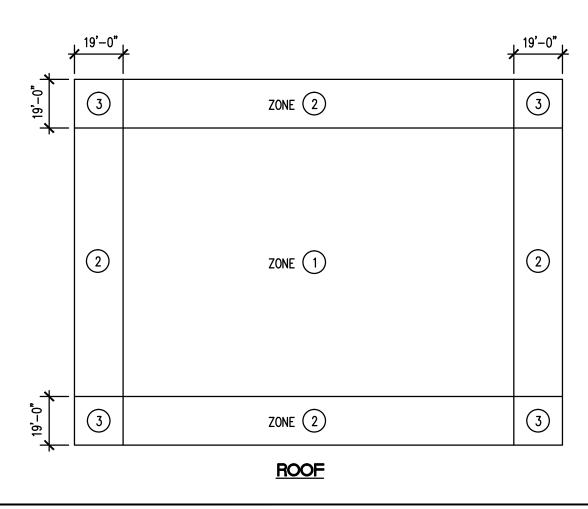
STATE OF CONNECTICUT DEPARTMENT OF PUBLIC WORKS									
REPARED E	SY:	date							
	L COMPANIES	07/10/09							
/ironmental	5 RESEARCH PARKWAY	scale							
	ERIDEN, CONNECTICUT, 06450	AS NOTED							
		drawn by							
CONSTRUC	TION DOCUMENTS PACKAGE	R.Z.							
ΙΡΔ	RKING GARAGE	approved by							
		G.M.K.							
CF - I	RS-273	drawing no.							
07601A	project no. CF-RS-273	E6.01							





ASCE 7-02 WIND LOADS ON COMPONENTS + CLADDING WIND VELOCITY 110 MPH EXPOSURE "B"									
FT <sup>2</sup>		TRIBUTA	ARY AREA						
ZONE	10	20	50	100					
1	+11.3	+10.4	+9.4	+9.0					
	-27.8	-27.1	-26.6	-25.4					
2	+11.3	+10.4	+9.4	+9.0					
	-46.6	-41.4	-34.8	-30.1					
3	+11.3	+10.4	+9.4	+9.0					
	-70.2	-57.7	-42.1	-30.1					
4	+25.4	+24.5	+22.8	+21.7					
	-27.5	-26.6	-25.0	-23.8					
5	+25.4	+24.5	+22.8	+21.7					
	-33.9	-31.8	-28.7	-26.6					





# 

FTG. MARK	SIZE (LxWxH)	REINFORCEMENT (BOTTOM, U.N.O.)
F7	7"-0" x 7'-0" x 1'-4"	(8)-#6 BARS, EACH WAY
F8	8"-0" x 8'-0" x 1'-6"	(9)-#7 BARS, EACH WAY
F8A	8"-0" x 8'-0" x 2'-6"	(9)-#7 BARS, EACH WAY
F10	12"-0" x 10'-0" x 1'-10"	#8 BARS AT 10" OC, EACH WAY
F12	12"-0" x 12'-0" x 2'-6"	(13)-#9 BARS, EACH WAY
F14	14"-0" x 14'-0" x 3'-0"	(15)-#10 BARS, EACH WAY
F14A	14"-6" x 14'-6" x 3'-2"	(16)-#10 BARS, EACH WAY
F16	16'-0" x 16'-0" x 3'-4"	(20)-#10 BARS, EACH WAY
F18	50'-0" x 18'-0" x 4'-0"	SEE PLANS FOR HORIZ. REINF'G. #4 VERT AT 12" OC, EACH VERT. FACE. HOOK ENDS OF #4 VERT AT 12" OC
F20	52'-0" x 20'-0" x 4'-0"	SEE PLANS FOR HORIZ. REINF'G. #4 VERT AT 12" OC, EACH VERT. FACE. HOOK ENDS OF #4 VERT AT 12" OC

# 

PIER MARK	SIZE (LxW)	REINFORCEMENT	REFERENCE
P1	3'-4"x3'-0"	(4)–#9 VERT. SHORT FACE (5)–#9 VERT. LONG FACE	-
P2	3'-0"x2'-4"	(4)#8 VERT. SHORT FACE (5)#8 VERT. LONG FACE	-
P3	2'-4"x2'-4"	(4)-#8 VERT. EACH FACE	_
P4	5'-10"x1'-8"	(6)-#7 VERT. EA. LONG FACE	-
P5	16'-0"x1'-8"	(17)–#7 VERT. EA. LONG FACE	1
P6	17'-1"x1'-8"	(18)–#7 VERT. EA. LONG FACE	1
P7	1'-4"x1'-4"	(3)–#6 VERT. EACH FACE	1
P8	1'-9"x1'-5"	(3)–#6 VERT. SHORT FACE (4)–#6 VERT. LONG FACE	_
P9	2'-10"x2'-10"	(5)-#8 VERT. EACH FACE	-
P10	3'-2"x2'-10"	(4)–#7 VERT. SHORT FACE (5)–#7 VERT. LONG FACE	_

NOTE: USE #3 TIES AT 12" OC AT PIERS, TYP., U.N.O. (DOUBLED AT TOP OF PIER) SEE PIER REINFORCING DETAILS, THIS SHEET, FOR ADDITIONAL INFORMATION.

# PRECAST CONCRETE NOTES

ALL STRUCTURAL PRECAST CONCRETE SHALL BE DESIGNED FOR THE SPAN AND LOADING CONDITIONS SHOWN ON THE DRAWINGS OR AS REQUIRED BY APPLICABLE CODES, INCLUDING BUT NOT LIMITED TO THOSE IMPOSED BY THE ERECTION SEQUENCES AND METHODS, BY A PRECAST MANUFACTURER'S PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT. ALL DESIGN CALCULATIONS, INCLUDING THE ANALYSIS AND DESIGN FOR LATERAL AND GRAVITY LOADS AND THE DESIGN OF ALL STRUCTURAL ELEMENTS AND CONNECTIONS, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO THE START OF FABRICATION. FOUNDATION FOR THE STRUCTURE HAS BEEN DESIGNED FOR PRELIMINARY LATERAL AND GRAVITY LOADS. FINAL FOUNDATION DESIGN MAY CHANGE BASED ON ACTUAL PRECAST DESIGN LATERAL AND GRAVITY LOADS.

DETAILED AND CHECKED SHOP DRAWINGS SHOWING ALL STRUCTURAL ELEMENTS, DETAILS AND CONNECTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW PRIOR TO THE START OF FABRICATION.

