

ENERGY PERFORMANCE CONTRACT FOR MULTIPLE BUILDINGS



The City of Clearwater
Clearwater, Florida

Submitted: April 15, 2010

Contact:

Honeywell

**Bueno Prades
407-909-9344**

Bueno.Prades@Honeywell.com

**HONEYWELL
AGREEMENT**



CUSTOMER NAME: **City of Clearwater**
HONEYWELL PROPOSAL NUMBER: Performance Contract
DATE OF SUBMISSION: April 15, 2010
PRICE VALID UNTIL: May 27, 2010

TABLE OF CONTENTS

ARTICLE

PAGE

1. GENERAL PROVISIONS	1
2. HONEYWELL'S RESPONSIBILITIES	1
3. CUSTOMER'S RESPONSIBILITIES.....	2
4. SUBCONTRACTS.....	4
5. INSTALLATION AND ACCEPTANCE.....	4
6. PRICE AND PAYMENT	4
7. CHANGES IN THE PROJECT	5
8. INSURANCE, INDEMNITY, WAIVER OF SUBROGATION, AND LIMITATION OF LIABILITY.....	5
9. TERMINATION OF THE AGREEMENT	6
10. ASSIGNMENT AND GOVERNING LAW.....	7
11. MISCELLANEOUS PROVISIONS.....	7
12. ARBITRATION	8

ATTACHMENT A	THE WORK (SCOPE-OF-WORK)
ATTACHMENT B	SOFTWARE LICENSE AGREEMENT
ATTACHMENT C	THE INSTALLATION SCHEDULE
ATTACHMENT D	SUPPORT SERVICES
ATTACHMENT E	PAYMENT SCHEDULE
ATTACHMENT F	ENERGY GUARANTEE
ATTACHMENT G	SCHEDULE OF SAVINGS
ATTACHMENT H	RESERVED
ATTACHMENT I	RESERVED
ATTACHMENT J	PROJECT ACCEPTANCE
EXHIBITS	A-1 and G-1 through G-9

Note Regarding Modifications Made to this Agreement: Provisions in the printed document that are not to be included in the agreement may be deleted by striking through the word, sentence or paragraph to be omitted. It is recommended that unwanted provisions not be made illegible. The parties should be clearly aware of the material deleted from the standard form. **Do not make any modifications to this Agreement unless approval to do so has been granted. Changes may be made only by deletion as explained above, or, by addendum.**

ARTICLE 1
GENERAL PROVISIONS

1.1 This Agreement, including all Attachments, Exhibits, and Schedules referenced herein (hereinafter the "Agreement") is made this 20th day of May, 2010 (the "Effective Date") by and between Honeywell International Inc. ("HONEYWELL"), a Delaware Corporation, acting through its Automation and Control Solutions business unit, with a principal place of business at 101 Columbia Road, Morristown, New Jersey 07962-1057, and City of Clearwater, *a municipal corporation*, ("CUSTOMER") with a principal place of business at 112 South Osceola Avenue, Clearwater, FL 33756 (collectively the "Parties").

1.2 **EXTENT OF AGREEMENT:** This Agreement, including all attachments and exhibits hereto, represents the entire agreement between CUSTOMER and HONEYWELL and supersedes all prior negotiations, representations or agreements. This Agreement shall not be superseded by any provisions of the documents for construction and may be amended only by written instrument signed by both CUSTOMER and HONEYWELL. None of the provisions of this Agreement shall be modified, altered, changed or voided by any subsequent Purchase Order issued by CUSTOMER, which relates to the subject matter of this Agreement.

1.3 As used in this Agreement, the term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by HONEYWELL to fulfill HONEYWELL's obligations, as described in Attachment A and otherwise set forth in the Contract Documents. The Work may constitute the whole or a part of the Project. The Work specifically excludes certain design and construction, which are the subject of separate agreements between CUSTOMER and parties other than HONEYWELL.

1.4 The Project is the total construction of which the Work performed by HONEYWELL under this Agreement may be the whole or a part.

1.5 The Contract Documents consist of this Agreement, its attachments, exhibits, schedules, and addenda.

1.6 Support Services means those services and obligations to be undertaken by HONEYWELL in support of CUSTOMER as set forth in Attachment D.

1.7 Installation Schedule means that schedule set out in Attachment C describing the Parties' intentions respecting the times by which the components or aspects of the Work therein set forth shall be installed and/or ready for acceptance or beneficial use by CUSTOMER.

ARTICLE 2
HONEYWELL'S RESPONSIBILITIES

2.1 HONEYWELL Services

2.1.1 HONEYWELL shall be responsible for construction of the Project.

2.1.2 HONEYWELL will assist CUSTOMER in securing permits necessary for the Work.

2.2 Responsibilities with Respect to the Work

2.2.1 HONEYWELL will provide construction supervision, inspection, labor, materials, tools, construction equipment and subcontracted items necessary for the execution and completion of the Work.

2.2.2 HONEYWELL shall keep the premises in an orderly fashion and free from unnecessary accumulation of waste materials or rubbish caused by its operations. If HONEYWELL damages property not needed for the Work, HONEYWELL shall repair the property to its pre-existing condition unless CUSTOMER directs otherwise. At the completion of the Work, HONEYWELL shall remove waste material supplied by HONEYWELL under this Agreement as well as all its tools, construction equipment, machinery and surplus material. HONEYWELL shall dispose of all waste materials or rubbish caused by its operations; provided, that unless otherwise specifically agreed to in this Agreement, HONEYWELL shall not be responsible for disposal of toxic or hazardous materials removed from the facilities. HONEYWELL shall be responsible for disposal of fluorescent lights, potential polychlorinated biphenyl containing light ballasts and mercury containing controls to the extent their replacement is specified in Attachment A.

2.2.3 HONEYWELL shall give all notices and comply with all laws and ordinances legally enacted as of the date of execution of the Agreement governing the execution of the Work. Provided, however, that HONEYWELL shall not be responsible nor liable for the violation of any code, law or ordinance caused by CUSTOMER or existing in CUSTOMER's property prior to the commencement of the Work.

2.2.4 HONEYWELL shall comply with all applicable federal, state and municipal laws and regulations that regulate the health and safety of its workers while providing the Work, and shall take such measures as required by those laws and regulations to prevent injury and accidents to other persons on, about or adjacent to the site of the Work. It is understood and agreed, however, that HONEYWELL shall have no responsibility for elimination or abatement of health or safety hazards created or otherwise resulting from activities at the site of

the Work carried on by persons not in a contractual relationship with HONEYWELL, including CUSTOMER, CUSTOMER's contractors or subcontractors, CUSTOMER's tenants or CUSTOMER's visitors. CUSTOMER agrees to cause its contractors, subcontractors and tenants to comply fully with all applicable federal, state and municipal laws and regulations governing health and safety and to comply with all reasonable requests and directions of HONEYWELL for the elimination or abatement of any such health or safety hazards at the site of the work.

2.3 Patent Indemnity

2.3.1 HONEYWELL shall, at its expense, defend or, at its option, settle any suit that may be instituted against CUSTOMER for alleged infringement of any United States patents related to the hardware manufactured and provided by HONEYWELL, provided that: 1. Such alleged infringement consists only in the use of such hardware by itself and not as part of, or in combination with, any other devices, parts or software not provided by HONEYWELL hereunder; 2. CUSTOMER gives HONEYWELL immediate notice in writing of any such suit and permits HONEYWELL, through counsel of its choice, to answer the charge of infringement and defend such suit; and 3. CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL's expense, to enable HONEYWELL to defend such suit.

2.3.2 If such a suit has occurred, or in HONEYWELL's opinion is likely to occur, HONEYWELL may, at its election and expense: obtain for CUSTOMER the right to continue using such equipment; or replace, correct or modify it so that it is not infringing; or remove such equipment and grant CUSTOMER a credit therefore, as depreciated.

2.3.3 In the case of a final award of damages in any such suit, HONEYWELL will pay such award. HONEYWELL shall not, however, be responsible for any settlement made without its written consent.

2.3.4 THIS ARTICLE STATES HONEYWELL'S TOTAL LIABILITY AND CUSTOMER'S SOLE REMEDY FOR ANY ACTUAL OR ALLEGED INFRINGEMENT OF ANY PATENT BY THE HARDWARE MANUFACTURED AND PROVIDED BY HONEYWELL HEREUNDER. IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY SUCH ACTUAL OR ALLEGED INFRINGEMENT, EXCEPT AS SET FORTH IN THIS SECTION 2.3.

2.4 Warranties and Completion

2.4.1 HONEYWELL warrants CUSTOMER good and clear title to all equipment and materials furnished to

CUSTOMER pursuant to this Agreement (except licensed software, which shall be governed exclusively by the terms and conditions of the Software License Agreement, attached hereto as Attachment B), free and clear of liens and encumbrances. HONEYWELL hereby warrants that all such equipment and materials shall be of good quality and shall be free from defects in materials and workmanship, including installation and setup, for a period of one (1) year from the date of beneficial use or substantial completion of the equipment or portion of the Work in question, provided that no repairs, substitutions, modifications, or additions have been made, except by HONEYWELL or with HONEYWELL's written permission, and provided that after delivery such equipment or materials have not been subjected by non-HONEYWELL personnel to accident, neglect, misuse, or use in violation of any instructions supplied by HONEYWELL. HONEYWELL's sole liability hereunder shall be to repair promptly or replace defective equipment or materials, at HONEYWELL's option and at HONEYWELL's expense. The limited warranty contained in this Section 2.4.1 shall constitute the exclusive remedy of CUSTOMER and the exclusive liability of HONEYWELL for any breach of any warranty related to the equipment and materials furnished by HONEYWELL pursuant to this Agreement.

2.4.2 In addition to the warranty set forth in Section 2.4.1 above, HONEYWELL shall, at CUSTOMER's request, assign to CUSTOMER any and all manufacturer's or installer's warranties for equipment or materials not manufactured by HONEYWELL and provided as part of the Work, to the extent that such third-party warranties are assignable and extend beyond the one (1) year limited warranty set forth in Section 2.4.1.

2.4.3 THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE EQUIPMENT AND MATERIALS PROVIDED HEREUNDER. HONEYWELL SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM, OR RELATING TO, THIS LIMITED WARRANTY OR ITS BREACH.

ARTICLE 3 **CUSTOMER'S RESPONSIBILITIES**

3.1 CUSTOMER shall provide HONEYWELL full information regarding the requirements for the Work.

3.2 CUSTOMER shall designate a representative who shall be fully acquainted with the Work, and who has

authority to approve changes in the scope of the Work and render decisions promptly.

3.3 CUSTOMER shall furnish to HONEYWELL all information regarding legal limitations, utility locations and other information reasonably pertinent to this Agreement, the Work and the Project.

3.4 If applicable, CUSTOMER shall secure and pay for all necessary approvals, easements, assessments and charges required for the construction, use or occupancy of permanent structures or for permanent changes in existing facilities, including charges for legal and auditing services.

3.5 If CUSTOMER becomes aware of any fault or defect in the Work, it shall give prompt written notice thereof to HONEYWELL.

3.6 The services and information required by the above paragraphs shall be furnished with reasonable promptness at CUSTOMER's expense and HONEYWELL shall be entitled to rely upon the accuracy and the completeness thereof.

3.7 Prior to the commencement of the Work and at such future times as HONEYWELL shall reasonably deem appropriate, CUSTOMER shall furnish evidence in a form satisfactory to HONEYWELL that sufficient funds are available and committed to pay for the Work. Unless such evidence is furnished, HONEYWELL is not required to commence or continue any Work. Further, if CUSTOMER does not provide such evidence, HONEYWELL may stop work upon fifteen (15) days notice to CUSTOMER. The failure of HONEYWELL to insist upon the providing of this evidence at any one time shall not be a waiver of CUSTOMER's obligation to make payments pursuant to this Agreement, nor shall it be a waiver of HONEYWELL's right to request or insist that such evidence be provided at a later date.

3.8 HAZARDOUS SUBSTANCES, MOLD AND UNSAFE WORKING CONDITIONS

3.8.1 "Hazardous substance" includes all of the following, whether naturally occurring or manufactured, in quantities, conditions or concentrations that have, are alleged to have, or are believed to have an adverse effect on human health, habitability of a Site, or the environment: (a) any dangerous, hazardous or toxic pollutant, contaminant, chemical, material or substance defined as hazardous or toxic or as a pollutant or contaminant under state or federal law, and (b) any petroleum product, nuclear fuel or material, carcinogen, asbestos, urea formaldehyde, foamed-in-place insulation, polychlorinated biphenyl (PCBs), and (c) any other chemical or biological material or organism, that has, is alleged to have, or is believed to have an adverse effect on human health, habitability of a Site, or the environment.

3.8.2 "Mold" means any type or form of fungus or biological material or agent, including mold, mildew, moisture, yeast and mushrooms, and any mycotoxins, spores, scents, or by-products produced or released by any of the foregoing. This includes any related or any such conditions caused by third parties.

3.8.3 "Covered Equipment" means the equipment covered by the Services to be performed by HONEYWELL under this Agreement, and is limited to the equipment included in the respective work scope attachments.

3.8.4 CUSTOMER has not observed or received notice from any source (formal or informal) of (a) Hazardous Substances or Mold, either airborne or on or within the walls, floors, ceilings, heating, ventilation and air conditioning systems, plumbing systems, structure, and other components of the Site, or within furniture, fixtures, equipment, containers or pipelines in a Site; or (b) conditions that, to CUSTOMER'S knowledge, might cause or promote accumulation, concentration, growth or dispersion of Hazardous Substances or Mold on or within such locations.

3.8.5 HONEYWELL is not responsible for determining whether the Covered Equipment or the temperature, humidity and ventilation settings used by CUSTOMER, are appropriate for CUSTOMER and the Site except as specifically provided in an attached Work Scope Document.

3.8.6 If any such materials, situations or conditions, whether disclosed or not, are in fact discovered by HONEYWELL or others and provide an unsafe condition for the performance of the work or Services, the discovery of the condition shall constitute a cause beyond HONEYWELL'S reasonable control and HONEYWELL shall have the right to cease the work or Services until the area has been made safe by CUSTOMER or CUSTOMER'S representative, at CUSTOMER'S expense. HONEYWELL shall have the right to terminate this Agreement if CUSTOMER has not fully remediated the unsafe condition within sixty (60) days of discovery.

3.8.7 CUSTOMER represents that CUSTOMER has not retained HONEYWELL to discover, inspect, investigate, identify, prevent or remediate Hazardous Substances or Mold or conditions caused by Hazardous Substances or Mold.

3.8.8 TO THE FULLEST EXTENT ALLOWED BY LAW, CUSTOMER SHALL INDEMNIFY AND HOLD HONEYWELL HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS AND COSTS OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO, CONSULTANTS' AND ATTORNEYS' FEES, DAMAGES FOR BODILY INJURY AND PROPERTY DAMAGE, FINES, PENALTIES, CLEANUP COSTS AND COSTS

ASSOCIATED WITH DELAY OR WORK STOPPAGE, THAT IN ANY WAY RESULTS FROM OR ARISES UNDER THE BREACH OF THE REPRESENTATIONS AND WARRANTIES IN THIS SECTION THE EXISTENCE OF MOLD OR A HAZARDOUS SUBSTANCE AT A SITE, OR THE OCCURRENCE OR EXISTENCE OF THE SITUATIONS OR CONDITIONS DESCRIBED IN THIS SECTION, WHETHER OR NOT CUSTOMER PROVIDES HONEYWELL ADVANCE NOTICE OF THE EXISTENCE OR OCCURRENCE AND REGARDLESS OF WHEN THE HAZARDOUS SUBSTANCE OR OCCURRENCE IS DISCOVERED OR OCCURS. THIS INDEMNIFICATION SHALL SURVIVE TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON. However, this provision does not constitute a waiver of CUSTOMER'S sovereign immunity under section 768.28, Florida Statutes, nor does it extend CUSTOMER'S liability beyond the limits established in section 768.28, Florida Statutes.

3.9 In addition to the price set forth in Article 6 of this Agreement, CUSTOMER shall pay any present and future taxes or any other governmental charges now or hereafter imposed by existing or future laws with respect to the sale, transfer, use, ownership or possession of the Work or any Support Services provided hereunder, excluding taxes on Honeywell's net income.

3.10 CUSTOMER shall execute a software license in the form of the Software License Agreement attached hereto as Attachment B. Failure of CUSTOMER to execute such Software License Agreement shall excuse HONEYWELL from any delivery requirements pursuant to this Agreement and shall be considered a material breach by CUSTOMER.

ARTICLE 4 **SUBCONTRACTS**

4.1 At its exclusive option, HONEYWELL may subcontract some or all of the Work or Support Services.

4.2 A Subcontractor is a person or entity who has a direct contract with HONEYWELL to perform any effort in connection with the Work. The term Subcontractor does NOT include any separate contractors employed by CUSTOMER or such separate contractors' subcontractors.

4.3 For the purposes of this Agreement, no contractual relationship shall exist between CUSTOMER and any Subcontractor. HONEYWELL shall be responsible for the management of its Subcontractors in their performance of their Work.

ARTICLE 5 **INSTALLATION AND ACCEPTANCE**

5.1 The Work to be performed under this Agreement shall be commenced and substantially completed as set

forth in the Installation Schedule attached hereto as Attachment C.

5.2 If HONEYWELL is delayed at any time in the progress of performing its obligations under this Agreement by any act of CUSTOMER or any contractor employed by CUSTOMER; or by changes ordered or requested by CUSTOMER in the Work performed pursuant to this Agreement; or by labor disputes, fire, unusual delay in transportation, adverse weather conditions or other events or occurrences which could not be reasonably anticipated; or unavoidable casualties; or any other problem beyond HONEYWELL's reasonable control (an "Excusable Delay"), then the time for performance of the obligations affected by such Excusable Delay shall be extended by the period of any delay actually incurred as a result thereof. If any delay, or cumulative delays, within CUSTOMER's control, extends beyond ten (10) days, CUSTOMER shall reimburse HONEYWELL for all additional costs resulting therefrom.

5.3 HONEYWELL shall provide Delivery and Acceptance Certificates in a form acceptable to CUSTOMER and HONEYWELL (the "Delivery and Acceptance Certificates") for the Work provided pursuant to the Schedule identified in attachment J. Upon receipt of each Delivery and Acceptance Certificate, CUSTOMER shall promptly inspect the Work performed by HONEYWELL identified therein and execute each such Delivery and Acceptance Certificate as soon as reasonably possible, but in no event later than ten (10) days after delivery of the same by HONEYWELL, unless CUSTOMER provides HONEYWELL with a written statement identifying specific material performance deficiencies that it wishes HONEYWELL to correct. HONEYWELL will use reasonably diligent efforts to correct all such material deficiencies and will give written notice to CUSTOMER when all such items have been corrected. The Parties intend that a final Delivery and Acceptance Certificate will be executed for the Work as soon as all Work is installed and operating. Execution and delivery by CUSTOMER of such final Delivery and Acceptance Certificate with respect to the Work shall constitute "Final Acceptance" of such Work performed by HONEYWELL pursuant to the Installation Schedule.

ARTICLE 6 **PRICE AND PAYMENT**

6.1 Price

6.1.1 The price for the Work is Three Million Four Hundred Ninety Eight Thousand and 00/100 Dollars (\$3,498,000.00), subject to the adjustments set forth in Articles 5 and 7.

6.1.2 The total price for Support Services is set forth in Attachment D hereto, subject to the adjustments described therein.

6.1.3 The price is based upon laws, codes and regulations in existence as of the date this Agreement is executed. Any changes in or to applicable laws, codes and regulations affecting the cost of the Work shall be the responsibility of CUSTOMER and shall entitle HONEYWELL to an equitable adjustment in the price and schedule.

6.1.4 The price will be modified for delays caused by CUSTOMER and for Changes in the Work, all pursuant to Article 7.

6.1.5 The license fees for all licensed software identified in Attachment B are included in the price to be paid by CUSTOMER as identified in this Article 6.

6.2 Payment

6.2.1 Upon execution of this Agreement, CUSTOMER shall pay or cause to be paid to HONEYWELL the full price for the Work in accordance with the Payment Schedule, Attachment E. CUSTOMER shall make payments for the Support Services in accordance with Attachment D.

6.2.2 Payments for the Work past due more than five (5) days shall accrue interest from the due date to the date of payment at the rate of one and one half percent (1.5%) per month, compounded monthly, or the highest legal rate then allowed. CUSTOMER shall pay all attorney and/or collection fees incurred by HONEYWELL in collecting any past due amounts.

ARTICLE 7 **CHANGES IN THE PROJECT**

7.1 A Change Order is a written order signed by CUSTOMER and HONEYWELL authorizing a change in the Work or adjustment in the price, or a change to the Installation Schedule described in Attachment C.

7.2 CUSTOMER may request HONEYWELL to submit proposals for changes in the Work.

7.3 Claims for Concealed or Unknown Conditions

If conditions are encountered at the site that are (1) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or (2) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than twenty-one (21) days after first observance of the conditions, and, if appropriate, an equitable adjustment to the Contract Price and Installation Schedule shall be made by a Change Order. If agreement cannot be reached by the

Parties, the party seeking an adjustment in the Price or Installation Schedule may assert a claim in accordance with Paragraph 7.4.

7.4 If HONEYWELL wishes to make a claim for an increase in the Price or an extension in the Installation Schedule it shall give CUSTOMER written notice thereof within a reasonable time after the occurrence of the event giving rise to such claim. This notice shall be given by HONEYWELL before proceeding to execute the Work, except in an emergency endangering life or property, in which case HONEYWELL shall have the authority to act, in its discretion, to prevent threatened damage, injury or loss. Claims arising from delay shall be made within a reasonable time after the delay. Increases based upon design and estimating costs with respect to possible changes requested by CUSTOMER shall be made within a reasonable time after the decision is made not to proceed with the change. No such claim shall be valid unless so made. If CUSTOMER and HONEYWELL cannot agree on the amount of the adjustment in the Price, or the Installation Schedule, it shall be determined pursuant to the provisions of Article 12. Any change in the Price or the Installation Schedule resulting from such claim shall be authorized by Change Order.

7.5 Emergencies

In any emergency affecting the safety of persons or property, HONEYWELL shall act, at its discretion, to prevent threatened damage, injury or loss. Any increase in the Price or extension of time claimed by HONEYWELL on account of emergency work shall be determined as provided in Section 7.4.

ARTICLE 8 **INSURANCE, INDEMNITY, WAIVER OF** **SUBROGATION, AND LIMITATION OF** **LIABILITY**

8.1 Indemnity

8.1.1 HONEYWELL agrees to indemnify and hold CUSTOMER, and CUSTOMER's consultants, agents and employees harmless from all claims for bodily injury and property damages [other than the Work itself and other property insured under Paragraph 8.4] to the extent such claims result from or arise under HONEYWELL's negligent actions or willful misconduct in its performance of the Work or the Support Services. **PROVIDED THAT, NOTHING IN THIS ARTICLE SHALL BE CONSTRUED OR UNDERSTOOD TO ALTER THE LIMITATIONS OF LIABILITY CONTAINED IN THIS ARTICLE, ARTICLE 2, OR THE INDEMNIFICATION CONTAINED IN SECTION 3.8.**

8.1.2 CUSTOMER shall indemnify and hold harmless HONEYWELL and HONEYWELL's consultants, agents and employees from and against all claims, damages,

losses and expenses, including but not limited to attorneys' fees, arising out of, or resulting from, any act or omission of CUSTOMER or CUSTOMER's contractors, consultants, agents or employees. However, this provision does not constitute a waiver of CUSTOMER'S sovereign immunity under section 768.28, Florida Statutes, nor does it extend CUSTOMER'S liability beyond the limits established in section 768.28, Florida Statutes.

8.1.3 CUSTOMER shall require any other contractor who may have a contract on this project with CUSTOMER to perform work in the areas where Work will be performed under this Agreement to agree to indemnify CUSTOMER and HONEYWELL and hold them harmless from all claims for bodily injury and property damage [other than property insured under Paragraph 8.4] that may arise from that contractor's operations. Such provisions shall be in a form satisfactory to HONEYWELL.

8.2 Contractor's Liability Insurance

HONEYWELL shall, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. Honeywell will not issue coverage on a per project basis. It is agreed, however, that HONEYWELL has the right to insure or self-insure any of the insurance coverages listed below:

- (a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD \$5,000,000 per occurrence. Such policy will be written on an occurrence form basis;
- (b) If automobiles are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD \$5,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles.
- (c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage to property which is assumed in the Contract.
- (d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD \$1,000,000 for bodily injury each accident or disease.

8.2.1 Prior to the commencement of the Contract, HONEYWELL will furnish evidence of said insurance coverage in the form of a Memorandum of Insurance which is accessible at: <http://www51.honeywell.com/moi/>. All insurance required in this Article will be written by companies with a rating of no less than "A-, XII" by A.M. Best or equivalent rating agency. HONEYWELL will endeavor to provide a thirty (30) day notice of cancellation or non-renewal to the Customer. In the event that a self-insured program is implemented, HONEYWELL will provide adequate proof of financial responsibility.

8.3. CUSTOMER's Liability Insurance

8.3.1 CUSTOMER shall be responsible for purchasing and maintaining its own liability insurance and, at its option, may purchase and maintain such insurance as will protect it against claims that may arise from operations under this Agreement.

8.4 RESERVED

8.5 RESERVED

8.6 Limitation of Liability

8.6.1 IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER ARISING OUT OF OR AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, MOLD, MOISTURE OR INDOOR AIR QUALITY, OR OTHERWISE, ARISING FROM, RELATING TO, OR CONNECTED WITH THE WORK, SERVICES, EQUIPMENT, MATERIALS, OR ANY GOODS PROVIDED HEREUNDER.

ARTICLE 9 **TERMINATION OF THE AGREEMENT**

9.1 If HONEYWELL defaults in, or fails or neglects to carry forward the Work in accordance with this Agreement, CUSTOMER may provide notice in writing of its intention to terminate this Agreement to HONEYWELL. If HONEYWELL, following receipt of such written notice, neglects to cure or correct the identified deficiencies within thirty (30) business days, CUSTOMER may provide a second written notice. If HONEYWELL has not, within thirty (30) business days after receipt of such notice, acted to remedy and make good such deficiencies, CUSTOMER may terminate this Agreement and take possession of the site together with all materials thereon, and move to complete the Work itself expediently. If the unpaid balance of the contract sum exceeds the expense of finishing the Work, the excess shall be paid to HONEYWELL, but if the expense exceeds the unpaid balance, HONEYWELL shall pay the difference to CUSTOMER.

9.2 If CUSTOMER fails to make payments as they become due, or otherwise defaults or breaches its obligations under this Agreement, HONEYWELL may give written notice to CUSTOMER of HONEYWELL's intention to terminate this Agreement. If, within seven (7) days following receipt of such notice, CUSTOMER fails to make the payments then due, or otherwise fails to cure or perform its obligations, HONEYWELL may, by written notice to CUSTOMER, terminate this Agreement and recover from CUSTOMER payment for Work executed and for losses sustained for materials, tools, construction

equipment and machinery, including but not limited to, reasonable profit and applicable damages.

ARTICLE 10

ASSIGNMENT AND GOVERNING LAW

10.1 This Agreement shall be governed by the law of the State where the Work is performed.

10.2 Neither party to the Agreement shall assign this Agreement or sublet it as a whole without the written consent of the other party. Such consent shall not be reasonably withheld, except that HONEYWELL may assign to another party the right to receive payments due under this Agreement. HONEYWELL may enter into subcontracts for the Work without obtaining CUSTOMER's consent.

ARTICLE 11

MISCELLANEOUS PROVISIONS

11.1 The Table of Contents and headings in this Agreement are for information and convenience only and do not modify the obligations of this Agreement.

11.2 Confidentiality. As used herein, the term "CONFIDENTIAL INFORMATION" shall mean any information in readable form or in machine-readable form, including software supplied to CUSTOMER by HONEYWELL, that has been identified or labeled as "Confidential" and/or "Proprietary" or with words of similar import. CONFIDENTIAL INFORMATION shall also mean any information that is disclosed orally and is designated as "Confidential" and/or "Proprietary" or with words of similar import at the time of disclosure and is reduced to writing, marked as "Confidential" and/or "Proprietary" or with words of similar import, and supplied to the receiving party within ten (10) days of disclosure.

All rights in and to CONFIDENTIAL INFORMATION and to any proprietary and/or novel features contained in CONFIDENTIAL INFORMATION disclosed are reserved by the disclosing party; and the party receiving such disclosure will not use the CONFIDENTIAL INFORMATION for any purpose except in the performance of this Agreement and will not disclose any of the CONFIDENTIAL INFORMATION to benefit itself or to damage the disclosing party. This prohibition includes any business information (strategic plans, etc.) that may become known to either party.

Each party shall, upon request of the other party or upon completion or earlier termination of this Agreement, return the other party's CONFIDENTIAL INFORMATION and all copies thereof.

Notwithstanding the foregoing provisions, neither party shall be liable for any disclosure or use of information disclosed or communicated by the other party if the information:

- (a) is publicly available at the time of disclosure or later becomes publicly available other than through breach of this Agreement; or
- (b) is known to the receiving party at the time of disclosure; or
- (c) is subsequently rightfully obtained from a third party on an unrestricted basis; or
- (d) is approved for release in writing by an authorized representative of the disclosing party.

The obligation of this Article shall survive any expiration, cancellation or termination of this Agreement.

11.3 If any provision is held illegal, invalid or unenforceable, the remaining provisions of this Agreement shall be construed and interpreted to achieve the purposes of the Parties.

11.4 Risk of loss for all equipment and materials provided by HONEYWELL hereunder shall transfer to CUSTOMER upon delivery to CUSTOMER's Facilities from HONEYWELL or its Subcontractor and title shall pass upon final acceptance or final payment by CUSTOMER to HONEYWELL, whichever occurs later.

11.5 Final notice or other communications required or permitted hereunder shall be sufficiently given if personally delivered to the person specified below, or if sent by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

To HONEYWELL:

HONEYWELL INTERNATIONAL INC.
Vince Rydzewski
V.P., & General Manager, South & Latin America Region
3079 Premiere Parkway, Suite 100
Duluth, GA 30097

To CUSTOMER:

Rick Camley
Assistant Director, General Services
City of Clearwater
1900 Grand Ave
Clearwater, FL 33765

11.6 Waiver. HONEYWELL's failure to insist upon the performance or fulfillment of any of CUSTOMER's obligations under this Agreement shall not be deemed or construed as a waiver or relinquishment of the future performance of any such right or obligation hereunder.

11.7 If any provision of this Agreement or the application thereof to any circumstances shall be held to be invalid or unenforceable, then the remaining provisions of this Agreement or the application thereof to other circumstances shall not be affected hereby and shall be valid and enforceable to the fullest extent permitted by law.

ARTICLE 12
ARBITRATION

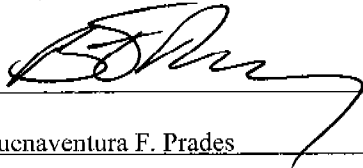
Work or the Project. In the event that a particular dispute cannot be so resolved, HONEYWELL and CUSTOMER agree that the dispute shall be resolved in a court of competent jurisdiction, in Pinellas County, Florida.

12.1 HONEYWELL and CUSTOMER shall exert best efforts to resolve any dispute that may arise respecting the

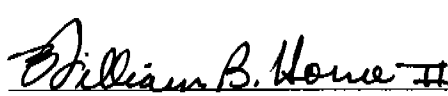
APPROVALS:

The parties hereby execute this Agreement as of the date first set forth herein by the signatures of their duly authorized representatives:

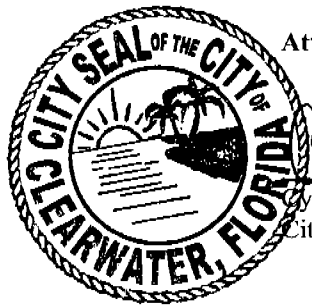
HONEYWELL INTERNATIONAL INC.

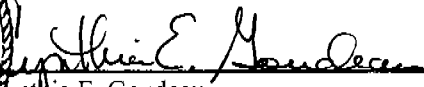
By 
Name Bucnaventura F. Prades
Title Account Executive
Date 4/28/2010

CITY OF CLEARWATER

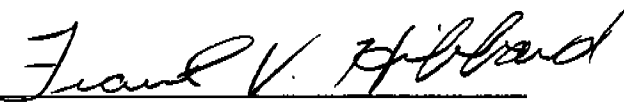
By 
Name William B. Horne II
Title City Manager
Date May 27, 2010

Attest:

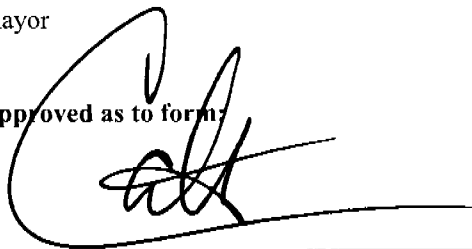



Cynthia E. Goudeau
City Clerk

Countersigned:


Frank V. Hibbard
Mayor

Approved as to form:


Camilo A. Soto
Assistant City Attorney

ATTACHMENT A

SCOPE OF WORK

PART 1 – PRODUCTS & EXECUTION

1 High Efficiency Lighting Upgrades – Buildings

- 1.1 Honeywell shall provide the lighting system upgrades detailed in **Lighting Details** attached hereto and incorporated herein by reference as **Exhibit G-7**. A list of lamps is identified in this document and all specific retrofits will be identified on a line by line basis. The Honeywell solution will include the following:

1.1.1 Upgrades:

- 1.1.1.1 Standard efficiency T12 fluorescent lighting fixtures will be retrofitted or replaced with T8 fluorescent systems. The retrofit involves the removal and disposal of existing lamps and ballasts, fixture cleaning, and the installation of the new T8 fluorescent lamps and electronic ballasts.
- 1.1.1.2 The existing fixtures have mostly T12 ballasts and lamps, in fixtures with 2- to 4-lamps. Honeywell will retrofit the majority of these fixtures with low- or normal-power electronic UltraMax ballasts and T8 28w lamps. In areas where the fixtures are worn or in poor repair, Honeywell will replace the fixtures with new T8 industrial or wrap fixtures.
- 1.1.1.3 The 28w T8 extended life lamps offer a reduced wattage per lamp with comparable lumen output capabilities and a higher quality of light output that has a longer rated life expectancy.
- 1.1.1.4 Approximately half of the existing fluorescent fixtures are T8 fixtures. The majority of the T8 fixtures are in fair condition. Retrofitting all T8 fixtures with 28w T8 lamps and low-power UltraMax ballasts will reduce kWh energy consumption. These retrofits will maintain or improve overall light levels.
- 1.1.1.5 The foot candles vary from room to room, but are generally high, between 40-80 foot candles. Honeywell intends to utilize the energy efficient strategy of de-lamping in the overlit areas with 2- T8 28 watt lamps, a white reflector, and low- or normal-power UltraMax ballasts.
- 1.1.1.6 Approximately 8% of the fluorescent fixtures contain T12 or T8 U-lamps. Due to the cost and difficulty of storing U-lamps, Honeywell will implement the energy-efficient design of replacing the U-lamps with (2) or (3) 2' linear fluorescent lamps and installing a reflector kit to maintain or improve overall light levels. This design is similar to the energy efficient strategy of de-lamping in these areas.
- 1.1.1.7 There are a number of high intensity discharge fixtures throughout the municipality sites. Honeywell will switch to high efficiency T8 fluorescent fixtures, which will reduce energy and materials costs, increase lamp life, consolidate materials, and provide balanced light disbursement. The existing fixtures vary between 100-400 watt metal halides and 250 watt high pressure sodium. These fixtures will be replaced on a one for one basis with new 1x4 T8 linear fluorescent high bay or industrial fixtures housing high lumen T8 lamps with normal power programmed start ballasts, white reflectors, and wire guards to further protect the lamps where necessary. An example of this application is in the Fleet Maintenance building. A 6-lamp T8 fluorescent high bay with normal power ballasts will maintain the same light levels as the existing 350w watt HID high bay, while using only half of the input wattage.
- 1.1.1.8 The utility rooms, bathrooms, and offices contain incandescent lamps, which Honeywell will replace with energy efficient compact fluorescent lamps. This design will maintain the consistency of maintenance stock, allow for the best possible reduction in kWh energy consumption.
- 1.1.1.9 Occupancy sensors will be installed in specific areas as detailed in Exhibit G-7
- 1.1.1.10 In areas with four lamp fixtures that are currently overlit, Honeywell will retrofit these fixtures with a two lamp reflector kit. The addition of reflector kits to delamaped fixtures will center the remaining lamps and increase the overall fixture efficiency.
- 1.1.1.11 To control exterior lighting, Honeywell will install or replacing an expiring time clock with a new 365-day digital time clock as outlined in **Lighting Details** attached hereto and incorporated herein by reference as **Exhibit G-7**. The time clocks can be programmed for each day of the year, automatically adjust for DST, and allows for holiday programming if desired.

1.2 Warranty

1.2.1 See general conditions

1.3 Maintenance Stock

- 1.3.1 A maintenance stock of 2% of linear fluorescent lamps and ballasts will be left with the customer at completion of the project. In the event that a very small quantity of one lamp or ballast type exists, a minimum of two items per lamp/ballast type will be left.

1.4 Included Buildings:

BUILDING DESCRIPTION	BUILDING ADDRESS
Gas -Gas Division (offices)	400 N. Myrtle Ave
Gas -Gas Sales Office	711 Maple St.
Gas -Meter shop	400 N. Myrtle Ave
General Services – Building & Maintenance Shops	1900 Grand Ave
General Services - City Hall	112 S. Osceola
General Services - Fleet Maintenance	1900 Grand Ave
General Services – Municipal Service Building (MSB)	100 S. Myrtle Ave.
Library-Main Library	100 N. Osceola
Parks & Recreation - Long Center Aqua center	1501 N. Belcher Rd.
Police - Beach Substation	700 Bayway Blvd.
Police - Countryside Station	2851 McMullen Booth Rd.
Police - Main Station	645 Pierce St.
Public Service - Bldg. B	1650 N. Arcturus Ave
Public Services - Traffic shop	1650 N. Arcturus Ave
Solid Waste - Transfer Station & Scale House	1005 Old Coachman Rd.
Traffic Engineering - Parking/Garden Ave Garage	28 Garden Ave.

1.5 Exclusions

- 1.5.1 Only the lighting fixtures specifically identified in **Exhibit G-7, lighting details** are included in this scope of work, no other retrofits/fixtures other than those listed are included.
- 1.5.2 Concealed conditions past the existing fixture junction Areas that require restricted access permits or specialized escort conditions.
- 1.5.3 Any pre-existing damage to a fixture diffuser (i.e. lens) including but not limited to discoloring (yellow lenses), cracks, broken pieces, dents, chips, diffusers completely missing, melted plastic, permanent fingerprints, or foreign matter stains (such as ballast tar leaks) is the sole responsibility of the customer. This scope of work does not include any replacement or repair to any damaged lenses or any other pre-existing damaged luminaire components.

2 High Efficiency HVAC Upgrades

- 2.1 **General Requirements:** Honeywell will retrofit equipment for the facilities as listed below. Equipment shall be Lennox, York, Carrier, Trane, or equivalent. This project shall be inclusive of furnishing the necessary equipment, providing the installation labor, securing the required permits, supervision labor, electrical reconnection, piping reconnection, insulation for newly installed piping, start-up and commissioning of newly installed systems as needed to provide a complete and functional system. Start up is included on all newly installed units. The compressors include a 2-5 year manufacturer's warranty to be administered through the manufacturer directly by the customer after expiration of 1st year labor and parts warranty. All cranes and hoisting equipment are included as well as demolition and disposal of existing equipment per applicable EPA requirements.

- 2.2 The following scope of work will be provided to achieve the projected savings.

Gas -Gas Division (offices)	400 N. Myrtle Ave	Replace 60 Ton air cooled chiller. Chiller efficiency shall be 1.11KW/Ton or better.
General Services-City Hall	112 S. Osceola	Replace two dual duct path air handlers' w/two new dual duct path air handlers. 17,000 cfm/unit; VFD w/ by-pass, double wall construction, cold deck stainless steel drain pan, sheet metal duct reconnect.
Long Center - UPARC	1501 N. Belcher Rd.	Replace 10 Roof Top Units w/new hi-efficiency RTUs. Electric cool, gas heat. Capacity: (2) 7.5 ton, (3) 12.5 ton, (2) 15 ton and (3) 17.5 ton. The minimum efficiency rating shall be 12 SEER.
Long Center - UPARC	1501 N. Belcher Rd.	Duct Cleaning shall be performed on all ductwork associated the newly installed RTUs defined in the line item above.
Long Center Gymnasium	1501 N. Belcher Rd.	Install new duct sox system at 4 supply metal duct. Install Outside Air Motorized Dampers at 4 OA Intakes.
Public Works - Bldg E	1650 N Arcturas Ave	Replace two 7.5 ton each split system w/ two new high -efficiency split system. The minimum efficiency rating shall be 12 SEER.
Transfer Station Scale House	1005 Old Coachman Rd	Replace (1) 2 ton split system with Electric heat. The minimum efficiency rating shall be 14 SEER.

3 **HVAC Control Automation Upgrade**

3.1 Building Management System (BMS): Honeywell will install Honeywell Building Manager platform – Enterprise Building Interface (EBI), which will be interfaced to the city's existing Ethernet network. The new configuration will allow centralized control for much of the city's HVAC systems, while providing a proven building management platform. Honeywell shall:

3.1.1 Install, and program the following to be located in the Fleet Administration building, located at 1900 Grande Ave:

- (1)Server – EBI Platform
- (1)Workstation – User Interface
- (1)KVM Switch
- (1)Network Switch/Firewall
- (1)Network Router
- (1)EBI Building Manager – Software
- (1)Backup Software Package
- (1)Anti Virus Package
- (2) UPS units

3.1.2 Create, install, and program a graphic display for each of the web enabled thermostats noted in section 4.2. Graphic display shall consist of (1) Graphic display per floor/building, with thermostat locations noted on the graphics. Each thermostat will have an additional graphic penetration which denotes the thermostats associated data. The Customer shall supply Honeywell with an electronic file of each floor plan. .

3.1.3 Create and install trending reports for all web enabled thermostats noted in section 3.3.

3.1.4 Configure the Building Management System to interface to the city's network configuration. Configuration shall meet the requirements of the Section 3.8 – Network Configuration.

3.1.5 Configure remote access of the system by authorized city and Honeywell personnel. Remote access will be granted via a dedicated router and firewall device.

3.2 Web Enabled Thermostats: Honeywell will replace existing local only thermostats with Honeywell programmable Thermostats. The new thermostats will be provided with a network interface to allow the units to be connected to the building management system described in section 3.1 above, using the city's existing Ethernet network. Honeywell shall:

3.2.1 Furnish, install, and program a new programmable thermostat on the existing air conditioning units such as RTU's, AHU's, Split Systems, etc. No new thermostats will be installed on Window, Bard, or Portable units. Honeywell has surveyed the sites, reviewed the documentation provided by the city, and this scope of work includes furnishing and replacing the existing thermostat locations as noted in section 3.3 below.

3.2.2 Remove the current installed thermostat, install the new programmable, communicating, thermostat in the same location, then program and commission the local operation of the new thermostat.

3.2.3 Install new communication wiring between each of the thermostats in the building and the building network interface.

3.2.4 Furnish, install, and program a network interface in each of the buildings. The network interface will be installed near the building Ethernet network switch. Honeywell will extend 120 VAC power from existing wall outlets or power panels. Customer shall provide a static IP address, along with a network port/jack on each buildings Ethernet switch.

3.2.5 Furnish, and install the Ethernet patch cable between Customer furnished Ethernet connection and the new router.

3.2.6 Program, test, and commission the new thermostats interfaced with the BMS system.

3.3 City of Clearwater – Thermostat Sites:

Facility Name	Facility Address
LONG CENTER	1501 N BELCHER ROAD
GAS ADMIN. BUILDING	400 N. MYRTLE AVE.
GAS SERVICE WAREHOUSE	400 MYRTLE AVENUE S.
POLICE, CLW BEACH STA.	700 BAYWAY BLVD. (CLW BCH)
POLICE, CNTRYSD IMPOUND LOT	2851 N. MCMULLEN BOOTH RD
PUBLIC WORKS COMPOUND, #A	1650 ARCTURAS AVE N.
PUBLIC WRKS BLD E	1650 ARCTURAS AVENUE N.
TRANSFER STATION OFFICE	1005 OLD COACHMAN ROAD

- 3.4 Set Point Adjustment & Trending:** Honeywell shall adjust all the temperature set points and create trend logs of the Customer's current installed DDC system from various vendors as listed below. All such modifications will be made via the existing BMS front ends, located at 1900 Grand Ave.

Facility Name	Facility Address
LIBRARY, MAIN BRANCH	100 N. OSCEOLA AVENUE
POLICE, COUNTRYSIDE STA.	2851 MCMULLEN BOOTH ROAD N.
BEACH REC & LIBRARY	69 BAY ESPLANADE
MUNICIPAL SERVICES BLDG.	100 S MYRTLE AVE
POLICE STATION, MAIN	645 PIERCE ST.
LIBRARY, N. GREENWOOD BRANCH	905 N. M.L.K. JR. AVE
FIRE STATION # 48 TRAINING BLDG.	1700 BELCHER ROAD N.

3.5 Optimized Exhaust Fan Control

Honeywell shall furnish and installed optimized Exhaust fan controls at the following locations. Controls will be local only, with no interface to the existing control system:

Facility Name	ADDRESS	EX FANS
LIBRARY, MAIN BRANCH	100 N. OSCEOLA AVENUE	2
MUNICIPAL SERVICES BLDG.	100 S MYRTLE AVE	1
POLICE STATION, MAIN	645 PIERCE ST.	1

- 3.6 City Hall DDC System:** Honeywell shall expand the existing DDC controls system currently installed in this building. The existing remote communication will remain as installed. Honeywell shall:

- 3.6.1 Furnish, install, and program an expansion of the existing KMC controllers currently servicing Air Handlers 1 & 2 located on the penthouse level.
- 3.6.2 Extend the existing communication wire as necessary.
- 3.6.3 Interface the expanded controllers with the buildings existing controllers.
- 3.6.4 Update the system graphics.
- 3.6.5 Perform a final check out and commissioning of the system.

- 3.7 Training:** Honeywell shall provide maximum of (40) hours on site training to be scheduled in (8) hour sessions. Training shall cover the Honeywell Programmable Thermostat maintenance/repair, and EBI Building Manager operation.

3.8 Network Configuration

The proposed Honeywell EBI system has specific, specialized operational requirements of the network infrastructure that is uses for system wide communication. If the customer's network infrastructure requires the use and membership of a domain, then the customer shall provide an EBI specific domain to support its role and privilege requirements for administrative level access to its PC resources.

The Ethernet LAN to be used by the EBI system should support the creation of a dedicated VLAN to provide isolation of the automation network from general business enterprise traffic. If the Ethernet LAN cannot support the configuration of a VLAN, then the network shall be configured to allow specific TCP/IP traffic between the various EBI system network nodes. It shall also be configured to permit TCP/IP communication between the EBI Server PC and all EBI Workstations. The customer shall open all required TCP ports on the network switches, routers and firewalls used to transport data serving all of EBI's network nodes.

In order to allow Honeywell access to the servers for maintenance, reporting, and verification, the owner shall provide and maintain a VPN connection. Only authorized Honeywell and city personnel will have remote access to the system.

Honeywell will provide a copy of the EBI R400 Network and Security Planning Guide at the customer's request. This document provides a detailed outline of the required network configuration and options.

3.9 Clarifications:

- 3.9.1 Commissioning is limited to the new equipment being installed under this scope of work.
- 3.9.2 Customer shall provide a Static IP address, open ports and network configuration for communication prior to Honeywell commissioning the BMS system. Please refer to Section 3.8 – Network Configuration for the Honeywell parameters. Such configuration will allow the remote web enabled thermostats to interface with the Building Management System, as well as, provide remote user access.
- 3.9.3 Programmable thermostat shall have local set point and override capacities where installed. Such override capability shall be limited to the functions of the unit.
- 3.9.4 Customer shall provide the necessary conditioned space or rack space for the proposed BMS equipment list in section 3.1.
- 3.9.5 Customer shall furnish any necessary patching or painting of the building structure. Replacement of the thermostat may expose a mismatched surface due to varying thermostat foot prints.

3.10 Exclusions: This scope of work **does not include** the following:

- 3.10.1 Radiant heat, Window Units, & Bard Unit controls are not included.
- 3.10.2 Smoke Control, Fire Control, Interconnection with Fire Alarm, Smoke Detectors, Smoke dampers, control dampers or fire/smoke dampers
- 3.10.3 Stair, Elevator or Building Pressurization Control
- 3.10.4 Wiring of t-stats (non-integrated) i.e. – exhaust fans, kitchen hoods, etc.
- 3.10.5 Network integration of Non-Honeywell DDC devices
- 3.10.6 Supervision, Commissioning and Testing of any system not furnished by Honeywell
- 3.10.7 HVAC System startup, commissioning or troubleshooting
- 3.10.8 Systems and/or controls not described above
- 3.10.9 Any miscellaneous power or control wiring (i.e. wiring between split systems, internal equipment wiring, incompatible unit wiring etc.)
- 3.10.10 120 VAC and greater devices and wiring (except as noted above)

4 Pool Upgrade Hi-Efficiency Motors

4.1 General Requirements: Honeywell shall provide the following to upgrade pool pumping with energy efficient equipment.

- 4.1.1 Install new Premium Efficiency motors for main pool circulating pumps for all pools listed in section 4.2 below.
- 4.1.2 A turbine flow meter shall be installed in pool return line as defined in table below.

- 4.1.3 Install Variable Frequency Drives on pumps as defined in table below.
- 4.1.4 During occupied hours the lead pool pump shall run with the VFD controlling to the permitted flow rate. Should the drive reach 100% and the permitted flow rate is not reached, the lag pump shall start. The VFD pump will then become the lag pump and the VFD shall modulate the speed until the permitted flow rate is reached.
- 4.1.5 During unoccupied hours minimum flow will be maintained. The minimum flow rate shall be set to ensure proper operation of chemical feed systems.
- 4.1.6 Programmable time based controllers shall be installed for seasonal pools listed in section 6.2 below.

4.2 Included Buildings:

Building Description	Scope Description
Long Center Aquatic Center	2 – 20 H.P. Hi – Efficiency Motors
	1 Turbine Meter
	1 VFD
	1 Lead/Lag Control System

5 Long Center Roof

- 5.1 GACO spray applied polyurethane foam recover with Neogard silicone roof coating application, including a manufacturer's 15 year full system warranty
 - 5.1.1 Wet vacuum entire built up gravel roof in order to remove loose gravel, dust and debris.
 - 5.1.2 Remove wet insulation. Mechanically attach new 2.5" Polyiso board and ¼" primed dens deck with screws and plates to match existing height.
 - 5.1.3 Tear out existing curb and wall flashings and discard.
 - 5.1.4 Remove existing pavers and discard.
 - 5.1.5 Leave existing (32) drains in place and foam flash.
 - 5.1.6 Refasten existing built up gravel roof with screws and plates into the metal deck at an average rate of 30 faster per 100 square feet to meet local and statewide wind uplift requirements.
 - 5.1.7 Install new 2x8 wood nailer and replace existing coping cap with new 040 aluminum mill finish coping cap and 050 aluminum mill finish cleat.
 - 5.1.8 All overflow scuppers and soil stacks will be receiving foam flashings and coating.
 - 5.1.9 Replace all existing gravel stop at open perimeter with new 040 aluminum mill finish gravel stop.
 - 5.1.10 Spray apply GACO 2.7 polyurethane foam at curb and wall flashings at an average thickness of 1".
 - 5.1.11 Spray apply GACO 2.7 polyurethane foam at an average thickness of 1.5" over prepared built up roof.
 - 5.1.12 Spray apply polyurethane foam crickets behind curbs and between drains to prevent water from ponding.
 - 5.1.13 Spray apply (2) passes of Neogard 7860 white reflective silicone coating at an average rate of 3.2 gallons (35 dry mills) per 100 square feet
 - 5.1.14 Embed silica granules into wet silicone at an average rate of 50lbs per 100 square feet.
 - 5.1.15 Set existing condensation lines on roof using wood block supports every 5' and adhere to roof system
 - 5.1.16 Re-paint existing roof door.
 - 5.1.17 Pressure wash existing sloped metal roof.
 - 5.1.18 Prime existing sloped metal roof with Ureprime primer at an average rate of 0.4 gallons per 100 square feet.
 - 5.1.19 Spray apply 2 coats of Neogard 70611 Acrylthane elastomeric coating over existing sloped metal roof, at an average rate of 2.5 gallons per 100 square feet.
 - 5.1.20 Provide manufacturer's 15 year warranty. This warranty shall cover all roof areas completed under this scope of work. See sample warranty attached hereto and incorporated herein by reference as Exhibit A-1.

PART 2 – GENERAL

A. GENERAL CONDITIONS

1. Honeywell is not responsible for bringing existing lighting/electrical systems up to code.
2. A five (5) year ballast warranty will be provided by the ballast manufacturer and a three (3) year lamp warranty will be provided by the lamp manufacturer. The five (5) year warranty on the ballasts operates by the Customer sending the old ballasts back to the manufacturer and in return a new ballast will be provided to be installed by the Customer's work force. Labor is not included in either warranty.
3. If Honeywell encounters any materials or substances classified as toxic or hazardous in performance of the Work associated with the mechanical systems, including asbestos, Honeywell will notify Customer and will stop work in that area until such area has been made safe by the Customer, or Customer's Representative, at Customer's expense. In the event such conditions cause a delay in Honeywell's performance, Honeywell shall be entitled to recovery of all costs associated with such delay, as well as an extension of time of performance.
4. Where demolition of certain areas of a building are required for removal and installation of equipment and that demolition is included in the scope of work defined herein, Honeywell will make every effort to replace such areas with similar materials as available. If such materials are not available, materials of similar quality will be supplied and installed.
5. Electrical: Should a problem with the existing wiring system occur, Honeywell will be limited to electrical wiring modifications (repairs) to three feet (36 inches) of the device or the nearest wall or ceiling penetrating, whichever is smaller.
6. Piping: Should a problem with the existing piping system occur, Honeywell will be limited to piping modifications (repairs) to two feet (24 inches) of the device installed or the nearest wall or ceiling penetration, whichever is smaller. Piping includes but is not limited to domestic hot and cold water, cooling cold water, heating hot water, condensate, fuel oil, and cooling tower condensing water.
7. Routine Maintenance: Routine maintenance such as vacuuming, coil cleaning and filter change of air handling devices, etc. is the responsibility of the Customer, or as included in Attachment D.
8. Utility Meter: If new utility meters are required, provision and coordination of utility meters is the responsibility of the customer.
9. Network Connections: To be provided by customer for off-site monitoring or remote access of Energy Management Systems.
10. Efficiency Values: Honeywell will install equipment and lighting components (hereto referred as "equipment") under the scope described herein with specific energy and water efficiency values. The customer is required to replace any failed "equipment" no longer warranted by Honeywell or a Honeywell subcontractor, with "equipment" of equal or greater efficiency for the full contract guarantee term.
11. Limitation of Liability – Security Systems, Fire Alarm Systems and/or Components - Honeywell's total liability for damages of any kind or nature arising out of or relating to any aspect or component of the security or fire alarm systems and/or components provided under this Agreement is limited to \$50,000.
12. Honeywell will provide information necessary to apply for utility incentives. Actual dollar amount of incentive will be determined by the Utility and is not guaranteed by Honeywell.
13. The following areas are specifically excluded from this proposal. Correction of problems in these areas, if required by Federal, State or local law or ordinance, will be considered additional work and will be chargeable (with approval) to the Owner.
 - a. Any work not specifically stated and outlined in this scope of work.
 - b. Painting and patching of areas beyond those areas directly related to work.
 - c. Existing non-code conditions (examples: existing electrical wiring which requires correction or approval by appropriate inspectors, existing penetrations in need of fire stopping, etc).

B. RELATED WORK SPECIFIED ELSEWHERE

Provision of equipment, material, and labor to provide functional measurement and verification systems coordinated under Attachment G – Schedule of Savings.

Exhibit A-1
Roof Warranty

NEOGARD

P.O. Box 35288, Dallas, TX 75235
Tel: 214-353-1689 Fax: 214-357-7532



NEOGARD Warranty

PROJECT NAME: Long Center, Clearwater, FL

BUILDING OWNER: SAMPLE

APPLICATOR: _____

SUBSTANTIAL COMPLETION DATE: _____

SYSTEM INSTALLED / AREA: Silicone

The NEOGARD Division of Jones-Blair Co. warrants to the Building Owner, hereinafter referred to as Owner, that for a period of **15** years from date of substantial completion, the NEOGARD system will not leak water due to membrane failure caused by faulty material. NEOGARD'S sole remedy shall be replacement of material proven to be faulty at the time of manufacture. The warranty is expressly conditioned upon coating material being applied in accordance with NEOGARD'S current published instructions regarding surface preparation, precautions and coating application. This shall be the exclusive remedy of NEOGARD.

NEOGARD'S liability to the Owner for any defect, failure, or deficiency which is covered by this warranty shall be expressly conditioned upon the Owner's obligation to notify NEOGARD within ten working days of the date that Owner discovers the defect. NEOGARD shall then have the right to immediately inspect the defect, and if not given this right, the Warranty shall be terminated.

The Warranty shall not apply if the coating system is ruptured by any cause other than failure of the NEOGARD coating materials and/or is subject to misuse or abnormal use or conditions. NEOGARD makes no warranty with respect to appearance or color. Items not part of the coating(s) or any material not supplied by NEOGARD are not included within the protection of the warranty. NEOGARD does not manufacture or supply Spray Polyurethane foam; therefore if used on this project it has been supplied by others and is specifically excluded from coverage under this warranty.

THE ABOVE WARRANTY IS IN LIEU OF ANY AND ALL OTHER WARRANTIES AND NEOGARD MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER OBLIGATIONS AND LIABILITIES ON THE PART OF NEOGARD AND APPLICATOR.

In no event shall NEOGARD be liable for any consequential damages or for damages to the building or its contents or injury to its occupants or other damage arising, directly or indirectly in respect of NEOGARD materials or the use or failure thereof, whether based on breach of warranty or negligence.

In consideration of the specification and use of the above named NEOGARD system on the above project, NEOGARD and Applicator agree that for a period of **15** years, subsequent to the completion of the project, any failure covered by the warranty shall be repaired or replaced without cost to the owner, it being understood that only the material for such repair per NEOGARD'S standard warranty, will be supplied by NEOGARD, and the necessary labor will be supplied by the applicator.

This Warranty is for the benefit of the Owner, and shall not be transferable or assignable to any other persons, firms or corporations without the prior express written consent signed by a duly authorized officer of NEOGARD.

This warranty shall be governed by, and construed in accordance with, the laws of the State of Texas, United States of America. All transactions shall be governed by the laws of the State of Texas. Customer hereby agrees that jurisdiction of any claims arising out of a transaction with JONES-BLAIR shall be in the State Court of Dallas County, Texas or the United States District Court for the Northern District of Texas. Customer waives any defense based on inappropriate venue or forum non conveniens.

NEOGARD DIVISION OF JONES-BLAIR CO.

APPLICATOR

Authorized Signature

Authorized Signature

Dennis Bigley

Printed Name

Printed Name

Issue Number: XXXX

Title

Date: _____

Valid when copy of this Warranty, executed by all parties, is on file at NEOGARD'S Warranty Department, Dallas, Texas.

ATTACHMENT B
SOFTWARE LICENSE AGREEMENT

Honeywell Building Solutions
License Agreement for Honeywell Enterprise Buildings Integrator and/or Digital Video Manager Software Products

Date:	<u>06-May-2010</u>		
Customer Name:	<u>City of Clearwater</u>	Honeywell Branch Name:	<u>Orlando</u>
Customer Address:	<u>100 S. Myrtle Ave</u>	Honeywell Branch Address:	<u>3657 Maguire Blvd</u>
	<u>Clearwater</u>		<u>Ste 100</u>
	<u>USA</u>		<u>Orlando, FL 32803</u>
Telephone:	<u>0</u>	Telephone:	<u>407-897-7200</u>
Re: Honeywell Software License Agreement			
Designated Installation	<u>City of Clearwater</u>		
Job Number	<u>0</u>		
* Require manual entry			

Dear Customer:

Your new Enterprise Buildings Integrator and/or Digital Video Manager system requires the use of software listed on Exhibit 1 of this form. In accordance with the usual practice in the industry, this software, related materials, and any updates or revisions, are protected by copyright and trade secret law, and may be protected by patent law.

You may use the software with compatible equipment at the designated installation. You may (for archival or backup purposes) make up to two (2) copies of noncopy-protected software on disk or magnetic tape and one (1) copy of software in printed form.

The software is proprietary to, and the title to the software remains in, Honeywell and its vendor(s). You agree (1) to take reasonable steps to maintain Honeywell's and its vendors' rights in the software; (2) not to sell, transfer, publish, display, disclose, or make the software or any copies available to others; and (3) not to reverse compile, disassemble, or otherwise reverse engineer the software. Honeywell and its vendors retain all rights in patents, copyrights, trademarks, and trade secrets. Any attempt to transfer, assign, or sublicense this agreement or the software is null and void. Upon termination of this license, you will immediately return the software to Honeywell. Termination will not cancel your obligations under this agreement.

If, for a period of one (1) year, the software does not meet Honeywell specifications, then Honeywell, at its option, shall repair or replace the software.

IN NO EVENT SHALL HONEYWELL OR ITS VENDORS BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL, OR SPECIAL DAMAGES RELATING TO OR ARISING OUT OF THIS AGREEMENT OR WARRANTY. NEITHER HONEYWELL NOR ITS VENDORS SHALL BE LIABLE FOR ANY WARRANTIES IMPLIED BY LAW OR OTHERWISE, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH REGARD TO ANY GOODS SUPPLIED PURSUANT TO THIS AGREEMENT.

Please indicate your acceptance by signing this Agreement and attached Order Form. You can order expansions, upgrades, and new software for the same site by completing and signing a new Order Form for each copy of product deployed at the same physical site.

Sincerely,

Authorized and Accepted by:

Authorized Honeywell Signature

Name: Buenaventura F. Prades

Title: Account Executive

Date: 4/28/2010

Authorized and Accepted by:

Authorized Customer Signature

Name: William B. Horne II

Title: City Manager

Date: _____

Honeywell Software Order Form

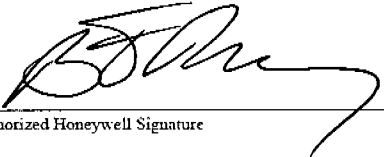
Exhibit 1

This Order Form is governed by the Software License Agreement originally signed by the parties as identified below. For upgrades, expansions, and new software for the same site, the Software License Agreement does not need to be signed again, but a new Order Form must be completed and signed by both parties. One System Number shall be referenced for each Order Form. Additional Order Forms should be filled out for each system number licensed at the same physical site. New sites at different physical addresses will require a new Software License Agreement and Order Form for each new site location.

Type of Order:	New EBI System	System Number Assigned:	
Current Version:		Current System Number:	0
Re: Honeywell Software License Agreement			
Designated Installation:	City of Clearwater		
Job Number:			
Date:	06-May-2010		
Customer Name:	City of Clearwater	Honeywell Branch Name:	Orlando
Customer Address:	100 S. Myrtle Ave	Honeywell Branch Address:	3657 Maguire Blvd
	Clearwater		Ste 100
	USA		Orlando, FL 32803
Telephone:	0	Telephone:	407-897-7200
* Require manual entry			

The undersigned parties have read and agreed to the terms and conditions set forth in the Software License Agreement and this Order Form.

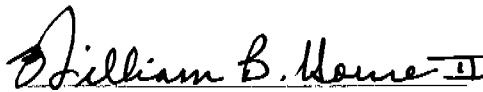
Authorized and Accepted by:



Authorized Honeywell Signature

Name: Buenaventura F. Prades
Title: Account Executive
Date: 4/28/2010

Authorized and Accepted by:



Authorized Customer Signature

Name: William B. Horne II
Title: City Manager
Date:

Please consider Anti - Virus and Malware detection software requirements to protect this Honeywell software installation. EBI is tested with Norton and McAfee Anti-Virus software products. Align with customer IT recommendations and best practices. This software is not included in the EBI or DVM software product and is responsibility of customer to provide. At the customers request Honeywell can provide a quote to install Anti-Virus or Malware detection software however most of these solutions require a subscription service to maintain detection of current virus and malware signatures.

Please consider Back Up software for disaster recovery to protect this Honeywell software installation. Symantec Live State or Acronis are recommended Back Up software solutions. Align with customer IT recommendations and best practices. This software is not included with the EBI or DVM software and is the responsibility of the customer to provide. At the customers request Honeywell can provide a quote to install Back Up software.

On the pages that follow please indicate Quantity of items selected for this order.

Items with "Require regional PM's approval" in the Comment column requires Regional Product Manager Approval prior to signing of agreement.

Note colors not shown when printed on black and white printer.

Exhibit 1

	Qty	Part Number	Software Description	Comment
<i>Base Package & Database Size</i>				
	1	EBI-BASE02	EBI Base Package 2	
	6	EBI-DBP00250	250 Point Adder to Database Size	
<i>First Free Interface</i>				
	1	EBI-IZBACDIRCL	Open - BACnet Direct Client Interface	
<i>Second Free Interface</i>				
	1	EBI-IZXLDIR	BM - Excel5000 Direct (point server) interface License	
<i>Documentation and Software</i>				
	1	EBI-ZZDVD410	EBI R410 DVD Media Set (Dual Layer DVDs only; no docs)	
	3	EBI-ZZACES	1 mouse pad; 1 keyboard overlay & 2 PC stickers	
<i>Additional Client Connection</i>				
	1	EBI-CLST	Additional Station Connection license	
<i>Building Management Interfaces</i>				
	2	EBI-SVLNS	LNS Server	
<i>Open Systems Interfaces</i>				
	1	EBI-OPMEDE	Microsoft Excel Data Exchange(Free in R410)	
	1	EBI-OPPCDTXL	OPC Data Transfer (within EBI)	
<i>Additional Options</i>				
	1	EBI-OPALMPAG	Alarm Pager	
<i>Server Type</i>				
	1	EBI-SEBM	EBI Building Manager Server	

ATTACHMENT C INSTALLATION SCHEDULE

The Installation Schedule showing the achievement of all major project milestones, tasks and associated responsibilities included in the Scope of Work. The critical path is shown in red.

ID	Task Name	Duration	Start	Finish	3rd Quarter			4th Quarter			1st Quarter					
					May	June	July	August	September	October	November	December	January	February	March	
1	Contract Award / Notice to Proceed	1 day	Fri 5/7/10	Fri 5/7/10												
2	Lighting Retrofit	120 days	Mon 5/10/10	Fri 10/22/10												
3	High Efficiency HVAC Upgrades	110 days	Mon 5/10/10	Fri 10/8/10												
4	High Efficiency Motors	10 days	Mon 5/10/10	Fri 5/21/10												
5	Roof	60 days	Mon 5/10/10	Fri 7/30/10												
6	Automation and Controls	180 days	Mon 5/10/10	Fri 1/14/11												
7	Punch List	30 days	Mon 1/17/11	Fri 2/25/11												
8	Project Acceptance	1 day	Mon 2/28/11	Mon 2/28/11												

The above Installation Schedule is based upon the contract being signed and the financing being secured by May 7, 2010. Should either event be delayed beyond May 7, 2010 the dates set forth in the schedule above shall be adjusted accordingly.

Honeywell Building Solutions (HBS) SERVICE AGREEMENT

Page 1 of 20

General Terms and Conditions

1. WORKING HOURS

Unless otherwise stated, all labor and services under this Agreement will be performed during the hours of 8:00 a.m. - 4:30 p.m. local time Monday through Friday, excluding federal holidays. If for any reason Customer requests Honeywell to furnish any labor or services outside of the hours of 8:00 a.m. - 4:30 p.m. local time Monday through Friday (or on federal holidays), any overtime or additional expenses, such as repairs or material costs not included in this Agreement, will be billed to and paid by Customer.

2. TAXES

Customer agrees to pay the amount of any new or increased taxes or governmental charges upon labor or the production, shipment, sale, installation, or use of equipment or software which become effective after the date of this Agreement. If Customer claims any such taxes do not apply to transactions covered by this Agreement, Customer shall provide Honeywell with a tax exemption certificate acceptable to the applicable taxing authorities.

3. PROPRIETARY INFORMATION

3.1 All proprietary information (as defined herein) obtained by Customer from Honeywell in connection with this Agreement will remain the property of Honeywell, and Customer will not divulge such information to any third party without prior written consent of Honeywell. The term "proprietary information" means written information (or oral information reduced to writing), or information in machine-readable form, including but not limited to software supplied to Customer which Honeywell deems proprietary or confidential and characterizes as proprietary at the time of disclosure to Customer by marking or labeling the same "Proprietary", "Confidential", or "Sensitive". The Customer shall incur no obligations hereunder with respect to proprietary information which: (a) was in the Customer's possession or was known to the Customer prior to its receipt from Honeywell; (b) is independently developed by the Customer without the utilization of such confidential information of Honeywell; (c) is or becomes public knowledge through no fault of the Customer; (d) is or becomes available to the Customer from a source other than Honeywell; (e) is or becomes available on an unrestricted basis to a third party from Honeywell or from someone acting under its control; (f) is received by Customer after notification to Honeywell that the Customer will not accept any further information.

3.2 Customer agrees that Honeywell may use nonproprietary information pertaining to the Agreement, and the work performed under the Agreement, for press releases, case studies, data analysis, promotional purposes, and other similar documents or statements to be publicly released, as long as Honeywell submits any such document or statement to Customer for its approval, which will not be unreasonably withheld.

4. INSURANCE OBLIGATIONS

Honeywell shall, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. It is agreed, however, that Honeywell has the right to insure or self-insure any of the insurance coverages listed below:

- (a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD \$5,000,000 per occurrence. Such policy will be written on an occurrence form basis;
- (b) If automobiles are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD \$5,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles.
- (c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage to property which is assumed in the Contract.
- (d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD \$1,000,000 for bodily injury each accident or disease.

Prior to the commencement of the Contract, Honeywell will furnish evidence of said insurance coverage in the form of a Memorandum of Insurance which is accessible at: <http://www51.honeywell.com/moi/>. All insurance required in this Article will be written by companies with a rating of no less than "A-, XII" by A.M. Best or equivalent rating agency. Honeywell will endeavor to provide a thirty (30) day notice of cancellation or non-renewal to the Customer. In the event that a self-insured program is implemented, Honeywell will provide adequate proof of financial responsibility.

