

**SOLAR FACILITIES LEASE AGREEMENT
BY AND BETWEEN THE CITY OF NEWTON AND**

This LEASE (as amended, modified or supplemented from time to time, the "**Lease**") made this ____ day of _____, 2019 (the "**Effective Date**"), is by and between the **City of Newton**, a municipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, with a mailing address of City Hall, 1000 Commonwealth Avenue, Newton Centre, MA 02459, acting by and through its Mayor, but without personal liability to him, (hereinafter the "**Lessor**" or the "**City**") and _____, a _____ with a usual business address of _____ (hereinafter "**Lessee**"). Lessor and Lessee may be referred to individually as a "**Party**" and collectively, as the "**Parties**".

RECITALS

A. The Parties intend to enter into a Solar Power Services Agreement (as same may be amended or modified from time to time, the "**PPA**"), pursuant to which the Lessee shall design, engineer, construct, install, operate and maintain certain solar photovoltaic systems for the production of electricity and corresponding Net Metering Credits (each, a "**Facility**" and collectively the "**Facilities**"), to be further defined in the PPA.

B. In order to design, engineer, construct, install, operate and maintain the Facilities, Lessee requires access to and use of Lessor's Properties (as hereinafter defined).

C. Lessor owns the Properties, and in connection with the foregoing, Lessor desires to lease the Leased Premises (described below) to Lessee in furtherance of Lessee's obligations under the PPA, and Lessee is willing to accept such Leased Premises from Lessor.

NOW, therefore, in consideration of the foregoing and the mutual covenants and agreements herein contained, the Parties agree as follows:

1. Definitions. Capitalized terms in this Lease shall have the meaning provided for hereunder or, if no definition is provided hereunder, the meaning provided for such capitalized term under the PPA.

2. Lease of Property; Other Rights.

a. The Lessor does hereby lease, demise and let unto Lessee and Lessee does hereby take, accept and lease from Lessor certain space at and on the following properties:

- (i)
- (ii)
- (iii)
- (iv)

- (v)
- (vi)
- (vii)

(each a “**Property**” and together, the “**Properties**”), such leased space referred to as the “**Leased Premises**”. Once the exact square footage of Leased Premises has been established following construction of the Facilities, the Parties shall amend this Agreement with site plans or legal descriptions to more specifically identify the Leased Premises.

A general depiction of the proposed Leased Premises at each Property as of the Effective Date is set forth on Exhibit A. The Leased Premises are leased to Lessee together with the rights described in Sections 2(b), (c), (d) and (e).

b. Lessor hereby grants to Lessee and Lessee’s Affiliates, agents, contractors, subcontractor, employees, and consultants (“**Lessee Parties**”) the non-exclusive use of such additional space at each Property for the design, development, installation, operation and maintenance of utility lines, cables, conduits, transformers, wires, meters, monitoring equipment and other necessary equipment and appurtenances (“**Cabling Space**”) wherever located, whether between and among the floors of the buildings located on the Properties, the rooftop space, the Delivery Point, and all necessary electrical and other utility sources located within each building or on the Properties. The location of the Cabling Space shall be mutually agreed upon by the Parties.

c. Lessor hereby grants to Lessee and Lessee Parties the non-exclusive rights of vehicular and pedestrian ingress and egress from all public right-of-ways over each Property to and from the respective Leased Premises and Cabling Space during normal business hours, and, upon reasonable advance coordination with Lessor, outside of normal business hours.

d. Lessor hereby grants to Lessee and Lessee Parties the temporary use of reasonably sufficient additional space on properties owned by Lessor near the Leased Premises for construction laydown, storage of construction materials, parking of construction crew vehicles and trailers, and for the removal of the Facilities, such area to be agreed upon by the Parties prior to construction or removal, as the case may be. Lessor, in consultation with Lessee, shall designate such additional space for Lessee’s use when construction commences.

e. Lessor hereby grants to Lessee and Lessee Parties the use of Lessor’s water supply already available at the Properties, at no additional cost to Lessee, for purposes of construction, cleaning, operation and maintenance of the Facilities.

f. Lessor shall deliver the Leased Premises to Lessee on the Effective Date in a condition ready for Lessee’s installation of the Facilities, clean and free of debris. Lessor represents and warrants to Lessee that as of the Effective Date, the Properties, the Leased Premises, the existing structure of each building (including without limitation the roof, foundations and exterior walls) and all building systems (including without limitation, the plumbing, electrical, ventilating, air conditioning and heating) are: (a) in good operating

condition and free of any leakage, (b) in compliance with all Applicable Law, and (c) free of any substance or matter defined as a toxic or Hazardous Materials or material or pollutant or contaminant under any Applicable Law, or any other substance or matter imposing liability for cleanup costs or expenses on any person or entity under Applicable Laws.

3. Lease Term and Rental. The term of this Lease (“**Term**”) shall begin on the Effective Date, run concurrently with the term of the PPA and terminate on the date the PPA terminates. Lessee shall pay to Lessor annual rent of One Dollar (\$1.00), payable on the Effective Date and thereafter on or before each subsequent anniversary of the Effective Date throughout remainder of the Term. Rent shall be paid by wire or by check made payable to the City of Newton and, after the initial rental payment, wired, mailed or hand-delivered to:

Treasurer-Collector
City of Newton
1000 Commonwealth Avenue
Newton Centre, MA 02459

4. Facilities Construction, Installation, Operation and Maintenance

a. Lessor consents to the design, development, installation, construction, operation, testing, maintenance, repair, replacement and removal of the Facilities by Lessee on the Leased Premises including, without limitation, solar panels, mounting substrates, supports, wiring and connections, power inverters, service equipment, metering equipment and utility interconnections. The Lessee shall perform a structural analysis of the Properties to confirm the structural suitability of the roofs and related structures for construction and operation of the Facilities.

b. The design of the Facilities shall not include any rooftop penetrations unless (i) the Lessor agrees in writing to specific rooftop penetrations in specific locations and (ii) no such rooftop penetrations reduce any existing rooftop warranties.

c. Prior to the commencement of construction, Lessee shall coordinate with and receive input from the Lessor’s designated technical staff and submit final design drawings for the Facilities for approval by the Lessor, such approval not to be unreasonably withheld, conditioned or delayed. Lessee shall construct the Facilities in accordance with Applicable Law.

d. Lessee shall have the following rights during the Term hereof:

(i) To develop, design, engineer, construct, install, operate, maintain, modify and upgrade the Facilities on the Leased Premises, subject to the terms and conditions of this Lease and the PPA; and

(ii) To clean, repair, replace and remove and dispose of part or all of the Facilities as Lessee, in its reasonable discretion, determines to be necessary.

e. Lessor acknowledges and agrees that notwithstanding the Facilities' presence on the respective Properties, Lessee is the exclusive owner and operator of the Facilities, Lessor has no ownership or other interest in the Facilities or other equipment or personal property of Lessee installed on the Properties, and Lessee may remove all or any portion of the Facilities or other equipment or personal property at any time in compliance with this Lease and the PPA. Lessor further acknowledges and agrees that the Facilities may not be sold, leased, assigned, mortgaged, pledged or otherwise alienated or encumbered (collectively, a "**Transfer**") with the fee interest or leasehold rights to the Properties or otherwise by Lessor, any person acting for, on behalf of, through, or for the benefit of Lessor, or any other subsequent owner of such interest in the Leased Premises.

5. Access to Leased Premises

a. Lessee and its sub-contractors, agents, consultants, and representatives shall have access during normal business hours and at other reasonable times to the Leased Premises for the purpose of planning, constructing, operating, inspecting, maintaining, replacing, repairing and removing the Facilities, and to any documents, materials and records of Lessor relating to the Leased Premises that Lessee reasonably requests in conjunction with these activities. Section 4.08 of the PPA, with respect to CORI and SORI checks, is specifically acknowledged by the Parties and is incorporated by reference into this Lease. During any such activities, Lessee, and its sub-contractors, agents, consultants and representatives, shall comply with Lessor's reasonable safety and security procedures (as may be promulgated from time to time and communicated to Lessee in writing), and Lessee and its sub-contractors, agents, consultants and representatives shall conduct such activities in such a manner and such a time and day as to minimize interference with Lessor's activities to the extent reasonably practicable. Notwithstanding anything in this Lease or PPA to the contrary, Lessee shall be allowed immediate access to the Leased Premises and the Facilities in connection with any emergency condition then existing with respect to the Facilities that could reasonably be expected to pose an imminent threat to the safety of persons or property, including the Facilities.

b. Lessor shall not cause or permit any interference with (i) the insolation to the Facilities and the Leased Premises or (ii) access to sunlight to the Facilities and the Leased Premises. Lessor shall not (x) build or cause to be built any structure or, to the extent within its reasonable control to prevent, permit any third party to build any structure, or (y) cause or permit the presence of any vegetation or airborne or particulate matter on, over, or about the Leased Premises that could, in either case of (x) or (y), block or interfere with the Facilities' access to sunlight. Upon request of Lessee, Lessor shall cause any trees or other vegetation on the Leased Premises to be pruned or trimmed to the point that they do not obstruct the passage of direct solar radiation across the Leased Premises to the Facilities to a degree greater than on the Effective Date. Lessee shall have the right to enforce Lessor's rights under any Applicable Law protecting solar energy systems from obstruction. Lessor shall cooperate with any efforts by Lessee to enforce such rights.

c. Lessor covenants that Lessee shall peaceably and quietly have, hold and enjoy its leasehold interest in the Leased Premises during the Term in accordance with this Lease and the

PPA, and Lessor shall cooperate as reasonably requested by Lessee to protect and defend Lessee's leasehold interest hereunder from any other rights, interests, titles and claims arising through Lessor or any third person or entity that threatens or challenges such leasehold interest.

6. Maintenance and Repair of Leased Premises

a. Lessee shall repair all damage to the Properties to the extent caused by or relating to Lessee's construction, installation, operation, maintenance and removal of the Facilities. Lessee shall keep the Leased Premises in good order and condition.

b. During the Term, Lessor shall maintain in good operating condition and repair the Properties including foliage, vegetation, structural elements and all building systems (including but not limited to, the foundations, exterior walls, structural condition of interior bearing walls, roof, fire sprinkler, electrical system (but not including the Facilities), and utility systems). All maintenance of the Properties shall be the responsibility of Lessor, except for maintenance of the Facilities which shall be Lessee's responsibility.

7. Statutory and Regulatory Compliance

Lessee shall comply with all provisions of Applicable Law in connection with the construction, operation and maintenance of the Facilities by Lessee and its contractors, subcontractors, employees and agents.

8. Maintenance.

a. Lessee shall properly maintain the Facilities in good order and working condition, and in compliance with all Applicable Laws. Prior to making any alterations or improvements to a Property after the Commercial Operation Date, Lessee shall obtain the Lessor's consent in accordance with Section 4(c), which shall not be unreasonably conditioned, withheld or delayed.

b. The Lessee, except with the reasonable consent of the Lessor, shall not permit any mechanics' liens, or similar liens, to remain upon the Leased Premises for labor and material furnished to the Lessee or claimed to have been furnished to the Lessee in connection with work of any character performed or claimed to have been performed at the direction of the Lessee and shall cause any such lien to be released of record or bonded over forthwith without cost to the Lessor.

9. Insurance.

a. Lessee (or its contractors, subcontractors or agents) and Lessor shall obtain and maintain the insurance coverage required under the PPA. In addition, Lessor shall obtain and maintain all-risk property insurance covering the replacement value of the Properties, naming Lessee as an additional insured, which shall be primary and non-contributory. Lessor shall provide Lessee with a description of its insurance and self-insurance upon the execution of this Lease and the PPA.

b. Each Party hereby waives any right of recovery against the other for injury or loss to personal property due to hazards covered by insurance obtained with respect to the Property or Leased Premises, including the improvements and installations thereon.

c. In the event that the PPA is terminated with respect to a Facility pursuant to Section 10.02(c) of the PPA as a result of a Facility Loss, this Lease shall terminate solely with respect to the applicable Property automatically effective upon the date of notice from Lessee to Lessor delivered pursuant to Section 10.02(c) of the PPA, provided that, Lessee shall have a reasonable period of time to remove the applicable Facility and Facility Assets from the applicable Property and shall comply with the provisions of Section 6.04 of the PPA in connection with such removal.