THE PRECAST CONCRETE MANUFACTURER SHALL BE RESPONSIBLE FOR FULL COORDINATION OF ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DETAILS AS THEY AFFECT THE STRUCTURAL SYSTEM. THERE SHALL BE NO FIELD CUTTING OF PRECAST ELEMENTS WITHOUT THE PRIOR REVIEW OF THE ENGINEER OF RECORD AND

SUBSEQUENT WRITTEN CONSENT BY THE PRECAST MANUFACTURER. ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING BARS SHALL CONFORM TO ACI "BUILDING CODE REQUIREMENTS FOR

REINFORCED CONCRETE", ACI-318-02, AND "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI-315.

SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR SPECIAL ARCHITECTURAL CONCRETE REQUIREMENTS TO INCLUDE LOCATION, MIX DESIGN, FORMWORK, FINISH, ETC.

THE CONTRACTOR SHALL COORDINATE PRECAST, CAST-IN-PLACE AND STRUCTURAL STEEL WORK WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS AND PROVIDE ALL NECESSARY INSERTS, REGLETS, ETC. REQUIRED.

CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT TWENTY-EIGHT (28) DAYS.

ALL REINFORCING SHALL CONFORM TO ASTM A615 GRADE 60, UNLESS OTHERWISE NOTED.

REINFORCING STEEL BARS WELDED TO STEEL INSERTS AND STRUCTURAL SHAPES SHALL CONFORM TO ASTM A615 GRADE 40 OR ASTM A706 GRADE 60, AND WELDING SHALL CONFORM TO AWS D1.4 "STRUCTURAL WELDING CODE - REINFORCING STEEL". ALL WELDMENTS SHALL RECEIVE TWO (2) COATS OF PRIMER.

ALL WELDED WIRE MESH SHALL CONFORM TO ASTM A185.

ALL PRESTRESSING STEEL SHALL CONFORM TO ASTM A416, STRESS RELIEVED, LOW RELAXATION, 7-WIRE STRAND, GRADE 270 KSI. ALL FLANGE-TO-FLANGE CONNECTIONS BETWEEN ADJACENT DOUBLE TEES AND EXPANSION BEARING ASSEMBLIES SHALL BE STAINLESS STEEL. ALL CONNECTION PLATES, INSERTS, BOLTS, NUTS AND WASHERS, COIL RODS AND COIL INSERTS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, OR ASTM A153, AS APPLICABLE. SURFACE PREPARATION OF THE COMPONENTS PRIOR TO GALVANIZING SHALL BE CONSISTENT WITH RECOMMENDATIONS BY THE STRUCTURAL STEEL PAINTING

COUNCIL (SSPC). AREAS OF EMBEDS DESIGNATED FOR FIELD WELDING SHALL BE FREE OF GALVANIZING WITHIN 3" OF THE WELD. ALL DAMAGED GALVANIZING, AS WELL AS FIELD WELDED CONNECTIONS, SHALL BE CLEANED OF LOOSE AND DELETERIOUS MATERIALS AND TOUCHED UP WITH TWO (2) COATS OF ZINC RICH PAINT IN ACCORDANCE WITH SSPC-PAINT 20.

THREAD COIL RODS OR EQUIVALENT ALONG SPANDRELS TO EXTEND IN TO C.I.P. TOPPING FOR DIAPHRAGM ACTION AS REQUIRED.

ALL GROUT SHALL BE OF THE NON-SHRINK, NON-FERROUS TYPE WITH MINIMUM I'C = 6000 PSI 28-DAY STRENGTH. PRECAST UNITS SHALL BE ERECTED WITHOUT EXCEEDING TOLERANCE LIMITS SPECIFIED IN PCI MNL-127.

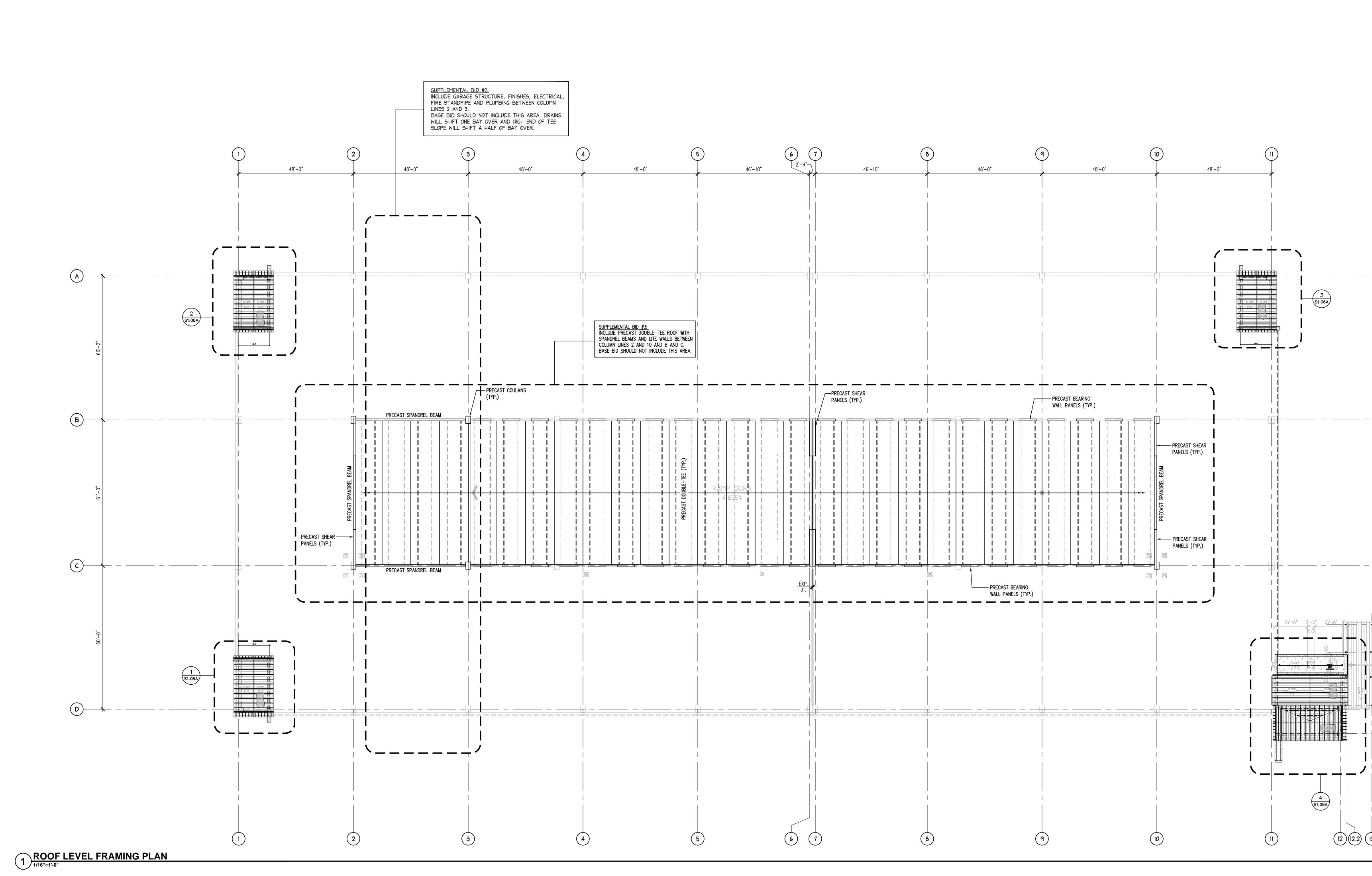
THE FOUNDATION FOR THE PRECAST STRUCTURE IS DESIGNED TO SUPPORT THE COMPLETED SUPERSTRUCTURE. DURING ERECTION OF THE SUPERSTRUCTURE, THE CONTRACTOR SHALL FURNISH ALL TEMPORARY BRACING AND SUPPORTS AS THE RESULT OF THE CONT5RACTOR'S CONSTRUCTION METHODS AND/OR SEQUENCE SO THAT STRUCTURAL INTEGRITY OF THE FOUNDATION IS NOT COMPROMISED.

SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

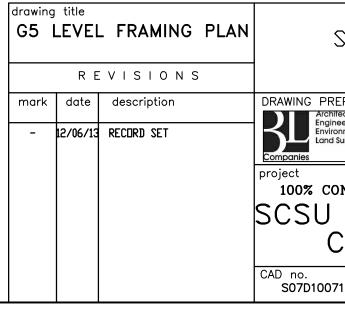
<u>WALL</u>

STEEL ROOF DECK NOTES	GENERAL NOTES
STEEL ROOF DECK SHALL CONFORM TO AISI SPECIFICATION FOR THE DESIGN OF LIGHT GAGE, COLD-FORMED STRUCTURAL STEEL MEMBERS AND THE STEEL DECK INSTITUTE'S DESIGN REQUIREMENTS. COMPOSITE STEEL FLOOR DECK SHALL CONFORM TO ASTM	DESIGNED IN ACCORDANCE WITH THE STATE OF CONNECTICUT BASIC BUILDI AMENDMENTS.
A-611, GRADE C AND D, OR FROM A-653-94 STRUCTURAL QUALITY GRADE 33 OR HIGHER.	IF ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THESE DRAWINGS A IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH THE A
STEEL ROOF DECK, UNLESS SPECIFIED OTHERWISE, SHALL BE 1.5" DEEP, 20 GAGE MINIMUM, TYPE "B" BY VULCRAFT OR APPROVED EQUAL. STEEL DECK SHALL BE GALVANIZED G60.	TYPICAL DETAILS AND NOTES SHOWN HEREIN SHALL APPLY UNLESS SPECIF
STEEL ROOF DECK SHALL BE CONTINUOUS OVER A MINIMUM OF THREE SPANS, AND SHALL BE FASTENED TO THE SUPPORTS AT THE UNIT ENDS AND AT INTERMEDIATE SUPPORTS AS RECOMMENDED BY THE STEEL DECK MANUFACTURER. MINIMUM ATTACHMENT	DETAILS NOT FULLY SHOWN OR NOTED SHALL BE SIMILAR TO DETAILS SHO
REQUIREMENTS SHALL BE #8 TEK SCREWS AT 12" OC AT EVERY SUPPORT AND 6" OC AT DECK PERIMETER. 5%" PUDDLE WELDS MAY BE SUBSITUTED IN LIEU OF #8 TEK SCREWS WHERE STEEL DECK BEARS ON STRUCTURAL STEEL.	ALL UNDERGROUND UTILITY LOCATIONS SHALL BE VERIFIED PRIOR TO STAR TO STARTING ANY EXCAVATION.
ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 - "STRUCTURAL WELDING CODE - SHEET STEEL".	WORK AREAS SHALL BE MARKED, FENCED, AND OTHERWISE SECURED SO A AND AS REQUIRED BY THE BUILDING INSPECTOR.
PROVIDE FIELD TOUCH UP OF ALL WELDS IN DECK WITH ZRC COLD GALVANIZING COMPOUND. ALL ACCESSORIES TO THE STEEL DECK, INCLUDING EDGE ANGLES, POUR STOPS, COLUMN CLOSURES, END CLOSURES, COVER	IT SHALL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DESIGN AND PROETC., AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING
PLATES AND GIRDER FILLERS, ETC., SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.	BRACING, SHORING, GUYS OR TIE-DOWNS. THESE TEMPORARY SUPPORTS COMPONENTS ARE STABLE AND COMPLETED.
	FOUNDATION DESIGN BASED ON GEOTECHNICAL ENGINEERING REPORT BY "D ENGINEERING" DATED JUNE 4, 2008.
COLD FORMED METAL FRAMING NOTES	ROOF (LEVEL G5) LOADS:
ALL LIGHTWEIGHT STEEL PRODUCTS, DETAILING, FABRICAITON AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AISI NASPEC 2001, "NORTH AMERICAN SPECIFICATION FOR DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".	LIVE LOAD = 40 PSF UNIFORM, 3000 LBS CONCENTRATED (PARKING GROUND SNOW LOAD, $Pg = 30$ PSF (CT SUPPLEMENT – APPENDIX
ALL PREMANUFACTURED METAL TRUSS PRODUCTS, DETAILING, FABRICAITON AND INSTALLATION SHALL MEET THE REQUIREMENTS OF "STANDARD FOR COLD–FORMED STEEL FRAMING – TRUSS DESIGN", 2001 EDITION.	EXPOSURE FACTOR, $Ce = 0.9$ THERMAL FACTOR, $Ct = 1.2$ IMPORTANCE FACTOR, Is = 1.0
STEEL GRADES:	FLAT ROOF SNOW LOAD, $Pf = 23 PSF$ (USE 30 PSF MIN. PER STAT SNOW LOADS INCREASED FOR DRIFT, SLIDING, ETC. WHERE APPLICAB
12, 14, & 16 GAGE COMPONENTS Fy (MIN) = 50 ksi (ASTM A-446 GRADED) 18 GAGE COMPONENTS Fy (MIN) = 33 ksi (ASTM A-446 GRADE B)	FLOOR LIVE LOADS: PARKING GARAGE = 40 PSF UNIFORM, 3000 LBS CONCENTRATED
20 GAGE COMPONENTS Fy (MIN) = 33 ksi (ASTM A-446 GRADE A) ALL COMPONENTS SHALL BE ZINC COATED (G60 GALVANIZED) IN ACCORDANCE WITH ASTM A-525.	STAIRS AND LOBBIES = 100 PSF UNIFORM WIND LOADS:
FLAME CUTTING OF MEMBERS OR HOLES IS NOT PERMITTED.	BASIC WIND SPEED (3-SEC. GUST) = 110 MPH (CT SUPPLEMENT - IMPORTANCE FACTOR = 1.00
ALL FIELD CONNECTIONS SHALL CONFORM TO DETAILS SHOWN ON FABRICATION PLANS.	EXPOSURE = "B" INTERNAL PRESSURE COEFFICIENT, $GCpi = \pm 0.18$
ALL STUDS, HARDWARE, ACCESSORIES, AND FASTENERS SHALL BE GALVANIZED.	WIND LOADS DETERMINED USING ASCE 7-02 PROVISIONS. MAIN WIND-FORCE PRESSURES: NORMAL TO RIDGE, WW+LW = 23.2 PARALLEL TO RIDGE, WW+LW = 19
ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 — "STRUCTURAL WELDING CODE — SHEET STEEL".	SEE TABLE, THIS SHEET, FOR COMPONENTS AND CLADDING PRESSUR
	SEISMIC DESIGN CRITERIA: Ss = 0.243 S1 = 0.062 (CT SUPPLEMENT - APPENDIX K) SEISMIC IMPORTANCE FACTOR, le = 1.00
CONCRETE NOTES	SEISMIC USE GROUP = 1 SITE CLASS = "D"
ALL CONCRETE WORK SHALL CONFORM TO ACI "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI-318-02, AND "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI-315.	Sds = 0.259 Sd1 = 0.099 SEISMIC DESIGN CATEGORY = "B"