5. HAZARDOUS SUBSTANCES, MOLD AND UNSAFE WORKING CONDITIONS

5.1 Customer has not observed or received notice from any source (formal or informal) of (a) Hazardous Substances or Mold, either airborne or on or within the walls, floors, ceilings, heating, ventilation and air conditioning systems, plumbing systems, structure, and other components of the Site, or within furniture, fixtures, equipment, containers or pipelines in a Site; or (b) conditions that, to Customer's knowledge, might cause or promote accumulation, concentration, growth or dispersion of Hazardous Substances or Mold on or within such locations.

5.2 Honeywell is not responsible for determining whether the Covered Equipment or the temperature, humidity and ventilation settings used by Customer, are appropriate for Customer and the Site except as specifically provided in an attached Work Scope Document.

5.3 If any such materials, situations or conditions, whether disclosed or not, are in fact discovered by Honeywell or others and provide an unsafe condition for the performance of the work or Services, the discovery of the condition shall constitute a cause beyond Honeywell's reasonable control and Honeywell shall have the right to cease the work or Services until the area has been made safe by Customer or Customer's representative, at Customer's expense. Honeywell shall have the right to terminate this Agreement if Customer has not fully remediated the unsafe condition within sixty (60) days of discovery.

5.4 Customer represents that Customer has not retained Honeywell to discover, inspect, investigate, identify, prevent or remediate Hazardous Substances or Mold or conditions caused by Hazardous Substances or Mold.

5.5 TO THE FULLEST EXTENT ALLOWED BY LAW, CUSTOMER SHALL INDEMNIFY AND HOLD HONEYWELL HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS AND COSTS OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO, CONSULTANTS' AND ATTORNEYS' FEES, DAMAGES FOR BODILY INJURY AND PROPERTY DAMAGE, FINES, PENALTIES, CLEANUP COSTS AND COSTS ASSOCIATED WITH DELAY OR WORK STOPPAGE, THAT IN ANY WAY RESULTS FROM OR ARISES UNDER THE BREACH OF THE REPRESENTATIONS AND WARRANTIES IN THIS SECTION, THE EXISTENCE OF MOLD OR A HAZARDOUS SUBSTANCE AT A SITE, OR THE OCCURRENCE OR EXISTENCE OF THE SITUATIONS OR CONDITIONS DESCRIBED IN THIS SECTION, WHETHER OR NOT CUSTOMER PROVIDES HONEYWELL ADVANCE NOTICE OF THE EXISTENCE OR OCCURRENCE AND REGARDLESS OF WHEN THE HAZARDOUS SUBSTANCE OR OCCURRENCE IS DISCOVERED OR OCCURS. THIS INDEMNIFICATION SHALL SURVIVE TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON. HOWEVER, THIS PROVISION DOES NOT CONSTITUTE A WAIVER OF CUSTOMER'S SOVEREIGN IMMUNITY UNDER SECTION 768.28, FLORIDA STATUTES, NOR DOES IT EXTEND CUSTOMER'S LIABILITY BEYOND THE LIMITS ESTABLISHED IN SECTION 768.28, FLORIDA STATUTES.

5.6 Customer is responsible for the containment of any and all refrigerant stored on or about the premises. Customer accepts all responsibility for and agrees to indemnify Honeywell against any and all claims, damages, or causes of action that arise out of the storage, consumption, loss and/or disposal of refrigerant, except to the extent Honeywell has brought refrigerant onsite and is directly and solely negligent for its mishandling.

6. WARRANTY AND LIMITATION OF LIABILITY

6.1 Honeywell will replace or repair any product Honeywell provides under this Agreement that fails within the warranty period (one) 1 year because of defective workmanship or materials, except to the extent the failure results from Customer negligence, or from fire, lightning, water damage, or any other cause beyond the control of Honeywell. This warranty applies to all products Honeywell provides under this Agreement, whether or not manufactured by Honeywell. The warranty is effective as of the date of Customer acceptance of the product or the date Customer begins beneficial use of the product, whichever occurs first.

6.2 THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS AND CUSTOMER EXPRESSLY WAIVES ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF WORKMANSHIP, CONSTRUCTION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES, EQUIPMENT, AND MATERIALS PROVIDED HEREUNDER. HONEYWELL SHALL NOT BE LIABLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, LOSS OF INCOME, EMOTIONAL DISTRESS, DEATH, LOSS OF USE, LOSS OF VALUE, ADVERSE HEALTH EFFECT OR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE, OR EXEMPLARY DAMAGES, ARISING FROM, OR RELATING TO, THIS LIMITED WARRANTY OR ITS BREACH.

6.3 Honeywell makes no representation or warranty, express, implied or otherwise, regarding Hazardous Substances or Mold. Honeywell shall have no duty, obligation or liability, all of which Customer expressly waives, for any damage or claim, whether known or unknown, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services, in whole or in part due to or arising from any investigation, testing, analysis, monitoring, cleaning, removal, disposal, abatement, remediation, decontamination, repair, replacement, relocation, loss of use of building, or equipment and systems, or personal injury, death or disease in any way associated with Hazardous Substances or Mold.

7. INDEMNITY

Honeywell agrees to indemnify and hold Customer and its agents and employees harmless from all claims for bodily injury and property damages to the extent such claims result from or arise under Honeywell's negligent actions or willful misconduct in its performance of the Work required under this Agreement, provided that such indemnity obligation is valid only to the extent (i) Customer gives Honeywell immediate notice in writing of any such claims and permits Honeywell, through counsel of its choice and Honeywell's sole cost and expense, to answer the claims and defend any related suit and (ii) Customer gives Honeywell all needed information, assistance and authority, at Honeywell's expense, to enable Honeywell to defend such suit. Honeywell is not responsible for any settlement without its written consent. Honeywell is not liable for loss or damage caused by the negligence of Customer or any other party or such party's employees or agents. This obligation shall survive termination of this Agreement. Notwithstanding the foregoing, Customer agrees that Honeywell will not be responsible for any damages caused by Mold or any other fungus or biological material or agent, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services.

8. LIMITATION OF LIABILITY

8.1 IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER ARISING OUT OF OR AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, MOLD, MOISTURE, INDOOR AIR QUALITY, OR OTHERWISE, ARISING FROM, RELATING TO, OR CONNECTED WITH THE SERVICES, EQUIPMENT, MATERIALS, OR ANY GOODS PROVIDED HEREUNDER.

8.2 NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, IF A PORTION OF THE SERVICES INVOLVES THE INSTALLATION AND/OR MAINTENANCE OF SYSTEMS ASSOCIATED WITH SECURITY AND/OR THE DETECTION OF AND/OR REDUCTION OF RISK OF LOSS ASSOCIATED WITH FIRE, HONEYWELL'S TOTAL LIABILITY ARISING OUT OF OR AS A RESULT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT OF THIS AGREEMENT.

9. EXCUSABLE DELAYS

Honeywell is not liable for damages caused by delay or interruption in Services due to fire, flood, corrosive substances in the air, strike, lockout, dispute with workmen, inability to obtain material or services, commotion, war, acts of God, the presence of Hazardous Substances or Mold, or any other cause beyond Honeywell's reasonable control. Should any part of the system or any Equipment be damaged by fire, water, lightning, acts of God, the presence of Hazardous Substances or Mold, third parties or any other cause beyond the control of Honeywell, any repairs or replacement will be paid for by Customer. In the event of any such delay, date of shipment or performance will be extended by a period equal to the time lost by reason of such delay, and Honeywell will be entitled to recover from Customer its reasonable costs, overhead, and profit arising from such delay.

10. PATENT INDEMNITY

10.1 Honeywell shall, at its expense, defend or, at its option, settle any suit that may be instituted against Customer for alleged infringement of any United States patents related to the hardware or software manufactured and provided by Honeywell under this Agreement ("the equipment"), provided that a) such alleged infringement consists only in the use of such equipment by itself and not as part of, or in combination with, any other devices, parts or software not provided by Honeywell hereunder, b) Customer gives Honeywell immediate notice in writing of any such suit and permits Honeywell, through counsel of its choice, to answer the charge of infringement and defend such suit, and c) Customer gives Honeywell all needed information, assistance and authority, at Honeywell's expense, to enable Honeywell to defend such suit.

10.2 If such a suit has occurred, or in Honeywell's opinion is likely to occur, Honeywell may, at its election and expense: a) obtain for Customer the right to continue using such equipment; b) replace, correct or modify it so that it is not infringing; or if neither a) or b) is not reasonable then c) remove such equipment and grant Customer a credit therefore, as depreciated.

10.3 In the case of a final award of damages in any such suit, Honeywell will pay such award. Honeywell will not, however, be responsible for any settlement made without its written consent.

10.4 THIS ARTICLE STATES HONEYWELL'S TOTAL LIABILITY AND CUSTOMER'S SOLE REMEDY FOR ANY ACTUAL OR ALLEGED INFRINGEMENT OF ANY PATENT BY THE HARDWARE MANUFACTURED AND PROVIDED BY HONEYWELL HEREUNDER.

11. SOFTWARE LICENSE

All software provided in connection with this Agreement shall be licensed and not sold. The end user of the software will be required to sign a license agreement with provisions limiting use of the software to the equipment provided under these specifications, limiting copying, preserving confidentiality, and prohibiting transfer to a third party. Licenses of this type are standard for computer-based equipment of the type covered by this Agreement. Customer shall be expected to grant Honeywell access to the end user for purposes of obtaining the necessary software license.

12. DISPUTE RESOLUTION

HONEYWELL and CUSTOMER shall exert best efforts to resolve any dispute that may arise respecting the Work or the Project. In the event that a particular dispute cannot be so resolved, HONEYWELL and CUSTOMER agree that the dispute shall be resolved in a court of competent jurisdiction, in Pinellas County, Florida .

13. ACCEPTANCE

This proposal and the pages attached shall become an Agreement upon signature above by Honeywell and Customer. The terms and conditions are expressly limited to the provisions hereof, including Honeywell's General Terms and Conditions attached hereto, notwithstanding receipt of, or acknowledgment by, Honeywell of any purchase order, specification, or other document issued by Customer. Any additional or different terms set forth or referenced in Customer's purchase order are hereby objected to by Honeywell and shall be deemed a material alteration of these terms and shall not be a part of any resulting order.

14. MISCELLANEOUS

14.1 This Agreement represents the entire Agreement between Customer and Honeywell for the Work described herein and supersedes all prior negotiations, representations or Agreements between the Parties related to the work described herein.

14.2 None of the provisions of this Agreement shall be modified, altered, changed or voided by any subsequent Purchase Order or other document unilaterally issued by Customer that relates to the subject matter of this Agreement. This Agreement may be amended only by written instrument signed by both Parties.

14.3 This Agreement is governed by the law of the State where the work is to be performed.

14.4 Any provision or part of this Agreement held to be void or unenforceable under any laws or regulations will be deemed stricken, and all remaining provisions will continue to be valid and binding upon Honeywell and Customer, who agree that this Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

14.5 Customer may not assign its rights or delegate its obligations under this Agreement, in whole or in part, without the prior written consent of Honeywell. Honeywell may assign its right to receive payment to a third party.

15. COVERAGE

15.1 Customer agrees to provide access to all Equipment covered by this Agreement. Honeywell will be free to start and stop all primary equipment incidental to the operation of the mechanical, control, automation, and life safety system(s) as arranged with Customer's representative.

15.2 It is understood that the repair, replacement, and emergency service provisions apply only to the Equipment included in the attached List of Covered Equipment. Repair or replacement of non-maintainable parts of the system such as, but not limited to,

ductwork, piping, shell and tube (for boilers, evaporators, condensers, and chillers), unit cabinets, boiler refractory material, heat exchangers, insulating material, electrical wiring, hydronic and pneumatic piping, structural supports and other non-moving parts, is not included under this Agreement. Costs to repair or replace such non-maintainable parts will be the sole responsibility of Customer.

15.3 Honeywell will not reload software, nor make repairs or replacements necessitated by reason of negligence or misuse of the Equipment by persons other than Honeywell or its employees, or caused by lightning, electrical storm, or other violent weather or by any other cause beyond Honeywell's control. Honeywell will provide such services at Customer's request and at an additional charge. Customer is entitled to receive Honeywell's then current preferred-Customer labor rates for such services.

15.4 Honeywell may install diagnostic devices and/or software at Honeywell's expense to enhance system operation and support. Upon termination of this Agreement, Honeywell may remove these devices and return the system to its original operation. Customer agrees to provide, at its sole expense, connection to the switched telephone network for the diagnostic devices and/or software.

15.5 Honeywell will review the Services delivered under this Agreement on an annual basis, unless otherwise noted.

15.6 This Agreement assumes that the systems and/or Equipment included in the attached List of Covered Equipment are in maintainable condition. If repairs are necessary upon initial inspection or initial seasonal start-up, repair charges will be submitted for approval. Should these charges be declined, those non-maintainable items will be eliminated from coverage under this Agreement and the price adjusted accordingly.

15.7 In the event that the system or any equipment component thereof is altered, modified, changed or moved, this Agreement may be immediately adjusted or terminated, at Honeywell's sole option. HONEYWELL is not responsible for any damages resulting from such alterations, modifications, changes or movement

15.8 Honeywell is not responsible for maintaining a supply of, furnishing and/or replacing lost or needed chlorofluorocarbon (CFC) based refrigerants not otherwise required under this Agreement. Customer is solely responsible for the cost of material and labor of any such refrigerant not otherwise provided for under this Agreement at current market rates.

15.9 Maintenance, repairs, and replacement of Equipment parts and components are limited to restoring to proper working condition. Honeywell is not obligated to provide replacement software, equipment, components and/or parts that represent a significant betterment or capital improvement to Customer's system(s) hereunder.

15.10 Unless otherwise specified, Customer retains all responsibility for maintaining LANs, WANs, leased lines and/or other communication mediums incidental or essential to the operation of the system(s) or Equipment found included in the attached List of Covered Equipment.

15.11 Customer will promptly notify Honeywell of any malfunction in the system(s) or Equipment covered under this Agreement that comes to Customer's attention.

16. TERMS OF PAYMENT

16.1 Subject to Honeywell's approval of Customer's credit, Customer will pay or cause to be paid to Honeywell the full price for the Services as specified on the first page of this Agreement. Honeywell will submit quarterly invoices to Customer in advance for Services to be performed during the subsequent billing period, and payment shall be due within twenty (20) days after Customer's receipt of each such invoice. Payments for Services past due more than five (5) days shall accrue interest from the due date to the date of payment at the rate of one and one-half percent (1.5%) per month, compounded monthly, or the highest legal rate then allowed. Customer will pay all attorney and/or collection fees incurred by Honeywell in collecting any past due amounts.

16.2 **Price Adjustment.** Honeywell may annually adjust the amounts charged for the Services provided, based upon the annual increase in the "Other Services" item of the Commodity and Service Group expenditure category of the Consumer Price Index for all urban consumers as published by the U. S. Department of Labor, Bureau of Labor Statistics which can be found at <http://www.bls.gov/news.release/cpi.htm> (see table 1. CPI-U) plus any unusual local increases in labor and material cost, with a maximum annual escalation of 4%.

17. TERMINATION

17.1 Customer may terminate this Agreement for cause if Honeywell defaults in the performance of any material term of this Agreement, or fails or neglects to carry forward the Services in accordance with this Agreement, after giving Honeywell written

notice of its intent to terminate. If, within thirty (30) days following receipt of such notice, Honeywell fails to cure or perform its obligations, Customer may, by written notice to Honeywell, terminate this Agreement.

17.2 Honeywell may terminate this Agreement for cause (including, but not limited to, Customer's failure to make payments as agreed herein) after giving Customer written notice of its intent to terminate. If, within thirty (30) days following receipt of such notice, Customer fails to make the payments then due, or otherwise fails to cure or perform its obligations, Honeywell may, by written notice to Customer, terminate this Agreement and recover from Customer payment for Services performed and for losses sustained for materials, tools, construction equipment and machinery, including but not limited to, reasonable overhead, profit and applicable damages.

17.3 **Cancellation** - This Agreement may be canceled at Honeywell's option in the event Honeywell equipment on Customer's premises is destroyed or substantially damaged. Likewise, this Agreement may be canceled at Customer's option in the event Customer's premises are destroyed. In the event of such cancellation, neither party shall be liable for damages or subject to any penalty, except that Customer will remain liable for Services rendered to the date of cancellation.

18. DEFINITIONS

18.1 "Hazardous substance" includes all of the following, whether naturally occurring or manufactured, in quantities, conditions or concentrations that have, are alleged to have, or are believed to have an adverse effect on human health, habitability of a Site, or the environment: (a) any dangerous, hazardous or toxic pollutant, contaminant, chemical, material or substance defined as hazardous or toxic or as a pollutant or contaminant under state or federal law, and (b) any petroleum product, nuclear fuel or material, carcinogen, asbestos, urea formaldehyde, foamed-in-place insulation, polychlorinated biphenyl (PCBs), and (c) any other chemical or biological material or organism, that has, is alleged to have, or is believed to have an adverse effect on human health, habitability of a Site, or the environment.

18.2 "Mold" means any type or form of fungus or biological material or agent, including mold, mildew, moisture, yeast and mushrooms, and any mycotoxins, spores, scents, or by-products produced or released by any of the foregoing. This includes any related or any such conditions caused by third parties.

18.3 "Covered Equipment" means the equipment covered by the Services to be performed by Honeywell under this Agreement, and is limited to the equipment included in the respective work scope attachments.

18.4 "Services" means those services and obligations to be undertaken by Honeywell in support of, or to maintain, the Covered Equipment, as more fully detailed in the attached work scope document(s), which are incorporated herein.

Section 1 - Preferred Mechanical Maintenance Services

1.1 **Scope** - HONEYWELL will maintain the mechanical systems, components, and hardware listed below:

Table A – List of Covered Equipment by Location:

Building	Qty	Equipment Description	Size	Building Address
Gas Department				400 N. MYRTLE AVE.
	1	Trane Air cooled chiller	60 ton	
Long Center				1501 N BELCHER ROAD
	1	RTU #1 - Trane Rooftop AHU	7.5 ton	
	1	RTU #2 - Trane Rooftop AHU	7.5 ton	
	1	RTU #3 - Trane Rooftop AHU	12.5 ton	
	1	RTU #4 - Trane Rooftop AHU	12.5 ton	
	1	RTU #5 - Trane Rooftop AHU	12.5 ton	
	1	RTU #6 - Trane Rooftop AHU	15 ton	
	1	RTU #7 - Trane Rooftop AHU	15 ton	
	1	RTU #8 - Trane Rooftop AHU	17.5 ton	
	1	RTU #9 - Trane Rooftop AHU	17.5 ton	
	1	RTU #10 - Trane Rooftop AHU	17.5 ton	
Transfer Station				1005 OLD COACHMAN ROAD
	1	Trane DX Split System DX # 1	2 ton	
Public Works Bldg E				1650 ARCTURAS AVE N.
	1	Trane DX Split System DX #2	7.5 ton	
	1	Trane DX Split System DX # 3	7.5 ton	
City Hall				112 OSCEOLA AVE.
	1	Central Station AHU #1	20 hp	
	1	Central Station AHU #2	21 hp	

1.2 **Preventive Maintenance** - Quarterly preventive maintenance call will be scheduled by a computer-generated service report detailing the tasks to perform, the skill levels required, and the special tools and instrumentation required to maintain the systems. Maintenance intervals will be determined by either equipment run time or a frequency determined from consideration of equipment operation, application, location, or criticality of end use. Upon completion of each service call, a summary of the preventive maintenance tasks completed will be provided to CUSTOMER.

1.3 **Component Replacements** - HONEYWELL will maintain CUSTOMER'S presently installed system within the functional limitations of presently installed hardware, firmware, and software found on CUSTOMER'S system(s).

HONEYWELL will repair or replace serviceable components and parts found on the List of Covered Equipment that have been found to be defective or have failed. Replaced components will be new or reconditioned components of compatible design as required to maintain CUSTOMER'S system. At HONEYWELL'S sole discretion, marginal components may also be repaired or replaced. These replacements will be based upon commercial availability of parts and/or components. All exchanged parts shall become the property HONEYWELL. Automatic valve and damper maintenance and repair are included in this Agreement. The labor required for their removal and installation is not included.

Notwithstanding the foregoing, at initial inspection, at initial seasonal start-up, or following twelve (12) months of service, if any individual component cannot, in the sole or exclusive opinion of HONEYWELL, be properly repaired, due to obsolescence, lack of commercial availability of standard parts, and/or excessive wear or deterioration, HONEYWELL may remove said component from the List of Covered Equipment, with sixty (60) days written notice. Non-maintainable components will be eliminated from coverage under this Agreement and HONEYWELL shall adjust the price accordingly.

1.4 **Emergency Service** - Activities performed under this Agreement are designed to minimize the incidence of emergency situations. However, should an emergency arise, HONEYWELL personnel will assess the situation either by phone or remote

diagnostics, or both, and will determine the required course of action with CUSTOMER. If it is determined that a site visit is required, HONEYWELL personnel will arrive at CUSTOMER site within 4 hours. If the resolution of the emergency service call requires HONEYWELL to provide service for equipment that is not listed in Article 1.1 above, CUSTOMER will be liable for charges prevailing for such service.

Emergency Service will be provided during the following periods during the term of this Agreement (check box for desired level of emergency service coverage):

- ☒ **Continuous Emergency Service:**
24 hours per day, seven days per week, federal holidays included
- ☐ **Extended Hours Emergency Service:**
12 hours per day, five days per week, federal holidays excluded.
Specified hours: 6:00 a.m. - 6:00 p.m., Monday through Friday.
- ☐ **Regular Business Hours Emergency Service:**
8.5 hours per day, five days per week, federal holidays excluded.
Specified hours: 8:00 a.m. - 4:30 p.m., Monday through Friday.

1.5 Performance Review - A review of the Services provided within this Agreement will be performed by HONEYWELL on an annual basis at CUSTOMER'S request. HONEYWELL and CUSTOMER will discuss work performed since the last review, answer questions pertaining to Service delivery, and identify opportunities to further improve performance of the Equipment.

1.6 Honeywell ServicePortal – HONEYWELL will provide customer access to an Internet-based application that will allow the CUSTOMER to securely submit non-emergency service requests online; view status of all service calls, whether scheduled, open or closed; view appointments and task detail of work performed on contracted service calls; and view contract and equipment coverage details (12 month history and includes only service performed per the HONEYWELL contract). Functionality enhancements or deletions are at the discretion of HONEYWELL.

Section 2 - Air Filter Services

2.1 Scope - HONEYWELL will furnish and install air filters appropriate for the design condition of CUSTOMER'S ventilation systems. Media for the fan system units listed in this section will be replaced according to the following schedule:

List of Covered Equipment:

System Unit #	Qty.	Size	Type	Changes/ Yr	Location
RTU -1-2	8	20" x 25"	2" Pleated	4	1501 N BELCHER ROAD
RTU-3-5	12	20" X 20"	2" Pleated	4	1501 N BELCHER ROAD
RTU-6-10	20	20" X 20"	2" Pleated	4	1501 N BELCHER ROAD
DX #1	1	20" X 20"	1" Pleated	4	1005 OLD COACHMAN ROAD
DX # 2-3	2	20" X 20"	2" Pleated	4	1650 ARCTURAS AVE N.
DX # 4	1	20" x 20"	1" Pleated	4	901 SATURN AVE. S.
Central Station AHU #1	4	20" X 24"	4" Pleated, 65% eff.	4	112 OSCEOLA AVE. S
Central Station AHU #2	4 ea.	20" x 24"	4" Pleated, 65%	4	112 OSCEOLA AVE. S.

2.2 Coverage - It is understood that the air filter media replacement services apply only to the fan system units listed in Article 1.1 above. If this Agreement is terminated, HONEYWELL will remove any HONEYWELL-supplied frames from the facility, or offer CUSTOMER the opportunity to purchase them at the current market value.

2.3 Frequency of Air Filter Media Replacement - Should filter loading experience indicate a need to adjust the frequency of media changes for the fan systems listed in Article 1.1 above, the frequency will be changed, and the Agreement amended to reflect the new media change frequency. The Agreement price will be adjusted to account for the revised media change frequency.

2.4 Performance Review - A review of the Services provided within this Agreement will be performed by HONEYWELL on an annual basis at CUSTOMER'S request. HONEYWELL and CUSTOMER will discuss work performed since the last review, answer questions pertaining to Service delivery, and identify opportunities to further improve performance of the Equipment.

Maintenance Service Special Provisions

These Special Provisions are incorporated herein by reference and made a part of the Attachment D Support Services Agreement.

1. This Support Services Agreement excludes the maintenance of the pool water side of the equipment. Maintenance of the filters, strainers, etc will be performed by Customer.
2. Honeywell shall provide annual roof (Long Ctr) inspection and maintenance to include: Cleaning drains, repair of small blisters, touch up coating.

Section 3 -Preferred Automation Maintenance Services

3.1 Scope - HONEYWELL will maintain building automation system hardware and software found in the List of Covered Equipment and Software below.

List of Covered Equipment – Web Interface:

Quantity	Description	Model Number	Location
9	Controller w/communication module	Router - TBD	See Table A
9	Power Supply	PSH100A	See Table A
9	Power Supply	AT175F	See Table A

Table A – List of Covered Equipment Location:

Facility Name	Facility Address
LONG CENTER	1501 N BELCHER ROAD
GAS ADMIN. BUILDING	400 N. MYRTLE AVE.
GAS SERVICE WAREHOUSE	400 MYRTLE AVENUE S.
POLICE, CLW BEACH STA.	700 BAYWAY BLVD. (CLW BCH)
POLICE, CNTRYSD IMPOUND LOT	2851 N. MCMULLEN BOOTH RD
PUBLIC WORKS COMPOUND, #A	1650 ARCTURAS AVE N.
PUBLIC WRKS BLD E	1650 ARCTURAS AVENUE N.
TRANSFER STATION OFFICE	1005 OLD COACHMAN ROAD

HVAC Controls:

Quantity	Description	Model Number	Location
2	Controller	TBD	Gas Warehouse
4	Controllers	TBD	Long Center

* Programmable web enabled thermostats will be serviced and maintained at the owner's cost, once the warranty period has expired.

3.2 Coverage - Unless noted by exception, maintenance intervals will be determined by equipment, application, location and HONEYWELL'S computer data bank of maintenance experience and manufacturer's specifications, according to HONEYWELL'S best judgment.

After each service call is completed, details from the service report will be provided to CUSTOMER.

HONEYWELL will review current data and applications and will verify correct operation of connected HVAC equipment.

3.3 Hardware Support - HONEYWELL will perform scheduled maintenance services on the Equipment covered under this Agreement as detailed on the List of Covered Equipment.

HONEYWELL will repair or replace serviceable components and parts found on the List of Covered Equipment and Software, which have been found to be defective or have failed. Replaced components will be new or reconditioned components of compatible design as required to maintain CUSTOMER'S system. At HONEYWELL'S sole discretion, marginal components may also be repaired or replaced. These replacements will be based upon commercial availability of parts and/or components. All exchanged parts shall become the property of HONEYWELL.

Notwithstanding the foregoing, at initial inspection or following twelve (12) months of service, or at initial seasonal start-up, if any individual component cannot, in the sole or exclusive opinion of HONEYWELL, be properly repaired, due to obsolescence, lack of commercial availability of standard parts, and/or excessive wear or deterioration, HONEYWELL may remove said component from the List of Covered Equipment, with sixty (60) days written notice. Non-maintainable components will be eliminated from coverage under this Agreement and HONEYWELL shall adjust the price accordingly.

3.4 Software Support - HONEYWELL will maintain the present system within the functional limitations of presently installed hardware and/or software included in the List(s) of Covered Equipment and Software. This may include providing

software patches, revisions and/or bug fixes to standard HONEYWELL software that may be periodically created by HONEYWELL to maintain present system operations. Third-party applications and/or software including, but not limited to, operating system(s), web browsers, local area network (LAN) and computerized maintenance management systems and any labor, software and/or hardware required to maintain the present applications and/or implement functional enhancements, will be CUSTOMER'S sole responsibility.

CUSTOMER shall be solely responsible for and agrees to purchase any and all hardware, firmware, and/or software that may hereafter be required to improve performance of the software installed on CUSTOMER'S system. HONEYWELL shall not be responsible to provide any improvements, functional, operational or otherwise. Third party software that adds, enhances or improves functional performance of CUSTOMER'S system are excluded under this Agreement and will be provided when and if available and at CUSTOMER'S expense.

Upon request, HONEYWELL will provide documentation to operate all HONEYWELL licensed software. Upon termination of this Agreement, all documentation, including software, will become operational property and responsibility of CUSTOMER, provided that CUSTOMER abides by the terms of the License Agreement for Software Products.

3.5 Emergency Service - Activities performed under this Agreement are designed to minimize the incidence of emergency situations. However, should an emergency arise, HONEYWELL personnel will assess the situation either by phone or remote diagnostics, or both, and will determine the required course of action with CUSTOMER. If it is determined that a site visit is required, HONEYWELL personnel will arrive at CUSTOMER'S site within 4 hours. If the resolution of the emergency service call requires HONEYWELL to provide service for equipment, software or any components thereof that are not listed on the List of Covered Equipment and Software, CUSTOMER will be liable for charges then prevailing for such service.

Emergency Service will be provided during the following periods during the term of this Agreement (check box for desired level of emergency service coverage):

- ☒ **Continuous Emergency Service:**
24 hours per day, seven days per week, federal holidays included
- ☐ **Extended Hours Emergency Service:**
12 hours per day, five days per week, federal holidays excluded.
Specified hours: 6:00 a.m. - 6:00 p.m., Monday through Friday.
- ☐ **Regular Business Hours Emergency Service:**
8.5 hours per day, five days per week, federal holidays excluded.
Specified hours: 8:00 a.m. - 4:30 p.m., Monday through Friday.

☒ **3.6 Operator Training Support** - To provide for the proper ongoing operation and improving application of the building management system by CUSTOMER personnel, HONEYWELL personnel will conduct a maximum of (8) hours of on-site training annually, dedicated to operating and/or programming issues mutually pre-determined by CUSTOMER and HONEYWELL.

Tuition for (1) person(s) to attend (1) scheduled training session(s) on system operation and programming at HONEYWELL'S Building Solutions Training Center has been included hereunder. Cost of travel and/or accommodations is not included and shall be CUSTOMER'S sole responsibility.

3.7 Performance Review - A review of the Services provided within this Agreement will be performed by HONEYWELL on an annual basis at CUSTOMER'S request. HONEYWELL and CUSTOMER will discuss work performed since the last review, answer questions pertaining to Service delivery, and identify opportunities to further improve performance of the Equipment.

3.8 Honeywell ServicePortal - HONEYWELL will provide customer access to an Internet-based application that will allow the CUSTOMER to securely submit non-emergency service requests online; view status of all service calls, whether scheduled, open or closed; view appointments and task detail of work performed on contracted service calls; and view contract and equipment coverage details (12 month history and includes only service performed per the HONEYWELL contract). Functionality enhancements or deletions are at the discretion of HONEYWELL.

3.9 Warranty Services - Honeywell shall provide the following services during the initial one year warranty period. Such services are not part of the standard warranty included with the project installation cost:

- Preventative Maintenance - Provide services outlined in sections 3.3 and 3.4 above.
- Emergency Service - Provide services outlined in section 3.5 above.

Section 4 - EBI Services

4.1 Scope:

Honeywell will provide software and hardware enhancement and support for Customer's Enterprise Building Integrator (EBI) system, which consists of Honeywell Security Manager, Honeywell Building Manager, Honeywell Life Safety Manager, Honeywell Digital Video Manager, Honeywell Asset Locator, and Honeywell Energy Manager. The services are more specifically described below.

List of Covered Software

Drawing number(s) and date(s) (if applicable)				
Quantity	Software Product Number	Version	Product Description	Location
1	EBI Building Manager	R400	Enterprise Building Integrator – Building Management Software	1900 Grand Ave.
1	Acronis Enterprise Back Up Software	TBD	Acronis Enterprise Back Up Software	1900 Grand Ave.
1	Norton or McAfee Virus Software	TBD	Anti Virus Software	1900 Grand Ave.

(If software embedded in network hardware is to be covered, include it in the List of Covered Software.)

List of Covered Hardware

Quantity	Description	Model Number	Location	Refresh Option (Yes or No)
1	EBI Database Server	TBD	1900 Grand Ave	Yes
	EBI Point Servers	TBD	1900 Grand Ave	Yes
1	EBI Workstation	TBD	1900 Grand Ave	Yes
1	Network Switch	TBD	1900 Grand Ave	Yes
1	Network Router	TBD	1900 Grand Ave	Yes
2	UPS Units	TBD	1900 Grand Ave	Yes
2	Monitors	TBD	1900 Grand Ave	Yes
1	KVM Switch	TBD	1900 Grand Ave	Yes

4.2 Software Enhancement and Support

For software included in the List of Covered Software and originally installed by Honeywell, Honeywell will, on a scheduled basis, (a) evaluate the condition of the software, (b) apply any available updates and upgrades that are applicable to the software (but for third-party software only after it has been qualified by Honeywell) and that have not been previously applied, (c) perform a system back-up, and (d) save the back-up files.

For the same software, Honeywell will apply critical software updates as they become available (but for third-party software only after it has been qualified by Honeywell). Critical software updates are updates that correct a problem that substantially compromises the overall system operation or security.

Customer shall not install any software on systems covered by this addendum without Honeywell's written approval. This addendum does not include any services on software installed by others, and Honeywell will not be liable for any damage to any such software installed without Honeywell's written approval that results from these services.

4.3 Hardware Support

For hardware included in the List of Included Hardware and originally furnished by Honeywell, Honeywell will, on a periodic basis, evaluate the performance of the hardware and recommend any enhancements needed to allow the software to perform as specified. If the Refresh Option is selected, Honeywell will replace the listed hardware with new hardware that satisfies the requirements of the upgraded or updated software on or about the two-year anniversary of the initiation of these EBI Software Enhancement and Support Services and on or about any succeeding two-year anniversary, for as long as these services remain in effect.

4.4 Performance Review

At Customer's request, Honeywell will, on an annual basis, provide a review of the services provided under this addendum. As part of this review, Honeywell will discuss services provided since the last review, answer questions pertaining to the services, and discuss opportunities to improve performance.

4.5 Warranty Services ~ Honeywell shall provide the following services during the initial one year warranty period. Such services are not part of the standard warranty included with the project installation cost:

- Software Enhancement and Support - Provide services outlined in sections 4.2 above.

Energy Guarantee Special Provisions

These Special Provisions are incorporated herein by reference and made a part of the Honeywell International Inc., Automation and Control Solutions Agreement.

1.1 Incorporated Documents - Attachment F, Attachment G, and Exhibits to Attachment G are hereby made an integral part of this SUPPORT SERVICES AGREEMENT, insofar as same is applicable to the work of the Energy Guarantee Auditing and Analysis Services, as if specifically written herein, and unless otherwise hereinafter specified.

1.2 Energy Guarantee Performance Period Auditing Activities - In coordination with, or in addition to, any Energy Auditing and Analysis Services, HONEYWELL will perform Measurement & Verification (M&V) activities as described in Attachment G.

1.3 Remote Diagnostics - CUSTOMER shall allow HONEYWELL to perform remote diagnostics on all equipment associated with the Energy Savings Guarantee for operational compliance with manufacturer's specifications, HONEYWELL specifications, requirements of Attachment F, and requirements of Attachment G.

HONEYWELL may install diagnostic devices at HONEYWELL's expense to monitor and/or enhance system operation and support. Upon termination of this Agreement, HONEYWELL may remove these devices and return the system to original operation.

1.4 Potential-To-Save - Verification of an ECM's potential to generate the proposed energy cost avoidance is satisfied upon CUSTOMER's signing of Attachment J or an equivalent Delivery and Acceptance Certificate. (See Attachment F - Definitions: "Option A".

1.5 Energy Purchasing Alternatives - It is understood that there is no requirement for HONEYWELL to perform evaluations of energy purchasing alternatives or perform rate negotiations under this contract.

Switching from the respective electric and natural gas local distribution companies (LDCs) to the respective marketers/brokers/suppliers (SUPPLIERS) for the commodity portion of gas and electricity will be the result of Contract(s) between CUSTOMER and SUPPLIER(s). HONEYWELL does not assure the provision of gas or electricity, and all incentives and payments associated with the Contract(s) between CUSTOMER and SUPPLIER(s) are the responsibility of the Parties to that Contract.

1.6 Utility Rebates - It is understood that all utility rebates and/or refunds are the result of an agreement between CUSTOMER and the utility company and HONEYWELL assumes no responsibility for either obtaining said rebates and/or refunds or for the quantity of said rebates and/or refunds.

It is further understood that any evaluation and presentation of options by HONEYWELL for potential utility rebates and credits available to CUSTOMER from utility companies is limited to those identified during contract negotiation and during installation. Assisting the CUSTOMER in securing identified rebates is understood to be a construction and installation task and is not part of these on-going services.

1.7 Recommendations - It is understood that HONEYWELL will use its best professional judgment in evaluating energy use characteristics, but assumes no responsibility for financial performance related to any recommendations.

1.8 CUSTOMER Responsibilities for Documentation - It is the responsibility of the CUSTOMER to provide to the M&V Specialist, at minimum, on a quarterly basis, except as modified below:

- 1.8.1 Verification that equipment installed to perform the ECMs has been properly maintained, including but not limited to provision of maintenance records.
- 1.8.2 Current status of the buildings (i.e., occupancy level and use, hours of operation, etc.).
- 1.8.3 Records of CUSTOMER initiated changes in equipment setpoints, start/stop conditions, usage patterns.
- 1.8.4 Records of CUSTOMER initiated changes in operation of mechanical-electrical systems, which may impact the ECMs.
- 1.8.5 Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
- 1.8.6 Copies of all utility information including monthly utility bills and utility summary data on a *monthly basis*, and access to utility accounts through an authorization by the CUSTOMER to the utility providers to allow the release of data to a HONEYWELL representative.

1.9 CUSTOMER Responsibilities for Notification – HONEYWELL and CUSTOMER division of responsibilities and risk allocation is described in Attachment F and Attachment G.

It is the responsibility of the CUSTOMER to notify HONEYWELL of all changes in production, occupancy, building load, conditioned building area, equipment operation, and scheduling, etc. from the baseline period. Deviation from the baseline period will result in Baseline Adjustments to normalize the Base Year energy use to Current Year conditions. It will be the responsibility of the CUSTOMER to investigate and correct any reported deficiencies in the current operations in the buildings that impact the ECMs.

1.10 CUSTOMER Responsibilities for Maintenance – During the term of this Agreement, for all equipment provided or modified as per Attachment A – Scope of Work, the CUSTOMER shall perform on-going maintenance and accomplish component replacement and equipment repairs in accordance with manufacturer's standards and practices and take all reasonable measures to insure the equipment is operating at full efficiency. Component replacement and equipment repairs must be accomplished in a timely fashion. Additionally, CUSTOMER shall insure such equipment is operated at all times in accordance with applicable manufacturer's specifications, HONEYWELL specifications, and the requirements of Attachments F and G contained herein. For all non-HONEYWELL maintenance actions, CUSTOMER shall document and make available to HONEYWELL maintenance dates and tasks accomplished, the start date and duration of all deficient equipment operation and the subsequent corrective action and/or repair dates. Failure of the CUSTOMER to operate the equipment per the specifications, repair any deficiencies in a timely manner, and perform the ongoing maintenance functions in accordance with the standards and practices during the Guarantee period will allow HONEYWELL to adjust the Guarantee accordingly.

CUSTOMER shall replace any failed equipment or component no longer warranted by HONEYWELL or a HONEYWELL subcontractor, with equipment or components of equal or greater efficiency value than installed by HONEYWELL, for the full contract guarantee term.

1.11 Energy Cost Avoidance – Energy Cost avoidance may also include, but is not limited to, savings from demand charges, power factor correction, taxes, ratchet charges, rate changes and other utility tariff charges that are reduced as a result of the HONEYWELL involvement to the extent permitted by the Agreement.

Energy Guarantee Auditing and Analysis Services

1.1 Scope – HONEYWELL will implement Energy *Guarantee* Auditing and Analysis Services for CUSTOMER'S facilities, energy conservation measures (ECMs), and/or utility meters in coordination with Attachment F – Energy Guarantee and Attachment G – Schedule of Savings. Attachment G, as used herein, includes the Exhibits to Attachment G. HONEYWELL will perform the services outlined in Section 1.4.

List of Covered Facilities, Meters, ECMs by Service Offering:

Facility	Building Address	LDC-Meter # / Utility Type	ECM's	Related M&V Offering Subsection
Gas -Gas Division (offices)	400 N. Myrtle Ave	Electric Meter - Acct # 44802-36337 Meter # 8732560	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 2: High Efficiency HVAC Upgrades , ECM 3: HVAC Controls Upgrade	1.4.1
Gas -Meter shop	400 N. Myrtle Ave	Electric Meter - Acct # 27573-14562 Meter # 2797576	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
GAS SERVICE WAREHOUSE	400 MYRTLE AVENUE S.	Electric Meter - Acct # 66213-78832-A-50 Meter # 8732560	ECM 3: HVAC Controls Upgrade	1.4.1
Gas -Gas Sales Office/Graphics and Records	711 Maple St.	Electric Meter - Acct # 66210-90815-B-42 Meter # 8731593	ECM 1; High Efficiency Lighting Upgrades Buildings	1.4.1
General Services – Building & Maintenance Shops	1900 Grand Ave	Electric Meter - Acct # 44991-14344 Meter # 2795568	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
General Services - City Hall	112 S. Osceola	Electric Meter - Acct # 62486-80959 Meter # 2796785 Gas Meter – Account Meter # 4010135	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 2: High Efficiency HVAC Upgrades , ECM 3: HVAC Controls Upgrade	1.4.1
General Services - Fleet Maintenance	1900 Grand Ave	Electric Meter - Acct # 44989-70339 Meter # 2531083	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
General Services – Municipal Service Building (MSB)	100 S. Myrtle Ave.	Electric Meter - Acct # 11151-99277 Meter # 3900952	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 3: HVAC Controls Upgrade	1.4.1
Parks & Recreation - Long Center	1501 N. Belcher Rd.	Electric Meter - Acct # 91948-11052 Meter # 2801259	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 2: High Efficiency HVAC Upgrades , ECM 3: HVAC Controls Upgrade, ECM 4 Pool Upgrades, ECM 5 Roof Upgrade	1.4.1
Police - Beach Substation	700 Bayway Blvd.	Electric Meter - Acct # 97583-37780 Meter # 2653969	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 3: HVAC Controls Upgrade	1.4.1
Police - Countryside Station	2851 McMullen Booth Rd.	Electric Meter - Acct # 04800-80699 Meter # 7229245	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 3: HVAC Controls Upgrade	1.4.1

Facility	Building Address	LDC-Meter # / Utility Type	ECM's	Related M&V Offering Subsection
Library-Main Library	100 N. Osceola	Electric Meter - Acct # 52781-54167 Meter # 2787919	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 3: HVAC Controls Upgrade	1.4.1
BEACH REC & LIBRARY	69 BAY ESPLANADE	Electric Meter - Acct # 96640-42272 Meter # 8733082	ECM 3: HVAC Controls Upgrade	1.4.1
LIBRARY, N. GREENWOOD BRANCH	905 N. M.L.K. JR. AVE	Electric Meter - Acct # 34597-89188 Meter # 8732499	ECM 3: HVAC Controls Upgrade	1.4.1
Public Services - Traffic shop	1650 N. Arcturus Ave	Electric Meter - Acct # 44992-58350 Meter # 2658805	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
Solid Waste - Transfer Station & Scale House	1005 Old Coachman Rd.	Electric Meter - Acct # 76419-23307 Meter # 5730578	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 2: High Efficiency HVAC Upgrades, ECM 3: HVAC Controls Upgrade	1.4.1
Traffic Engineering - Parking/Garden Ave Garage	28 Garden Ave.	Electric Meter - Acct # 64093-96118 Meter # 2794212	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
Police - Main Station	645 Pierce St.	Electric Meter - Acct # 56889-09252 Meter # 2802839	ECM 1; High Efficiency Lighting Upgrades Buildings, ECM 3: HVAC Controls Upgrade	1.4.1
PUBLIC WORKS COMPOUND, #A	1650 ARCTURAS AVE N.	Electric Meter - Acct # 44986-82316 Meter # 2525068	ECM 3: HVAC Controls Upgrade	1.4.1
Public Service - Bldg. B	1650 N. Arcturus Ave	Electric Meter - Acct # 44994-02367 Meter # 4527482	ECM 1; High Efficiency Lighting Upgrades Buildings,	1.4.1
Public Service - Bldg. C	1650 N. Arcturus Ave	Electric Meter - Acct # 53446-66301 Meter # 6526565	ECM 2: High Efficiency HVAC Upgrades, ECM 3: HVAC Controls Upgrade	1.4.1
FIRE STATION 48 Training	1700 BELCHER RD	Electric Meter - Acct # 21537-78362-A-75 Meter # 2525422	ECM 3: HVAC Controls Upgrade	1.4.1

1.2 Coverage – This Agreement includes all labor, travel, and expenses to perform the services and frequency described in Section 1.4. Services not explicitly described in Section 1.4, including CUSTOMER Guarantee Responsibilities, are not included. It is understood that it will be the responsibility of the CUSTOMER to investigate and correct any deficiencies not covered under the SUPPORT SERVICES AGREEMENT.

1.3 Incorporated Documents - The Energy Guarantee Special Provisions, Attachment F – Energy Guarantee, Attachment G – Schedule of Savings, and Exhibits to Attachment G are hereby made an integral part of this SUPPORT SERVICES AGREEMENT, insofar as same is applicable to the work of the Energy Auditing and Analysis Services, as if specifically written herein, and unless otherwise hereinafter specified.

1.4 M&V Offerings – In coordination with section 1.1, HONEYWELL will perform the Measurement & Verification (M&V) offerings checked below:

☒ **1.4.1 Retrofit Isolation Energy Audit for Option A Verified ECMs** – HONEYWELL will provide *Option A* energy guarantee auditing services as detailed in Attachment F, Attachment G, and Exhibits to Attachment G for specific Energy Conservation Measures (ECMs) identified in Attachment G and/or Exhibits to Attachment G as using *Option A* methodologies for Measurement and Verification. HONEYWELL will provide this one-time determination of the quantity of energy avoidance of the CUSTOMER'S facility for the First Guarantee Year only. Option A methods will be applied on an ECM specific basis (i.e., isolated to the retrofit) and Energy Cost Avoidance for a Guarantee Year will be quantified and summarized on an ECM basis. After the ECM's potential-to-save has been verified (section 1.3) HONEYWELL shall either stipulate the quantity of cost avoidance or determine the cost avoidance from engineering calculations and measurement of specific variables. Utility bill auditing (Option C) and reconciliation of Option A results to utility meter bill data is not included. The Option A retrofit isolation method was selected by the CUSTOMER to provide an economical reconciliation method and to minimize the interactive effects on the determination of cost avoidance due changes to the site or facilities from the baseline conditions.

HONEYWELL will provide a single (1) reporting submission of the determination of energy avoidance for the First Guarantee Year. The Energy Avoidance quantified in the First Guarantee Year will be stipulated as the annual Energy Avoidance for each Guarantee Year of the remaining contract term.

Term Coverage: Year 1 Verification of Potential to Perform; Year 2 to End of Term Verification of Potential to Perform, including trend data analysis, Energy avoidance stipulated to be same as Year 1 Results, Cost avoidance includes stipulated escalation rate as listed in Att G

Option A Audit Report section will be submitted: ☒ Annually

☐ **1.4.2 Energy Advisory Report–Level 1 (Not Applicable)**

☐ **1.4.3 Energy Advisory Report–Level 2 (Not Applicable)**

☐ **1.4.4 Retrofit Isolation Energy Audit for Option B Verified (Not Applicable)**

☐ **1.4.5 Utility Bill Energy Audit for Option C verified ECMs (Not Applicable)**

ATTACHMENT E
PAYMENT SCHEDULE

1. The following payment schedule has been established for the Work:

1.1 The payment schedule reflected below has been established for the Work. Payment shall be made net thirty (30) days of invoice date. If issues surrounding lack of payment are not remedied within ten (10) business days, HONEYWELL may suspend all Work until payment is made.

Total payments are: \$ 3,498,000

1.2 Percent Complete

<u>Percent of Project Complete</u>	<u>Amount Due</u>
Upon contract execution:	
30%	\$1,049,400
Monthly Progress Payments:	
65%	\$2,273,700
Upon Project Delivery and Acceptance:	
5%	\$174,900

2. The following payment schedule has been established for Support Services:

2.1 The first invoice will be issued upon completion of the Work and prior to commencement of Support Services and CUSTOMER shall pay or cause to be paid to HONEYWELL the full price for the Services as specified in Attachment D.

ATTACHMENT F ENERGY GUARANTEE

1. DEFINITIONS

When used in this Agreement, the following capitalized words shall have the meanings ascribed to them below:

“Baseline” is the description outlined in Attachment G, that defines the Baseline Usage Baseline Usage Unit Costs and facilities, systems, or equipment operations and characteristics, and environmental conditions that are to be used as the benchmark for determining cost avoidance.

“Baseline Period” is the period of time (specified in Section 1 of Attachment G) coordinated with the Baseline Usage for the purpose of utility bill analysis (see "Option C") to allow the comparison of a Guarantee Year against a Baseline. The Baseline Period may not always be one contiguous element of time and may be different from a 365-day annual period. Baseline information from non-contiguous elements of time may be normalized and assigned to a specified Baseline Period.

“Baseline Usage or Demand” the calculated or measured energy usage (demand) by a piece of equipment or a site prior to the implementation of the ECMs. Baseline physical conditions, such as equipment counts, nameplate data, and control strategies, will typically be determined through surveys, inspections, and/or metering at the site.

“Baseyear or Base Year” is equivalent to "Baseline" and may not always be one contiguous element of time and may be different from a 365-day annual period.

“Construction Phase or Period” The time period between the start of the project installation and the date of Final Project Acceptance.

“Construction Savings Period” The time period(s) between the completion of installation and start of providing substantial benefit to the CUSTOMER for each single specific ECM vs. the time of Final Project Acceptance.

“Commissioning Phase or Period” The phase, before Final Project Acceptance, when (1) the functional ability of the installed equipment or systems, and/or modified equipment or systems to operate in conformity with the design intent is documented and verified and (2) the potential-to-save of said equipment and systems is documented and verified for the first time.

“Cost Adjustments” means for each year following the first year of the Support Services, HONEYWELL, may, in its sole discretion increase the annual Operational Cost Savings in an amount matching the adjustment to the Support Services fee.

“Cost Avoidance” means the difference between the actual cost incurred during a selected time period versus what the cost *would have been* had the cost avoidance strategy not been implemented.

“Covered Systems and Equipment” as used in this Attachment F means the systems and equipment identified in Attachment A (Scope of Work) and Attachment D (Support Services).

“Energy and Operational Cost Avoidance Guarantee Practices” are those practices identified in Attachment G, intended to achieve avoided costs in energy and/or operating expenses.

“Energy Auditing” means the act of Measurement and Verification (M&V) to determine the Guarantee Savings.

“Energy Costs” may include the cost of electricity and fuels to operate HVAC equipment, facility mechanical and lighting systems, and energy management systems, and the cost of water and sewer usage, as applicable.

“ECM” The Energy Conservation Measure (ECM) is the installation of equipment or systems, or modification of equipment or systems as described in Attachment A, for the purpose of reducing utility (energy, water, etc.) consumption and demand and costs and/or non-utility (O&M, operational) costs.

“Facilities” shall mean those buildings where the energy and operational cost savings will be realized.

“F.E.M.P.” shall mean the Federal Energy Management Program of the U.S. Department of Energy and its Measurement and Verification Guidelines for Federal Energy Projects (DOE/GO-102000-0960, September 2000). The F.E.M.P. guidelines classify measurement & verification approaches as Option A, Option B, Option C, and Option D. The F.E.M.P. Guideline was developed based on the International Performance Measurement and

Verification Protocol (I.P.M.V.P.). The focus of the F.E.M.P. M&V Guidelines is on choosing the M&V option and method most appropriate for specific projects.

“Financing Document” refers to that document executed between CUSTOMER and a third-party financing entity providing for payments from CUSTOMER to third-party financing entity.

“Final Project Acceptance” refers to CUSTOMER acceptance of the installation of the ECMs as described in Attachment A.

“First Guarantee Year” is defined as the period beginning on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed and ending on the day prior to the first (1st) anniversary thereof.

“Guarantee Period” is defined as the period beginning on the first (1st) day of the First Guarantee Year and ending on the last day of the final Guarantee Year. Also known as the "Measurement and Verification Phase" or "Performance Period".

“Guarantee Year” is defined as the First Guarantee Year and each of the successive twelve (12) month periods commencing on the anniversary of the commencement of the First Guarantee Year throughout the Term of this Agreement.

“Guaranteed Savings” is defined as the amount of avoided Energy and Operational Costs necessary to pay for the cost of the Work and Support Services incurred by CUSTOMER in each Guarantee Year [as identified in Section 3.1 hereof].

“I.P.M.V.P.” International Performance Measurement and Verification Protocol (July 1997) provides an overview of current best practice techniques available for measurement & verification of performance contracts. This document is the basis for the F.E.M.P. protocol. The techniques are classified as Option A, Option B, Option C, and Option D.

“Measurement and Verification Plan” (M&V Plan) is defined as the plan providing details on how the Guarantee Savings will be verified.

“Measurement and Verification Phase or Period” The specific time period designated to demonstrate the savings and/or performance achieved from the energy retrofit. The savings will be verified based on the Measurement and Verification procedures as outlined in Attachment G. Also known as the "Guarantee Period" or "Performance Period".

“Operational Costs” commonly referred to as O&M costs, shall include the cost of operating and maintaining the Facilities, such as, but not limited to, the cost of inside and outside labor to repair and maintain affected systems and equipment, the cost of custodial supplies, the cost of replacement parts, the cost of deferred maintenance, the cost of lamp and ballast disposal, and the cost of new capital equipment.

“Option A” is a verification approach that is designed for projects in which the potential to perform needs to be verified, but the actual on-going, year over year performance can be stipulated based on the results of the “potential to perform and generate Savings” verification and engineering calculations. Option A involves procedures for verifying that:

- Baseline conditions have been properly defined; and
- The equipment and/or systems that were contracted to be installed have been installed; and
- The installed equipment components or systems, *at the end of the construction period*, meet the specifications of the contract in terms of quantity, quality, and rating; and
- The installed equipment is operating and performing in accordance with the specifications in the contract and meeting all functional tests.
- The “potential to perform and generate Savings” may involve pre-retrofit and post-retrofit measurements or may be based on manufacturer and vendor data.

“Option B” is for projects in which the potential to perform and generate Savings needs to be verified; and actual performance needs to be measured (verified). Option B involves procedures for verifying the same items as Option A plus verifying actual performance of equipment component or system. Performance verification techniques involve engineering calculations with metering and monitoring for verifying that:

- The installed equipment components or systems, each year of the performance period, meet the specifications of the contract in terms of quantity, quality and rating, and operation and functional performance.

“Option C” is also for projects in which the potential to perform needs to be verified and actual performance during the term of the contract needs to be verified. Option C involves procedures for verifying the same items as Option A plus verifying achieved energy savings during the term of the contract using whole building utility meter analysis performance verification techniques .

“Option D” is a verification technique where calibrated simulations of the baseline energy use and/or calibrated simulations of the post-installation energy consumption are used to measure Savings from the Energy Conservation Measures. Option D can involve measurements of energy use both before and after the Retrofit for specific equipment or energy end use as needed to calibrate the simulation program. Periodic inspections of the equipment may also be warranted. Energy consumption is calculated by developing calibrated hourly simulation models of whole-building energy use, or equipment sub-systems in the baseline mode and in the post-installation mode and comparing the simulated annual differences for either an average year or for conditions that correspond to the specific year during either the baseline or post-installation period.

“Performance Phase or Period” Also know as the "Guarantee Period" or "Measurement and Verification Period".

“Potential-to-Save” or **“Potential-to-Perform”** by an ECM is satisfied when a measure is properly installed and has the potential to generate predicted levels of energy cost avoidance. Verification of an ECM's "potential-to-save" is satisfied upon CUSTOMER's signing of Attachment J or an equivalent Delivery and Acceptance Certificate. Also see "Option A".

“Retrofit” is the work provided by HONEYWELL as defined by the “ECMs.”

“Retrofit and Support Costs” are the sum of the (i) the financing payments required to be made by CUSTOMER pursuant to the Financing Document; and (ii) the payments required to be made by CUSTOMER for Support Services.

“Retrofit Isolation Method (RIM) or Approach” is an M&V approach that verifies the Guarantee Savings using techniques that isolate the energy use of the ECM and affected systems separate from the energy use of the rest of the facility. This method is used to mitigate the interactive energy effects of changes made to the facility outside of HONEYWELL's control.

“Savings” is defined as avoided, defrayed, or reallocated costs.

“Support Services” is defined as the services to be provided by HONEYWELL and described in Attachment D.

“Term” shall have the meaning as defined in Section 2 hereof.

“Total Guarantee Year Savings” is defined as the summation of avoided Energy and Operational Costs realized by Facilities in each Guarantee Year as a result of the Retrofit and Support Services provided by HONEYWELL as well as Excess Savings, if any, carried forward from previous years.

2. **TERM AND TERMINATION**

2.1 Guarantee Term. The Term of this Guarantee Period shall commence on the first (1st) day of the month following the date of Final Project Acceptance of the Work installed pursuant to this Agreement and shall terminate at the end of the Guarantee Period unless terminated earlier as provided for herein. The Term of this Guarantee Period is defined in Section 1 of Attachment G.

2.2 Guarantee Termination. Given that both parties recognize that the energy and operational savings can only be achieved if the systems and equipment are properly maintained throughout the Guarantee Term, Customer agrees that the savings guarantee set forth herein is dependent upon the continuation of any existing Support Services Agreements by HONEYWELL or by OTHERS. Customer shall continue to contract with Honeywell for the Energy Auditing and Analysis Services set forth in this Agreement for the entire term of the savings guarantee term. Should this Agreement, or other existing Agreements covering systems and equipment not covered in this Agreement, be terminated (including, as applicable, the Support Services Agreement – Attachment D) in whole or in part for any reason prior to the end of the Term, the Guarantee for the Guarantee Year in which such termination

becomes effective shall be prorated as of the effective date of such termination, with a reasonable adjustment for seasonal fluctuations in Energy and Operational Costs, and the Guarantee for all subsequent Guarantee Years shall be null and void.

3. SAVINGS GUARANTEE

3.1 Guarantee Savings. HONEYWELL guarantees to CUSTOMER that the identified Facilities will realize the total energy and operational cost avoidance through the combined value of all ECMs over the Term of the contract as defined in Section 1 of Attachment G. In no event shall the savings guarantee provided herein exceed the total installation, support services, and financing costs for the Work under this Agreement.

3.1.1 Additional Savings Before Final Project Acceptance. All energy and operational cost avoidance realized by CUSTOMER that result from activities undertaken by HONEYWELL prior to Final Project Acceptance, including any utility rebates or other incentives earned as a direct result of the installed Energy Conservation Measures or Support Services provided by HONEYWELL, will be applied toward the Guaranteed Savings for the First Guarantee Year.

3.1.2 Additional Savings After Final Project Acceptance. Additional energy and/or operational cost avoidance, including any utility rebates or other incentives, that can be demonstrated, or earned, as a result of HONEYWELL's efforts that result in no additional costs to CUSTOMER beyond the costs identified in this Agreement will be included in the guarantee savings reconciliation report for the applicable Guarantee Year(s).

3.1.3 Cumulation of Savings. The Guaranteed Savings in each Guarantee Year are considered satisfied if the Total Guarantee Year Savings for such Guarantee Year equals or exceeds the Retrofit and Support Costs for such Guarantee Year, or the amount identified in Section 1 of Attachment G hereto.

3.1.4 Excess Savings. In the event that the Total Guarantee Year Savings in any Guarantee year exceed the Guaranteed Savings required for that Guarantee Year, such Excess Savings shall not be carried forward and applied against Guaranteed Savings shortfalls in any future Guarantee Year. In the event HONEYWELL has previously paid CUSTOMER for a Guaranteed Savings shortfall in a past Guarantee Year, pursuant to Section 3.1.5, then Excess Savings in current Guarantee Year shall be billed to CUSTOMER (but only up to any amounts previously paid by HONEYWELL for a shortfall and CUSTOMER shall pay HONEYWELL within thirty (30) days after receipt of such bill.

3.1.5 Savings Shortfalls. In the event that the Total Guarantee Year Savings in any Guarantee Year is less than the Guaranteed Savings required for that Guarantee Year, after giving credit for any Excess Savings carried forward from previous Guarantee Years pursuant to Section 3.1.4, HONEYWELL shall, upon receipt of written demand from CUSTOMER, compensate CUSTOMER the amount of any such shortfall, in such form as agreed to by the parties, limited by the value of the guarantee, within forty-five (45) days. Resulting compensation shall be HONEYWELL's sole liability for any shortfall in the Guaranteed Savings.

3.1.6 Aggregation of Savings. The parties mutually agree that the Guarantee Savings for this Agreement and the Guarantee Savings for all previous active Energy and Operational Guaranteed Cost Avoidance projects for this CUSTOMER shall be combined each year until the end of the original guarantee term for each project. Throughout the duration of the term for the each specific phase the total savings will be utilized as an aggregate in satisfying the sum of the respective guarantees.

3.2 Savings Reconciliation Documentation. HONEYWELL will provide CUSTOMER with a guarantee savings reconciliation report after each Guarantee Year. CUSTOMER will assist HONEYWELL in generating the savings reconciliation report by providing HONEYWELL with copies of all bills pertaining to Energy Costs within two (2) weeks following the CUSTOMER's receipt thereof, together with access to relevant records relating to such Energy Costs. CUSTOMER will also assist HONEYWELL by permitting access to any maintenance records, drawings, or other data deemed necessary by HONEYWELL to generate the said report. Data and calculations utilized by HONEYWELL in the preparation of its guarantee cost savings reconciliation report will be made available to CUSTOMER, along with such explanations and clarifications as CUSTOMER may reasonably request.

3.2.1 Acceptance of Guarantee Reconciliation. At the end of each Guarantee Year CUSTOMER will have forty-five (45) days to review the guarantee savings reconciliation report and provide written notice to HONEYWELL of non-acceptance of the Guarantee Savings for that Guarantee Year. Failure to provide written

notice within forty-five (45) days of the receipt of the guarantee savings reconciliation report will deem it accepted by CUSTOMER.

3.2.2 Guarantee Savings Reconciliation. Guarantee Savings will be determined in accordance with the methodology(s), operating parameters, formulas, and constants as described below and/or defined in Attachment G and/or additional methodologies defined by HONEYWELL that may be negotiated with CUSTOMER at any time.

For reconciliation of Guarantee Savings employing the method of utility bill analysis consistent with F.E.M.P. Option C:

Energy usage for the Facilities for such Guarantee Year will be summarized and compared with the adjusted Baseline Period energy usage for the Facilities through the use of energy accounting software. The difference between the adjusted Baseline Period energy usage and the Guarantee Year energy usage will be the Energy avoidance. The difference between the adjusted Baseline Period energy usage multiplied by the applicable energy rate as defined in Attachment G, and the Guarantee Year energy usage multiplied by the applicable energy rate as defined in Attachment G, will be used to calculate the Energy Cost avoidance. Energy Cost avoidance may also include, but are not limited to, Savings from demand charges, power factor correction, taxes, ratchet charges, rate changes and other utility tariff charges that are reduced as a result of the HONEYWELL involvement. A Baseline will be specified (Section 1 of Attachment G) for the purpose of utility bill analysis.

AND/OR for those energy audits employing the method consistent with I.P.M.V.P. and/or F.E.M.P. Options A and/or B:

For each ECM, HONEYWELL will employ an M&V Plan which may be comprised of any or all of the following elements:

1. Pre-retrofit model of energy consumption or demand
2. Post retrofit measured energy consumption
3. Post-retrofit measured demand and time-of-use
4. Post-retrofit energy and demand charges
5. Sampling plan
6. Stipulated Values

The value of the energy savings will be derived from the measured data and engineering formulae included herein, and the applicable energy charges as defined in Attachment G. In some cases, energy usage and/or demand will be calculated from measured variables that directly relate to energy consumption, demand or cost, such as, but not limited to, measured flow, temperature, current, voltage, enthalpy or pressure.

AND/OR for those energy audits employing the method consistent with I.P.M.V.P. and/or F.E.M.P. Option D:

For each Energy Conservation Measure, HONEYWELL will employ an M&V Plan that may be comprised of any or all of the following elements:

1. Pre-retrofit model of energy consumption or demand
2. Post retrofit model of energy consumption or demand
3. Post retrofit measured energy consumption
4. Post-retrofit measured demand and time-of-use
5. Post-retrofit energy and demand charges
6. Sampling plan
7. Stipulated Values

The value of the energy savings will be derived from a calibrated simulation of either the whole-building or of sub-systems in the building to determine the difference in the performance of the specific equipment being replaced. This method may entail as needed one-time measurements of the performance of the energy consuming systems in the building in order to calibrate the simulation model. Energy usage for the Facilities for such Guarantee Year will be derived through the use of simulation programs.

3.3 Operational Cost Avoidance. The agreed-upon Operational Cost Avoidance as described in Attachment G (Schedule of Savings) will be deemed realized upon execution of this Agreement and will begin to accrue on the date of the completion and acceptance of each Retrofit improvement or on the commencement date for Support Services (Article 6.2.3), whichever comes first. These Savings are representative of information provided by the CUSTOMER consisting of either whole or partial budgeted operational costs and as such, it is hereby understood and agreed that the CUSTOMER is wholly responsible for assuring that these budgeted Operational Costs are accurate and achievable. Implementation of this Agreement (including, as applicable, the Support Services

Agreement) allows for the reallocation or defrayal of such budgeted Operational Costs. The CUSTOMER acknowledges and agrees that, if it did not enter into this Agreement, it would have to take future steps to achieve the same ends as does the work included in Attachment A of this contract, and that, in doing so, it would incur operational costs of at least equal to the operational costs stated in Attachment G per year over the life of the contract. The CUSTOMER agrees that, by entering into this agreement, it will avoid future operational costs in at least this amount.

3.4 Base Year Adjustments. Baseline Period shall be adjusted to reflect: changes in occupied square footage; changes in energy-consuming equipment, including any repairs or improvements made to the equipment as part of this Agreement; changes in the Facilities; changes in Energy and Operational Cost Avoidance Guarantee Practices adversely affecting energy consumption and/or demonstrated operational changes; changes in weather between the Baseline Period and the Guarantee Year; and documented or otherwise conclusively established metering errors for the Baseline Period and/or any Guarantee Year adversely affecting energy usage measurement.

3.4.1 Facility Operational Changes. Except in the case of emergencies, CUSTOMER agrees it will not, without the consent of an Authorized Representative of HONEYWELL: make any significant deviations from the applicable Energy and Operational Cost Avoidance Guarantee Practices; put any system or item of equipment in a permanent "on" position, if the same would constitute a deviation from the applicable Energy and Operational Cost Avoidance Guarantee Practices; or assume manual control of any energy management system or item of equipment, if the same would constitute a deviation from the applicable Energy and Operational Cost Avoidance Guarantee Practices.

3.4.2 Hours and Practices. To achieve these energy savings, HONEYWELL and CUSTOMER agree upon the operating practices listed in Attachment G.

3.4.3 Activities and Events Adversely Impacting Savings. CUSTOMER shall promptly notify HONEYWELL of any activities known to CUSTOMER which adversely impact HONEYWELL's ability to realize the Guaranteed Savings and HONEYWELL shall be entitled to reduce its Guaranteed Savings by the amount of any such adverse impact to the extent that such adverse impact is beyond HONEYWELL's reasonable control.

3.4.3.1 If for any reason any facility and/or utility meter covered under this Agreement is materially unoccupied, closed, or discontinued, the CUSTOMER shall promptly notify HONEYWELL within fifteen (15) days of this change. The savings will be deemed realized for such facilities or meters and the Guarantee will be adjusted accordingly. HONEYWELL will provide written notice of such adjustment to the CUSTOMER.

3.5 Guarantee Adjustment. HONEYWELL's Guaranteed Savings obligations under this Agreement are contingent upon: (1) CUSTOMER following the Energy and Operational Cost Avoidance Guarantee Practices set forth herein and in Attachment G; (2) no alterations or additions being made by CUSTOMER to any of the Covered Systems and Equipment without prior notice to and agreement by HONEYWELL; (3) CUSTOMER sending all current utility bills to HONEYWELL within two (2) weeks after receipt by CUSTOMER, if CUSTOMER fails to provide current utility bills for a period of time in excess of six (6) months HONEYWELL will send CUSTOMER written notice that it must send HONEYWELL copies of the utility bills and if CUSTOMER still fails to comply within thirty (30) days, HONEYWELL may, at its sole discretion, deem the Guarantee Savings obligation met during that period and any successive periods, and (4) HONEYWELL's ability to render services not being impaired by circumstances beyond its control. To the extent CUSTOMER defaults in or fails to perform fully any of its obligations under this Agreement, HONEYWELL may, in its sole discretion, adjust its Guaranteed Savings obligation; provided, however, that no adjustment hereunder shall be effective unless HONEYWELL has first provided CUSTOMER with written notice of CUSTOMER's default(s) or failure(s) to perform and CUSTOMER has failed to cure its default(s) or failure(s) to perform within thirty (30) days after the date of such notice.

4. EXTENT OF CONTRACTUAL GUARANTEE

4.1 Status of the Honeywell Proposal. CUSTOMER's Request for Proposal, Honeywell's proposal and any other documents submitted by Honeywell to the Customer prior to negotiation of this Agreement are expressly excluded from and are not a part of this Agreement. The parties agree that although the Honeywell Proposal may have contained scope items, guarantee savings and M&V options other than those stated in this Agreement, the Scope of Work, Schedule of Savings, and M&V plan were developed jointly by the parties through negotiation. The CUSTOMER has chosen to purchase the scope of work set forth in Attachment A. The CUSTOMER accepts the Energy Guarantee and Schedule of Savings and agrees to the M&V plan set forth in Attachments F and G.