10. Reserved.

11. Eminent Domain.

a. If part of a Property is taken by eminent domain or by way of condemnation such that the balance of such Property remains unsuitable for Lessee's use and operation of the applicable Facility, as reasonably determined by Lessee, then the Parties shall meet to discuss a mutually agreeable alternative arrangement for operation of such Facility and Facility Assets. If no alternative arrangement is acceptable to Lessee, then Lessee may terminate this Lease in part with respect to the affected Property.

b. If the entirety of a Property shall be taken by right of eminent domain, the Lease shall terminate with respect to the affected Property as of the time that possession is required by the taking authority. Lessor reserves, and the Lessee grants to the Lessor, all rights which the Lessee may have for damages or injury to the Leased Premises for any taking by eminent domain, except for damage to the Lessee's fixtures, property, or equipment, including the affected Facility and Facility Assets. The Parties will be entitled to share in the condemnation proceeds in proportion to the values of their respective interests in the Property, which for Lessee will include, where applicable, the value of the affected Facility and Facility Assets, moving expenses, prepaid rent, and business dislocation expenses.

12. Term and Termination. Unless Lessor has exercised the Purchase Option under the PPA, within one hundred twenty (120) days after termination of this Lease (in whole or in part following a Property-Specific Default or Lessor Property-Specific Default), Lessee shall remove the applicable Facility and Facility Assets or Facilities, and any of its vehicles, equipment or other materials, and repair any damage to the applicable Property or Properties caused by such removal. In connection with such removal, Lessor shall continue to provide Lessee and Lessee Parties with access to the Properties without payment of any additional rent. Lessee shall maintain all insurance required under this Lease and any security for the cost of removal required under the PPA until removal of the applicable Facility and Facility Assets or Facilities is complete.

13. Assignment.

a. This Lease and the rights and obligations under this Lease shall be binding upon and shall inure to the benefit of Lessee and Lessor and their respective successors and permitted assigns. Except as provided in this Lease, neither Party shall have the right to assign or transfer, whether voluntarily or by operation of Applicable Law, any of its rights, duties or obligations under this Lease without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed. Any purported assignment in violation of this Section 13 shall be null and void *ab initio*.

b. Lessor shall not assign its interests in this Lease, nor any part thereof, without Lessee's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

c. Assignment by Lessee.

(i) Notwithstanding anything to the contrary herein, Lessee may assign all or a portion of its rights and obligations hereunder to (A) to one or more Affiliates of Lessee, (B) to any person succeeding to all or substantially all of the assets of Lessee, (C) to an entity that acquires one or more Facilities or, prior to the construction of the Facilities, the development rights thereto, so long as the assignee has demonstrable experience in operating and maintaining solar photovoltaic systems comparable to the Facilities; and has demonstrable financial capability to maintain the Facilities. In the event of any such assignment, Lessee shall provide advance written notice to Lessor of the existence of such assignment, together with the name and address of the assignee, and documentation establishing that the assignee as of the closing of such transaction will assume all or a portion of the Lessee's rights and obligations under this Lease. Lessor agrees to promptly execute any document reasonably requested in acknowledgement of such assignment and in consent thereto in accordance with the provisions hereof. If such assignment is a full assignment of all of Lessee's rights, and obligations under this Lease, then Lessee shall have no further liability arising under this Lease after the effective date of the assignment.

(ii) Lessor shall deliver notice to Lessee not less than thirty (30) days in advance of any proposed transfer of the Properties, which such transfer shall be subject to the prior written consent of Lessee, in its sole discretion. Lessor agrees that this Lease shall survive any transfer of the Properties; provided, however that Lessor shall remain primarily liable for all obligations of Lessor hereunder until Lessee has approved the creditworthiness of Lessor's assignee. In furtherance of the foregoing, Lessor agrees that it shall cause any purchaser, assignee, or mortgagee of the Properties to execute and deliver to Lessee an assignment and assumption of this Lease and the PPA simultaneously with the transfer of the Properties to such purchaser, assignee or mortgagee, and that Lessor shall reimburse Lessee for all costs and expenses associated with review and negotiation of such agreements, including reasonable attorneys' fees. Such assignment and assumption agreements shall contain an acknowledgement by the purchaser, assignee or mortgagee that it has no interest in the Facilities and shall not gain any interest in the Facilities by virtue of the transfer, other than the rights of Lessor hereunder.

d. Notwithstanding any contrary provisions contained in this Lease, including without limitation Section 13(c)(i) and 13(c)(ii), Lessor specifically agrees, without any further request for prior consent but with advance written notice to Lessor which will identify any such assignee, to permit Lessee to assign, transfer or pledge its rights under this Lease and its rights and title to the Facilities for the purpose of obtaining financing or refinancing in connection with the Facilities (including, without limitation, pursuant to a sale-leaseback or partnership flip transaction or any debt financing) and to sign any consent, agreement, amendment or estoppel reasonably requested by Lessee or its Designated Third Parties to acknowledge and evidence such agreement; provided, however, that such agreement does not adversely affect the rights of Lessor or materially alter the obligations owed to Lessor under the terms of this Lease.

14. Amendment. No amendment to this Lease shall be valid unless made in writing and signed by a duly authorized agent of Lessee and the Lessor. No provision may be waived except in a writing signed by the duly authorized signatory of the Lessor and a duly authorized signatory of the Lessee.

15. Severability. If any term or condition of this Lease is found to be unenforceable under Applicable Law, the remaining terms and conditions shall remain binding upon the Parties as though said unenforceable provision were not contained herein, and if appropriate, such invalid or unenforceable provision shall be modified or replaced to give effect to the underlying intention of the Parties.

16. Interpretation. Unless otherwise specified, the following rules of construction and interpretation apply: (a) captions are for convenient reference only and in no way define or limit the construction of the terms and conditions hereof; (b) use of the term "including" shall be interpreted to mean "including but not limited to;" use of the terms "termination" or "expiration" are interchangeable; use of the terms "will" and "shall" are interchangeable, and mandatory, rather than permissive; (c) except as otherwise expressly stated, whenever a Party's approval or consent is required under this Lease, such consent shall not be unreasonably withheld or delayed; (d) reference to a default shall take into consideration any applicable notice, grace and cure periods; and (e) exhibits are an integral part of the Lease.

17. Governing Law. This Lease and the performance thereof shall be governed, interpreted, construed and regulated by the laws of the Commonwealth of Massachusetts. Each of the Parties consents to the exclusive jurisdiction of the state or federal courts of the Commonwealth of Massachusetts sitting in Middlesex County with respect to all disputes arising under or out of this Agreement, and Lessor and Lessee hereby waive any right to stay or dismiss any action or proceeding under or in connection with this Lease brought before the foregoing courts on the basis of *forum nonconveniens*. LESSOR AND LESSEE EXPRESSLY WAIVE ANY RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING TO WHICH LESSOR OR LESSEE MAY BE PARTIES ARISING OUT OF OR IN ANY WAY PERTAINING TO THIS AGREEMENT.

18. Notices. All notices must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice), or by email to the address listed

below, and shall be deemed received as of the earlier of five days after the date of the postmark or actually receipt thereof:

LESSOR:

City Solicitor
City of Newton Law Department
1000 Commonwealth Avenue
Newton Centre, MA 02459
Email:

LESSEE:

Henry Shine
Newton Solar SPV I LLC
1 N Wacker Dr
Ste 2900
Chicago IL 60610
Email: henry.shine@macquarie.com

With a copy to:

David Prince
Newton Solar SPV I LLC
125 W 55th St
New York NY 10019
Email: david.prince@macquarie.com

19. Notice of Lease. Lessor agrees to execute a Notice of Lease pursuant to G.L. c. 183, §4, to be prepared by Lessee in the form of Exhibit B hereto, which Notice may be recorded by Lessee at its expense. If requested, a copy shall be sent to the Lessor.

20. Entire Agreement. This Lease and the PPA contain all the agreements, promises and understandings between the Lessor and Lessee and no oral agreements, promises or understandings shall be binding upon either the Lessor or Lessee in any disputes, controversy or proceeding at law, and any addition, variation or modification to this Lease shall be void and ineffective unless made in writing and signed by the Parties hereto in accordance with Section 14 of this Lease.

21. Representations and Warranties of Lessor

a. Authorization; Enforceability. The execution and delivery by Lessor of, and the performance of its obligations under, this Lease: (i) have been duly authorized by all necessary action and do not and will not require any further consent or approval of any other person, (ii) and do not contravene any provision of, conflict with or constitute a breach or default under any indenture, mortgage, material agreement binding on Lessor, any valid order of any court, or regulatory agency or other body having authority to which Lessor is subject, or any Applicable

Law, including but not limited to, competitive bidding, public notice, open meetings, or prior appropriation requirements. This Lease constitutes the legal, valid, and binding obligation of Lessor and its successors and assigns, enforceable against Lessor in accordance with its terms, except as may be limited by bankruptcy, reorganization, insolvency or laws relating to or affecting creditors' rights generally. No suit, action or arbitration, or legal administrative or other proceeding is pending or has been threatened against Lessor that would have a material adverse effect on the validity or enforceability of this Lease or the ability of Lessor to fulfill its commitments hereunder.

b. Lessor's Title to Properties; Transfers. Lessor represents and warrants that it owns fee title to each Property and that as of the Effective Date, there are no ground leases, master leases, liens, security interests or other encumbrances on any of the Properties. To the extent that, after the Effective Date, any third party has any interest in the Properties or any other claim, lien, encumbrance or right of possession on or against the Properties or Leased Premises, Lessor will promptly obtain such consents, non-disturbance agreements or other written documents as Lessee may reasonably request in order to evidence the consent of such third party to the transactions contemplated by this Lease and the acknowledgement by such third party of the right, title and interest of Lessee in and to the Properties and the Facilities. The Lessor shall not permit any mechanics' liens, or similar liens, to remain upon the Leased Premises for labor and material furnished to the Lessor or claimed to have been furnished to the Lessor in connection with work of any character performed or claimed to have been performed at the direction of the Lessor and shall cause any such lien to be released of record or bonded over forthwith without cost to the Lessee. Without limiting the generality of the foregoing, Lessor hereby waives any statutory or common law lien that it might otherwise have in or to the Facilities or any portion thereof.

c. No Interference with and Protection of Facilities. Lessor will not conduct activities on, in or about the Properties that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the Facilities or operation thereof. Nothing contained in this provision shall preclude Lessor from conducting the maintenance and repair, as needed, of the Properties, or snow removal by Lessor in cases of snow loading that could affect the integrity of roofing; provided, that Lessor shall not remove snow from the surface of the photovoltaic modules nor shall Lessor be permitted to remove snow inside of the Leased Premises; except as mutually agreed upon by the Parties with respect to snow removal on parking lots underneath canopies.

d. Maintenance of Leased Premises. Subject to the terms and conditions hereof, Lessor shall have full access and use of the Leased Premises, including but not limited to access for the purpose of maintenance and repair, so long as such access and use does not unreasonably interfere with Lessee's use of the Leased Premises for the Facilities.

e. Hazardous Materials. Lessor represents that, to the best of its knowledge, there are no substances, chemicals or wastes, identified as hazardous, toxic or dangerous materials under Applicable Law ("**Hazardous Materials**") present on, in or under the Properties in violation of any Applicable Law. Lessor shall not introduce or use any Hazardous Materials on,

in or under the Properties in violation of any Applicable Law. If Lessor becomes aware of any such Hazardous Materials, Lessor shall promptly notify in writing Lessee of the type and location of such materials, to the extent known by Lessor. As of the Effective Date, Lessor has provided to Lessee, and thereafter shall provide to Lessee, all evidence in its possession of Hazardous Materials on the Properties and all environmental reports relating to the Properties.

f. Premises Conditions. Lessor represents and warrants to Lessee that Lessor is unaware of any site conditions (a) that would materially increase the cost of installing any Facility and Facility Assets at the planned locations on the Properties (b) that would adversely affect the ability of any Facility or Facility Assets as designed to produce electricity once installed, absent conditions beyond Lessor's reasonable control. The Parties acknowledge Lessee's obligation under Section 4 above to conduct a structural analysis of the Leased Premises.