ALL CONCRETE FORMWORK SHALL CONFORM WITH ACI "RECOMMENDED PRACTICES FOR CONCRETE FORMWORK", ACI-347.	BASIC STRUCTURAL SYSTEM = BEARING WALL SYSTEMS SEISMIC RESISTING SYSTEM = ORDINARY REINFORCED CONCRETE SHE RESPONSE MODIFICATION COEFFICIENT, $R = 4$
ALL STRUCTURAL CONCRETE SHALL CONFORM WITH ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDINGS", ACI-301.	DEFLECTION AMPLIFICATION FACTOR, $Cd = 4$ ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE ANALYSIS
AIR ENTRAIN ALL EXTERIOR CONCRETE. ALL CONCRETE FOR FOUNDATIONS AND SLABS ON GRADE SHALL BE NORMAL WEIGHT CONCRETE WITH A MINIMUM COMPRESSIVE	DESIGN BASE SHEAR = 1,200k EAST 1,400k WEST
STRENGTH AT 28 DAYS OF 4,500 PSI. REMOVE ALL DEBRIS FROM BOTTOM OF FOOTINGS PRIOR TO PLACING CONCRETE. DO NOT PLACE CONCRETE ON FROZEN SOIL, ICE,	MISCELLANEOUS LOADS: HANDRAILS AND GUARDS = 50 PLF OR 200 LBS AT ANY POINT
MUD, OR IN STANDING WATER. ALL FOUNDATION SUBGRADES SHALL BE INSPECTED AND APPROVED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER WITH GEOTECHNICAL ENGINEERING EXPERIENCE PRIOR TO BEING CONCRETED.	VEHICLE BARRIERS = 6000 LBS HORIZONTALLY APPLIED AT 18 INCH SOIL LATERAL LOADS: AT-REST COEFFICIENT FOR RESTRAINED F ACTIVE PRESSURE COEF. FOR CANTILEVER
ALL CONCRETE SHALL BE CONTINUOUSLY MOIST CURED FOR SEVEN (7) DAYS MINIMUM. CONCRETE SHALL BE KEPT MOIST BY FOG	ALL COMPACTED CONTROLLED FILL BEING PLACED MUST BE TESTED BY AN
SPRAYING, CURING PAPER AND/OR ACCEPTABLE CURING COMPOUNDS. CONTRACTOR SHALL SUBMIT MIX DESIGNS FOR APPROVAL. MIX DESIGN SHALL INDICATE 28-DAY STRENGTHS, CEMENT CONTENT,	OPERATION. SLABS AND FOOTINGS SHALL NOT BE PLACED UNTIL FILL TES THE ENGINEER. PROIR TO PLACING CONCRETE, EXISTING SOIL CONDITIONS GEOTECHNICAL ENGINEER. ALL UNSUITABLE SOIL SHALL BE REMEDIATED A
AIR CONTENT, WATER-CEMENT RATIO, AMOUNT OF FINE AND COARSE AGGREGATES, AND ADMIXTURES. MAX. WATER-CEMENT RATIO = 0.42 FOR 4,500 PSI	PAD PREPARATION SHALL BE IN ACCORDANCE WITH THE SITE DRAWINGS, S REQUIREMENTS
MAX. SLUMP- 4" FOR SLABS	ALL SPECIAL INSPECTION REPORTS PERFORMED IN ACCORDANCE WITH THE SUBMITTED TO THE ENGINEER FOR REVIEW IN A TIMELY MANNER. THE FIN
5" FOR ALL OTHER CONCRETE MAX. AGGREGATE SIZE— FOOTINGS & FOUNDATIONS — 3/4" TO 1 1/2"	ISSUED UNTIL ALL SPECIAL INSPECTION REPORTS HAVE BEEN RECEIVED AN
SLAB-ON-GRADE - $3/4$ " TO 1" CONCRETE FILL - $1/2$ "	STRUCTURAL STEEL NOTES
CEMENT SHALL BE PORTLAND CEMENT, TYPE I OR II, CONFORMING TO ASTM C—150. AGGREGATES SHALL CONFORM TO ASTM C—33. AIR ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C—260. NON—SHRINK GROUT SHALL CONFORM TO ASTM C—109.	STEEL SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL STEEL DESIGN", AISC 335-89S1, OF THE AMERICAN INSTITUTE OF STEEL CONSTRU
EXPANSION JOINTS SHALL BE 1/2" THICK ASPHALT IMPREGNATED FIBERBOARD JOINT MATERIAL, CONFORMING TO ASTM D-1751. CURING COMPOUND SHALL BE CLEAR, CONFORMING TO ASTM C-309.	ALL STRUCTURAL STEEL SHALL CONFROM TO ASTM A992, EXCEPT AS MOD
COLD WEATHER CONCRETE WORK SHALL CONFORM TO ACI-306. HOT WEATHER CONCRETE WORK SHALL CONFORM TO ACI-305.	ALL MISCELLANEOUS STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 ALL HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO ASTM A500, G ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554, GRADE 36.
GROUND FLOOR CONCRETE SLAB-ON-GRADE IS NOT DESIGNED AS A STRUCTURAL DIAPHRAGM.	ALL WELDS SHALL USE E70XX ELECTRODES AND CONFROM TO THE "STRUC
THE MAXIMUM LENGTH BETWEEN CONSTRUCTION JOINTS OF WALLS AND FOOTINGS SHALL NOT EXCEED 40 FEET, EXCEPT AS INDICATED ELSEWHERE ON THESE DRAWINGS.	EDITION. ALL WELDERS SHALL BE CERTIFIED IN ACCORDANCE WITH AWS R ALL BOLTED CONNECTIONS SHALL BE BEARING TYPE, UTILIZING 3/4" DIA.
ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60. WELDED WIRE MESH SHALL CONFORM TO ASTM A185 AND ASTM A82.	OTHERWISE.
WELDED WIRE MESH SHALL HAVE MINIMUM END AND SIDE LAPS OF 1'-0".	ALL BOLTS, NUTS, AND WASHERS SHALL BE IN ACCORDANCE WITH THE LA COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS. USE DIRECT TEN: A325 BOLTS.
CONCRETE ACCESSORIES SHALL BE ADEQUATE TO MAINTAIN REINFORCING ACCURATELY IN PLACE AND BE NON–CORROSIVE, NON–STAINING TYPE.	ALL STRUCTURAL STEEL SHALL BE SHOP PRIMED (ONE COAT OF 2 MIL. DF
LAP ALL BAR REINFORCING PER ACI-318. STAGGER SPLICES IN WALLS AND SLABS AND ALL HORIZONTAL REINFORCEMENT.	STANDARD COLOR. OPENINGS THROUGH BEAMS AND COLUMNS SHALL NOT BE PERMITTED UNL
CONCRETE SHALL NOT BE DROPPED THROUGH REINFORCING STEEL (AS IN WALLS AND COLUMNS) SO AS TO CAUSE SEGREGATION OF AGGREGATES. USE HOPPERS, CHUTES OR TRUNKS OF VARYING LENGTHS SO THAT THE FREE UNCONFINED FALL OF CONCRETE	FIELD FLAME CUTTING OF ANY STRUCTURAL MEMBERS IS NOT PERMITTED.