5. CUSTOMER RESPONSIBILITIES PROVISIONS

5.1. Equipment Subject to these Provisions. Equipment affecting the performance of the Energy Saving Guarantee includes (1) equipment provided as per Attachment A – Scope of Work, (2) modifications made to existing equipment as outlined in Attachment A – Scope of Work, (3) existing or new equipment not provided or modified under this Agreement but materially affected by the work provided per Attachment A – Scope of Work and consuming energy or water via utility meters covered by this Agreement.

5.2. CUSTOMER Maintenance and Replacement Responsibilities. During the term of this Agreement, for all equipment covered by the Energy Savings Guarantee of this Agreement, the CUSTOMER shall perform on-going maintenance and accomplish component replacement and equipment repairs in accordance with manufacturer's standards and practices and take all reasonable measures to insure the equipment is operating at full efficiency. Component replacement and equipment repairs must be accomplished in a timely fashion. Additionally, CUSTOMER shall insure such equipment is operated at all times in accordance with applicable manufacturer's specifications, HONEYWELL specifications, and the requirements of Attachments F and G contained herein. For all non-HONEYWELL maintenance actions, CUSTOMER shall document and make available to HONEYWELL maintenance dates and tasks accomplished, the start date and duration of all deficient equipment operation and the subsequent corrective action and/or repair dates. Failure of the CUSTOMER to operate the equipment per the specifications, repair any deficiencies in a timely manner, and perform the ongoing maintenance functions in accordance with the standards and practices during the Guarantee period will allow HONEYWELL to adjust the Guarantee accordingly.

5.2.1. CUSTOMER shall replace any vandalized or any failed equipment or component no longer warranted by HONEYWELL or the manufacturer, with equipment or components of equal or greater efficiency value than installed by HONEYWELL, for the full Guarantee Term.

5.2.2. CUSTOMER shall be responsible to investigate and correct any reported deficiencies not covered under this Support Services Agreement.

5.3. CUSTOMER Granted Access for Remote Diagnostics. CUSTOMER shall allow HONEYWELL to perform remote diagnostics on all equipment associated with the Energy Savings Guarantee for operational compliance with the manufacturer's specifications, and the requirements of Attachment D, Attachment F and Attachment G contained herein. CUSTOMER shall provide one or both of the following described in section 5.3.1 or 5.3.2, as applicable.

5.3.1. Dial-In Remote Access: CUSTOMER is responsible for implementation and costs for first-time installation and on-going maintenance and subscription fees for two (2) dedicated phone lines and two (2) modems at each front-end computer and one (1) dedicated phone line at each controller not hardwire connected to a front-end computer.

5.3.2. TCP/IP Remote Access: CUSTOMER is responsible for implementation and costs for remote Honeywell access through CUSTOMER's firewall(s) to the controllers and front-end computer(s) by one (1) Measurement and Verification Specialist including but not limited to a dedicated static IP address, installation and on-going maintenance and subscription and licensing fees for access hardware and software and one(1) station license dedicated to the remote user.

5.4. CUSTOMER Reporting Responsibilities. CUSTOMER shall report to HONEYWELL in writing within fifteen (15) days of the following changes or events. The Guarantee or the realized Cost Avoidance will be adjusted accordingly. Failure to do so will result in adjustment of the Guarantee.

- (1) any additional energy source or change in existing energy source or supplier that the CUSTOMER may negotiate during the term of this Guarantee and/or,
- (2) any material change in system or equipment status, including replacement of, addition to, or modification of existing energy and/or water consuming systems or equipment and/or,
- (3) any long term temporary (equal to or greater than 10 days) or permanent changes in operating schedules and/or,
- (4) any facility and/or utility meter covered under this Agreement that becomes materially unoccupied, closed, or discontinued and/or,
- (5) any material change in the payment schedule, such as due to refinancing or variable interest rate.

5.5. CUSTOMER Governmental Unit Reporting Responsibilities. CUSTOMER is solely responsible for reports to be submitted to the Department of Commerce, Public Utilities/Services Commission, or any other governmental agency or governmental unit.

5.6. CUSTOMER Provided Documentation. It will be the responsibility of the CUSTOMER to provide to the M&V specialist on a minimum monthly basis (unless noted otherwise):

- (1) Verification that equipment installed to perform the ECMs has been properly maintained, including but limited to provision of maintenance records.
- (2) Current status of the buildings (i.e., occupancy level and use, hours of operation, etc.).
- (3) Records of customer initiated changes in equipment setpoints, start/stop conditions, usage patterns.
- (4) Records of customer initiated changes in operation of mechanical systems, which may impact the ECMs.
- (5) Records regarding addition or deletion of equipment or building structure, which may impact the ECMs or the building energy consumption.
- (6) Copies of monthly utility bills and utility summary data on a *monthly* basis, and access to utility accounts through an authorization by the CUSTOMER to the Utility to allow the release of data to a Honeywell representative.

5.7. CUSTOMER Rebate Responsibilities. It is understood that all energy rebates and/or refunds are the result of an agreement between CUSTOMER and the utility company and HONEYWELL assumes no responsibility for obtaining said rebates and/or refunds. It is understood that said rebates and/or refunds are not included in the Guarantee.

5.8. Material Changes in Energy Units & Cost Avoidance.

5.8.1. Reported Material Changes. CUSTOMER shall deliver to HONEYWELL a written notice describing and explaining all actual or proposed Material Changes in the Premises or in the operations in the Premises and their anticipated effect on energy use. Said Notice must be delivered to HONEYWELL no less than seven (7) days before any actual or proposed Material Change occurs.

5.8.1.1. For purposes of this provision, a Material Change is defined as any change in the following which reasonably could be expected to increase or decrease energy used at the Premises by a value more than five percent (5%) of the Guaranteed energy Savings per utility meter or submeter:

- (1) manner of use of the Premises by Client;
- (2) hours of operation of any equipment or facilities or energy systems contained in the Premises;
- (3) occupancy of the Premises;
- (4) structure of the Premises;
- (5) types of equipment used in the Premises; or
- (6) conditions affecting energy use in the Premises.

5.8.2. Unreported Material Changes. In the absence of any material Changes in the Premises or in their operations, energy consumption and demand should not change from year to year. Therefore, if energy consumption and demand per utility meter or submeter for any month increases by five percent (5%) of the Guaranteed Savings per meter or more from the energy consumption and demand for the same month of the *preceding* contract year after adjustment for changes to climactic conditions, then such increase shall be deemed to have resulted from a Material Change, except where such increase is due to equipment malfunction, faulty repair or other acts of negligence by HONEYWELL.

5.8.3. Adjustments for Material Changes. In the event of any increase or decrease in energy consumption and demand for any month resulting from a reported or unreported Material Change, the amount of that increase shall be subtracted from or that decrease shall be added to the total energy consumption and demand for that month prior to the calculation of energy savings pursuant to Attachments F and G.

5.8.3.1. If a reported or unreported Material Change affected energy consumption and demand in the same calendar month in the preceding year, the *next preceding* contract year where a Material Change has not occurred will be used to compute the value of the Material Change and the energy savings for the current month.

--- End of Attachment F ---

ATTACHMENT G SCHEDULE OF SAVINGS

1. Schedule of Savings

The total energy and operational Cost Avoidance over the Term of the contract is equal to or greater than **\$6,119,618** as defined in the table below:

YEAR	ENERGY	OPERATIONAL	TOTAL
1	\$198,644	\$102,252	\$300,896
2	\$208,577	\$105,319	\$313,896
3	\$219,106	\$108,479	\$327,585
4	\$230,267	\$111,733	\$342,000
5	\$242,097	\$115,085	\$357,182
6	\$254,638	\$118,538	\$373,175
7	\$267,930	\$122,094	\$390,024
8	\$282,020	\$125,756	\$407,777
9	\$296,956	\$129,529	\$426,485
10	\$312,788	\$133,415	\$446,203
11	\$329,570	\$137,417	\$466,987
12	\$347,358	\$141,540	\$488,898
13	\$366,214	\$145,786	\$512,000
14	\$386,201	\$150,160	\$536,361
15	\$275,484	\$154,665	\$430,149
TOTALS	\$4,217,851	\$1,901,767	\$6,119,618

or the sum of the Retrofit and Support Costs for such Guarantee Year, whichever is less. Provided further, in no event shall the cost avoidance guarantee provided herein exceed the total installation, maintenance, and financing costs for the Work under this Agreement. Proforma budget neutral or positive cash flows are not guaranteed.

The Term of the Guarantee Performance Period is 15 years, subject to Attachment F.

1.1 Energy Savings. The first year amount of energy savings is the sum of the below listed ECMs. The schedule of savings does not include the absolute increase in energy use due to the implementation of measures to increase environmental comfort as directed by the customer, and other baseline adjustments (see 1.3.1.1). The Guaranteed savings are less than the projected savings, represented in Exhibits G-7 through G-8. The Cost Avoidance is based on the listed Energy and Operational Cost Avoidance Guarantee Practices contained in Section 1.3 herein.

Att A No. ^[a]	ECM Description	Electric Year 1	Non-Electric Year 1	Total Year 1
1	High Efficiency Lighting Upgrades - Buildings	\$68,348		\$68,348
2	High Efficiency HVAC Upgrades	\$8,772		\$8,772
3	HVAC Controls Automation Upgrade	\$65,369	\$33,093	\$98,463
4	Pool High Efficiency Motors	\$11,805		\$11,805
5	Cool Roof	\$11,256		\$11,256
Totals		\$165,551	\$33,093	\$198,644

[a] Att A: Attachment A, Scope of Work.

Customer agrees that the baseline for the unit cost of energy will be adjusted each year of the guarantee term. This annually adjusted value of energy unit cost is stipulated as the new baseline in each succeeding year. Customer agrees that baseline adjustment is stipulated to be an escalation of 6% per year for the unit cost of electric utilities and 0% per year for gas utilities used in the determination of cost avoidance each year.

1.2 Operational Cost Savings. The annual guarantee of operational cost avoidance strategies are listed below. The Savings are based on the listed Energy and Operational Cost Avoidance Guarantee Practices contained in Section 1.3 herein. The operational cost savings described below and identified in Section 1 are deemed satisfied upon contract execution. The Customer acknowledges and agrees that, if it did not enter into this agreement, it would have to take future steps to achieve the same ends as does the work included in Attachment A of this contract, and that, in doing so, it would incur operational costs of at least the amount per year over the life of the performance period as presented below and in the Schedule of Savings. The Customer agrees that, by entering into this agreement, it will avoid future operational costs in at least these amounts.

Further, the Customer acknowledges that operational cost savings categorized as capital cost avoidance are part of, or are causally connected to scope of work specified in Attachment A (i.e., the ECMs being implemented), and are documented by industry standard engineering methodologies acceptable to the Customer.

Customer agrees that the baseline for the unit cost of operations will be adjusted each year of the guarantee term. This annually adjusted value of operational unit cost is stipulated as the new baseline in each succeeding year. Customer agrees that baseline adjustment is stipulated to be an escalation of 3% per year for operational costs used in the determination of operational cost avoidance each year.

The operational cost avoidance values were identified, reviewed, and agreed to by the Evaluation Committee for this project, including Margie Simmons (Finance Director), Rick Carnley (Asst Director, General Services), Chuck Warrington (Managing Director, Clearwater Gas), Brian Langille (Gas Supply Engineer), Mike Quillen (Engineering Director), and Kevin Dunbar (Director of Parks and Recreation).

OSD#	Operational Savings Description (OSD)	Att. A Ref.	Cost Avoidance Category (O&M, Capital,)	1 st Year Cost Avoidance
1	High Efficiency Lighting Upgrades - Buildings	1	O&M	\$6,344
2	High Efficiency HVAC Upgrades	2	O&M	\$84,189
3	HVAC Controls Automation Upgrade	3	O&M	\$0
5	Cool Roof	5	O&M	\$11,719
Total				\$102,252

[a] O&M: operations and maintenance.

1.3 Energy and Operational Cost Avoidance Guarantee Practices:

1.3.1 BASELINE Operating Parameters are the facility(s) and system(s) operations measured and/or observed before commencement of the Work. The data summarized will be used in the calculation of the baseline energy consumption and/or demand and for calculating baseline adjustments for changes in facility operation that occur during the Guarantee Period. HONEYWELL and CUSTOMER agree that the operating parameters specified in this section are representative of equipment operating characteristics during the Baseline Period specified in this Agreement. The following data was collected with the assistance of Rick Carnley, Assistant Director, General Services.

The Electrical Baseline Period is defined as June 2008 to May of 2009.

The Electrical Baseline Period is defined as May 2008 to April of 2009.

The Contractual Baseline consists of the Baseline Conditions and Baseline Operating Parameters collected from the Baseline Period and modified by Baseline Adjustments, as necessary, as defined herein and by the Exhibits to Attachment G.

Baseline operating parameters are stipulated in <Baseline Operating Parameters> attached hereto and incorporated herein as Exhibit G-1. See Energy Savings Calculations, attached hereto and incorporated herein as Exhibit G-7 through G-8 for further information regarding stipulated baseline parameters.

1.3.1.1 Pre-Retrofit Baseline Adjustments: The following describes the adjustments that have been made during the determination of the Baseline, prior to the determination of the projected cost avoidance and the guaranteed cost avoidance. The adjustments are due to those projects included in Attachment A, or other known events, which increase energy use prior to the application of the ECMs.

The parameters, methodologies, and/or calculations used in determining the Pre-Retrofit Baseline Adjustments are incorporated herein as Exhibit G-4.

Routine and non-routine future post-retrofit baseline adjustments are discussed in section 1.4.4.

1.3.2 GUARANTEE PERIOD Operating Parameters of the facility(s) and system(s) after completion of Work. The Customer agrees to operate, or cause to effect the operation of the Work in such manner that is in accordance with the Guaranteed Period Operating Parameters. The data summarized will be used in the calculation of the post-retrofit energy consumption and/or demand. HONEYWELL and CUSTOMER agree that the proposed operating parameters specified in this section are representative of equipment operating characteristics during the Guarantee Period specified in this Agreement. And, further, that they are agreed to be reasonable and may be used in the calculation of the cost avoidance, as if the site is actually operating per the parameters outlined exhibit G-2.

Guarantee Period operating parameters are stipulated in Guarantee Period Operating Parameters attached hereto and incorporated herein as Exhibit G-2.

1.3.2.1 Post-Retrofit Baseline Adjustments: The following describes known future events, events not captured in section 1.3.1.1., which generally increase energy use compared to the Baseline Period. This energy use is added to the baseline to determine an adjusted baseline against which the energy and energy cost avoidance will be determined. Energy increases are variable and dependant on the actual use of equipment.

The known post retrofit adjustments to the baseline conditions used in the determination of energy and energy cost avoidance are included in Exhibit G and attached hereto and incorporated herein as Exhibit G-5.

1.3.3 Operational Cost Avoidance: The following parameters, methodologies, and/or calculations were used in determining the Operational Costs and/or avoided costs due to the Retrofit and Support Services implementation and are agreed to be reasonable and may be used in the calculation of the cost avoidance.

Operational cost avoidance methodology and/or calculation details are attached hereto and are incorporated herein as the exhibits outlined in the following table.

OSD #	Operational Savings Description	Cost Avoidance Methodology	Exhibit
1	High Efficiency Lighting Upgrades - Buildings	Reduction of yearly lamps and ballasts replacement & calculation of estimated Labor & Material due to extended material life.	G-9
2	High Efficiency HVAC Upgrades	HVAC and pool motors repair/replacement costs, preventative maintenance, etc.	G-9
3	Cool Roof	Estimated roof repair costs	G-9
The operational savings measures and which budget line items or invoice categories that are affected, are cross-referenced in each Operational Savings Cost Avoidance Detail in the Exhibits.			

[a] O&M: operations and maintenance.

1.3.4 Other energy and operating savings measures: The following measures were not included in the guarantee but may be used during the term in the determination of realized cost avoidance, or calculation of performance versus the guarantee, or to show value-add to the Customer:

Att A No.	Description of Attachment A Tasks not included in Sections 1.1 or 1.2 above
1	Reduced maintenance and labor costs for lighting upgrades

1.4 Guarantee Savings Measurement and Verification Plan

1.4.1 Measurement and Verification Methodology(s):

Energy Conservation Measure	Electric Savings Verification Method	Fuel Savings Verification Method	Other Utility Savings Verification Method
-----------------------------	--------------------------------------	----------------------------------	---

High Efficiency Lighting Upgrades - Buildings	Option A/stipulated Burn Hours	N/A	N/A
High Efficiency HVAC Upgrades	OPTION A / Stipulated Manufactures' data	OPTION A / Stipulated Manufactures' data A	N/A
HVAC Controls Automation Upgrade	OPTION A / Stipulated w/ run hours & Manufactures' data	OPTION A / Stipulated w/ run hours & Manufactures' data	
Pool High Efficiency Motors	OPTION A w/ Stipulated Manufactures' data	OPTION A w/ Stipulated Manufactures' data	N/A
Cool Roof	OPTION A w/ Stipulated Manufactures' data	OPTION A w/ Stipulated Manufactures' data	

A description of M&V options applicable to this program are included in the Measurement and Verification Options Matrix, attached hereto and incorporated herein as Exhibit G-6.

1.4.2 Energy Cost Avoidance: The following describes the Measurement and Verification procedures, formulas, and stipulated values which may be used in the calculation of the energy cost avoidance. The calculation of energy cost avoidance is based upon the utility rate paid during the Guarantee Year, or the Baseline Period utility rate, whichever produces the higher cost avoidance and/or as defined heretofore. Energy cost avoidance may also include, but is not limited to, Savings from demand charges, power factor correction, taxes, ratchet charges, rate changes and other utility tariff charges that are reduced as a result of the HONEYWELL involvement. The Customer is responsible for procuring a ratchet reset from the local utility company, as applicable. In case any ratchets are not reset the following adjustment will be made - energy cost avoidance will be calculated as if the ratchet has been reset at the end of the installation of electrical demand reducing ECMs.

1.4.2.1 High Efficiency Lighting Upgrades - Buildings

Honeywell will replace the existing lighting in the buildings listed in **Attachment A** with higher efficiency fixtures. The existing light fixtures will have a representative sample measured for power consumption levels. The results of the measurement will be compared against the power consumption utilized in the energy savings calculations for accuracy. The post retrofit fixtures power consumption will also be have a representative sample measured. The difference in the post retrofit fixture power consumption and pre retrofit power consumption levels will be multiplied by the annual run time hours for each fixture. The annual run time hours will be stipulated for the duration of the contract.

1.4.2.2 High Efficiency HVAC Upgrades

Honeywell will replace HVAC units in five (5) buildings. These units are past their expected useful life. The energy efficiency of the new units will be much greater than the existing units. The calculations assume that the space loads served by these units during the baseline period will be similar to future space loads at the facility resulting in similar load factors.

Gas Division Offices	Public Service, Traffic shop, E
Long Center (UPARC)	Solid Waste, Transfer Station Scale house
City Hall - general services	

The current unit energy efficiencies will be stipulated for the purpose of determining cost avoidance. The energy efficiencies of the post retrofit units will also be stipulated. Units being replaced shall be done in replaced in accordance with the Progress Energy – HVAC Check Chiller/Unitary rebate Program. The energy savings is defined in **Exhibit G-8, "Engineered Cost Avoidance Calculations"**.

1.4.2.3 HVAC Controls Automation Upgrade

Honeywell will install new HVAC controls in various buildings in the Gadsden City as defined in **Attachment A**. Occupied and Unoccupied temperature set points and time of day scheduling will be

programmed into the new control system to generate energy savings as defined in **Exhibit G-8, “Engineered Cost Avoidance Calculations”**. Energy cost avoidance was calculated using eQuest, an engineering modeling program supported by the US Department of Energy and weather bin analyses. Hours of operation and temperature set points will be stipulated for the duration of the contract.

1.4.2.4 Pool High Efficiency Motors

Pools identified in attachment A will realize energy savings from the following measures.

- Installation of New Premium Efficiency motors for main pool circulating pumps
- Installation of variable frequency drives to minimize over pumping issue.
- Installation of time clocks to minimize run time in off season for seasonal pools.

The strategies outlined above will generate energy savings as defined in **Exhibit G-8, “Engineered Cost Avoidance Calculations”**.

1.4.2.5 Cool Roof

The Long Center Roof improvements identified in attachment A will realize energy savings from the following measures.

- Installation of polyurethane foam insulated roofing system.
- Use of high reflectivity roof coating to reduce absorption of heat from solar radiance.

The strategies outlined above will generate energy savings as defined in **Exhibit G-8, “Engineered Cost Avoidance Calculations”**.

1.4.3 Specific ECM M&V Plan(s): Specific M&V plans are displayed in Exhibit G-6.

1.4.4 Constants: The constants and/or stipulated values defined in the Exhibits to Attachment G, or as defined herein, are mutually agreed to by the Customer to be reasonable and may be used in the determination of the cost avoidance.

1.4.5 Exhibits and Schedules: The following Exhibits are attached hereto and are made a part of this Agreement by reference.

1.4.5.1 Exhibits

Exhibit G-1	Baseline Operating Parameters
Exhibit G-2	Guarantee Period Operating Parameters
Exhibit G-3	Utility Rates
Exhibit G-4	Pre-Retrofit Baseline Adjustments
Exhibit G-5	Known Future Post-Retrofit Baseline Adjustments
Exhibit G-6	Site Specific Measurement & Verification Plan Details
Exhibit G-7	Lighting Details
Exhibit G-8	Engineered Cost Avoidance Calculations
Exhibit G-9	Operations and Maintenance Savings

June 08 - May 09

Building	Address	Account #	kWh	Cost
Police-Countryside Station	2851 MCMULLEN BOOTH ROAD N.	04802-24708	253,061	\$ 24,909
General Services-MSB	100 S MYRTLE AVE	11151-99277	2,144,400	\$ 210,921
Fire Stations-Station 48/Training	1700 BELCHER ROAD N.	21539-22379	25,440	\$ 3,036
Library-N. Greenwood Library	905 N. M.L.K. JR. AVE	34597-89188	323,199	\$ 38,829
Gas -Gas Sales Office	400 N. MYRTLE AVE.	44802-36337	133,873	\$ 14,438
Public Service-Bldg. A	1650 N ARCTURAS AVE	44986-82316	85,828	\$ 9,539
General Services-B & M Shops	1900A GRAND AVE.	44989-70339	71,182	\$ 7,863
General Services-Fleet Maintenance	1900 GRAND AVENUE	44991-14344	649,640	\$ 68,167
Public Service-Bldg. B	1650 N ARCTURAS AVE	44994-02367	84,769	\$ 10,096
Public Works - E	1650 N ARCTURAS AVE	52340-17027	51,345	\$ 6,430
Library-Main Library	100 N. OSCEOLA AVENUE	52781-54167	3,068,600	\$ 313,085
Public Services-Traffic shop (Auditor Bldg)	1650 N ARCTURAS AVE	53446-66301	60,649	\$ 6,930
Police-Main Station	645 PIERCE ST.	56889-09252	2,154,640	\$ 207,226
General Services - City Hall	112 OSCEOLA AVENUE S.	62486-80959	1,019,040	\$ 97,542
Police-Countryside PD Impound Lot	2851 N. MCMULLEN BOOTH RD	63706-86129	14,459	\$ 1,878
Traffic Engineering-Parking/Garden Ave Garage	28 N GARDEN AVE	64093-96118	211,040	\$ 20,302
Gas Service Warehouse	400 MYRTLE AVENUE S.	66213-78832	274,398	\$ 29,208
Gas - Metershop				
Gas - Gas Division Offices				
Solid Waste-Transfer Station & Scale House	1005 OLD COACHMAN ROAD	76419-23307	20,444	\$ 29,208
Pks & Rec-Long Center Aquacenter (Auditor Bldg)	1501 N BELCHER ROAD	91948-11052	2,527,700	\$ 249,901
Pks & Rec-Long Center UPARC (Auditor Bldg)				
Library-Beach Library	100 N. OSCEOLA AVENUE	96640-42272	203,014	\$ 21,785
Police-Beach Substation	700 BAYWAY BLVD. (CLW BCH)	97583-37780	130,640	\$ 14,759
			13,507,361	\$ 1,386,053



ELECTRIC BILLING HISTORY

Customer Name: CITY OF CLEARWATER	
Location: 1005 NE COACHMAN RD *OFC CLEARWATER FL 33765 SOLID WASTE TRANSFER STATION OFFICE	
Account Number: 76419-23307	Service Base: 39300426
Service Base Description:	Metered Service

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/08/09	30	60	1,636		55					\$199.92	12.22¢	\$217.43	13.29¢
04/08/09	29	60	1,405		48					\$173.19	12.33¢	\$188.36	13.41¢
03/10/09	29	60	1,079		37					\$150.07	13.91¢	\$163.21	15.13¢
02/09/09	31	60	1,262		41					\$173.72	13.77¢	\$188.93	14.97¢
01/09/09	31	60	1,260		41					\$173.46	13.77¢	\$188.65	14.97¢
12/09/08	32	60	1,264		40					\$142.49	11.27¢	\$154.96	12.26¢
11/07/08	29	60	1,523		53					\$169.52	11.13¢	\$184.37	12.11¢
10/09/08	30	60	2,257		75					\$246.09	10.90¢	\$267.64	11.86¢
09/09/08	33	60	2,600		79					\$281.87	10.84¢	\$306.56	11.79¢
08/07/08	30	60	2,135		71					\$233.37	10.93¢	\$253.81	11.89¢
07/08/08	32	60	2,077		65					\$221.81	10.68¢	\$241.24	11.61¢
06/06/08	30	60	1,946		65					\$208.49	10.71¢	\$226.76	11.65¢
05/07/08	29	60	1,383		48					\$151.24	10.94¢	\$164.49	11.89¢
04/08/08	32	60	1,299		41					\$142.71	10.99¢	\$155.21	11.95¢
03/07/08	29	60	1,050		36					\$117.39	11.18¢	\$127.67	12.16¢
02/07/08	29	60	1,126		39					\$125.11	11.11¢	\$136.07	12.08¢
01/09/08	30	60	1,256		42					\$138.33	11.01¢	\$150.45	11.98¢
12/10/07	33	60	1,316		40					\$147.43	11.20¢	\$160.34	12.18¢
11/07/07	29	60	1,584		55					\$175.29	11.07¢	\$190.64	12.04¢
10/09/07	32	60	1,990		62					\$217.50	10.93¢	\$236.55	11.89¢
09/07/07	30	60	1,975		66					\$215.95	10.93¢	\$234.87	11.89¢
08/08/07	30	60	1,909		64					\$209.08	10.95¢	\$227.39	11.91¢
07/09/07	32	60	1,970		62					\$215.42	10.94¢	\$234.28	11.89¢
06/07/07	30	60	1,580		53					\$174.88	11.07¢	\$190.19	12.04¢
Total	731		38882		1274					\$ 4,404.33	275	\$ 4,790.07	299
Maximum	33		2600		79					\$ 281.87	14	\$ 306.56	15
Average	30.5		1620.1		53.1	#DIV/0!		#DIV/0!		\$ 183.51	11.4	\$ 199.59	12.5
Minimum	29		1050		36					\$ 117.39	11	\$ 127.67	12



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	1501 N BELCHER RD *LITE CLEARWATER FL 33765		LONG CENTER
Account Number:	91948-11052	Service Base:	56512280
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/07/09	28	53	164,910	56,120	5,890	403	403	61%		\$16,432.27	9.96¢	\$18,115.15	10.98¢
04/09/09	31	53	168,590	49,680	5,438	375	368	60%		\$16,176.94	9.60¢	\$17,837.46	10.58¢
03/09/09	31	53	143,060	38,640	4,615	331	324	58%		\$15,321.30	10.71¢	\$16,921.38	11.83¢
02/06/09	29	53	137,540	39,560	4,743	329	322	60%		\$14,933.82	10.86¢	\$16,499.97	12.00¢
01/08/09	30	53	158,700	41,630	5,290	375	370	59%		\$16,946.61	10.68¢	\$18,689.02	11.78¢
12/09/08	32	53	173,420	46,690	5,419	508	508	44%		\$14,946.65	8.62¢	\$16,481.23	9.50¢
11/07/08	29	53	245,180	74,750	8,454	508	508	69%		\$20,863.65	8.51¢	\$22,916.37	9.35¢
10/09/08	31	53	262,200	79,810	8,458	508	508	69%		\$22,173.80	8.46¢	\$24,341.25	9.28¢
09/08/08	33	53	279,220	84,870	8,461	508	508	69%		\$23,483.95	8.41¢	\$25,766.62	9.23¢
08/06/08	30	53	261,050	85,560	8,702	518	518	70%		\$22,478.03	8.61¢	\$24,672.60	9.45¢
07/07/08	32	53	276,000	83,260	8,625	506	506	71%		\$22,341.67	8.09¢	\$24,518.84	8.88¢
06/05/08	30	53	257,830	79,120	8,594	513	506	70%		\$21,075.16	8.17¢	\$23,141.40	8.98¢
05/06/08	27	53	171,580	54,280	6,355	423	423	63%		\$14,433.70	8.41¢	\$15,918.21	9.28¢
04/09/08	33	53	195,500	55,660	5,924	423	423	58%		\$15,883.16	8.12¢	\$17,494.63	8.95¢
03/07/08	25	53	133,400	38,180	5,336	426	382	52%		\$11,237.28	8.42¢	\$12,441.83	9.33¢
02/11/08	33	53	161,000	46,000	4,879	382	373	53%		\$13,190.99	8.19¢	\$14,566.65	9.05¢
01/09/08	33	53	168,360	42,320	5,102	414	400	51%		\$13,512.49	8.03¢	\$14,916.31	8.86¢
12/07/07	32	53	173,650	48,990	5,427	396	373	57%		\$14,651.87	8.44¢	\$16,161.84	9.31¢
11/05/07	30	53	231,380	72,910	7,713	483	483	67%		\$19,920.08	8.61¢	\$21,891.49	9.46¢
10/06/07	29	53	248,400	82,800	8,566	531	531	67%		\$21,709.57	8.74¢	\$23,837.73	9.60¢
09/07/07	30	53	284,050	89,700	9,468	538	538	73%		\$24,274.76	8.55¢	\$26,627.60	9.37¢
08/08/07	30	53	276,690	90,390	9,223	550	550	70%		\$23,923.27	8.65¢	\$26,245.33	9.49¢
07/09/07	28	53	250,930	77,510	8,962	529	529	71%		\$21,521.97	8.58¢	\$23,633.69	9.42¢
06/11/07	32	53	238,280	74,750	7,446	513	513	60%		\$20,546.06	8.62¢	\$22,572.30	9.47¢
Total	728		5060920		167090	10990		1504%		\$ 441,979.05	212	\$ 486,208.90	233
Maximum	33		284050		9468	550		73%		\$ 24,274.76	11	\$ 26,627.60	12
Average	30.3		210871.7		6962.1	457.9		63%		\$ 18,415.79	8.8	\$ 20,258.70	9.7
Minimum	25		133400		4615	329		44%		\$ 11,237.28	8	\$ 12,441.83	9



Customer Name:	CITY OF CLEARWATER		
Location:	69 BAY ESPLANADE *REC, & LIBRARY CLEARWATER FL 33767		
Account Number:	96640-42272	Service Base:	61803612
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

[illegible]



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	700 BAYWAY BLVD, POLICE CLEARWATER FL 33767		
Account Number:	97583-37780	Service Base:	25798004
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/13/09	28	100	7,831	2,206	280					\$886.13	11.32¢	\$963.73	12.31¢
04/15/09	33	100	7,596	1,742	230					\$805.52	10.60¢	\$876.05	11.53¢
03/13/09	29	100	6,621	1,653	228					\$810.18	12.24¢	\$881.12	13.31¢
02/12/09	29	100	9,984	2,508	344					\$1,215.06	12.17¢	\$1,321.47	13.24¢
01/14/09	33	100	8,515	1,650	258					\$968.16	11.37¢	\$1,052.94	12.37¢
12/12/08	30	100	8,824	2,084	294					\$841.23	9.53¢	\$914.90	10.37¢
11/12/08	30	100	9,390	2,607	313					\$946.60	10.08¢	\$1,029.49	10.96¢
10/13/08	31	100	13,477	3,685	435					\$1,343.36	9.97¢	\$1,461.00	10.84¢
09/12/08	31	100	15,123	4,144	488					\$1,506.51	9.96¢	\$1,638.47	10.83¢
08/12/08	32	100	15,757	4,261	492					\$1,561.29	9.91¢	\$1,698.04	10.78¢
07/11/08	30	100	14,041	3,920	468					\$1,377.57	9.81¢	\$1,498.23	10.67¢
06/11/08	30	100	13,481	3,653	449					\$1,308.72	9.71¢	\$1,423.35	10.56¢
05/12/08	28	100	8,699	2,293	311					\$842.19	9.68¢	\$915.95	10.53¢
04/14/08	32	100	9,709	2,423	303					\$919.97	9.48¢	\$1,000.55	10.31¢
03/13/08	28	100	8,880	2,199	317					\$840.64	9.47¢	\$914.27	10.30¢
02/14/08	31	100	9,896	2,516	319					\$943.47	9.53¢	\$1,026.11	10.37¢
01/14/08	33	100	9,234	2,067	280					\$844.46	9.15¢	\$918.42	9.95¢
12/12/07	33	100	8,451	1,784	256					\$778.50	9.21¢	\$846.69	10.02¢
11/09/07	29	100	9,367	2,671	323					\$953.70	10.18¢	\$1,037.23	11.07¢
10/11/07	29	100	11,487	3,202	396					\$1,155.77	10.06¢	\$1,257.01	10.94¢
09/12/07	29	100	11,846	3,216	408					\$1,179.86	9.96¢	\$1,283.20	10.83¢
08/14/07	32	100	13,960	3,746	436					\$1,381.43	9.90¢	\$1,502.43	10.76¢
07/13/07	29	100	11,799	3,167	407					\$1,170.40	9.92¢	\$1,272.91	10.79¢
06/14/07	30	100	9,737	2,682	325					\$978.04	10.04¢	\$1,063.71	10.92¢
Total	729		253705		8362					\$ 25,558.76	243	\$ 27,797.27	265
Maximum	33		15757		492					\$ 1,561.29	12	\$ 1,698.04	13
Average	30.4		10571.0		348.4	#DIV/0!		#DIV/0!		\$ 1,064.95	10.1	\$ 1,158.22	11.0
Minimum	28		6621		228					\$ 778.50	9	\$ 846.69	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	2851 N MCMULLEN BOOTH RD, COUNTRYSIDE POLICE CLEARWATER FL 33761		
Account Number:	04802-24708	Service Base:	45252532
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/29/09	30	53	19,913	5,061	664	40	36	69%		\$1,852.65	9.30¢	\$2,014.88	10.12¢
04/29/09	30	53	17,547	4,629	585	38	35	64%		\$1,656.40	9.44¢	\$1,801.45	10.27¢
03/30/09	31	53	19,259	4,368	621	50	50	52%		\$1,812.63	9.41¢	\$1,971.36	10.24¢
02/27/09	29	53	19,825	4,949	684	51	51	56%		\$2,132.07	10.75¢	\$2,318.78	11.70¢
01/29/09	29	53	19,342	4,616	667	46	44	60%		\$2,046.78	10.58¢	\$2,226.01	11.51¢
12/31/08	35	53	22,792	5,169	651	39	38	70%		\$2,338.27	10.26¢	\$2,543.04	11.16¢
11/26/08	29	53	18,880	4,762	651	41	40	66%		\$1,568.72	8.31¢	\$1,706.09	9.04¢
10/28/08	29	53	21,060	5,813	726	39	39	78%		\$1,755.49	8.34¢	\$1,909.21	9.07¢
09/29/08	32	53	24,600	6,279	769	47	47	68%		\$2,023.07	8.22¢	\$2,200.22	8.94¢
08/28/08	30	53	22,613	6,347	754	42	42	75%		\$1,890.27	8.36¢	\$2,055.84	9.09¢
07/29/08	33	53	25,011	6,438	758	41	39	77%		\$2,029.32	8.11¢	\$2,207.06	8.82¢
06/26/08	29	53	22,219	6,308	766	42	42	76%		\$1,797.31	8.09¢	\$1,954.73	8.80¢
05/28/08	29	53	19,981	5,222	689	39	39	74%		\$1,597.49	8.00¢	\$1,737.41	8.70¢
04/29/08	32	53	19,365	4,920	605	35	34	72%		\$1,527.92	7.89¢	\$1,661.75	8.58¢
03/28/08	30	53	16,877	4,021	563	37	34	63%		\$1,337.00	7.92¢	\$1,454.11	8.62¢
02/27/08	29	53	16,126	3,894	556	36	36	64%		\$1,291.44	8.01¢	\$1,404.55	8.71¢
01/29/08	29	53	15,379	3,537	530	32	31	69%		\$1,211.29	7.88¢	\$1,317.39	8.57¢
12/31/07	32	53	18,539	3,950	579	35	35	69%		\$1,429.37	7.71¢	\$1,554.57	8.39¢
11/29/07	34	53	20,208	4,669	594	40	39	62%		\$1,639.48	8.11¢	\$1,783.08	8.82¢
10/26/07	29	53	22,904	6,500	790	42	42	78%		\$1,922.87	8.40¢	\$2,091.29	9.13¢
09/27/07	30	53	24,650	6,621	822	42	42	82%		\$2,033.76	8.25¢	\$2,211.90	8.97¢
08/28/07	29	53	24,433	6,803	843	44	44	80%		\$2,039.14	8.35¢	\$2,217.75	9.08¢
07/30/07	33	53	29,259	7,296	887	47	45	79%		\$2,360.71	8.07¢	\$2,567.48	8.78¢
06/27/07	29	53	22,822	6,398	787	47	46	70%		\$1,926.16	8.44¢	\$2,094.87	9.18¢
Total	731		503604		16540	992		1672%		\$ 43,219.61	206	\$ 47,004.82	224
Maximum	35		29259		887	51		82%		\$ 2,360.71	11	\$ 2,567.48	12
Average	30.5		20983.5		689.2	41.3		70%		\$ 1,800.82	8.6	\$ 1,958.53	9.3
Minimum	29		15379		530	32		52%		\$ 1,211.29	8	\$ 1,317.39	8



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	100 S MYRTLE AVE CLEARWATER FL 33756		MSB
Account Number:	11151-99277	Service Base:	43522830
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	29	53	169,900	57,100	5,859	372	372	66%		\$16,726.88	9.85¢	\$18,191.64	10.71¢
04/13/09	31	53	160,900	42,500	5,190	363	359	60%		\$15,167.96	9.43¢	\$16,496.20	10.25¢
03/13/09	30	53	148,800	38,000	4,960	335	275	62%		\$15,606.56	10.49¢	\$16,973.22	11.41¢
02/11/09	29	53	147,700	36,900	5,093	328	301	65%		\$15,508.78	10.50¢	\$16,866.87	11.42¢
01/13/09	33	53	162,900	36,100	4,936	335	306	61%		\$16,693.79	10.25¢	\$18,155.66	11.15¢
12/11/08	31	53	156,800	38,500	5,058	382	340	55%		\$12,899.05	8.23¢	\$14,028.60	8.95¢
11/10/08	31	53	170,600	51,500	5,503	379	379	61%		\$14,586.29	8.55¢	\$15,863.60	9.30¢
10/10/08	29	53	185,700	62,200	6,403	435	435	61%		\$16,317.18	8.79¢	\$17,746.06	9.56¢
09/11/08	31	53	211,900	68,800	6,835	433	433	66%		\$18,257.13	8.62¢	\$19,856.27	9.37¢
08/11/08	32	53	217,900	68,100	6,809	423	419	67%		\$18,526.07	8.50¢	\$20,148.77	9.25¢
07/10/08	30	53	203,400	64,500	6,780	400	400	71%		\$16,743.46	8.23¢	\$18,210.02	8.95¢
06/10/08	32	53	207,900	62,400	6,497	405	405	67%		\$16,903.35	8.13¢	\$18,383.91	8.84¢
05/09/08	28	53	173,500	56,700	6,196	388	388	67%		\$14,549.93	8.39¢	\$15,824.35	9.12¢
04/11/08	30	53	175,000	49,100	5,833	389	389	62%		\$14,217.28	8.12¢	\$15,462.57	8.84¢
03/12/08	28	53	153,500	38,400	5,482	364	334	63%		\$12,214.14	7.96¢	\$13,283.97	8.65¢
02/13/08	29	53	156,800	39,100	5,407	364	325	62%		\$12,417.59	7.92¢	\$13,505.24	8.61¢
01/15/08	34	53	185,300	41,800	5,450	364	333	62%		\$14,225.35	7.68¢	\$15,471.34	8.35¢
12/12/07	34	53	183,300	42,600	5,391	402	338	56%		\$14,738.95	8.04¢	\$16,029.93	8.75¢
11/08/07	29	53	173,400	56,600	5,979	406	406	61%		\$15,205.85	8.77¢	\$16,537.72	9.54¢
10/10/07	29	53	198,400	67,000	6,841	445	445	64%		\$17,468.78	8.80¢	\$18,998.87	9.58¢
09/11/07	31	53	223,500	70,100	7,210	491	491	61%		\$19,305.46	8.64¢	\$20,996.42	9.39¢
08/11/07	30	53	216,100	73,800	7,203	474	474	63%		\$19,040.48	8.81¢	\$20,708.23	9.58¢
07/12/07	29	53	206,500	66,200	7,121	464	444	64%		\$17,911.82	8.67¢	\$19,480.71	9.43¢
06/13/07	29	53	195,100	65,600	6,728					\$15,664.08	8.03¢	\$17,036.09	8.73¢
Total	728		4384800		144767	9141		1446%		\$ 380,896.21	209	\$ 414,256.26	228
Maximum	34		223500		7210	491		71%		\$ 19,305.46	11	\$ 20,996.42	11
Average	30.3		182700.0		6032.0	397.4		63%		\$ 15,870.68	8.7	\$ 17,260.68	9.5
Minimum	28		147700		4936	328		55%		\$ 12,214.14	8	\$ 13,283.97	8



ELECTRIC BILLING HISTORY

Customer Name: CITY OF CLEARWATER			
Location: 1700 N BELCHER RD, FIRE CLEARWATER FL 33765			
Account Number:	21539-22379	Service Base:	56046840
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/11/09	28	70	1,936		69	8		36%		\$215.08	11.11¢	\$233.91	12.08¢
04/13/09	33	70	1,846		56	9		26%		\$210.66	11.41¢	\$229.11	12.41¢
03/11/09	29	70	1,224		42	6		29%		\$158.67	12.96¢	\$172.57	14.10¢
02/10/09	29	70	2,053		71	27		11%		\$321.78	15.67¢	\$349.96	17.05¢
01/12/09	33	70	1,544		47	9		22%		\$202.69	13.13¢	\$220.44	14.28¢
12/10/08	33	70	1,405		43	14		13%		\$174.09	12.39¢	\$189.33	13.48¢
11/07/08	29	70	1,750		60	12		21%		\$194.06	11.09¢	\$211.06	12.06¢
10/09/08	29	70	2,634		91	9		42%		\$253.10	9.61¢	\$275.26	10.45¢
09/10/08	33	70	3,118		94	12		33%		\$302.64	9.71¢	\$329.15	10.56¢
08/08/08	30	70	2,747		92	11		35%		\$269.49	9.81¢	\$293.09	10.67¢
07/09/08	30	70	2,621		87	10		36%		\$246.94	9.42¢	\$268.57	10.25¢
06/09/08	32	70	2,562		80	10		33%		\$242.45	9.46¢	\$263.69	10.29¢
05/08/08	28	70	1,468		52	7		31%		\$148.17	10.09¢	\$161.15	10.98¢
04/10/08	30	70	1,536		51	8		27%		\$157.05	10.22¢	\$170.81	11.12¢
03/11/08	28	70	618		22	23		4%		\$142.93	23.13¢	\$155.44	25.15¢
02/12/08	29	70	473		16	4		17%		\$61.41	12.98¢	\$66.78	14.12¢
01/14/08	34	70	308		9	3		13%		\$45.16	14.66¢	\$49.12	15.95¢
12/11/07	32	70	629		20	6		14%		\$81.54	12.96¢	\$88.68	14.10¢
11/09/07	31	70	1,439		46	11		18%		\$163.47	11.36¢	\$177.79	12.36¢
10/09/07	29	70	2,631		91	11		34%		\$258.66	9.83¢	\$281.31	10.69¢
09/10/07	31	70	3,613		117	12		40%		\$340.52	9.42¢	\$370.34	10.25¢
08/10/07	30	70	3,699		123	27		19%		\$399.13	10.79¢	\$434.09	11.74¢
07/11/07	30	70	3,063		102	22		19%		\$331.10	10.81¢	\$360.10	11.76¢
06/11/07	28	70	3,678		131	28		20%		\$400.91	10.90¢	\$436.03	11.86¢
Total	728		48595		1613	299		592%		\$ 5,321.70	283	\$ 5,787.78	308
Maximum	34		3699		131	28		42%		\$ 400.91	23	\$ 436.03	25
Average	30.3		2024.8		67.2	12.5		25%		\$ 221.74	11.8	\$ 241.16	12.8
Minimum	28		308		9	3		4%		\$ 45.16	9	\$ 49.12	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER									
Location:	905 N MARTIN LUTHER KING JR AVE *LITE, LIBRARY CLEARWATER FL 33755								GREENWOOD LIBRARY	
Account Number:	34597-89188			Service Base:	31382744					
Service Base Description:	Metered Service									

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/11/09	28	70	9,704		347	69		21%		\$1,142.69	11.78¢	\$1,701.09	17.53¢
04/13/09	33	70	12,515		379	82		19%		\$1,444.69	11.54¢	\$2,029.54	16.22¢
03/11/09	29	70	15,077		520	88		25%		\$1,886.56	12.51¢	\$2,517.06	16.69¢
02/10/09	27	70	22,936		849	92		38%		\$2,709.07	11.81¢	\$3,411.60	14.87¢
01/14/09	35	70	34,831		995	72		58%		\$3,857.32	11.07¢	\$4,660.41	13.38¢
12/10/08	33	70	33,511		1,015	72		59%		\$2,937.84	8.77¢	\$3,644.71	10.88¢
11/07/08	29	70	32,585		1,124	64		73%		\$2,834.66	8.70¢	\$3,532.49	10.84¢
10/09/08	29	70	27,925		963	71		57%		\$2,490.72	8.92¢	\$3,158.43	11.31¢
09/10/08	33	70	33,748		1,023	64		67%		\$2,926.98	8.67¢	\$3,632.96	10.76¢
08/08/08	30	70	30,349		1,012	66		64%		\$2,664.59	8.78¢	\$3,347.59	11.03¢
07/09/08	30	70	33,578		1,119	56		83%		\$2,770.64	8.25¢	\$3,460.31	10.31¢
06/09/08	32	70	36,440		1,139	65		73%		\$3,021.58	8.29¢	\$3,733.23	10.24¢
05/08/08	27	70	27,626		1,023	55		78%		\$2,314.52	8.38¢	\$2,964.24	10.73¢
04/11/08	31	70	32,861		1,060	64		69%		\$2,745.82	8.36¢	\$3,433.32	10.45¢
03/11/08	28	70	29,404		1,050	57		77%		\$2,457.09	8.36¢	\$3,119.29	10.61¢
02/12/08	32	70	32,842		1,026	67		64%		\$2,755.51	8.39¢	\$3,443.85	10.49¢
01/11/08	32	70	39,337		1,229	91		56%		\$3,338.24	8.49¢	\$4,077.63	10.37¢
12/10/07	33	70	45,766		1,387	69		84%		\$3,903.08	8.53¢	\$4,694.98	10.26¢
11/07/07	29	70	38,557		1,330	69		80%		\$3,327.44	8.63¢	\$4,068.92	10.55¢
10/09/07	29	70	37,162		1,281	70		76%		\$3,219.51	8.66¢	\$3,951.53	10.63¢
09/10/07	31	70	38,442		1,240	63		82%		\$3,297.56	8.58¢	\$4,036.42	10.50¢
08/10/07	30	70	28,788		960	66		61%		\$2,537.05	8.81¢	\$3,209.30	11.15¢
07/11/07	29	70	25,780		889	69		54%		\$2,307.20	8.95¢	\$2,959.32	11.48¢
06/12/07	29	70	29,473		1,016	65		65%		\$2,588.29	8.78¢	\$3,265.03	11.08¢
Total	728		729237		23976	1666		1481%		\$ 65,478.65	222	\$ 82,053.25	282
Maximum	35		45766		1387	92		84%		\$ 3,903.08	13	\$ 4,694.98	18
Average	30.3		30384.9		999.0	69.4		62%		\$ 2,728.28	9.3	\$ 3,418.89	11.8
Minimum	27		9704		347	55		19%		\$ 1,142.69	8	\$ 1,701.09	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER			
Location:	400 N MYRTLE AVE, GAS ADMIN BLDG CLEARWATER FL 33755		Clearwater Gas Chiller	
Account Number:	44802-36337	Service Base:		29356972
Service Base Description:	Metered Service			

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVar	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	29	70	10,855		374	55		28%		\$1,194.66	11.01¢	\$1,299.27	11.97¢
04/13/09	32	70	9,312		291	52		23%		\$1,044.23	11.21¢	\$1,135.68	12.20¢
03/12/09	29	70	6,191		213	26		34%		\$743.33	12.01¢	\$808.42	13.06¢
02/11/09	29	70	5,394		186	22		35%		\$646.58	11.99¢	\$703.20	13.04¢
01/13/09	33	70	7,559		229	27		35%		\$887.63	11.74¢	\$965.36	12.77¢
12/11/08	31	70	6,675		215	35		26%		\$670.33	10.04¢	\$729.03	10.92¢
11/10/08	31	70	9,084		293	40		31%		\$880.11	9.69¢	\$957.18	10.54¢
10/10/08	29	70	13,337		460	53		36%		\$1,265.94	9.49¢	\$1,376.80	10.32¢
09/11/08	31	70	17,006		549	51		45%		\$1,549.76	9.11¢	\$1,685.51	9.91¢
08/11/08	32	70	17,236		539	71		32%		\$1,642.23	9.53¢	\$1,786.07	10.36¢
07/10/08	30	70	15,748		525	48		46%		\$1,385.71	8.80¢	\$1,507.08	9.57¢
06/10/08	32	70	15,476		484	48		42%		\$1,365.03	8.82¢	\$1,484.59	9.59¢
05/09/08	25	70	8,345		334	39		36%		\$789.62	9.46¢	\$858.79	10.29¢
04/14/08	33	70	9,867		299	35		36%		\$890.46	9.02¢	\$968.45	9.82¢
03/12/08	29	70	7,025		242	31		33%		\$659.60	9.39¢	\$717.37	10.21¢
02/12/08	32	70	7,536		236	36		27%		\$716.99	9.51¢	\$779.79	10.35¢
01/11/08	31	70	7,604		245	32		32%		\$707.32	9.30¢	\$769.28	10.12¢
12/11/07	33	70	8,326		252	33		32%		\$789.30	9.48¢	\$858.44	10.31¢
11/08/07	29	70	11,100		383	46		35%		\$1,055.66	9.51¢	\$1,148.13	10.34¢
10/10/07	29	70	15,542		536	49		46%		\$1,420.70	9.14¢	\$1,545.14	9.94¢
09/11/07	29	70	18,194		627	56		47%		\$1,656.61	9.11¢	\$1,801.72	9.90¢
08/13/07	32	70	20,416		638	69		39%		\$1,878.89	9.20¢	\$2,043.47	10.01¢
07/12/07	30	70	17,433		581	55		44%		\$1,592.39	9.13¢	\$1,731.87	9.93¢
06/12/07	28	70	9,355		334	49		28%		\$926.66	9.91¢	\$1,007.83	10.77¢
Total	728		274616		9065	1058		846%		\$ 26,359.74	236	\$ 28,668.47	256
Maximum	33		20416		638	71		47%		\$ 1,878.89	12	\$ 2,043.47	13
Average	30.3		11442.3		377.7	44.1		35%		\$ 1,098.32	9.8	\$ 1,194.52	10.7
Minimum	25		5394		186	22		23%		\$ 646.58	9	\$ 703.20	10



ELECTRIC BILLING HISTORY

Customer Name: CITY OF CLEARWATER	
Location: 1650 N ARCTURAS AVE *STE A CLEARWATER FL 33765	
Account Number: 44986-82316	Service Base: 41584880
Service Base Description:	Metered Service

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVar	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/06/09	28	70	6,227		222	34		27%		\$698.94	11.22¢	\$760.14	12.21¢
04/08/09	33	70	5,877		178	26		29%		\$637.65	10.85¢	\$693.49	11.80¢
03/06/09	29	70	4,697		162	32		21%		\$612.05	13.03¢	\$665.64	14.17¢
02/05/09	29	70	5,126		177	30		25%		\$648.71	12.66¢	\$705.51	13.76¢
01/07/09	33	70	5,301		161	28		24%		\$659.29	12.44¢	\$717.02	13.53¢
12/05/08	31	70	5,157		166	31		22%		\$535.00	10.37¢	\$581.85	11.28¢
11/04/08	29	70	6,866		237	31		32%		\$670.65	9.77¢	\$729.38	10.62¢
10/06/08	31	70	10,368		334	30		46%		\$944.93	9.11¢	\$1,027.68	9.91¢
09/05/08	31	70	10,615		342	32		45%		\$971.96	9.16¢	\$1,057.09	9.96¢
08/05/08	33	70	9,526		289	32		38%		\$885.52	9.30¢	\$963.09	10.11¢
07/03/08	29	70	8,660		299	34		37%		\$795.00	9.18¢	\$864.63	9.98¢
06/04/08	29	70	7,408		255	37		29%		\$710.97	9.60¢	\$773.24	10.44¢
05/06/08	32	70	5,343		167	32		22%		\$535.47	10.02¢	\$582.37	10.90¢
04/04/08	28	70	5,045		180	30		25%		\$505.39	10.02¢	\$549.66	10.90¢
03/07/08	30	70	4,487		150	30		21%		\$462.98	10.32¢	\$503.53	11.22¢
02/06/08	28	70	4,842		173	31		23%		\$493.67	10.20¢	\$536.91	11.09¢
01/09/08	33	70	6,149		186	41		19%		\$630.12	10.25¢	\$685.32	11.15¢
12/07/07	35	70	5,822		166	34		20%		\$592.80	10.18¢	\$644.72	11.07¢
11/02/07	29	70	7,867		271	36		31%		\$763.00	9.70¢	\$829.83	10.55¢
10/04/07	29	70	9,869		340	39		36%		\$933.21	9.46¢	\$1,014.95	10.28¢
09/05/07	29	70	11,552		398	40		41%		\$1,071.05	9.27¢	\$1,164.86	10.08¢
08/07/07	33	70	12,246		371	39		40%		\$1,123.01	9.17¢	\$1,221.38	9.97¢
07/05/07	28	70	9,369		335	38		37%		\$889.83	9.50¢	\$967.77	10.33¢
06/07/07	31	70	8,408		271	36		31%		\$806.20	9.59¢	\$876.81	10.43¢
Total	730		176827		5832	803		721%		\$ 17,577.40	244	\$ 19,116.87	266
Maximum	35		12246		398	41		46%		\$ 1,123.01	13	\$ 1,221.38	14
Average	30.4		7367.8		243.0	33.5		30%		\$ 732.39	10.2	\$ 796.54	11.1
Minimum	28		4487		150	26		19%		\$ 462.98	9	\$ 503.53	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	1900 GRAND AVE CLEARWATER FL 33765		B&M SHOPS
Account Number:	44989-70339	Service Base:	41590698
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/06/09	28	70	4,401		157	29		23%		\$515.53	11.71¢	\$560.68	12.74¢
04/08/09	33	70	3,889		118	25		20%		\$454.46	11.69¢	\$494.25	12.71¢
03/06/09	29	70	3,107		107	25		18%		\$422.68	13.60¢	\$459.70	14.80¢
02/05/09	29	70	2,953		102	19		22%		\$384.59	13.02¢	\$418.27	14.16¢
01/07/09	33	70	5,029		152	33		19%		\$649.88	12.92¢	\$706.79	14.05¢
12/05/08	31	70	2,581		83	30		12%		\$326.80	12.66¢	\$355.42	13.77¢
11/04/08	29	70	7,203		248	30		34%		\$693.69	9.63¢	\$754.44	10.47¢
10/06/08	31	70	14,087		454	23		82%		\$1,214.18	8.62¢	\$1,320.50	9.37¢
09/05/08	31	70	8,609		278	22		53%		\$775.62	9.01¢	\$843.56	9.80¢
08/05/08	33	70	5,200		158	21		31%		\$501.31	9.64¢	\$545.22	10.49¢
07/03/08	29	70	7,905		273	26		44%		\$707.94	8.96¢	\$769.95	9.74¢
06/04/08	29	70	6,218		214	27		33%		\$583.42	9.38¢	\$634.52	10.20¢
05/06/08	28	70	4,681		167	28		25%		\$470.30	10.05¢	\$511.49	10.93¢
04/08/08	32	70	4,323		135	23		24%		\$424.54	9.82¢	\$461.73	10.68¢
03/07/08	30	70	2,516		84	20		17%		\$276.06	10.97¢	\$300.24	11.93¢
02/06/08	28	70	2,565		92	20		19%		\$279.78	10.91¢	\$304.28	11.86¢
01/09/08	33	70	3,632		110	25		18%		\$379.44	10.45¢	\$412.68	11.36¢
12/07/07	35	70	3,588		103	24		18%		\$379.92	10.59¢	\$413.20	11.52¢
11/02/07	28	70	6,081		217	35		26%		\$616.94	10.15¢	\$670.98	11.03¢
10/05/07	29	70	7,356		254	31		34%		\$704.94	9.58¢	\$766.69	10.42¢
09/06/07	29	70	7,803		269	35		32%		\$754.44	9.67¢	\$820.52	10.52¢
08/08/07	33	70	8,925		270	35		32%		\$844.04	9.46¢	\$917.97	10.29¢
07/06/07	29	70	7,248		250	34		31%		\$706.67	9.75¢	\$768.57	10.60¢
06/07/07	31	70	5,606		181	36		21%		\$582.46	10.39¢	\$633.47	11.30¢
Total	730		135506		4476	656		688%		\$ 13,649.63	253	\$ 14,845.12	275
Maximum	35		14087		454	36		82%		\$ 1,214.18	14	\$ 1,320.50	15
Average	30.4		5646.1		186.5	27.3		29%		\$ 568.73	10.5	\$ 618.55	11.4
Minimum	28		2516		83	19		12%		\$ 276.06	9	\$ 300.24	9



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER									
Location:	1900 GRAND AVE, ADMIN CLEARWATER FL 33765						FLEET MAINTENANCE			
Account Number:	44991-14344			Service Base:		41593607				
Service Base Description:	Metered Service									

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/06/09	28	171	39,240		1,401	142		41%		\$3,845.03	9.80¢	\$4,181.74	10.66¢
04/08/09	33	70	44,200		1,339	138		40%		\$4,512.98	10.21¢	\$4,908.18	11.10¢
03/06/09	29	70	41,000		1,414	139		42%		\$4,739.88	11.56¢	\$5,154.95	12.57¢
02/05/09	29	70	47,080		1,623	148		46%		\$5,398.11	11.47¢	\$5,870.82	12.47¢
01/07/09	33	70	50,080		1,518	147		43%		\$5,702.71	11.39¢	\$6,202.09	12.38¢
12/05/08	31	70	51,160		1,650	160		43%		\$4,665.30	9.12¢	\$5,073.83	9.92¢
11/04/08	29	70	55,040		1,898	175		45%		\$5,028.95	9.14¢	\$5,469.33	9.94¢
10/06/08	31	70	63,640		2,053	198		43%		\$5,796.94	9.11¢	\$6,304.57	9.91¢
09/05/08	31	70	66,280		2,138	197		45%		\$6,002.80	9.06¢	\$6,528.59	9.85¢
08/05/08	33	70	68,800		2,085	196		44%		\$6,199.12	9.01¢	\$6,742.10	9.80¢
07/03/08	29	70	65,840		2,270	195		49%		\$5,738.57	8.72¢	\$6,241.21	9.48¢
06/04/08	29	70	57,280		1,975	184		45%		\$5,047.11	8.81¢	\$5,489.18	9.58¢
05/06/08	28	70	49,920		1,783	172		43%		\$4,443.16	8.90¢	\$4,832.34	9.68¢
04/08/08	32	70	51,720		1,616	170		40%		\$4,572.56	8.84¢	\$4,973.07	9.62¢
03/07/08	30	70	53,440		1,781	162		46%		\$4,673.62	8.75¢	\$5,082.98	9.51¢
02/06/08	28	70	48,760		1,741	158		46%		\$4,303.04	8.82¢	\$4,679.94	9.60¢
01/09/08	33	70	57,520		1,743	172		42%		\$5,020.84	8.73¢	\$5,460.61	9.49¢
12/07/07	35	70	60,520		1,729	168		43%		\$5,422.74	8.96¢	\$5,897.71	9.75¢
11/02/07	28	70	62,080		2,217	198		47%		\$5,650.81	9.10¢	\$6,145.76	9.90¢
10/05/07	29	70	67,760		2,337	198		49%		\$6,104.36	9.01¢	\$6,639.04	9.80¢
09/06/07	29	70	69,920		2,411	200		50%		\$6,283.73	8.99¢	\$6,834.12	9.77¢
08/08/07	33	70	75,320		2,282	206		46%		\$6,735.62	8.94¢	\$7,325.59	9.73¢
07/06/07	29	70	60,400		2,083	186		47%		\$5,475.26	9.07¢	\$5,954.84	9.86¢
06/07/07	31	70	60,960		1,966	178		46%		\$5,492.37	9.01¢	\$5,973.45	9.80¢
Total	730		1367960		45056	4187		1071%		\$ 126,855.61	224	\$ 137,966.04	244
Maximum	35		75320		2411	206		50%		\$ 6,735.62	12	\$ 7,325.59	13
Average	30.4		56998.3		1877.3	174.5		45%		\$ 5,285.65	9.4	\$ 5,748.59	10.2
Minimum	28		39240		1339	138		40%		\$ 3,845.03	9	\$ 4,181.74	9



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	1650 N ARCTURAS AVE *STE B CLEARWATER FL 33765		
Account Number:	44994-02367	Service Base:	41599425
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/06/09	28	70	6,505		232	22		44%		\$679.51	10.45¢	\$822.08	12.64¢
04/08/09	33	70	7,031		213	21		42%		\$723.29	10.29¢	\$869.70	12.37¢
03/06/09	29	70	5,733		198	27		31%		\$699.97	12.21¢	\$849.66	14.82¢
02/05/09	29	70	5,736		198	26		32%		\$696.57	12.14¢	\$845.96	14.75¢
01/07/09	33	70	6,442		195	25		33%		\$765.41	11.88¢	\$920.83	14.29¢
12/05/08	31	70	5,691		184	26		29%		\$558.83	9.82¢	\$684.15	12.02¢
11/04/08	29	70	6,594		227	26		36%		\$630.51	9.56¢	\$762.11	11.56¢
10/06/08	31	70	8,167		263	22		50%		\$740.54	9.07¢	\$881.77	10.80¢
09/05/08	31	70	8,728		282	22		53%		\$785.07	8.99¢	\$930.21	10.66¢
08/05/08	33	70	8,711		264	20		55%		\$776.30	8.91¢	\$920.68	10.57¢
07/03/08	29	70	7,899		272	20		57%		\$685.22	8.67¢	\$819.60	10.38¢
06/04/08	29	70	7,532		260	20		54%		\$657.33	8.73¢	\$789.26	10.48¢
05/06/08	32	70	7,015		219	23		40%		\$629.16	8.97¢	\$758.63	10.81¢
04/04/08	28	70	5,860		209	28		31%		\$559.91	9.55¢	\$683.32	11.66¢
03/07/08	30	70	6,112		204	27		31%		\$575.36	9.41¢	\$700.11	11.45¢
02/06/08	28	70	6,137		219	29		31%		\$584.69	9.53¢	\$710.26	11.57¢
01/09/08	33	70	6,890		209	27		32%		\$634.50	9.21¢	\$764.44	11.09¢
12/07/07	35	70	4,753		136	19		30%		\$455.70	9.59¢	\$572.32	12.04¢
11/02/07	29	70	6,352		219	18		51%		\$579.93	9.13¢	\$707.44	11.14¢
10/04/07	29	70	7,580		261	18		61%		\$677.99	8.94¢	\$814.08	10.74¢
09/05/07	29	70	8,178		282	21		56%		\$736.09	9.00¢	\$877.27	10.73¢
08/07/07	33	70	9,203		279	20		58%		\$814.48	8.85¢	\$962.53	10.46¢
07/05/07	28	70	7,277		260	19		57%		\$657.24	9.03¢	\$791.52	10.88¢
06/07/07	31	70	6,977		225	17		55%		\$626.39	8.98¢	\$757.96	10.86¢
Total	730		167103		5510	543		1049%		\$ 15,929.99	231	\$ 19,195.89	279
Maximum	35		9203		282	29		61%		\$ 814.48	12	\$ 962.53	15
Average	30.4		6962.6		229.6	22.6		44%		\$ 663.75	9.6	\$ 799.83	11.6
Minimum	28		4753		136	17		29%		\$ 455.70	9	\$ 572.32	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	1701 N HERCULES AVE *BLDG E, RECYCLING CENTER CLEARWATER FL 33765		
Account Number:	52340-17027	Service Base:	38061210
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/11/09	30	60	4,376		146					\$516.97	11.81¢	\$562.25	12.85¢
04/11/09	31	60	4,957		160					\$584.20	11.79¢	\$635.36	12.82¢
03/11/09	29	60	4,631		160					\$609.13	13.15¢	\$662.47	14.31¢
02/10/09	29	60	4,675		161					\$614.82	13.15¢	\$668.65	14.30¢
01/12/09	33	60	4,477		136					\$589.23	13.16¢	\$640.83	14.31¢
12/10/08	33	60	4,689		142					\$499.82	10.66¢	\$543.59	11.59¢
11/07/08	29	60	4,218		145					\$450.69	10.68¢	\$490.16	11.62¢
10/09/08	29	60	3,675		127					\$394.03	10.72¢	\$428.53	11.66¢
09/10/08	33	60	4,289		130					\$458.09	10.68¢	\$498.22	11.62¢
08/08/08	30	60	3,253		108					\$350.00	10.76¢	\$380.65	11.70¢
07/09/08	30	60	4,246		142					\$442.35	10.42¢	\$481.09	11.33¢
06/09/08	32	60	3,859		121					\$403.00	10.44¢	\$438.30	11.36¢
05/08/08	28	60	4,022		144					\$419.57	10.43¢	\$456.32	11.35¢
04/10/08	30	60	5,730		191					\$593.25	10.35¢	\$645.21	11.26¢
03/11/08	28	60	4,082		146					\$425.68	10.43¢	\$462.96	11.34¢
02/12/08	29	60	4,679		161					\$486.38	10.39¢	\$528.98	11.31¢
01/14/08	34	60	4,475		132					\$465.64	10.41¢	\$506.43	11.32¢
12/11/07	33	60	4,705		143					\$499.75	10.62¢	\$543.52	11.55¢
11/08/07	30	60	4,546		152					\$483.22	10.63¢	\$525.54	11.56¢
10/09/07	27	60	2,898		107					\$311.90	10.76¢	\$339.22	11.71¢
09/12/07	33	60	3,687		112					\$393.92	10.68¢	\$428.42	11.62¢
08/10/07	29	60	3,208		111					\$344.12	10.73¢	\$374.26	11.67¢
07/12/07	31	60	3,895		126					\$415.54	10.67¢	\$451.93	11.60¢
06/11/07	28	60	3,641		130					\$389.14	10.69¢	\$423.23	11.62¢
Total	728		100913		3330					\$ 11,140.44	264	\$ 12,116.12	287
Maximum	34		5730		191					\$ 614.82	13	\$ 668.65	14
Average	30.3		4204.7		138.7	#DIV/0!		#DIV/0!		\$ 464.19	11.0	\$ 504.84	12.0
Minimum	27		2898		107					\$ 311.90	10	\$ 339.22	11



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	100 N OSCEOLA AVE, MAIN LIBRARY CLEARWATER FL 33755		
Account Number:	52781-54167	Service Base:	84921542
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	28	53	235,000	78,000	8,393	540	536	65%		\$23,152.43	9.85¢	\$25,562.80	10.88¢
04/14/09	33	53	258,000	75,400	7,818	568	518	57%		\$24,578.93	9.53¢	\$27,114.22	10.51¢
03/12/09	29	53	243,600	70,400	8,400	640	640	55%		\$26,703.47	10.96¢	\$29,437.24	12.08¢
02/11/09	29	53	236,600	73,400	8,159	600	600	57%		\$26,199.49	11.07¢	\$28,889.13	12.21¢
01/13/09	32	53	262,000	66,000	8,188	538	538	63%		\$27,505.44	10.50¢	\$30,309.44	11.57¢
12/12/08	32	53	249,400	67,400	7,794	534	518	61%		\$20,736.81	8.31¢	\$22,919.99	9.19¢
11/10/08	31	53	238,600	73,600	7,697	582	570	55%		\$20,642.72	8.65¢	\$22,817.67	9.56¢
10/10/08	29	53	250,400	84,600	8,634	524	524	69%		\$21,809.21	8.71¢	\$24,086.31	9.62¢
09/11/08	31	53	284,400	92,000	9,174	610	610	63%		\$24,583.76	8.64¢	\$27,104.32	9.53¢
08/11/08	32	53	281,000	87,800	8,781	534	534	69%		\$23,856.71	8.49¢	\$26,313.59	9.36¢
07/10/08	30	53	259,400	88,400	8,647	540	536	67%		\$21,788.42	8.40¢	\$24,059.43	9.28¢
06/10/08	32	53	270,200	83,200	8,444	550	550	64%		\$22,166.96	8.20¢	\$24,471.12	9.06¢
05/09/08	25	53	199,600	70,200	7,984	576	528	58%		\$17,355.63	8.70¢	\$19,238.38	9.64¢
04/14/08	33	53	272,000	75,600	8,242	580	562	59%		\$21,908.27	8.05¢	\$24,189.78	8.89¢
03/12/08	28	53	244,800	67,600	8,743	596	596	61%		\$20,011.02	8.17¢	\$22,126.35	9.04¢
02/13/08	33	53	269,200	74,000	8,158	440		77%		\$19,980.13	7.42¢	\$22,092.75	8.21¢
01/11/08	31	53	268,600	69,600	8,665	542	542	67%		\$21,289.88	7.93¢	\$23,517.22	8.76¢
12/11/07	33	53	280,200	70,200	8,491	542	542	65%		\$22,842.20	8.15¢	\$25,210.99	9.00¢
11/08/07	27	53	209,000	70,400	7,741	554	554	58%		\$18,681.40	8.94¢	\$20,685.74	9.90¢
10/12/07	31	53	247,600	92,200	7,987	532	532	63%		\$22,252.97	8.99¢	\$24,570.14	9.92¢
09/11/07	29	53	226,200	79,400	7,800	512	512	63%		\$20,118.15	8.89¢	\$22,248.33	9.84¢
08/13/07	32	53	249,000	90,200	7,781	546	542	59%		\$22,248.47	8.94¢	\$24,565.24	9.87¢
07/12/07	30	53	236,000	85,400	7,867	524	520	63%		\$21,103.85	8.94¢	\$23,320.37	9.88¢
06/12/07	28	53	202,200	75,000	7,221	530	530	57%		\$18,484.24	9.14¢	\$20,471.30	10.12¢
Total	728		5973000		196807	13234		1493%		\$ 530,000.56	214	\$ 585,321.85	236
Maximum	33		284400		9174	640		77%		\$ 27,505.44	11	\$ 30,309.44	12
Average	30.3		248875.0		8200.3	551.4		62%		\$ 22,083.36	8.9	\$ 24,388.41	9.8
Minimum	25		199600		7221	440		55%		\$ 17,355.63	7	\$ 19,238.38	8