22. Representations and Warranties of Lessee

a. Authorization; Enforceability. The execution and delivery by Lessee of, and the performance of its obligations under, this Lease have been duly authorized by all necessary action, do not and will not require any further consent or approval of any other person, and do not contravene any provision of, or constitute a default under any indenture, mortgage or other material agreement binding on Lessee or any valid order of any court, or regulatory agency or other body having authority to which Lessee is subject, or any Applicable Law. This Lease constitutes a legal, valid, and binding obligation of Lessee and its successors and assigns, enforceable against Lessee in accordance with its terms, except as may be limited by bankruptcy, reorganization, insolvency or laws relating to or affecting creditors' rights generally. No suit, action or arbitration, or legal administrative or other proceeding is pending or has been threatened against Lessee that would have a material adverse effect on the validity or enforceability of this Lease or the ability of Lessee to fulfill its commitments hereunder

b. Hazardous Materials. Lessee shall not introduce or use any Hazardous Materials on, in or under the Properties in violation of any Applicable Law. If Lessee becomes aware of any such Hazardous Materials, Lessee shall promptly notify in writing Lessor of the type and location of such materials, to the extent known by Lessee.

c. No Interference with and Protection of Lessor Solar Panels. Lessee will not conduct activities on, in or about the Leased Premises that have a reasonable likelihood of causing damage, impairment or otherwise adversely affecting the existing solar panels of Lessor.

d. Insolation. Lessee shall not cause or permit any interference with Lessor's existing solar panels or Lessor's insolation and access to sunlight, as such access exists as of the Effective Date, or build any structure or permit any third party under Lessee's control to build any structure that blocks the Lessor's existing solar panels' access to sunlight.

e. Regulatory Status. Lessee represents and warrants that it is not an electric utility or electric corporation as defined under Massachusetts law.

f. Liens. Subject to Section 25 and Section 36, Lessee shall not directly or indirectly cause, create, incur, assume or suffer to exist any mortgage, pledge, lien, charge, security interest, encumbrance or claim on or with respect to the Leased Premises and agrees to discharge any such encumbrance or interest that attaches to the Leased Premises.

23. Taxes. In the event Lessor's tax assessor intends to assess real or personal property taxes against Lessee (or any designated third party) due to Lessee's ownership of the Facilities or occupancy of the Leased Premises, the Parties shall enter into a payment in lieu of taxes agreement ("**PILOT Agreement**") under the authority of and in accordance with General Laws Chapter 59, §38H, as amended, prior to the assessment of any such tax to establish a stable, levelized payment structure regarding payment of such taxes for the Term. If, notwithstanding the foregoing, real or personal property taxes are assessed by Lessor's tax assessor against Lessee or if Lessor is required to make payments under a PILOT Agreement, Lessee shall forward such bill to the Lessor at the address specified in Section 18 for payment by the Lessor. Such tax payments or payments in lieu of real or personal property taxes shall be paid by the Lessor on behalf of the Lessee. If Lessee is required to pay any real or personal property taxes or payments under a PILOT Agreement directly, Lessor shall reimburse Lessee for such payment within thirty (30) days of receipt of an invoice from Lessee. Both Parties shall use reasonable efforts to administer this Lease and implement its provisions so as to minimize Governmental Charges.

24. Liability and Indemnity

a. The Lessee shall indemnify, defend, and hold harmless the Lessor and all of its officers, employees, boards, commissions, and representatives ("**Lessor Indemnified Parties**") from and against all claims, causes of action, suits, costs, damages, and liability of any kind ("**Losses**") from or to third parties which arise out of the performance of Lessee's obligations hereunder, provided that such Losses are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property but only to the extent caused by the grossly negligent or intentional acts or omissions of the Lessee, its employees, agents, subcontractors, or anyone directly or indirectly employed by them or anyone for whose acts Lessee is legally liable. This indemnity obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of the Lessor, but the Lessee's obligation to pay Losses shall be reduced in proportion to the percentage by which the Lessor's negligent or intentional acts, errors or omissions caused the Losses.

b. To the extent permitted by law, Lessor shall indemnify and hold harmless Lessee and all of its officers, employees, boards, commissions, and representatives ("**Lessee Indemnified Parties**") from and against any and all Losses from or to third parties for injury or death to persons or damage or loss to or of property to the extent arising out of the negligent or intentional acts or omissions of the Lessor, its employees, agents, subcontractors or representatives. This indemnity obligation shall apply notwithstanding any negligent or intentional acts, errors or omissions of Lessee, but the Lessor's obligation to pay Losses shall be reduced in proportion to the percentage by which the Lessee's negligent or intentional acts, errors or omissions caused the Losses. Notwithstanding the foregoing, the extent of the Lessor's

indemnification shall not exceed the Lessor's liability for the negligent acts or omissions of its employees as governed by Massachusetts General Laws Chapter 258.

c. Neither Lessor nor its officers, employees, boards, committees, commissions, agents and representatives shall be under any personal obligation or incur any personal liability by reason of this Agreement, the execution thereof or anything relating thereto which arises out of the breach or violation of any provision of this Agreement.

d. The provisions of this section shall survive the expiration or earlier termination of this Lease.

e. NO CONSEQUENTIAL DAMAGES.

NOTWITHSTANDING ANY PROVISION OF THIS LEASE TO THE CONTRARY, NEITHER LESSEE NOR LESSOR SHALL BE LIABLE TO THE OTHER FOR INCIDENTAL, CONSEQUENTIAL, SPECIAL, PUNITIVE OR INDIRECT DAMAGES, INCLUDING WITHOUT LIMITATION, LOSS OF USE, LOSS OF PROFITS, COST OF CAPITAL OR INCREASED OPERATING COSTS, ARISING OUT OF THIS LEASE WHETHER BY REASON OF CONTRACT, INDEMNITY, STRICT LIABILITY, NEGLIGENCE OR BREACH OF WARRANTY; provided, however, that the aforementioned clause shall not eliminate or reduce Lessor's obligations to compensate Lessee for lost revenue under Section 24(g), or as expressly set forth in other sections of this Lease or PPA, including without limitation, Lessee's right to recover the Termination Payments, the loss of value of any Environmental Incentives, or any other remedy under the PPA.

f. Nothing contained in this Lease shall constitute a waiver by Lessor of limitations on liability of Lessor under the Massachusetts Tort Claims Act, General Laws Chapter 258, as from time to time amended.

g. Hazardous Materials.

(i) Lessor Hazardous Materials. Lessee shall not be responsible for any liabilities, damages, costs, or expenses related to: (i) any pre-existing Hazardous Materials encountered at, released from, or transported from the Properties; or (ii) any Hazardous Materials brought onto the Properties or released by Lessor or Lessor's agents, employees, contractors, subcontractors, licensees, or invitees (items (i) and (ii) together, "**Lessor Hazardous Materials**"). Lessor shall indemnify and hold harmless the Lessee Indemnified Parties from any liability, damages, costs or expenses (including reasonable attorneys' fees) incurred by Lessee arising out of or related to the Lessor Hazardous Materials. Upon encountering any materials that Lessee suspects may constitute Lessor Hazardous Materials, Lessee shall immediately notify Lessor and may suspend work in the affected area as reasonably necessary until such materials are properly remediated by Lessor; provided, however, that Lessee shall not be responsible for any liabilities, damages, costs or expenses related to such Lessor Hazardous Materials.

(ii) Lessor Remediation. If Lessor Hazardous Materials are encountered at a Property in violation of any Applicable Law and prevent or interfere with the installation of any

Facility and Facility Assets, Lessor shall remediate such Lessor Hazardous Materials at its own cost and expense. Lessee shall stop work in the affected area until Lessor can demonstrate that all required remediation is complete. After the Commercial Operation Date, if Lessor Hazardous Materials are encountered at the Leased Premises, and Lessor is required by Applicable Law to remediate the Lessor Hazardous Materials, then Lessor shall notify Lessee in writing of the extent of Lessor's planned remediation. If any Facility and Facility Assets must be removed or Lessee's ability to operate, inspect, test, maintain, repair or replace any Facility and Facility Assets is hindered in any way by Lessor's performance of such remediation, Lessor shall be responsible for all documented Losses incurred by Lessee to remove, store and reinstall such Facility and Facility Assets or any part thereof, and lost revenue (reasonably estimated and documented by Lessee) due to any excess downtime, and if mutually acceptable to the Parties, the Term shall be extended day for day for each day of interruption due to Lessor's remediation to mitigate any such lost revenue.

(iii) Lessee Hazardous Materials. If Lessee (A) directly causes a release of Hazardous Materials brought onto a Property by Lessee, or (B) negligently causes a release of any preexisting Hazardous Materials at a Property, provided that Lessee had actual knowledge that the Hazardous Materials were preexisting at the Property, then Lessee shall perform all required remediation. Lessee shall indemnify and hold harmless the Lessor Indemnified Parties from any costs or expenses incurred by Lessor due to any such release of Hazardous Materials on the Leased Premises caused by Lessee or its subcontractors in excess of quantities allowed under Applicable Law.

25. Provisions Regarding Financing Parties

a. The Parties acknowledge that the Lessee may finance the construction and operation of the Facilities through non-recourse project financing, asset-backed financing, lease/purchase financing, tax equity investment or other type of financing, and in each case, ownership of the Facilities may be transferred to a third party, and Lessee may pledge its interest in this Lease including any rights to payment, and the Facilities as security for loans or financing. Lessor agrees to cooperate with the Lessee in the negotiation and execution of any reasonable amendment or addition to this Lease required by the financing parties so long as such amendment or addition does not result in a material adverse change in the Lessor's rights or obligations hereunder.

b. The lenders will require such financing to be secured by a first lien on the Lessee's assets and the Facilities, including a collateral or full assignment of this Lease and all of Lessee's rights and obligations hereunder. Accordingly, this Lease or Lessee's rights to receive payments hereunder, may be assigned by the Lessee in connection with the financing or any refinancing of the Facilities, alone or aggregated with other comparable systems, without further consent of the Lessee. Lessor acknowledges that it has been advised that part of the collateral securing financial accommodations of Lessee is the granting of a first priority security interest in the Facilities to be perfected by a filing under the Uniform Commercial Code and to be documented in a recorded notice on title to the Leased Premises. Lessor (i) agrees to execute such consent and agreement, estoppel, or similar documents with respect to a collateral

assignment hereof as the lenders may reasonably request in connection with the financing or refinancing of the Facilities and (ii) acknowledges that such consent and agreement or similar documents will, among other things, require the Lessor to give the lenders notice of, and an opportunity to cure, any breach by the Lessee hereunder.

c. No financing arrangement by Lessee shall materially reduce any of Lessor's rights and Lessee's obligations under this Lease.

26. No Third Party Beneficiaries. This Lease is solely for the benefit of the Parties and no right or cause of action shall accrue by reason hereof for the benefit of any third party not a Party hereto, other than the Lessor Indemnified Parties, the Lessee Indemnified Parties and any lenders or secured parties, as provided herein; provided that any Designated Third Party (as defined below) shall be an intended third party beneficiary of this Lease.

27. Defaults and Remedies. If either Party breaches any material term of this Lease the non-defaulting Party shall provide written notice to the defaulting Party describing the nature of the default (a "**Default Notice**"). Following the receipt of a Default Notice (a) if such breach is capable of being cured within thirty (30) days after notice of such breach, the defaulting Party shall cure the breach within such thirty (30) day period, or (b) if the defaulting Party has diligently commenced work to cure such breach during such thirty (30) day period but additional time is needed to cure the breach, the defaulting Party shall cure such breach within one hundred and twenty (120) days from the date of receipt such Default Notice (such uncured default, following expiration of notice and cure periods, an "**Event of Default**"); provided that, (a) a breach by Lessee of a material term of this Lease that relates solely to one or more Properties, subject to the cure periods set forth in this Section 27, shall be deemed an Event of Default of Lessee solely with respect to such Property or Properties, and for no other Property or Properties (a "**Property-Specific Default**"), and (b) for a breach by Lessor of a material term of this Lease that relates solely to one or more Properties, subject to the cure periods set forth in this Section 27, Lessee shall have the right to deem the breach of such material term to be an Event of Default of Lessor solely with respect to such Property or Properties, and for no other Property or Properties (a "**Lessor Property-Specific Default**"). Upon an Event of Default, Property-Specific Default, or Lessor Property-Specific Default, the non-defaulting Party shall have the remedies as provided in the PPA; provided that, a Property-Specific Default hereunder shall only constitute a "Facility-Specific Default" under the PPA, and a Lessor Property-Specific Default hereunder shall constitute a "Customer Facility-Specific Default" under the PPA. A default beyond notice and cure periods under the PPA shall also constitute an Event of Default under this Lease; provided that, a "Facility-Specific Default" under the PPA shall only constitute a Property-Specific Default hereunder, and a "Customer Facility-Specific Default" under the PPA shall constitute a Lessor Property-Specific Default hereunder.