SHALL NOT EXCEED FIVE (5) FEET.	EXPOSED TOPS OF ALL STEEL HOLLOW STRUCTURAL SECTION COLUMNS SH SHALL BE WATERTIGHT.
MINIMUM REINFORCEMENT COVER, UNLESS NOTED OTHERWISE: —CONCRETE CAST AGAINST EARTH: 3" —CONCRETE EXPOSED TO EARTH OR WEATHER:	ALL STEEL SHALL BE FABRICATED, ERECTED, AND TESTED IN ACCORDANCE
No. 6 TO No. 18 BARS $-2"$ No. 5 AND SMALLER $-11/2"$	CONSTRUCTION (AISC) "CODE OF STANDARD PRACTICE FOR STEEL BUILDING STRUCTURAL STEEL SHOP DRAWINGS, PREPARED BY THE STEEL SUBCONTR
–CONCRETE NOT EXPOSED TO EARTH OR WEATHER: No. 11 AND SMALLER – 3/4"	SIZES, AND GRADES OF STEEL MEMBERS AND CONNECTIONS, TYPE AND NU APPROVAL PRIOR TO THE FABRICATION OF THE STEEL COMPONENTS. THE
ALL CONCRETE WORK, REINFORCING PLACEMENT, AND FORMWORK SHALL BE INSPECTED BY AN INDEPENDENT TESTING AGENCY RETAINED BY THE OWNER FOR THE FOLLOWING ITEMS:	RESPONSIBLE FOR CHECKING, VERIFICATION AND COORDINATION OF DIMENS PORTIONS OF THE CONTRACT DRAWINGS. THE STEEL SUBCONTRACTOR SH. CONTRACT DRAWINGS FOR UTILIZATION AS SHOP DRAWINGS, UNLESS APPRO
INSPECT BOTTOM OF FOOTING SOIL CONDITIONS. INSPECT FORMWORK AND PLACEMENT OF CONCRETE.	THE STEEL FABRICATOR SHALL BE AISC (AMERICAN INSTITUTE OF STEEL C
SAMPLING FRESH CONCRETE PER ASTM C-172, MODIFIED FOR SLUMP BY ASTM C-94. SLUMP PER ASTM C-143. ONE TEST AT POINT OF DISCHARGE FOR EACH DAYS POUR FOR EACH TYPE OF CONCRETE. AIR CONTENT PER ASTM C-173 (VOLUMETRIC) OR ASTM C-231 (PRESSURE). ONE TEST FOR EACH DAYS POUR FOR EACH	ALL STRUCTURAL STEEL ERECTION AND SHORING SHALL BE INSPECTED BY OWNER FOR THE FOLLOWING ITEMS:
TYPE OF CONCRETE. COMPRESSION TEST CYLINDERS PER ASTM C-31 (4 CYLINDERS)	VISUALLY INSPECT ALL CONNECTIONS, INCLUDING, BUT NOT LIMITED TO, STRUCTURE, AND METAL DECK SIDE LAPS.
CONCRETE TEMPERATURE – TEST EACH TIME A SET OF CYLINDERS IS CAST. COMPRESSION STRENGTH TEST PER ASTM C-39. ONE SET FOR EACH DAYS POUR PLUS ADDITIONAL SETS FOR EACH 50 cy OVER AND ABOVE THE FIRST 25 cy. ONE CYLINDER TESTED AT 7 DAYS, TWO CYLINDERS TESTED AT 28 DAYS, AND ONE	INSPECT WELDS AT MOMENT CONNECTIONS. INSPECT STEEL ERECTION FOR ORIENTATION AND PLUMBNESS.
CYLINDER RETAINED FOR LATER TESTING IF REQUIRED.	ALL STEEL CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR ON THESE DRAWINGS. REACTIONS NOT SHOWN SHALL BE DESIGNED TO RE
	GEOTECHNICAL NOTES
MASONRY NOTES	ALL FOOTINGS HAVE BEEN DESIGNED FOR AN ALLOWABLE NET SOIL BEARIN ENGINEERING REPORT BY "DR. CLARENCE WELTI, P.E., P.C. GEOTECHNICAL SHALL BEAR ON LOAM OR SOIL FILL. IF UNSUITABLE SOIL OR ROCK IS EN
NEW MASONRY WALLS ARE DESIGNED IN ACCORDANCE WITH ACI 530-02 USING WORKING STRESS DESIGN, WITH APPENDIX A.3	ELEVATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
SPECIAL PROVISIONS FOR SEISMIC DESIGN.	PLACE THREE (3) FEET OF 3/4" MINUS COMPACTED PROCESSED STONE BAS SUBGRADES TO AT LEAST 95% OF MODIFIED OPTIMUM DENSITY WITH A 6+
CONSTRUCTION SHALL CONFORM TO ACI 530.1–02, "SPECIFICATIONS FOR MASONRY STRUCTURES." ALL MASONRY CONSTRUCTION SHALL BE INSPECTED AND TESTED TO ASSURE CONFORMANCE WITH THE DETAILS SHOWN ON THESE	BASE SHALL EXTEND BEYOND THE FOOTINGS FOR A HORIZONTAL DISTANCE THE FOOTINGS. SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION
PLANS.	THE BOTTOM OF ALL EXTERIOR FOOTING ELEVATIONS SHALL BE A MINIMUM NOTED OTHERWISE. COMPACT BOTTOM OF FOOTING SUBGRADE WITH A PLA
MASONRY UNITS SHALL CONFORM TO ASTM C90 WITH COMPRESSIVE STRENGTH OF 1900 PSI, LIGHT WEIGHT BLOCK. MASONRY MORTAR FOR STRUCTURAL CMU SHALL BE TYPE "S," CONFORMING TO ASTM C270.	ADDITIONAL FOOTING SUBGRADE PREPARATION AND REQUIREMENTS. CONTROLLED FILL SHALL BE INERT, GRANULAR FILL FREE FROM ORGANICS.
ALL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60.	REQUIREMENTS.
ALL BAR REINFORCING SHALL BE GROUTED SOLID FULL HEIGHT USING LOW LIFT METHOD.	ALL CONTROLLED FILL PLACED SHALL BE COMPACTED TO A MINIMUM OF 9 THE MODIFIED PROCTOR TEST, ASTM D1557. MINIMUM COMPACTION REQUIN DENSITY DETERMINED IN ACCORDANCE WITH ASTM D1557C.
ALL BOND BEAMS SHALL BE GROUTED SOLID.	DEMOTT DETERMINED IN ACCORDANCE WITH ASTM DIDD/C.
GROUT SHALL CONFORM TO ASTM C94 OF C476.	drawing title
PROVIDE No. 9 WIRE STANDARD LADUR-TYPE HORIZONTAL REINFORCEMENT AT 16" o.c. TYPICAL, UNLESS OTHERWISE NOTED. PROVIDE GALVANIZED TRI-TIES AT 16" o.c. AT ALL STEEL COLUMNS IN CONTACT WITH MASONRY.	GENERAL NOTES
PROVIDE GALVANIZED TRI-TIES AT TO O.C. AT ALL STEEL COLUMNS IN CONTACT WITH MASONRT. PROVIDE (2)-#5 VERTICAL (ONE IN EACH CORE) SOLIDLY GROUTED AT ALL DOOR, WINDOW, AND CONSTRUCTION JOINTS.	R E V I S I O N S mark date description DRAWING PREPAR
	- 12/06/13 RECORD SET
	<u>Companies</u> project
	100% CONST SCSU F