ELECTRIC BILLING HISTORY

Customer Name: CITY OF CLEARWATER	
Location: 1650 N ARCTURAS AVE *STE E CLEARWATER FL 33765	
Account Number: 53446-66301	Service Base: 60205630
Service Base Description:	Metered Service

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/06/09	28	70	4,384		157	19		34%		\$476.89	10.88¢	\$518.65	11.83¢
04/08/09	33	70	4,765		144	18		33%		\$507.59	10.65¢	\$552.04	11.59¢
03/06/09	29	70	3,872		134	28		20%		\$512.42	13.23¢	\$557.29	14.39¢
02/05/09	29	70	4,236		146	29		21%		\$553.54	13.07¢	\$602.01	14.21¢
01/07/09	33	70	4,384		133	25		22%		\$553.91	12.63¢	\$602.41	13.74¢
12/05/08	31	70	4,260		137	28		20%		\$452.66	10.63¢	\$492.30	11.56¢
11/04/08	29	70	4,846		167	21		33%		\$473.21	9.76¢	\$514.64	10.62¢
10/06/08	31	70	6,015		194	22		37%		\$569.71	9.47¢	\$619.60	10.30¢
09/05/08	31	70	6,393		206	24		36%		\$607.14	9.50¢	\$660.32	10.33¢
08/05/08	33	70	6,350		192	25		32%		\$607.43	9.57¢	\$660.64	10.40¢
07/03/08	29	70	5,876		203	28		30%		\$561.13	9.55¢	\$610.28	10.39¢
06/04/08	29	70	5,268		182	23		33%		\$496.37	9.42¢	\$539.85	10.25¢
05/06/08	32	70	4,633		145	18		34%		\$429.56	9.27¢	\$467.18	10.08¢
04/04/08	29	70	4,330		149	21		30%		\$417.66	9.65¢	\$454.24	10.49¢
03/06/08	29	70	3,984		137	19		30%		\$383.93	9.64¢	\$417.55	10.48¢
02/06/08	28	70	3,842		137	26		22%		\$399.11	10.39¢	\$434.06	11.30¢
01/09/08	33	70	4,293		130	26		21%		\$433.39	10.10¢	\$471.35	10.98¢
12/07/07	35	70	4,628		132	21		26%		\$452.61	9.78¢	\$492.26	10.64¢
11/02/07	29	70	4,943		170	21		34%		\$477.77	9.67¢	\$519.62	10.51¢
10/04/07	29	70	5,423		187	25		31%		\$529.90	9.77¢	\$576.32	10.63¢
09/05/07	29	70	6,000		207	25		34%		\$575.97	9.60¢	\$626.42	10.44¢
08/07/07	33	70	6,689		203	23		37%		\$624.09	9.33¢	\$678.75	10.15¢
07/05/07	28	70	5,270		188	22		36%		\$507.33	9.63¢	\$551.77	10.47¢
06/07/07	31	70	5,250		169	20		35%		\$498.84	9.50¢	\$542.53	10.33¢
Total	730		119934		3950	557		722%		\$ 12,102.16	245	\$ 13,162.08	266
Maximum	35		6689		207	29		37%		\$ 624.09	13	\$ 678.75	14
Average	30.4		4997.3		164.6	23.2		30%		\$ 504.26	10.2	\$ 548.42	11.1
Minimum	28		3842		130	18		20%		\$ 383.93	9	\$ 417.55	10



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	645 PIERCE ST CLEARWATER FL 33756		MAIN PD
Account Number:	56889-09252	Service Base:	2403380
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVar	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	29	53	168,820	49,680	5,821	311	311	78%		\$15,977.46	9.46¢	\$17,376.60	10.29¢
04/13/09	31	53	166,980	39,790	5,386	313	308	72%		\$15,242.51	9.13¢	\$16,577.28	9.93¢
03/13/09	30	53	150,880	36,340	5,029	290	262	72%		\$15,583.52	10.33¢	\$16,948.16	11.23¢
02/11/09	29	53	145,130	34,960	5,004	329	258	63%		\$15,052.70	10.37¢	\$16,370.86	11.28¢
01/13/09	33	53	167,900	35,190	5,088	290	271	73%		\$16,895.36	10.06¢	\$18,374.87	10.94¢
12/11/08	31	53	155,710	36,110	5,023	327	290	64%		\$12,506.34	8.03¢	\$13,601.52	8.74¢
11/10/08	31	53	169,510	47,380	5,468	359	359	63%		\$14,207.11	8.38¢	\$15,451.21	9.12¢
10/10/08	29	53	183,770	56,580	6,337	368	368	72%		\$15,627.77	8.50¢	\$16,996.28	9.25¢
09/11/08	31	53	210,450	62,790	6,789	437	437	65%		\$17,834.11	8.47¢	\$19,396.19	9.22¢
08/11/08	32	53	219,420	63,020	6,857	393	393	73%		\$18,220.68	8.30¢	\$19,816.63	9.03¢
07/10/08	30	53	199,870	59,110	6,662	403	389	69%		\$16,213.65	8.11¢	\$17,633.79	8.82¢
06/10/08	32	53	216,200	60,030	6,756	386	386	73%		\$17,178.23	7.95¢	\$18,682.87	8.64¢
05/09/08	25	53	145,590	46,000	5,824	345	345	70%		\$12,195.66	8.38¢	\$13,263.88	9.11¢
04/14/08	32	53	179,860	45,310	5,621	329	329	71%		\$14,065.34	7.82¢	\$15,297.32	8.51¢
03/13/08	29	53	151,570	36,340	5,227	304	285	72%		\$11,799.04	7.78¢	\$12,832.52	8.47¢
02/13/08	29	53	150,880	36,340	5,203	301	278	72%		\$11,737.39	7.78¢	\$12,765.47	8.46¢
01/15/08	34	53	181,700	38,870	5,344	301	276	74%		\$13,641.24	7.51¢	\$14,836.08	8.17¢
12/12/07	34	53	185,610	41,170	5,459	304	283	75%		\$14,561.68	7.85¢	\$15,837.14	8.53¢
11/08/07	29	53	178,020	52,670	6,139	366	366	70%		\$15,096.97	8.48¢	\$16,419.31	9.22¢
10/10/07	29	53	195,500	60,030	6,741	412	403	68%		\$16,725.65	8.56¢	\$18,190.64	9.30¢
09/11/07	31	53	215,740	60,260	6,959	421	421	69%		\$17,991.93	8.34¢	\$19,567.84	9.07¢
08/11/07	30	53	198,950	60,490	6,632	412	412	67%		\$16,981.73	8.54¢	\$18,469.16	9.28¢
07/12/07	29	53	191,590	55,430	6,607	497	497	55%		\$16,520.63	8.62¢	\$17,967.67	9.38¢
06/13/07	29	53	175,720	50,830	6,059	366	366	69%		\$14,845.87	8.45¢	\$16,146.21	9.19¢
Total	728		4305370		142035	8564		1669%		\$ 366,702.57	205	\$ 398,819.50	223
Maximum	34		219420		6959	497		78%		\$ 18,220.68	10	\$ 19,816.63	11
Average	30.3		179390.4		5918.1	356.8		70%		\$ 15,279.27	8.6	\$ 16,617.48	9.3
Minimum	25		145130		5004	290		55%		\$ 11,737.39	8	\$ 12,765.47	8



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	112 S OSCEOLA AVE, CITY HALL CLEARWATER FL 33756		
Account Number:	62486-80959	Service Base:	17130505
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	29	53	78,080	24,000	2,692	150	150	75%		\$7,483.66	9.58¢	\$8,139.00	10.42¢
04/13/09	34	53	87,200	22,240	2,565	155	150	69%		\$8,019.22	9.20¢	\$8,721.46	10.00¢
03/10/09	29	53	67,360	16,800	2,323	144	130	67%		\$7,055.30	10.47¢	\$7,673.12	11.39¢
02/09/09	27	53	56,640	13,440	2,098	141	134	62%		\$5,974.77	10.55¢	\$6,497.98	11.47¢
01/13/09	35	53	87,200	20,640	2,491	157	147	66%		\$8,967.18	10.28¢	\$9,752.43	11.18¢
12/09/08	33	53	76,960	18,080	2,332	162	155	60%		\$6,236.24	8.10¢	\$6,782.34	8.81¢
11/06/08	29	53	78,400	25,440	2,703	178	178	63%		\$6,830.30	8.71¢	\$7,428.43	9.48¢
10/08/08	29	53	90,720	28,960	3,128	181	181	72%		\$7,781.31	8.58¢	\$8,462.71	9.33¢
09/09/08	33	53	107,360	31,040	3,253	181	181	75%		\$8,894.64	8.28¢	\$9,673.72	9.01¢
08/07/08	29	53	94,720	29,760	3,266	174	174	78%		\$8,040.79	8.49¢	\$8,745.08	9.23¢
07/09/08	33	53	104,960	31,040	3,181	174	174	76%		\$8,404.86	8.01¢	\$9,141.04	8.71¢
06/06/08	29	53	89,440	27,200	3,084	174	174	74%		\$7,300.75	8.16¢	\$7,940.22	8.88¢
05/08/08	28	53	74,560	23,360	2,663	160	160	69%		\$6,181.97	8.29¢	\$6,723.44	9.02¢
04/10/08	29	53	74,880	20,000	2,582	166	166	65%		\$6,035.60	8.06¢	\$6,564.26	8.77¢
03/12/08	30	53	70,240	16,960	2,341	155	147	63%		\$5,537.90	7.88¢	\$6,022.97	8.57¢
02/11/08	32	53	71,040	16,480	2,220	147	131	63%		\$5,505.68	7.75¢	\$5,987.92	8.43¢
01/10/08	29	53	66,720	14,240	2,301	150	136	64%		\$5,149.80	7.72¢	\$5,600.87	8.39¢
12/12/07	34	53	81,440	18,720	2,395	152	136	66%		\$6,486.20	7.96¢	\$7,054.32	8.66¢
11/08/07	31	53	84,960	26,880	2,741	171	171	67%		\$7,310.49	8.60¢	\$7,950.82	9.36¢
10/08/07	28	53	80,640	25,440	2,880	178	178	67%		\$6,988.76	8.67¢	\$7,600.90	9.43¢
09/10/07	31	53	93,760	26,720	3,025	170	170	74%		\$7,817.94	8.34¢	\$8,502.71	9.07¢
08/10/07	30	53	89,120	28,160	2,971	181	181	68%		\$7,670.88	8.61¢	\$8,342.77	9.36¢
07/11/07	29	53	86,720	24,320	2,990	157	155	79%		\$7,201.70	8.30¢	\$7,832.50	9.03¢
06/12/07	32	53	92,480	25,760	2,890	157	157	77%		\$7,637.74	8.26¢	\$8,306.73	8.98¢
Total	732		1985600		65116	3915		1660%		\$ 170,513.68	207	\$ 185,447.74	225
Maximum	35		107360		3266	181		79%		\$ 8,967.18	11	\$ 9,752.43	11
Average	30.5		82733.3		2713.2	163.1		69%		\$ 7,104.74	8.6	\$ 7,726.99	9.4
Minimum	27		56640		2098	141		60%		\$ 5,149.80	8	\$ 5,600.87	8



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	2851 N MCMULLEN BOOTH RD, *IMPOUND CLEARWATER FL 33761		
Account Number:	63706-86129	Service Base:	64761501
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/01/09	30	60	1,054		35					\$132.57	12.58¢	\$144.18	13.68¢
04/01/09	29	60	967		33					\$122.51	12.67¢	\$133.24	13.78¢
03/03/09	29	60	1,065		37					\$148.26	13.92¢	\$161.24	15.14¢
02/02/09	31	60	1,098		35					\$152.52	13.89¢	\$165.88	15.11¢
01/02/09	30	60	867		29					\$122.67	14.15¢	\$133.42	15.39¢
12/03/08	33	60	940		28					\$108.69	11.56¢	\$118.21	12.58¢
10/31/08	29	60	1,124		39					\$127.89	11.38¢	\$139.09	12.37¢
10/02/08	30	60	1,477		49					\$164.71	11.15¢	\$179.13	12.13¢
09/02/08	33	60	1,650		50					\$182.76	11.08¢	\$198.77	12.05¢
07/31/08	31	60	1,473		48					\$164.30	11.15¢	\$178.69	12.13¢
06/30/08	30	60	1,458		49					\$158.87	10.90¢	\$172.78	11.85¢
05/31/08	31	60	1,286		41					\$141.38	10.99¢	\$153.77	11.96¢
04/30/08	29	60	1,014		35					\$113.73	11.22¢	\$123.70	12.20¢
04/01/08	29	60	748		26					\$86.68	11.59¢	\$94.27	12.60¢
03/03/08	32	60	735		23					\$85.35	11.61¢	\$92.83	12.63¢
01/31/08	28	60	701		25					\$81.89	11.68¢	\$89.06	12.70¢
01/03/08	31	60	807		26					\$92.67	11.48¢	\$100.79	12.49¢
12/03/07	33	60	791		24					\$92.85	11.74¢	\$100.98	12.77¢
10/31/07	29	60	938		32					\$108.13	11.53¢	\$117.60	12.54¢
10/02/07	33	60	1,188		36					\$134.12	11.29¢	\$145.87	12.28¢
08/30/07	29	60	1,125		39					\$127.57	11.34¢	\$138.74	12.33¢
08/01/07	33	60	1,267		38					\$142.34	11.23¢	\$154.81	12.22¢
06/29/07	29	60	993		34					\$113.85	11.47¢	\$123.82	12.47¢
05/31/07	30	60	905		30					\$104.71	11.57¢	\$113.88	12.58¢
Total	731		25671		842					\$ 3,011.02	283	\$ 3,274.75	308
Maximum	33		1650		50					\$ 182.76	14	\$ 198.77	15
Average	30.5		1069.6		35.1	#DIV/0!		#DIV/0!		\$ 125.46	11.8	\$ 136.45	12.8
Minimum	28		701		23					\$ 81.89	11	\$ 89.06	12



ELECTRIC BILLING HISTORY

Customer Name: CITY OF CLEARWATER			
Location: 28 N GARDEN AVE *GARADGE CLEARWATER FL 33755			
Account Number:	64093-96118	Service Base:	20001688
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVAr	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	28	53	15,760	4,160	563	29	29	81%		\$1,478.25	9.38¢	\$1,607.70	10.20¢
04/14/09	33	53	17,920	4,360	543	28	28	81%		\$1,637.75	9.14¢	\$1,781.16	9.94¢
03/12/09	29	53	15,600	3,920	538	31	31	72%		\$1,649.65	10.57¢	\$1,794.11	11.50¢
02/11/09	29	53	16,600	4,160	572	37	37	64%		\$1,768.24	10.65¢	\$1,923.08	11.58¢
01/13/09	33	53	18,240	4,000	553	27	27	85%		\$1,852.20	10.15¢	\$2,014.39	11.04¢
12/11/08	31	53	17,320	4,240	559	29	29	80%		\$1,403.95	8.11¢	\$1,526.89	8.82¢
11/10/08	31	53	17,840	4,600	575	32	30	75%		\$1,461.48	8.19¢	\$1,589.46	8.91¢
10/10/08	29	53	17,560	4,800	606	30	30	84%		\$1,454.65	8.28¢	\$1,582.03	9.01¢
09/11/08	31	53	19,240	5,160	621	32	30	81%		\$1,577.65	8.20¢	\$1,715.83	8.92¢
08/11/08	32	53	19,160	5,040	599	31	30	80%		\$1,564.95	8.17¢	\$1,702.03	8.88¢
07/10/08	30	53	17,600	4,680	587	31	31	79%		\$1,401.37	7.96¢	\$1,524.11	8.66¢
06/10/08	32	53	18,200	4,520	569	29	28	82%		\$1,416.81	7.78¢	\$1,540.91	8.47¢
05/09/08	25	53	13,840	3,840	554	29	26	80%		\$1,123.28	8.12¢	\$1,221.67	8.83¢
04/14/08	33	53	17,720	4,320	537	27	27	83%		\$1,373.57	7.75¢	\$1,493.88	8.43¢
03/12/08	28	53	15,080	3,680	539	27	27	83%		\$1,186.49	7.87¢	\$1,290.41	8.56¢
02/13/08	33	53	17,640	4,240	535	28	28	80%		\$1,368.20	7.76¢	\$1,488.04	8.44¢
01/11/08	31	53	17,640	4,200	569	37	37	64%		\$1,399.02	7.93¢	\$1,521.56	8.63¢
12/11/07	33	53	19,080	4,360	578	30	30	80%		\$1,521.78	7.98¢	\$1,655.07	8.67¢
11/08/07	29	53	17,240	4,680	594	33	32	75%		\$1,440.55	8.36¢	\$1,566.73	9.09¢
10/10/07	29	53	17,760	4,960	612	31	31	82%		\$1,484.56	8.36¢	\$1,614.60	9.09¢
09/11/07	29	53	18,080	4,840	623	31	31	84%		\$1,496.01	8.27¢	\$1,627.05	9.00¢
08/13/07	32	53	19,920	5,240	623	32	30	81%		\$1,628.18	8.17¢	\$1,770.79	8.89¢
07/12/07	30	53	19,160	5,160	639	32	32	83%		\$1,583.33	8.26¢	\$1,722.02	8.99¢
06/12/07	28	53	16,960	4,440	606	30	30	84%		\$1,401.30	8.26¢	\$1,524.04	8.99¢
Total	728		421160		13892	733		1904%		\$ 35,673.22	204	\$ 38,797.56	222
Maximum	33		19920		639	37		85%		\$ 1,852.20	11	\$ 2,014.39	12
Average	30.3		17548.3		578.8	30.5		79%		\$ 1,486.38	8.5	\$ 1,616.57	9.2
Minimum	25		13840		535	27		64%		\$ 1,123.28	8	\$ 1,221.67	8



ELECTRIC BILLING HISTORY

Customer Name:	CITY OF CLEARWATER		
Location:	400 N MYRTLE AVE, GAS CLEARWATER FL 33755		
Account Number:	66213-78832	Service Base:	24045198
Service Base Description:	Metered Service		

Note: * Cost does not include sales tax or other charges.

Confidential and Proprietary Information

Billing Period (Current 12 Months)			kWh Consumption			kW Demand			kVar	Metered Svc Charges *		Total Bill Amt	
Read Date	Days	Rate	Total	On-Peak	Daily	Base	On-Peak	L F		Monthly	per kWh	Amt	per kWh
05/12/09	29	70	20,516		707	65		45%		\$2,103.95	10.26¢	\$2,288.19	11.15¢
04/13/09	32	70	22,711		710	65		45%		\$2,302.12	10.14¢	\$2,503.72	11.02¢
03/12/09	29	70	20,755		716	74		40%		\$2,418.15	11.65¢	\$2,629.90	12.67¢
02/11/09	29	70	23,677		816	82		41%		\$2,748.13	11.61¢	\$2,988.78	12.62¢
01/13/09	33	70	22,551		683	65		44%		\$2,569.33	11.39¢	\$2,794.32	12.39¢
12/11/08	31	70	22,655		731	72		42%		\$2,076.09	9.16¢	\$2,257.89	9.97¢
11/10/08	31	70	21,580		696	68		43%		\$1,975.92	9.16¢	\$2,148.94	9.96¢
10/10/08	29	70	22,297		769	66		49%		\$2,025.42	9.08¢	\$2,202.78	9.88¢
09/11/08	31	70	24,160		779	67		48%		\$2,177.01	9.01¢	\$2,367.69	9.80¢
08/11/08	32	70	25,225		788	68		48%		\$2,265.26	8.98¢	\$2,463.67	9.77¢
07/10/08	30	70	23,529		784	69		47%		\$2,055.05	8.73¢	\$2,235.05	9.50¢
06/10/08	32	70	24,742		773	67		48%		\$2,139.83	8.65¢	\$2,327.26	9.41¢
05/09/08	25	70	18,589		744	67		46%		\$1,672.14	9.00¢	\$1,818.61	9.78¢
04/14/08	33	70	23,395		709	68		43%		\$2,041.15	8.72¢	\$2,219.94	9.49¢
03/12/08	29	70	21,747		750	71		44%		\$1,927.02	8.86¢	\$2,095.81	9.64¢
02/12/08	32	70	23,843		745	70		44%		\$2,082.63	8.73¢	\$2,265.05	9.50¢
01/11/08	31	70	23,846		769	79		41%		\$2,116.25	8.87¢	\$2,301.61	9.65¢
12/11/07	33	70	22,787		691	65		44%		\$2,054.41	9.02¢	\$2,234.36	9.81¢
11/08/07	29	70	21,551		743	63		49%		\$1,948.82	9.04¢	\$2,119.52	9.83¢
10/10/07	29	70	23,076		796	63		53%		\$2,070.59	8.97¢	\$2,251.95	9.76¢
09/11/07	29	70	22,877		789	64		51%		\$2,058.15	9.00¢	\$2,238.42	9.78¢
08/13/07	32	70	25,939		811	64		53%		\$2,302.65	8.88¢	\$2,504.34	9.65¢
07/12/07	30	70	23,325		778	66		49%		\$2,100.82	9.01¢	\$2,284.83	9.80¢
06/12/07	28	70	21,225		758	64		49%		\$1,926.23	9.08¢	\$2,094.95	9.87¢
Total	728		546598		18035	1632		1109%		\$ 51,157.12	225	\$ 55,637.58	245
Maximum	33		25939		816	82		53%		\$ 2,748.13	12	\$ 2,988.78	13
Average	30.3		22774.9		751.4	68.0		46%		\$ 2,131.55	9.4	\$ 2,318.23	10.2
Minimum	25		18589		683	63		40%		\$ 1,672.14	9	\$ 1,818.61	9

Exhibit G-1
Baseline Natural Gas
Consumption (Therms)

ACCOUNT	LOCATION	CCTR	SERVICE_ADDRESS	RATE	MAY08	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR09	TOTCONS	GRP
4010135	8010172	6531	112 S OSCEOLA AVE - City Hall	NMGS	3,257.1	2,988.6		6,456.3	3,434.7	3,733.5	3,130.4	3,875.0	3,798.3	3,609.2	3,335.9	3,672.2	41,291.2	15

ACCOUNT	LOCATION	CCTR	SERVICE_ADDRESS	RATE	MAY08	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR09	TOTREV
4010135	8010172	6531	112 S OSCEOLA AVE	NMGS	\$ 5,600	\$ 5,469		\$ 13,103	\$ 6,728	\$ 6,825	\$ 5,727	\$ 6,889	\$ 6,383	\$ 6,067	\$ 5,044	\$ 4,924	\$ 72,759

Exhibit G-1
Baseline Operating Parameters

High Efficiency Lighting:

See **Exhibit G-7 - Lighting Details** for run time hours for all lighting fixtures.

High Efficiency HVAC:

All units being replaced in accordance with the Scope of Work (Attachment A) were modeled using a 7.7 EER. The equipment is of similar age and baseline efficiency.

- Long Center Packaged Units
- Gas Division Offices
- Public Works E
- Transfer Station

Web Enabled HVAC Controls:

The following Space Temperature Setpoints apply to Facilities listed below. Details of the hours of operation can be found in **Exhibit G-8 – HVAC Controls**.

Pre Retrofit Facility	Occupied		UnOccupied	
	Heating STPT	Cooling STPT	Heating STPT	Cooling STPT
BEACH REC & LIBRARY - MOD	72	72	72	72
COUNTRYSIDE IMPOUND LOT	72	72	72	72
COUNTRYSIDE REC. CENTER	73	73	73	73
ENGINEERING FIELD OPERATION #E	72	72	72	72
FIRE 48 TRAINING CTR OFFICE	72.5	72.5	72.5	72.5
FIRE STATION # 48 TRAINING CENTER	72.5	72.5	72.5	72.5
FIRE STATION # 49	72	72	72	72
FIRE STATION # 51	72	72	72	72
FIRE STATION 44	72	72	72	72
GAS ADMIN. BUILDING	72	72	72	72
GAS SERVICE WAREHOUSE	72	72	72	72
GRAPHICS/ RECORDS RETENTION	72	72	72	72
LIBRARY, N. GREENWOOD BRANCH	73.5	73.5	76	76
LONG CENTER	70	72	70	72
MAIN LIBRARY	71	72	78	70
MUNICIPAL SERVICES BLDG.	72	75	72	75
NURSERY	72	72	72	72
POLICE STATION, MAIN	70	74	70	74
POLICE, CLW BEACH STA.	70	70	70	70
POLICE, COUNTRYSIDE STA.	72	72	72	72
PUBLIC WORKS BLDG. A	72	72	72	72
PUBLIC WORKS BLDG. C	72	72	72	72
SOLID WASTE ADMIN.	73	73	73	73
TRANSFER STATION OFFICE	72	72	72	72
CITY HALL	72	72	72	72

Exhibit G-1
Baseline Operating Parameters

Pool Pumping:

Field measurement data including amperage draw, voltage, GPM (using local devices, and power factor can be found in Exhibit G-8 Pool Motors. All pumps that were ON at the time of the measurements run 24 hours a day, 365 days a year.

Exhibit G-2
Guarantee Period Operating Parameters

High Efficiency Lighting:

See **Exhibit G-7 - Lighting Details** for run time hours for all lighting fixtures.

High Efficiency HVAC:

All units being replaced in accordance with the Scope of Work (Att A) were modeled using the following Efficiencies.

- Long Center Packaged Units - 10.8 EER
- Gas Division Offices – 1.1 kW/ton
- Public Works E - 10.8 EER
- Transfer Station – 12.6 EER

Web Enabled HVAC Controls:

The following Space Temperature Setpoints apply to Facilities listed below. Details of the hours of operation can be found in **Exhibit G-8 – HVAC Controls**.

Pre Retrofit Facility	Occupied		UnOccupied	
	Heating STPT	Cooling STPT	Heating STPT	Cooling STPT
BEACH REC & LIBRARY - MOD	70	76	68	80
COUNTRYSIDE IMPOUND LOT	70	76	68	80
COUNTRYSIDE REC. CENTER	70	76	68	80
ENGINEERING FIELD OPERATION #E	70	76	68	80
FIRE 48 TRAINING CTR OFFICE	70	76	68	80
FIRE STATION # 48 TRAINING CENTER	70	76	68	80
FIRE STATION # 49	70	76	68	80
FIRE STATION # 51	70	76	68	80
FIRE STATION 44	70	76	68	80
GAS ADMIN. BUILDING	70	76	68	80
GAS SERVICE WAREHOUSE	70	76	68	80
GRAPHICS/ RECORDS RETENTION	70	76	68	80
LIBRARY, N. GREENWOOD BRANCH	70	76	68	80
LONG CENTER	70	76	68	80
MAIN LIBRARY	70	76	68	80
MCMULLEN TENNIS COMPLEX	70	76	68	80
MUNICIPAL SERVICES BLDG.	70	76	68	80
N. GREENWOOD REC	70	76	68	80
N. GREENWOOD REC GYM	70	76	68	80
NURSERY	70	76	68	80
POLICE STATION, MAIN	70	76	68	80
POLICE, CLW BEACH STA.	70	76	68	80
POLICE, COUNTRYSIDE STA.	70	76	68	80
PUBLIC WORKS BLDG. A	70	76	68	80
PUBLIC WORKS BLDG. C	70	76	68	80
SOLID WASTE ADMIN.	70	76	68	80
TRANSFER STATION OFFICE	70	76	68	80
CITY HALL	70	76	68	72

Pool Pumping:

Exhibit G-2
Guarantee Period Operating Parameters

Field measurement data including amperage draw, voltage, GPM (using local devices, and power factor can be found in Exhibit G-8 Pool Motors. The Post Retrofit hours of operation will be as follows.

Continuous Use Pools: Pumps will continue to run 24/7/365

- Long Center.

Exhibit G-3 Utility Rates

Electric Utility Rate Baseline

Rate	Demand/Non	Rate Code	Voltage	Account	Contract Electrical Rates				Unit Costs									
					kWh		kW		On-Peak		Off-Peak		Base		On Peak		GRT	
					On-Peak	Off-Peak	Base	On Peak	Energy	Fuel	Energy	Fuel	Base	On Peak	GRT	MFF	MUT	Total Tax
GSDT-1	Demand		53 Secondary	N/A	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.564%	6.038%	0.000%	8.602%
GS-1	Non-Demand		60 Secondary	N/A	\$ 0.12566	\$ -	\$ -	\$ -	\$ 0.05638	\$ 0.05933	\$ -	\$ -	\$ -	\$ -	2.564%	6.038%	0.000%	8.602%
GSD-1	Demand		70 Secondary	N/A	\$ 0.09805	\$ -	\$ 4.03	\$ -	\$ 0.03095	\$ 0.05933	\$ -	\$ -	\$ 3.71	\$ -	2.564%	6.038%	0.000%	8.602%
LS-1	Non-Demand		16 N/A	N/A	\$ 0.08283	\$ -	\$ -	\$ -	\$ 0.02105	\$ 0.05522					2.564%	6.038%	0.000%	8.602%
GST-1	Non-Demand		100 Secondary	N/A	\$ 0.22742	\$ 0.07853	\$ -	\$ -	\$ 0.12926	\$ 0.08015	\$ 0.02283	\$ 0.04948			2.564%	6.038%	0.000%	8.602%
GSLM-2	Demand		169 Secondary	73051-92711	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.564%	6.038%	0.000%	8.602%
GSLM-2	Demand		169 Secondary	09544-56332	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.564%	6.038%	0.000%	8.602%
GSLM-2	Demand		171 Secondary	44991-14344	\$ 0.09805	\$ -	\$ 4.03	\$ -	\$ 0.03095	\$ 0.05933	\$ -	\$ -	\$ 3.71	\$ -	2.564%	6.038%	0.000%	8.602%

On-Peak Periods for Time Of Use Rates

On-Peak periods for TOU rates are Monday through Friday as follows:

November through March 6 to 10 a.m. / 6 to 10 p.m.

April through October.....Noon to 9 p.m.

All other hours, including Saturday, Sunday, and six major holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas) and the adjacent weekday if a holiday falls on Saturday or Sunday, are considered Off-Peak.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Days	31	28	31	30	31	30	31	31	30	31	30
Peak Hrs	8	8	8	9	9	9	9	9	9	9	8
Total Hrs Pea	248	224	248	270	279	270	279	279	270	279	240
Off Peak Hou	496	448	496	450	465	450	465	465	450	465	480

Electrical Escalation Model

Long Center Acct # 91948-11052

kWh Total	CONSUMPTION	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05
Billed Amt.	COST	232,478	219,368	179,578	172,908	163,938	156,348	200,738	192,918	249,958	291,588	250,418	293,198
Unit Cost	COST	\$16,820	\$15,635	\$12,696	\$13,082	\$12,749	\$12,128	\$15,157	\$15,112	\$19,057	\$21,803	\$19,880	\$22,600
		\$0.072	\$0.071	\$0.071	\$0.076	\$0.078	\$0.078	\$0.076	\$0.078	\$0.076	\$0.075	\$0.079	\$0.077

kWh Total	CONSUMPTION	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06
Billed Amt.	COST	234,318	187,628	195,678	172,448	177,508	151,978	189,238	204,878	193,209	227,019	216,439	205,859
Unit Cost	COST	\$18,757	\$15,233	\$15,415	\$16,059	\$16,855	\$14,486	\$17,866	\$19,551	\$18,581	\$21,612	\$20,974	\$19,721
		\$0.080	\$0.081	\$0.079	\$0.093	\$0.095	\$0.095	\$0.094	\$0.095	\$0.096	\$0.095	\$0.097	\$0.096

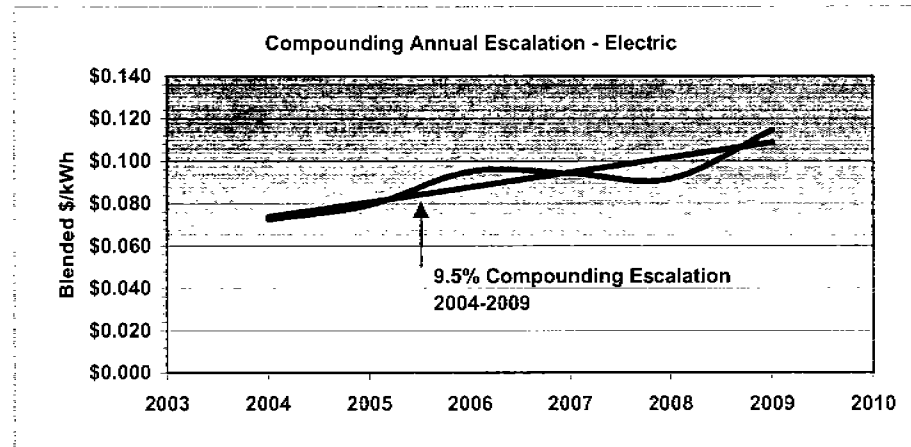
kWh Total	CONSUMPTION	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07
Billed Amt.	COST	219,659	189,989	193,669	215,749	158,939	151,809	189,069	204,709	193,209	238,280	250,930	276,690
Unit Cost	COST	\$21,363	\$18,593	\$17,972	\$19,309	\$14,925	\$14,208	\$17,532	\$19,241	\$18,320	\$22,572	\$23,634	\$26,245
		\$0.097	\$0.098	\$0.093	\$0.089	\$0.094	\$0.094	\$0.093	\$0.094	\$0.095	\$0.095	\$0.094	\$0.095

kWh Total	CONSUMPTION	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08
Billed Amt.	COST	284,050	248,400	231,380	173,650	168,360	161,000	133,400	195,500	171,580	257,830	276,000	261,050
Unit Cost	COST	\$26,628	\$23,838	\$21,891	\$16,162	\$14,916	\$14,567	\$12,442	\$17,495	\$15,918	\$23,141	\$24,519	\$24,673
		\$0.094	\$0.096	\$0.095	\$0.093	\$0.089	\$0.090	\$0.093	\$0.089	\$0.093	\$0.090	\$0.089	\$0.095

kWh Total	CONSUMPTION	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09
Billed Amt.	COST	279,220	262,200	245,180	173,420	158,700	137,540	143,060	168,590	164,910			
Unit Cost	COST	\$25,767	\$24,341	\$22,916	\$16,481	\$18,689	\$16,500	\$16,921	\$17,837	\$18,115			
		\$0.092	\$0.093	\$0.093	\$0.095	\$0.118	\$0.120	\$0.118	\$0.106	\$0.110	#DIV/0!	#DIV/0!	#DIV/0!

	Unit Cost	Escalatic.	linear Esc.
2004	\$0.0725	-	\$0.0725
2005	\$0.0793	8.6%	\$0.0794
2006	\$0.0951	16.6%	\$0.0869
2007	\$0.0941	-1.0%	\$0.0952
2008	\$0.0915	-2.8%	\$0.1042
2009	\$0.1143	19.9%	\$0.1141
Total			

Model Escalation	9.50%
Contract Escalation	6%



Natural Gas Rate Baseline

Rate	Unit Costs - \$/Therm										Contract NG Rates
	Non Fuel	ECA	RIA	UIA	PGA	GRT	MFF	MUT	SST	PCT	\$/Therms
NSGS	\$ 0.46	\$ 0.04	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	\$ 1.466
NMGS	\$ 0.40	\$ 0.04	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	\$ 1.406
NGAC	\$ 0.15	\$ -	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	\$ 1.116
N410N	\$ 0.41	\$ -	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	\$ 1.376
N410M	\$ 0.41	\$ -	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	\$ 1.376

Exhibit G-4
Pre Retrofit Baseline Adjustments

Pre Retrofit baseline adjustments are not calculated as part of this contract.

Exhibit G-5
Known Future Baseline Adjustments

Known future baseline adjustments are not calculated as part of this contract.

EXHIBIT G-6
Site Specific Measurement & Verification Plan

ECM 1: High Efficiency Lighting Upgrades - Buildings

The purpose of this ECM is to increase the efficiency of the lighting systems by retrofitting or replacing selected existing lighting fixtures with new energy efficient lamps and ballasts which will provide significant reductions in both the electrical demand and consumption

- 1) **Description/Rationale for ECM and M&V Method:** A Retrofit Isolation Methodology (Option A) with performance and operational parameters stipulated and agreed upon as displayed in the engineering calculations was selected to determine the energy unit displacement and cost avoidance. The M&V methodology will provide assurance that the ECM has the potential to perform as installed. This method was selected as a cost effective approach providing an acceptable balance between the cost of doing M&V versus the quantity of projected Cost Avoidance.
- 2) **Boundary of Energy Use and Cost Avoidance Determination** The energy cost avoidance determination for this ECM is isolated to the electrical lighting energy.
- 3) **Baseline: Baseline Conditions and Planned & Unplanned Baseline Adjustment Conditions**
Baseline: The energy performance baseline was determined from existing systems manufacturer's performance specifications, Staff interviews, and utility bill analysis. The energy use baselines are included in **Exhibit G-1 - Baseline Operating Parameters**. The baseline period dates are listed in section 1 of Attachment G. The baseline unit cost energy is based on the most recent rates paid by the Customer and will be considered to be the value of unit cost avoidance. Operational performance baseline parameters are included and presented in Attachment G.
Planned and Unplanned (Routine and Non-Routine) Baseline Adjustments:
There are no projected baseline adjustments for this ECM. The Customer and Honeywell have stipulated and agreed upon operational and energy baseline parameters.
- 4) **Potential-to-Save Verification Plan** The verification of potential-to-save will be based on review of subcontractor documents and as-built observations to verify that the quantity, nameplate capacity, nameplate efficiency and operational scheduling of the ECM meet the intent of the Engineered Savings Calculations.
- 5) **Parameters to be Monitored & Sampling Plan:** The sampling methodology will utilize measurements taken on switches or breakers and include five percent (5%) of fixtures per technology type (lamp and ballast combinations). Due to minimal quantities and accepted energy usage, the exit signs and incandescent lamps will not be measured. Operational parameters (hours) are stipulated in accordance with Exhibit G-5 in order to calculate the potential to save.
- 6) **Determination of Energy & Cost Avoidance** Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 7) **Determination of Non-Energy Operational Cost Impact:** Calculation of estimated Labor & Material Savings due to increased lamp life and reduced run time.
- 8) **Customer Responsibilities** The guarantee is contingent on the Customer successfully fulfilling the following tasks:
 - a) maintain post retrofit operational use as projected and displayed in the engineering calculations.
 - b) as delineated in the Energy Guarantee Special Provisions outlined in Attachment D and Attachments F and G.
 - c) provide Honeywell with notification of changes that would impact the baseline of this ECM.
- 9) **On-Going Activities:** in accordance with Attachment D.
- 10) **Reports & Documentation** there will be a single (1) annual report of the determination of energy avoidance each year, subject to Attachment D and Attachment F.

EXHIBIT G-6
Site Specific Measurement & Verification Plan

ECM 2: HIGH EFFICIENCY HVAC UPGRADES

The purpose of this ECM is to improve efficiency in various HVAC and Mechanical Systems.

- 1) **Description/Rationale for ECM and M&V Method:** A Retrofit Isolation Methodology (Option A) with performance and operational parameters stipulated and agreed upon as displayed in the engineering calculations was selected to determine the energy unit displacement and cost avoidance. The M&V methodology will provide assurance that the ECM has the potential to perform as installed. This method was selected as a cost effective approach providing an acceptable balance between the costs of doing M&V versus the quantity of projected Cost Avoidance.
- 2) **Boundary of Energy Use and Cost Avoidance Determination:** The energy cost avoidance determination for this ECM is isolated to electrical and natural gas energy use associated with improved efficiency due to the replacement of HVAC and Mechanical Systems.
- 3) **Baseline: Baseline Conditions and Planned & Unplanned Baseline Adjustment Conditions**
Baseline: The energy performance baseline was determined from existing systems manufacturer's performance specifications, Staff interviews, and utility bill analysis. The energy use baselines are included in **Exhibit G-1 - Baseline Operating Parameters**. The baseline period dates are listed in section 1 of Attachment G. The baseline unit cost energy is based on the most recent rates paid by the Customer and will be considered to be the value of unit cost avoidance. Operational performance baseline parameters are included and presented in Attachment G.

Planned and Unplanned (Routine and Non-Routine) Baseline Adjustments:

There are no projected baseline adjustments for this ECM. The Customer and Honeywell have stipulated and agreed upon operational and energy baseline parameters.
- 4) **Potential-to-Save Verification Plan** The verification of potential-to-save will be based on review of subcontractor documents and as-built observations to verify that the quantity, nameplate capacity, nameplate efficiency and operational scheduling of the ECM meet the intent of the Engineered Savings Calculations.
- 5) **Parameters to be Monitored & Sampling Plan:** Limited to Verification of Potential to Perform as indicated above. Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 6) **Determination of Energy & Cost Avoidance** Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 7) **Determination of Non-Energy Operational Cost Impact:** Existing units are past their expected useful lives and have experienced numerous costly repairs over the last few years.
- 8) **Customer Responsibilities** The guarantee is contingent on the Customer successfully fulfilling the following tasks:
 - a) cause to effect preventative maintenance and annual inspections
 - b) maintain post retrofit operational use as projected and displayed in the engineering calculations
 - c) as delineated in the Energy Guarantee Special Provisions outlined in Attachment D and Attachments F and G.
 - d) provide Honeywell with notification of changes that would impact the baseline of this ECM.
- 9) **On-Going Activities:** in accordance with Attachment D.
- 10) **Reports & Documentation:** there will be a single (1) annual report of the determination of energy avoidance each year, subject to Attachment D and Attachment F.

EXHIBIT G-6
Site Specific Measurement & Verification Plan

ECM 3: HVAC CONTROLS AUTOMATION UPGRADE

The purpose of this ECM is to reduce the electrical and natural gas usage associates with cooling and heating of City Of Clearwater facilities. See attachment A for a complete scope of work.

- 1) **Description/Rationale for ECM and M&V Method:** A *Retrofit Isolation Methodology (Option A)* with performance and operational parameters stipulated and agreed upon as displayed in the engineering calculations was selected to determine the energy unit displacement and cost avoidance. The M&V methodology will provide assurance that the ECM has the potential to perform as installed. This method was selected as a cost effective approach providing an acceptable balance between the costs of doing M&V versus the quantity of projected Cost Avoidance.
- 2) **Boundary of Energy Use and Cost Avoidance Determination:** Savings from installation of an energy management system and retrofitting energy efficient HVAC equipment will be quantified through Option A. This method analyzes energy use within the *isolated* boundary of this particular ECM retrofit and not the building as a whole at the utility meter. This retrofit isolation approach, thus avoids the time and expense necessary to track on-site changes that effect electrical use as seen at the electric utility meter that are not related to this ECM. Honeywell will provide verification that the HVAC Controls systems installed are operating the specifications projected in this Agreement through the documentation records provided by the installer and by annual spot check of the systems.
- 3) **Baseline: Baseline Conditions and Planned & Unplanned Baseline Adjustment Conditions**
Baseline: The energy performance baseline was determined from existing systems manufacturer's performance specifications, Staff interviews, and utility bill analysis. The energy use baselines are included in **Exhibit G-1 - Baseline Operating Parameters**. The baseline period dates are listed in section 1 of Attachment G. The baseline unit cost energy is based on the most recent rates paid by the Customer and will be considered to be the value of unit cost avoidance. Operational performance baseline parameters are included and presented in Attachment G.

Planned and Unplanned (Routine and Non-Routine) Baseline Adjustments:

There are no projected baseline adjustments for this ECM. The Customer and Honeywell have stipulated and agreed upon operational and energy baseline parameters.
- 4) **Potential-to-Save Verification Plan** The verification of potential-to-save will be based on review of subcontractor documents and as-built observations to verify that the quantity, nameplate capacity, nameplate efficiency and that the control strategies, operational scheduling, and temperature set points of the ECM meet the intent of the Engineered Savings Calculations.
- 5) **Parameters to be Monitored & Sampling Plan:** Limited to Verification of Potential to Perform as indicated above. Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 6) **Determination of Energy & Cost Avoidance** Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 7) **Determination of Non-Energy Operational Cost Impact:** Reductions in Energy Management System related labor activities required to maintain ageing equipment, and reduction in Building Controls related material purchases required to maintain ageing equipment. Operational savings are based on the following agreed upon concepts;

The operational cost savings are deemed satisfied upon contract execution. The Customer acknowledges and agrees that, if it did not enter into this agreement, it would have to take future steps to achieve the same ends as does the work included in Attachment A of this contract, and that, in doing so, it would incur operational costs of at least the amount per year over the life of the performance period as presented in the Schedule of Savings. The Customer agrees that, by entering into this agreement, it will avoid future operational costs in at least these amounts.

- 8) **Customer Responsibilities** The guarantee is contingent on the Customer successfully fulfilling the following tasks:

EXHIBIT G-6
Site Specific Measurement & Verification Plan

- a) cause to effect preventative maintenance and annual inspections
 - b) maintain post retrofit operational use as projected and displayed in the engineering calculations
 - c) as delineated in the Energy Guarantee Special Provisions outlined in Attachment D and Attachments F and G.
 - d) provide Honeywell with notification of changes that would impact the baseline of this ECM.
- 9) **On-Going Activities:** in accordance with Attachment D.
- 10) **Reports & Documentation:** there will be a single (1) annual report of the determination of energy avoidance each year, subject to Attachment D and Attachment F.

EXHIBIT G-6
Site Specific Measurement & Verification Plan

ECM 4: POOL UPGRADES –HIGH EFFICIENCY MOTORS

The purpose of this ECM is to reduce the pumping energy and reduce the energy loss at the City pools.

1) **Description/Rationale for ECM and M&V Method:** A *Retrofit Isolation Methodology (Option A)* with performance and operational parameters stipulated and agreed upon as displayed in the engineering calculations was selected to determine the energy unit displacement and cost avoidance. The M&V methodology will provide assurance that the ECM has the potential to perform as installed. This method was selected as a cost effective approach providing an acceptable balance between the costs of doing M&V versus the quantity of projected Cost Avoidance.

2) **Boundary of Energy Use and Cost Avoidance Determination:** The energy cost avoidance determination for this ECM is isolated to the electric usage projected for pumping.

3) **Baseline: Baseline Conditions and Planned & Unplanned Baseline Adjustment Conditions**
Baseline: The energy performance baseline was determined from spot measurements of amperage, voltage and power factor, flow rate via onsite devices, existing systems manufacturer's performance specifications, Staff interviews, and utility bill analysis. The energy use baselines are included in **Exhibit G-1 - Baseline Operating Parameters**. The baseline period dates are listed in section 1 of Attachment G. The baseline unit cost energy is based on the most recent rates paid by the Customer and will be considered to be the value of unit cost avoidance. Operational performance baseline parameters are included and presented in Attachment G.

Planned and Unplanned (Routine and Non-Routine) Baseline Adjustments:

There are no projected baseline adjustments for this ECM. The Customer and Honeywell have stipulated and agreed upon operational and energy baseline parameters.

4) **Potential-to-Save Verification Plan** The verification of potential-to-save will be based on review of subcontractor documents and as-built observations to verify that the quantity, nameplate capacity, nameplate efficiency and operational scheduling of the ECM meet the intent of the Engineered Savings Calculations. Post retrofit measurements of motor amperage and voltage, and review of seasonal scheduling will be verified for compliance with the intent of the Engineered Savings Calculations.

5) **Parameters to be Monitored & Sampling Plan:** Limited to Verification of Potential to Perform as indicated above. Customer agrees that the engineering calculations presented are stipulated and agreed upon as accrued based on the verification data.

6) **Determination of Energy & Cost Avoidance:** Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.

7) **Determination of Non-Energy Operational Cost Impact:** Calculation of estimated Labor & Material Savings due to reduced pump usage.

8) **Customer Responsibilities** The guarantee is contingent on the Customer successfully fulfilling the following tasks:

- a) cause to effect preventative maintenance and annual inspections
- b) maintain post retrofit operational use as projected and displayed in the engineering calculations
- c) as delineated in the Energy Guarantee Special Provisions outlined in Attachment D and Attachments F and G.
- d) provide Honeywell with notification of changes that would impact the baseline of this ECM.

9) **On-Going Activities:** In accordance with Attachment D.

10) Reports & Documentation: there will be a single (1) annual report of the determination of energy avoidance each year, subject to Attachment D and Attachment F.

EXHIBIT G-6
Site Specific Measurement & Verification Plan

ECM 5: COOL ROOF

The purpose of this ECM is to reduce the impact of roof related cooling load, and winter heat loss at the Long Center.

- 1) **Description/Rationale for ECM and M&V Method:** *A Retrofit Isolation Methodology (Option A) with performance and operational parameters stipulated and agreed upon as displayed in the engineering calculations* was selected to determine the energy unit displacement and cost avoidance. The M&V methodology will provide assurance that the ECM has the potential to perform as installed. This method was selected as a cost effective approach providing an acceptable balance between the costs of doing M&V versus the quantity of projected Cost Avoidance.
- 2) **Boundary of Energy Use and Cost Avoidance Determination:** The energy cost avoidance determination for this ECM includes electric energy for cooling and electric energy used for heating.
- 3) **Baseline: Baseline Conditions and Planned & Unplanned Baseline Adjustment Conditions**
Baseline: The energy performance baseline was determined using existing roofing systems manufacturer's performance specifications. The energy use baselines are included in **Exhibit G-1 - Baseline Operating Parameters**. The baseline period dates are listed in section 1 of Attachment G. The baseline unit cost energy is based on the most recent rates paid by the Customer and will be considered to be the value of unit cost avoidance. Operational performance baseline parameters are included and presented in Attachment G.

Planned and Unplanned (Routine and Non-Routine) Baseline Adjustments:

There are no projected baseline adjustments for this ECM. The Customer and Honeywell have stipulated and agreed upon operational and energy baseline parameters.

- 4) **Potential-to-Save Verification Plan** The verification of potential-to-save will be based on review of subcontractor documents and as-built observations to verify that the installation of the ECM meets the intent of the Engineered Savings Calculations.
- 5) **Parameters to be Monitored & Sampling Plan:** Limited to Verification of Potential to Perform as indicated above. Customer agrees that the engineering calculations presented are stipulated and agreed upon as accrued based on the verification data.
- 6) **Determination of Energy & Cost Avoidance:** Customer agrees that the engineering calculations presented are stipulated and represent the guarantee period operational performance and energy savings accrued.
- 7) **Determination of Non-Energy Operational Cost Impact:** Calculation of estimated Labor & Material Savings accrued associated with periodic roof repairs or maintenance required on the existing roof.
- 8) **Customer Responsibilities** The guarantee is contingent on the Customer successfully fulfilling the following tasks:
 - a) cause to effect preventative maintenance and annual inspections
 - b) maintain post retrofit operational use as projected and displayed in the engineering calculations
 - c) as delineated in the Energy Guarantee Special Provisions outlined in Attachment D and Attachments F and G.
 - d) provide Honeywell with notification of changes that would impact the baseline of this ECM.
- 9) **On-Going Activities:** In accordance with Attachment D.
- 10) **Reports & Documentation:** there will be a single (1) annual report of the determination of energy avoidance each year, subject to Attachment D and Attachment F.

Exhibit G-7 **Lighting Detail**

Facility	kWh Saved	Baseline	% Savings Notes
Gas -Gas Division (offices)	24,179	274,398	15%
Gas -Metershop	18,247		
Gas -Gas Sales Office	11,345	81,090	14%
City Hall	46,217	1,019,040	5%
General Services-B & M Shops	7,329	71,182	10%
General Services-Fleet Maintenance	117,738	649,640	18%
General Services-MSB	51,926	2,144,400	2%
Library-Main Library	59,325	3,068,600	2%
Pks & Rec-Long Center Aquacenter (Auditor Bldg)	29,909	2,527,700	1%
Police-Beach Substation	4,591	130,640	4%
Police-Countryside Station	24,114	253,061	10%
Police-Main Station	45,651	2,154,640	2%
Public Service-Bldg. B	5,540	84,769	7%
Public Services-Traffic shop (Auditor Bldg)	9,807	60,649	16%
Solid Waste-Transfer Station & Scale House	17,661	20,444	86%
Traffic Engineering-Parking/Garden Ave Garage	22,891	211,040	11%
Totals	496,471	12,751,293	4%

	Energy	O&M
Contract Guarantee Savings 91%	\$ 68,348	\$ 6,344

Building Summary

Building Name	Sum of Existing Qty	Sum of Proposed Qty	Sum of Total Saved kW	Sum of Total kWh Saved	Sum of Total kW Dollars Saved	Sum of Total kWh Dollars Saved	Controls Dollars Saved	Time Clock Savings	Maintenance Savings	Grand Total Savings
Gas -Gas Division (offices)	183	183	9.63	24,179	\$ 429	\$ 2,183	\$ 270	\$ 3,811	\$300	\$ 6,993
Gas -Gas Sales Office	112	112	7.37	11,345	\$ -	\$ 1,313	\$ 273	\$ 245	\$85	\$ 1,916
Gas -Metershop	112	112	7.45	18,247	\$ 332	\$ 1,648	\$ 140	\$ 785	\$166	\$ 3,071
General Services-City Hall	534	534	21.09	46,217	\$ 698	\$ 4,306	\$ 521	\$ 823	\$322	\$ 6,669
General Services-Fleet Maintenance	509	504	51.30	117,738	\$ 1,699	\$ 11,039	\$ 2,179	\$ 1,333	\$1,030	\$ 17,280
General Services-MSB	1044	1044	20.37	51,926	\$ 675	\$ 4,747	\$ 320	\$ 842	\$1,441	\$ 8,625
Library-Main Library	1461	1461	22.80	59,325	\$ 755	\$ 5,446	\$ 2,389	\$ -	\$721	\$ 9,611
Police-Beach Substation	110	107	2.16	4,591	\$ -	\$ 481	\$ 83	\$ -	\$60	\$ 624
Police-Countryside Station	136	136	9.42	24,114	\$ 312	\$ 2,093	\$ 292	\$ -	\$216	\$ 2,912
Police-Main Station	1370	1370	17.52	45,651	\$ 580	\$ 4,056	\$ 2,306	\$ -	\$881	\$ 7,823
Public Service-Bldg. B	47	47	1.50	5,540	\$ 67	\$ 500	\$ 175	\$ -	\$33	\$ 775
Traffic Engineering-Parking/Garden Ave Garage	182	182	4.87	22,891	\$ 161	\$ 1,995	\$ 2,564	\$ -	\$404	\$ 5,125
General Services-B & M Shops - Reduced Scope	43	43	4.42	7,329	\$ 197	\$ 662	\$ 18	\$ -	\$57	\$ 933
Solid Waste-Transfer Station & Scale House - Redu	35	35	6.80	17,661	\$ -	\$ 2,043	\$ 289	\$ 1,185	\$85	\$ 3,602
Pks & Rec-Long Center Aquacenter	419	419	15.02	29,909	\$ 498	\$ 2,825	\$ 437	\$ -	\$487	\$ 4,247
Public Services-Traffic shop	70	70	4.38	9,807	\$ 195	\$ 886	\$ 175	\$ -	\$80	\$ 1,336
Project Total	6,367	6,359	206	496,471	6,598	46,223	13,330	9,024	6,344	81,542

	Energy	O&M
Contract Guarantee Savings 91%	\$ 68,348	\$ 6,344

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
1212T8	LP12	2	2	A 1x2, 1-Lamp T8 Fluorescent Fixture will be Retrofit with a 1-Lamp Electronic Low Power Ballast and (1) 2' T8 Energy Saving Lamp.
1222	1212VAN	1	1	A 1x2, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x2 Box Wrap Containing a 1-Lamp Electronic Normal Power Ballast and (1) 2' T8 Energy Saving Lamp.
1222	LP22	1	1	A 1x2, 2-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 2' T8 Energy Saving Lamps.
1222T8	LP22	4	4	A 1x2, 2-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 2' T8 Energy Saving Lamps.
1323T8	LP23	4	4	A 1x3, 2-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 3' T8 Energy Saving Lamps.
1414	LP14	1	1	A 1x4, 1-Lamp Fluorescent Fixture will be Retrofit with a 1-Lamp Electronic Low Power Ballast and (1) 4' T8 Energy Saving Lamp.
1414T8	LP14	9	9	A 1x4, 1-Lamp T8 Fluorescent Fixture will be Retrofit with a 1-Lamp Electronic Low Power Ballast and (1) 4' T8 Energy Saving Lamp.
1424	1414SWR	2	2	A 1x4, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x4 Standard Wrap Containing a 1-Lamp Electronic Normal Power Ballast, (1) Reflector, and (1) 4' T8 Energy Saving Lamp.
1424	1414VR	1	1	A 1x4, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x4 Vapor Resistant Fixture Containing a 1-Lamp Electronic Normal Power Ballast and (1) 4' T8 Energy Saving Lamp.
1424	LP14K14	8	8	A 1x4, 2-Lamp Fluorescent Fixture will be Retrofit with a 1-Lamp Electronic Low Power Ballast, (1) Bracket Kit, and (1) 4' T8 Energy Saving Lamp.
1424	LP24	122	122	A 1x4, 2-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 4' T8 Energy Saving Lamps.
1424	LP24L14	4	4	A 1x4, 2-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 1x4 Lens, and (2) 4' T8 Energy Saving Lamps.
1424T8	LP24	450	450	A 1x4, 2-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 4' T8 Energy Saving Lamps.
1424T8-DL2	LP24	2	2	A 1x4 T8 Fluorescent Fixture, Delamped, will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 4' T8 Energy Saving Lamps.
1434	LP34	289	289	A 1x4, 3-Lamp Fluorescent Fixture will be Retrofit with a 3-Lamp Electronic Low Power Ballast and (3) 4' T8 Energy Saving Lamps.
1434DS	LP34-ALT	11	11	A 1x4, Double Switched 3-Lamp Fluorescent Fixture will be Retrofit with a 3-Lamp Electronic Low Power Ballast and (3) 4' T8 Energy Saving Lamps. Alternate Switching.
1444	1424SWR	7	7	A 1x4, 4-Lamp Fluorescent Fixture will be Replaced with a New 1x4 Standard Wrap Containing a 2-Lamp Electronic Normal Power Ballast, (1) Reflector and (2) 4' T8 Energy Saving Lamps.
1444	1424WW	1	1	A 1x4, 4-Lamp Fluorescent Fixture will be Replaced with a New 1x4 Wide Wrap Containing a 2-Lamp Electronic Normal Power Ballast, and (2) 4' T8 Energy Saving Lamps.
1444	LP44	6	6	A 1x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
1444T8	LP44	2	2	A 1x4, 4-Lamp T8 Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
1828	1824IND	41	41	A 1x8, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x8 Industrial Strip Containing a 2-Lamp Electronic Normal Power Ballast, White Hood, and (2) 4' T8 Energy Saving Lamp.

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
1828	1824VR	1	1	A 1x8, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x8 Vapor Resistant Wrap Containing a 2-Lamp Electronic Normal Power Ballast and (2) 4' T8 Energy Saving Lamps.
1828	1834IND-WG	15	15	A 1x8, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x8 Industrial Strip Containing a 3- Lamp Electronic Normal Power Ballast, (1) White Hood, (1) Wire Guard, and (3) 4' T8 Energy Saving Lamps.
1828	1844IND-WG	9	9	A 1x8, 2-Lamp Fluorescent Fixture will be Replaced with a New 1x8 Industrial Strip Containing a 4-Lamp Electronic Normal Power Ballast, (1) White Hood, (1) Wire Guard, and (4) 4' T8 Energy Saving Lamps.
1828	LP44K18	12	12	A 1x8, 2-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast, (1) 1x8 Bracket Kit, and (4) 4' T8 Energy Saving Lamps.
1828	NP24K18	77	77	A 1x8, 2-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 1x8 Bracket Kit, and (2) 4' T8 Energy Saving Lamps.
1828T8	1824VR	4	4	A 1x8, 2-Lamp T8 Fluorescent Fixture will be Replaced with a New 1x8 Vapor Resistant Wrap Containing a 2-Lamp Electronic Normal Power Ballast and (2) 4' T8 Energy Saving Lamps.
1828T8	1844VR	2	2	A 1x8, 2-Lamp T8 Fluorescent Fixture will be Replaced with a New 1x8 Vapor Resistant Fixture Containing a 4-Lamp Electronic Normal Power Ballast and (4) 4' T8 Energy Saving Lamps.
1844	LP44	40	40	A 1x8, 4-Lamp 4' Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
1844T8	LP44	453	453	A 1x8, 4-Lamp 4' T8 Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
222U	LP22R22	26	26	A 2x2, 2- U-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x2 Reflector Kit, and (2) 2' T8 Energy Saving Lamps.
222U	LP2U	6	6	A 2x2, 2- U-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) T8 6" U-tube Energy Saving Lamps.
222U	NP22K22	6	6	A 2x2, 2- U-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Ballast, (1) 2x2 Bracket Kit and (2) 2' T8 Energy Saving Lamps.
222U	NP22R22	10	10	A 2x2, 2- U-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Ballast, (1) 2x2 Reflector Kit and (2) 2' T8 Energy Saving Lamps.
222U	NP22R22L	1	1	A 2x2, 2- U-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Ballast, (1) 2x2 Reflector Kit, (1) 2x2 Lens, and (2) 2' T8 Energy Saving Lamps.
222UT8	LP22R22	18	18	A 2x2, 2- U-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x2 Reflector Kit, and (2) 2' T8 Energy Saving Lamps.
222UT8	LP2U	6	6	A 2x2, 2- U-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) T8 6" U-tube Energy Saving Lamps.
222UT8	LP32R22	73	73	A 2x2, 2- U-Lamp T8 Fluorescent Fixture will be Retrofit with a 3-Lamp Electronic Low Power Ballast, (1) 2x2 Reflector Kit, and (3) 2' T8 Energy Saving Lamps.
222UT8	NP22K22	198	198	A 2x2, 2- U-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Ballast, (1) 2x2 Bracket Kit and (2) 2' T8 Energy Saving Lamps.
222UT8	NP32R22	3	3	A 2x2, 2- U-Lamp T8 Fluorescent Fixture will be Retrofit with a 3-Lamp Electronic Ballast, (1) 2x2 Reflector Kit and (3) 2' T8 Energy Saving Lamps.
2424	LP24	57	57	A 2x4, 2-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 4' T8 Energy Saving Lamps.
2424T8	LP24	132	132	A 2x4, 2-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast and (2) 4' T8 Energy Saving Lamps.

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
2424XB	NP24	16	16	A 2x4, 2-Lamp, 2 Ballast Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast and (2) 4' T8 Energy Saving Lamps.
2434	HP24R24	22	22	A 2x4, 3-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic High Power Ballast, (1) Reflector and (2) 4' T8 Energy Saving Lamps.
2434	HP24R24L	4	4	A 2x4, 3-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic High Power Ballast, (1) Reflector, (1) Lens, and (2) 4' T8 Energy Saving Lamps.
2434	NP24R24	2	2	A 2x4, 3-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2434T8	HP24R24	52	52	A 2x4, 3-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic High Power Ballast, (1) Reflector and (2) 4' T8 Energy Saving Lamps.
2434T8	LP24R24	128	128	A 2x4, 3-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2434T8	LP24R24T2	6	3	A 2x4, 3-Lamp T8 Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast (Tandem-Wired), (2) 2x4 Reflector Kits, and (4) 4' T8 Energy Lamps.
2434T8	LP34	1,229	1,229	A 2x4, 3-Lamp T8 Fluorescent Fixture will be Retrofit with a 3-Lamp Electronic Low Power Ballast and (3) 4' T8 Energy Saving Lamps.
2434T8-DL	LP24R24	221	221	A 2x4, Delamped T8 Fluorescent Fixture (various) will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2434T8-DS	LP34-ALT	89	89	A 2x4, 3-Lamp T8 Fluorescent Fixture Wired for Double Switching will be Retrofit with a 3-Lamp Electronic Low Power Ballast and (3) 4' T8 Energy Saving Lamps. Alternate Switching.
2444	HP24R24	111	111	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic High Power Ballast, (1) Reflector and (2) 4' T8 Energy Saving Lamps.
2444	HP24R24L	40	40	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic High Power Ballast, (1) Reflector, (1) Lens, and (2) 4' T8 Energy Saving Lamps.
2444	LP24R24	217	217	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2444	LP24R24L	2	2	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Low Power Ballast, (1) 2x4 Reflector Kit, (1) 2x4 Lens, and (2) 4' T8 Energy Saving Lamps.
2444	LP44	35	35	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
2444	NP24R24	189	189	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2444	NP24R24L	14	14	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 2x4 Reflector Kit, (1) 2x4 Lens and (2) 4' T8 Energy Saving Lamps.
2444	NP24R24T2	10	5	A 2x4, 4-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Normal Power Ballast (Tandem Wired), (2) 2x4 Reflector Kits, and (4) 4' T8 Energy Saving Lamps.
2444T8	LP44	13	13	A 2x4, 4-Lamp T8 Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic Low Power Ballast and (4) 4' T8 Energy Saving Lamps.
2444T8	NP24R24	14	14	A 2x4, 4-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps.
2444T8	NP24R24-HI	4	4	A 2x4, 4-Lamp T8 Fluorescent Fixture will be Retrofit with a 2-Lamp Electronic Normal Power Ballast, (1) 2x4 Reflector Kit, and (2) 4' T8 Energy Saving Lamps. High Location.

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
4-64	HP44R24-X2	2	2	A 4x4, 6-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic High Power Ballast, (2) 2x4 Reflector and (4) 4' T8 Energy Saving Lamps.
4484	HP44R24-X2	1	1	A 4x4, 8-Lamp Fluorescent Fixture will be Retrofit with a 4-Lamp Electronic High Power Ballast, (2) 2x4 Reflector and (4) 4' T8 Energy Saving Lamps.
CFL200	1464HBPSSR-WG	17	17	A 200w Compact Fluorescent Fixture will be Replaced with a New 1x4 High Bay Fixture Containing a (1) 4-Lamp and (1) 2-Lamp Electronic Program Start Ballast, (1) Reflector, (1) Wire Guard, with Slave Relay, and (6) 4' T8 High Lumen Lamps. High Location.
HAL90	CF15R30	5	5	A 90w Halogen Infrared Fixture will be Retrofit with a 15w R30 One-Piece Compact Fluorescent Flood Lamp.
I100	CF23	9	9	A 100w Incandescent Fixture will be Retrofit with a 23w One-Piece Compact Fluorescent Lamp.
I100DIM	CC18	8	8	A 100w Dimmable Incandescent Fixture will be Retrofit with a 18w One-Piece Cold Cathode Lamp.
I2X60	CF2X13	3	3	A (2) x 60w Incandescent Fixture will be Retrofit with (2) 13w One-Piece Compact Fluorescent Lamps.
I2X60	CF2X15R30	4	4	A (2) x 60w Incandescent Fixture will be Retrofit with (2) 15w R30 One-Piece Compact Fluorescent Flood Lamp.
I2X60	PL2X13DRM	2	2	A (2) x 60w Incandescent Fixture will be Replaced with a New Drum Fixture Containing (2) 13w Plug-In Compact Fluorescent Lamp.
I2X90	CF2X23R30	12	12	A (2) x 90w Incandescent Fixture will be Retrofit with (2) 23w One-Piece Compact Fluorescent Lamp and R30 Reflector.
I3X60	1313VAN	1	1	A (3) x 60w Incandescent Fixture will be Replaced with a New 1x3 Vanity Fixture Containing a 1-Lamp Electronic Normal Power Ballast and (1) 3' T8 Energy Saving Lamp.
I40DIM	CC13	4	4	A 40w Incandescent Dimmable Fixture will be Retrofit with a 13w One-Piece Cold Cathode Lamp.
I60	CAP20	21	21	A 60w Incandescent Fixture will be Retrofit with a 20w Halogen Capsytle Lamp.
I60	CF13	11	11	A 60w Incandescent Fixture will be Retrofit with a 13w One-Piece Compact Fluorescent Lamp.
I60	CF15R30	12	12	A 60w Incandescent Fixture will be Retrofit with a 15w R30 One-Piece Compact Fluorescent Flood Lamp.
I75	CF23	2	2	A 75w Incandescent Fixture will be Retrofit with a 23w One-Piece Compact Fluorescent Lamp.
I75DIM	CC18	6	6	A 75w Incandescent Dimmable Fixture will be Retrofit with a 18w One-Piece Cold Cathode Lamp.
I90	CF23R30	2	2	A 90w Incandescent Fixture will be Retrofit with a 23w One-Piece Compact Fluorescent Lamp and R30 Reflector.
K2X15	KLED	29	29	An Exit Sign Containing (2) 15w Incandescents will be Replaced with New Universal LED Exit Sign
K2X15B	KLEDB	6	6	An Exit Sign Containing (2) 15w Incandescents with Battery Backup will be Replaced with a New Universal LED Exit Sign with Battery Backup
M100	CF42	1	1	A 100w Metal Halide Fixture will be Retrofit with a 42w One-Piece Compact Fluorescent Lamp.