28. Waiver. The waiver by either Party of any breach of any term, condition or provision herein contained shall not be deemed to be a waiver of such term, condition or provision, or of any subsequent breach of the same, or any other term, condition or provision contained herein.

29. Remedies Cumulative. No remedy herein conferred upon or reserved to Lessee or

Lessor shall exclude any other remedy herein or by law provided, but each shall be cumulative and in addition to every other remedy given hereunder or now or hereafter existing at law or in equity or by statute.

30. Binding Effect. This Lease and its rights, privileges, duties and obligations shall inure to the benefit of and be binding upon each of the Parties hereto, together with their respective successors and permitted assigns.

31. Counterparts. This Lease may be executed in counterparts, which shall together constitute one and the same agreement. Facsimile or “pdf” signatures shall have the same effect as original signatures and each Party consents to the admission in evidence of a facsimile or photocopy of this Lease in any court or other proceeding between the Parties.

32. Further Assurances. Upon receipt of a written request from the other Party, each Party shall execute such additional documents, instruments or assurances and take such additional actions (including the prompt and proper recording of this Lease) as are reasonably necessary to carry out the terms and intent hereof. Neither Party shall unreasonably withhold, condition or delay its compliance with any reasonable request made pursuant to this section.

33. Dispute Resolution. The Parties acknowledge and agree that Article IX of the PPA is incorporated herein by reference as if set forth fully in this Lease and governs the rights and duties with regard to this Lease as it does the PPA.

34. Certificates. Either Party hereto, without charge, at any time and from time to time, within fifteen (15) business days after receipt of a written request by the other Party hereto, shall deliver a written instrument, duly executed, certifying to such requesting Party, or any other person, firm or corporation specified by such requesting Party:

a. That this Lease is unmodified and in full force and effect, or if there has been any modification, that the same is in full force and effect as so modified, and identifying any such modification;

b. Such other information as may be reasonably requested by the other Party; and

Any written instrument given hereunder may be relied upon by the recipient of such instrument, except to the extent that the recipient has actual knowledge of facts or information contained in the written instrument.

35. Tax Attestation and Non-Collusion Certificates. Simultaneously with the execution of this Agreement by Lessee, Lessee shall also execute and deliver to Lessor a Tax Attestation Certificate in the form of Exhibit C hereto and a Non-Collusion Certificate in the form of Exhibit D hereto.

36. Financing Provisions. Notwithstanding any contrary provisions contained in this Agreement, including without limitation Section 13, Lessor specifically agrees, without any

further request for prior consent but with advance written notice to Lessor which will identify any such assignee, to permit Lessee to assign, transfer or pledge its rights under this Agreement and its rights and title to the Facilities for the purpose of obtaining financing or refinancing in connection with the Facilities (including, without limitation, pursuant to a sale-leaseback or partnership flip transaction) and to sign any agreement reasonably requested by Lessee or its lenders to acknowledge and evidence such agreement; provided, however, that such agreement does not adversely affect the rights of Lessor or materially adversely alter the obligations owed to Lessor under the terms of this Agreement.

37. Third Party Rights.

a. Notice to Designated Third Party. Lessor agrees to give copies of any notice provided to Lessee by Lessor under Section 18 to any assignee or transferee permitted pursuant to Section 36 (each, a “**Designated Third Party**”).

b. Exercise of Lessee Rights. Any Designated Third Party, as collateral assignee and if allowed pursuant to its contractual arrangements with Lessee, shall be entitled to exercise, in the place and stead of Lessee, any and all rights and remedies of Lessee under this Agreement in accordance with the terms of this Agreement. Such Designated Third Party shall also be entitled to exercise all rights and remedies of secured parties generally with respect to this Agreement and the Facilities, subject to the terms of this Agreement.

c. Performance of Lessee Obligations. A Designated Third Party shall have the right, but not the obligation, to pay all sums due under this Agreement and to perform any other act, duty or obligation required of Lessee hereunder or cause to be cured any default of Lessee hereunder in the time and manner provided by and subject to the terms of this Agreement. Nothing herein requires the Designated Third Party to cure any default of Lessee under this Agreement or (unless such party has succeeded to the Lessee’s interests under this Agreement) to perform any act, duty or obligation of Lessee under this Agreement, but Lessor hereby gives such party the option to do so, provided any such cure, act, duty or obligation is performed in accordance with the terms of this Agreement.

d. Exercise of Remedies. Upon the exercise of remedies under its security interest in the Facilities, including any sale thereof by a Designated Third Party, whether by judicial proceeding or under any power of sale contained therein, or any conveyance from Lessee to the Designated Third Party (or any assignee of the Designated Third Party) in lieu thereof, the Designated Third Party shall give notice to Lessor of the transferee or assignee of this Agreement. Any such exercise of secured party remedies shall not constitute a default under this Agreement, unless the act of exercising such remedy itself constitutes an Event of Default.

e. Lessor agrees that each Designated Third Party is a third party beneficiary of the provisions of this Section.

f. Upon any rejection or other termination of this Agreement pursuant to any process undertaken with respect to Lessee under the United States Bankruptcy Code, at the request of a Designated Third Party made within ninety (90) days of such termination or

rejection, Lessor shall enter into a new lease agreement with such Designated Third Party or its assignee on substantially the same terms as this Agreement.

g. Lessor shall not exercise any rights to terminate or suspend this Agreement unless it shall have given the Designated Third Party a copy of prior written notice of its intent to terminate or suspend this Agreement. Lessor's notice of an intent to terminate or suspend must specify the condition giving rise to such right. The Designated Third Party shall have one hundred twenty (120) days after Lessee's cure period expires to cure the condition, except that with respect to any payment defaults, the cure period for the Designated Third Party shall be ninety (90) days after Lessee's cure period expires. Lessor's and Lessee's obligations under this Agreement shall otherwise remain in effect, and Lessor and Lessee shall be required to fully perform all of their respective obligations under this Agreement during any cure period.

h. If pursuant to an exercise of remedies by a Designated Third Party, such party or its assignee acquires title to or control of the Facilities and this Agreement, and cures all defaults under this Agreement existing as of the date of such change in title or control within the time periods described in the preceding paragraph (g) in the manner required by this Agreement, then such person or entity shall no longer be in default under this Agreement and this Agreement shall continue in full force and effect.

[Signatures Follow]

IN WITNESS WHEREOF, the Parties hereto have set their hands and affixed their respected seals as of the date first written above.

LESSOR: City of Newton

Setti Warren, Mayor

Approved as to Form:

Name: _____

Title: _____

Date: _____

LESSEE: _____

By: _____

Name & Title

Exhibit A
General Depiction of Leased Premises

Exhibit B

RECORDING REQUESTED BY,
PREPARED BY AND WHEN RECORDED
RETURN TO:

(Space above this line for recorder's use only)

NOTICE OF LEASE

This Notice of Lease is made this ____ day of _____, 2019, by and between City of Newton, Massachusetts ("Lessor") and Newton Solar SPV I LLC, a Delaware limited liability company ("Lessee" and together with Lessor, the "Parties").

In accordance with the provisions of Massachusetts General Laws Chapter 183, Section 4, as amended, notice is hereby given of the following described lease:

Date of Lease: _____

Lessor: City of Newton, Massachusetts
1000 Commonwealth Avenue
Newton, MA 02459

Lessee: _____

Leased Premises: Certain space on the rooftop and other portions of the properties listed on Annex 1. A depiction of the Leased Premises is attached hereto as Annex 2.

Initial Term: From the date of the Lease (shown above) until 00:00 a.m. on the last day of the month in which the twentieth anniversary of the Commercial Operation Date (as defined in the Power Purchase Agreement dated as of even date with the Lease between Lessor and Lessee (the "PPA")) for the last Facility to achieve Commercial Operation (as defined in the PPA) occurs.

Leasehold

Access Rights: The Leased Premises are leased to Lessee together with the following rights:

- a. Lessor hereby grants to Lessee the non-exclusive use of such additional space at each Property for the installation, operation and maintenance of utility

lines, cables, conduits, transformers, wires, meters, monitoring equipment and other necessary equipment and appurtenances (“**Cabling Space**”) wherever located, whether between and among the floors of the buildings located on the Properties, the rooftop space, the Delivery Point, and all necessary electrical and other utility sources located within each building or on the Properties. The location of the Cabling Space shall be mutually agreed upon by the Parties.

b. Lessor hereby grants to Lessee non-exclusive rights of ingress and egress from all public right-of-ways over each Property to and from the respective Leased Premises and Cabling Space during normal business hours, and upon reasonable advance coordination with Lessor outside of normal business hours.

Ownership of

the Facilities: Lessee or Lessee's assigns, will at all times retain title to and be the legal and beneficial owner of the Facilities, which will at all times retain the legal status of personal property of Lessee as defined under Article 9 of the Uniform Commercial Code. The Facilities will not attach to or be deemed a part of, or a fixture to, the Leased Premises, notwithstanding the manner in which the Facilities are or may be affixed to the real property of Lessor.

The term “Facility” or “Facilities” means the solar electric generating facility or facilities installed at Lessor’s property, including but not limited to the Facility Assets.

“**Facility Assets**” means each and all of the assets of which each applicable Facility is comprised, including Lessee’s solar energy panels, mounting systems, carports, tracking devices, inverters, integrators and other related equipment and components installed on Lessor’s premises, electric lines and conduits required to connect such equipment to the Delivery Point and the LDC System (as such terms are defined in the Lease), protective and associated equipment, improvements, metering devices, and other tangible and intangible assets, permits, property rights and contract rights reasonably necessary for the construction, operation, and maintenance of the applicable Facility.

[Signatures begin on following page]

Executed and effective as of the date first set forth above.

LESSOR: CITY OF NEWTON

By: _____
Name:
Title:

COMMONWEALTH OF MASSACHUSETTS

_____, ss.

On this ____ day of _____, before me, the undersigned notary public, personally appeared _____, proved to me through satisfactory evidence of identification, which was a Massachusetts driver's license, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose, as _____ of City of Newton.

Notary Public
My commission expires:

LESSEE: _____

BY:

By: _____
Name:
Title:

COMMONWEALTH OF MASSACHUSETTS

_____, ss.

On this ____ day of _____, before me, the undersigned notary public, personally appeared _____, proved to me through satisfactory evidence of identification, which was a Massachusetts driver's license, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose, as _____ of _____

Notary Public
My commission expires:

Annex 1 to Notice of Lease

DESCRIPTION OF LESSOR'S PROPERTIES

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)
- (vii)

Annex 2 to Notice of Lease

DEPICTION OF LEASED PREMISES

Exhibit C to Lease

TAX ATTESTATION

Pursuant to M.G.L. c. 62C, § 49A, the undersigned acting on behalf of _____, certifies under the penalties of perjury that, to the best of the undersigned's knowledge and belief, _____ is in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.*

By _____

**Signature of Individual
or Corporate Contractor (Mandatory)

*** Contractor's Social Security Number
(Voluntary) or Federal
Identification Number

By: _____
Corporate Officer
(Mandatory, if applicable)

Date: _____

* The provision in the Attestation relating to child support applies only when the Contractor is an individual.

** Approval of a contract or other agreement will not be granted unless the applicant signs this certification clause.

*** Your social security number will be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Lessees who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended. This request is made under the authority of GL c. 62C, § 49A.

Exhibit D

CERTIFICATE OF NON-COLLUSION

The undersigned certifies, under penalties of perjury, that this CONTRACT has been made and submitted in good faith and without collusion or fraud with any other person.

As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

Lessee:

By: _____

By: _____
(Signature)

(Name of person signing qualifications)



Setti D. Warren
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

MEMORANDUM

To: Bob Rooney, Chief Operating Officer

From: Candace Havens, Director, Planning and Development Department
David Koses, Transportation Planning Coordinator
Lydia Hausle, Planning Intern

Re: Newton City Hall & Library Parking Study

Date: December 9, 2013

BACKGROUND

The purpose of this study is to display and analyze collected data in order to make an informed recommendation for a more appropriate parking solution for Library patrons, as well as City Hall staff and visitors. Further, the study provides a platform from which the City of Newton may begin to consider long-term approaches to reducing reliance on individual vehicles, consistent with Mayor Warren's vision of livable communities and complete streets in and around Newton City Hall.