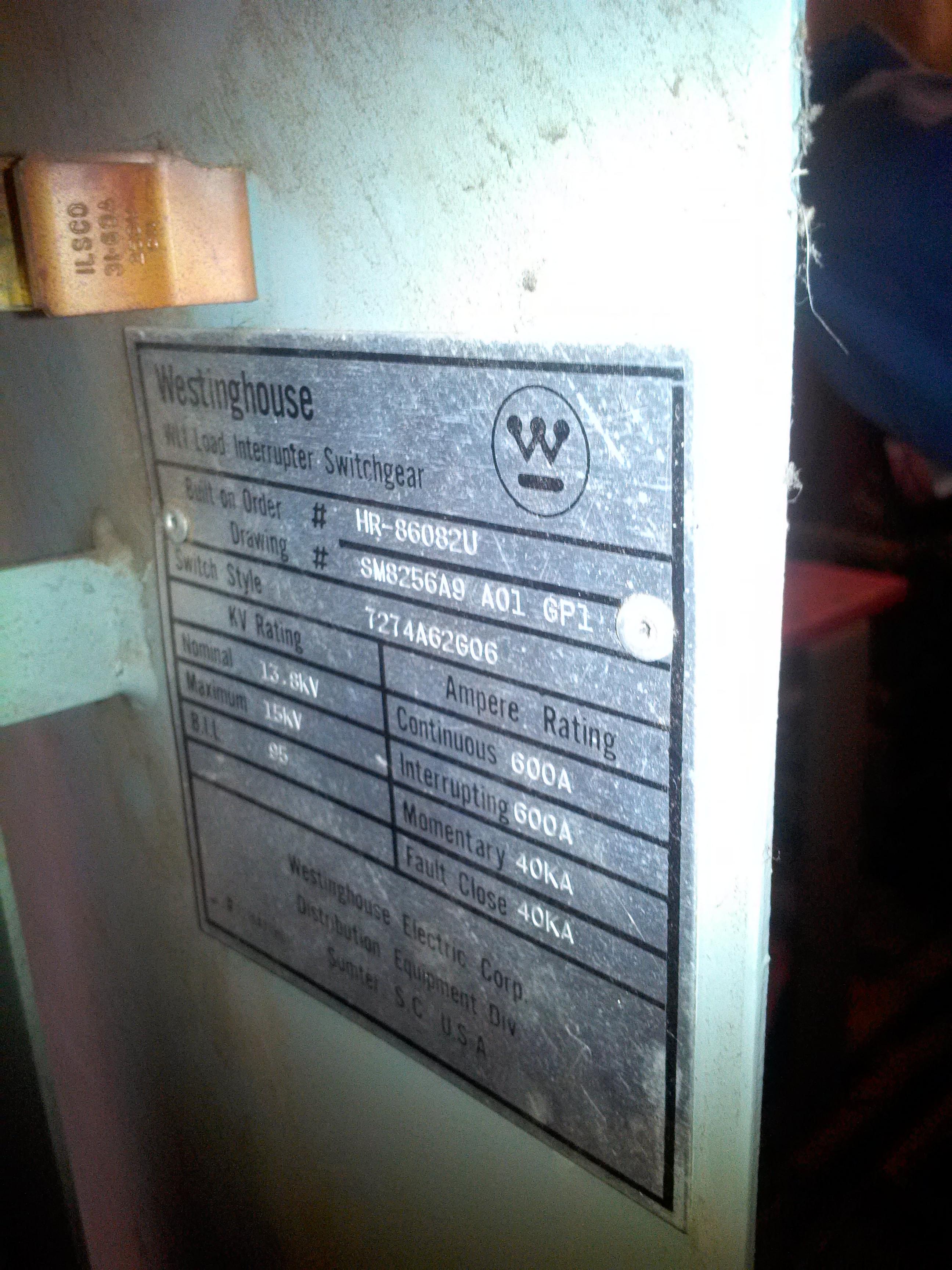
INE	CTICUT BASIC BUILDING CODE, 2003 IBC WITH STATE OF CONNECTICUT	
· P A MIL	THESE DRAWINGS AND/OR CONDITIONS SPECIFIED, THE CONTRACTOR SHALL ROCEED WITH THE AFFECTED WORK. PPLY UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. CONSTRUCTION AR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.	
	TIED PRIOR TO STARTING EXCAVATION WORK. CALL BEFORE YOU DIG PRIOR	
ER	WISE SECURED SO AS TO PROVIDE PROPER PROTECTION FOR THE PUBLIC,	
NE	TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING AND FORMWORK, PROPERTY DURING CONSTRUCTION. THIS INCLUDES PROVIDING TEMPORARY PORARY SUPPORTS SHALL REMAIN IN PLACE UNTIL ALL STRUCTURAL	
NE	ERING REPORT BY "DR. CLARENCE WELTI, P.E., P.C. GEOTECHNICAL	
	ENTRATED (PARKING) EMENT – APPENDIX K)	
E	PSF MIN. PER STATE OF CONNECTICUT AMMENDMENTS) IC. WHERE APPLICABLE.	
).1	(CT SUPPLEMENT – APPENDIX K) 3 OVISIONS.	
F FO	IDGE, WW+LW = 23.2 PSF RIDGE, WW+LW = 19.3 PSF CLADDING PRESSURES	
- /	PPENDIX K)	
	YSTEMS RCED CONCRETE SHEAR WALLS	
F	RCE ANALYSIS	
.Y En	S AT ANY POINT APPLIED AT 18 INCHES ABOVE FLOOR LEVEL T FOR RESTRAINED RETAINING WALLS, Ko = 0.45 DEF. FOR CANTILEVERED RET. WALLS, Ka = 0.28	
US PL TIN	T BE TESTED BY AN APPROVED TESTING LABORATORY DURING THE FILL ACED UNTIL FILL TEST REPORTS HAVE BEEN CHECKED AND APPROVED BY IG SOIL CONDITIONS SHALL BE INSPECTED AND VERIFIED BY THE L BE REMEDIATED AS DIRECTED BY THE GEOTECHNICAL ENGINEER. BUILDING IE SITE DRAWINGS, SPECIFICATIONS, AND GEOTECHNICAL REPORT	
EL١	ORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS SHALL BE MANNER. THE FINAL REPORT OF SPECIAL INSPECTIONS SHALL NOT BE BEEN RECEIVED AND APPROVED BY THE ENGINEER.	
רכ	ES	
	STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC E OF STEEL CONSTRUCTION.	
) Or	92, EXCEPT AS MODIFIED BELOW: IFORM TO ASTM A36. M TO ASTM A500, GRADE B. 4, GRADE 36.	
	ROM TO THE "STRUCTURAL WELDING CODE (STEEL)", AWS D1.1, LATEST RDANCE WITH AWS REQUIREMENTS.	
,	JTILIZING 3/4" DIA. ASTM A325-N TENSION CONTROL BOLTS, UNLESS SHOWN	
	DANCE WITH THE LATEST SPECIFICATIONS APPROVED BY THE RESEARCH S. USE DIRECT TENSION INDICATORS, CONFORMING TO ASTM F959, ON ALL	