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
M100	IND70WP	3	3	A 100w Metal Halide Fixture will be replaced with an Induction 70w Wall Pack Fixture.
M100	M70K	9	9	A 100w Metal Halide Fixture will be Retrofit with a 70w Metal Halide Lamp and Ballast Kit.
M1000	1464HBT5PSSR-HI	6	6	A 1000w Metal Halide Fixture will be Replaced with a New 1x4 T5 High Bay Fixture Containing a (1) 4-Lamp & (1) 2-Lamp Electronic Normal Power Program Start Ballast, (1) Reflector, Slave Relay, and (6) 4' T5 High Efficiency Lamps. High Location
M1000	M750K	4	4	A 1000w Metal Halide Fixture will be Retrofit with a 750w Metal Halide Lamp and Ballast Kit. High Location.
M175	IND100FL-PC	2	2	A 175w Metal Halide Fixture will be replaced with an Induction 100w Flood Fixture with Photocell.
M175	IND100FL-PCVHI	1	1	A 175w Metal Halide Fixture will be replaced with an Induction 100w Flood Fixture with Photocell. Very High Location.
M175	IND100SB-PCVHI	2	2	A 175w Metal Halide Fixture will be replaced with an Induction 100w Shoe box Fixture with Photocell. Very High Location
M175	IND120WP-PC	5	5	A 175w Metal Halide Fixture will be replaced with an Induction 120w Wallpack Fixture with Photocell.
M250	1464HBPSSR-WG	19	19	A 250w Metal Halide Fixture will be Replaced with a New 1x4 High Bay Fixture Containing a (1) 4-Lamp and (1) 2-Lamp Electronic Program Start Ballast, (1) Reflector, (1) Wire Guard, with Slave Relay, and (6) 4' T8 High Lumen Lamps. High Location.
M250	DIS-HI	1	1	A 250w Metal Halide Fixture will be Disconnected and Removed. High Location
M250	IND150FL	2	2	A 250w Metal Halide Fixture will be replaced with an Induction 150w Flood Fixture.
M250	IND150FL-PCHI	9	9	A 250w Metal Halide Fixture will be replaced with an Induction 150w Flood Fixture with Photocell. High Location.
M2X175	IND2X100FL-PC-HI	1	1	A (2) x 175w Metal Halide Fixture will be replaced with (2) Induction 100w Flood Fixtures with Photocell. High Location.
M2X175	IND2X100SB-PC-HI	10	10	A (2) x 175w Metal Halide Fixture will be replaced with (2) Induction 100w Shoe box Fixture with Photocell. High Location.
M2X250	IND2X150CH	6	6	A (2) x 250w Metal Halide Fixture will be replaced with (2) Induction 150w Cobrahead Fixture.
M2X250	IND2X150FL-PC-VHI	1	1	A (2) x 250w Metal Halide Fixture will be replaced with (2) Induction 150w Flood Fixture with Photocell. Very High Location.
M2X400	IND2X200SB	1	1	A (2) x 400w Metal Halide Fixture will be replaced with (2) Induction 200w Shoe box Fixture.
M350	1444HB-WG	8	8	A 350w Metal Halide Fixture will be Replaced with a New 1x4 High Bay Fixture Containing a 4-Lamp Electronic Normal Power Ballast, (1) Reflector, (1) Wire Guard, and (4) 4' T8 High Lumen Lamps.
M350	1464HBPSSR-WG	89	89	A 350w Metal Halide Fixture will be Replaced with a New 1x4 High Bay Fixture Containing a (1) 4-Lamp and (1) 2-Lamp Electronic Program Start Ballast, (1) Reflector, (1) Wire Guard, with Slave Relay, and (6) 4' T8 High Lumen Lamps. High Location.
M400	1464HBT5PSSR-HI	5	5	A 400w Metal Halide Fixture will be Replaced with a New 1x4 T5 High Bay Fixture Containing a (1) 4-Lamp & (1) 2-Lamp Electronic Normal Power Program Start Ballast, (1) Reflector, Slave Relay, and (6) 4' T5 High Efficiency Lamps. High Location
M400	IND200SB	4	4	A 400w Metal Halide Fixture will be replaced with an Induction 200w Shoe box Fixture.

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
M70	CF42	20	20	A 70w Metal Halide Fixture will be Retrofit with a 42w One-Piece Compact Fluorescent Lamp.
NL	NEW TIME CLOCK	8	8	Install in a New Layout Install a New 365-day Digital Time Clock to Control Exterior Lighting.
Q500	IND120WP-PC	5	5	A 500w Quartz Fixture will be replaced with an Induction 120w Wallpack Fixture with Photocell.
Q500	IND150FL	2	2	A 500w Quartz Fixture will be replaced with an Induction 150w Flood Fixture.
S1000	M750K	2	2	A 1000w High Pressure Sodium Fixture will be Retrofit with a 750w Metal Halide Lamp and Ballast Kit. High Location.
S150	IND70WP-PC	2	2	A 150w High Pressure Sodium Fixture will be replaced with an Induction 70w Wall Pack Fixture with Photocell.
S175	IND120WP	1	1	A 175w High Pressure Sodium Fixture will be replaced with an Induction 120w Wallpack Fixture.
S250	IND120WP-PC	8	8	A 250w High Pressure Sodium Fixture will be replaced with an Induction 120w Wallpack Fixture with Photocell.
S2X250	IND2X150SB-PC	4	4	A (2) x 250w High Pressure Sodium Fixture will be replaced with (2) Induction 150w Shoe box Fixture with Photocell
S400	IND200SB-PC	3	3	A 400w High Pressure Sodium Fixture will be replaced with an Induction 200w Shoe box Fixture. Very High Location.
S70	IND40WP-PC	2	2	A 70w High Pressure Sodium Fixture will be Replaced with a New 40w Induction Wall Pack Fixture, with Photocell.
VEND	MISER	10	10	A Vending Machine will be Retrofit with a VendMiser. Pricing and Labor included in the Control.

4,948

4,940

Control ECMs	Control Code	Existing Qty	Control Qty	Description
	OSC		71	Install a Single Head Ceiling Mounted Occupancy Sensor
	OSC2		37	Install a Dual Head Ceiling Mounted Occupancy Sensor
	OSC2-FL		9	Install (2) Single Head Ceiling Mounted Flood-style Occupancy Sensor
	OSC2-FL-PH		5	Install (2) Single Head Ceiling Mounted Flood-style Occupancy Sensor with Photocell.
	OSC2-PH		2	Install (2) Single Head Ceiling Mounted Occupancy Sensor with Photocell.
	OSC2-WM		4	Install (2) Single Head Ceiling Mounted Occupancy Sensor
	OSC3		4	Install (3) Single Head Ceiling Mounted Occupancy Sensors

Code Definitions

Existing Code	Proposed Code	Existing Qty	Proposed Qty	Description
	OSC4		1	Install (4) Single Head Ceiling Mounted Occupancy Sensors
	OSC5		1	Install (5) Single Head Ceiling Mounted Occupancy Sensors
	OSC7DT		1	Install (7) Single Pole Dual Technology Occupancy Sensor Ceiling.
	OSC-FL-PH		1	Install a Single Head Ceiling Mounted Flood-style Occupancy Sensor with Photocell.
	OSC-PH		6	Install a Single Head Ceiling Mounted Occupancy Sensor with Photocell.
	OSW		310	Install a Single Pole Occupancy Sensor Wall Switch
	OSW2G		24	Install a Dual Pole Occupancy Sensor Wall Switch
	OSW2G-RECP		2	Install a Dual Pole Occupancy Sensor Wall Switch with Switch Plates
	OSW3G		1	Install a 3-Gang Occupancy Sensor Wall Switch
	OSW3WAY		2	Install (2) Single Pole Occupancy Sensor Wall Switch
	OSWDT		1	Install a Single Pole Dual Technology Occupancy Sensor Wall Switch
	OSWPH		25	Install a Single Head Wall Mounted Occupancy Sensor with Inhibitive Photocell
	OSWPH-2G		1	Install a Dual Pole Occupancy Sensor Wall Switch with Inhibitive Photocell
	PH		10	Install a Photocell Sensor
	TIME CLOCK		1	Install a Local Astronomical Timeclock Control System with Manual Override to bring all fixtures in zone up to full light output. Timeclock schedule will be determined by Project Manager and Facility Manager. Power Packs included with Fixture.
	TSW		7	Install a Timer Switch Control System.
	TSW2G		3	Install a Dual Pole Digital Timer Switch to bring all fixtures in zone up to full light output for set amount of time to be determined by Project Manager and Facility Manager.
	VM		3	Add VendingMiser Control
	VMX2		3	Add (2) VendingMiser Control

Hour Codes

Hour Code	Usage Description	Winter			Summer			Total Hours
		Winter On Peak Hours	Winter Int Peak Hours	Winter Off Peak Hours	Summer On Peak Hours	Summer Int Peak Hours	Summer Off Peak Hours	
0		-	-	-	-	-	-	0
1	Continuous Use	904	-	3,152	1,233	-	3,471	8760
2	Office - Low Use	-	-	339	206	-	206	751
3	Office - Normal Use	212	-	846	769	-	513	2340
4	Office - High Use	885	-	995	1,207	-	1,073	4160
5	Bath - Personal Use - Concession Stands	94	-	376	342	-	228	1040
6	Bath - Common Area	321	-	855	777	-	648	2601
7	Utility - Low Use	-	-	235	95	-	190	520
8	Common Area	212	-	846	769	-	513	2340
9	Hallways	288	-	769	699	-	583	2339
10	Exterior	452	-	1,576	411	-	1,941	4380
11	Police Substations	-	-	422	114	-	376	912
12	Recreation & Aquatic Center	212	-	946	773	-	627	2558
14	Conference Rooms, Classrooms, Training	-	-	338	274	-	118	730
31	Main Library	321	-	1,147	778	-	984	3230
32	Countryside Library	201	-	704	488	-	600	1993
33	North Greenwood Library	-	-	470	570	-	-	1040
34	East Library	102	-	806	868	-	224	2000
35	Beach Branch Library	113	-	339	137	-	411	1000
51	Morningside Recreation Center	-	-	635	641	-	128	1404
101	Sensored High Use Areas	660	-	880	1,067	-	800	3407
102	Sensored Continuous Use	723	-	2,522	986	-	2,777	7008
103	Sensored Office - Low Use	-	-	271	219	-	110	600
105	Sensored Office - Normal Use	188	-	658	570	-	456	1872
106	Sensored Bath - Personal Use - Concession Stands	94	-	282	228	-	228	832
107	Sensored Bath - Common Area	256	-	684	725	-	414	2079
108	Sensored Utility - Low Use	-	-	188	114	-	114	416
110	Sensored Common Area	188	-	658	570	-	456	1872
114	Sensored Exterior	362	-	1,261	329	-	1,553	3505
116	Sensored Conference Rooms, Classrooms, Training	-	-	270	110	-	204	584
133	Sensored North Greenwood Library	-	-	376	456	-	-	832
1001	FOREST RUN PARK	438	-	142	398	-	295	1273
1002	BEACH REC.CENTER, Ed Wright Park, Montclair Park, Morningside R	394	-	227	478	-	266	1365
1003	COURT ST WATERFALL, Del Oro park, Long Center	407	-	256	370	-	423	1456
1004	KINGS HYW. REC.CENTER	419	-	285	508	-	335	1547

Hour Codes

1005	BEACH VOLLEY BALL, Cleveland St, Court St. Water Fall, Plaza Park	397	-	348	361	-	533	1639
1006	BEACH REC. CENTER, David Martin, Woodgate Park	407	-	379	494	-	449	1729
1007	CLEVELAND ST., Long Center, Mandalay Streetscape, Valencia Park	366	-	544	555	-	537	2002
1008	CLEARWATER HIGH TENNIS	398	-	556	482	-	657	2093
1009	Sand Key Bridge	386	-	860	468	-	1,016	2730
1010	CREST LAKE SIGN	366	-	1,046	256	-	1,426	3094
1011	ED WRIGHT PARK	386	-	1,275	1,054	-	925	3640
1012	COACHMAN RIDGE PARK, Countryside Community Park, Marymount	425	-	1,402	1,159	-	1,018	4004
1013	CLEARWATER HIGH	428	-	1,565	1,167	-	1,208	4368
1014	CREST LAKE PARK, Ed Wright Park	517	-	1,559	502	-	1,972	4550
1015	COACHMAN PARK, Ed C. Moore - West (5-7), Ed Wright Park, Glen C	528	-	1,590	512	-	2,011	4641
1016	COACHMAN PARK, Crest Lake Park, Ed C. Moore (1-4)	538	-	1,621	522	-	2,051	4732
1017	PIER 60 Fishing Pier	604	-	1,597	466	-	2,156	4823
1018	LONG CENTER	615	-	1,628	475	-	2,197	4915
1019	ED C. MOORE - West	878	-	2,112	1,198	-	2,364	6552
1020	Brighthouse Field - Cleaning Hours	-	-	100	62	-	62	224

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Gas-Gas Division (offices)	1	1	Welding Shop	1828	1844IND-WG	9	5	0.1260	0.0930	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (4) 4' T8's, WG	120	120	TRUE	3	2,340	1.10	0.81	0.29	2,574	1,900	674	\$ 61	\$ 13	\$ 74
Gas-Gas Division (offices)	2	1	Welding Shop	1828T8	1844VR	2	2	0.1100	0.0930	1x8, 2-Lamp T8	New 1x8 w/ Elect. NP Bal. & (4) 4' T8's, VR	120	120	TRUE	3	2,340	0.21	0.18	0.03	499	422	77	\$ 7	\$ 1	\$ 8
Gas-Gas Division (offices)	3	1	Welding Shop	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.07	0.04	0.03	163	98	66	\$ 6	\$ 1	\$ 7
Gas-Gas Division (offices)	4	1	Welding Shop/bath	1424	1414SWR	1	1	0.0720	0.0250	1x4, 2-Lamp	New 1x4 w/ Elect. NP Bal. & (1) 4' T8, Refl	120	120	TRUE	3	2,340	0.07	0.02	0.05	163	57	107	\$ 10	\$ 2	\$ 12
Gas-Gas Division (offices)	5	1	Welding Shop/offices	1444	1424SWR	1	1	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 20	\$ 4	\$ 24
Gas-Gas Division (offices)	6	1	Welding Shop/storage	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.07	0.04	0.03	163	98	66	\$ 6	\$ 1	\$ 7
Gas-Gas Division (offices)	7	1	Ice Machine	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 1	\$ 1
Gas-Gas Division (offices)	8	2	Bath 1	1424	1414SWR	1	1	0.0720	0.0250	1x4, 2-Lamp	New 1x4 w/ Elect. NP Bal. & (1) 4' T8, Refl	120	120	TRUE	6	2,601	0.07	0.02	0.05	182	63	119	\$ 11	\$ 2	\$ 13
Gas-Gas Division (offices)	9	2	Phone Rm	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 3
Gas-Gas Division (offices)	10	2	Recept. Area	2434	HP24R24	3	3	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	55	120	TRUE	3	2,340	0.33	0.19	0.14	776	443	334	\$ 30	\$ 6	\$ 36
Gas-Gas Division (offices)	11	2	Recept. Area	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 16	\$ 3	\$ 20
Gas-Gas Division (offices)	12	2	Recept. Area	K2X15B	KLEDB	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs. B3	Exit Sign - New Universal LED w/ BB	120	120	TRUE	1	8,760	0.03	0.03	0.03	255	17	238	\$ 21	\$ 1	\$ 23
Gas-Gas Division (offices)	13	2	Office 1	2424XB	NP24	4	4	0.0772	0.0460	2x4, 2-Lamp, 2 Ballast	Elect. NP Bal. & (2) 4' T8's	30	120	TRUE	3	2,340	0.30	0.18	0.11	701	436	265	\$ 24	\$ 5	\$ 29
Gas-Gas Division (offices)	14	2	Office 2	2424XB	NP24	4	4	0.0772	0.0460	2x4, 2-Lamp, 2 Ballast	Elect. NP Bal. & (2) 4' T8's	48	120	TRUE	3	2,340	0.30	0.19	0.11	701	436	265	\$ 24	\$ 5	\$ 29
Gas-Gas Division (offices)	15	2	Office 3	2434	HP24R24	2	2	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	20	120	TRUE	3	2,340	0.22	0.13	0.10	518	295	222	\$ 20	\$ 4	\$ 24
Gas-Gas Division (offices)	16	2	Break Rm.	2434	NP24R24	2	2	0.1140	0.0480	2x4, 3-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.22	0.09	0.13	518	218	300	\$ 27	\$ 6	\$ 33
Gas-Gas Division (offices)	17	2	Open Office	2434	HP24R24	7	7	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	41	120	TRUE	3	2,340	0.77	0.44	0.33	1,811	1,033	779	\$ 70	\$ 15	\$ 85
Gas-Gas Division (offices)	18	2	Open Office	K2X15B	KLEDB	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs. B3	Exit Sign - New Universal LED w/ BB	120	120	TRUE	1	8,760	0.03	0.03	0.03	255	17	238	\$ 21	\$ 1	\$ 23
Gas-Gas Division (offices)	19	2	Bathroom Men's	1222	1212VAN	1	1	0.0500	0.0170	1x2, 2-Lamp	New 1x2 w/ Elect. NP Bal. & (1) 2' T8	120	120	TRUE	6	2,601	0.05	0.02	0.03	128	43	83	\$ 8	\$ 1	\$ 9
Gas-Gas Division (offices)	20	2	Conf. Rm	2434	HP24R24L	4	4	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	45	120	TRUE	14	730	0.44	0.25	0.19	323	184	139	\$ 13	\$ 8	\$ 21
Gas-Gas Division (offices)	21	2	Office 4	2434	HP24R24	2	2	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	40	120	TRUE	3	2,340	0.22	0.13	0.10	518	295	222	\$ 20	\$ 4	\$ 24
Gas-Gas Division (offices)	22	2	Open Office	2434	HP24R24	4	4	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	42	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	590	445	\$ 40	\$ 8	\$ 48
Gas-Gas Division (offices)	23	2	Hall	2424XB	NP24	2	2	0.0772	0.0460	2x4, 2-Lamp, 2 Ballast	Elect. NP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.15	0.09	0.06	350	218	133	\$ 12	\$ 3	\$ 14
Gas-Gas Division (offices)	25	2	Office 5	2434	HP24R24	4	4	0.1140	0.0650	2x4, 3-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	42	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	590	445	\$ 40	\$ 8	\$ 48
Gas-Gas Division (offices)	26	2	Office 6	2424XB	NP24	6	6	0.0772	0.0480	2x4, 2-Lamp, 2 Ballast	Elect. NP Bal. & (2) 4' T8's	38	120	TRUE	3	2,340	0.45	0.28	0.17	1,051	654	398	\$ 36	\$ 8	\$ 43
Gas-Gas Division (offices)	27	2	Bathroom Women's	13X60	1313VAN	1	1	0.1800	0.0230	Inc (3) 60w	New 1x3 w/ Elect. NP Bal. & (1) 3' T8	120	120	TRUE	6	2,601	0.17	0.02	0.15	454	58	396	\$ 36	\$ 7	\$ 43
Gas-Gas Division (offices)	30	1	Design Office	2444T8	LP44	2	2	0.1120	0.0850	2x4, 4-Lamp T8	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	3	2,340	0.22	0.16	0.05	508	386	123	\$ 11	\$ 2	\$ 13
Gas-Gas Division (offices)	31	1	Design Office	160	CAP20	21	21	0.0600	0.0200	Inc 60w	Halogen Capsyrite 20w	120	120	TRUE	3	2,340	1.22	0.41	0.81	2,860	953	1,907	\$ 172	\$ 36	\$ 208
Gas-Gas Division (offices)	32	1	Print Rm.	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 3
Gas-Gas Division (offices)	33	1	Accounting Recept. Area	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	70	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Gas Division (offices)	34	1	Accounting Office 1	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Gas Division (offices)	35	1	Accounting Office Open	2444	HP24R24	6	6	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	50	120	TRUE	3	2,340	0.84	0.38	0.46	1,961	885	1,076	\$ 97	\$ 20	\$ 118

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Gas -Gas Division (offices)	36	1	Accounting Office 2	2444	HP24R24	3	3	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.42	0.19	0.23	981	443	538	\$ 49	\$ 10	\$ 59
Gas -Gas Division (offices)	37	1	Storage/phones	2444	LP24R24	3	3	0.1443	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	62	120	TRUE	7	620	0.42	0.13	0.29	218	65	153	\$ 14	\$ 13	\$ 27
Gas -Gas Division (offices)	38	1	Office 3	2444	HP24R24	3	3	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	75	120	TRUE	3	2,340	0.42	0.19	0.23	981	443	538	\$ 49	\$ 10	\$ 59
Gas -Gas Division (offices)	39	1	Bathroom Men's	222U	LP22R22	1	1	0.0723	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	6	120	TRUE	6	2,601	0.07	0.03	0.04	182	68	114	\$ 10	\$ 2	\$ 12
Gas -Gas Division (offices)	40	1	Break Rm.	2444	LP24R24	4	4	0.1443	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	72	120	TRUE	8	2,340	0.56	0.17	0.39	1,307	390	917	\$ 83	\$ 17	\$ 100
Gas -Gas Division (offices)	41	1	Break Rm./phone Closet	2444	LP24R24	1	1	0.1443	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	72	120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 5	\$ 4	\$ 9
Gas -Gas Division (offices)	42	1	Office 4	2444	HP24R24	4	4	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.56	0.25	0.31	1,307	590	717	\$ 65	\$ 14	\$ 78
Gas -Gas Division (offices)	43	1	Office 5	2444	HP24R24	4	4	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.56	0.25	0.31	1,307	590	717	\$ 65	\$ 14	\$ 78
Gas -Gas Division (offices)	44	1	Office 5	222U	NP22R22	1	1	0.0723	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	6	120	TRUE	3	2,340	0.07	0.03	0.04	163	73	91	\$ 8	\$ 2	\$ 10
Gas -Gas Division (offices)	45	1	Office 6	2444	HP24R24	2	2	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	104	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas -Gas Division (offices)	46	1	Office 6	2444T8	NP24R24	1	1	0.1120	0.0480	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl	104	120	TRUE	3	2,340	0.11	0.05	0.06	254	109	145	\$ 13	\$ 3	\$ 16
Gas -Gas Division (offices)	47	1	Office 7	2444	HP24R24	3	3	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	75	120	TRUE	3	2,340	0.42	0.19	0.23	981	443	538	\$ 49	\$ 10	\$ 59
Gas -Gas Division (offices)	48	1	Bathroom Women's	222J	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	6	120	TRUE	6	2,601	0.07	0.03	0.04	182	68	114	\$ 10	\$ 2	\$ 12
Gas -Gas Division (offices)	49	1	Office 8	2444	HP24R24	4	4	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	75	120	TRUE	3	2,340	0.56	0.25	0.31	1,307	590	717	\$ 65	\$ 14	\$ 78
Gas -Gas Division (offices)	50	1	Hall	2444	LP24R24	6	6	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	9	2,339	0.84	0.25	0.59	1,960	585	1,375	\$ 124	\$ 26	\$ 150
Gas -Gas Division (offices)	52	1	Hall	K2X15B	KL EDB	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc. BB	Exit Sign - New Universal LED w/ BB	120	120	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 21	\$ 1	\$ 23
Gas -Gas Division (offices)	53	1	Maintenance Shop	1834IND-WG	1834IND-WG	7	7	0.1260	0.0700	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (3) 4' T8's, WG	120	120	TRUE	3	2,340	0.86	0.48	0.38	2,002	1,112	890	\$ 80	\$ 17	\$ 97
Gas -Gas Division (offices)	54	1	Maintenance Shop/Cage	1834IND-WG	1834IND-WG	8	8	0.1200	0.0700	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (3) 4' T8's, WG	120	120	TRUE	3	2,340	0.98	0.54	0.43	2,288	1,271	1,017	\$ 92	\$ 19	\$ 111
Gas -Gas Division (offices)	57	Ext	Front	S175	IND120WP	1	1	0.1880	0.1250	HPS 175w	Induction 120w Wal pack	120	120	TRUE	10	4,380	0.18	0.12	0.06	799	631	268	\$ 24	\$ 3	\$ 27
Gas -Gas Division (offices)	58	Ext	Slide	M100	IND70WP	1	1	0.1300	0.0750	MH 100w	Induction 70w Wall Pack	120	120	TRUE	10	4,380	0.13	0.07	0.05	552	319	234	\$ 21	\$ 2	\$ 23
Gas -Gas Division (offices)	60	Ext	Back	M250	IND150FL	2	2	0.2950	0.1650	MH 250w	Induction 150w Flood	120	120	TRUE	10	4,380	0.57	0.32	0.25	2,507	1,402	1,105	\$ 100	\$ 11	\$ 111
Gas -Gas Division (offices)	62	Ext	Back	M100	IND70WP	1	1	0.1300	0.0750	MH 100w	Induction 70w Wall Pack	120	120	TRUE	10	4,380	0.13	0.07	0.05	552	319	234	\$ 21	\$ 2	\$ 23
Gas -Gas Division (offices)	63	Ext	Back	Q500	IND150FL	2	2	0.5000	0.1650	Inc 500w Quartz	Induction 150w Flood	120	120	TRUE	10	4,380	0.97	0.32	0.65	4,249	1,402	2,847	\$ 257	\$ 29	\$ 286
Gas -Gas Division (offices)	64	1	Exterior Lighting Panel	N.L.	NEW TIME CLOCK	1	1			New Layout	New Time Clock	120	120	TRUE	10	4,360	-	-	-	-	-	\$ -	\$ -	\$ -	
Gas -Gas Sales Office	1	1	Office 1	4464	HP44R24-X2	1	1	0.2180	0.1260	4x4, 6-Lamp	Elect. HP Bal. & (4) 4' T8's, (2) Refl	63	120	TRUE	3	2,340	0.21	0.12	0.09	490	286	204	\$ 24	\$ -	\$ 24
Gas -Gas Sales Office	2	1	Recept. Area	4464	HP44R24-X2	1	1	0.2180	0.1260	4x4, 6-Lamp	Elect. HP Bal. & (4) 4' T8's, (2) Refl	63	120	TRUE	3	2,340	0.21	0.12	0.09	490	286	204	\$ 24	\$ -	\$ 24
Gas -Gas Sales Office	3	1	Recept. Area	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 42	\$ -	\$ 42
Gas -Gas Sales Office	4	1	Bath 1	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	106	832	0.06	0.04	0.01	47	35	12	\$ 1	\$ -	\$ 1
Gas -Gas Sales Office	5	1	Bath 2	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	106	832	0.06	0.04	0.01	47	35	12	\$ 1	\$ -	\$ 1
Gas -Gas Sales Office	6	1	Break Rm.	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	36	120	TRUE	8	2,340	0.14	0.04	0.10	327	98	229	\$ 27	\$ -	\$ 27
Gas -Gas Sales Office	7	1	Office 2	2444	HP24R24L	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens	120	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 42	\$ -	\$ 42
Gas -Gas Sales Office	8	1	Office Open	2444	HP24R24L	15	15	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens	48	120	TRUE	3	2,340	2.10	0.95	1.15	4,903	2,213	2,690	\$ 311	\$ -	\$ 311
Gas -Gas Sales Office	10	1	Design Open Area	2444	HP24R24	4	4	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	36	120	TRUE	3	2,340	0.56	0.25	0.31	1,307	590	717	\$ 83	\$ -	\$ 83
Gas -Gas Sales Office	11	1	Print Area	2444	LP44	11	11	0.1440	0.0950	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's	91	120	TRUE	3	2,340	1.54	0.91	0.63	3,595	2,122	1,473	\$ 170	\$ -	\$ 170

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total Dollars Saved
Gas-Gas Sales Office	12	1	Garage	1424	LP24	0	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.21	0.13	0.08	109	65	44	\$ 5	\$ -	\$ 5
Gas-Gas Sales Office	13	1	Print Area 2	2444T8	LP44	11	11	0.1120	0.0850	2x4, 4-Lamp T8	Elect. LP Bal. & (4) 4' T8's	88	120	TRUE	3	2,340	1.20	0.91	0.29	2,796	2,122	674	\$ 78	\$ -	\$ 78
Gas-Gas Sales Office	14	1	Office 1	2444	HP24R24	3	3	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	106	120	TRUE	3	2,340	0.42	0.19	0.23	981	443	538	\$ 62	\$ -	\$ 62
Gas-Gas Sales Office	15	1	Print Area 2	2444	LP44	4	4	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	3	2,340	0.56	0.33	0.23	1,307	772	536	\$ 62	\$ -	\$ 62
Gas-Gas Sales Office	16	1	Break Rm.	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	8	2,340	0.14	0.04	0.10	327	98	229	\$ 27	\$ -	\$ 27
Gas-Gas Sales Office	17	1	Office 1	2444	HP24R24	4	4	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.56	0.25	0.31	1,307	590	717	\$ 83	\$ -	\$ 83
Gas-Gas Sales Office	18	1	Office 2	2444	HP24R24	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	87	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 42	\$ -	\$ 42
Gas-Gas Sales Office	19	1	Office 3	2444	HP24R24	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 42	\$ -	\$ 42
Gas-Gas Sales Office	20	2	Stairs	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 6	\$ -	\$ 6
Gas-Gas Sales Office	21	2	File Storage	2444	LP24R24	31	31	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	35	120	TRUE	7	520	4.33	1.29	3.04	2,252	672	1,579	\$ 183	\$ -	\$ 183
Gas-Gas Sales Office	29	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1	-	-	New Layout	New Time Clock	120	120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -
Gas-Meishop	1	2	Stairwell	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120	120	TRUE	9	2,339	0.07	0.03	0.04	183	61	102	\$ 9	\$ 2	\$ 11
Gas-Meishop	2	2	Open Office	2444	HP24R24	6	6	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.84	0.38	0.46	1,961	885	1,076	\$ 97	\$ 20	\$ 118
Gas-Meishop	3	2	Office/conf.	2444	HP24R24	12	12	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	63	120	TRUE	3	2,340	1.68	0.76	0.92	3,922	1,770	2,152	\$ 194	\$ 41	\$ 235
Gas-Meishop	4	2	Office 1	2444	HP24R24L	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens	40	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Meishop	5	2	Bath	2444	LP24R24L	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl, Lens	120	120	TRUE	6	2,601	0.28	0.08	0.20	727	217	510	\$ 48	\$ 9	\$ 55
Gas-Meishop	6	2	Back Hall	1844	LP44	2	2	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	9	2,339	0.28	0.16	0.11	653	366	288	\$ 24	\$ 5	\$ 29
Gas-Meishop	7	2	Storage	1844	LP44	4	4	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	7	520	0.56	0.33	0.23	291	171	119	\$ 11	\$ 10	\$ 21
Gas-Meishop	8	2	File Area	1844	LP44	4	4	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	7	520	0.56	0.33	0.23	291	171	119	\$ 11	\$ 10	\$ 21
Gas-Meishop	9	2	Storage	1844	LP44	2	2	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	7	520	0.28	0.16	0.11	146	86	60	\$ 5	\$ 5	\$ 10
Gas-Meishop	10	2	Exits	K2X15B	KLEDB	1	1	0.0390	0.0020	Exit Sign - (2) 15w Inc's, BB	Exit Sign - New Universal LED w/ BB	120	120	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 21	\$ 1	\$ 23
Gas-Meishop	11	2	Back Stairs	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	5	2,339	0.07	0.04	0.03	163	98	66	\$ 6	\$ 1	\$ 7
Gas-Meishop	12	2	Bathroom Men's	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 23	\$ 4	\$ 27
Gas-Meishop	13	2	Bathroom Women's	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 23	\$ 4	\$ 27
Gas-Meishop	14	2	Office 2	2444	HP24R24	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	50	120	TRUE	3	2,340	0.26	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Meishop	15	2	Super Hall	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,339	0.14	0.04	0.10	327	98	229	\$ 21	\$ 4	\$ 25
Gas-Meishop	16	2	Office 3	2444	HP24R24	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	48	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Meishop	17	2	Office 4	2444	HP24R24	1	1	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	30	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 16	\$ 3	\$ 20
Gas-Meishop	18	2	Office 5	2444	HP24R24	1	1	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	39	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 16	\$ 3	\$ 20
Gas-Meishop	19	2	Office 6	2444	HP24R24	1	1	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	44	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 16	\$ 3	\$ 20
Gas-Meishop	20	2	Office 7	2444T8	HP24R24	1	1	0.1120	0.0480	2x4, 4-Lamp T8	Elect. HP Bal. & (2) 4' T8's, Refl	59	120	TRUE	3	2,340	0.11	0.05	0.06	254	109	145	\$ 13	\$ 3	\$ 16
Gas-Meishop	21	1	Supply Area	1844	LP44	13	13	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	3	2,340	1.82	1.07	0.74	4,249	2,508	1,741	\$ 157	\$ 33	\$ 190
Gas-Meishop	22	1	Supply Area	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.21	0.13	0.08	490	293	197	\$ 18	\$ 4	\$ 22
Gas-Meishop	23	1	Supply Office	2444	HP24R24L	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens	41	120	TRUE	3	2,340	0.26	0.13	0.15	654	295	359	\$ 32	\$ 7	\$ 39
Gas-Meishop	24	1	Front Desk	2444	HP24R24L	3	3	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens	31	120	TRUE	3	2,340	0.42	0.19	0.23	581	443	538	\$ 49	\$ 10	\$ 59
Gas-Meishop	25	1	Front Desk	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.07	0.04	0.03	163	98	66	\$ 6	\$ 1	\$ 7
Gas-Meishop	26	1	Office 1	2444	HP24R24	1	1	0.1440	0.0850	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	53	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 16	\$ 3	\$ 20
Gas-Meishop	27	1	Meier Area 1	1844	LP44	4	4	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	3	2,340	0.56	0.33	0.23	1,307	772	536	\$ 48	\$ 10	\$ 59
Gas-Meishop	28	1	Meier Area 1	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	3	2,340	0.14	0.08	0.06	327	195	132	\$ 12	\$ 3	\$ 14

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total kWh Dollars Saved
Gas-Metershop	30	1	Bath	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 23	\$ 4	\$ 27
Gas-Metershop	31	1	Meier Area 2	2444	HP24R24L	16	16	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl, Lens		120	TRUE	3	2,340	2.23	1.01	1.23	5,230	2,361	2,869	\$ 259	\$ 55	\$ 314
Gas-Metershop	32	1	Meier Area 3	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.21	0.13	0.08	490	293	197	\$ 18	\$ 4	\$ 22
Gas-Metershop	33	1	Lab	1844	LP44	2	2	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	46	120	TRUE	3	2,340	0.28	0.16	0.11	654	386	268	\$ 24	\$ 5	\$ 29
Gas-Metershop	34	1	Meier Area 4	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.14	0.08	0.06	327	195	132	\$ 12	\$ 3	\$ 14
Gas-Metershop	36	Ext	Front	M1000	M750K	3	3	1.0800	0.8020	MH 1000w	MH 750w Ktl Hl		120	TRUE	10	4,380	3.14	2.53	0.61	13,765	10,222	3,543	\$ 320	\$ 36	\$ 356
Gas-Metershop	37	Ext	Small Gas Building	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	7	520	0.14	0.08	0.06	73	43	29	\$ 3	\$ 3	\$ 5
Gas-Metershop	38	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1	-	-	New Layout	New Time Clock		120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -
General Services-B & M Shops - Reduced Scope	1	1	Wood Shop	M350	1444HB-WG	8	8	0.3780	0.1140	MH 350w	New 1x4 w/ Elect. NP Bal. & (4) 4' T8's, WG	50	120	TRUE	3	2,340	2.93	0.66	2.05	8,864	2,070	4,794	\$ 433	\$ 91	\$ 524
General Services-B & M Shops - Reduced Scope	2	1	Wood Shop Storage	1828	1824IND	5	5	0.1280	0.0480	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's		120	TRUE	2	751	0.61	0.23	0.38	459	575	284	\$ 26	\$ 17	\$ 43
General Services-B & M Shops - Reduced Scope	4	1	Bathroom Women's	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	5	1,040	0.14	0.04	0.10	145	43	102	\$ 9	\$ 4	\$ 14
General Services-B & M Shops - Reduced Scope	5	1	Bathroom Women's	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl		120	TRUE	5	1,040	0.07	0.03	0.04	73	27	45	\$ 4	\$ 2	\$ 6
General Services-B & M Shops - Reduced Scope	6	1	Bathroom Men's	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	40	120	TRUE	5	1,040	0.07	0.03	0.04	73	27	45	\$ 4	\$ 2	\$ 6
General Services-B & M Shops - Reduced Scope	7	1	Bathroom Men's	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	5	1,040	0.14	0.04	0.10	145	43	102	\$ 9	\$ 4	\$ 14
General Services-B & M Shops - Reduced Scope	8	1	Storage 1	2444	LP24R24	4	4	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	7	520	0.56	0.17	0.39	291	87	204	\$ 18	\$ 17	\$ 36
General Services-B & M Shops - Reduced Scope	9	1	Storage 2	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	7	520	0.28	0.08	0.20	145	43	102	\$ 9	\$ 9	\$ 18
General Services-B & M Shops - Reduced Scope	10	1	Break Room	2444	LP24R24	6	6	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	8	2,340	0.84	0.25	0.59	1,961	586	1,375	\$ 124	\$ 26	\$ 150
General Services-B & M Shops - Reduced Scope	11	2	Storage	1828	AP24K18	7	7	0.2860	0.0480	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kit		120	TRUE	7	520	0.66	0.33	0.53	445	169	275	\$ 25	\$ 24	\$ 48
General Services-B & M Shops - Reduced Scope	15	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1	-	-	New Layout	New Time Clock		120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -
General Services-City Hall	13	1	City Manager/recept.	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.66	0.37	0.29	1,553	872	681	\$ 65	\$ 10	\$ 75
General Services-City Hall	4	3	City Manager/recept.	222U	NP22R22	1	1	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's Refl		120	TRUE	3	2,340	0.07	0.03	0.04	163	73	91	\$ 9	\$ 1	\$ 10
General Services-City Hall	5	3	Office Open	1434	LP34	17	17	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	41	120	TRUE	3	2,340	1.88	1.06	0.82	4,399	2,470	1,929	\$ 184	\$ 27	\$ 211
General Services-City Hall	6	3	Office 304	1424	LP24L14	4	4	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's, Lens	41	120	TRUE	3	2,340	0.28	0.17	0.11	654	390	263	\$ 25	\$ 4	\$ 29
General Services-City Hall	7	3	Office 304-A	2444	LP44	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		120	TRUE	3	2,340	0.23	0.16	0.11	654	386	268	\$ 26	\$ 4	\$ 29
General Services-City Hall	8	3	Office 304-B	1434	LP34	5	5	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	28	120	TRUE	3	2,340	0.55	0.31	0.24	1,264	720	567	\$ 54	\$ 8	\$ 62
General Services-City Hall	9	3	Office 304/closet	1434	LP34	1	1	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.11	0.06	0.05	259	145	113	\$ 11	\$ 2	\$ 12
General Services-City Hall	10	3	Conf Rm. 303	1404	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	14	730	0.66	0.57	0.29	484	272	212	\$ 20	\$ 10	\$ 28
General Services-City Hall	11	3	Office 302	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	31	120	TRUE	3	2,340	0.66	0.37	0.29	1,553	872	681	\$ 65	\$ 10	\$ 75
General Services-City Hall	13	3	Bath	12X60	CF2X13	1	1	0.1200	0.0260	Inc (2) 60w	(2) Compact One Piece 13w		120	TRUE	5	1,040	0.12	0.03	0.09	121	26	95	\$ 9	\$ 3	\$ 12
General Services-City Hall	14	3	Closet	160	CF13	1	1	0.0600	0.0130	Inc 60w	Compact One Piece 13w		120	TRUE	7	520	0.06	0.01	0.05	30	7	24	\$ 2	\$ 2	\$ 3
General Services-City Hall	15	3	Office 301	1434	LP34	7	7	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	60	120	TRUE	3	2,340	0.77	0.43	0.34	1,811	1,017	794	\$ 76	\$ 11	\$ 87
General Services-City Hall	16	3	Conf Rm	1434	LP34	5	5	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	32	120	TRUE	14	730	0.55	0.31	0.24	404	227	177	\$ 18	\$ 8	\$ 24
General Services-City Hall	17	3	Office 309	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	60	120	TRUE	3	2,340	0.66	0.37	0.29	1,553	872	681	\$ 65	\$ 10	\$ 75
General Services-City Hall	18	3	Copy 311	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	39	120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	19	3	Office 312	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	45	120	TRUE	3	2,340	0.66	0.37	0.29	1,553	872	681	\$ 65	\$ 10	\$ 75

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total Dollars Saved
General Services-City Hall	22	3	Conf Rm.	1434	LP34	8	8	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	14	730	0.88	0.50	0.39	646	363	283	\$ 28	\$ 13	\$ 39
General Services-City Hall	23	3	Coffee Rm	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	8	2,340	0.07	0.04	0.03	163	98	66	\$ 6	\$ 1	\$ 7
General Services-City Hall	24	3	Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8
General Services-City Hall	28	3	Council Chamber	180	CF23R30	2	2	0.0900	0.0230	Inc 90w	Compact One Piece 23w R30 Refl		120	TRUE	14	730	0.17	0.04	0.13	127	33	95	\$ 9	\$ 4	\$ 13
General Services-City Hall	30	3	Council Chamber	1434	LP34	12	12	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	14	730	1.33	0.74	0.59	969	544	425	\$ 39	\$ 19	\$ 59
General Services-City Hall	31	3	Council Chamber/closet X 2	175	CF23	2	2	0.0790	0.0230	Inc 75w	Compact One Piece 23w		120	TRUE	4	4,160	0.15	0.04	0.10	605	166	420	\$ 42	\$ 3	\$ 45
General Services-City Hall	32	3	Security Office	2444	LP44	5	5	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		120	TRUE	4	4,160	0.70	0.41	0.29	2,905	1,715	1,190	\$ 120	\$ 9	\$ 129
General Services-City Hall	33	3	Bath	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 24	\$ 3	\$ 28
General Services-City Hall	34	3	Bath	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl		120	TRUE	5	1,040	0.07	0.03	0.04	73	27	45	\$ 4	\$ 1	\$ 6
General Services-City Hall	35	3	Bath/Hall	222U	LP22R22	3	3	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl		120	TRUE	5	1,040	0.21	0.08	0.13	216	82	136	\$ 13	\$ 4	\$ 17
General Services-City Hall	36	3	Attorney Entry	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.14	0.08	0.06	327	195	132	\$ 13	\$ 2	\$ 14
General Services-City Hall	37	3	Recept. Area	1434	LP34	12	12	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	1.33	0.74	0.58	3,105	1,743	1,362	\$ 130	\$ 19	\$ 149
General Services-City Hall	38	3	Copy Rm.	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	39	3	Copy Rm.	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	39	120	TRUE	3	2,340	0.14	0.08	0.06	327	195	132	\$ 13	\$ 2	\$ 14
General Services-City Hall	40	3	Copy Rm.	222J	NP22R22	3	3	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl		120	TRUE	3	2,340	0.21	0.09	0.12	490	218	272	\$ 26	\$ 4	\$ 30
General Services-City Hall	42	3	Office Open	2444	HP24R24	3	3	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	61	120	TRUE	3	2,340	0.42	0.19	0.23	981	443	538	\$ 51	\$ 8	\$ 59
General Services-City Hall	43	3	Conf Rm.	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	14	730	0.29	0.13	0.15	204	92	112	\$ 10	\$ 5	\$ 15
General Services-City Hall	44	3	Conf Rm.	222J	NP22R22	1	1	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	31	120	TRUE	14	730	0.07	0.03	0.04	51	23	28	\$ 3	\$ 1	\$ 4
General Services-City Hall	45	3	Office Soto	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	54	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39
General Services-City Hall	46	3	Office Stides	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	38	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	47	3	Office Mahony	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39
General Services-City Hall	48	3	Center 2 Offices	1434	LP34	5	5	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.55	0.31	0.24	1,294	726	567	\$ 54	\$ 8	\$ 62
General Services-City Hall	49	3	Office Tormeno	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	50	3	Office Hall	1434DS	LP34-ALT	4	4	0.1140	0.0640	1x4, 3-Lamp, DS	Elect. LP Bal. & (3) 4' T8's, ALT		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	51	3	Office Dwilt	1434DS	LP34-ALT	4	4	0.1140	0.0640	1x4, 3-Lamp, DS	Elect. LP Bal. & (3) 4' T8's, ALT	32	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	52	3	Office	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.88	0.37	0.29	1,653	872	681	\$ 65	\$ 10	\$ 75
General Services-City Hall	53	3	Library	2444	LP44	4	4	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		120	TRUE	3	2,340	0.56	0.33	0.23	1,307	772	536	\$ 51	\$ 8	\$ 59
General Services-City Hall	54	3	Vending Hall	222U	LP22R22	2	2	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl		120	TRUE	9	2,339	0.14	0.06	0.09	327	123	204	\$ 20	\$ 3	\$ 22
General Services-City Hall	55	3	Phone Rm	1434	LP34	3	3	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	7	520	0.33	0.16	0.15	173	97	76	\$ 6	\$ 5	\$ 11
General Services-City Hall	56	3	Vending	1434DS	LP34-ALT	3	3	0.1140	0.0640	1x4, 3-Lamp, DS	Elect. LP Bal. & (3) 4' T8's, ALT		120	TRUE	8	2,340	0.33	0.19	0.15	776	436	340	\$ 32	\$ 5	\$ 37
General Services-City Hall	57	3	Vending	1444	1424SWR	1	1	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	8	2,340	0.14	0.05	0.09	327	109	219	\$ 21	\$ 3	\$ 24
General Services-City Hall	58	3	Vending	2444	LP44	1	1	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		120	TRUE	8	2,340	0.14	0.08	0.06	327	193	134	\$ 13	\$ 2	\$ 15

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-City Hall	593		Vending	VEND	MISER	2	2	0.3399	0.3399	Vending Machine	Vending Machine Controlled		120	TRUE	8	2,340	0.66	0.66	-	1,539	1,539	-	\$ -	\$ -	\$ -
General Services-City Hall	622		City Training Rm/entry	1444	1424SWR	2	2	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	14	730	0.28	0.09	0.19	204	68	136	\$ 13	\$ 6	\$ 19
General Services-City Hall	632		Equip Service/Office 228	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	642		Closet	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
General Services-City Hall	652		Training Rm	1434	LP34	14	14	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	14	730	1.55	0.87	0.68	1,130	634	496	\$ 46	\$ 22	\$ 68
General Services-City Hall	662		Training Rm	1444	1424SWR	1	1	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	14	730	0.14	0.05	0.09	102	34	68	\$ 6	\$ 3	\$ 9
General Services-City Hall	672		Office 225	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	71	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	682		Office 224	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	69	120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	692		Office 223	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	66	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	702		Copy Rm	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	712		Hall	1434	LP34	3	3	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	20	120	TRUE	9	2,339	0.33	0.19	0.15	776	436	340	\$ 33	\$ 5	\$ 37
General Services-City Hall	722		Break Rm	1434	LP34	9	9	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	34	120	TRUE	8	2,340	1.00	0.56	0.44	2,329	1,307	1,021	\$ 97	\$ 14	\$ 112
General Services-City Hall	742		Bathroom Men's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	6	2,601	0.67	0.04	0.63	182	108	73	\$ 7	\$ 1	\$ 8
General Services-City Hall	792		Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	6	2,601	0.67	0.04	0.63	182	108	73	\$ 7	\$ 1	\$ 8
General Services-City Hall	812		Bathroom Women's Hc	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	6	2,601	0.22	0.12	0.10	575	323	252	\$ 24	\$ 3	\$ 27
General Services-City Hall	822		City Clerk Open.	1434	LP34	28	28	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	36	120	TRUE	3	2,340	3.10	1.74	1.36	7,245	4,067	3,178	\$ 303	\$ 45	\$ 348
General Services-City Hall	832		City Clerk Open.	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.57	0.34	0.23	163	98	66	\$ 6	\$ 1	\$ 7
General Services-City Hall	842		City Clerk Open.	2444	HP24R24	1	1	0.1440	0.0550	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.14	0.06	0.08	327	146	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	852		Office 1	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	862		Office 1	1444	1424WW	1	1	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 21	\$ 3	\$ 24
General Services-City Hall	872		Office 2	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	882		File Rm.	1434	LP34	3	3	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	7	520	0.33	0.19	0.15	173	97	76	\$ 6	\$ 5	\$ 11
General Services-City Hall	892		Office 3	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	902		Office 3	2444	HP24R24	1	1	0.1440	0.0550	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.14	0.06	0.08	327	146	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	911		Housing Open	1434	LP34	13	10	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	1.11	0.62	0.49	2,568	1,483	1,135	\$ 108	\$ 16	\$ 124
General Services-City Hall	921		Housing Open	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.14	0.06	0.08	327	195	132	\$ 13	\$ 2	\$ 14
General Services-City Hall	931		Office 103	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.66	0.37	0.29	1,553	872	681	\$ 65	\$ 10	\$ 75
General Services-City Hall	941		Office 103	2484	HP44R24-X2	1	1	0.3250	0.1260	4x4, 8-Lamp	Elect. HP Bal. & (4) 4' T8's, (2) Refl	157	120	TRUE	3	2,340	0.31	0.12	0.19	726	286	440	\$ 42	\$ 6	\$ 48
General Services-City Hall	951		Office 102	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	42	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	961		Office 101	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	971		Closet	82X60	PL2X13CRM	1	1	0.1200	0.0300	Inc (2) 60w	ICF Fixture - New (2) 13w Drum		120	TRUE	7	520	0.12	0.03	0.09	61	15	45	\$ 4	\$ 3	\$ 7
General Services-City Hall	981		Office 104	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's		120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-City Hall	99	1	Office 104	222U	NP22R22	1	1	0.0728	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	60	120	TRUE	3	2,340	0.07	0.03	0.04	163	73	91	\$ 9	\$ 1	\$ 10
General Services-City Hall	100	1	Office 106	2444	HP24R24	2	2	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39
General Services-City Hall	101	1	Conf. Rm 108	1434	LP34	10	10	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	82	120	TRUE	14	730	1.11	0.62	0.49	807	453	354	\$ 33	\$ 16	\$ 49
General Services-City Hall	102	1	Closet 107	1424	LP24	1	1	0.0728	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
General Services-City Hall	103	1	Mech Rm	1424	LP24	1	1	0.0728	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
General Services-City Hall	107	1	Mech Rm	1424	LP24	1	1	0.0728	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
General Services-City Hall	110	1	Recept/ Eco Development	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	111	1	Recept/ Eco Development	1444	1424SWR	2	2	0.1440	0.0480	1x4, 4-Lamp	New 1x4 w/ Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-City Hall	112	1	Recept/ Eco Development	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	113	1	Closet	12X60	PL2X13DRM	1	1	0.1200	0.0300	Inc (2) 60w	CF Fixture - New (2) 30w Drum	120	120	TRUE	7	520	0.12	0.03	0.09	61	15	45	\$ 4	\$ 3	\$ 7
General Services-City Hall	114	1	Office 126	1434	LP34	3	3	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	36	120	TRUE	3	2,340	0.33	0.19	0.15	776	436	340	\$ 32	\$ 5	\$ 37
General Services-City Hall	115	1	Office 127	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	34	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	116	1	Office 128	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	34	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	117	1	Office Open	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	3	2,340	0.22	0.12	0.10	518	291	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	118	1	Office Open	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	119	1	Office 130	1434	LP34	4	4	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	3	2,340	0.44	0.25	0.19	1,035	581	454	\$ 43	\$ 6	\$ 50
General Services-City Hall	120	1	Office 130	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	121	1	Copy Rm 124	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	49	120	TRUE	3	2,340	0.14	0.06	0.08	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	122	1	Copy Rm 124	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	14	730	0.22	0.12	0.10	161	91	71	\$ 7	\$ 3	\$ 10
General Services-City Hall	123	1	Office 125	1434	LP34	1	1	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	3	2,340	0.11	0.06	0.05	259	145	113	\$ 11	\$ 2	\$ 12
General Services-City Hall	124	1	Office 125	2444	HP24R24	1	1	0.1440	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	63	120	TRUE	3	2,340	0.14	0.06	0.05	327	148	179	\$ 17	\$ 3	\$ 20
General Services-City Hall	125	1	Office 125	222U	NP22R22	2	2	0.0728	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	145	182	\$ 17	\$ 3	\$ 20
General Services-City Hall	126	1	Conf. Rm 122	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	55	120	TRUE	14	730	0.66	0.37	0.29	484	272	212	\$ 20	\$ 10	\$ 29
General Services-City Hall	127	1	Office 121	1434	LP34	9	9	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	46	120	TRUE	3	2,340	1.00	0.56	0.44	2,329	1,307	1,021	\$ 97	\$ 14	\$ 112
General Services-City Hall	128	1	Office 120	1434	LP34	6	6	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	44	120	TRUE	3	2,340	0.66	0.37	0.29	1,563	872	681	\$ 65	\$ 10	\$ 76
General Services-City Hall	129	1	Office 120	222U	NP22R22	1	1	0.0728	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	120	120	TRUE	3	2,340	0.07	0.03	0.04	163	73	91	\$ 9	\$ 1	\$ 10
General Services-City Hall	130	1	Hall	1424	LP24	3	3	0.0728	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	9	2,339	0.21	0.13	0.08	490	283	197	\$ 19	\$ 3	\$ 22
General Services-City Hall	131	1	Hall	1434	LP34	2	2	0.1140	0.0640	1x4, 3-Lamp	Elect. LP Bal. & (3) 4' T8's	120	120	TRUE	9	2,339	0.22	0.12	0.10	517	290	227	\$ 22	\$ 3	\$ 25
General Services-City Hall	132	1	Hall	222U	LP22R22	1	1	0.0728	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120	120	TRUE	9	2,339	0.07	0.03	0.04	163	61	102	\$ 10	\$ 1	\$ 11
General Services-City Hall	133	1	Hall	K2X15B	KLEDB	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc's, BB	Exit Sign - New Universal LED w/ BB	120	120	TRUE	1	8,760	0.03	0.00	0.03	253	17	238	\$ 20	\$ 1	\$ 21
General Services-City Hall	137	Ext	Building Front	12X90	CF2X23R30	4	4	0.1800	0.0460	Inc (2) 90w	(2) Compact One Piece 23w R30 Refl	120	120	TRUE	10	4,380	0.70	0.18	0.52	3,059	782	2,277	\$ 186	\$ 17	\$ 204
General Services-City Hall	138	Ext	Building Sides	12X90	CF2X23R30	4	4	0.1800	0.0460	Inc (2) 90w	(2) Compact One Piece 23w R30 Refl	120	120	TRUE	10	4,380	0.70	0.18	0.52	3,059	782	2,277	\$ 186	\$ 17	\$ 204

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-City Hall	139	Ext	Back	12X90	CF2X23R30	4	4	0.1800	0.0460	Inc 12" 90w	(2) Compact One Piece 23w R30 Refl	120	120	TRUE	10	4,380	0.70	0.18	0.52	3,059	762	2,277	\$ 186	\$ 17	\$ 204
General Services-City Hall	140	Ext	Back	M100	IND70WP	1	1	0.1300	0.0750	MH 100w	Induction 70w Wall Pack	120	120	TRUE	10	4,380	0.13	0.07	0.05	552	319	234	\$ 19	\$ 2	\$ 21
General Services-City Hall	141	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1	-	-	New Layout	New Time Clock	120	120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -
General Services-Fleet Maintenance	1	1	Lobby	2444	NP24R24L	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, Lens	60	120	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
General Services-Fleet Maintenance	2	1	Lobby	222U	NP22R22L	1	1	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl, Lens	120	120	TRUE	3	2,340	0.07	0.03	0.04	163	73	91	\$ 9	\$ 1	\$ 10
General Services-Fleet Maintenance	3	1	Office 1	2444	NP24R24L	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, Lens	70	120	TRUE	5	2,340	0.26	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	4	1	Office 2	2444	NP24R24L	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, Lens	120	120	TRUE	3	2,340	0.26	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	5	1	Office 3	2444	NP24R24L	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, Lens	50	120	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
General Services-Fleet Maintenance	6	1	Office 4	1844T8	LP44	2	2	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	53	120	TRUE	3	2,340	0.22	0.16	0.05	508	386	123	\$ 12	\$ 2	\$ 13
General Services-Fleet Maintenance	7	1	Hallway 1 To 4	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	9	2,339	0.14	0.04	0.10	327	98	229	\$ 22	\$ 3	\$ 25
General Services-Fleet Maintenance	8	1	Hallway 1 To 4	222U	LP22R22	3	3	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	18	120	TRUE	9	2,339	0.21	0.08	0.13	490	184	306	\$ 29	\$ 4	\$ 34
General Services-Fleet Maintenance	9	1	Break Room	2444	LP24R24	12	12	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	57	120	TRUE	8	2,340	1.68	0.50	1.18	3,922	1,171	2,751	\$ 282	\$ 39	\$ 301
General Services-Fleet Maintenance	10	1	Kitchen	2444	LP24R24	4	4	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	8	2,340	0.56	0.17	0.39	1,307	390	917	\$ 87	\$ 13	\$ 100
General Services-Fleet Maintenance	11	1	Kitchen - Snack Machine	VEND	MISER	1	1	0.3399	0.3399	Vending Machine	Vending Machine Controlled	120	120	TRUE	1	8,780	0.33	0.33	-	2,881	2,881	-	\$ -	\$ -	\$ -
General Services-Fleet Maintenance	12	1	Work Room	2444	NP24R24	5	5	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	45	120	TRUE	114	3,505	0.70	0.23	0.47	2,448	816	1,632	\$ 134	\$ 15	\$ 149
General Services-Fleet Maintenance	13	1	Work Room	222U	NP22K22	1	1	0.0723	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Kil	120	120	TRUE	114	3,505	0.07	0.03	0.04	245	909	136	\$ 11	\$ 1	\$ 12
General Services-Fleet Maintenance	14	1	Office 5	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	15	1	Office 6	2444	NP24R24	1	1	0.1443	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	50	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 21	\$ 3	\$ 24
General Services-Fleet Maintenance	16	1	Office 6	222U	NP22K22	2	2	0.0723	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Kil	120	120	TRUE	3	2,340	0.14	0.06	0.08	327	145	182	\$ 17	\$ 3	\$ 20
General Services-Fleet Maintenance	17	1	Office 7	2444	NP24R24	2	2	0.1443	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	65	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	18	1	Bathroom Men's	2444	LP24R24	2	2	0.1443	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	0	2,601	0.28	0.08	0.20	727	217	510	\$ 49	\$ 6	\$ 55
General Services-Fleet Maintenance	19	1	Bathroom Women's	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,601	0.42	0.13	0.29	1,090	325	764	\$ 73	\$ 10	\$ 83
General Services-Fleet Maintenance	20	1	Kitchen 2	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	75	120	TRUE	8	2,340	0.42	0.13	0.29	981	293	688	\$ 66	\$ 10	\$ 75
General Services-Fleet Maintenance	21	1	Kitchen 2	222U	LP22R22	2	2	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120	120	TRUE	8	2,340	0.14	0.05	0.09	327	123	204	\$ 19	\$ 3	\$ 22
General Services-Fleet Maintenance	22	1	Conference Room	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	114	3,505	0.42	0.13	0.29	1,469	439	1,030	\$ 84	\$ 10	\$ 94
General Services-Fleet Maintenance	23	1	Office 8	2444	NP24R24	3	3	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.42	0.14	0.26	981	327	654	\$ 62	\$ 9	\$ 72
General Services-Fleet Maintenance	24	1	Hallway Kitchen 2 To 10	2444	LP24R24	5	5	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	35	120	TRUE	9	2,339	0.70	0.21	0.49	1,634	488	1,146	\$ 109	\$ 16	\$ 126
General Services-Fleet Maintenance	26	1	Office 9	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	59	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	27	1	Computer Room	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	107	2,079	0.28	0.08	0.20	581	173	407	\$ 40	\$ 6	\$ 47
General Services-Fleet Maintenance	28	1	Office 10	2444	NP24R24	3	3	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	65	120	TRUE	103	600	0.42	0.14	0.26	251	84	166	\$ 15	\$ 9	\$ 25
General Services-Fleet Maintenance	29	1	Radio Shop	2444	NP24R24	10	10	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	63	120	TRUE	3	2,340	1.40	0.47	0.93	3,269	1,090	2,179	\$ 208	\$ 31	\$ 239
General Services-Fleet Maintenance	30	1	Office 11	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Feet Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-Fleet Maintenance	31	1	Radio Storage	2444	LP24R24	4	4	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	125	120	TRUE	7	520	0.56	0.17	0.39	291	87	204	\$ 17	\$ 13	\$ 29
General Services-Fleet Maintenance	33	1	Small Engine Shop	1828	1624IND	24	24	0.1260	0.0480	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's	35	120	TRUE	3	2,340	2.93	1.12	1.82	6,864	2,815	4,249	\$ 405	\$ 60	\$ 465
General Services-Fleet Maintenance	34	1	Small Engine Shop	1828	1624IND	4	4	0.1260	0.0480	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's		120	TRUE	3	2,340	0.49	0.19	0.30	1,144	436	708	\$ 68	\$ 10	\$ 78
General Services-Fleet Maintenance	35	1	Small Engine Shop Parts	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.08	0.20	654	195	458	\$ 44	\$ 6	\$ 50
General Services-Fleet Maintenance	36	1	Small Engine Shop Office	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	37	2	Upper Storage	1828	1624IND	8	8	0.1260	0.0480	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's		120	TRUE	7	520	0.98	0.37	0.61	508	194	315	\$ 25	\$ 20	\$ 46
General Services-Fleet Maintenance	38	2	Recept. Area	2444	NP24R24	19	19	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	2.65	0.88	1.77	6,210	2,070	4,140	\$ 395	\$ 59	\$ 453
General Services-Fleet Maintenance	39	2	Recept. Area	222U	NP22K22	1	1	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Kit		120	TRUE	3	2,340	0.07	0.03	0.04	183	73	91	\$ 9	\$ 1	\$ 10
General Services-Fleet Maintenance	41	2	Medic Room 2-1	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
General Services-Fleet Maintenance	42	2	Office 2-2	2444	NP24R24T2	4	2	0.1440	0.0930	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, TW in 2	66	120	TRUE	3	2,340	0.56	0.18	0.38	1,307	422	885	\$ 84	\$ 13	\$ 97
General Services-Fleet Maintenance	43	2	Office 2-2	160	CF15R30	4	4	0.0600	0.0150	Inc 60w	Compact One Piece 15w R30 Flood		120	TRUE	3	2,340	0.23	0.06	0.17	545	136	409	\$ 39	\$ 6	\$ 45
General Services-Fleet Maintenance	44	2	Office 2-3	2444	NP24R24	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
General Services-Fleet Maintenance	45	2	Bathroom Women's	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	45	120	TRUE	6	2,801	0.28	0.08	0.20	727	217	510	\$ 49	\$ 6	\$ 55
General Services-Fleet Maintenance	46	2	Bathroom Men's	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	6	2,801	0.28	0.08	0.20	727	217	510	\$ 49	\$ 6	\$ 55
General Services-Fleet Maintenance	47	2	Jc	160	CF13	1	1	0.0600	0.0130	Inc 60w	Compact One Piece 13w		120	TRUE	7	520	0.06	0.01	0.05	30	7	24	\$ 2	\$ 2	\$ 3
General Services-Fleet Maintenance	48	2	Hallway Bathrooms	160	CF15R30	4	4	0.0600	0.0150	Inc 60w	Compact One Piece 15w R30 Flood		120	TRUE	3	2,339	0.23	0.06	0.17	545	136	408	\$ 39	\$ 6	\$ 45
General Services-Fleet Maintenance	49	2	Office 2-7	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	80	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	50	2	Break Room 2-8	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.08	0.20	654	195	458	\$ 44	\$ 6	\$ 50
General Services-Fleet Maintenance	51	2	Office 2-9	2444	NP24R24L	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, Lens	5	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	52	2	Computer Room 2-10	1444	LP44	2	2	0.1440	0.0850	1x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		120	TRUE	7	520	0.28	0.16	0.11	145	86	60	\$ 5	\$ 4	\$ 9
General Services-Fleet Maintenance	53	2	Training 2-12	2444	NP24R24	9	9	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	14	730	1.26	0.42	0.84	918	306	612	\$ 57	\$ 28	\$ 84
General Services-Fleet Maintenance	54	2	Conference Room 2-13	2444	LP24R24	6	6	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	14	730	0.84	0.25	0.59	612	183	429	\$ 40	\$ 19	\$ 59
General Services-Fleet Maintenance	55	2	Storage 2-14	2444	LP24R24	6	6	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	107	2,079	0.84	0.25	0.59	1,742	520	1,222	\$ 120	\$ 19	\$ 140
General Services-Fleet Maintenance	56	2	Office 2-15	2444	NP24R24	3	3	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	0.42	0.14	0.28	881	327	654	\$ 62	\$ 9	\$ 72
General Services-Fleet Maintenance	57	SW	Stairwell	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl		120	TRUE	9	2,339	0.07	0.03	0.04	163	61	102	\$ 10	\$ 1	\$ 11
General Services-Fleet Maintenance	58	SW	Stairwell	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	9	2,339	0.14	0.04	0.10	327	98	229	\$ 22	\$ 3	\$ 25
General Services-Fleet Maintenance	60	1	Office 1-17	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	61	1	Office 1-16	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	62	1	Office 1-15	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	70	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	63	1	Office 1-14	2444	NP24R24	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	70	120	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
General Services-Fleet Maintenance	64	1	Office 1-8	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	65	1	Office 1-7	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	75	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total kWh Dollars Saved
General Services-Fleet Maintenance	66	1	Office Lnc 4	2444T8	NP24R24	3	3	0.1129	0.0460	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl.	76	120	TRUE	3	2,340	0.33	0.14	0.19	763	327	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	67	1	Office Lnc 4 B	2444T8	NP24R24	1	1	0.1129	0.0460	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl.	120	120	TRUE	3	2,340	0.11	0.05	0.06	254	109	145	\$ 14	\$ 2	\$ 16
General Services-Fleet Maintenance	68	1	Parts Room	2444	NP24R24T2	6	3	0.1449	0.0930	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl, TW in 2	77	120	TRUE	3	2,340	0.84	0.27	0.57	1,361	633	1,328	\$ 127	\$ 18	\$ 145
General Services-Fleet Maintenance	69	1	Parts Room	2444	NP24R24	1	1	0.1449	0.0460	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 21	\$ 3	\$ 24
General Services-Fleet Maintenance	71	1	Parts Room Storage	2444	LP24R24	8	8	0.1449	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	7	520	1.12	0.33	0.78	591	174	408	\$ 33	\$ 26	\$ 59
General Services-Fleet Maintenance	72	1	Tool Room	2444	LP24R24	1	1	0.1449	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 4	\$ 3	\$ 7
General Services-Fleet Maintenance	73	1	Parts Office	2444	NP24R24	2	2	0.1449	0.0460	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	74	1	Bath / Lockers	2444	LP24R24	1	1	0.1449	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 24	\$ 3	\$ 28
General Services-Fleet Maintenance	75	1	Bathroom	2444	LP24R24	1	1	0.1449	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	6	2,601	0.14	0.04	0.10	363	108	255	\$ 24	\$ 3	\$ 28
General Services-Fleet Maintenance	76	1	Locker Room	2444	LP24R24	5	5	0.1449	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	70	120	TRUE	6	2,601	0.70	0.21	0.49	1,817	542	1,274	\$ 122	\$ 16	\$ 138
General Services-Fleet Maintenance	77	1	Office Fabrication 1	2444	NP24R24	4	4	0.1449	0.0460	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
General Services-Fleet Maintenance	78	1	Office Fabrication 2	2444	NP24R24	2	2	0.1449	0.0460	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	120	TRUE	3	2,340	0.25	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
General Services-Fleet Maintenance	79	1	Back Storage	1628	NP24K18	7	7	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	30	120	TRUE	7	520	0.56	0.33	0.53	445	169	275	\$ 22	\$ 18	\$ 40
General Services-Fleet Maintenance	80	1	Back Storage	1424T8	LP24	1	1	0.0589	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
General Services-Fleet Maintenance	81	1	Storage 1	1628	NP24K18	1	1	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	7	520	0.12	0.05	0.08	64	24	39	\$ 3	\$ 3	\$ 6
General Services-Fleet Maintenance	82	1	Storage 2	1628	NP24K18	1	1	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	7	520	0.12	0.05	0.08	64	24	39	\$ 3	\$ 3	\$ 6
General Services-Fleet Maintenance	83	1	Storage 3	1628	NP24K18	1	1	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	7	520	0.12	0.05	0.08	64	24	39	\$ 3	\$ 3	\$ 6
General Services-Fleet Maintenance	84	1	Shop Zone 1	MJ350	1464HBPSS R-WG	10	10	0.3769	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	70	120	TRUE	3	2,340	3.67	1.66	2.01	8,580	3,881	4,698	\$ 448	\$ 67	\$ 514
General Services-Fleet Maintenance	85	1	Shop Zone 1 Task	1628	NP24K18	16	16	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	3	2,340	1.96	0.74	1.21	4,576	1,743	2,833	\$ 270	\$ 40	\$ 310
General Services-Fleet Maintenance	86	1	Work Bay Zone 2	MJ350	1464HBPSS R-WG	22	22	0.3769	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	60	120	TRUE	3	2,340	8.07	3.65	4.42	18,876	8,539	10,337	\$ 986	\$ 146	\$ 1,132
General Services-Fleet Maintenance	87	1	Work Bay Zone 2	CFL200	1464HBPSS R-WG	2	2	0.2000	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	120	TRUE	3	2,340	0.39	0.33	0.06	908	776	132	\$ 13	\$ 2	\$ 14
General Services-Fleet Maintenance	88	1	Work Bay Zone 2 Task	1628	NP24K18	22	22	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	3	2,340	2.69	1.02	1.66	6,292	2,397	3,895	\$ 371	\$ 55	\$ 427
General Services-Fleet Maintenance	89	1	Work Bay Zone 3	MJ350	1464HBPSS R-WG	10	10	0.3769	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	80	120	TRUE	3	2,340	2.67	1.66	2.01	8,580	3,881	4,698	\$ 448	\$ 67	\$ 514
General Services-Fleet Maintenance	90	1	Work Bay Zone 3 Task	1628	NP24K18	2	2	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	3	2,340	0.24	0.09	0.15	572	216	354	\$ 34	\$ 5	\$ 39
General Services-Fleet Maintenance	91	1	Office Fire Trucks 1	2444T8	NP24R24-HI	2	2	0.1129	0.0460	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl, HI	92	120	TRUE	3	2,340	0.22	0.09	0.12	508	218	291	\$ 28	\$ 4	\$ 32
General Services-Fleet Maintenance	92	1	Office Fire Trucks 2	2444T8	NP24R24-HI	2	2	0.1129	0.0460	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl, HI	120	120	TRUE	3	2,340	0.22	0.09	0.12	508	218	291	\$ 28	\$ 4	\$ 32
General Services-Fleet Maintenance	93	1	Aisle Zone 4	MJ350	1464HBPSS R-WG	11	11	0.3769	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	68	120	TRUE	3	2,340	4.03	1.82	2.21	9,438	4,289	5,168	\$ 493	\$ 73	\$ 566
General Services-Fleet Maintenance	94	1	Aisle Zone 4	CFL200	1464HBPSS R-WG	2	2	0.2000	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	120	TRUE	3	2,340	0.39	0.33	0.06	908	776	132	\$ 13	\$ 2	\$ 14
General Services-Fleet Maintenance	95	1	Aisle Zone 4	MJ250	DIS-HI	1	1	0.2950	-	MH 250w	Disconnect and Remove, HI	120	120	TRUE	3	2,340	0.29	-	0.29	670	-	670	\$ 64	\$ 9	\$ 73
General Services-Fleet Maintenance	96	1	Work Bay Zone 5	MJ250	1464HBPSS R-WG	19	19	0.2950	0.1710	MH 250w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	67	120	TRUE	3	2,340	5.44	3.16	2.29	12,722	7,375	5,348	\$ 510	\$ 76	\$ 586
General Services-Fleet Maintenance	97	1	Work Bay Zone 5	CFL200	1464HBPSS R-WG	3	3	0.2000	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	120	TRUE	3	2,340	0.58	0.50	0.08	1,362	1,164	197	\$ 19	\$ 3	\$ 22
General Services-Fleet Maintenance	98	1	Work Bay Zone 5 Task	1628	NP24K18	12	12	0.1269	0.0460	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kil	120	120	TRUE	3	2,340	1.47	0.56	0.91	3,432	1,307	2,125	\$ 203	\$ 30	\$ 233