After receiving numerous complaints concerning the lack of available parking at the Newton Free Library, located at 330 Homer St., the Newton Department of Planning and Development developed and conducted a parking study to evaluate the current stock of parking at the Library and in the immediate vicinity. A major concern of library patrons has been the use of the Newton Free Library parking lot by the staff of Newton City Hall, located directly across the street. Further, as Newton City Hall has absorbed the Newton Department of Health, Human Services, as well as Cultural Arts into the building, the demand for employee and visitor parking has increased.

ANALYSIS SUMMARY

The data collected from a walking survey performed on Tuesday, October 15, 2013 provided valuable metrics concerning the utilization of the current parking stock in and around the Newton Free Library. The analysis of the data was centered on arriving at a recommendation that achieves three main goals:

- I. To provide accessible and convenient parking for patrons of the Newton Free Library and Newton City Hall;
- II. To establish appropriate restrictions and options that accommodate customers and employees; and

- III. To consider and incorporate a long-term vision that addresses the potential for an increased modal share by pedestrians, bicyclists, and transit riders.

MAP 1: Study Area



The list below summarizes the problems and opportunities affecting the study area as found from the collected data and subsequent analysis. For a full report of the findings and analysis, please see the section titled 'Full Findings and Analysis.'

- Although some of the parking areas operate under heavy pressure, the study area as a whole is not short of parking supply. At the busiest hour, 11 AM, the study area is 81.9% full, with the capacity to accommodate an additional 78 vehicles.
- At present, there are few restrictions on parking in the area. Further, many of the spaces that are restricted, such as the carpool spots in War Memorial Circle, are underutilized.
- The study area as a whole operates at an average of 73% occupancy. However, some areas are often far more crowded than that. Specifically, City Hall Circle and the Library Lot are overused, often functioning at occupancies of above 85%, and in some cases above 95%. Additionally, the staff lot, while underutilized at some times, is severely over utilized at 1 PM.

- Walnut Street is grossly underutilized. The peak occupancy occurs at 10 AM when 22% of parking spaces are occupied. The street as a whole is, on average, 87% vacant, representing a free, convenient parking alternative.
- At present, 33 city vehicles are housed in the study area. At any given time throughout the day, city cars consume an average of 6.32% of the total parking stock. While relatively unobtrusive for visitors in most lots, city vehicles represent a large percentage, up to 73%, of vehicles in War Memorial Circle. Most other lots are largely unaffected by the presence of city vehicles. Less significant volumes of city cars were recorded in City Hall Circle, the Library Lot and on Homer St.
- Both the Library Lot and City Hall Circle accommodate a mix of long-term and short-term parkers. At present, the Library Lot has an average hourly turnover rate of 49%, meaning that 49% of spaces in the lot become free within a single hour. City Hall Circle has an average hourly turnover rate of 39%, meaning that 39% of spaces become available within a single hour. On average, people are parked for longer durations at City Hall Circle than in the Library Lot.
- Both City Hall Circle and the Library Lot serve as a long-term parking place for many vehicles that likely belong to employees. In City Hall Circle, 21% of vehicles parked for five or more hours. In the Library Lot, 16% of vehicles were parked for five or more hours. According to City Hall’s Human Resource Department, 171 employees report to City Hall Daily. According to the Director of the Library, between 70 and 76 people are working in the Library at any given time. These long-term parkers, specifically in the Library Lot, are placing unnecessary constraints on a parking area meant to accommodate visitors of the Newton Free Library.

RECOMMENDATION

The following recommendations are based on data and analyses from the study area. They strive to address the short-term needs of the area, while also anticipating future needs and city-wide goals. Some of the recommendations represent an opportunity for pilot programs. Specifically, those recommendations that address time-restricted parking and encouragement of alternative modes of transportation may be better received by employees and the public if implemented first as a trial. A map outlining the recommendations for the trial can be found at the end of this document.

1. **Restrict City Hall Employees from Parking in the Library Lot.** With 16% of vehicles assumed to be “likely employees” displaced from the Library Lot, visitors would have access to parking spots currently occupied by long-term parkers. For additional parking, city hall employees may be directed to Walnut Street, Commonwealth Avenue, and Homer Street.

AND;

Consider Restricting Employee Parking on Portions of City Hall Circle Drive. 21% of vehicles parked at City Hall Circle during the data collection were assumed to be “likely employees”. The number of employees parked at City Hall Circle may be controlled with “visitor only” signs or with a 2 hour parking limit from 9AM-5PM around the circle. This will alleviate the congestion that occurs at the peak hours of the day. This limitation will also ensure that visitors of City Hall may find convenient parking when coming in for errands or other business.

2. **Make Better Use of 36 Parking Spaces on Walnut Street, as well as available space on Homer Street and Commonwealth Ave.** Walnut Street, as previously stated, is “parked” well below capacity. Assuming that the Library Lot and City Hall Circle both directed all of their traffic in excess of the 85% target to Walnut Street, it *still* would not be fully occupied (as shown in Table I). Further, there are two paths leading from Walnut Street to Newton City Hall. Ensuring snow clearance and the installation of low-laying LED light fixtures along the paths would diffuse any fear employees may have about walking to their vehicles, and also enhance the aesthetic of the paths. It may also be appropriate to ease foot travel from Homer Street and Commonwealth Ave. to the City Hall Building by incorporating tasteful lighting fixtures and creating obvious pathways, as employees will be directed to park in these areas.

TABLE I: Walnut Street Occupancy After Adjusting Library Lot and City Hall Circle Parking to 85% Utilization

	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM	5PM
OCCUPIED SPACES ON WALNUT ST. DURING DATA COLLECTION	4	8	5	6	4	4	3	4	3
TOTAL EXCESS FROM LIBRARY LOT & WALNUT STREET	0	9	25	2	4	30	24	8	0
AVAILABLE PARKING SPACES ON WALNUT STREET	32	28	31	30	32	32	33	32	33
OCCUPIED SPACES AFTER ABSORBING EXCESS	4	17	30	8	8	34	27	12	3
UNOCCUPIED SPACES ON WALNUT STREET AFTER ADJUSTMENT	32	19	6	28	28	2	9	24	33

3. **Reclaim a Portion of War Memorial Lot for Housing City Cars, Handicap Parking, and Employees.** Currently, the majority of city vehicles reside in the War Memorial Lot. Restricting a part of the circle for city vehicles will alleviate the pressure city cars place on other parking lots, while also making all city vehicles readily accessible for employees to take out for business. There are 44 parking spaces in War Memorial Circle, 20 along the inside of the circle, and 24 around the outside. The highest number of city vehicles parked in the entire study area at a single time is 23, however 33 individual city vehicles were observed throughout the day. Converting the 20 spots along the inside of the circle to “city car parking” would absorb nearly all of the pressure from city cars on all other parking areas. Further, as this option leaves as many as 24 spaces open, these spaces would remain open for increased handicap parking and designated employee parking.
4. **Restrict portion of Library Lot for short-term (ex. 15 minute, 1 hour, etc.) parking.** Residents have voiced their concern about their inability to find convenient parking for their quick trips to the library. There is currently live parking in front of the library that is well utilized by people quickly dropping off books. Adding a row, or a portion of a row of short-term parking to the Library Lot, specifically in rows close to the library door, may help (a.) placate frustrated library visitors, and (b.) ensure that library employees and long-term visitors do not consume the parking closest to the entrance.
5. **Improve Signage to the Staff Lot and Front of City Hall to Encourage Use of Main Door by Visitors.** Current signage in the staff lot is inadequate to ensure that unauthorized vehicles do not park in the lot, thereby causing congestion. Contractors and other visitors of City Hall who may have business with Inspectional Services may prefer to use the South side entrance, however they should not be consuming parking spaces specifically designated for certain employees. Improved signage to the lot

(ex. “Authorized Staff Only”) may dissuade unauthorized parking. Installing a tasteful “Visitor Entrance” sign on the front (East) façade of City Hall may also help direct people to the proper entrance.

- Promote Alternative Modes of Transportation for Employees.** At present, there are few resources in place to incentivize or even make possible traveling to Newton City Hall or the Newton Free Library without a personal vehicle. While the thoroughfares around the area are populated with sidewalks, employees can only be expected or encouraged to walk so far. Further, though there are some bicycle lanes in the vicinity of the study area, and others under consideration, there are few bicycle racks. The City might consider ways to improve the area for alternative modes of transportation, and also promote those opportunities that already exist (underutilized carpool parking spots, the #59 bus, etc.). Conducting a survey of both the Newton Free Library and Newton City Hall staff in order to understand what would incentivize alternative modes of transportation could prove to be a useful tool in planning future infrastructural and policy changes (such as free MBTA passes, bicycle lanes, commuter benefits, etc.). This recommendation also presents an opportunity to involve the newly appointed Sustainability Director in an effort to be as consistent as possible with the city’s environmental goals.

RESEARCH METHOD

Data collection for this study took place on Tuesday, October 15, 2013, between the hours of 9 AM and 6 PM. This date was chosen in order to carry out the data collection on an ordinary day, one that would represent an honest description of the day-to-day parking trends in and around the Newton Free Library and Newton City Hall. In addition to collecting license plate data, the Department reached out to employees of City Hall’s Human Resource Department and the Director of the Library in order to know the exact number of people employed by both establishments.

There were seven major areas included in the data collection (see Map I); the entire parking lot at the Newton Free Library, the City Hall staff lot, Homer Street between Walnut Street and Commonwealth Avenue, Walnut Street between Homer Street and Commonwealth Avenue, the entirety of City Hall Circle, Commonwealth Avenue between City Hall Circle Drive and the War Memorial Circle, and the entirety of the War Memorial Circle. In total, occupancy and length of stay data was collected for 431 parking spaces. In choosing these seven locations, the Department aimed to exhaust any and all parking solutions for persons wishing to use the Library. Additionally, the inclusion of parking data from areas in the vicinity of the Library, such as on Walnut Street or Commonwealth Avenue, allowed for an elevated understanding of the forces, if any, that contribute to the parking congestion in the Library lot.

The data collection itself consisted of documenting the license plate number of cars in each study location hourly. The walking survey was done in the same direction and in the same order every hour to ensure consistent and comprehensive data was recorded. The license plate number and specific location of the car within a given study area was recorded. Additionally, the longevity of a vehicle’s stay was recorded. The data collection was intended to gather sufficient information to analyze the occupancy of the study area, as well as the turnover of vehicles in order to assess the long-term and short-term parking needs of the area.

Given the volume (33) of city-owned vehicles that absorb parking in the study area, all City cars and their identification numbers were recorded. Further, any Public Works, Fire, and Police Department vehicles were also recorded.

FULL FINDINGS AND ANALYSIS

In the following pages, the data has been broken down and reorganized to highlight the central problems and opportunities of the study area.

EXISTING PARKING SUPPLY AND DEMAND

At present, there are few restrictions governing the 431 parking spots available in the study area. Aside from 10 handicap spots, and a small selection of other restricted spaces, there are 407 parking spots in the study area that are completely unrestricted. Further, no parking spaces make use of a meter or other financial disincentive. The existing parking supply is shown in Table II.

TABLE II: Existing Parking Supply									
Study Area	Handicap Spots	Live Parking Spots	Veteran Parking Spots	Alderman Parking Spots	15 Min Parking Spots	Assessing Parking Spots	Carpool Parking Spots	Un-restricted Spots	Total Parking Spots
Library Lot	6	0	0	0	0	0	0	179	185
Homer St.	1	3	0	0	0	0	0	59	63
Staff Lot	3	0	0	1	0	0	0	14	18
City Hall Circle	0	0	0	2	2	0	0	61	65
Walnut St.	0	0	0	0	0	0	0	36	36
Commonwealth Ave.	0	0	0	0	0	0	0	20	20
War Memorial Circle	0	0	1	0	0	1	4	38	44
Total Study Area	10	3	1	3	2	1	4	407	431

Although the Department cannot be certain of how people get to work each day, data from the Director of the Library and City Hall’s Human Resources Department reveal how many people must travel to City Hall and the Library for work, as shown in Table III.