)NE	COAT OF 2 MIL. DRY FILM, MIN.). SHOP PRIMER TO BE FABRICATOR'S	
RS	BE PERMITTED UNLESS APPROVED BY THE STRUCTURAL ENGINEER. IS NOT PERMITTED.	
ES	ECTION COLUMNS SHALL BE COVERED WITH A SHOP WELDED CAP PLATE AND	
' T	FOR STEEL BUILDINGS AND BRIDGES" HE STEEL SUBCONTRACTORS, SHOWING COMPLETE DIMENSIONS, DETAILS, TIONS, TYPE AND NUMBER OF WELDS AND BOLTS, SHALL BE SUBMITTED FOR	
EL OR EL	TIONS, TYPE AND NUMBER OF WELDS AND BOLTS, SHALL BE SUBMITTED FOR COMPONENTS. THE STRUCTURAL STEEL SUBCONTRACTOR SHALL BE DINATION OF DIMENSIONS AND DETAILS WITH THE STRUCTURAL AND OTHER SUBCONTRACTOR SHALL NOT REPRODUCE ANY PORTION OF THE STRUCTURAL INGS, UNLESS APPROVAL OF THE STRUCTURAL ENGINEER IS OBTAINED. STITUTE OF STEEL CONSTRUCTION) CERTIFIED.	
IAI	L BE INSPECTED BY AN INDEPENDENT TESTING AGENCY RETAINED BY THE	
	JT NOT LIMITED TO, BOLTS, WELDS, METAL DECK WELDS TO SUPPORT	
HE	UMBNESS. STEEL FABRICATOR TO RESIST MINIMUM THE REACTIONS SHOWN THUS XXK BE DESIGNED TO RESIST 5 KIPS MINIMUM.	
	BLE NET SOIL BEARING PRESSURE OF 6,000 PSF, PER GEOTECHNICAL P.C. GEOTECHNICAL ENGINEERING" DATED JUNE 4, 2008. NO FOOTINGS	
-È N( PR	SOIL OR ROCK IS ENCOUNTERED AT PROPOSED BOTTOM OF FOOTING TIFY THE ENGINEER. DCESSED STONE BASE BENEATH ALL FOUNDATIONS AND PROOF ROLL THE	
DD	DENSITY WITH A 6+ TON VIBRATORY COMPACTOR. THE PROCESSED STONE ORIZONTAL DISTANCE EQUAL TO AT LEAST THE DEPTH OF THE FILL BENEATH TIONAL INFORMATION. HALL BE A MINIMUM OF 3'-6" BELOW FINISHED EXTERIOR GRADE, UNLESS	
si Re	JBGRADE WITH A PLATE COMPACTOR. SEE GEOTECHNICAL REPORT FOR QUIREMENTS. EE FROM ORGANICS. SEE GEOTECHNICAL REPORT FOR CONTROLLED FILL	
JM	TO A MINIMUM OF 95% OF MAXIMUM DRY UNIT WEIGHT AS DETERMINED BY COMPACTION REQUIREMENTS REFER TO PERCENTAGES OF THE MAXIMUM DRY 57C.	
	STATE OF CONNECTICUT DEPARTMENT OF PUBLIC WORKS	
	DRAWING PREPARED BY: Architecture Engineering Land Surveying Companies BL COMPANIES 355 RESEARCH PARKWAY MERIDEN, CONNECTICUT, 06450 date 07/10/09 scale AS NOTED	
	project 100% CONSTRUCTION DOCUMENTS PACKAGE SCSU PARKING GARAGE CF-RS-273 drawn by LP approved by CA drawing no.	
	CAD no. S07D1007100 project no. CF-RS-273 S1.00	
	· · · ·	_