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-Fleet Maintenance	99	1	Work Bay Zone 5 Task	1424	LP14K14	5	5	0.072	0.0210	1x4, 2-Lamp	Elect. LP Bal. & (1) 4' T8, Kl	120	TRUE	3	2,340	0.25	0.10	0.25	817	238	579	\$ 55	\$ 8	\$ 63	
General Services-Fleet Maintenance	100	1	Aisle Zone 6	M350	1464HBPSS R-WG	14	14	0.378	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	TRUE	3	2,340	5.13	2.32	2.81	12,012	5,434	6,578	\$ 627	\$ 83	\$ 720	
General Services-Fleet Maintenance	101	1	Aisle Zone 6	CFL200	1464HBPSS R-WG	1	1	0.2003	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	TRUE	3	2,340	0.19	0.17	0.03	454	388	66	\$ 6	\$ 1	\$ 7	
General Services-Fleet Maintenance	102	1	Work Bay Zone 7	CFL200	1464HBPSS R-WG	6	6	0.2003	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	90	120	TRUE	3	2,340	1.16	1.00	0.17	2,724	2,329	395	\$ 38	\$ 6	\$ 43
General Services-Fleet Maintenance	103	1	Work Bay Zone 7	M350	1464HBPSS R-WG	6	6	0.378	0.1710	M-1350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	TRUE	3	2,340	2.20	1.00	1.20	5,146	2,329	2,819	\$ 289	\$ 40	\$ 309	
General Services-Fleet Maintenance	104	1	Work Bay Zone 7 Task	1828	NP24K18	6	6	0.1263	0.0480	1x8, 2-Lamp	Elect. NP Bal. & (2) 4' T8's, Kl	120	TRUE	5	2,340	0.73	0.28	0.45	1,716	654	1,062	\$ 101	\$ 15	\$ 116	
General Services-Fleet Maintenance	105	1	Work Bay Zone 7 Task	1424	LP14K14	3	3	0.0723	0.0210	1x4, 2-Lamp	Elect. LP Bal. & (1) 4' T8, Kl	120	TRUE	3	2,340	0.21	0.06	0.15	490	143	347	\$ 33	\$ 5	\$ 38	
General Services-Fleet Maintenance	106	1	Work Bay Zone 7 Task	1844T8	LP44	3	3	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	120	TRUE	3	2,340	0.33	0.25	0.08	763	579	184	\$ 18	\$ 3	\$ 20	
General Services-Fleet Maintenance	107	1	Aisle Zone 8	M350	1464HBPSS R-WG	16	16	0.3783	0.1710	MH 350w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	81	120	TRUE	3	2,340	5.87	2.65	3.21	13,728	6,210	7,518	\$ 717	\$ 106	\$ 823
General Services-Fleet Maintenance	108	1	Aisle Zone 8	CFL200	1464HBPSS R-WG	3	3	0.2003	0.1710	CFL 200w	New 1x4 w/ Elect. PS Bal. & (6) 4' T8's, WG, SR, HI	120	TRUE	3	2,340	0.58	0.50	0.08	1,362	1,164	197	\$ 19	\$ 3	\$ 22	
General Services-Fleet Maintenance	110	1	Work Bay - Drink Machine	VEND	MPSER	2	2	0.3393	0.3390	Vending Machine	Vending Machine Control ad	120	TRUE	1	6,760	0.66	0.66	-	5,761	5,761	-	\$ -	\$ -	\$ -	
General Services-Fleet Maintenance	111	Ext	Walls	M175	IND120WP-PC	4	4	0.2103	0.1250	MH 175w	Induction 120w Wallpack, PC	120	TRUE	10	4,380	0.81	0.45	0.33	3,569	2,124	1,445	\$ 118	\$ 11	\$ 129	
General Services-Fleet Maintenance	112	Ext	Walls	S70	IND40WP-PC	2	2	0.0943	0.0450	HPS 70w	40w Induction Wall Pack	120	TRUE	10	4,380	0.18	0.09	0.10	799	382	416	\$ 34	\$ 3	\$ 37	
General Services-Fleet Maintenance	113	Ext	Walls	S250	IND120WP-PC	8	8	0.2953	0.1250	HPS 250w	Induction 120w Wallpack, PC	120	TRUE	10	4,380	2.29	0.97	1.32	10,027	4,249	5,778	\$ 473	\$ 44	\$ 517	
General Services-Fleet Maintenance	116	Ext	Side Canopy	1424	1414VR	1	1	0.0723	0.0250	1x4, 2-Lamp	New 1x4 w/ Elect. NP Bal. & (1) 4' T8	120	TRUE	10	4,380	0.07	0.02	0.05	306	106	200	\$ 16	\$ 2	\$ 18	
General Services-Fleet Maintenance	117	Ext	Side Canopy	1828	1824VR	1	1	0.1263	0.0490	1x8, 2-Lamp	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's, VR	120	TRUE	10	4,380	0.12	0.05	0.08	535	204	331	\$ 27	\$ 3	\$ 30	
General Services-Fleet Maintenance	118	Ext	Side Canopy	18X60	CF2X15R30	4	4	0.1203	0.0300	Inc (2) 60w	(2) Compact One Piece 15w R30 Flood	120	TRUE	10	4,380	0.47	0.12	0.35	2,039	510	1,529	\$ 125	\$ 12	\$ 137	
General Services-Fleet Maintenance	119	1	Exterior Lighting Panel	NL	NEW TIME C-CLOCK	1	1	-	-	New Layout	New Time Clock	120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -	
General Services-MSB	1	Perit	Stairs	1424T8	LP24	2	2	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	1	8,760	0.11	0.06	0.03	866	731	255	\$ 22	\$ 1	\$ 23	
General Services-MSB	2	Perit	Mech Rm	1424T8	LP24	18	18	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	1.01	0.75	0.26	527	390	136	\$ 11	\$ 9	\$ 20	
General Services-MSB	3	Perit	Boxer 401	1424T8	LP24	3	3	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.17	0.13	0.04	88	69	23	\$ 2	\$ 1	\$ 3	
General Services-MSB	4	Perit	Fan 402	1424T8	LP24	2	2	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
General Services-MSB	5	Perit	Exits	K2X15	KLED	1	1	0.0303	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	6	3	Surf 390 Recep. Area	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.48	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31	
General Services-MSB	7	3	Mech 304	1424T8	LP24	2	2	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
General Services-MSB	8	3	Phone C305	1424T8	LP24	2	2	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
General Services-MSB	9	3	Jc	1424T8	LP24	1	1	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.08	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
General Services-MSB	10	3	Budget 341	2434T8	HP24R24	1	1	0.0853	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.08	0.06	0.02	193	148	45	\$ 4	\$ 1	\$ 5	
General Services-MSB	11	3	Office 351	2434T8	LP34	3	3	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
General Services-MSB	12	3	Office 350	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.45	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31	
General Services-MSB	13	3	Office 350 A	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	58	277	TRUE	3	2,340	0.45	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
General Services-MSB	14	3	Office 352	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	60	277	TRUE	3	2,340	0.45	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
General Services-MSB	15	3	Office 353	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	76	277	TRUE	3	2,340	0.45	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
General Services-MSB	16	3	Office 366	2434T8	LP34	3	3	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
General Services-MSB	17	3	Storage	2424T8	LP24	1	1	0.0583	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
General Services-MSB	18	3	Office 362	2434T8	LP34	2	2	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.16	0.12	0.04	366	291	95	\$ 9	\$ 1	\$ 10	
General Services-MSB	19	3	Office 363	2434T8	LP34	2	2	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.16	0.12	0.04	366	291	95	\$ 9	\$ 1	\$ 10	
General Services-MSB	20	3	Office 362	2424T8	LP24	2	2	0.0583	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	28	277	TRUE	3	2,340	0.11	0.08	0.03	263	195	68	\$ 6	\$ 1	\$ 7
General Services-MSB	21	3	Office 364	2434T8	LP34	2	2	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	68	277	TRUE	3	2,340	0.16	0.12	0.04	366	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	22	3	Office 364	2434T8	LP34	2	2	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.16	0.12	0.04	366	291	95	\$ 9	\$ 1	\$ 10	
General Services-MSB	23	3	Studio	2434T8	LP34	9	9	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.74	0.56	0.18	1,736	1,307	429	\$ 41	\$ 6	\$ 47	
General Services-MSB	26	3	Studio	1424T8	LP24	12	12	0.0583	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	127	277	TRUE	3	2,340	0.68	0.50	0.17	1,560	1,171	409	\$ 39	\$ 6	\$ 45
General Services-MSB	27	3	Office 374	2434T8	LP34	2	2	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	65	277	TRUE	3	2,340	0.16	0.12	0.04	366	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	28	3	Training Rm.	2434T8	LP34	6	6	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	14	730	0.49	0.37	0.12	361	272	89	\$ 8	\$ 4	\$ 12	
General Services-MSB	29	3	Office 372	2434T8	LP34	3	3	0.0853	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	68	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total Dollars Saved	
General Services-MSB	303		Office 372 A	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.16	0.12	0.04	386	291	95 \$	9 \$	1 \$	10	
General Services-MSB	313		Office 371	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	323		Open Office 1	2434T8	LP34	54	54	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	4.45	3.35	1.10	10,418	7,844	2,574 \$	245 \$	36 \$	282	
General Services-MSB	333		Open Office 1	K2X15	KLED	3	3	0.0300	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	1		8,760	0.09	0.01	0.08	765	51	714 \$	60 \$	3 \$	63	
General Services-MSB	343		Open Office 2	2434T8	LP34	14	14	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	1.15	0.87	0.29	2,701	2,034	667 \$	64 \$	9 \$	73	
General Services-MSB	353		Open Office 2	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	1		8,760	0.03	0.00	0.03	255	17	238 \$	20 \$	1 \$	21	
General Services-MSB	363		Office 345	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	373		Office 344	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	3		2,340	0.33	0.25	0.08	772	581	191 \$	18 \$	3 \$	21	
General Services-MSB	383		Office 343	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	91	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16
General Services-MSB	393		Conf 342	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	14		730	0.33	0.25	0.08	241	181	59 \$	6 \$	3 \$	8	
General Services-MSB	403		Office 333	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	413		Conf. 332	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	14		730	0.33	0.25	0.08	241	181	59 \$	6 \$	3 \$	8	
General Services-MSB	423		Office 331	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.33	0.25	0.08	772	581	191 \$	18 \$	3 \$	21	
General Services-MSB	433		Open Office 3	2434T8	LP34	9	9	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.74	0.56	0.18	1,736	1,307	429 \$	41 \$	6 \$	47	
General Services-MSB	443		File Rm 315	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	7		520	0.16	0.08	0.08	86	43	42 \$	3 \$	3 \$	6	
General Services-MSB	453		Copy 314	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.16	0.12	0.04	386	291	95 \$	9 \$	1 \$	10	
General Services-MSB	463		File 313	2434T8	LP24R24	4	4	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	7		520	0.33	0.17	0.16	171	87	85 \$	7 \$	5 \$	12	
General Services-MSB	473		Break Rm	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	76	277	TRUE	8		2,340	0.16	0.08	0.08	386	195	191 \$	18 \$	3 \$	21
General Services-MSB	483		File Rm 311	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	7		520	0.16	0.08	0.08	86	43	42 \$	3 \$	3 \$	6	
General Services-MSB	493		Office Dettlenwanger	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.08	0.06	0.02	193	145	46 \$	5 \$	1 \$	5	
General Services-MSB	503		Office Marcin	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.08	0.06	0.02	193	145	46 \$	5 \$	1 \$	5	
General Services-MSB	513		Office Postl	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.08	0.06	0.02	193	145	46 \$	5 \$	1 \$	5	
General Services-MSB	523		Open Office	2434T8	LP34	45	45	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	3.71	2.79	0.92	8,662	6,537	2,145 \$	205 \$	30 \$	235	
General Services-MSB	533		Office 319	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	543		Office 318	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	553		Coset 317	1424T8	LP24	1	1	0.0540	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7		520	0.06	0.04	0.01	26	22	8 \$	1 \$	0 \$	1	
General Services-MSB	563		Office 316	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.25	0.19	0.06	579	436	143 \$	14 \$	2 \$	16	
General Services-MSB	573		Neighborhood Suite Entry	2424T8	LP24	4	4	0.0540	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	3		2,340	0.23	0.17	0.06	527	390	136 \$	13 \$	2 \$	15	
General Services-MSB	583		Neighborhood Suite Entry	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	1		8,760	0.03	0.00	0.03	255	17	238 \$	20 \$	1 \$	21	
General Services-MSB	593		Office 392	2434T8	LP34	9	9	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	62	277	TRUE	3		2,340	0.74	0.56	0.18	1,736	1,307	429 \$	41 \$	6 \$	47
General Services-MSB	603		Office 391	2434T8	LP34	5	5	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	49	277	TRUE	3		2,340	0.41	0.31	0.10	965	726	238 \$	23 \$	3 \$	26
General Services-MSB	613		Office 391 A	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.16	0.12	0.04	386	291	95 \$	9 \$	1 \$	10	
General Services-MSB	623		Vending 390	2434T8	LP24R24	8	8	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	56	277	TRUE	9		2,339	0.66	0.33	0.33	1,543	780	762 \$	73 \$	11 \$	84
General Services-MSB	633		Vending 390	VEND	MISER	1	1	0.3300	0.3300	Vending Machine	Vending Machine Controlled	277	TRUE	1		8,760	0.33	0.33	-	2,861	2,861	- \$	- \$	- \$	-	
General Services-MSB	643		Shower C309	2434T8	LP24R24	1	1	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	5		1,040	0.08	0.04	0.04	86	43	42 \$	4 \$	1 \$	5	
General Services-MSB	653		Shower C308	2434T8	LP24R24	1	1	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	5		1,040	0.08	0.04	0.04	86	43	42 \$	4 \$	1 \$	5	
General Services-MSB	670		Bathroom Men's C302	1424T8	LP24	2	2	0.0540	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6		2,601	0.11	0.08	0.03	293	217	76 \$	7 \$	1 \$	8	
General Services-MSB	683		Bathroom Men's C302	1844T8	LP44	3	3	0.1100	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	6		2,601	0.33	0.25	0.08	848	643	204 \$	20 \$	3 \$	22	
General Services-MSB	703		Bathroom Women's	1424T8	LP24	2	2	0.0540	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6		2,601	0.11	0.08	0.03	293	217	76 \$	7 \$	1 \$	8	
General Services-MSB	713		Bathroom Women's	1844T8	LP44	3	3	0.1100	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	6		2,601	0.33	0.25	0.08	848	643	204 \$	20 \$	3 \$	22	
General Services-MSB	723		Hall	222U	LP2U	6	6	0.0700	0.0430	2x2, 2-Lamp U	Elect. LP Bal. & (2) U Tube T8's	277	TRUE	9		2,339	0.42	0.25	0.17	960	565	395 \$	38 \$	6 \$	43	
General Services-MSB	733		Hall	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	9		2,339	0.03	0.00	0.03	68	5	64 \$	6 \$	1 \$	7	
General Services-MSB	772		Suite 230	2434T8	LP34	23	23	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	55	277	TRUE	3		2,340	1.90	1.43	0.47	4,437	3,341	1,096 \$	105 \$	16 \$	120
General Services-MSB	782		Suite 230	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w	Exit Sign - New Universal LED	277	TRUE	1		8,760	0.03	0.00	0.03	255	17	238 \$	20 \$	1 \$	21	
General Services-MSB	792		Office 234	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	85	277	TRUE	3		2,340	0.33	0.25	0.08	772	581	191 \$	18 \$	3 \$	21
General Services-MSB	832		Office 233	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3		2,340	0.16	0.12	0.04	386	291	95 \$	9 \$	1 \$	10	
General Services-MSB	812		Break Rm/Conf	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	8		2,340	0.33	0.25	0.08	772	581	191 \$	18 \$	3 \$	21	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total kWh Dollars Saved
General Services-MSB	832		Planning Suite 210 Entry	2434T8	LP34	7	7	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.58	0.43	0.14	1,351	1,017	334	\$ 32	\$ 5	\$ 37
General Services-MSB	862		Planning Suite 210 Entry	K2X15	KLED	1	1	0.0320	0.0020	Exit Sign - (2) 15w Inc's	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21
General Services-MSB	872		Planning Suite 210 Entry	K2X15B	KLEDB	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc's, BB	Exit Sign - New Universal LED w/ BB		277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21
General Services-MSB	882		Mer	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
General Services-MSB	892		Phone	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
General Services-MSB	902		Jc	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
General Services-MSB	912		Open Office	2434T8	LP34	49	49	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	4.04	3.04	1.00	9,454	7,119	2,335	\$ 223	\$ 33	\$ 256
General Services-MSB	942		File/Break Rm. 218	2434T8	LP24R24	5	5	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	70	277	TRUE	8	2,340	0.41	0.21	0.20	965	468	477	\$ 45	\$ 7	\$ 52
General Services-MSB	952		Conf Rm 216	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8
General Services-MSB	962		Office 215	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	972		Office 214	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	982		Office 213	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	992		Office 212	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.66	0.50	0.16	1,643	1,162	381	\$ 36	\$ 5	\$ 42
General Services-MSB	1002		Office 220 Recept.	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
General Services-MSB	1012		Conf Rm 227	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	62	277	TRUE	14	730	0.16	0.12	0.04	120	91	30	\$ 3	\$ 1	\$ 4
General Services-MSB	1022		Office 226	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	54	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	1032		Open Office 1	2434T8	LP34	30	30	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	2.47	1.86	0.61	5,789	4,350	1,430	\$ 136	\$ 20	\$ 157
General Services-MSB	1042		Open Office 1	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc's	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21
General Services-MSB	1052		Office 225	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	1062		Office Open 2	2434T8	LP34	41	41	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	3.38	2.55	0.84	7,810	5,956	1,854	\$ 186	\$ 28	\$ 214
General Services-MSB	1072		Office Open 3	2434T8	LP34	26	26	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	2.14	1.61	0.53	5,016	3,777	1,239	\$ 118	\$ 18	\$ 136
General Services-MSB	1082		Office Open 3	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Inc's	Exit Sign - New Universal LED		277	TRUE	3	2,340	0.06	0.00	0.06	136	9	127	\$ 12	\$ 2	\$ 14
General Services-MSB	1092		Office 224	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
General Services-MSB	1102		Office 223	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	1112		Office 222	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	1122		Conf Rm 221	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8
General Services-MSB	1142		Bathroom Men's	1844T8	LP44	2	2	0.1120	0.0850	1x8, 4-Lamp T8 4"	Elect. LP Bal. & (4) 4' T8's		277	TRUE	6	2,601	0.22	0.16	0.05	565	429	136	\$ 13	\$ 2	\$ 15
General Services-MSB	1152		Bathroom Men's	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.11	0.08	0.03	293	217	76	\$ 7	\$ 1	\$ 8
General Services-MSB	1172		Bathroom Women's	1844T8	LP44	2	2	0.1120	0.0850	1x8, 4-Lamp T8 4"	Elect. LP Bal. & (4) 4' T8's		277	TRUE	6	2,601	0.22	0.16	0.05	565	429	136	\$ 13	\$ 2	\$ 15
General Services-MSB	1182		Bathroom Women's	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.11	0.08	0.03	293	217	76	\$ 7	\$ 1	\$ 8
General Services-MSB	1202		Hall	222UT8	LP2U	6	6	0.0580	0.0430	2x2, 2-Lamp U T8	Elect. LP Bal. & (2) U Tube T8's		277	TRUE	9	2,339	0.34	0.25	0.09	790	585	204	\$ 20	\$ 3	\$ 22
General Services-MSB	1222		Hall	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc's	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21
General Services-MSB	1251		Mer	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
General Services-MSB	1261		Phone	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
General Services-MSB	1271		Elevator Rm	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
General Services-MSB	1281		Jc	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
General Services-MSB	1291		Suite 121 Entry	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	57	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	1311		Office 125	2434T8	HP24R24	2	2	0.0850	0.0850	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl	75	277	TRUE	3	2,340	0.16	0.13	0.04	386	296	91	\$ 9	\$ 1	\$ 10
General Services-MSB	1321		Conf Rm 124	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8
General Services-MSB	1331		Small Open Office	2434T8	LP34	7	7	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.58	0.43	0.14	1,351	1,017	334	\$ 32	\$ 5	\$ 37
General Services-MSB	1351		Office 123	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
General Services-MSB	1361		Conf Rm	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8
General Services-MSB	1371		Office 128	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
General Services-MSB	1381		Office 112 Open	2434T8	LP34	28	28	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	60	277	TRUE	3	2,340	2.31	1.74	0.57	5,402	4,067	1,335	\$ 127	\$ 19	\$ 146
General Services-MSB	1391		Office 112 Open	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Inc's	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.06	0.00	0.06	513	34	476	\$ 40	\$ 2	\$ 42
General Services-MSB	1421		Office 115	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
General Services-MSB	1411		Office 114	2434T8-DS	LP34-ALT	2	2	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	81	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	1421		Storage 113	2424T8	LP24	1	1	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
General Services-MSB	1441		Ffe Rm	2444T8	NP24R24	1	1	0.1120	0.0480	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	7	520	0.11	0.05	0.06	56	24	32	\$ 3	\$ 2	\$ 5

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
General Services-MSB	145	1	Office 110	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	0.49	0.37	0.12	1,156	872	286	\$ 27	\$ 4	\$ 31
General Services-MSB	146	1	Office 127	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	147	1	Copy 126	2434T8	HP24R24	4	4	0.0650	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl.	68	277	TRUE	3	2,340	0.33	0.25	0.08	772	590	182	\$ 17	\$ 3	\$ 20
General Services-MSB	148	1	Open Office 121	2434T8	LP34	30	30	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	2.47	1.66	0.81	5,766	4,356	1,430	\$ 136	\$ 20	\$ 157
General Services-MSB	150	1	Open Office 121	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	3	2,340	0.06	0.00	0.06	136	9	127	\$ 12	\$ 2	\$ 14	
General Services-MSB	151	1	Testing Rm 111	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8
General Services-MSB	152	1	Testing Rm 111	140DIM	CC13	4	4	0.0400	0.0130	Inc 40w DIM	Cold Cathode One Piece 13w	277	TRUE	14	730	0.16	0.05	0.10	113	37	76	\$ 7	\$ 3	\$ 11	
General Services-MSB	154	1	Jc Hse	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	155	1	Customer Service Entry	2434T8	LP34	8	8	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	63	277	TRUE	3	2,340	0.66	0.50	0.16	1,543	1,162	381	\$ 36	\$ 5	\$ 42
General Services-MSB	156	1	Office 151	2434T8-DS	LP34-ALT	2	2	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	65	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	157	1	Office 152	2434T8-DS	LP34-ALT	2	2	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	74	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
General Services-MSB	158	1	Office Open 1	2434T8	LP34	26	26	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	62	277	TRUE	3	2,340	2.14	1.61	0.53	5,016	3,777	1,239	\$ 118	\$ 18	\$ 136
General Services-MSB	161	1	Office 154	2434T8	LP34	8	8	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	0.49	0.37	0.12	1,156	872	286	\$ 27	\$ 4	\$ 31
General Services-MSB	162	1	Office 153	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	60	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
General Services-MSB	164	1	Back Hse	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	165	1	Mer	1424T8	LP24	6	6	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.34	0.25	0.09	176	130	45	\$ 4	\$ 3	\$ 7	
General Services-MSB	166	1	Phone C106	1424T8	LP24	3	3	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3	
General Services-MSB	167	1	Ups Rm	2444T8	NP24R24	3	3	0.1120	0.0480	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl.	75	277	TRUE	7	520	0.33	0.14	0.19	169	73	97	\$ 8	\$ 6	\$ 14
General Services-MSB	168	1	Break Rm C110	2444T8	NP24R24	3	3	0.1120	0.0480	2x4, 4-Lamp T8	Elect. NP Bal. & (2) 4' T8's, Refl.	60	277	TRUE	8	2,340	0.33	0.14	0.19	763	327	436	\$ 42	\$ 6	\$ 48
General Services-MSB	169	1	Dock Area	1424T8	LP24	4	4	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	5	1,040	0.23	0.17	0.06	234	174	61	\$ 6	\$ 2	\$ 8	
General Services-MSB	170	1	Dock Area C110 Mail	1424T8	LP24	4	4	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 2	\$ 2	\$ 4	
General Services-MSB	171	1	Office 144	2434T8	HP24R24	2	2	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl.	75	277	TRUE	3	2,340	0.16	0.13	0.04	386	295	91	\$ 9	\$ 1	\$ 10
General Services-MSB	172	1	Office 144 A	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
General Services-MSB	173	1	Office 144 B	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	40	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
General Services-MSB	174	1	Bathroom Men's	1844T8	LP44	2	2	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	6	2,601	0.22	0.16	0.05	565	429	136	\$ 13	\$ 2	\$ 15	
General Services-MSB	175	1	Bathroom Men's	1424T8	LP24	2	2	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.11	0.08	0.03	293	217	76	\$ 7	\$ 1	\$ 8	
General Services-MSB	177	1	Bathroom Women's	1844T8	LP44	2	2	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	6	2,601	0.22	0.16	0.05	565	429	136	\$ 13	\$ 2	\$ 15	
General Services-MSB	178	1	Bathroom Women's	1424T8	LP24	2	2	0.0500	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.11	0.08	0.03	293	217	76	\$ 7	\$ 1	\$ 8	
General Services-MSB	181	1	Hall	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	182	1	Back Entry Hall	222UT8	LP22R22	3	3	0.0500	0.0270	2x2, 2-Lamp U T8	Elect. LP Bal. & (2) 2' T8's, Refl.	31	277	TRUE	9	2,339	0.17	0.08	0.09	395	184	211	\$ 20	\$ 3	\$ 23
General Services-MSB	183	1	Back Entry Hall	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	184	1	Suite 140 Open Office	2434T8	LP34	19	19	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	1.57	1.16	0.39	3,666	2,760	906	\$ 86	\$ 13	\$ 98	
General Services-MSB	185	1	Suite 140 Open Office	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Incs	Exit Sign - New Universal LED	277	TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21	
General Services-MSB	186	1	Conf Rm 143	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8	
General Services-MSB	187	1	Office Damico	2434T8	HP24R24	2	2	0.0650	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl.	277	TRUE	3	2,340	0.16	0.13	0.04	386	295	91	\$ 9	\$ 1	\$ 10	
General Services-MSB	188	1	Office Priestler	2434T8	HP24R24	2	2	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl.	277	TRUE	3	2,340	0.16	0.13	0.04	386	295	91	\$ 9	\$ 1	\$ 10	
General Services-MSB	189	1	Office Martney	2434T8	HP24R24	2	2	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl.	80	277	TRUE	3	2,340	0.16	0.13	0.04	386	295	91	\$ 9	\$ 1	\$ 10
General Services-MSB	190	1	Hall	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl.	277	TRUE	9	2,339	0.16	0.08	0.08	386	195	191	\$ 18	\$ 3	\$ 21	
General Services-MSB	192	1	Office 141	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
General Services-MSB	193	Ext	Pole Light	M400	IND200SB	4	4	0.4500	0.2150	MH 400w	Induction 200w Shoe box	277	TRUE	10	4,360	1.78	0.83	0.94	7,783	3,654	4,130	\$ 338	\$ 31	\$ 369	
General Services-MSB	194	Ext	Pole Light	M2X400	IND2X200SB	1	1	0.9180	0.4300	MH- (2) 400w	(2) Induction 200w Shoe box	277	TRUE	10	4,360	0.84	0.42	0.47	3,822	1,827	2,085	\$ 169	\$ 18	\$ 185	
General Services-MSB	195	Ext	Building Front	M70	CF42	10	10	0.0950	0.0420	MH 70w	Compact One Piece 42w	277	TRUE	10	4,360	0.92	0.41	0.51	4,036	1,784	2,252	\$ 184	\$ 17	\$ 201	
General Services-MSB	196	Ext	Building Back	M70	CF42	10	10	0.0950	0.0420	MH 70w	Compact One Piece 42w	277	TRUE	10	4,360	0.92	0.41	0.51	4,036	1,784	2,252	\$ 184	\$ 17	\$ 201	
General Services-MSB	198	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1	-	-	New Layout	New Time Clock	277	TRUE	10	4,360	-	-	-	-	-	-	\$ -	\$ -	\$ -	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Library-Main Library	124	4	Bathroom Men's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	134	Jc	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1		
Library-Main Library	144		Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	184		Office Hallway	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.25	0.18	0.06	579	436	143	\$ 14	\$ 5	\$ 16	
Library-Main Library	174		Storage4014	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	184		Office4013	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	49	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Library-Main Library	194		Office4012	2434T8	LP34	5	5	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.41	0.31	0.10	965	726	238	\$ 23	\$ 3	\$ 26	
Library-Main Library	204		Office4010	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5	
Library-Main Library	214		Office4011	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5	
Library-Main Library	224		Storage4016	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.17	0.13	0.04	85	65	23	\$ 2	\$ 1	\$ 3	
Library-Main Library	234		Storage4016	1424T8	LP14	3	3	0.0320	0.0210	1x4, 1-Lamp T8	Elect. LP Bal. & (1) 4' T8	277	TRUE	7	520	0.09	0.06	0.03	48	32	17	\$ 1	\$ 1	\$ 2	
Library-Main Library	254		Utility 4005	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.34	0.25	0.09	176	130	45	\$ 4	\$ 3	\$ 7	
Library-Main Library	273		Stacks	1844T8	LP44	177	177	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	87	277	TRUE	31	3,230	19.23	14.59	4.64	62,111	47,137	14,973	\$ 1,366	\$ 164	\$ 1,509
Library-Main Library	303		Microfilm	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	31	3,230	0.16	0.12	0.04	533	401	132	\$ 12	\$ 1	\$ 13	
Library-Main Library	313		Storage3003	2434T8	LP34	12	12	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	42	277	TRUE	7	520	0.99	0.74	0.24	514	387	127	\$ 10	\$ 8	\$ 18
Library-Main Library	323		Hallway Elevator	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	80	277	TRUE	9	2,339	0.16	0.12	0.04	386	290	95	\$ 9	\$ 1	\$ 10
Library-Main Library	333		Office3006	222U18	NP22K22	12	12	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	73	277	TRUE	2	751	0.68	0.37	0.30	507	280	227	\$ 20	\$ 10	\$ 30
Library-Main Library	343		Storage3012	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3	
Library-Main Library	353		Utility3007	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	363		Utility3009	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	383		Computer Space	222U18	NP22K22	15	15	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	42	277	TRUE	31	3,230	0.84	0.47	0.38	2,728	1,604	1,122	\$ 111	\$ 13	\$ 123
Library-Main Library	393		Check Out Area	222U18	NP22K22	12	12	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	40	277	TRUE	31	3,230	0.68	0.37	0.30	2,781	1,203	978	\$ 89	\$ 10	\$ 99
Library-Main Library	403		Classroom	222U18	NP22K22	24	24	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	36	277	TRUE	8	2,340	1.55	0.74	0.81	3,160	1,743	1,416	\$ 135	\$ 20	\$ 155
Library-Main Library	413		Office Open	2434T8	LP34	16	16	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	66	277	TRUE	3	2,340	1.32	0.99	0.33	3,087	2,324	763	\$ 73	\$ 11	\$ 84
Library-Main Library	423		Utility3023	1424T8	LP24	8	8	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.45	0.33	0.12	294	174	61	\$ 5	\$ 4	\$ 9	
Library-Main Library	433		Conference3015	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3	
Library-Main Library	443		Office3014	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	473		Lounge3028	2434T8	LP34	13	13	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	8	2,340	1.07	0.81	0.26	2,509	1,888	620	\$ 58	\$ 9	\$ 68	
Library-Main Library	483		Kitchen3027	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3	
Library-Main Library	543		Bathroom Men's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	553		Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	573	Jc	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1		
Library-Main Library	592		Stacks Section A	1844T8	LP44	15	15	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	1.83	1.24	0.59	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	602		Stacks Section B	1844T8	LP44	12	12	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	88	277	TRUE	31	3,230	1.30	0.99	0.31	4,211	3,196	1,015	\$ 92	\$ 12	\$ 103
Library-Main Library	612		Stacks Section C	1844T8	LP44	15	15	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	1.83	1.24	0.59	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	622		Stacks Section D	1844T8	LP44	15	15	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	82	277	TRUE	31	3,230	1.83	1.24	0.59	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128
Library-Main Library	632		Stacks Section E	1844T8	LP44	6	6	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	0.85	0.45	0.16	2,105	1,598	508	\$ 46	\$ 5	\$ 51	
Library-Main Library	642		Stacks Section F	1844T8	LP44	6	6	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	0.85	0.45	0.16	2,105	1,598	508	\$ 46	\$ 5	\$ 51	
Library-Main Library	652		Stacks Section G	1844T8	LP44	15	15	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	90	277	TRUE	31	3,230	1.83	1.24	0.59	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128
Library-Main Library	662		Stacks Section H	1844T8	LP44	15	15	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	1.83	1.24	0.59	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	672		Stacks Section I	1844T8	LP44	6	6	0.1123	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	TRUE	31	3,230	0.85	0.45	0.16	2,105	1,598	508	\$ 46	\$ 5	\$ 51	
Library-Main Library	732		Entry Youth Services	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	62	277	TRUE	9	2,339	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
Library-Main Library	742		Youth Services	222U18	NP22K22	42	42	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	66	277	TRUE	31	3,230	2.36	1.30	1.06	7,632	4,211	3,421	\$ 310	\$ 35	\$ 345
Library-Main Library	752		Utility2006	2424T8	LP24	1	1	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
Library-Main Library	762		Utility2004	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	520	0.08	0.06	0.02	43	32	11	\$ 1	\$ 1	\$ 2	
Library-Main Library	772		Utility2007	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	782		Utility2009	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	792		Class2010	222U18	NP22K22	2	2	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	42	277	TRUE	31	3,230	0.11	0.06	0.05	363	201	163	\$ 15	\$ 2	\$ 16
Library-Main Library	812		Class2013	222U18	NP22K22	22	22	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit	277	TRUE	8	2,340	1.24	0.68	0.55	2,896	1,598	1,298	\$ 124	\$ 16	\$ 142	
Library-Main Library	832		Office2015	2434T8	LP34	19	19	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	68	277	TRUE	3	2,340	1.57	1.18	0.39	3,666	2,760	905	\$ 86	\$ 13	\$ 99
Library-Main Library	852		Office2016	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	50	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Library-Main Library	862		Class2012	222U18	LP22R22	2	2	0.0580	0.0272	2x2, 2-Lamp U T8	Elect. LP Bal. & (2) 2' T8's, Refl	33	277	TRUE	3	2,340	0.11	0.05	0.06	263	123				

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total kWh Dollars Saved
Library-Main Library	101	2	Office Open	222UT8	NP22K22	12	12	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kil	64	277	TRUE	3	2,340	0.68	0.37	0.30	1,580	672	708	\$ 68	\$ 10	\$ 78	
Library-Main Library	102	2	Office Open Hallway	2434T8	LP34	7	7	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	9	2,339	0.58	0.43	0.14	1,350	1,016	334	\$ 32	\$ 5	\$ 37	
Library-Main Library	105	2	Office 2032	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Library-Main Library	106	2	Office 2033	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Library-Main Library	107	2	Office 2034	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	108	2	Kitchen	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	7	520	0.08	0.06	0.02	43	32	11	\$ 1	\$ 1	\$ 2	
Library-Main Library	109	2	Office 2035	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
Library-Main Library	110	2	Office 2037	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	52	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Library-Main Library	116	1	Stacks A	1844T8	LP44	21	21	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	107	277	TRUE	31	3,230	2.28	1.73	0.55	7,369	5,593	1,776	\$ 161	\$ 18	\$ 179	
Library-Main Library	119	1	Stacks B	1844T8	LP44	21	21	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	107	277	TRUE	31	3,230	2.28	1.73	0.55	7,369	5,593	1,776	\$ 161	\$ 18	\$ 179	
Library-Main Library	120	1	Stacks C	1844T8	LP44	15	15	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	277	TRUE	31	3,230	1.63	1.24	0.39	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	121	1	Stacks D	1844T8	LP44	15	15	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	277	TRUE	31	3,230	1.63	1.24	0.39	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	122	1	Stacks D	1844T8	LP44	15	15	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	88	277	TRUE	31	3,230	1.63	1.24	0.39	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	123	1	Stacks D	1844T8	LP44	15	15	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	277	277	TRUE	31	3,230	1.63	1.24	0.39	5,264	3,995	1,269	\$ 115	\$ 13	\$ 128	
Library-Main Library	126	1	Bookstore	222UT8	LP22R22	4	4	0.0580	0.0270	2x2, 2-Lamp U T8	Elect. LP Bal. & (2) 2' T8's, Refl	42	277	TRUE	3	2,340	0.23	0.10	0.12	527	245	281	\$ 27	\$ 4	\$ 31	
Library-Main Library	128	1	Office B S	2434T8	HP24R24	2	2	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl	68	277	TRUE	3	2,340	0.16	0.13	0.04	396	295	91	\$ 9	\$ 1	\$ 10	
Library-Main Library	130	1	Kitchen 1047	2434T8	LP24R24	7	7	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	277	277	TRUE	31	3,230	0.58	0.29	0.29	1,894	943	921	\$ 83	\$ 9	\$ 83	
Library-Main Library	131	1	Hallway 1033	2434T8	LP34	5	5	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	55	277	TRUE	9	2,339	0.41	0.31	0.10	984	720	238	\$ 23	\$ 3	\$ 26	
Library-Main Library	132	1	Utility 1030	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	133	1	Office 1032	2434T8	LP34	5	5	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	86	277	TRUE	3	2,340	0.41	0.31	0.10	985	720	238	\$ 23	\$ 3	\$ 26	
Library-Main Library	134	1	Office 10	2434T8	LP34	16	16	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	1.32	0.99	0.33	3,097	2,324	763	\$ 73	\$ 11	\$ 84	
Library-Main Library	135	1	Storage 1043	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3	
Library-Main Library	136	1	Office 1035	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	139	1	Utility 1038	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	44	277	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 3	\$ 2	\$ 4	
Library-Main Library	140	1	Utility 1037	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	22	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	141	1	Office 1036	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	86	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	142	1	Office 1039	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	143	1	Dock 1040	1424T8	LP24	7	7	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.39	0.29	0.10	205	152	53	\$ 5	\$ 3	\$ 8	
Library-Main Library	145	1	Utility 1042	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 3	\$ 2	\$ 4	
Library-Main Library	149	1	Utility 1025	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.34	0.25	0.09	176	130	45	\$ 4	\$ 3	\$ 7	
Library-Main Library	153	1	Bathroom Men's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	154	1	Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8	
Library-Main Library	156	1	Meeting Room	222UT8	NP22K22	48	48	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kil	277	277	TRUE	8	2,340	2.70	1.49	1.21	6,319	3,486	2,833	\$ 270	\$ 40	\$ 310	
Library-Main Library	158	1	Kitchen	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	7	520	0.25	0.19	0.06	129	97	32	\$ 3	\$ 2	\$ 5	
Library-Main Library	159	1	Utility	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.34	0.25	0.09	176	130	45	\$ 4	\$ 3	\$ 7	
Library-Main Library	160	1	Conference 1015	222UT8	LP22R22	8	8	0.0580	0.0270	2x2, 2-Lamp U T8	Elect. LP Bal. & (2) 2' T8's, Refl	77	277	TRUE	7	520	0.45	0.21	0.24	234	109	125	\$ 10	\$ 8	\$ 18	
Library-Main Library	161	1	Conference 1015	1424T8	LP24	12	12	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.68	0.50	0.17	351	260	91	\$ 9	\$ 6	\$ 13	
Library-Main Library	162	1	Utility 1009	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	163	1	Utility 1010	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	33	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	164	1	Hallway Phone	222UT8	NP22K22	3	3	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kil	277	277	TRUE	9	2,339	0.17	0.09	0.08	395	214	177	\$ 17	\$ 3	\$ 19	
Library-Main Library	165	1	Utility 1003	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 3	\$ 2	\$ 4	
Library-Main Library	166	1	Check Out Counter	1424T8	LP24	8	8	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	86	277	TRUE	31	3,230	0.45	0.33	0.12	1,454	1,078	376	\$ 34	\$ 4	\$ 38	
Library-Main Library	167	1	Office	2434T8	LP34	19	19	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	80	277	TRUE	3	2,340	1.57	1.18	0.35	3,668	2,760	906	\$ 86	\$ 13	\$ 99	
Library-Main Library	172	1	Utility 1005	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
Library-Main Library	173	1	Break Room	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	8	2,340	0.16	0.12	0.04	388	281	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	171	1	Office 1036	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.16	0.12	0.04	388	281	95	\$ 9	\$ 1	\$ 10	
Library-Main Library	172	1	Office 1011	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
Library-Main Library	173	1	Entry	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	277	TRUE	7	520	0.25	0.19	0.06	129	97	32	\$ 3	\$ 2	\$ 5	
Library-Main Library	174	1	Utility 5006	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
Library-Main Library	175	SW	S W 5004	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Library-Main Library	176	SW	S W 5006	1424T8	LP2																					

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Pks & Rec-Long Center Aquacenter	51		Restroom	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.06	0.04	0.01	148	108	38	\$ 4	\$ 0	\$ 4
Pks & Rec-Long Center Aquacenter	61		Entry	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	9	2,339	0.11	0.08	0.03	263	195	68	\$ 7	\$ 1	\$ 7
Pks & Rec-Long Center Aquacenter	91		Locker Room Boys	1844T8	LP44	4	4	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	6	2,601	0.43	0.33	0.10	1,130	858	272	\$ 26	\$ 3	\$ 29
Pks & Rec-Long Center Aquacenter	101		Locker Room Boys	1424	LP24	6	6	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	55	277	TRUE	6	2,601	0.42	0.25	0.17	1,090	651	439	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	111		Locker Room Boys	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Inc	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.06	0.00	0.05	510	34	476	\$ 40	\$ 2	\$ 42
Pks & Rec-Long Center Aquacenter	121		Locker Room Boys	1828T8	1824VR	2	2	0.1100	0.0480	1x8, 2-Lamp T8	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's, VR		277	TRUE	6	2,601	0.21	0.09	0.12	555	242	313	\$ 30	\$ 4	\$ 34
Pks & Rec-Long Center Aquacenter	131		Locker Room Boys	2424	LP24	4	4	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.28	0.17	0.11	727	434	293	\$ 28	\$ 4	\$ 32
Pks & Rec-Long Center Aquacenter	151		Locker Room Girls	1844T8	LP44	4	4	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	60	277	TRUE	6	2,601	0.43	0.33	0.10	1,130	858	272	\$ 26	\$ 3	\$ 29
Pks & Rec-Long Center Aquacenter	161		Locker Room Girls	1424	LP24	6	6	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.42	0.25	0.17	1,090	651	439	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	171		Locker Room Girls	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Inc	Exit Sign - New Universal LED		277	TRUE	1	8,760	0.06	0.00	0.05	510	34	476	\$ 40	\$ 2	\$ 42
Pks & Rec-Long Center Aquacenter	181		Locker Room Girls	1828T8	1824VR	2	2	0.1100	0.0480	1x8, 2-Lamp T8	New 1x8 w/ Elect. NP Bal. & (2) 4' T8's, VR		277	TRUE	6	2,601	0.21	0.09	0.12	555	242	313	\$ 30	\$ 4	\$ 34
Pks & Rec-Long Center Aquacenter	191		Locker Room Girls	1844T8	LP44	4	4	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	6	2,601	0.43	0.33	0.10	1,130	858	272	\$ 26	\$ 3	\$ 29
Pks & Rec-Long Center Aquacenter	201		Office	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	24	277	TRUE	3	2,340	0.11	0.08	0.03	263	195	68	\$ 7	\$ 1	\$ 7
Pks & Rec-Long Center Aquacenter	211		Storage	1424	LP24	6	6	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.42	0.25	0.17	218	130	88	\$ 7	\$ 6	\$ 13
Pks & Rec-Long Center Aquacenter	221		Storage	N100	CF42	1	1	0.1300	0.0420	MH 100w	Compact One Piece 42w		277	TRUE	7	520	0.13	0.04	0.09	66	21	44	\$ 4	\$ 3	\$ 6
Pks & Rec-Long Center Aquacenter	231		Storage Outside	2444	LP44	4	4	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		277	TRUE	7	520	0.56	0.33	0.23	291	171	119	\$ 10	\$ 8	\$ 17
Pks & Rec-Long Center Aquacenter	241		Office C / J	2444	LP44	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's	41	277	TRUE	3	2,340	0.28	0.16	0.11	654	386	268	\$ 26	\$ 4	\$ 29
Pks & Rec-Long Center Aquacenter	251		Snack Desk	2444	LP44	2	2	0.1440	0.0850	2x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		277	TRUE	3	2,340	0.28	0.16	0.11	654	386	268	\$ 26	\$ 4	\$ 29
Pks & Rec-Long Center Aquacenter	261		Entry	2434T8	LP34	8	8	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	9	2,339	0.66	0.50	0.16	1,543	1,162	381	\$ 36	\$ 5	\$ 42
Pks & Rec-Long Center Aquacenter	281		Restroom	1444T8	LP44	1	1	0.1120	0.0850	1x4, 4-Lamp T8	Elect. LP Bal. & (4) 4' T8's		277	TRUE	6	2,601	0.11	0.08	0.03	283	214	68	\$ 7	\$ 1	\$ 7
Pks & Rec-Long Center Aquacenter	291		Classroom Starfish	1844T8	LP44	6	6	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	3	2,340	0.65	0.49	0.16	1,525	1,168	358	\$ 35	\$ 5	\$ 40
Pks & Rec-Long Center Aquacenter	301		Hallway	2434T8	LP34	16	16	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	5	2,339	1.48	1.12	0.37	3,471	2,614	858	\$ 82	\$ 12	\$ 94
Pks & Rec-Long Center Aquacenter	321		Jc	1844	LP44	1	1	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	7	520	0.14	0.08	0.06	73	43	30	\$ 2	\$ 2	\$ 4
Pks & Rec-Long Center Aquacenter	331		Classroom Dolphin	2424T8	LP24	12	12	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	30	277	TRUE	3	2,340	0.68	0.50	0.17	1,580	1,171	409	\$ 39	\$ 6	\$ 45
Pks & Rec-Long Center Aquacenter	341		Fitness Center	1844T8	LP44	30	30	0.1120	0.0850	1x8, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	2	2,340	3.26	2.47	0.79	7,827	5,788	1,839	\$ 175	\$ 26	\$ 201
Pks & Rec-Long Center Aquacenter	391		Entry Entry	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	9	2,339	0.11	0.08	0.03	263	195	68	\$ 7	\$ 1	\$ 7
Pks & Rec-Long Center Aquacenter	401		Office Open	2434T8	LP34	7	7	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	70	277	TRUE	3	2,340	0.58	0.43	0.14	1,351	1,017	334	\$ 32	\$ 5	\$ 37
Pks & Rec-Long Center Aquacenter	411		Office Schultz	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Pks & Rec-Long Center Aquacenter	421		Office Beasley	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Pks & Rec-Long Center Aquacenter	441		Office Reception	#60	CF13	4	4	0.0600	0.0130	Inc 60w	Compact One Piece 13w		277	TRUE	3	2,340	0.23	0.05	0.18	545	118	427	\$ 41	\$ 6	\$ 47
Pks & Rec-Long Center Aquacenter	451		Utility	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3
Pks & Rec-Long Center Aquacenter	462		Office Open	2434T8	LP34	15	15	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	70	277	TRUE	3	2,340	1.24	0.93	0.31	2,894	2,179	715	\$ 68	\$ 10	\$ 78

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included in Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Pks & Rec-Long Center Aquacenter	47	2	Offinn Bigley	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 0	\$ 48
Pks & Rec-Long Center Aquacenter	48	2	Office Carpenter	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	97	277	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	49	2	Copy Room	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	50	2	Filo Room	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 21	\$ 3	\$ 24
Pks & Rec-Long Center Aquacenter	51	2	Office Lew	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	52	2	Office P & R	222UT8	NP22K22	4	4	0.0580	0.0320	2x2, 2-Lamp U T8	Elect. NP Bal. & (2) 2' T8's, Kit		277	TRUE	3	2,340	0.23	0.12	0.10	527	291	236	\$ 23	\$ 3	\$ 26
Pks & Rec-Long Center Aquacenter	53	2	Office P & R	HAL90	CF15R30	5	5	0.0900	0.0150	HAL 90w	Compact One Piece 15w R30 Flood		277	TRUE	3	2,340	0.44	0.07	0.36	1,021	170	851	\$ 81	\$ 12	\$ 93
Pks & Rec-Long Center Aquacenter	54	2	Office P & R	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 21	\$ 3	\$ 24
Pks & Rec-Long Center Aquacenter	55	2	Office Youth	2444	NP24R24	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
Pks & Rec-Long Center Aquacenter	56	2	Office Workroom	2444	NP24R24	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
Pks & Rec-Long Center Aquacenter	57	2	Office Clayton	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	19	277	TRUE	3	2,340	0.28	0.09	0.19	654	218	436	\$ 42	\$ 6	\$ 48
Pks & Rec-Long Center Aquacenter	58	2	Office Laterza	2444	NP24R24	4	4	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	68	277	TRUE	3	2,340	0.56	0.19	0.37	1,307	436	872	\$ 83	\$ 12	\$ 95
Pks & Rec-Long Center Aquacenter	59	2	Conference	2444	NP24R24	8	8	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	14	730	1.12	0.37	0.74	816	272	544	\$ 50	\$ 25	\$ 75
Pks & Rec-Long Center Aquacenter	60	2	Conference	1750IM	CC18	6	6	0.0750	0.0160	Inc 75w DIM	Cold Cathode One Piece 18w		277	TRUE	14	730	0.44	0.10	0.33	319	76	242	\$ 22	\$ 11	\$ 33
Pks & Rec-Long Center Aquacenter	61	2	Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8
Pks & Rec-Long Center Aquacenter	62	2	Bathroom Men's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8
Pks & Rec-Long Center Aquacenter	64	2	Office	2444	NP24R24	6	6	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.84	0.28	0.56	1,961	654	1,307	\$ 125	\$ 19	\$ 143
Pks & Rec-Long Center Aquacenter	65	2	Office Lockwood	2444	NP24R24	6	6	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	44	277	TRUE	3	2,340	0.84	0.28	0.56	1,961	654	1,307	\$ 125	\$ 19	\$ 143
Pks & Rec-Long Center Aquacenter	66	2	Conference Manatee	2444	NP24R24	5	5	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl		277	TRUE	14	730	0.70	0.23	0.47	510	170	340	\$ 32	\$ 15	\$ 47
Pks & Rec-Long Center Aquacenter	67	2	Bathroom Men's	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.21	0.13	0.06	545	325	219	\$ 21	\$ 3	\$ 24
Pks & Rec-Long Center Aquacenter	70	2	Bathroom Women's	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.21	0.13	0.06	545	325	219	\$ 21	\$ 3	\$ 24
Pks & Rec-Long Center Aquacenter	71	2	Handway Bath	1844	LP44	1	1	0.1440	0.0850	1x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's		277	TRUE	9	2,339	0.54	0.06	0.06	327	193	134	\$ 13	\$ 2	\$ 16
Pks & Rec-Long Center Aquacenter	73	2	Utility	1844	LP44	2	2	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	7	520	0.26	0.16	0.11	145	86	60	\$ 5	\$ 4	\$ 9
Pks & Rec-Long Center Aquacenter	74	2	Utility Cor	1844	LP44	1	1	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	7	520	0.14	0.06	0.06	73	43	30	\$ 2	\$ 2	\$ 4
Pks & Rec-Long Center Aquacenter	75	2	Classroom A	2424T6	LP24	9	9	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	3	2,340	0.51	0.38	0.13	1,155	878	306	\$ 29	\$ 4	\$ 34
Pks & Rec-Long Center Aquacenter	76	2	Classroom B	2424T8	LP24	11	11	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	52	277	TRUE	3	2,340	0.62	0.46	0.16	1,448	1,074	375	\$ 36	\$ 5	\$ 41
Pks & Rec-Long Center Aquacenter	77	2	Storage C	1844	LP44	3	3	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's		277	TRUE	7	520	0.42	0.25	0.17	218	129	89	\$ 7	\$ 6	\$ 13
Pks & Rec-Long Center Aquacenter	80	Ext	Parking Lot	M175	IND100SB-PCVHI	1	1	0.2100	0.1100	MH 175w	Induction 100w Shoe box, PC, VHI	120	120	TRUE	110	1,872	0.20	0.11	0.10	381	200	182	\$ 17	\$ 3	\$ 20
Pks & Rec-Long Center Aquacenter	81	Ext	Parking Lot	M175	IND100SB-PCVHI	1	1	0.2100	0.1100	MH 175w	Induction 100w Shoe box, PC, VHI	120	120	TRUE	110	1,872	0.20	0.11	0.10	381	200	182	\$ 17	\$ 3	\$ 20
Pks & Rec-Long Center Aquacenter	82	Ext	Parking Lot	MZX175	IND22X100S B-PC-HI	10	10	0.4200	0.2200	MH (2) 175w	(2) Induction 100w Shoe box, PC, HI	120	120	TRUE	110	1,872	4.07	2.13	1.94	7,527	3,993	3,532	\$ 343	\$ 64	\$ 407
Pks & Rec-Long Center Aquacenter	83	Ext	Parking Lot	S2X250	IND22X150S B-PC	4	4	0.5800	0.3300	HPS (2) 250w	(2) Induction 150w Shoe box, PC	120	120	TRUE	110	1,872	2.29	1.28	1.01	4,285	2,387	1,898	\$ 178	\$ 33	\$ 212
Pks & Rec-Long Center Aquacenter	84	Ext	Parking Lot	S400	IND200SB-PC	3	3	0.4600	0.2150	HPS 400w	Induction 200w Shoe box, VHI	120	120	TRUE	110	1,872	1.35	0.63	0.73	2,533	1,171	1,362	\$ 129	\$ 24	\$ 153

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Pks & Rec-Long Center Aquacenter	85	Ext	Parking Lot	M2X175	IND2X100FL-PC-HI	1	1	0.4200	0.2200	MH (2) 175w	(2) Induction 100w Flood, PC, HI		120	TRUE	110	1,872	0.41	0.21	0.19	763	399	363	\$ 34	\$ 6	\$ 41
Pks & Rec-Long Center Aquacenter	86	Ext	Parking Lot	M175	IND100FL-PCVHI	1	1	0.2100	0.1100	MH 175w	Induction 100w Flood, PC, VHI		120	TRUE	110	1,872	0.20	0.11	0.10	381	200	182	\$ 17	\$ 3	\$ 20
Police-Beach Substation	1	2	Lobby	2434T8	LP24R24	5	5	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	60	120	TRUE	11	912	0.41	0.21	0.20	376	190	186	\$ 17	\$ -	\$ 17
Police-Beach Substation	2	2	Lobby	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	120	120	TRUE	1	8,760	0.16	0.08	0.08	1,445	731	714	\$ 75	\$ -	\$ 75
Police-Beach Substation	4	2	Conference Room	2434T8	LP24R24T2	6	3	0.0850	0.0850	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, TW In 2	60	120	TRUE	14	730	0.49	0.25	0.25	361	181	181	\$ 22	\$ -	\$ 22
Police-Beach Substation	5	2	Conference Room	160	CF15R30	4	4	0.0600	0.0150	Inc 60w	Compact One Piece 15w R30 Flood	120	120	TRUE	14	730	0.23	0.06	0.17	170	42	127	\$ 16	\$ -	\$ 16
Police-Beach Substation	6	2	Tele Room	1444T8	LP44	1	1	0.1120	0.0850	1x4, 4-Lamp T8	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	7	520	0.17	0.08	0.03	56	43	14	\$ 1	\$ -	\$ 1
Police-Beach Substation	7	2	Bathroom Women's	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	41	120	TRUE	5	1,040	0.06	0.04	0.01	59	43	15	\$ 2	\$ -	\$ 2
Police-Beach Substation	8	2	Bathroom Women's	1212T8	LP12	1	1	0.0200	0.0140	1x2, 1-Lamp T8	Elect. LP Bal. & (1) 2' T8	120	120	TRUE	5	1,040	0.02	0.01	0.01	20	14	6	\$ 1	\$ -	\$ 1
Police-Beach Substation	9	2	Bathroom Men's	1212T8	LP12	1	1	0.0200	0.0140	1x2, 1-Lamp T8	Elect. LP Bal. & (1) 2' T8	120	120	TRUE	5	1,040	0.02	0.01	0.01	20	14	6	\$ 1	\$ -	\$ 1
Police-Beach Substation	10	2	Bathroom Men's	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	5	1,040	0.06	0.04	0.01	59	43	15	\$ 2	\$ -	\$ 2
Police-Beach Substation	11	2	Control Desk	2434T8	HP24R24	7	7	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl	80	120	TRUE	11	912	0.58	0.44	0.14	526	403	124	\$ 11	\$ -	\$ 11
Police-Beach Substation	12	2	Control Desk	2434T8	HP24R24	2	2	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	7	8,760	0.16	0.13	0.04	1,445	1,105	340	\$ 36	\$ -	\$ 36
Police-Beach Substation	15	2	Control Booth	2434T8	HP24R24	6	6	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	2	751	0.49	0.38	0.12	372	264	87	\$ 10	\$ -	\$ 10
Police-Beach Substation	16	2	Office	2434T8	HP24R24	4	4	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	11	912	0.33	0.25	0.08	301	230	71	\$ 6	\$ -	\$ 6
Police-Beach Substation	17	2	Bathroom Men's	1844T8	LP44	1	1	0.1120	0.0850	1x4, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	45	120	TRUE	5	1,040	0.11	0.08	0.03	113	66	27	\$ 4	\$ -	\$ 4
Police-Beach Substation	18	2	Bathroom Men's	1414T8	LP14	1	1	0.0320	0.0210	1x4, 1-Lamp T8	Elect. LP Bal. & (1) 4' T8	120	120	TRUE	5	1,040	0.03	0.02	0.01	32	21	11	\$ 1	\$ -	\$ 1
Police-Beach Substation	19	2	Bathroom Women's	1414T8	LP14	1	1	0.0320	0.0210	1x4, 1-Lamp T8	Elect. LP Bal. & (1) 4' T8	120	120	TRUE	5	1,040	0.03	0.02	0.01	32	21	11	\$ 1	\$ -	\$ 1
Police-Beach Substation	20	2	Bathroom Women's	1844T8	LP44	1	1	0.1120	0.0850	1x4, 4-Lamp T8 4'	Elect. LP Bal. & (4) 4' T8's	120	120	TRUE	5	1,040	0.11	0.08	0.03	113	66	27	\$ 4	\$ -	\$ 4
Police-Beach Substation	21	2	Copy Room	2434T8	LP24R24	1	1	0.0850	0.0430	2x4 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	8	2,340	0.08	0.04	0.04	193	98	95	\$ 12	\$ -	\$ 12
Police-Beach Substation	23	2	Office Open	2434T8	HP24R24	12	12	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl	80	120	TRUE	2	751	0.99	0.76	0.23	743	568	175	\$ 19	\$ -	\$ 19
Police-Beach Substation	24	2	Office Lt	2434T8	HP24R24	4	4	0.0850	0.0650	2x4, 3-Lamp, T8	Elect. HP Bal. & (2) 4' T8's, Refl		120	TRUE	2	751	0.33	0.25	0.08	248	189	58	\$ 6	\$ -	\$ 6
Police-Beach Substation	25	1	Garage	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	11	6,760	0.34	0.25	0.09	2,957	2,192	765	\$ 81	\$ -	\$ 81
Police-Beach Substation	26	1	Garage	1424T8	LP24	17	17	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	10	4,380	0.96	0.71	0.25	4,189	3,106	1,083	\$ 108	\$ -	\$ 108
Police-Beach Substation	27	1	Storage 2	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 3	\$ -	\$ 3
Police-Beach Substation	28	1	Elevator Room	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.11	0.06	0.03	59	43	15	\$ 1	\$ -	\$ 1
Police-Beach Substation	29	1	Storage 1	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.34	0.25	0.09	176	130	45	\$ 4	\$ -	\$ 4
Police-Beach Substation	33	Ext	Wall By Dock	M175	JND120WP-PC	1	1	0.2100	0.1250	MH 175w	Induction 120w Wallpack, PC		120	TRUE	10	4,380	0.20	0.12	0.06	592	531	361	\$ 36	\$ -	\$ 36
Police-Countryside Station	1	1	Roll Call	2444	LP24R24	11	11	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	60	120	TRUE	14	730	1.54	0.46	1.08	1,122	335	787	\$ 73	\$ 36	\$ 109
Police-Countryside Station	3	1	Jc	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 4	\$ 3	\$ 7
Police-Countryside Station	4	1	Storage A	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 4	\$ 3	\$ 7
Police-Countryside Station	5	1	Office Supervisor	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	11	912	0.07	0.04	0.03	64	38	26	\$ 2	\$ 1	\$ 3
Police-Countryside Station	6	1	Office Supervisor	1424	LP24	8	8	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	20	120	TRUE	11	912	0.56	0.33	0.23	510	304	205	\$ 16	\$ 7	\$ 23
Police-Countryside Station	8	1	Halway	1424	LP24	7	7	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	5	2,339	0.49	0.29	0.20	1,143	683	461	\$ 44	\$ 7	\$ 51
Police-Countryside Station	10	1	Tele Room	1424	LP24	1	1	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	120	TRUE	7	520	0.07	0.04	0.03	36	22	15	\$ 1	\$ 1	\$ 2
Police-Countryside Station	12	1	Bathroom Men's	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	50	120	TRUE	6	2,601	0.42	0.13	0.29	1,090	325	764	\$ 73	\$ 10	\$ 83
Police-Countryside Station	14	1	Locker Room Men's	2444	LP24R24	10	10	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	6	2,601	1.40	0.42	0.98	3,833	1,065	2,548	\$ 243	\$ 32	\$ 276
Police-Countryside Station	15	1	Lockers	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	7	520	0.26	0.08	0.20	145	43	102	\$ 8	\$ 6	\$ 15
Police-Countryside Station	16	1	Bathroom Women's	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl		120	TRUE	6	2,601	0.28	0.08	0.20	727	217	510	\$ 49	\$ 6	\$ 55