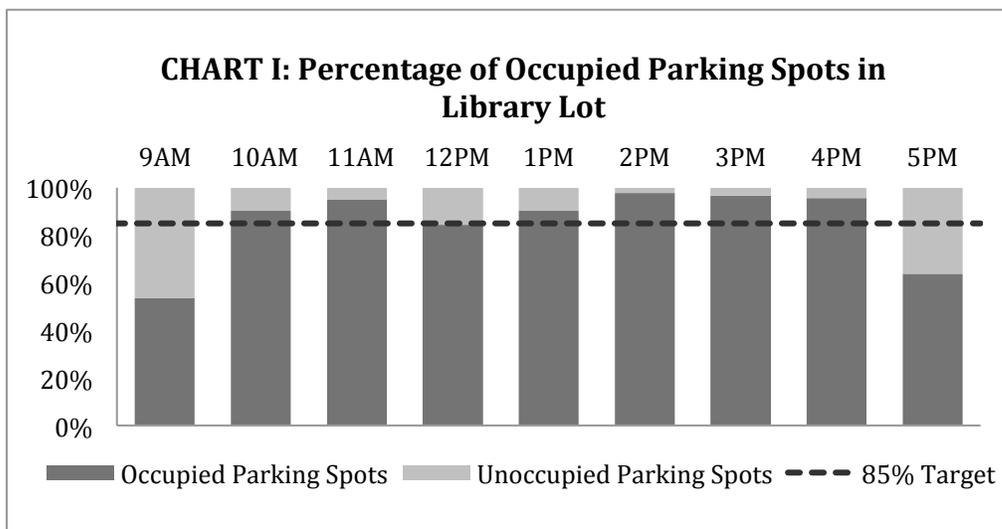
TABLE III: Employees of Newton Free Library and City Hall		
Employer	Number of Employees	Employee to Parking Spaces Ratio
Newton City Hall	171	1: 2.5
Newton Free Library	76*	1: 5.7
Total	247	1: 1.7

* 76 represents the upper limit of a range (70-76) of employees and volunteers that are expected to be working at any given

OCCUPANCY

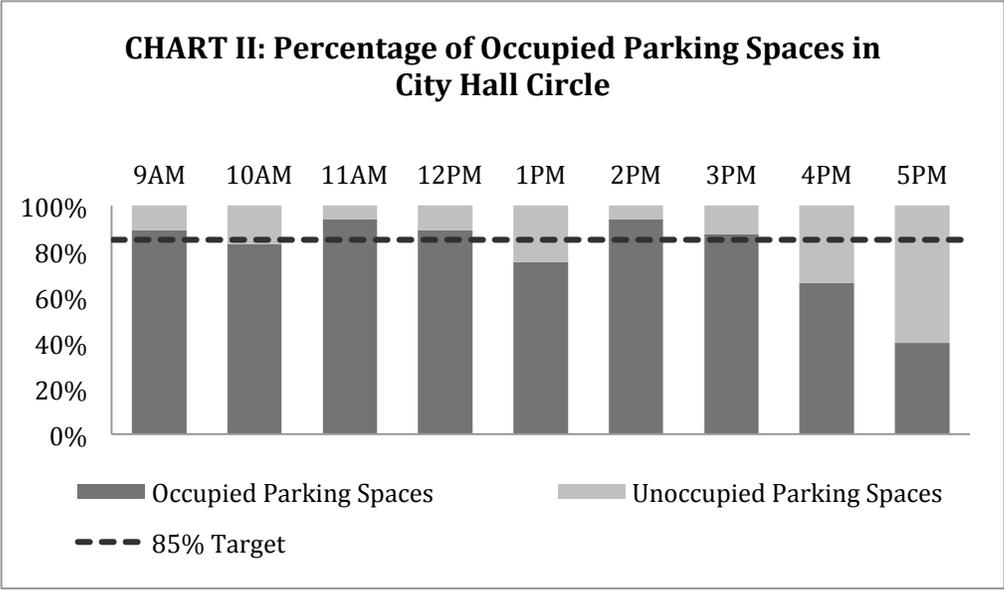
In order to assess the utilization of the available parking stock in the area, the occupancy for each individual area and the study area as a whole was calculated. The results illuminate those lots that experience periods of time when available parking spaces are scarce or nonexistent. Specifically, the occupancy charts reveal that the Library Lot, City Hall Circle, the Staff Lot, and War Memorial Circle experience “peak hours”, during which occupancy levels breach 85%, an industry standard for target parking occupancy.

Relative to the occupancy pattern of the entire study area, the Library Lot experiences high occupancy throughout the day. As seen in Chart I, “peak hours” for the Library Lot occur from 10 AM until noon, and again from 1 PM until 5 PM. At the busiest hour, the Library Lot is 98% full, which translates to 181 out of 185 parking spaces occupied at 2 PM. The dip in occupancy at 12 PM can potentially be attributed to a break in library activities at lunchtime

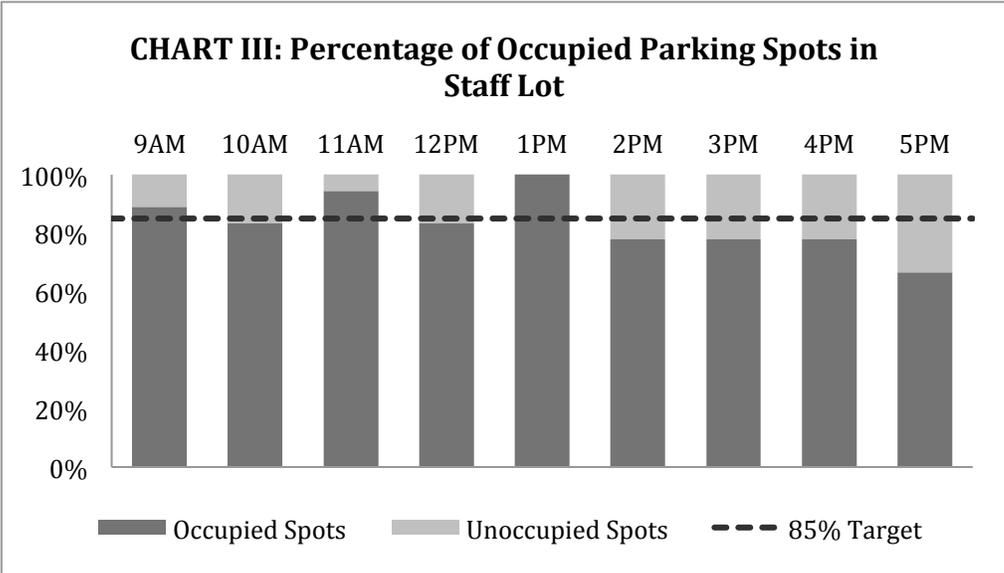


Relative to the occupancy pattern of the entire study area, the Library Lot experiences high occupancy throughout the day. As seen in Chart I, “peak hours” for the Library Lot occur from 10 AM until noon, and again from 1 PM until 5 PM. At the busiest hour, the Library Lot is 98% full, which translates to 181 out of 185 parking spaces occupied at 2 PM. The dip in occupancy at 12 PM can potentially be attributed to a break in library activities at lunchtime

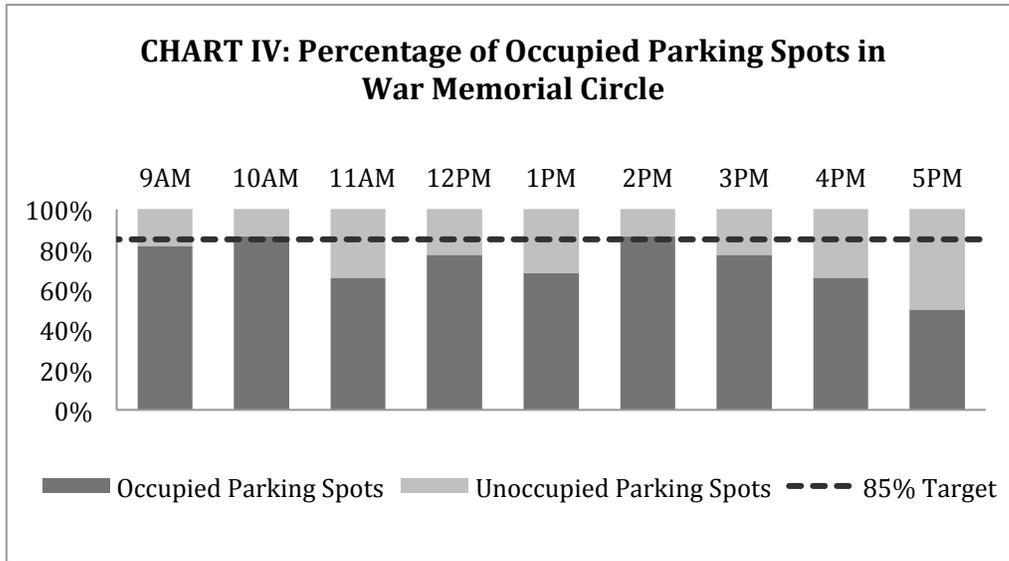
City Hall Circle experiences similar parking congestion at “peak hours” throughout the day (see Chart II). Though overall occupancy is less than that of the Library Lot, City Hall Circle does experience occupancy levels much higher than the study area as a whole. Like the Library Lot, City Hall Circle experiences morning peaks and afternoon peaks from 9 AM to 10 AM, 11 AM to 1 PM, and from 2 PM until 4 PM. At two times, City Hall Circle reaches occupancy of 94%, meaning that 61 of 65 parking spaces are occupied. Unlike the Library Lot, City Hall Circle occupancy does not dip below 85% at noontime.



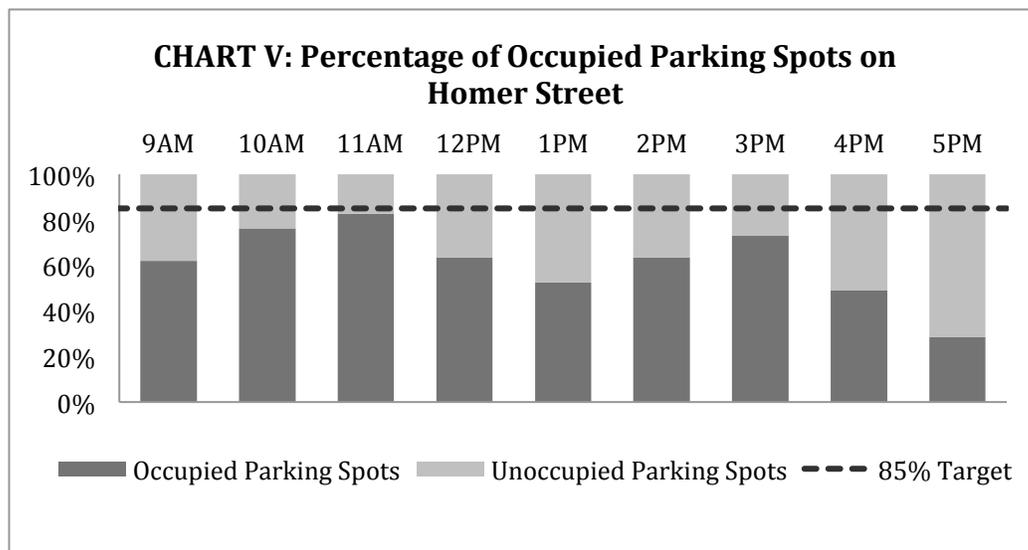
The Staff lot operates at occupancy levels above 85% at 9 AM, 11 AM, and 1 PM, as seen in Chart III. On the day of the walking survey, the staff lot was above capacity, with cars parked in imagined spaces and squeezed tightly into narrow areas at 1 PM. Although high occupancy in the staff lot is desired in order to alleviate parking pressure on other areas, blocking in vehicles poses potential inconveniences and hazards for employees.



The War Memorial Lot experiences occupancy of 86% at 10 AM and 2 PM (see Chart IV). Aside from the two hours when the War Memorial Lot rises just above the 85% threshold, the lot remains readily available for people to park in and is not considered to be an area of concern for people wishing to use the Newton Free Library. All other study areas function at an occupancy of 85% or less for all hours recorded during the walking survey.