ROOF CONSTRUCTION CONSISTS OF PRECAST DOUBLE TEES SUPPORTED ON PRECAST SPANDREL BEAMS OR PRECAST BEARING WALL PANELS.
 FOR DOOR OPENING SIZES AND LOCATIONS SEE ARCHITECTURAL DRAWINGS. FOR SLAB AND TEE PENETRATIONS, SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.



	(A)
	B
	c
	D.5 $ D.6$ $- D.8$ $- D.9$ $- D.9$ $- D.9$ $- D.9$ $- D.9$ $- D.9$
	ACTUAL PLAN NORTH NORTH
CONSTRUCTION J PAR CONSTRUCTION CONSTRUCTION CONSTRUCTION CF-RS	DF CONNECTICUT TMENT OF PUBLIC WORKS COMPANIES RESEARCH PARKWAY DEN, CONNECTICUT, 06450 ON DOCUMENTS PACKAGE KING GARAGE S-273 Diject no. CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273 CF-RS-273



	010000014013	4701030	87440000	000000103087442		
	Account Number	J tvn	n:i–vo	ount No;,, Due		
The United 1//umineting Company		:	· · · ·			
The United 1/luminating Company	010-0000140-1347		12115	103;0WA2t "		
nytime at 1-800-7-CALL UI (1-800-722-5584).				<i>ayatz£9.w,,A""#-</i> iing Company.		
		Please	Indicate Am	ount Paid		
011 235 00001 01 84 111 <sub>1</sub> 1 <sub>1</sub> 1111111111111111111111111111		1•111111 THE U PO BO	Include Another Another and Influence Another anot			
Please consider adding <b>\$1</b> for Operatio	n Fuel to your payment this mon	th or call 1-8	00-7-CALL·UI to	donate more than \$1.		
Your Account Information	Account Number: 010-0000140- Meter Number: 014014849	1347		MESSAGES		
Customer Name Key: SO C SO CONN STATE UNIV T 201 WINTERGREEN AVE NEW HAVEN, CT 06515	ower Time of	Day	Have a question for UI? Click on Customer Care on UI's website at www.uinet.com.			
Next Meter Re	Billing Period: 9/11/15 - 10/0 Statement Date: 10/14/15 eading <i>(on or about):</i> 11/10/15	No stamps, no checks, no fees! Enror now to receive and pay your UI bill or				
Previous Charges & Credits Amount of Previous Bill Payment Received. Thanks!	9/14/15 9/24/15	\$ \$	113,706.20 113,706.20 er	the Internet (www.uinet.com). MONTHLY MONEY-SAVER Do you have a self-cleaning electric oven? Save money by using this featur after baking or broiling to take		
Balance Forward		\$	0.00	advantage of the existing heat.		
New Charges & Credits POD 1171007687002 _(CYCLI	E 061			Your electric cumplion is a		
Current Supplier: DIRECT ENERGY BUSINE Generation Services Charge Total Generation Services Charges		\$ \$	61,248.94 61,248.94	Your electric supplier is : DIRECT ENERGY BUSINESS MARKETING, LLC 1 HESS PLZ WOODBRIDGE, NJ 07095		
Transmission per kw on-peak	The second s	\$	13,384.56	800 437-7265 www.hessenergy.com		
Transmission per kw on-peak Distribution Basic Service Distribution per kw on-peak	175.20	\$ \$ \$	4,818.44 345.49 9,353.57	kWh Delivery Per Day Daily Usage Chart		
Distribution per kw on-peak Distribution per kw shoulder Distribution per kw shoulder	- SR311	\$ \$ \$	4,209.11 1,056.05 475.22	31754 <u> </u>		
Distribution per kw off-peak	the front i	\$ \$	0.00 0 00	28698+< 27170 25612 iii		
Distribution per kwh on-peak	201600 kWh X \$.000000	\$	0.00	24114		
Distribution per kwh shoulder Distribution per kwh off-peak	207900 kWh X \$.000000 401100 kWh X \$.000000	\$ \$	0.00 0.00			
Transformer Ownership		\$	344.29cr 9,534.28			
Combined Public Benefits Charge Decoupling Adjustment	810600 kWh X \$.011762 810600 kWh X \$.000834	\$ \$	676.04	ONDJ MAMJJAS		
Earnings Sharing Total Delivery Charges	810600 kWh X \$.002071-	\$	1,678.75cr 41 829.72	MONTHS		
Load Pulse Equipment Monthly Charge		<u>\$</u> \$	8.78			
Total New Charges		\$ \$	0.78 103,087.44			
			-	FECENED		
	Amount Now	Due: N	10200/44			
One or more components /Jave changed p	Amount Now	•	103,087.44	act 192015		

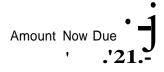
All and and



17w United Illuminating Company

Call us anytime at 1-800-7-CALL UI (1-800-722-5584).

r-,,,,,,Date 11/12/15



Please make your check payable to: The United Illuminating Company.

#### Please indicate Amount Paid

Meter	Service	Meter Reading	м	lultiplier		Kilowatt	Domond	c/kWh	Generation Ra
WIELEI			14	unupner		Kilowatt	Demand	8.55	
	Period	Current Last				Hours	kW	7.60	mm7-0-0-mm
014014849	29 days	10778 - 10682	х	2100	=	201600 kWh	1562.4	6.65	
Shoulder	29 days	10767 - 10668	X	2100	=	207900 kWh	1738.8	5.70	
Off Peak	29 days	21717 - 21526	X	2100	=	401100 kWh	1537.2	4.75	
	POD ID: 11	7-1007687-002						2.85	

ccount Number

L-00001 40-1 347

O N D J F M A M J J A SO MONTHS

.95 II .00

RECEIVED

UCT 1 9 2015

ACCTS PAYABLE