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Countryside Station	18	1	Bathroom Women's	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	8	2,601	0.07	0.04	0.03	182	108	73	\$ 7	\$ 1	\$ 8
Police-Countryside Station	19	1	Locker Room Women's	2444	LP24R24	8	8	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	45	120	TRUE	6	2,601	1.12	0.33	0.78	2,906	868	2,039	\$ 195	\$ 26	\$ 221
Police-Countryside Station	20	1	Conference Room	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	85	120	TRUE	14	730	0.28	0.08	0.20	204	61	143	\$ 13	\$ 6	\$ 20
Police-Countryside Station	21	1	Office Work Room	2444	NP24R24	5	5	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120		TRUE	11	912	0.70	0.23	0.47	637	212	425	\$ 33	\$ 15	\$ 48
Police-Countryside Station	22	1	Break Room	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	8	2,340	0.28	0.08	0.20	654	195	458	\$ 44	\$ 8	\$ 50
Police-Countryside Station	23	1	Break Room - Drink Machine	VEND	MISER	1	1	0.3390	0.3390	Vending Machine	Vending Machine Controlled	120		TRUE	1	8,760	0.33	0.33	-	2,881	2,881	-	\$ -	\$ -	\$ -
Police-Countryside Station	24	1	Holding Cell Open	2444	NP24R24	5	5	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	65	120	TRUE	11	912	0.70	0.23	0.47	637	212	425	\$ 33	\$ 15	\$ 48
Police-Countryside Station	25	1	Holding Cell Open	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120		TRUE	1	8,760	0.14	0.05	0.09	1,224	408	816	\$ 69	\$ 3	\$ 72
Police-Countryside Station	26	1	Interview Room	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	11	912	0.14	0.04	0.10	127	38	89	\$ 7	\$ 3	\$ 10
Police-Countryside Station	29	1	Intox Room	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	11	912	0.14	0.04	0.10	127	38	89	\$ 7	\$ 3	\$ 10
Police-Countryside Station	30	1	Storage	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	85	120	TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 4	\$ 3	\$ 7
Police-Countryside Station	31	1	Evidence Room 1	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	7	520	0.14	0.04	0.10	73	22	51	\$ 4	\$ 3	\$ 7
Police-Countryside Station	32	1	Halfway Evidence	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	8	2,339	0.28	0.08	0.20	653	195	458	\$ 44	\$ 6	\$ 50
Police-Countryside Station	33	1	Evidence Room 2	1844	LP44	1	1	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120		TRUE	11	912	0.14	0.08	0.06	127	75	52	\$ 4	\$ 2	\$ 6
Police-Countryside Station	34	1	Evidence Room 2	1444	LP44	1	1	0.1440	0.0850	1x4, 4-Lamp	Elect. LP Bal. & (4) 4' T8's	120		TRUE	11	912	0.14	0.08	0.06	127	75	52	\$ 4	\$ 2	\$ 6
Police-Countryside Station	35	1	Lobby Office	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120		TRUE	1	8,760	0.14	0.05	0.09	1,224	408	816	\$ 69	\$ 3	\$ 72
Police-Countryside Station	36	1	Lobby Office	2444	NP24R24	3	3	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	79	120	TRUE	1	8,760	0.42	0.14	0.28	3,671	1,224	2,447	\$ 207	\$ 9	\$ 217
Police-Countryside Station	38	1	Office Small	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120		TRUE	11	912	0.28	0.09	0.19	255	85	170	\$ 13	\$ 6	\$ 19
Police-Countryside Station	33	1	Lobby	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	65	120	TRUE	11	912	0.28	0.08	0.20	255	76	179	\$ 14	\$ 6	\$ 20
Police-Countryside Station	40	1	Lobby	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	1	8,760	0.14	0.04	0.10	1,224	365	858	\$ 73	\$ 3	\$ 78
Police-Countryside Station	42	1	Elect Room	1844	LP44	1	1	0.1440	0.0850	1x8, 4-Lamp 4'	Elect. LP Bal. & (4) 4' T8's	120		TRUE	7	520	0.14	0.08	0.06	73	43	30	\$ 2	\$ 2	\$ 4
Police-Countryside Station	43	1	Bathroom Women's	12X60	CF2X13	1	1	0.1200	0.0560	Inc (2) 60w	(2) Compact One Piece 13w	20	120	TRUE	5	1,040	0.12	0.03	0.09	121	26	95	\$ 9	\$ 3	\$ 12
Police-Countryside Station	44	1	Bathroom Men's	12X60	CF2X13	1	1	0.1200	0.0560	Inc (2) 60w	(2) Compact One Piece 13w	120		TRUE	5	1,040	0.12	0.03	0.09	121	26	95	\$ 9	\$ 3	\$ 12
Police-Countryside Station	45	Ext	Canopy	1100	CF23	1	1	0.1000	0.0230	Inc 100w	Compact One Piece 23w	120		TRUE	10	4,380	0.10	0.02	0.07	425	98	327	\$ 27	\$ 2	\$ 29
Police-Countryside Station	46	Ext	Sally Port	1100	CF23	2	2	0.1000	0.0230	Inc 100w	Compact One Piece 23w	120		TRUE	10	4,380	0.29	0.07	0.22	1,275	293	981	\$ 80	\$ 7	\$ 88
Police-Countryside Station	47	Ext	Sally Port	Q500	IND120WP-PC	1	1	0.5000	0.1250	Inc 500w Quartz	Induction 120w Wallpack, PC	120		TRUE	10	4,380	0.49	0.12	0.36	2,124	531	1,593	\$ 130	\$ 12	\$ 142
Police-Countryside Station	48	Ext	Walls	S150	IND70WP-PC	2	2	0.1880	0.0750	HPS 150w	Induction 70w Wall Pack, PC	120		TRUE	10	4,380	0.36	0.15	0.22	1,597	637	960	\$ 78	\$ 7	\$ 86
Police-Countryside Station	49	Ext	Walls	Q500	IND120WP-PC	2	2	0.5000	0.1250	Inc 500w Quartz	Induction 120w Wallpack, PC	120		TRUE	10	4,380	0.97	0.24	0.73	4,249	1,062	3,186	\$ 261	\$ 24	\$ 285
Police-Countryside Station	50	Ext	Front Canopy	1100	CF23	5	5	0.1000	0.0230	Inc 100w	Compact One Piece 23w	120		TRUE	10	4,380	0.49	0.11	0.37	2,124	489	1,636	\$ 134	\$ 12	\$ 146
Police-Main Station	1	1	Lobby	M100	M70K	9	9	0.1300	0.0950	M-1 100w	M-1 70w Kit	65	277	TRUE	1	8,760	1.13	0.31	0.83	9,942	7,265	2,677	\$ 227	\$ 10	\$ 237
Police-Main Station	2	1	Lobby Display	1414T2	LP14	4	4	0.0320	0.0210	1x4, 1-Lamp T8	Elect. LP Bal. & (1) 4' T8	277		TRUE	1	8,760	0.12	0.03	0.04	1,088	714	374	\$ 32	\$ 1	\$ 33
Police-Main Station	5	1	Bathroom Men's C102	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	6	1	Bathroom Women's C103	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	8	1	Halfway S103	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	9	2,339	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Man Station	9	1	Interview Room S103	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	2	761	0.10	0.13	(0.03)	75	94	(19)	\$ (2)	\$ (1)	\$ (3)
Police-Man Station	10	1	Front Desk	2434T8	LP34	3	3	0.0650	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	1	8,760	0.25	0.19	0.06	2,167	1,631	\$35	\$ 45	\$ 2	\$ 47
Police-Man Station	11	1	Front Desk	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	1	8,760	0.10	0.13	(0.03)	872	1,096	(224)	\$ (19)	\$ (1)	\$ (20)
Police-Man Station	12	1	Front Desk	2434T8-DL	LP24R24	5	5	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	1	8,760	0.17	0.21	(0.04)	1,453	1,827	(374)	\$ (32)	\$ (1)	\$ (33)
Police-Man Station	13	1	Front Desk	2434T8-DL	LP24R24	4	4	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	1	8,760	0.13	0.17	(0.03)	1,162	1,462	(299)	\$ (25)	\$ (1)	\$ (26)
Police-Man Station	16	1	Office Records	2434T8	LP34	11	11	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	54	277	TRUE	3	2,340	0.91	0.86	0.22	2,122	1,596	\$24	\$ 50	\$ 7	\$ 57
Police-Man Station	17	1	Office Records	2434T8-DL	LP24R24	6	6	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.20	0.25	(0.05)	466	586	(120)	\$ (11)	\$ (2)	\$ (13)
Police-Man Station	18	1	Office Records	2434T8-DL	LP24R24	8	8	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.27	0.33	(0.07)	621	781	(160)	\$ (15)	\$ (2)	\$ (18)
Police-Man Station	21	1	Storage S171	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	48	277	TRUE	7	520	0.16	0.08	0.08	86	43	42	\$ 3	\$ 3	\$ 6
Police-Man Station	22	1	Office S172	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Man Station	23	1	Office S172	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Man Station	24	1	Conference Room S173	2434T8-DS	LP34-ALT	3	3	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	109	277	TRUE	14	730	0.25	0.19	0.06	181	136	45	\$ 4	\$ 2	\$ 6
Police-Man Station	25	1	Storage	2434T8	LP24R24	3	3	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	48	277	TRUE	7	520	0.25	0.13	0.12	129	65	64	\$ 5	\$ 4	\$ 9
Police-Man Station	26	1	Hallway S176	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	47	277	TRUE	9	2,339	0.16	0.12	0.04	386	290	95	\$ 9	\$ 1	\$ 10
Police-Man Station	27	1	Loading Dock S87	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.17	0.13	0.04	68	65	23	\$ 2	\$ 1	\$ 3
Police-Man Station	28	1	Hallway S7 To C108	2424T8	LP24	6	6	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	9	2,339	0.34	0.25	0.09	730	585	204	\$ 20	\$ 9	\$ 22
Police-Man Station	29	1	Office S196	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	2	761	0.11	0.08	0.03	85	63	22	\$ 2	\$ 1	\$ 3
Police-Man Station	30	1	Office S196	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	3	2,340	0.11	0.08	0.03	263	195	68	\$ 6	\$ 1	\$ 7
Police-Man Station	31	1	Evidence Locker	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Man Station	32	1	Office S180	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	52	277	TRUE	3	2,340	0.49	0.37	0.12	1,156	872	286	\$ 27	\$ 4	\$ 31
Police-Man Station	33	1	Office S180	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Man Station	34	1	Office S180	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	77	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Man Station	37	1	Ballroom S184	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	5	1,040	0.06	0.04	0.01	59	43	15	\$ 1	\$ 0	\$ 2
Police-Man Station	38	1	Storage S183	2424T8	LP24	3	3	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	41	277	TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3
Police-Man Station	39	1	Nail S155	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Man Station	40	1	Storage S182	2424T8	LP24	3	3	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3
Police-Man Station	41	1	Storage S181	2424T8	LP24	3	3	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	28	277	TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3
Police-Man Station	42	1	Evidence Vault S190	2434T8	LP24R24	22	22	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	67	277	TRUE	3	2,340	1.81	0.92	0.90	4,245	2,147	2,097	\$ 200	\$ 30	\$ 230
Police-Man Station	43	1	Storage S193	2424T8	LP24	1	1	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Man Station	44	1	Storage	2424T8	LP24	1	1	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Man Station	45	1	Storage S191	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	1	8,760	0.17	0.08	0.03	965	731	255	\$ 22	\$ 1	\$ 23
Police-Man Station	46	1	Storage S192	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	1	8,760	0.17	0.13	0.04	1,479	1,086	382	\$ 32	\$ 1	\$ 34
Police-Man Station	48	1	Hallway C111 To S121	2224T8	LP32R22	17	17	0.0580	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl	29	277	TRUE	9	2,333	0.96	0.69	0.26	2,237	1,620	617	\$ 59	\$ 9	\$ 68
Police-Man Station	50	1	Hallway C111 To S121	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	9	2,339	0.25	0.19	0.08	579	436	143	\$ 14	\$ 2	\$ 18
Police-Man Station	52	1	Ballroom Women's C108	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	46	277	TRUE	6	2,601	0.23	0.17	0.06	565	434	151	\$ 14	\$ 2	\$ 16
Police-Man Station	53	1	Ballroom Men's C107	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	6	2,601	0.23	0.17	0.06	565	434	151	\$ 14	\$ 2	\$ 16
Police-Man Station	55	1	Jc C105	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.08	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Man Station	56	1	Elect Room C104	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3
Police-Man Station	57	1	Mesh Room E101	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	77	277	TRUE	7	520	0.23	0.17	0.06	117	87	30	\$ 2	\$ 2	\$ 4
Police-Man Station	58	1	Storage S154	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3
Police-Man Station	59	1	Office S150	2434T8	LP34	15	15	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	35	277	TRUE	1	8,760	1.24	0.93	0.31	10,834	8,157	2,677	\$ 227	\$ 10	\$ 237
Police-Man Station	62	1	Office S153	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	63	1	Storage S151	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	77	277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3
Police-Man Station	64	1	Conference Room S152	2434T8-DS	LP34-ALT	6	6	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	111	277	TRUE	14	730	0.49	0.37	0.12	361	272	89	\$ 8	\$ 4	\$ 12
Police-Man Station	65	1	Suit Lockers W150	2434T8	LP24R24	3	3	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	40	277	TRUE	109	832	0.25	0.13	0.12	206	104	102	\$ 10	\$ 4	\$ 14
Police-Man Station	66	1	Garage Sally Port W183	1424T8	LP24	26	26	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	10	277	TRUE	1	8,760	1.46	1.08	0.38	12,814	9,500	3,314	\$ 261	\$ 13	\$ 293

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Main Station	671		Tele Room C117	1424T8	LP24	3	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Main Station	681		Fire Pump	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	691		Elect Room C115	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.45	0.33	0.12	234	174	61	\$ 5	\$ 4	\$ 9
Police-Main Station	701		Swat Weapons W170	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	1	8,760	0.11	0.08	0.03	986	731	255	\$ 22	\$ 1	\$ 23
Police-Main Station	711		Armory W160	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	1	8,760	0.17	0.13	0.04	1,478	1,096	382	\$ 32	\$ 1	\$ 34
Police-Main Station	721		Hallway W160	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	9	2,339	0.25	0.18	0.06	578	436	142	\$ 14	\$ 2	\$ 16
Police-Main Station	731		Hallway W144	2434T8	LP34	12	12	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	9	2,339	0.98	0.74	0.24	2,314	1,742	572	\$ 55	\$ 8	\$ 63
Police-Main Station	751		Evidence W144	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	761		Adult Booking W140	1424T8	LP24	15	15	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	23	277	TRUE	7	520	0.84	0.63	0.22	439	325	113	\$ 9	\$ 7	\$ 16
Police-Main Station	771		Adult Booking W140	K2X15	KLED	1	1	0.0300	0.0020	Exit Sign - (2) 15w Inc.	Exit Sign - New Universal LED	277		TRUE	1	8,760	0.03	0.00	0.03	255	17	238	\$ 20	\$ 1	\$ 21
Police-Main Station	781		Jc W145	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Main Station	791		Juvenile Booking W130	1424T8	LP24	13	13	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	30	277	TRUE	1	8,760	0.73	0.54	0.19	6,407	4,750	1,657	\$ 140	\$ 6	\$ 147
Police-Main Station	801		Office W110	2434T8	LP34	9	9	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	91	277	TRUE	1	8,760	0.66	0.50	0.16	5,778	4,351	1,428	\$ 121	\$ 5	\$ 126
Police-Main Station	811		Equipment S110	2424T8	LP24	6	6	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	1	8,760	0.45	0.33	0.12	3,943	2,923	1,020	\$ 86	\$ 4	\$ 90
Police-Main Station	821		Office S120	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	831		Office S120	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	851		Office S121	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
Police-Main Station	861		Office S122	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	2	751	0.25	0.19	0.06	166	140	46	\$ 4	\$ 2	\$ 6
Police-Main Station	871		Office S123	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	2	751	0.25	0.19	0.06	166	140	46	\$ 4	\$ 2	\$ 6
Police-Main Station	881		Roll Call S140	2434T8	LP34	12	12	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	52	277	TRUE	14	730	0.99	0.74	0.24	722	544	178	\$ 17	\$ 8	\$ 25
Police-Main Station	891		Roll Call S140	2434T8	LP34	12	12	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	14	730	0.99	0.74	0.24	722	544	178	\$ 17	\$ 8	\$ 25
Police-Main Station	901		Laundry S130	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp T8	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	8	2,340	0.16	0.08	0.08	386	195	191	\$ 18	\$ 3	\$ 21
Police-Main Station	911		Interview Room S102	2434T8	LP24R24	4	4	0.0850	0.0430	2x4, 3-Lamp T8	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	7	520	0.33	0.17	0.16	171	87	85	\$ 7	\$ 5	\$ 12
Police-Main Station	921		Tele Room C101	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	932		Office S231	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	45	277	TRUE	2	751	0.25	0.19	0.06	186	140	46	\$ 4	\$ 2	\$ 6
Police-Main Station	942		Office S240	2434T8-DL	LP24R24	6	6	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	4	4,160	0.20	0.25	(0.05)	828	1,041	(213)	\$ (21)	\$ (2)	\$ (23)
Police-Main Station	952		Office S240	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	4	4,160	0.08	0.06	0.02	343	258	85	\$ 9	\$ 1	\$ 9
Police-Main Station	962		Office S240	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	4	4,160	0.03	0.04	(0.01)	139	174	(36)	\$ (4)	\$ (0)	\$ (4)
Police-Main Station	972		Office S240	2434T8-DL	LP24R24	12	12	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	30	277	TRUE	4	4,160	0.40	0.50	(0.10)	1,656	2,062	(426)	\$ (43)	\$ (3)	\$ (46)
Police-Main Station	982		Office S240	222UT6	NP32R22	1	1	0.0580	0.0450	2x2, 2-Lamp U T8	Elect. NP Bal. & (3) 2' T8's, Refl	277		TRUE	4	4,160	0.06	0.04	0.01	234	162	52	\$ 5	\$ 0	\$ 6
Police-Main Station	1002		Office S241	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	1012		Office S242	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	1022		Office S243	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	56	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	1032		Office S244	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	125	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	1042		Storage S247	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp T8	Elect. LP Bal. & (3) 4' T8's	277		TRUE	7	520	0.33	0.25	0.08	171	129	42	\$ 3	\$ 3	\$ 6
Police-Main Station	1052		Multi Room S46	2434T8	LP24R24	1	1	0.0850	0.0430	2x4, 3-Lamp T8	Elect. LP Bal. & (2) 4' T8's, Refl	277		TRUE	8	2,340	0.08	0.04	0.04	193	98	95	\$ 9	\$ 1	\$ 10
Police-Main Station	1062		Storage S245	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	1072		Elect Room C204	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3
Police-Main Station	1082		Jc C205	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Main Station	1102		Bath-room Men's C206	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	24	277	TRUE	6	2,601	0.23	0.17	0.06	585	434	151	\$ 14	\$ 2	\$ 16
Police-Main Station	1122		Bathroom Women's C207	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277		TRUE	6	2,601	0.23	0.17	0.06	585	434	151	\$ 14	\$ 2	\$ 16
Police-Main Station	1132		Women's Lockers S280	2424T8	LP24	10	10	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	22	277	TRUE	6	2,601	0.56	0.42	0.15	1,463	1,085	378	\$ 36	\$ 5	\$ 41
Police-Main Station	1162		Bathroom Women's	1424T8	LP24	6	6	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	50	277	TRUE	6	2,601	0.34	0.25	0.09	878	651	227	\$ 22	\$ 3	\$ 25
Police-Main Station	1172		Break Room S270																						

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Main Station	131	2	Office S240	2434T8	LP34	6	0	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.49	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
Police-Main Station	132	2	Office S240	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Main Station	133	2	Office S240	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	134	2	Office S240	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Main Station	136	2	Storage W245	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	7	520	0.16	0.08	0.08	86	43	42	\$ 3	\$ 3	\$ 6
Police-Main Station	137	2	Office S220	2434T8	LP34	9	9	0.0850	0.0840	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	80	277	TRUE	3	2,340	0.74	0.56	0.18	1,736	1,307	429	\$ 41	\$ 8	\$ 47
Police-Main Station	138	2	Computer Room W244	2434T8	LP34	8	8	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.66	0.50	0.16	1,543	1,162	381	\$ 36	\$ 5	\$ 42
Police-Main Station	139	2	Computer Room W243	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	140	2	Office W242	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.18	0.12	0.04	388	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	141	2	Conference Room W270	2434T8	LP34	16	16	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	63	277	TRUE	14	730	1.32	0.99	0.33	963	725	238	\$ 22	\$ 11	\$ 33
Police-Main Station	142	2	Tele Room W282	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	7	520	0.18	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3
Police-Main Station	143	2	Ups W281	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	7	520	0.33	0.25	0.08	171	129	42	\$ 3	\$ 3	\$ 6
Police-Main Station	144	2	Kitchen W291	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	8	2,340	0.16	0.08	0.08	386	195	191	\$ 18	\$ 3	\$ 21
Police-Main Station	145	2	Office W292	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	2	751	0.33	0.25	0.08	248	186	61	\$ 5	\$ 3	\$ 8
Police-Main Station	146	2	Classroom	2434T8	LP34	12	12	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	75	277	TRUE	14	730	0.99	0.74	0.24	722	544	176	\$ 17	\$ 8	\$ 25
Police-Main Station	147	2	Classroom	2434T8	LP34	8	8	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	14	730	0.66	0.50	0.16	482	363	119	\$ 11	\$ 5	\$ 16
Police-Main Station	150	2	Training W230a	2434T8-DS	LP34-ALT	6	6	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	14	730	0.66	0.50	0.16	482	363	119	\$ 11	\$ 5	\$ 16
Police-Main Station	151	2	Training W230b	2434T8-DL	LP24R24	12	12	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	25	277	TRUE	14	730	0.40	0.50	(0.10)	291	365	(75)	\$ (7)	\$ (3)	\$ (10)
Police-Main Station	152	2	Training W230c	2434T8-DL	LP24R24	10	10	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	14	730	0.33	0.42	(0.09)	242	304	(62)	\$ (6)	\$ (3)	\$ (9)
Police-Main Station	153	2	Training W230d	2434T8-DL	LP24R24	10	10	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	14	730	0.33	0.42	(0.09)	242	304	(62)	\$ (6)	\$ (3)	\$ (9)
Police-Main Station	154	2	Training W230e	2434T8-DL	LP24R24	10	10	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	14	730	0.33	0.42	(0.09)	242	304	(62)	\$ (6)	\$ (3)	\$ (9)
Police-Main Station	156	2	Office W224	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Main Station	157	2	Office W223	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	158	2	Tele Room W222	2434T8	LP24R24	1	1	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	7	520	0.08	0.04	0.04	43	22	21	\$ 2	\$ 1	\$ 3
Police-Main Station	159	2	Tele Room W221	2434T8	LP24R24	1	1	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	7	520	0.08	0.04	0.04	43	22	21	\$ 2	\$ 1	\$ 3
Police-Main Station	160	2	Office Open W210	2434T8	LP34	9	9	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	41	277	TRUE	3	2,340	0.74	0.56	0.18	1,736	1,307	429	\$ 41	\$ 8	\$ 47
Police-Main Station	162	2	Bathroom Men's W215	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	163	2	Bathroom Women's W216	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	164	2	Break Room W214	2434T8	LP24R24	2	2	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	78	277	TRUE	8	2,340	0.16	0.08	0.08	386	195	191	\$ 18	\$ 3	\$ 21
Police-Main Station	165	2	Office W213	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Main Station	166	2	Office W212	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	167	2	Hallway W270 To S220	222UT8	LP32R22	13	13	0.0580	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl		277	TRUE	9	2,339	0.73	0.53	0.20	1,711	1,239	472	\$ 45	\$ 7	\$ 52
Police-Main Station	169	2	Storage W260	2434T8	LP24R24	6	6	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	7	520	0.49	0.25	0.24	257	130	127	\$ 10	\$ 8	\$ 18
Police-Main Station	170	2	Tele Room W280	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	171	2	Office S210	2434T8	LP34	3	3	0.0650	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	65	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16
Police-Main Station	172	2	Office S211	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	173	2	Tele Room C201	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	174	2	Bathroom Men's C202	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	176	2	Bathroom Women's C203	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	6	2,601	0.06	0.04	0.01	146	108	38	\$ 4	\$ 0	\$ 4
Police-Main Station	178	3	Office S330	2434T8	LP34	19	19	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	80	277	TRUE	3	2,340	1.57	1.18	0.35	3,666	2,760	906	\$ 86	\$ 13	\$ 99
Police-Main Station	179	3	Office S330	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.03	0.04	(0.01)	78	99	(20)	\$ (2)	\$ (0)	\$ (2)

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved	
Police-Man Station	180	3	Office S330	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)	
Police-Man Station	181	3	Office S330	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	183	3	Storage S331	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	7	520	0.08	0.06	0.02	43	32	11	\$ 1	\$ 1	\$ 2	
Police-Man Station	184	3	Conference Room W301	2434T8-DS	LP34-ALT	9	9	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	50	277	TRUE	14	730	0.74	0.56	0.18	542	408	134	\$ 12	\$ 6	\$ 18	
Police-Man Station	185	3	Conference Room W301	1100DIM	CC18	8	8	0.1000	0.0180	Inc 100w, DIM	Cold Cathode One Piece 18w	120	TRUE	14	14	730	0.78	0.14	0.64	566	102	465	\$ 43	\$ 21	\$ 64	
Police-Man Station	186	3	Storage S336	2424T8	LP24	1	1	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	7	520	0.06	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
Police-Man Station	187	3	Break Room S337	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	6	6	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	188	3	Storage S338	2424T8	LP24	3	3	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	7	520	0.17	0.13	0.04	86	65	23	\$ 2	\$ 1	\$ 3	
Police-Man Station	189	3	Conference Room S333	2434T8-DS	LP34-ALT	2	2	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	14	14	730	0.16	0.12	0.04	120	91	30	\$ 3	\$ 1	\$ 4	
Police-Man Station	190	3	Office S332	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	191	3	Office S334	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	50	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Man Station	192	3	Office S335	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	193	3	Office S359	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	2	2	751	0.16	0.12	0.04	124	93	31	\$ 3	\$ 1	\$ 4	
Police-Man Station	194	3	Office S370	2434T8	LP34	5	5	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	65	277	TRUE	3	3	2,340	0.41	0.31	0.10	965	726	238	\$ 23	\$ 3	\$ 26
Police-Man Station	195	3	Office S370	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	196	3	Office S370	2434T8-OL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)	
Police-Man Station	197	3	Office S370	2434T8-OL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	198	3	Office S381	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Police-Man Station	199	3	Office S381	2434T8-OL	LP24R24	5	5	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.17	0.21	(0.04)	388	488	(100)	\$ (10)	\$ (1)	\$ (11)	
Police-Man Station	201	3	Storage S382	2424T8	LP24	2	2	0.0580	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	30	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Police-Man Station	202	3	Office S383	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Police-Man Station	204	3	Office S372	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21	
Police-Man Station	205	3	Conference Room S373	2434T8-DS	LP34-ALT	4	4	0.0850	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	277	TRUE	14	14	730	0.33	0.25	0.08	241	181	59	\$ 6	\$ 3	\$ 8	
Police-Man Station	206	3	Office S379	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	45	277	TRUE	3	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Man Station	207	3	Office S374	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	208	3	Office S374	2434T8-OL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	210	3	Copy Room S378	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	6	6	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5	
Police-Man Station	211	3	Office S378	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	59	277	TRUE	3	3	2,340	0.49	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
Police-Man Station	212	3	Office S375	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	213	3	Storage S377	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3	
Police-Man Station	215	3	Bathroom Women's C307	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	6	6	2,601	0.23	0.17	0.06	585	434	151	\$ 14	\$ 2	\$ 16
Police-Man Station	216	3	Bathroom Men's C306	1424T8	LP24	4	4	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	6	2,601	0.23	0.17	0.06	585	434	151	\$ 14	\$ 2	\$ 16	
Police-Man Station	218	3	Highway S370 To S310	222UT6	LP32R22	10	10	0.0580	0.0420	2x2, 2-Lamp U T6	Elect. LP Bal. & (3) 2' T6's, Refl	277	TRUE	6	6	2,339	0.56	0.41	0.16	1,316	953	363	\$ 35	\$ 5	\$ 40	
Police-Man Station	221	3	Jc C305	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	7	520	0.08	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1	
Police-Man Station	222	3	Elect Room C304	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	7	520	0.17	0.13	0.04	88	65	23	\$ 2	\$ 1	\$ 3	
Police-Man Station	223	3	Copy Room S360	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	6	6	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
Police-Man Station	224	3	Office S350	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.49	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31	
Police-Man Station	225	3	Office S350	222UT6	NP32R22	2	2	0.0580	0.0450	2x2, 2-Lamp U T6	Elect. NP Bal. & (3) 2' T8's, Refl	277	TRUE	3	3	2,340	0.11	0.09	0.03	263	204	59	\$ 6	\$ 1	\$ 6	
Police-Man Station	226	3	Office S351	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	50	277	TRUE	3	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	227	3	Office S352	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	228	3	Office S353	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	58	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Man Station	229	3	Office S354	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	230	3	Conference Room S358	2434T8	LP24R24	3	3	0.0850	0.0430	2x4, 3-Lamp, T8	Elect. LP Bal. & (2) 4' T8's, Refl	53	277	TRUE	14	730	0.25	0.13	0.12	181	91	89	\$ 8	\$ 4	\$ 12	
Police-Man Station	231	3	Copy Room S355	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	6	6	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	232	3	Storage S357	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	7	520	0.33	0.25	0.08	171	129	42	\$ 3	\$ 3	\$ 6	
Police-Man Station	233	3	Office S356	1424T8	LP24	2	2	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	1	1	8,760	0.11	0.08	0.03	966	731	235	\$ 22	\$ 1	\$ 23	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kWh Dollars Saved	Total kWh Dollars Saved
Police-Main Station	234	3	Office S356	1424T8-DL2	LP24	2	2	-	0.0430	1x4, 2-Lamp T8, DL by	Elect. LP Bal. & (2) 4' T8's		277	TRUE	1	8,760	-	0.08	(0.08)	-	731	(731)	\$ (62)	\$ (3)	\$ (65)
Police-Main Station	235	3	Hallway W330 To W363	222JF8	LP32R22	15	15	0.0586	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl	34	277	TRUE	9	2,339	0.84	0.61	0.23	1,974	1,429	545	\$ 52	\$ 8	\$ 60
Police-Main Station	237	3	Office W330	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	20	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Main Station	238	3	Office W330	2434T8-DL	LP24R24	8	8	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.27	0.33	(0.07)	621	761	(140)	\$ (15)	\$ (2)	\$ (18)
Police-Main Station	239	3	Office W330	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Main Station	240	3	Office W330	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
Police-Main Station	242	3	Office W332	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	243	3	Office W320	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	144	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	244	3	Interview W333	2434T8	LP34	3	3	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	2	751	0.25	0.19	0.06	186	140	46	\$ 4	\$ 2	\$ 6
Police-Main Station	245	3	Office W350	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	23	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
Police-Main Station	246	3	Office W350	2434T8-DL	LP24R24	6	6	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.20	0.25	(0.05)	466	586	(120)	\$ (11)	\$ (2)	\$ (13)
Police-Main Station	247	3	Office W350	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Main Station	248	3	Office W351	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	13	277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)
Police-Main Station	250	3	Storage W340	2424T8	LP24	8	8	0.0586	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.45	0.33	0.12	234	174	61	\$ 5	\$ 4	\$ 9
Police-Main Station	251	3	Storage W341	2424T8	LP24	1	1	0.0586	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.08	0.04	0.01	29	22	8	\$ 1	\$ 0	\$ 1
Police-Main Station	252	3	Interview W342	1424T8	LP24	2	2	0.0586	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	2	751	0.11	0.08	0.03	85	63	22	\$ 2	\$ 1	\$ 3
Police-Main Station	253	3	Storage W344	2424T8	LP24	2	2	0.0586	0.0430	2x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	7	520	0.11	0.08	0.03	96	43	15	\$ 1	\$ 1	\$ 2
Police-Main Station	254	3	Office W360	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	45	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	255	3	Office W360	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Main Station	258	3	Office W361	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	33	277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	257	3	Break Room W362	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	106	277	TRUE	6	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	258	3	Office W360	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	54	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	259	3	Office W360	2434T8-DL	LP24R24	5	5	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.17	0.21	(0.04)	388	488	(100)	\$ (10)	\$ (1)	\$ (11)
Police-Main Station	261	3	Tele Room W364	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	7	520	0.08	0.06	0.02	43	32	11	\$ 1	\$ 1	\$ 2
Police-Main Station	262	3	Bathroom W367	1222T8	LP22	1	1	0.0342	0.0270	1x2, 2-Lamp T8	Elect. LP Bal. & (2) 2' T8's		277	TRUE	5	1,040	0.03	0.03	0.01	34	27	7	\$ 1	\$ 0	\$ 1
Police-Main Station	263	3	Storage W366	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	7	520	0.16	0.12	0.04	86	65	21	\$ 2	\$ 1	\$ 3
Police-Main Station	264	3	Office W365	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	265	3	Office W390	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
Police-Main Station	266	3	Office W390	2434T8-DL	LP24R24	7	7	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.23	0.29	(0.06)	543	683	(140)	\$ (13)	\$ (2)	\$ (15)
Police-Main Station	267	5	Office W390	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	268	3	Office W380	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	271	3	Office W391	2434T8	LP34	1	1	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5
Police-Main Station	272	3	Office W391	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)
Police-Main Station	273	3	Storage	2444T8	LP24R24	1	1	0.1129	0.0480	2x4, 4-Lamp T8	Elect. LP Bal. & (2) 4' T8's, Refl	61	277	TRUE	7	520	0.11	0.05	0.06	56	24	32	\$ 3	\$ 2	\$ 5
Police-Main Station	274	3	Interview W371	1424T8	LP24	2	2	0.0586	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	2	751	0.11	0.08	0.03	85	63	22	\$ 2	\$ 1	\$ 3
Police-Main Station	275	3	Interview W373	1424T8	LP24	2	2	0.0586	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's		277	TRUE	2	751	0.11	0.08	0.03	85	63	22	\$ 2	\$ 1	\$ 3
Police-Main Station	278	3	Copy Room W374	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	6	2,340	0.16	0.12	0.04	386	291	95	\$ 9	\$ 1	\$ 10
Police-Main Station	277	3	Bathroom W372	1222T8	LP22	1	1	0.0342	0.0270	1x2, 2-Lamp T8	Elect. LP Bal. & (2) 2' T8's		277	TRUE	5	1,040	0.03	0.03	0.01	34	27	7	\$ 1	\$ 0	\$ 1
Police-Main Station	280	3	Bathroom W370	1222T8	LP22	1	1	0.0342	0.0270	1x2, 2-Lamp T8	Elect. LP Bal. & (2) 2' T8's		277	TRUE	5	1,040	0.03	0.03	0.01	34	27	7	\$ 1	\$ 0	\$ 1
Police-Main Station	281	3	Hallway W375	222JF8	LP32R22	1	1	0.0586	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl		277	TRUE	9	2,339	0.06	0.04	0.02	132	95	36	\$ 3	\$ 1	\$ 4
Police-Main Station	282	3	Hallway W375	2434T8	LP34	2	2	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	60	277	TRUE	9	2,339	0.16	0.12	0.04	386	290	95	\$ 9	\$ 1	\$ 10
Police-Main Station	283	3	Office W375	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	78	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Main Station	284	3	Office W380	2434T8	LP34	6	6	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.49	0.37	0.12	1,158	872	286	\$ 27	\$ 4	\$ 31
Police-Main Station	285	3	Office W380	2434T8-DL	LP24R24	4	4	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	39	277	TRUE	3	2,340	0.13	0.17	(0.03)	311	390	(80)	\$ (8)	\$ (1)	\$ (9)
Police-Main Station	286	3	Office W380	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl		277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Main Station	287	3	Office W380	2434T8	LP34	4	4	0.0850	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's		277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Man Station	288	3	Office W360	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	289	3	Office W360	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	290	3	Office W360	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	291	3	Office W360	2434T8-LP34	LP34	2	2	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.16	0.12	0.04	396	291	95	\$ 9	\$ 1	\$ 10	
Police-Man Station	292	3	Office W360	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	293	3	Office W360	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	294	3	Office W360	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	295	3	Office W360	2434T8-LP34	LP34	1	1	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.08	0.06	0.02	193	145	48	\$ 5	\$ 1	\$ 5	
Police-Man Station	296	3	Office W360	2434T8-DL	LP24R24	4	4	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.13	0.17	(0.03)	311	390	(80)	\$ (8)	\$ (1)	\$ (9)	
Police-Man Station	297	3	Office W360	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	300	3	Office W388	2434T8-LP24	LP24	2	2	0.0589	0.0430	2x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	3	2,340	0.11	0.08	0.03	263	195	68	\$ 6	\$ 1	\$ 7	
Police-Man Station	301	3	Office W367	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	302	3	Office W367	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	303	3	Interview W386	1424T8-LP24	LP24	2	2	0.0589	0.0430	1x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	2	751	0.11	0.08	0.03	85	63	22	\$ 2	\$ 1	\$ 3	
Police-Man Station	304	3	Storage W364	222UT8-LP32R22	LP32R22	2	2	0.0589	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl	38	277	TRUE	7	520	0.11	0.08	0.03	59	42	16	\$ 1	\$ 1	\$ 2
Police-Man Station	305	3	Office W383	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)	
Police-Man Station	306	3	Conference Room W382	2434T8-LP34	LP34	4	4	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	4	4,160	0.33	0.25	0.08	1,372	1,033	339	\$ 34	\$ 3	\$ 37	
Police-Man Station	307	3	Office W310	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	3	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)
Police-Man Station	308	3	Office W310	2434T8-DL	LP24R24	1	1	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.03	0.04	(0.01)	78	98	(20)	\$ (2)	\$ (0)	\$ (2)	
Police-Man Station	310	3	Office W312	2434T8-DL	LP24R24	3	3	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.10	0.13	(0.03)	233	293	(60)	\$ (6)	\$ (1)	\$ (7)	
Police-Man Station	311	3	Office W313	2434T8-DS	LP34-ALT	4	4	0.0859	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	50	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	312	3	Waiting	2434T8-DL	LP24R24	4	4	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.13	0.17	(0.03)	311	390	(80)	\$ (8)	\$ (1)	\$ (9)	
Police-Man Station	313	3	Office S310	2434T8-LP34	LP34	11	11	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	50	277	TRUE	3	2,340	0.91	0.68	0.22	2,122	1,598	524	\$ 50	\$ 7	\$ 57
Police-Man Station	314	3	Office S311	2434T8-DL	LP24R24	4	4	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	121	277	TRUE	3	2,340	0.13	0.17	(0.03)	311	390	(80)	\$ (8)	\$ (1)	\$ (9)
Police-Man Station	315	3	Office S312	2434T8-DL	LP24R24	2	2	0.0342	0.0430	2x4, T8, DL	Elect. LP Bal. & (2) 4' T8's, Refl	277	TRUE	3	2,340	0.07	0.08	(0.02)	155	195	(40)	\$ (4)	\$ (1)	\$ (4)	
Police-Man Station	316	3	Office S312	222UT8-LP32R22	LP32R22	1	1	0.0589	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl	277	TRUE	3	2,340	0.06	0.04	0.02	132	95	36	\$ 3	\$ 1	\$ 4	
Police-Man Station	317	3	Conference Room S314	2434T8-DS	LP34-ALT	3	3	0.0859	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	100	277	TRUE	14	730	0.25	0.19	0.06	161	136	45	\$ 4	\$ 2	\$ 6
Police-Man Station	318	3	Office S313	2434T8-DS	LP34-ALT	4	4	0.0859	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	120	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	319	3	Office S315	2434T8-DS	LP34-ALT	4	4	0.0859	0.0640	2x4, 3-Lamp, T8, DS	Elect. LP Bal. & (3) 4' T8's, ALT	122	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	320	3	Office S316	2424T8-LP24	LP24	5	5	0.0589	0.0430	2x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	35	277	TRUE	3	2,340	0.28	0.21	0.07	658	488	170	\$ 16	\$ 2	\$ 19
Police-Man Station	321	3	Bathroom S317	1323T8-LP23	LP23	1	1	0.0469	0.0400	1x3, 2-Lamp, T8	Elect. LP Bal. & (2) 3' T8's	277	TRUE	5	1,040	0.04	0.04	0.01	46	40	6	\$ 1	\$ 0	\$ 1	
Police-Man Station	322	3	Bathroom S317	1222T8-LP22	LP22	1	1	0.0342	0.0270	1x2, 2-Lamp, T8	Elect. LP Bal. & (2) 2' T8's	277	TRUE	5	1,040	0.03	0.03	0.01	34	27	7	\$ 1	\$ 0	\$ 1	
Police-Man Station	324	3	Office S318	2434T8-LP34	LP34	3	3	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	3	2,340	0.25	0.19	0.06	579	436	143	\$ 14	\$ 2	\$ 16	
Police-Man Station	325	3	Storage S320	2434T8-LP34	LP34	3	3	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	277	TRUE	7	520	0.25	0.19	0.06	129	97	32	\$ 3	\$ 2	\$ 5	
Police-Man Station	326	3	Hallway S320	222UT8-LP32R22	LP32R22	2	2	0.0589	0.0420	2x2, 2-Lamp U T8	Elect. LP Bal. & (3) 2' T8's, Refl	277	TRUE	9	2,339	0.11	0.08	0.03	263	191	73	\$ 7	\$ 1	\$ 8	
Police-Man Station	327	3	Office S319	2434T8-LP34	LP34	4	4	0.0859	0.0640	2x4, 3-Lamp, T8	Elect. LP Bal. & (3) 4' T8's	70	277	TRUE	3	2,340	0.33	0.25	0.08	772	581	191	\$ 18	\$ 3	\$ 21
Police-Man Station	328	3	Tele Room C301	1424T8-LP24	LP24	2	2	0.0589	0.0430	1x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.11	0.08	0.03	59	43	15	\$ 1	\$ 1	\$ 2	
Police-Man Station	329	3	Bathroom Men's C302	1424T8-LP24	LP24	1	1	0.0589	0.0430	1x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.06	0.04	0.01	148	108	38	\$ 4	\$ 0	\$ 4	
Police-Man Station	331	3	Bathroom Women's C303	1424T8-LP24	LP24	1	1	0.0589	0.0430	1x4, 2-Lamp, T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	6	2,601	0.06	0.04	0.01	148	108	38	\$ 4	\$ 0	\$ 4	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Police-Main Station	333	Pent	Mechanical Room 400	1424T8	LP24	12	12	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	10	277	TRUE	7	520	0.68	0.50	0.17	351	260	91	\$ 7	\$ 6	\$ 13
Police-Main Station	334	Pent	Boiler Room 401	1424T8	LP24	3	3	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.17	0.13	0.04	86	65	23	\$ 2	\$ 1	\$ 3	
Police-Main Station	335	SW	Stairwell 14	1424T8	LP24	5	5	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	1	8,760	0.28	0.21	0.07	2,464	1,827	637	\$ 54	\$ 2	\$ 56	
Police-Main Station	336	SW	Stairwell DB	1424T8	LP24	7	7	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	1	8,760	0.39	0.29	0.10	3,450	2,558	892	\$ 76	\$ 3	\$ 79	
Police-Main Station	337	Ext	Roof	Q500	IND120WP-PC	2	2	0.5000	0.1250	Inc 500w Quartz	Induction 120w Waipack, PC	277	TRUE	10	4,380	0.97	0.24	0.73	4,249	1,062	3,186	\$ 261	\$ 24	\$ 285	
Police-Main Station	339	Ext	Generator Room C115	1424T8	LP24	10	10	0.0580	0.0430	1x4, 2-Lamp T8	Elect. LP Bal. & (2) 4' T8's	277	TRUE	7	520	0.56	0.42	0.15	293	217	76	\$ 6	\$ 5	\$ 11	
Police-Main Station	341	Ext	Parking Poles	M250	IND150FL-PC-HI	6	6	0.2950	0.1650	MH 250w	Induction 150w Flood, PC, HI	277	TRUE	10	4,380	1.72	0.96	0.76	7,520	4,206	3,314	\$ 271	\$ 25	\$ 296	
Police-Main Station	342	Ext	Parking Poles	M2X250	IND2X150FL-PC-VHI	1	1	0.5900	0.3300	MH (2) 250w	(2) Induction 150w Flood, PC, VHI	277	TRUE	10	4,380	0.57	0.32	0.25	2,507	1,402	1,105	\$ 90	\$ 8	\$ 99	
Public Service-Bldg. B	1	1	Open Office Entry	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	4	4,160	0.14	0.08	0.06	581	347	234	\$ 21	\$ 3	\$ 24	
Public Service-Bldg. B	3	3	Bathroom Women's	2424	LP24	1	1	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	5	1,040	0.07	0.04	0.03	73	43	29	\$ 3	\$ 1	\$ 4	
Public Service-Bldg. B	4	4	Office	2424	LP24	1	1	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	5	1,040	0.07	0.04	0.03	73	43	29	\$ 3	\$ 1	\$ 4	
Public Service-Bldg. B	5	5	Open Office	2424	LP24	11	11	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	50	120	TRUE	4	4,160	0.77	0.46	0.31	3,198	1,909	1,287	\$ 116	\$ 14	\$ 130
Public Service-Bldg. B	6	6	Open Office	2444	NP24R24	2	2	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	TRUE	4	4,160	0.28	0.09	0.19	1,162	387	775	\$ 70	\$ 8	\$ 78	
Public Service-Bldg. B	8	8	Kitchen	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	46	120	TRUE	6	2,340	0.14	0.08	0.06	327	195	132	\$ 12	\$ 3	\$ 14
Public Service-Bldg. B	9	9	Elect Room	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120	TRUE	7	520	0.07	0.03	0.04	38	14	23	\$ 2	\$ 2	\$ 4	
Public Service-Bldg. B	10	10	Conference Room	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	70	120	TRUE	14	750	0.14	0.08	0.06	102	61	41	\$ 4	\$ 3	\$ 6
Public Service-Bldg. B	11	11	Office 1	2424	LP24	3	3	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	54	120	TRUE	4	4,160	0.21	0.13	0.08	872	521	351	\$ 32	\$ 4	\$ 35
Public Service-Bldg. B	12	12	Office 2	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	4	4,160	0.14	0.08	0.06	581	347	234	\$ 21	\$ 3	\$ 24	
Public Service-Bldg. B	13	13	Office 2	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	90	120	TRUE	4	4,160	0.14	0.05	0.09	581	194	387	\$ 35	\$ 4	\$ 39
Public Service-Bldg. B	14	14	Office 3	2424	LP24	3	3	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	4	4,160	0.21	0.13	0.08	872	521	351	\$ 32	\$ 4	\$ 35	
Public Service-Bldg. B	15	15	Office 4	2424	LP24	3	3	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	55	120	TRUE	4	4,160	0.21	0.13	0.08	872	521	351	\$ 32	\$ 4	\$ 35
Public Service-Bldg. B	16	16	Office 5	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120	TRUE	4	4,160	0.14	0.08	0.06	581	347	234	\$ 21	\$ 3	\$ 24	
Public Service-Bldg. B	17	17	Office 6	2424	LP24	3	3	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	50	120	TRUE	4	4,160	0.21	0.13	0.08	872	521	351	\$ 32	\$ 4	\$ 35
Public Service-Bldg. B	18	18	Copy Room	2424	LP24	2	2	0.0720	0.0430	2x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	50	120	TRUE	8	2,340	0.14	0.08	0.06	327	195	132	\$ 12	\$ 3	\$ 14
Public Service-Bldg. B	19	Ext	Front Entry	160	CF13	2	2	0.0600	0.0130	Inc 60w	Compact One Piece 13w	120	TRUE	10	4,380	0.12	0.03	0.09	510	110	399	\$ 36	\$ 4	\$ 40	
Public Service-Bldg. B	20	Ext	Back Entry	160	CF13	1	1	0.0600	0.0130	Inc 60w	Compact One Piece 13w	120	TRUE	10	4,380	0.06	0.01	0.05	255	55	200	\$ 18	\$ 2	\$ 20	
Public Services-Traffic shop	1	1	Open Shop Right	2444	NP24R24	6	6	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	60	120	TRUE	3	2,340	0.84	0.26	0.58	1,961	664	1,307	\$ 118	\$ 25	\$ 143
Public Services-Traffic shop	2	2	Open Shop Middle	2444	NP24R24	7	7	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.96	0.33	0.63	2,286	763	1,525	\$ 138	\$ 29	\$ 167	
Public Services-Traffic shop	3	3	Open Shop Left	2444	NP24R24	3	3	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.42	0.14	0.28	961	327	634	\$ 59	\$ 12	\$ 71	
Public Services-Traffic shop	5	5	Hallway/storage	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	9	2,339	0.26	0.08	0.20	653	195	458	\$ 41	\$ 9	\$ 50	
Public Services-Traffic shop	7	7	Office 1	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	76	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 20	\$ 4	\$ 24
Public Services-Traffic shop	8	8	Office 2 Traffic Super	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 20	\$ 4	\$ 24	
Public Services-Traffic shop	9	9	Office 2 Traffic Super 2	2444	NP24R24	1	1	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.14	0.05	0.09	327	109	218	\$ 20	\$ 4	\$ 24	
Public Services-Traffic shop	10	10	Signs Shop	2444	NP24R24	9	9	0.1440	0.0480	2x4, 4-Lamp	Elect. NP Bal. & (2) 4' T8's, Refl	70	120	TRUE	3	2,340	1.26	0.42	0.84	2,542	981	1,561	\$ 177	\$ 37	\$ 214
Public Services-Traffic shop	11	11	Signs Shop	222U	NP22X22	2	2	0.0720	0.0320	2x2, 2-Lamp U	Elect. NP Bal. & (2) 2' T8's, Refl	120	TRUE	3	2,340	0.14	0.06	0.08	327	145	182	\$ 16	\$ 3	\$ 20	
Public Services-Traffic shop	12	12	Bathroom Men's	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	40	120	TRUE	5	1,040	0.26	0.08	0.20	291	87	204	\$ 18	\$ 9	\$ 27
Public Services-Traffic shop	13	13	Bathroom Women's	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	5	1,040	0.28	0.08	0.20	291	87	204	\$ 18	\$ 9	\$ 27	
Public Services-Traffic shop	14	14	Shower	160	CF13	1	1	0.0600	0.0130	Inc 60w	Compact One Piece 13w	120	TRUE	5	1,040	0.06	0.01	0.05	61	13	47	\$ 4	\$ 2	\$ 6	
Public Services-Traffic shop	15	15	Break Area	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	8	2,340	0.28	0.08	0.20	654	195	458	\$ 41	\$ 9	\$ 50	
Public Services-Traffic shop	17	17	Jc	160	CF13	1	1	0.0600	0.0130	Inc 60w	Compact One Piece 13w	120	TRUE	7	520	0.06	0.01	0.05	30	7	24	\$ 2	\$ 2	\$ 4	
Public Services-Traffic shop	18	18	Warehouse Left Front	1828	LP44K18	3	3	0.1280	0.0650	1x8, 2-Lamp	Elect. LP Bal. & (4) 4' T8's, Kit	25	120	TRUE	3	2,340	0.37	0.25	0.12	856	579	279	\$ 25	\$ 5	\$ 31
Public Services-Traffic shop	19	19	Warehouse Left Back	1828	LP44K18	3	3	0.1280	0.0650	1x8, 2-Lamp	Elect. LP Bal. & (4) 4' T8's, Kit	120	TRUE	3	2,340	0.37	0.25	0.12	856	579	278	\$ 25	\$ 5	\$ 31	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved
Public Services-Traffic shop	20	1	Warehouse Right Back	1826	LP44K18	3	3	0.1260	0.0850	1x6, 2-Lamp	E-ect. LP Bal. & (4) 4' T8's, Kil	120	TRUE	3	2,340	0.37	0.25	0.12	858	579	279	\$ 25	\$ 5	\$ 31	
Public Services-Traffic shop	21	1	Warehouse Right Front	1826	LP44K18	3	3	0.1260	0.0850	1x6, 2-Lamp	E-ect. LP Bal. & (4) 4' T8's, Kil	120	TRUE	3	2,340	0.37	0.25	0.12	858	579	279	\$ 25	\$ 5	\$ 31	
Public Services-Traffic shop	22	1	Warehouse Task	1444	LP44	2	2	0.1440	0.0850	1x4, 4-Lamp	E-ect. LP Bal. & (4) 4' T8's	120	TRUE	3	2,340	0.28	0.16	0.11	654	396	268	\$ 24	\$ 5	\$ 29	
Public Services-Traffic shop	23	1	Warehouse Task	1222	LP22	1	1	0.0500	0.0270	1x2, 2-Lamp	E-ect. LP Bal. & (2) 2' T8's	120	TRUE	3	2,340	0.05	0.03	0.02	113	61	52	\$ 5	\$ 1	\$ 6	
Public Services-Traffic shop	25	1	Medi Room	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	E-ect. LP Bal. & (2) 4' T8's	120	TRUE	7	520	0.14	0.08	0.06	73	43	29	\$ 3	\$ 3	\$ 5	
Public Services-Traffic shop	27	1	Canopy	1828	NP24K18	2	2	0.1260	0.0480	1x6, 2-Lamp	E-lect. NP Bal. & (2) 4' T8's, Kil	120	TRUE	10	4,380	0.24	0.09	0.15	1,071	408	663	\$ 60	\$ 7	\$ 67	
Solid Waste-Transfer Station & Scale House - Redu	2	1	Break Room	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	E-lect. LP Bal. & (2) 4' T8's, Refl	56	120	TRUE	3	2,340	0.42	0.13	0.29	981	293	688	\$ 80	\$ -	\$ 80
Solid Waste-Transfer Station & Scale House - Redu	3	1	Scale House	2444	LP24R24	2	2	0.1440	0.0430	2x4, 4-Lamp	E-lect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.28	0.08	0.20	654	195	458	\$ 53	\$ -	\$ 53	
Solid Waste-Transfer Station & Scale House - Redu	4	1	Bath	1414	LP14	1	1	0.0420	0.0210	1x4, 1-Lamp	E-lect. LP Bal. & (1) 4' T8	120	TRUE	6	2,601	0.04	0.02	0.02	106	53	53	\$ 6	\$ -	\$ 6	
Solid Waste-Transfer Station & Scale House - Redu	5	1	Bath	222U	LP22R22	1	1	0.0720	0.0270	2x2, 2-Lamp U	E-lect. LP Bal. & (2) 2' T8's, Refl	120	TRUE	6	2,601	0.07	0.03	0.04	182	68	114	\$ 13	\$ -	\$ 13	
Solid Waste-Transfer Station & Scale House - Redu	6	1	Upper Level Office	2444	LP24R24	1	1	0.1440	0.0430	2x4, 4-Lamp	E-lect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	3	2,340	0.14	0.04	0.10	327	98	229	\$ 27	\$ -	\$ 27	
Solid Waste-Transfer Station & Scale House - Redu	7	1	Bath	1424T8	LP24	1	1	0.0580	0.0430	1x4, 2-Lamp T8	E-lect. LP Bal. & (2) 4' T8's	120	TRUE	6	2,601	0.06	0.04	0.01	146	168	38	\$ 4	\$ -	\$ 4	
Solid Waste-Transfer Station & Scale House - Redu	8	1	Over Conveyor	M1000	1464HBTSP SSR-HI	6	6	1.0600	0.3230	MH 1000w	New 1x4 w/ E-lect. NPPS Bal. & (6) 4' T5's, SR, HI	120	TRUE	3	2,340	6.29	1.88	4.41	14,708	4,399	10,309	\$ 1,193	\$ -	\$ 1,193	
Solid Waste-Transfer Station & Scale House - Redu	9	1	Over Conveyor	M400	1464HBTSP SSR-HI	5	5	0.4580	0.3230	MH 400w	New 1x4 w/ E-lect. NPPS Bal. & (6) 4' T5's, SR, HI	120	TRUE	3	2,340	2.22	1.57	0.65	5,196	3,666	1,532	\$ 177	\$ -	\$ 177	
Solid Waste-Transfer Station & Scale House - Redu	11	1	Exterior On Building	S1000	M750K	2	2	1.1000	0.8020	MPS 1000w	MH 750w Kil, HI	120	TRUE	10	4,380	2.13	1.56	0.58	9,347	6,615	2,532	\$ 293	\$ -	\$ 293	
Solid Waste-Transfer Station & Scale House - Redu	12	1	Exterior On Building	M1000	M750K	1	1	1.0600	0.8020	MH 1000w	MH 750w Kil, HI	120	TRUE	10	4,380	1.05	0.78	0.27	4,568	3,407	1,181	\$ 137	\$ -	\$ 137	
Solid Waste-Transfer Station & Scale House - Redu	13	1	Shop	1424	LP24	1	1	0.0720	0.0430	1x4, 2-Lamp	E-lect. LP Bal. & (2) 4' T8's	120	TRUE	3	2,340	0.07	0.04	0.03	163	98	66	\$ 8	\$ -	\$ 8	
Solid Waste-Transfer Station & Scale House - Redu	14	1	Office Trailer # 1	1424	LP24	4	4	0.0720	0.0430	1x4, 2-Lamp	E-lect. LP Bal. & (2) 4' T8's	120	TRUE	3	2,340	0.28	0.17	0.11	654	390	263	\$ 30	\$ -	\$ 30	
Solid Waste-Transfer Station & Scale House - Redu	15	1	Office Trailer # 2	1424	LP24	3	3	0.0720	0.0430	1x4, 2-Lamp	E-lect. LP Bal. & (2) 4' T8's	120	TRUE	3	2,340	0.21	0.13	0.08	490	293	197	\$ 23	\$ -	\$ 23	
Solid Waste-Transfer Station & Scale House - Redu	16	1	Exterior Lighting Panel	NL	NEW TIME CLOCK	1	1			New Layout	New Time Clock	120	TRUE	10	4,380	-	-	-	-	-	-	\$ -	\$ -	\$ -	
Traffic Engineering-Parking/Garden Ave Garage	4	1	Front Office	2444	HP24R24	9	9	0.1440	0.0650	2x4, 4-Lamp	E-lect. HP Bal. & (2) 4' T8's, Refl	40	120	TRUE	3	2,340	1.26	0.57	0.69	2,942	1,328	1,614	\$ 154	\$ 23	\$ 177
Traffic Engineering-Parking/Garden Ave Garage	5	1	Hall	2444	LP24R24	3	3	0.1440	0.0430	2x4, 4-Lamp	E-lect. LP Bal. & (2) 4' T8's, Refl	120	TRUE	9	2,339	0.42	0.13	0.29	980	293	687	\$ 66	\$ 10	\$ 75	
Traffic Engineering-Parking/Garden Ave Garage	6	1	Hall	222U	LP22R22	4	4	0.0720	0.0270	2x2, 2-Lamp U	E-lect. LP Bal. & (2) 2' T8's, Refl	120	TRUE	9	2,339	0.28	0.10	0.17	653	245	408	\$ 39	\$ 6	\$ 45	

Fixture Location Guide

Building Name	Index	Floor	Location	Existing Code	Proposed Code	Existing Qty	Proposed Qty	Existing kW	Proposed kW	Existing Description	Proposed Description	Existing Foot Candles	Volts	Included In Project	Hour Code	Total Hours	Total Pre kW	Total Post kW	Total Saved kW	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved	Total kW Dollars Saved	Total Dollars Saved							
Traffic Engineering-Parking/Garden Ave Garage	7		Office	2444	HP24R24	2	2	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120		TRUE	3	2,340	0.26	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39							
Traffic Engineering-Parking/Garden Ave Garage	8		Office	2444	HP24R24	2	2	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120		TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39							
Traffic Engineering-Parking/Garden Ave Garage	9		Office	2444	HP24R24	2	2	0.1443	0.0650	2x4, 4-Lamp	Elect. HP Bal. & (2) 4' T8's, Refl	120		TRUE	3	2,340	0.28	0.13	0.15	654	295	359	\$ 34	\$ 5	\$ 39							
Traffic Engineering-Parking/Garden Ave Garage	10		Tunnel	1424	LP24	6	6	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	7	520	0.42	0.25	0.17	218	130	88	\$ 7	\$ 6	\$ 13							
Traffic Engineering-Parking/Garden Ave Garage	11		Storage	1424	LP24	8	8	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	7	520	0.56	0.33	0.23	291	174	117	\$ 9	\$ 7	\$ 17							
Traffic Engineering-Parking/Garden Ave Garage	12		Generator	1424	LP24	4	4	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	7	520	0.28	0.17	0.11	145	87	59	\$ 5	\$ 4	\$ 8							
Traffic Engineering-Parking/Garden Ave Garage	13		Pump	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	7	520	0.14	0.08	0.06	73	43	29	\$ 2	\$ 2	\$ 4							
Traffic Engineering-Parking/Garden Ave Garage	14		Mer	1424	LP24	2	2	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	7	520	0.14	0.08	0.06	73	43	29	\$ 2	\$ 2	\$ 4							
Traffic Engineering-Parking/Garden Ave Garage	15		Bathroom Men's	222U	LP22R22	1	1	0.0723	0.0210	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120		TRUE	6	2,601	0.07	0.03	0.04	182	68	114	\$ 11	\$ 1	\$ 12							
Traffic Engineering-Parking/Garden Ave Garage	16		Bathroom Women's	222U	LP22R22	1	1	0.0720	0.0213	2x2, 2-Lamp U	Elect. LP Bal. & (2) 2' T8's, Refl	120		TRUE	6	2,601	0.07	0.03	0.04	182	68	114	\$ 11	\$ 1	\$ 12							
Traffic Engineering-Parking/Garden Ave Garage	19		Money Office	2444	LP24R24	6	6	0.1440	0.0430	2x4, 4-Lamp	Elect. LP Bal. & (2) 4' T8's, Refl	120		TRUE	8	2,340	0.84	0.25	0.59	1,961	586	1,375	\$ 131	\$ 19	\$ 151							
Traffic Engineering-Parking/Garden Ave Garage	25.1		Parking Level 6	M2X250	IND2X150C H	6	6	0.5900	0.3300	MH (2) 250w	(2) Reduction 150w Cobrahead	120		TRUE	1	8,760	3.43	1.92	1.51	30,080	16,624	13,256	\$ 1,123	\$ 50	\$ 1,173							
Traffic Engineering-Parking/Garden Ave Garage	26.1		Parking Level 6	K2X15	KLED	2	2	0.0300	0.0020	Exit Sign - (2) 15w Inc	Exit Sign - New Universal LED	120		TRUE	1	8,760	0.06	0.00	0.05	510	34	476	\$ 40	\$ 2	\$ 42							
Traffic Engineering-Parking/Garden Ave Garage	27.1		Stairs X 2	1424	LP24	14	14	0.0720	0.0430	1x4, 2-Lamp	Elect. LP Bal. & (2) 4' T8's	120		TRUE	1	6,760	0.98	0.58	0.39	8,565	5,115	3,450	\$ 292	\$ 13	\$ 305							
Total Qty Included in Project																	4,948	4,940					2,636	506	299	206	1,252,714	756,243	496,471	\$ 46,223	\$ 6,598	\$ 52,820
																							Controls Savings \$			13,330						
																										\$ 66,150						

Time Clock Savings

Building Name	Floor	Existing Code	Existing kW	Sum of Qty	Total Controlled Load	Current Operating Hours	Current kWh Usage	Proposed Operating Hours	Proposed kWh Usage	kWh Saved per Year	kWh Rate	\$ Saved
Gas -Gas Division (offices)	Ext	CF26	0.0280	3	0.084							
		M100	0.1300	2	0.260							
		M250	0.2950	2	0.590							
		M400	0.4580	2	0.916							
		M1000	1.0800	3	3.240							
		M1500	1.6100	2	3.220							
		PL2X18	0.0400	1	0.040							
		Q1500	1.5000	2	3.000							
		S175	0.2100	1	0.210							
Gas -Gas Division (offices) Total				12	11.560	4380	50,633	728	8,416	42,217	\$ 0.0903	\$ 3,811
Gas -Gas Sales Office	Ext	CF13	0.0130	1	0.013							
		NEON	-	1	-							
		S100FL	0.1300	3	0.390							
		S250CH	0.2950	1	0.295							
		S50	0.0640	2	0.128							
Gas -Gas Sales Office Total				9	0.826	4380	3,618	1,820	1,503	2,115	\$ 0.1157	\$ 245
Gas -Metershop	Ext	1424	0.0720	2	0.144							
		CF13	0.0130	1	0.013							
		M1000	1.0800	3	3.240							
Gas -Metershop Total				7	3.397	4380	14,879	1,820	6,183	8,696	\$ 0.0903	\$ 785
General Services-B & M Shops - Reduced Scope	Ext	M250	0.2950	3	0.885							
		M2X250	0.5900	1	0.590							
General Services-B & M Shops - Reduced Scope Total				5	1.475	4380	6,461	1,820	2,685	3,776	\$ 0.0903	\$ 341
General Services-City Hall	Ext	H175	0.2100	11	2.310							
		I2X90	0.1800	12	2.160							
		M100	0.1300	1	0.130							
General Services-City Hall Total				26	4.600	4380	20,148	1,820	8,372	11,776	\$ 0.0699	\$ 823
General Services-Fleet Maintenance	Ext	1424	0.0720	1	0.072							
		1828	0.1260	1	0.126							
		CF13JJ	0.0130	4	0.052							
		I2X60	0.1200	4	0.480							
		M175	0.2100	4	0.840							
		S250	0.2950	4	1.180							
		S1000	1.0800	4	4.320							
		S70	0.0940	2	0.188							
		S70	0.0940	2	0.188							
General Services-Fleet Maintenance Total				28	7.446	4380	32,613	1,820	13,552	19,062	\$ 0.0699	\$ 1,333
General Services-MSB	Ext	M2X400	0.9160	1	0.916							
		M400	0.4580	4	1.832							
		M70	0.0950	20	1.900							
		PL26	0.0280	2	0.056							
General Services-MSB Total				28	4.704	4380	20,604	1,820	8,561	12,042	\$ 0.0699	\$ 842
Solid Waste-Transfer Station & Scale House - Redu	Ext	M1000	1.0800	1	1.080							
		M250	0.2950	2	0.590							
		S100	0.1300	1	0.130							
		S1000	1.1000	2	2.200							
Solid Waste-Transfer Station & Scale House - Redu Total				7	4.000	4380	17,520	1,820	7,280	10,240	\$ 0.1157	\$ 1,185
Grand Total				192								\$ 9,366

Controls Location Guide

Building Name	Index	Floor	Location	Control ID	Control Qty	Control Code	Total Proposed Load	Proposed Control Description	Hour Code	Proposed Control Load Reduction	Proposed Control Hours Reduction	Total Hours	Total kWh Existing	Total kWh Proposed	Total kWh Saved	Total kWh Dollars Saved
Gas -Gas Division (offices)	7	1	Ice Machine	1853	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$ 1
Gas -Gas Division (offices)	33	1	Accounting Recept. Area	1866	1	OSC	0.1300	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$ 8
Gas -Gas Division (offices)	34	1	Accounting Office 1	1867	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$ 8
Gas -Gas Division (offices)	35	1	Accounting Office Open	1868	1	OSC	0.3900	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	913	639	274	\$ 25
Gas -Gas Division (offices)	36	1	Accounting Office 2	1869	1	OSW	0.1950	Single Pole Occupancy Sensor	3	100%	30%	2,340	456	319	137	\$ 12
Gas -Gas Division (offices)	37	1	Storage/phone	1870	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$ 4
Gas -Gas Division (offices)	39	1	Bathroom Men's	1871	1	OSW	0.0270	Single Pole Occupancy Sensor	6	100%	50%	2,601	70	35	35	\$ 3
Gas -Gas Division (offices)	40	1	Break Rm.	1872	1	OSW	0.1720	Single Pole Occupancy Sensor	8	100%	33%	2,340	402	270	133	\$ 12
Gas -Gas Division (offices)	42	1	Office 4	1873	1	OSW	0.2600	Single Pole Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$ 16
Gas -Gas Division (offices)	43	1	Office 5	1874	1	OSW	0.2600	Single Pole Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$ 16
Gas -Gas Division (offices)	45	1	Office 6	1875	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$ 8
Gas -Gas Division (offices)	47	1	Office 7	1876	1	OSC	0.1950	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	456	319	137	\$ 12
Gas -Gas Division (offices)	49	1	Office 8	1877	1	OSW	0.2600	Single Pole Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$ 16
Gas -Gas Division (offices)	8	2	Bath 1	1854	1	OSW	0.0250	Single Pole Occupancy Sensor	6	100%	50%	2,601	65	33	33	\$ 3
Gas -Gas Division (offices)	13	2	Office 1	1855	1	OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$ 12
Gas -Gas Division (offices)	14	2	Office 2	1856	1	OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$ 12
Gas -Gas Division (offices)	15	2	Office 3	1857	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$ 8
Gas -Gas Division (offices)	16	2	Break Rm.	1858	1	OSW	0.0960	Single Pole Occupancy Sensor	8	100%	33%	2,340	225	151	74	\$ 7
Gas -Gas Division (offices)	17	2	Open Office	1859	1	OSC2	0.4550	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,065	745	319	\$ 29
Gas -Gas Division (offices)	19	2	Bathroom Men's	1860	1	OSW	0.0170	Single Pole Occupancy Sensor	6	100%	50%	2,601	44	22	22	\$ 2
Gas -Gas Division (offices)	20	2	Conf. Rm.	1861	1	OSC	0.2600	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	190	114	76	\$ 7
Gas -Gas Division (offices)	21	2	Office 4	1862	1	OSC	0.1300	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$ 8
Gas -Gas Division (offices)	25	2	Office 5	1863	1	OSC	0.2600	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$ 16
Gas -Gas Division (offices)	26	2	Office 6	1864	1	OSC	0.2880	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	674	472	202	\$ 18
Gas -Gas Division (offices)	27	2	Bathroom Women's	1865	1	OSW	0.0230	Single Pole Occupancy Sensor	6	100%	50%	2,601	60	30	30	\$ 3
Gas -Gas Sales Office	1	1	Office 1	1842	1	OSW	0.1260	Single Pole Occupancy Sensor	3	100%	30%	2,340	295	208	88	\$ 10
Gas -Gas Sales Office	2	1	Recept. Area	1843	1	OSC	0.2560	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$ 21

Controls Location Guide

Gas -Gas Sales Office	6	1 Break Rm.	1844	1 OSW	0.0430	Single Pole Occupancy Sensor	8	100%	33%	2,340	101	67	33	\$	4
Gas -Gas Sales Office	8	1 Office Open	1845	1 OSC2	0.9750	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,282	1,597	684	\$	79
Gas -Gas Sales Office	10	1 Design Open Area	1846	1 OSC	0.2600	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$	21
Gas -Gas Sales Office	13	1 Print Area 2	1847	1 OSC2	0.9350	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,188	1,532	656	\$	76
Gas -Gas Sales Office	14	1 Office 1	1848	1 OSW	0.1950	Single Pole Occupancy Sensor	3	100%	30%	2,340	456	319	137	\$	16
Gas -Gas Sales Office	16	1 Break Rm.	1849	1 OSW	0.0430	Single Pole Occupancy Sensor	8	100%	33%	2,340	101	67	33	\$	4
Gas -Gas Sales Office	17	1 Office 1	1850	1 OSW	0.2600	Single Pole Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$	21
Gas -Gas Sales Office	18	1 Office 2	1851	1 OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	11
Gas -Gas Sales Office	19	1 Office 3	1852	1 OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	11
Gas -Metershop	29	1 Bath	1839	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Gas -Metershop	31	1 Meter Area 2	1840	1 OSC2	1.0400	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,434	1,704	730	\$	66
Gas -Metershop	33	1 Lab	1841	1 OSW	0.1700	Single Pole Occupancy Sensor	3	100%	30%	2,340	398	278	119	\$	11
Gas -Metershop	2	2 Open Office	1831	1 OSC2	0.3900	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	913	639	274	\$	25
Gas -Metershop	12	2 Bathroom Men's	1832	1 OSW2G- 1 RECP	0.0430	Dual Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Gas -Metershop	13	2 Bathroom Women's	1833	1 OSW2G- 1 RECP	0.0430	Dual Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Gas -Metershop	14	2 Office 2	1834	1 OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	8
Gas -Metershop	17	2 Office 4	1835	1 OSWDT	0.0650	Single Pole Dual Tech Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
Gas -Metershop	18	2 Office 5	1836	1 OSW	0.0650	Single Pole Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
Gas -Metershop	19	2 Office 6	1837	1 OSW	0.0650	Single Pole Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
Gas -Metershop	20	2 Office 7	1838	1 OSW	0.0480	Single Pole Occupancy Sensor	3	100%	30%	2,340	112	79	34	\$	3
General Services-B & M Shops - Reduced Scope	10	1 Break Room	1830	1 OSW	0.2580	Single Pole Occupancy Sensor	8	100%	33%	2,340	604	404	199	\$	18
General Services-City Hall	95	1 Office 102	1817	1 OSW2G	0.2560	Dual Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	96	1 Office 101	1818	1 OSW2G	0.2560	Dual Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	101	1 Conf. Rm 108	1819	1 OSW3G	0.6400	Double Pole Occupancy Sensor	14	100%	40%	730	467	280	187	\$	17
General Services-City Hall	114	1 Office 126	1820	1 OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-City Hall	115	1 Office 127	1821	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	116	1 Office 128	1822	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	119	1 Office 130	1823	1 OSW2G	0.2560	Dual Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	121	1 Copy Rm 124	1824	1 OSC	0.0650	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
General Services-City Hall	125	1 Conf. Rm 122	1825	1 OSW2G	0.3840	Dual Pole Occupancy Sensor	14	100%	40%	730	280	168	112	\$	10
General Services-City Hall	64	2 Closet	1811	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1

Controls Location Guide

General Services-City Hall	65	2 Training Rm	1812	1 OSW	0.8960	Single Pole Occupancy Sensor	14	100%	40%	730	654	392	262	\$	24
General Services-City Hall	67	2 Office 225	1813	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	68	2 Office 224	1814	1 OSC	0.1280	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-City Hall	69	2 Office 223	1815	1 OSC	0.2560	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	90	2 Office 3	1816	1 OSW2G	0.0650	Dual Pole Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
General Services-City Hall	5	3 Office Open	1793	1 OSC2	1.0880	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,546	1,782	764	\$	73
General Services-City Hall	6	3 Office 304	1794	1 OSW2G	0.1720	Dual Pole Occupancy Sensor	3	100%	30%	2,340	402	282	121	\$	12
General Services-City Hall	9	3 Office 304/closet	1795	1 OSW2G	0.0640	Dual Pole Occupancy Sensor	3	100%	30%	2,340	150	105	45	\$	4
General Services-City Hall	10	3 Conf Rm. 303	1796	1 OSW2G	0.3840	Dual Pole Occupancy Sensor	14	100%	40%	730	280	168	112	\$	10
General Services-City Hall	11	3 Office 302	1797	1 OSW	0.3840	Single Pole Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-City Hall	15	3 Office 301	1798	1 OSW2G	0.4480	Dual Pole Occupancy Sensor	3	100%	30%	2,340	1,048	734	314	\$	30
General Services-City Hall	16	3 Conf Rm	1799	1 OSC	0.3200	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	234	140	93	\$	9
General Services-City Hall	17	3 Office 309	1800	1 OSW2G	0.3840	Dual Pole Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-City Hall	22	3 Conf Rm.	1801	1 OSC	0.5120	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	374	224	150	\$	14
General Services-City Hall	23	3 Coffee Rm	1802	1 OSW	0.0430	Single Pole Occupancy Sensor	8	100%	33%	2,340	101	67	33	\$	3
General Services-City Hall	38	3 Copy Rm.	1803	1 OSW	0.0650	Single Pole Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
General Services-City Hall	42	3 Office Open	1804	1 OSW	0.1950	Single Pole Occupancy Sensor	3	100%	30%	2,340	456	319	137	\$	13
General Services-City Hall	44	3 Conf Rm.	1805	1 OSW	0.0320	Single Pole Occupancy Sensor	14	100%	40%	730	23	14	9	\$	1
General Services-City Hall	45	3 Office Soto	1806	1 OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-City Hall	46	3 Office Sides	1807	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-City Hall	47	3 Office Mahony	1808	1 OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-City Hall	49	3 Office Tormeno	1809	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-City Hall	59	3 Vending	1810	1 VMX2	0.6780	Add (2) Vending/Miser Control	8	100%	33%	2,340	1,587	1,063	524	\$	50
General Services-Fleet Maintenance	2	1 Lobby	1734	1 OSC	0.2240	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	524	367	157	\$	15
General Services-Fleet Maintenance	3	1 Office 1	1735	1 OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	4	1 Office 2	1736	1 OSC	0.0960	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	5	1 Office 3	1737	1 OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-Fleet Maintenance	6	1 Office 4	1738	1 OSW	0.1700	Single Pole Occupancy Sensor	3	100%	30%	2,340	398	278	119	\$	11
General Services-Fleet Maintenance	9	1 Break Room	1739	1 OSC	0.5160	Ceiling Mounted Occupancy Sensor	8	100%	33%	2,340	1,207	809	398	\$	38
General Services-Fleet Maintenance	10	1 Kitchen	1740	1 OSW	0.1720	Single Pole Occupancy Sensor	8	100%	33%	2,340	402	270	133	\$	13