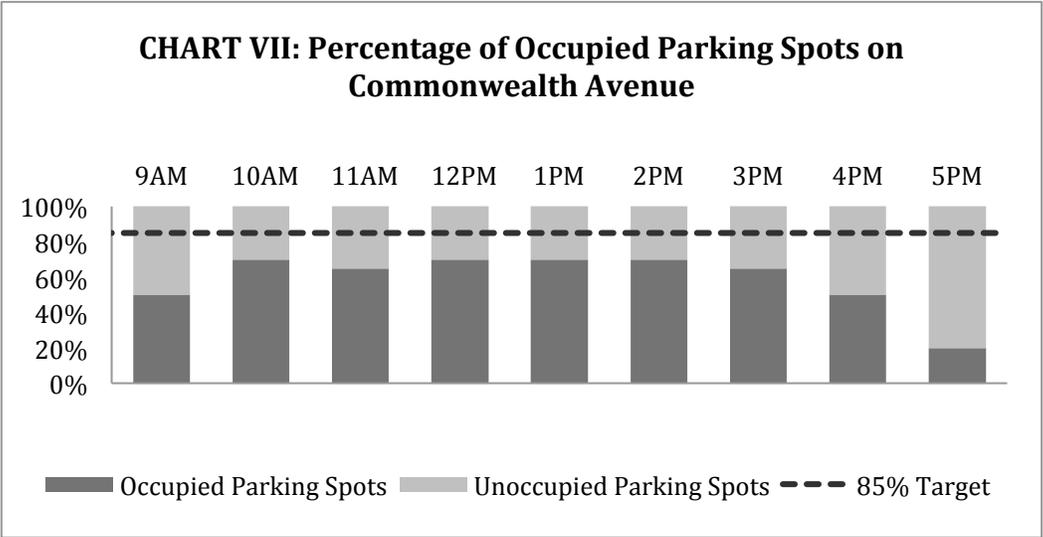
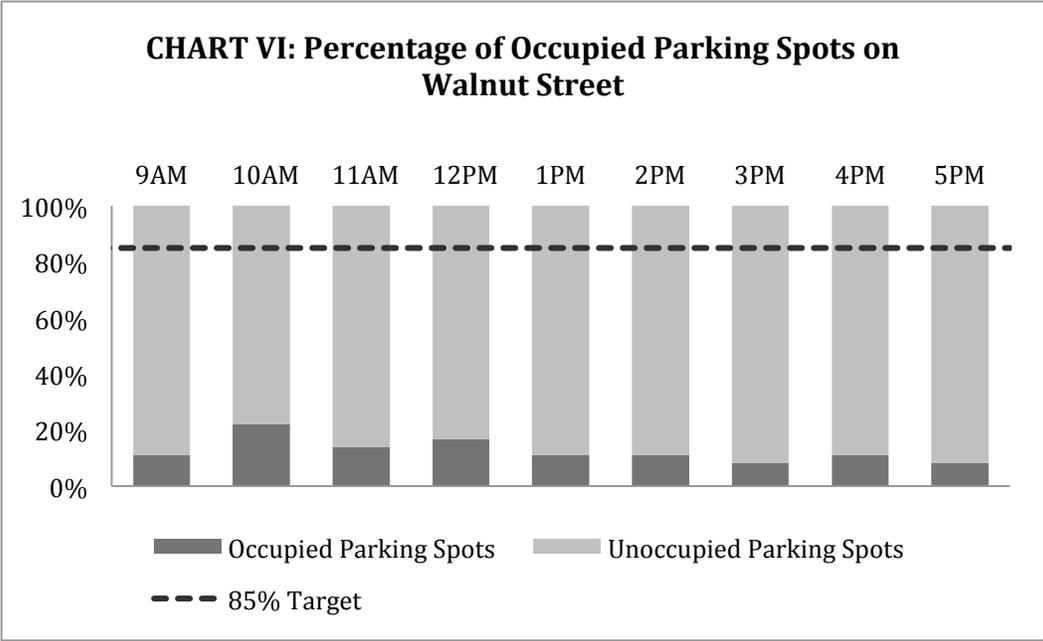


Homer Street, Walnut Street, and Commonwealth Avenue experience far less parking pressure than the four areas charted above. From Charts V, VI, and VII, it is obvious that there is much room for these three areas to absorb some of the parking demand that is currently stressing the parking supply in the Library Lot, City Hall Circle, the Staff Lot, and War Memorial Circle.



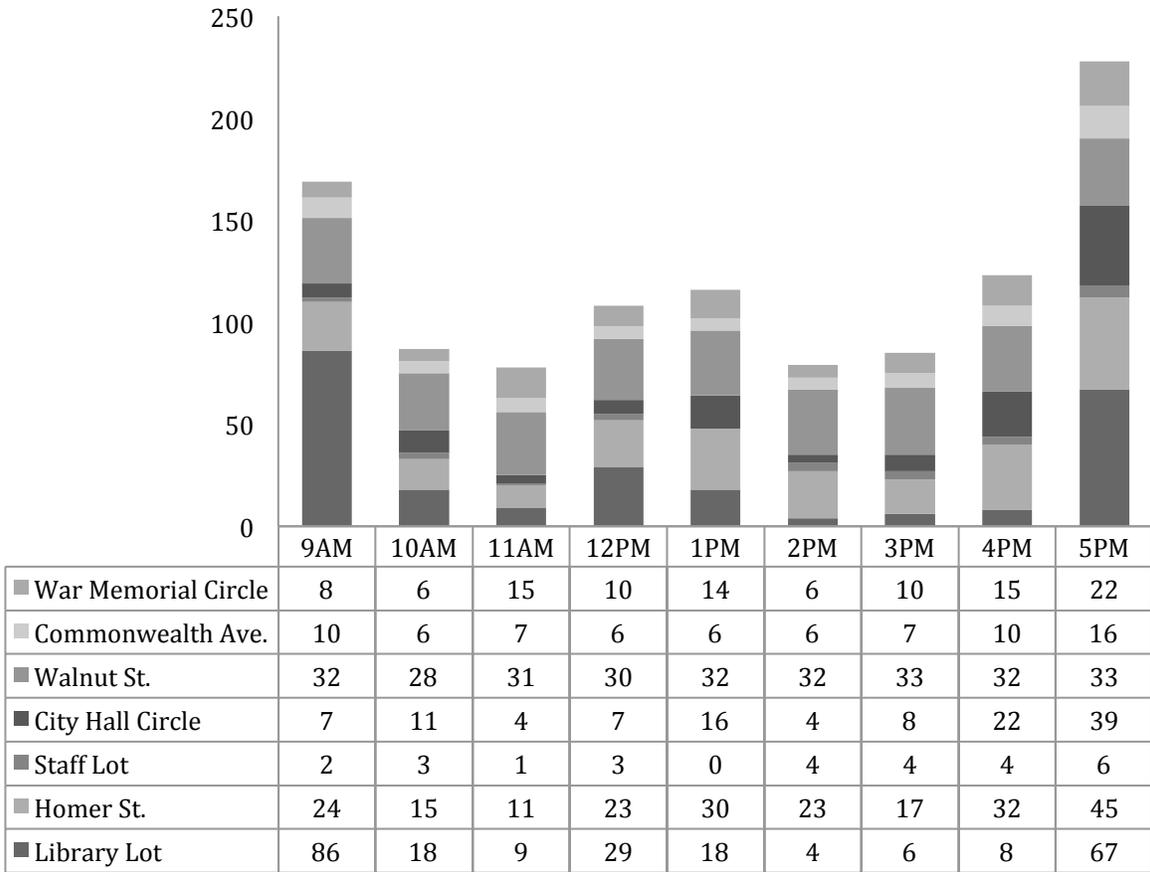
Though Homer St. does peak during the middle of the day, as other study areas do, it is never over crowded and during most hours, there are many open parking spaces available.

Walnut Street is, by far, the least used area in the study. At its busiest hour, eight of the available 36 parking spots were occupied.



Though some of the above charts illustrate parking area under heavy amount of pressure, the study area as a whole is not short of parking supply. Chart VIII shows the number of unoccupied spaces in each location from 9AM until 6PM. This representation confirms that the main problem affecting the area is not the supply of parking spaces, but rather the distribution of cars throughout the area.

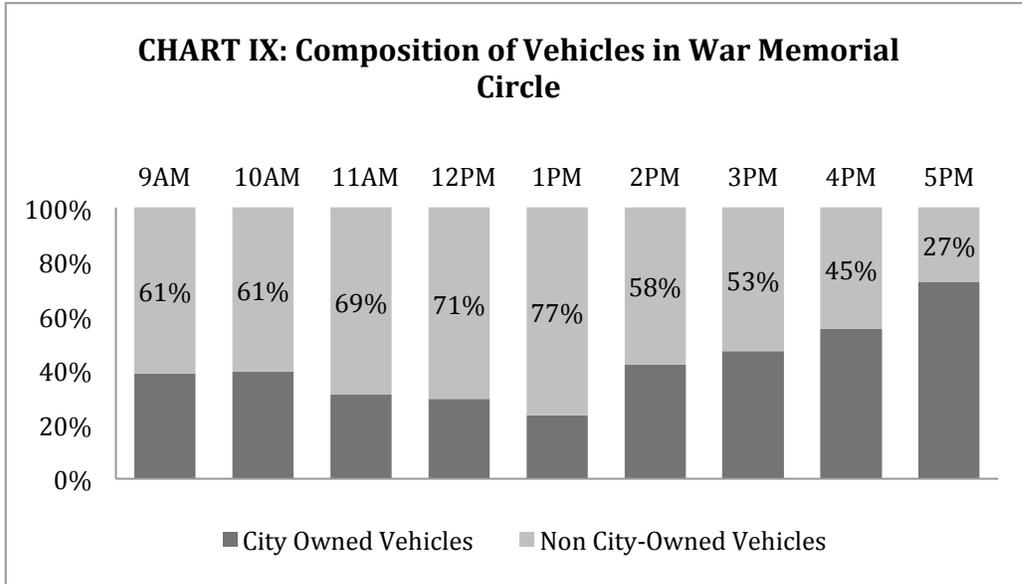
CHART VIII: Number of Available Spaces by Time and Location



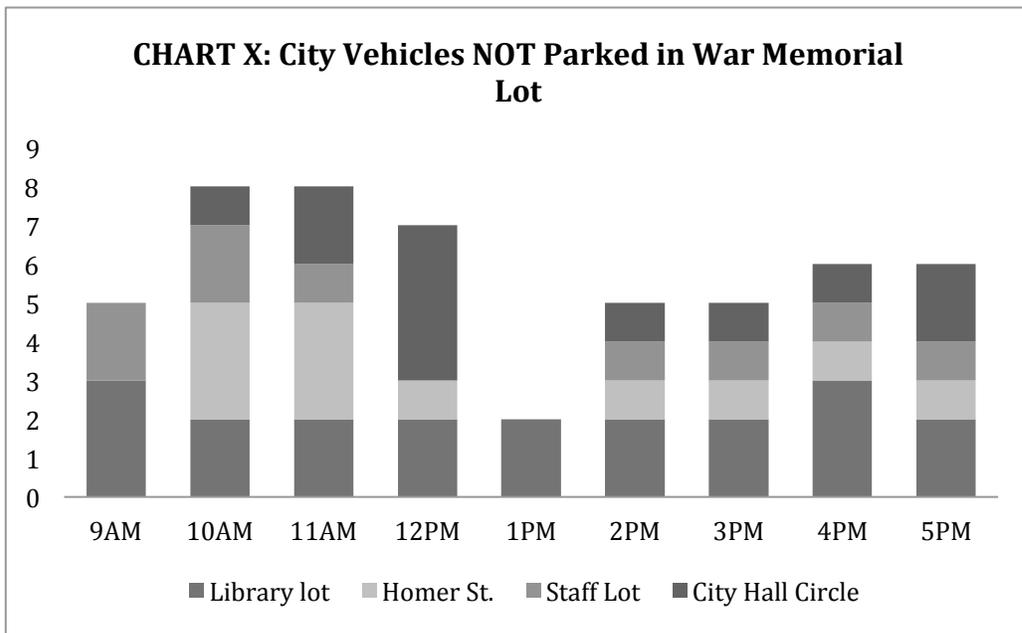
COMPOSITION OF VEHICLES: PUBLIC VS. CITY OWNED VEHICLES

In order to understand the needs of the study area to accommodate the 33 city owned vehicles in a way that does not interfere with Library activity, it is important to understand the current parking patterns of city cars. Most study areas had few, if any, city vehicles parked in them throughout the day. The overwhelming majority of city vehicles were parked in War Memorial Circle, with fewer city owned cars parked in the Library Lot, Staff Lot, City Hall Circle, and on Homer Street.

In the War Memorial Circle, it is important to note that although the occupancy in the lot decreases to 50% by the end of the workday (chart IV), the composition of vehicles shifts to a majority of city owned vehicles; by 5 PM, 16 of the 22 vehicles parked in the lot are city owned.



In the War Memorial Circle, it is important to note that although the occupancy in the lot decreases to 50% by the end of the workday (chart IV), the composition of vehicles shifts to a majority of city owned vehicles; by 5 PM, 16 of the 22 vehicles parked in the lot are city owned.

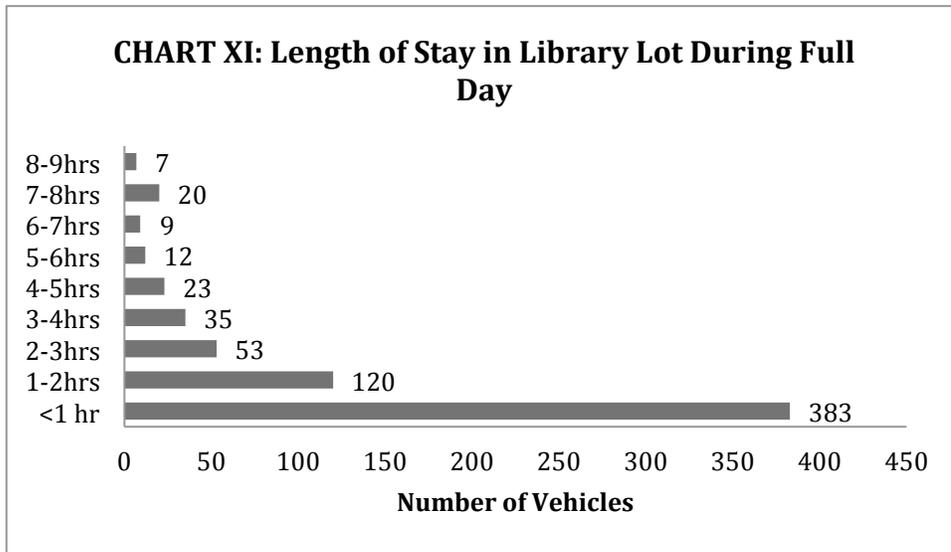


As previously mentioned, the presence of city owned vehicles in areas other than War Memorial Circle is not overwhelming. Chart X shows the number of city cars recorded at any given hour that were *not* parked in War Memorial Circle. Some areas, like Homer St. experience very inconsistent numbers of city cars. Other areas,

like the Library Lot, serve as a much more consistent holding ground for the city’s vehicles, regardless of whether or not it is an appropriate parking location for these cars.

LENGTH OF STAY

The length of stay is an important metric in order to understand what affect long-term and short-term visitors have on the study area. Because the Library Lot and City Hall Circle represent the areas with the most constrained parking, the length of stay for vehicles in both lots has been calculated to determine how much parking is consumed by long-term and short-term parkers.



Throughout the course of the walking survey, 662 vehicles were counted in the Library Lot. Of those 662 vehicles, 383, or 58%, were parked for less than one hour. Moreover, 66 of the vehicles parked in the library lot left and returned at some point throughout the day. The average length of stay for all vehicles parked in the Library Lot was 1.6 hours, with a median length of stay of less than one hour.

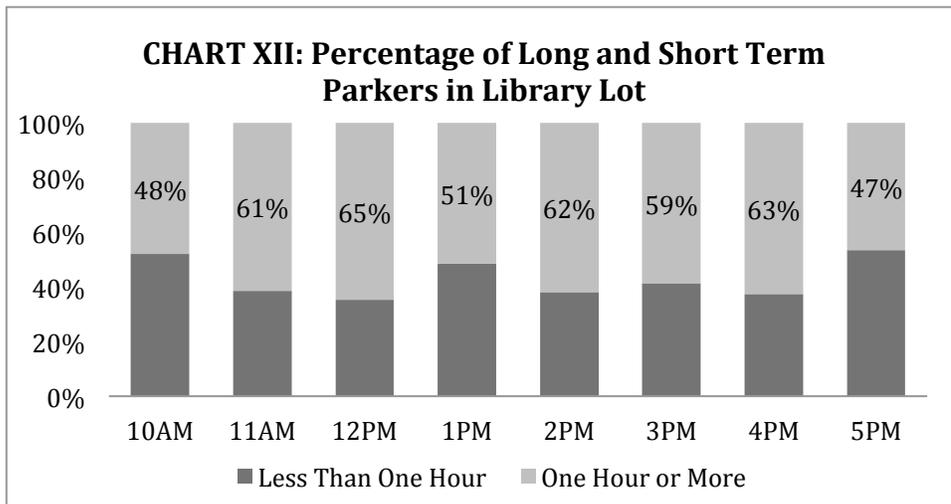


Chart XII highlights how many vehicles at each hour of the day were parked for less than one hour and for one hour or more. On average, 49% of vehicles in the Library Lot at any given time had been parked for less than one hour. Note that the 9AM hour, which would have shown 100% of vehicles as having been parked for less than one hour, has been omitted.

Similar to the Newton Free Library, Newton City Hall is a destination of many people for various reasons. Throughout the course of the walking survey, 185 vehicles were counted in City Hall Circle, as shown in Chart XII. Of those 185 cars, 119, or 64%, were parked for less than one hour. The average length of stay for all cars in City Hall Circle was 2.03 hours, although the median length of stay was less than one hour.

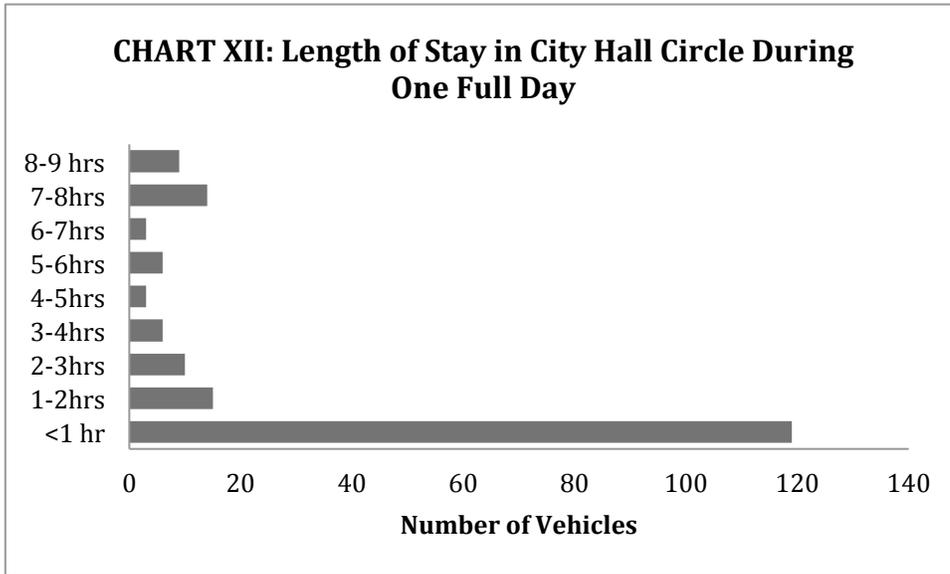
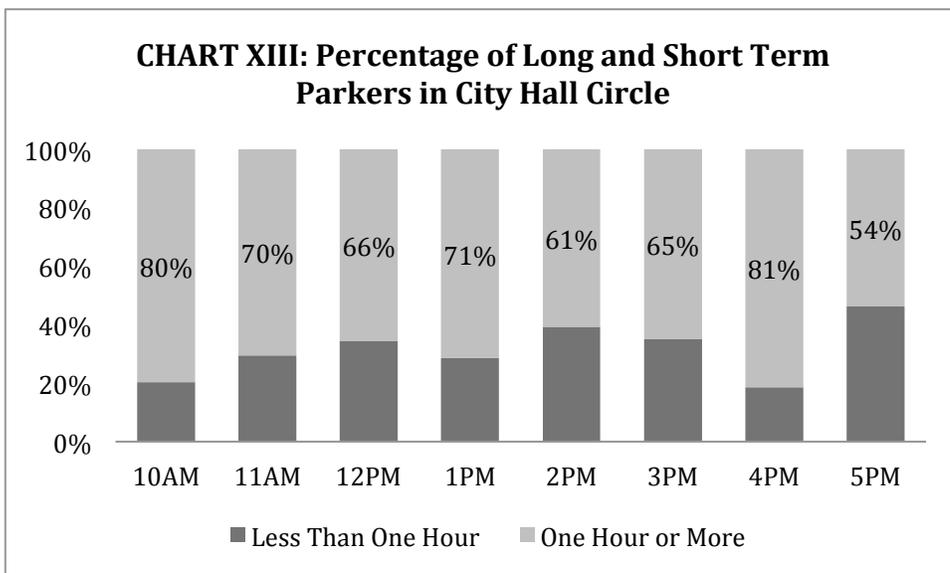


Chart XIII highlights the percentage of vehicles parked for less than one hour or more than one hour at each hour of the day. On average, 39% of vehicles parked in City Hall Circle at any given time had been parked for one hour or less. Note that the 9AM hour, which would have shown 100% of vehicles as having been parked for less than one hour, has been omitted.



With an understanding of the parking patterns at the Library Lot and City Hall Circle, it becomes feasible to decipher the driver type for vehicles. Specifically, it becomes much easier to assume whether a vehicle belongs to a customer or an employee.

Table IV, shown below, classifies all vehicles parked in the Library Lot and City Hall Circle. All vehicles parked for less than 5 hours were assumed to be customer vehicles, *unless* that same vehicle re-parked during the day. Conversely, if a vehicle was parked for 5 or more hours, including vehicles that left and then returned, it was assumed to be an employee of either the Newton Free Library or Newton City Hall.

TABLE IV: Assumed Driver Type Based on Parking Pattern				
Assumed Driver Type	Location	Total Vehicles	% of All Vehicles	Description
Likely Customer	City Hall Circle	147	79%	Vehicle parked for less than 5 hours and does not re-park
Likely Employee		38	21%	Vehicle parked for 5 or more hours
Likely Customer	Library Lot	553	84%	Vehicle parked for less than 5 hours and does not re-park
Likely Employee		109	16%	Vehicle parked for 5 or more hours

The table shows that in both lots, the majority of cars are likely customer vehicles. However, 21% of City Hall Circle and 16% of the Library Lot are likely employee vehicles, and contribute heavily to the need for long term parking opportunities in the area that do not interfere with parking for patrons of the Library.

CLOSING REMARKS

The data collected, and subsequent analysis, led to the recommendations found on pages 4 and 5 of this memorandum, and include:

1. Restrict Employees from Parking in the Library Lot and Consider Restricting Employee Parking on Portions of City Hall Circle Drive.
2. Make Better Use of 36 Parking Spaces on Walnut Street, as well as available space on Homer Street and Commonwealth Ave
3. Reclaim a Portion of War Memorial Lot for City Car Parking
4. Restrict portion of Library Lot for short-term (ex. 15 minute, 1 hour, etc.) parking.
5. Improve Signage to the Staff Lot and Front of City Hall to Encourage Use of Main Door by Visitors
6. Conduct alternative transportation survey for employees.

It is advised that one or a combination of these recommendations be considered for a trial. During the trial period, a qualitative evaluation of the parking availability could be undertaken prior to making any permanent changes.

City Hall/Library Parking Changes - Pilot

Rec. #3: No General Parking in War Memorial Circle. City cars, h/c, and assigned employees.

Rec. #2: City Hall staff & general public may park in areas shown in red

Rec. #1: Circle: 2-hr limit 9AM-5PM

No Change: Assigned + h/c parking in Staff Lot

Rec. #4: 1st row: 2-hr limit

Rec. #1: No City Hall Staff Parking in Library Lot

Other Proposed Improvements: Pathway Lighting, Improved Crosswalks, TDM Measures to Reduce Parking Demand.