Controls Location Guide

General Services-Fleet Maintenance	11	1	Kitchen - Snack Machine	1741	1	VM	0.3396	Add Vending/Miser Control	1	100%	30%	8,760	2,970	2,079	891	\$	75
General Services-Fleet Maintenance	14	1	Office 5	1742	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	15	1	Office 6	1743	1	OSW	0.1120	Single Pole Occupancy Sensor	3	100%	30%	2,340	262	183	79	\$	7
General Services-Fleet Maintenance	17	1	Office 7	1744	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	18	1	Bathroom Men's	1745	1	OSW	0.0860	Single Pole Occupancy Sensor	6	100%	50%	2,601	224	112	112	\$	11
General Services-Fleet Maintenance	19	1	Bathroom Women's	1746	1	OSW	0.1296	Single Pole Occupancy Sensor	6	100%	50%	2,601	336	168	168	\$	16
General Services-Fleet Maintenance	20	1	Kitchen 2	1747	1	OSC	0.1830	Ceiling Mounted Occupancy Sensor	8	100%	33%	2,340	428	287	141	\$	13
General Services-Fleet Maintenance	23	1	Office 8	1748	1	OSW	0.1440	Single Pole Occupancy Sensor	3	100%	30%	2,340	337	236	101	\$	10
General Services-Fleet Maintenance	28	1	Office 9	1749	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	29	1	Radio Shop	1750	1	OSC	0.4800	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,123	786	337	\$	32
General Services-Fleet Maintenance	30	1	Office 11	1751	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	35	1	Small Engine Shop Parts	1752	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
General Services-Fleet Maintenance	36	1	Small Engine Shop Office	1753	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	60	1	Office 1-17	1757	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	61	1	Office 1-16	1768	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	62	1	Office 1-15	1769	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	63	1	Office 1-14	1770	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-Fleet Maintenance	64	1	Office 1-8	1771	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	65	1	Office 1-7	1772	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	66	1	Office Loc 4	1773	1	OSW	0.1440	Single Pole Occupancy Sensor	3	100%	30%	2,340	337	236	101	\$	10
General Services-Fleet Maintenance	67	1	Office Loc 4 B	1774	1	OSW	0.0480	Single Pole Occupancy Sensor	3	100%	30%	2,340	112	79	34	\$	3
General Services-Fleet Maintenance	72	1	Tool Room	1775	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
General Services-Fleet Maintenance	73	1	Parts Office	1776	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	74	1	Bath / Lockers	1777	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
General Services-Fleet Maintenance	75	1	Bathroom	1778	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
General Services-Fleet Maintenance	76	1	Locker Room	1779	1	OSW2G	0.2150	Dual Pole Occupancy Sensor	6	100%	50%	2,601	559	280	280	\$	27
General Services-Fleet Maintenance	77	1	Office Fabrication 1	1780	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-Fleet Maintenance	78	1	Office Fabrication 2	1781	1	OSW2G	0.0960	Dual Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	84	1	Shop Zone 1	1782	1	PH	1.7100	Photocell Sensor	3	100%	30%	2,340	4,001	2,801	1,200	\$	114
General Services-Fleet Maintenance	87	1	Work Bay Zone 2	1783	1	PH	4.1040	Photocell Sensor	3	100%	30%	2,340	9,603	6,722	2,881	\$	275

Controls Location Guide

General Services-Fleet Maintenance	89	1	Work Bay Zone 3	1784	1	PH	1.7100	Photocell Sensor	3	100%	30%	2,340	4,001	2,801	1,200	\$	114
General Services-Fleet Maintenance	91	1	Office Fire Trucks 1	1785	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	92	1	Office Fire Trucks 2	1786	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	93	1	Aisle Zone 4	1787	1	PH	2.2230	Photocell Sensor	3	100%	30%	2,340	5,202	3,641	1,561	\$	149
General Services-Fleet Maintenance	97	1	Work Bay Zone 5	1788	1	PH	3.7620	Photocell Sensor	3	100%	30%	2,340	8,803	6,162	2,641	\$	252
General Services-Fleet Maintenance	101	1	Aisle Zone 6	1789	1	PH	2.5650	Photocell Sensor	3	100%	30%	2,340	6,002	4,201	1,801	\$	172
General Services-Fleet Maintenance	103	1	Work Bay Zone 17	1790	1	PH	2.0520	Photocell Sensor	3	100%	30%	2,340	4,802	3,361	1,441	\$	137
General Services-Fleet Maintenance	107	1	Aisle Zone 8	1791	1	PH	3.2490	Photocell Sensor	3	100%	30%	2,340	7,603	5,322	2,281	\$	217
General Services-Fleet Maintenance	110	1	Work Bay - Drink Machine	1792	1	VMX2	0.6780	Add (2) Vending/Miser Control	1	100%	30%	8,760	5,939	4,157	1,782	\$	151
General Services-Fleet Maintenance	39	2	Recept. Area	1754	1	OSC3	0.9440	(3) Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	2,209	1,546	663	\$	63
General Services-Fleet Maintenance	41	2	Mech Room 2-1	1755	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
General Services-Fleet Maintenance	42	2	Office 2-2	1756	1	OSW	0.1860	Single Pole Occupancy Sensor	3	100%	30%	2,340	435	305	131	\$	12
General Services-Fleet Maintenance	44	2	Office 2-3	1757	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-Fleet Maintenance	45	2	Bathroom Women's	1758	1	OSW	0.0860	Single Pole Occupancy Sensor	6	100%	50%	2,601	224	112	112	\$	11
General Services-Fleet Maintenance	46	2	Bathroom Men's	1759	1	OSW	0.0860	Single Pole Occupancy Sensor	6	100%	50%	2,601	224	112	112	\$	11
General Services-Fleet Maintenance	47	2	Jc	1760	1	OSW	0.0130	Single Pole Occupancy Sensor	7	100%	66%	520	7	2	4	\$	0
General Services-Fleet Maintenance	48	2	Office 2-7	1761	1	OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
General Services-Fleet Maintenance	50	2	Break Room 2-8	1762	1	OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
General Services-Fleet Maintenance	52	2	Computer Room 2-10	1763	1	OSW	0.1700	Single Pole Occupancy Sensor	7	100%	66%	520	88	30	58	\$	5
General Services-Fleet Maintenance	53	2	Training 2-12	1764	1	OSC	0.4320	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	315	189	126	\$	12
General Services-Fleet Maintenance	54	2	Conference Room 2-13	1765	1	OSW	0.2580	Single Pole Occupancy Sensor	14	100%	40%	730	188	113	75	\$	7
General Services-Fleet Maintenance	56	2	Office 2-15	1766	1	OSW	0.1440	Single Pole Occupancy Sensor	3	100%	30%	2,340	337	236	101	\$	10
General Services-MSB	131	1	Office 125	1713	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-MSB	133	1	Small Open Office	1714	1	OSC	0.4480	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,048	734	314	\$	30
General Services-MSB	135	1	Office 123	1715	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	137	1	Office 128	1716	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	140	1	Office 115	1717	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	141	1	Office 114	1718	1	OSW2G	0.1280	Dual Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	145	1	Office 110	1719	1	OSW	0.3840	Single Pole Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-MSB	146	1	Office 127	1720	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	147	1	Copy 126	1721	1	OSW	0.2600	Single Pole Occupancy Sensor	3	100%	30%	2,340	608	426	183	\$	17

Controls Location Guide

General Services-MSB	151	1	Testing Rm 111	1722	1	OSW	0.2560	Single Pole Occupancy Sensor	14	100%	40%	730	187	112	75	\$	7
General Services-MSB	155	1	Customer Service Entry	1723	1	OSC2-PH	0.5120	(2) Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	1,198	839	359	\$	34
General Services-MSB	162	1	Office 153	1724	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	168	1	Break Rm C110	1725	1	OSW	0.1440	Single Pole Occupancy Sensor	6	100%	33%	2,340	337	226	111	\$	11
General Services-MSB	169	1	Dock Area	1726	1	OSW	0.1720	Single Pole Occupancy Sensor	5	100%	50%	1,040	179	89	89	\$	9
General Services-MSB	170	1	Dock Area C110 Mail	1727	1	OSW	0.1720	Single Pole Occupancy Sensor	7	100%	66%	520	89	30	59	\$	5
General Services-MSB	171	1	Office 144	1728	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-MSB	172	1	Office 144 A	1729	1	OSW	0.0640	Single Pole Occupancy Sensor	3	100%	30%	2,340	150	105	45	\$	4
General Services-MSB	173	1	Office 144 B	1730	1	OSW	0.0640	Single Pole Occupancy Sensor	3	100%	30%	2,340	150	105	45	\$	4
General Services-MSB	187	1	Office Damico	1731	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-MSB	188	1	Office Priestler	1732	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
General Services-MSB	192	1	Office 141	1733	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	79	2	Office 234	1699	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	80	2	Office 233	1700	1	OSWPH	0.1280	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	94	2	File /break Rm. 218	1701	1	OSW	0.2150	Single Pole Occupancy Sensor	8	100%	33%	2,340	503	337	166	\$	16
General Services-MSB	95	2	Conf Rm 216	1702	1	OSC	0.2560	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	187	112	75	\$	7
General Services-MSB	96	2	Office 215	1703	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	97	2	Office 214	1704	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	98	2	Office 213	1705	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	99	2	Office 212	1706	1	OSC2-PH	0.5120	(2) Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	1,198	839	359	\$	34
General Services-MSB	101	2	Conf Rm 227	1707	1	OSC	0.1280	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	93	56	37	\$	3
General Services-MSB	102	2	Office 226	1708	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	105	2	Office 225	1709	1	OSWPH	0.1250	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	109	2	Office 224	1710	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	110	2	Office 223	1711	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	111	2	Office 222	1712	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	9	3	Jc	1665	1	OSW2G	0.0430	Dual Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
General Services-MSB	10	3	Budget 341	1666	1	OSW	0.0650	Single Pole Occupancy Sensor	3	100%	30%	2,340	152	106	46	\$	4
General Services-MSB	11	3	Office 351	1667	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	12	3	Office 350	1668	1	OSC	0.3840	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-MSB	13	3	Office 350 A	1669	1	OSC	0.3840	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26

Controls Location Guide

General Services-MSB	14	3	Office 352	1670	1	OSC	0.3840	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-MSB	15	3	Office 353	1671	1	OSC	0.3840	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	899	629	270	\$	26
General Services-MSB	16	3	Office 366	1672	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	17	3	Storage	1673	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	36%	520	22	8	15	\$	1
General Services-MSB	18	3	Office	1674	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	19	3	Office 363	1675	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	20	3	Office 362	1676	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
General Services-MSB	27	3	Office 374	1677	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	28	3	Training Rm.	1678	1	OSC	0.3840	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	280	168	112	\$	10
General Services-MSB	29	3	Office 372	1679	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	30	3	Office 372 A	1680	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	31	3	Office 371	1681	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	37	3	Office 344	1682	1	OSC	0.2560	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	38	3	Office 343	1683	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	39	3	Conf 342	1684	1	OSC	0.2560	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	187	112	75	\$	7
General Services-MSB	40	3	Office 333	1685	1	OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	42	3	Office 331	1686	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
General Services-MSB	43	3	Open Office 3	1687	1	OSC2	0.5760	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,348	943	404	\$	39
General Services-MSB	44	3	File Rm 315	1688	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
General Services-MSB	46	3	File 313	1689	1	OSC	0.1720	Ceiling Mounted Occupancy Sensor	7	100%	66%	520	89	30	59	\$	5
General Services-MSB	47	3	Break Rm	1690	1	OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
General Services-MSB	48	3	File Rm 311	1691	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
General Services-MSB	49	3	Office Dettenwanger	1692	1	OSWPH	0.0640	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	150	105	45	\$	4
General Services-MSB	50	3	Office Marcin	1693	1	OSWPH	0.0640	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	150	105	45	\$	4
General Services-MSB	51	3	Office Post	1694	1	OSWPH	0.0640	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	150	105	45	\$	4
General Services-MSB	53	3	Office 319	1695	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	56	3	Office 316	1696	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
General Services-MSB	61	3	Office 391 A	1697	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
General Services-MSB	63	3	Vending 390	1698	1	OSC2	0.3390	(2) Ceiling Mounted Occupancy Sensors	1	100%	30%	8,760	2,970	2,079	891	\$	75
Library-Main Library	118	1	Stacks A	1648	1	OSC2-FL- PH	1.7850	(2) Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	5,766	3,459	2,306	\$	209
Library-Main Library	119	1	Stacks B	1649	1	OSC2-FL- PH	1.7850	(2) Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	5,766	3,459	2,306	\$	209

Controls Location Guide

Library-Main Library	120	1	Stacks C	1650	1	OSC-FL-PH	1.2750	Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	121	1	Stacks C	1651	1	OSC2-FL-PH	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	122	1	Stacks D	1652	1	OSC2-FL-PH	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	123	1	Stacks D	1653	1	OSC2-FL-PH	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor, PH	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	128	1	Office B S	1654	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
Library-Main Library	130	1	Kitchen1047	1655	1	OSC	0.3010	Ceiling Mounted Occupancy Sensor	31	100%	40%	3,230	972	583	389	\$	35
Library-Main Library	135	1	Storage1043	1656	1	OSW	0.1280	Single Pole Occupancy Sensor	7	100%	86%	520	67	23	44	\$	4
Library-Main Library	138	1	Restroom 1027	1657	1	OSW	0.0460	Single Pole Occupancy Sensor	6	100%	50%	2,601	120	60	60	\$	6
Library-Main Library	137	1	Restroom 1028	1658	1	OSW	0.0460	Single Pole Occupancy Sensor	6	100%	50%	2,601	120	60	60	\$	6
Library-Main Library	138	1	Office 1035	1659	1	OSC-PH	0.1280	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	141	1	Office1036	1660	1	OSC	0.1280	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	169	1	Utility1005	1661	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	86%	520	22	8	15	\$	1
Library-Main Library	170	1	Break Room	1662	1	OSW	0.1280	Single Pole Occupancy Sensor	8	100%	33%	2,340	300	201	99	\$	9
Library-Main Library	171	1	Office1036	1663	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	172	1	Office 1011	1664	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Library-Main Library	59	2	Stacks Section A	1618	1	OSC2-FL	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	60	2	Stacks Section B	1619	1	OSC2-FL	1.0200	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	3,295	1,977	1,318	\$	119
Library-Main Library	61	2	Stacks Section C	1620	1	OSC2-FL	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	62	2	Stacks Section D	1621	1	OSC2-FL	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	63	2	Stacks Section E	1622	1	OSC2-FL	0.5100	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	1,647	988	659	\$	60
Library-Main Library	64	2	Stacks Section F	1623	1	OSC2-FL	0.5100	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	1,647	988	659	\$	60
Library-Main Library	65	2	Stacks Section G	1624	1	OSC2-FL	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	66	2	Stacks Section H	1625	1	OSC2-FL	1.2750	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	4,118	2,471	1,647	\$	149
Library-Main Library	67	2	Stacks Section I	1626	1	OSC2-FL	0.5100	(2) Ceiling Mounted Flood Occupancy Sensor	31	100%	40%	3,230	1,647	988	659	\$	60
Library-Main Library	71	2	Copy Area	1627	1	OSW	0.0460	Single Pole Occupancy Sensor	31	100%	40%	3,230	149	89	59	\$	5
Library-Main Library	73	2	Entry Youth Services	1628	1	OSC	0.0640	Ceiling Mounted Occupancy Sensor	9	100%	33%	2,339	150	100	49	\$	5
Library-Main Library	74	2	Youth Services	1629	1	OSC4	1.3440	(4) Ceiling Mounted Occupancy Sensors	31	100%	40%	3,230	4,341	2,605	1,736	\$	157
Library-Main Library	75	2	Utility2006	1630	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	86%	520	22	8	15	\$	1
Library-Main Library	76	2	Utility2004	1631	1	OSW	0.0640	Single Pole Occupancy Sensor	7	100%	86%	520	33	11	22	\$	2
Library-Main Library	79	2	Class2010	1632	1	OSW	0.0640	Single Pole Occupancy Sensor	31	100%	40%	3,230	207	124	83	\$	7
Library-Main Library	81	2	Class2013	1633	1	OSC2	0.7040	(2) Ceiling Mounted Occupancy Sensors	8	100%	33%	2,340	1,647	1,104	544	\$	52

Controls Location Guide

Library-Main Library	83	2 Office2015	1634	1 OSC2	1.2160	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,845	1,992	854	\$	81
Library-Main Library	85	2 Office2016	1635	1 OSWPH	0.1280	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	86	2 Class2012	1636	1 OSW	0.0540	Single Pole Occupancy Sensor	3	100%	30%	2,340	126	88	38	\$	4
Library-Main Library	92	2 Office2019	1637	1 OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Library-Main Library	97	2 Jc	1638	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Library-Main Library	102	2 Office Open Hallway	1639	1 OSC3	0.4480	(3) Ceiling Mounted Occupancy Sensor	9	100%	33%	2,339	1,048	702	346	\$	33
Library-Main Library	103	2 Restroom 2030	1640	1 OSW	0.0460	Single Pole Occupancy Sensor	6	100%	50%	2,601	120	60	60	\$	6
Library-Main Library	104	2 Restroom 2031	1641	1 OSW	0.0460	Single Pole Occupancy Sensor	6	100%	50%	2,601	120	60	60	\$	6
Library-Main Library	105	2 Office2032	1642	1 OSC-PH	0.2560	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Library-Main Library	106	2 Office2033	1643	1 OSC-PH	0.2560	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Library-Main Library	107	2 Office2034	1644	1 OSC-PH	0.1280	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	108	2 Kitchen	1645	1 OSW	0.0640	Single Pole Occupancy Sensor	7	100%	66%	520	33	11	22	\$	2
Library-Main Library	109	2 Office2035	1646	1 OSC-PH	0.1920	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
Library-Main Library	110	2 Office2037	1647	1 OSC-PH	0.2560	Ceiling Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Library-Main Library	32	3 Hallway Elevator	1619	1 OSC	0.1280	Ceiling Mounted Occupancy Sensor	9	100%	33%	2,339	299	201	99	\$	9
Library-Main Library	43	3 Conference3015	1616	1 OSW	0.1280	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Library-Main Library	44	3 Office3014	1617	1 OSC	0.1280	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	13	4 Jc	1610	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Library-Main Library	18	4 Office4013	1611	1 OSC	0.1280	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Library-Main Library	19	4 Office4012	1612	1 OSC	0.3200	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	749	524	225	\$	21
Library-Main Library	20	4 Office4010	1613	1 OSW	0.0640	Single Pole Occupancy Sensor	3	100%	30%	2,340	150	105	45	\$	4
Library-Main Library	21	4 Office4011	1614	1 OSW	0.0640	Single Pole Occupancy Sensor	3	100%	30%	2,340	150	105	45	\$	4
Pks & Rec-Long Center Aquacenter	1	1 Office First Aid	1550	1 OSW	0.2150	Single Pole Occupancy Sensor	3	100%	30%	2,340	503	352	151	\$	14
Pks & Rec-Long Center Aquacenter	2	1 Office Super	1551	1 OSW	0.0430	Single Pole Occupancy Sensor	3	100%	30%	2,340	101	70	30	\$	3
Pks & Rec-Long Center Aquacenter	3	1 Storage	1552	1 OSW	0.2580	Single Pole Occupancy Sensor	7	100%	66%	526	134	46	89	\$	7
Pks & Rec-Long Center Aquacenter	4	1 Restroom	1553	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Pks & Rec-Long Center Aquacenter	20	1 Office	1554	1 OSW	0.0660	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Pks & Rec-Long Center Aquacenter	23	1 Storage Outside	1555	1 OSW	0.3400	Single Pole Occupancy Sensor	7	100%	66%	520	177	60	117	\$	9
Pks & Rec-Long Center Aquacenter	24	1 Office C J T	1556	1 OSW	0.1700	Single Pole Occupancy Sensor	3	100%	30%	2,340	398	278	119	\$	11
Pks & Rec-Long Center Aquacenter	25	1 Snack Desk	1557	1 OSW	0.1700	Single Pole Occupancy Sensor	3	100%	30%	2,340	398	278	119	\$	11
Pks & Rec-Long Center Aquacenter	29	1 Starfish Classroom	1558	1 OSW	0.5100	Single Pole Occupancy Sensor	3	100%	30%	2,340	1,193	835	358	\$	34

Controls Location Guide

Pks & Rec-Long Center Aquacenter	32	1 Jo	1559	1 OSW	0.0850	Single Pole Occupancy Sensor	7	100%	66%	520	44	15	29	\$	2
Pks & Rec-Long Center Aquacenter	33	1 Classroom Dolphin	1560	1 OSW	0.5160	Single Pole Occupancy Sensor	3	100%	30%	2,340	1,207	845	362	\$	35
Pks & Rec-Long Center Aquacenter	40	1 Office Open	1561	1 OSW	0.4480	Single Pole Occupancy Sensor	3	100%	30%	2,340	1,048	734	314	\$	30
Pks & Rec-Long Center Aquacenter	41	1 Office Schultz	1562	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Pks & Rec-Long Center Aquacenter	42	1 Office Beasley	1563	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Pks & Rec-Long Center Aquacenter	46	2 Office Open	1564	1 OSC2	0.9600	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	2,246	1,572	674	\$	64
Pks & Rec-Long Center Aquacenter	47	2 Office Bigley	1565	1 OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
Pks & Rec-Long Center Aquacenter	48	2 Office Carpenter	1566	1 OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
Pks & Rec-Long Center Aquacenter	49	2 Copy Room	1567	1 OSC	0.0960	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
Pks & Rec-Long Center Aquacenter	50	2 File Room	1568	1 OSW	0.0480	Single Pole Occupancy Sensor	3	100%	30%	2,340	112	79	34	\$	3
Pks & Rec-Long Center Aquacenter	51	2 Office Lew	1569	1 OSW	0.0960	Single Pole Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
Pks & Rec-Long Center Aquacenter	55	2 Office Youth	1570	1 OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Pks & Rec-Long Center Aquacenter	56	2 Office Workroom	1571	1 OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Pks & Rec-Long Center Aquacenter	57	2 Office Clayton	1572	1 OSC	0.0960	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	225	157	67	\$	6
Pks & Rec-Long Center Aquacenter	58	2 Office Laterza	1573	1 OSC	0.1920	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Pks & Rec-Long Center Aquacenter	61	2 Bathroom Women's	1574	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Pks & Rec-Long Center Aquacenter	62	2 Bathroom Men's	1575	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Pks & Rec-Long Center Aquacenter	64	2 Office	1576	1 OSC	0.2880	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	674	472	202	\$	19
Pks & Rec-Long Center Aquacenter	65	2 Office Lockwood	1577	1 OSC	0.2880	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	674	472	202	\$	19
Pks & Rec-Long Center Aquacenter	66	2 Conference Manatee	1578	1 OSC	0.2400	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	175	105	70	\$	7
Pks & Rec-Long Center Aquacenter	75	2 Classroom A	1579	1 OSC	0.3870	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	906	634	272	\$	26
Pks & Rec-Long Center Aquacenter	76	2 Classroom B	1580	1 OSC	0.4730	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,107	775	332	\$	32
Police-Beach Substation	1	2 Lobby	1538	1 OSW	0.2150	Single Pole Occupancy Sensor	11	100%	30%	912	196	137	59	\$	5
Police-Beach Substation	4	2 Conference Room	1539	1 OSW	0.2550	Single Pole Occupancy Sensor	14	100%	40%	730	186	112	74	\$	9
Police-Beach Substation	6	2 Tele Room	1540	1 OSW	0.0850	Single Pole Occupancy Sensor	7	100%	66%	520	44	15	29	\$	3
Police-Beach Substation	8	2 Bathroom Women's	1541	1 OSW	0.0570	Single Pole Occupancy Sensor	5	100%	50%	1,040	59	30	30	\$	4
Police-Beach Substation	10	2 Bathroom Men's	1542	1 OSW	0.0570	Single Pole Occupancy Sensor	5	100%	50%	1,040	59	30	30	\$	4
Police-Beach Substation	11	2 Control Desk	1543	1 OSC2	0.4550	(2) Ceiling Mounted Occupancy Sensors	11	100%	30%	912	415	290	124	\$	11
Police-Beach Substation	16	2 Office	1544	1 OSW	0.2600	Single Pole Occupancy Sensor	11	100%	30%	912	237	166	71	\$	6
Police-Beach Substation	17	2 Bathroom Men's	1545	1 OSW	0.1060	Single Pole Occupancy Sensor	5	100%	50%	1,040	110	55	55	\$	7
Police-Beach Substation	19	2 Bathroom Women's	1546	1 OSW	0.1060	Single Pole Occupancy Sensor	5	100%	50%	1,040	110	55	55	\$	7

Controls Location Guide

Police-Beach Substation	23	2 Office Open	1547	1 OSC	0.7800	Ceiling Mounted Occupancy Sensor	2	100%	30%	751	586	410	176	\$	19
Police-Beach Substation	24	2 Office LI	1548	1 OSW	0.2600	Single Pole Occupancy Sensor	2	100%	30%	751	195	137	59	\$	6
Police-Countryside Station	1	1 Roll Call	1514	1 OSC	0.4730	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	345	207	138	\$	13
Police-Countryside Station	3	1 Jo	1515	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Countryside Station	4	1 Storage A	1516	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Countryside Station	5	1 Office Supervisor	1517	1 OSW	0.0430	Single Pole Occupancy Sensor	11	100%	30%	912	39	27	12	\$	1
Police-Countryside Station	6	1 Office Supervisor	1518	1 OSC	0.3440	Ceiling Mounted Occupancy Sensor	11	100%	30%	912	314	220	94	\$	7
Police-Countryside Station	10	1 Tele Room	1519	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Countryside Station	11	1 Bathroom Men's Entry	1520	1 OSW	0.0130	Single Pole Occupancy Sensor	6	100%	50%	2,601	34	17	17	\$	2
Police-Countryside Station	13	1 Bathroom Men's Locker Room	1521	1 OSW2G	0.1980	Dual Pole Occupancy Sensor	6	100%	50%	2,601	515	257	257	\$	25
Police-Countryside Station	14	1 Men's Locker Room	1522	1 OSC	0.4300	Ceiling Mounted Occupancy Sensor	6	100%	50%	2,601	1,118	559	559	\$	53
Police-Countryside Station	19	1 Women's Locker Room	1523	1 OSW	0.3440	Single Pole Occupancy Sensor	6	100%	50%	2,601	895	447	447	\$	43
Police-Countryside Station	20	1 Conference Room	1524	1 OSW	0.0860	Single Pole Occupancy Sensor	14	100%	40%	730	63	38	25	\$	2
Police-Countryside Station	21	1 Office Work Room	1525	1 OSW	0.2400	Single Pole Occupancy Sensor	11	100%	30%	912	219	153	66	\$	5
Police-Countryside Station	22	1 Break Room	1526	1 OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Police-Countryside Station	23	1 Break Room - Drink Machine	1527	1 VM	0.3390	Add Vending/Miser Control	1	100%	30%	8,760	2,970	2,079	891	\$	75
Police-Countryside Station	25	1 Holding Cell Open	1528	1 OSC	0.0480	Ceiling Mounted Occupancy Sensor	1	100%	30%	8,760	420	294	126	\$	11
Police-Countryside Station	30	1 Storage	1529	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Countryside Station	31	1 Evidence Room	1530	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Countryside Station	34	1 Evidence Room	1531	1 OSW	0.0850	Single Pole Occupancy Sensor	11	100%	30%	912	78	54	23	\$	2
Police-Countryside Station	36	1 Lobby Office	1532	1 OSC	0.1440	Ceiling Mounted Occupancy Sensor	1	100%	30%	8,760	1,261	883	378	\$	32
Police-Countryside Station	38	1 Office Small	1533	1 OSW	0.0960	Single Pole Occupancy Sensor	11	100%	30%	912	88	61	26	\$	2
Police-Countryside Station	39	1 Lobby	1534	1 OSC	0.0860	Ceiling Mounted Occupancy Sensor	11	100%	30%	912	78	55	24	\$	2
Police-Countryside Station	42	1 Elect Room	1535	1 OSW	0.0850	Single Pole Occupancy Sensor	7	100%	66%	520	44	15	29	\$	2
Police-Countryside Station	43	1 Bathroom Women's	1536	1 OSW	0.0260	Single Pole Occupancy Sensor	5	100%	50%	1,040	27	14	14	\$	1
Police-Countryside Station	44	1 Bathroom Men's	1537	1 OSW	0.0260	Single Pole Occupancy Sensor	5	100%	50%	1,040	27	14	14	\$	1
Police-Main Station	4	1 Bathroom Men's C102	1351	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	6	1 Bathroom Women's C103	1352	1 OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	21	1 Storage S171	1353	1 OSW	0.0660	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	22	1 Office S172	1354	1 OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6

Controls Location Guide

Police-Main Station	24	1	Conference Room S173	1355	1	OSWPH-2G	0.1920	Dual Pole Occupancy Sensor, PH	14	100%	40%	730	140	84	56	\$	5
Police-Main Station	25	1	Storage	1356	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	27	1	Loading Dock S97	1357	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	29	1	Office S196	1358	1	OSW	0.0860	Single Pole Occupancy Sensor	2	100%	30%	751	65	45	19	\$	2
Police-Main Station	30	1	Office S195	1359	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	31	1	Evidence Locker	1360	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	37	1	Bathroom S184	1361	1	OSW	0.0430	Single Pole Occupancy Sensor	5	100%	50%	1,040	45	22	22	\$	2
Police-Main Station	38	1	Storage S183	1362	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	40	1	Storage S182	1363	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	41	1	Storage S181	1364	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	43	1	Storage S193	1365	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	44	1	Storage	1366	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	55	1	Jc C105	1367	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	56	1	Elect Room C104	1368	1	TSW	0.1290	Timer Switch, Line Voltage	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	57	1	Mech Room E101	1369	1	TSW2G	0.1720	Timer Switch, Dual Pole Occupancy Sensor	7	100%	66%	520	89	30	59	\$	5
Police-Main Station	58	1	Storage S154	1370	1	OSW	0.1280	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	59	1	Office S150	1371	1	OSC2	0.9600	(2) Ceiling Mounted Occupancy Sensors	1	100%	30%	8,760	8,410	5,887	2,523	\$	214
Police-Main Station	63	1	Storage S151	1372	1	OSW	0.1280	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	68	1	Fire Pump	1373	1	TSW	0.0860	Timer Switch, Line Voltage	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	69	1	Elect Room C115	1374	1	TSW2G	0.3440	Timer Switch, Dual Pole Occupancy Sensor	7	100%	66%	520	179	61	118	\$	10
Police-Main Station	75	1	Evidence W144	1375	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	78	1	Jc W145	1376	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	85	1	Office S121	1377	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Police-Main Station	86	1	Office S122	1378	1	OSW	0.1920	Single Pole Occupancy Sensor	2	100%	30%	751	144	101	43	\$	4
Police-Main Station	87	1	Office S123	1379	1	OSW	0.1920	Single Pole Occupancy Sensor	2	100%	30%	751	144	101	43	\$	4
Police-Main Station	88	1	Roll Call S140	1380	1	OSC2	0.7680	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	561	336	224	\$	21
Police-Main Station	89	1	Roll Call S140	1381	1	OSC2	0.7680	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	561	336	224	\$	21
Police-Main Station	90	1	Laundry S130	1382	1	OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Police-Main Station	91	1	Interview Room S102	1383	1	OSW3WAY	0.1720	Single Pole Occupancy Sensor	7	100%	66%	520	89	30	59	\$	5
Police-Main Station	92	1	Tele Room C101	1384	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	100	2	Office S241	1385	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17

Controls Location Guide

Police-Main Station	101	2 Office S242	1386	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	102	2 Office S243	1387	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	103	2 Office S244	1388	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	104	2 Storage S247	1389	1 OSW	0.2560	Single Pole Occupancy Sensor	7	100%	66%	520	133	45	88	\$	7
Police-Main Station	105	2 Multi Room S46	1390	1 OSW	0.0430	Single Pole Occupancy Sensor	8	100%	33%	2,340	101	67	33	\$	3
Police-Main Station	106	2 Storage S245	1391	1 OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	107	2 Elect Room C204	1392	1 TSW2G	0.1290	Timer Switch, Dual Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	108	2 Jc C205	1393	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	117	2 Break Room S270	1394	1 OSC2	0.3870	(2) Ceiling Mounted Occupancy Sensors	8	100%	33%	2,340	906	607	299	\$	29
Police-Main Station	119	2 Break Room S270 - Drink Machines	1395	1 VMX2	0.6780	Add (2) VendingMiser Control	1	100%	30%	8,760	5,939	4,157	1,782	\$	151
Police-Main Station	120	2 Break Room S270 - Snack Machine	1396	1 VM	0.3390	Add VendingMiser Control	1	100%	30%	8,760	2,970	2,079	891	\$	75
Police-Main Station	122	2 Mens Lockers S260	1397	1 OSC7DT	0.9460	(7) Single Pole DT Occupancy Sensor	6	100%	50%	2,601	2,461	1,230	1,230	\$	118
Police-Main Station	134	2 Office S240	1398	1 OSC3	0.6850	(3) Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,603	1,122	481	\$	46
Police-Main Station	136	2 Storage W245	1399	1 OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	137	2 Office S220	1400	1 OSC	0.5760	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,348	943	404	\$	39
Police-Main Station	138	2 Computer Room W244	1401	1 OSC	0.5120	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,198	839	359	\$	34
Police-Main Station	139	2 Computer Room W243	1402	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	140	2 Office W242	1403	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	141	2 Conference Room W270	1404	1 OSC2	1.0240	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	748	449	299	\$	28
Police-Main Station	142	2 Tele Room W282	1405	1 OSW	0.1280	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	143	2 Ups W281	1406	1 OSW	0.2560	Single Pole Occupancy Sensor	7	100%	66%	520	133	45	88	\$	7
Police-Main Station	144	2 Kitchen W291	1407	1 OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Police-Main Station	145	2 Office W292	1408	1 OSW	0.2560	Single Pole Occupancy Sensor	2	100%	30%	751	192	135	58	\$	5
Police-Main Station	146	2 Classroom	1409	1 OSC2	0.7680	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	561	336	224	\$	21
Police-Main Station	147	2 Classroom	1410	1 OSC2	0.5120	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	374	224	150	\$	14
Police-Main Station	150	2 Training W230a	1411	1 OSC	0.5120	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	374	224	150	\$	14
Police-Main Station	151	2 Training W230b	1412	1 OSC2	0.5160	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	377	226	151	\$	14
Police-Main Station	152	2 Training W230b	1413	1 OSC2	0.4300	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	314	188	126	\$	12
Police-Main Station	153	2 Training W230b	1414	1 OSC2	0.4300	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	314	188	126	\$	12
Police-Main Station	154	2 Training W230b	1415	1 OSC2	0.4300	(2) Ceiling Mounted Occupancy Sensors	14	100%	40%	730	314	188	126	\$	12

Controls Location Guide

Police-Main Station	156	2	Office W224	1416	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	50	\$	6
Police-Main Station	157	2	Office W223	1417	1	OSW	0.1290	Single Pole Occupancy Sensor	3	100%	30%	2,340	302	211	91	\$	9
Police-Main Station	158	2	Tele Room W222	1418	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	159	2	Tele Room W221	1419	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	160	2	Office Open W210	1420	1	OSC3	0.5760	(3) Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,348	943	404	\$	39
Police-Main Station	162	2	Bathroom Men's W215	1421	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	163	2	Bathroom Women's W216	1422	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	164	2	Break Room W214	1423	1	OSWPH	0.0860	Wall Mounted Occupancy Sensor, PH	8	100%	33%	2,340	201	135	66	\$	6
Police-Main Station	165	2	Office W213	1424	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	166	2	Office W212	1425	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	169	2	Storage W260	1426	1	OSW	0.2580	Single Pole Occupancy Sensor	7	100%	66%	520	134	46	89	\$	7
Police-Main Station	170	2	Tele Room W280	1427	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	171	2	Office S210	1428	1	OSW	0.1920	Single Pole Occupancy Sensor	3	100%	30%	2,340	449	314	135	\$	13
Police-Main Station	172	2	Office S211	1429	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	173	2	Tele Room C201	1430	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	174	2	Bathroom Men's C202	1431	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	176	2	Bathroom Women's C203	1432	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	179	3	Office S330	1433	1	OSC5	1.4740	(5) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	3,449	2,414	1,035	\$	99
Police-Main Station	183	3	Storage S331	1434	1	OSW	0.0640	Single Pole Occupancy Sensor	7	100%	66%	520	33	11	22	\$	2
Police-Main Station	184	3	Conference Room W301	1435	1	OSC	0.5760	Ceiling Mounted Occupancy Sensor	14	100%	40%	730	420	252	168	\$	16
Police-Main Station	186	3	Storage S336	1436	1	OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	187	3	Break Room S337	1437	1	OSW	0.1280	Single Pole Occupancy Sensor	8	100%	33%	2,340	300	201	99	\$	9
Police-Main Station	188	3	Storage S338	1438	1	OSW	0.1290	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	189	3	Conference Room S333	1439	1	OSW2G	0.1280	Dual Pole Occupancy Sensor	14	100%	40%	730	93	56	37	\$	3
Police-Main Station	190	3	Office S332	1440	1	OSW	0.1290	Single Pole Occupancy Sensor	3	100%	30%	2,340	302	211	91	\$	9
Police-Main Station	191	3	Office S334	1441	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	192	3	Office S335	1442	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	193	3	Office S359	1443	1	OSW	0.1280	Single Pole Occupancy Sensor	2	100%	30%	751	96	67	29	\$	2
Police-Main Station	197	3	Office S370	1444	1	OSC2	0.4920	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,151	806	345	\$	33
Police-Main Station	199	3	Office S381	1445	1	OSC2	0.4710	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,102	771	331	\$	32

Controls Location Guide

Police-Main Station	201	3 Storage S382	1446	1 OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	202	3 Office S383	1447	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	204	3 Office S372	1448	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	205	3 Conference Room S373	1449	1 OSW3WAY	0.2560	Single Pole Occupancy Sensor	14	100%	40%	730	187	112	75	\$	7
Police-Main Station	206	3 Office379	1450	1 OSW2G	0.0860	Dual Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	208	3 Office374	1451	1 OSW	0.1720	Single Pole Occupancy Sensor	3	100%	30%	2,340	402	282	121	\$	12
Police-Main Station	210	3 Copy Room S376	1452	1 OSW	0.0640	Single Pole Occupancy Sensor	8	100%	33%	2,340	150	100	49	\$	5
Police-Main Station	211	3 Office S376	1453	1 OSC2	0.3840	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	899	629	270	\$	26
Police-Main Station	212	3 Office S375	1454	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	213	3 Storage S377	1455	1 OSW	0.1280	Single Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	221	3 Jc C305	1456	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	222	3 Elect Room C304	1457	1 OSW2G	0.1290	Dual Pole Occupancy Sensor	7	100%	66%	520	67	23	44	\$	4
Police-Main Station	223	3 Copy Room S360	1458	1 OSW	0.1920	Single Pole Occupancy Sensor	8	100%	33%	2,340	449	301	148	\$	14
Police-Main Station	224	3 Office S350	1459	1 OSC2	0.4740	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,109	776	333	\$	32
Police-Main Station	226	3 Office S351	1460	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	227	3 Office S352	1461	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	228	3 Office S353	1462	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	229	3 Office S354	1463	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	230	3 Conference Room S358	1464	1 OSW	0.1290	Single Pole Occupancy Sensor	14	100%	40%	730	94	57	38	\$	4
Police-Main Station	231	3 Copy Room S355	1465	1 OSW	0.1280	Single Pole Occupancy Sensor	8	100%	33%	2,340	300	201	99	\$	9
Police-Main Station	232	3 Storage S357	1466	1 OSW	0.2560	Single Pole Occupancy Sensor	7	100%	66%	520	133	45	88	\$	7
Police-Main Station	238	3 Office W330	1467	1 OSC2	0.4940	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,156	809	347	\$	33
Police-Main Station	242	3 Office W332	1468	1 OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	243	3 Office W320	1469	1 OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	244	3 Interview W333	1470	1 OSW	0.1920	Single Pole Occupancy Sensor	2	100%	30%	751	144	101	43	\$	4
Police-Main Station	247	3 Office W350	1471	1 OSC	0.3650	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	854	598	256	\$	24
Police-Main Station	249	3 Office W351	1472	1 OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	250	3 Storage W340	1473	1 OSW	0.3440	Single Pole Occupancy Sensor	7	100%	66%	520	179	61	118	\$	10
Police-Main Station	251	3 Storage W341	1474	1 OSW	0.0430	Single Pole Occupancy Sensor	7	100%	66%	520	22	8	15	\$	1
Police-Main Station	253	3 Storage W344	1475	1 OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	255	3 Office W360	1476	1 OSC2	0.2990	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	700	490	210	\$	20

Controls Location Guide

Police-Main Station	256	3	Office W361	1477	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	257	3	Break Room W362	1478	1	OSW	0.1280	Single Pole Occupancy Sensor	8	100%	33%	2,340	300	201	99	\$	9
Police-Main Station	259	3	Office W360	1479	1	OSC2	0.4710	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,102	771	331	\$	32
Police-Main Station	261	3	Tele Room W364	1480	1	OSW	0.0640	Single Pole Occupancy Sensor	7	100%	66%	520	33	11	22	\$	2
Police-Main Station	262	3	Bathroom W367	1481	1	OSW	0.0270	Single Pole Occupancy Sensor	5	100%	50%	1,040	28	14	14	\$	1
Police-Main Station	267	3	Office W390	1482	1	OSC2	0.6230	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,458	1,020	437	\$	42
Police-Main Station	272	3	Office W391	1483	1	OSW	0.1930	Single Pole Occupancy Sensor	3	100%	30%	2,340	452	316	135	\$	13
Police-Main Station	277	3	Bathroom W372	1484	1	OSW	0.0270	Single Pole Occupancy Sensor	5	100%	50%	1,040	28	14	14	\$	1
Police-Main Station	280	3	Bathroom W370	1485	1	OSW	0.0270	Single Pole Occupancy Sensor	5	100%	50%	1,040	28	14	14	\$	1
Police-Main Station	283	3	Office W375	1486	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	286	3	Office W380	1487	1	OSC	0.5990	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,402	981	420	\$	40
Police-Main Station	290	3	Office W380	1488	1	OSC	0.4710	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	1,102	771	331	\$	32
Police-Main Station	291	3	Office W380	1489	1	OSC2	0.5150	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,205	844	362	\$	34
Police-Main Station	296	3	Office W380	1490	1	OSC	0.2790	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	653	457	196	\$	19
Police-Main Station	300	3	Office W388	1491	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	302	3	Office W387	1492	1	OSW	0.1720	Single Pole Occupancy Sensor	3	100%	30%	2,340	402	282	121	\$	12
Police-Main Station	304	3	Storage W384	1493	1	OSW	0.0840	Single Pole Occupancy Sensor	7	100%	66%	520	44	15	29	\$	2
Police-Main Station	305	3	Office W383	1494	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	306	3	Conference Room W382	1495	1	OSW	0.2560	Single Pole Occupancy Sensor	4	100%	30%	4,160	1,065	745	319	\$	32
Police-Main Station	307	3	Office W310	1496	1	OSW	0.0860	Single Pole Occupancy Sensor	3	100%	30%	2,340	201	141	60	\$	6
Police-Main Station	310	3	Office W312	1497	1	OSW	0.1290	Single Pole Occupancy Sensor	3	100%	30%	2,340	302	211	91	\$	9
Police-Main Station	311	3	Office W313	1498	1	OSW	0.2560	Single Pole Occupancy Sensor	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	316	3	Office S312	1499	1	OSW	0.1280	Single Pole Occupancy Sensor	3	100%	30%	2,340	300	210	90	\$	9
Police-Main Station	317	3	Conference Room S314	1500	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	14	100%	40%	730	140	84	56	\$	5
Police-Main Station	318	3	Office S313	1501	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	319	3	Office S315	1502	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17
Police-Main Station	320	3	Office S316	1503	1	OSW	0.2150	Single Pole Occupancy Sensor	3	100%	30%	2,340	503	352	151	\$	14
Police-Main Station	322	3	Bathroom S317	1504	1	OSW	0.0670	Single Pole Occupancy Sensor	5	100%	50%	1,040	70	35	35	\$	3
Police-Main Station	324	3	Office S318	1505	1	OSWPH	0.1920	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	449	314	135	\$	13
Police-Main Station	325	3	Storage S320	1506	1	OSW	0.1920	Single Pole Occupancy Sensor	7	100%	66%	520	100	34	66	\$	5
Police-Main Station	327	3	Office S319	1507	1	OSWPH	0.2560	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	599	419	180	\$	17

Controls Location Guide

Police-Main Station	328	3	Tele Room C301	1508	1	OSW	0.0860	Single Pole Occupancy Sensor	7	100%	66%	520	45	15	30	\$	2
Police-Main Station	330	3	Bathroom Men's C302	1509	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	331	3	Bathroom Women's C303	1510	1	OSW	0.0430	Single Pole Occupancy Sensor	6	100%	50%	2,601	112	56	56	\$	5
Police-Main Station	339	Ext	Generator Room C118	1513	1	TSW	0.4300	Timer Switch, Line Voltage	7	100%	66%	520	224	76	148	\$	12
Police-Main Station	333	Pent	Mechanical Room 400	1511	1	TSW	0.5160	Timer Switch, Line Voltage	7	100%	66%	520	268	91	177	\$	14
Police-Main Station	334	Pent	Boiler Room 401	1512	1	TSW	0.1290	Timer Switch, Line Voltage	7	100%	66%	520	67	23	44	\$	4
Public Service-Bldg. B	1	1	Open Office Entry	1328	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	4	100%	30%	4,160	358	250	107	\$	10
Public Service-Bldg. B	3	1	Bathroom Women's	1329	1	OSW	0.0430	Single Pole Occupancy Sensor	5	100%	50%	1,040	45	22	22	\$	2
Public Service-Bldg. B	4	1	Office	1330	1	OSW	0.0430	Single Pole Occupancy Sensor	5	100%	50%	1,040	45	22	22	\$	2
Public Service-Bldg. B	5	1	Open Office	1331	1	OSC2	0.5690	(2) Ceiling Mounted Occupancy Sensors	4	100%	30%	4,160	2,367	1,657	710	\$	64
Public Service-Bldg. B	8	1	Kitchen	1332	1	OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Public Service-Bldg. B	10	1	Conference Room	1333	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	14	100%	40%	730	63	38	25	\$	2
Public Service-Bldg. B	11	1	Office 1	1334	1	OSW	0.1290	Single Pole Occupancy Sensor	4	100%	30%	4,160	537	376	161	\$	15
Public Service-Bldg. B	12	1	Office 2	1335	1	OSC	0.1340	Ceiling Mounted Occupancy Sensor	4	100%	30%	4,160	557	390	167	\$	15
Public Service-Bldg. B	14	1	Office 3	1336	1	OSW	0.1290	Single Pole Occupancy Sensor	4	100%	30%	4,160	537	376	161	\$	15
Public Service-Bldg. B	15	1	Office 4	1337	1	OSW	0.1290	Single Pole Occupancy Sensor	4	100%	30%	4,160	537	376	161	\$	15
Public Service-Bldg. B	16	1	Office 5	1338	1	OSW	0.0860	Single Pole Occupancy Sensor	4	100%	30%	4,160	358	250	107	\$	10
Public Service-Bldg. B	17	1	Office 6	1339	1	OSW	0.1290	Single Pole Occupancy Sensor	4	100%	30%	4,160	537	376	161	\$	15
Public Service-Bldg. B	18	1	Copy Room	1340	1	OSW	0.0860	Single Pole Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Public Services-Traffic shop	1	1	Open Shop Right	1311	1	OSC2	0.2880	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	674	472	202	\$	18
Public Services-Traffic shop	2	1	Open Shop Middle	1312	1	OSC2	0.3360	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	786	550	236	\$	21
Public Services-Traffic shop	3	1	Open Shop Left	1313	1	OSC	0.1440	Ceiling Mounted Occupancy Sensor	3	100%	30%	2,340	337	236	101	\$	9
Public Services-Traffic shop	5	1	Hallway/storage	1314	1	OSC	0.0860	Ceiling Mounted Occupancy Sensor	9	100%	33%	2,339	201	135	66	\$	6
Public Services-Traffic shop	7	1	Office 1	1315	1	OSW	0.0480	Single Pole Occupancy Sensor	3	100%	30%	2,340	112	79	34	\$	3
Public Services-Traffic shop	8	1	Office 2 Traffic Super	1316	1	OSWPH	0.0480	Wall Mounted Occupancy Sensor, PH	3	100%	30%	2,340	112	79	34	\$	3
Public Services-Traffic shop	9	1	Office 2 Traffic Super 2	1317	1	OSW	0.0480	Single Pole Occupancy Sensor	3	100%	30%	2,340	112	79	34	\$	3
Public Services-Traffic shop	10	1	Signal Shop	1318	1	OSC2	0.4960	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,161	812	348	\$	31
Public Services-Traffic shop	12	1	Bathroom Men's	1319	1	OSW	0.0860	Single Pole Occupancy Sensor	5	100%	50%	1,040	89	45	45	\$	4
Public Services-Traffic shop	13	1	Bathroom Women's	1320	1	OSW2G	0.0860	Dual Pole Occupancy Sensor	5	100%	50%	1,040	89	45	45	\$	4
Public Services-Traffic shop	14	1	Shower	1321	1	OSW	0.0130	Single Pole Occupancy Sensor	5	100%	50%	1,040	14	7	7	\$	1

Controls Location Guide

Public Services-Traffic shop	15	1	Break Area	1322	1	OSC	0.0860	Ceiling Mounted Occupancy Sensor	8	100%	33%	2,340	201	135	66	\$	6
Public Services-Traffic shop	17	1	Jc	1323	1	OSW	0.0130	Single Pole Occupancy Sensor	7	100%	66%	520	7	2	4	\$	0
Public Services-Traffic shop	18	1	Warehouse Left Front	1324	1	OSC2-WM	0.2550	(2) Ceiling Mounted Occupancy Sensor, WM	3	100%	30%	2,340	597	418	179	\$	16
Public Services-Traffic shop	19	1	Warehouse Left Back	1325	1	OSC2-WM	0.2550	(2) Ceiling Mounted Occupancy Sensor, WM	3	100%	30%	2,340	597	418	179	\$	16
Public Services-Traffic shop	20	1	Warehouse Right Back	1326	1	OSC2-WM	0.2550	(2) Ceiling Mounted Occupancy Sensor, WM	3	100%	30%	2,340	597	418	179	\$	16
Public Services-Traffic shop	21	1	Warehouse Right Front	1327	1	OSC2-WM	0.2550	(2) Ceiling Mounted Occupancy Sensor, WM	3	100%	30%	2,340	597	418	179	\$	16
Solid Waste-Transfer Station & Scale House - Redu	8	1	Over Conveyor	1307	1	PH	1.9380	Photocell Sensor	3	100%	30%	2,340	4,535	3,174	1,360	\$	157
Solid Waste-Transfer Station & Scale House - Redu	9	1	Over Conveyor	1308	1	PH	1.6150	Photocell Sensor	3	100%	30%	2,340	3,779	2,645	1,134	\$	131
Traffic Engineering-Parking/Garden Ave Garage	1		Front Office	1295	1	OSC2	0.5850	(2) Ceiling Mounted Occupancy Sensors	3	100%	30%	2,340	1,369	958	411	\$	39
Traffic Engineering-Parking/Garden Ave Garage	7		Office	1296	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
Traffic Engineering-Parking/Garden Ave Garage	8		Office	1297	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
Traffic Engineering-Parking/Garden Ave Garage	9		Office	1298	1	OSW	0.1300	Single Pole Occupancy Sensor	3	100%	30%	2,340	304	213	91	\$	9
Traffic Engineering-Parking/Garden Ave Garage	10		Tunnel	1299	1	TSW	0.2580	Timer Switch, Line Voltage	7	100%	66%	520	134	46	89	\$	7
Traffic Engineering-Parking/Garden Ave Garage	11		Storage	1300	1	TSW	0.3440	Timer Switch, Line Voltage	7	100%	66%	520	179	61	118	\$	10
Traffic Engineering-Parking/Garden Ave Garage	16		Bathroom Men's	1301	1	OSW	0.0610	Single Pole Occupancy Sensor	6	100%	50%	2,601	159	79	79	\$	8
Traffic Engineering-Parking/Garden Ave Garage	18		Bathroom Women's	1302	1	OSW	0.0610	Single Pole Occupancy Sensor	6	100%	50%	2,601	159	79	79	\$	8
Traffic Engineering-Parking/Garden Ave Garage	19		Money Office	1303	1	OSC	0.2580	Ceiling Mounted Occupancy Sensor	8	100%	33%	2,340	604	404	199	\$	19
Traffic Engineering-Parking/Garden Ave Garage	24	1	Parking Level 5	1304	1	CLOCK	10.9980	Timeclock w/ Manual Override	1	100%	30%	8,760	96,342	67,440	28,903	\$	2,448
Total Qty:				850,839	535							445,700	300,304	145,396	\$	13,330	

Exhibit G-8
Engineered Cost Avoidance Calculations

High Efficiency Cooling

Facility	Baseline kWh	kWh Saved	% Sav	\$ Saved	Guar Savings
Long Center	2527700	66,090	3%	\$5,450	\$5,014
Gas Division	133873	29,374	22%	\$3,148	\$2,896
Public Works E	60649	7,343	12%	\$787	\$724
Transfer Station	20444	1,327	6%	\$150	\$138
Totals	2742666	104,134	4%	\$9,535	\$8,772
Guaranteed Contract Savings: 92%:				\$8,772	

COOLING EQUIPMENT UPGRADE

Honeywell

Job Name: Clearwater

Building: Long Center

OVERVIEW:

The existing packaged RTUs (Two 7.5 ton gas packs, three 12.5, two 15 ton and three 17.5 ton) serving the serving the Uparc section of the Long Center are aging and less efficient than newer equipment currently available. They will be replaced with a new High Efficiency packaged unit in the existing location. The savings calculation assumes an average cooling load over the period that the equipment is in operation. It also assumes that the savings will be based upon the current building loads, including ventilation.

ASSUMPTIONS:

Present cooling energy usage.....	230,250 KWH/yr
Electrical demand period.....	10 months
Existing cooling equipment EER rating.....	7.7 MBTU/KWH
New cooling equipment EER rating.....	10.8 MBTU/KWH
Cooling equipment rated capacity.....	135.0 tons
Weekly cooling system operation.....	60 hrs/wk
Cooling season length.....	32 wk/yr
Avoided cost of electricity.....	\$0.0760 /KWH
Avoided cost of demand.....	\$3.00 /KW
Cooling conversion factor.....	12 MBTU/ton-hr

UTILITY SAVINGS CALCULATIONS:

Load Factor = **0.57**

Demand Savings = **34.42 KW**

Cooling Savings = **66,090 KWH/yr**

Cost Savings @ 90% = **\$5,450 /yr**

UTILITY SAVINGS FORMULAS:

$$\text{Load Factor} = \frac{\text{cooling KWH} \times (\text{exist EER})}{\left[\text{tons} \times 12 \times \left(\frac{\text{oper.}}{\text{period}} \right) \right]}$$

$$\text{Demand Savings} = \left(\frac{\text{load}}{\text{factor}} \right) \times (\text{tons}) \times (12) \times \left(\frac{1}{\text{exist EER}} - \frac{1}{\text{new EER}} \right)$$

$$\text{Cooling Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{oper.}}{\text{period}} \right)$$

$$\text{Cost Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{demand}}{\text{cost}} \right) + \left(\frac{\text{cooling}}{\text{savings}} \right) \times \left(\frac{\text{elect.}}{\text{cost}} \right)$$

COOLING EQUIPMENT UPGRADE

Honeywell

Job Name: Clearwater

Building: Gas Division Offices

OVERVIEW:

The existing packaged air cooled chiller serving the Facility is aging and less efficient than newer equipment currently available. The system will be replaced with a new High Efficiency packaged unit in the existing location. The savings calculation assumes an average cooling load over the period that the equipment is in operation. It also assumes that the savings will be based upon the current building loads, including ventilation.

ASSUMPTIONS:

Present cooling energy usage.....	102,334 KWH/yr
Electrical demand period.....	10 months
Existing cooling equipment EER rating.....	7.7 MBTU/KWH
New cooling equipment EER rating.....	10.8 MBTU/KWH
Cooling equipment rated capacity.....	60.0 tons
Weekly cooling system operation.....	60 hrs/wk
Cooling season length.....	32 wk/yr
Avoided cost of electricity.....	\$0.0981 /KWH
Avoided cost of demand.....	\$4.03 /KW
Cooling conversion factor.....	12 MBTU/ton-hr

UTILITY SAVINGS CALCULATIONS:

Load Factor = **0.57**

Demand Savings = **15.30 KW**

Cooling Savings = **29,374 KWH/yr**

Cost Savings @ 90% = **\$3,148 /yr**

UTILITY SAVINGS FORMULAS:

$$\text{Load Factor} = \frac{\text{cooling KWH} \times (\text{exist EER})}{\left[\text{tons} \times 12 \times \left(\frac{\text{oper.}}{\text{period}} \right) \right]}$$

$$\text{Demand Savings} = \left(\frac{\text{load}}{\text{factor}} \right) \times (\text{tons}) \times (12) \times \left(\frac{1}{\text{exist EER}} - \frac{1}{\text{new EER}} \right)$$

$$\text{Cooling Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{oper.}}{\text{period}} \right)$$

$$\text{Cost Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{demand}}{\text{cost}} \right) + \left(\frac{\text{cooling}}{\text{savings}} \right) \times \left(\frac{\text{elect.}}{\text{cost}} \right)$$

COOLING EQUIPMENT UPGRADE

Honeywell

Job Name: Clearwater

Building: Public Works - E

OVERVIEW:

The existing packaged RTUs (Two 7.5 ton split Systems) serving the Facility are aging and less efficient than newer equipment currently available. They will be replaced with a new High Efficiency packaged unit in the existing location. The savings calculation assumes an average cooling load over the period that the equipment is in operation. It also assumes that the savings will be based upon the current building loads, including ventilation.

ASSUMPTIONS:

Present cooling energy usage.....	25,583 KWH/yr
Electrical demand period.....	10 months
Existing cooling equipment EER rating.....	7.7 MBTU/KWH
New cooling equipment EER rating.....	10.8 MBTU/KWH
Cooling equipment rated capacity.....	15.0 tons
Weekly cooling system operation.....	60 hrs/wk
Cooling season length.....	32 wk/yr
Avoided cost of electricity.....	\$0.0981 /KWH
Avoided cost of demand.....	\$4.03 /KW
Cooling conversion factor.....	12 MBTU/ton-hr

UTILITY SAVINGS CALCULATIONS:

Load Factor = **0.57**

Demand Savings = **3.82 KW**

Cooling Savings = **7,343 KWH/yr**

Cost Savings @ 90% = **\$787 /yr**

UTILITY SAVINGS FORMULAS:

$$\text{Load Factor} = \frac{\text{cooling KWH} \times (\text{exist EER})}{\left[\text{tons} \times 12 \times \left(\frac{\text{oper.}}{\text{period}} \right) \right]}$$

$$\text{Demand Savings} = \left(\frac{\text{load}}{\text{factor}} \right) \times (\text{tons}) \times (12) \times \left(\frac{1}{\text{exist EER}} - \frac{1}{\text{new EER}} \right)$$

$$\text{Cooling Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{oper.}}{\text{period}} \right)$$

$$\text{Cost Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{demand}}{\text{cost}} \right) + \left(\frac{\text{cooling}}{\text{savings}} \right) \times \left(\frac{\text{elect.}}{\text{cost}} \right)$$

COOLING EQUIPMENT UPGRADE

Honeywell

Job Name: Clearwater

Building: Transfer Station Scale House

OVERVIEW:

The existing split system (2 ton split Systems) serving the Facility is aging and less efficient than newer equipment currently available. They will be replaced with a new High Efficiency packaged unit in the existing location. The savings calculation assumes an average cooling load over the period that the equipment is in operation. It also assumes that the savings will be based upon the current building loads, including ventilation.

ASSUMPTIONS:

Present cooling energy usage.....	<u>3,411</u> KWH/yr
Electrical demand period.....	<u>10</u> months
Existing cooling equipment EER rating.....	<u>7.7</u> MBTU/KWH
New cooling equipment EER rating.....	<u>12.6</u> MBTU/KWH
Cooling equipment rated capacity.....	<u>2.0</u> tons
Weekly cooling system operation.....	<u>60</u> hrs/wk
Cooling season length.....	<u>32</u> wk/yr
Avoided cost of electricity.....	<u>\$0.1257</u> /KWH
Avoided cost of demand.....	<u>\$0.00</u> /KW
Cooling conversion factor.....	<u>12</u> MBTU/ton-hr

UTILITY SAVINGS CALCULATIONS:

Load Factor = 0.57

Demand Savings = 0.69 KW

Cooling Savings = 1,327 KWH/yr

Cost Savings @ 90% = \$150 /yr

UTILITY SAVINGS FORMULAS:

$$\text{Load Factor} = \frac{\text{cooling KWH} \times (\text{exist EER})}{\left[\text{tons} \times 12 \times \left(\frac{\text{oper.}}{\text{period}} \right) \right]}$$

$$\text{Demand Savings} = \left(\frac{\text{load}}{\text{factor}} \right) \times (\text{tons}) \times (12) \times \left(\frac{1}{\text{exist EER}} - \frac{1}{\text{new EER}} \right)$$

$$\text{Cooling Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{oper.}}{\text{period}} \right)$$

$$\text{Cost Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{demand}}{\text{cost}} \right) + \left(\frac{\text{cooling}}{\text{savings}} \right) \times \left(\frac{\text{elect.}}{\text{cost}} \right)$$

**Exhibit G-8
Engineered Cost Avoidance Calculations**

HVAC Controls

Facility	Rate	GSF	kWh	dTh	\$ Savings	S/GSF	kWh/Gsf	Guar Savings
BEACH REC & LIBRARY - MOD	70	9,600	7,621		\$ 747	\$ 0.078	0.79	\$ 672
BEACH REC & LIBRARY - MOD - Unocc	70	9,600	4,540		\$ 445	\$ 0.046	0.47	\$ 400
COUNTRYSIDE IMPOUND LOT	53	1,800	2,635		\$ 200	\$ 0.111	1.46	\$ 180
ENGINEERING FIELD OPERATION #E	70	4,800	4,445		\$ 436	\$ 0.091	0.93	\$ 392
ENGINEERING FIELD OPERATION #E - Unocc	70	4,800	2,579		\$ 253	\$ 0.053	0.54	\$ 227
FIRE STATION # 48 TRAINING CENTER	70	7,200	4,034		\$ 396	\$ 0.055	0.56	\$ 356
FIRE STATION # 48 TRAINING CENTER -UNOCC	70	7,200	3,208		\$ 315	\$ 0.044	0.45	\$ 283
GAS ADMIN. BUILDING	70	7,200	5,666		\$ 556	\$ 0.077	0.79	\$ 500
GAS ADMIN. BUILDING - UNOCC	70	7,200	2,991		\$ 293	\$ 0.041	0.42	\$ 264
GAS SERVICE WAREHOUSE	70	5,625	4,646		\$ 456	\$ 0.081	0.83	\$ 410
GAS SERVICE WAREHOUSE - UNOCC	70	5,625	2,776		\$ 272	\$ 0.048	0.49	\$ 245
LIBRARY, N. GREENWOOD BRANCH	70	7,200	859		\$ 84	\$ 0.012	0.12	\$ 76
LIBRARY, N. GREENWOOD BRANCH - Unoccupied	70	7,200	4,391		\$ 431	\$ 0.060	0.61	\$ 387
Long Center D - 76/70 Occupied - 80/68 Unoccupied	53	60,000	48,400		\$ 3,976	\$ 0.066	0.81	\$ 3,576
Main Library - 76/70 Occupied - 80/68 Unoccupied	53	90,000	185,500		\$ 16,531	\$ 0.184	2.06	\$ 14,866
MUNICIPAL SERVICES BLDG.	53	68,264	83,282		\$ 6,325	\$ 0.093	1.22	\$ 5,688
POLICE STATION, MAIN	53	79,300	49,800		\$ 10,269	\$ 0.129	0.63	\$ 9,235
POLICE, CLW BEACH STA.	100	6,370	4,992		\$ 1,135	\$ 0.178	0.78	\$ 1,021
POLICE, CLW BEACH STA. - Unocc	100	6,370	1,962		\$ 154	\$ 0.024	0.31	\$ 139
POLICE, COUNTRYSIDE STA.	53	8,000	9,760		\$ 976	\$ 0.122	1.22	\$ 878
PUBLIC WORKS BLDG. A	70	7,125	12,187		\$ 1,195	\$ 0.168	1.71	\$ 1,075
PUBLIC WORKS BLDG. A - Unocc	70	7,125	3,928		\$ 385	\$ 0.054	0.55	\$ 346
TRANSFER STATION OFFICE	60	800	843		\$ 106	\$ 0.132	1.05	\$ 95
TRANSFER STATION OFFICE - UNOCC	60	800	332		\$ 42	\$ 0.052	0.42	\$ 38
		419,204	451,377	-	\$ 45,976			\$ 41,347

Guaranteed Contract Savings: 90%: \$41,347

Facility	Rate	GSF	kWh	dTh	\$ Savings Elec	\$ Savings Gas	\$ Savings (Total)	kWh/Gsf
City Hall	53	24,581	351,460	2,616	\$ 26,692	\$ 36,770.4	\$63,462	0.08
					\$24,023	\$33,093	\$57,116	0.07

Facilities in Red have savings figures based on average kWh reduction per GSF of Modeled Facilities

Electric Utility Rate Baseline

Electric Utility Rate Baseline					Unit Costs													
					kWh				kW				kWh					
Rate	Demand/Non	Rate Code	Voltage	Account	On-Peak		Off-Peak		Base	On Peak	GRT	MFF	MUT	Total Tax	On-Peak	Off-Peak	Base	On Peak
					Energy	Fuel	Energy	Fuel										
GSDT-1	Demand	53	Secondary	N/A	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
GS-1	Non-Demand	60	Secondary	N/A	\$ 0.05638	\$ 0.05933	\$ -	\$ -	\$ -	\$ -	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.12566	\$ -	\$ -	\$ -
GSD-1	Demand	70	Secondary	N/A	\$ 0.03095	\$ 0.05933	\$ -	\$ -	\$ 3.71	\$ -	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.09805	\$ -	\$ 4.03	\$ -
LS-1	Non-Demand	16	N/A	N/A	\$ 0.02105	\$ 0.05522					2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.08283	\$ -	\$ -	\$ -
GST-1	Non-Demand	100	Secondary	N/A	\$ 0.12926	\$ 0.08015	\$ 0.02283	\$ 0.04948			2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.22742	\$ 0.07853	\$ -	\$ -
GSLM-2	Demand	169	Secondary	73051-92711	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
GSLM-2	Demand	169	Secondary	09544-56332	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948	\$ 0.91	\$ 2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
GSLM-2	Demand	171	Secondary	44991-14344	\$ 0.03095	\$ 0.05933	\$ -	\$ -	\$ 3.71	\$ -	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.09805	\$ -	\$ 4.03	\$ -

On-Peak Periods for Time Of Use Rates

On-Peak periods for TOU rates are Monday through Friday as follows:

November through March 6 to 10 a.m. / 6 to 10 p.m.

April through October.....Noon to 9 p.m.

All other hours, including Saturday, Sunday, and six major holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas) and the adjacent weekday if a holiday falls on Saturday or Sunday, are considered Off-Peak.

Natural Gas Rate Baseline

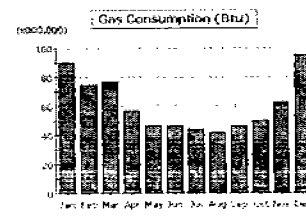
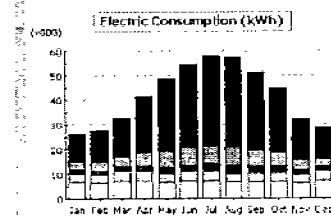
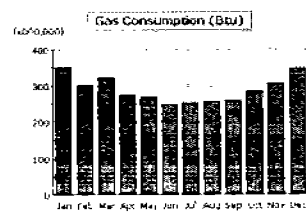
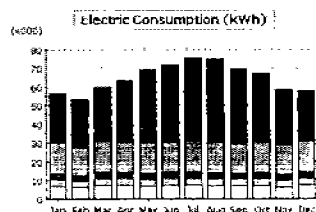
Unit Costs - \$/Therm													Contract NG Rates
Rate	Non Fuel	ECA	RIA	UIA	PGA	GRT	MFF	Taxes	MUT	SST	PCT		\$/Therms
NMGS	\$ 0.40	\$ 0.04	\$ -	\$ -	\$ 0.89	2.5%	6.0%	0.0%	0.0%	0.0%	0.0%		\$ 1.406

Main PD - Existing

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	39	40.6	46.5	62.2	82.9	93.8	102.6	102.5	87.3	76.1	50.9	40.3	824.8
Heat Reject.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	15.6	14.2	15.8	15.7	16.2	16	16.5	16.5	15.8	16.2	15.3	15.6	189.4
Pumps & Aux.	9.7	8.8	9.7	9.4	9.7	9.3	9.7	9.7	9.4	9.7	9.4	9.7	114
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	23.7	22	25	24.6	23.7	24.6	25	24.4	24	24.4	22.7	25	289.1
Task Lights	2	1.9	2.2	2.2	2	2.2	2.2	2.1	2.1	2.1	1.9	2.2	25.5
Area Lights	17.7	16.8	19.3	19.3	17.7	19.3	19.3	18.5	18.5	18.5	16.9	19.3	221.1
Total	107.7	104.3	118.5	133.4	152.3	165.3	175.3	173.7	157.1	147	117.1	112.2	1,663.80

Main PD - 76/70 Occupied - 80/68 Unoccupied

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	36.9	38.2	43.8	58.6	78.8	89.3	98	98.1	83.1	72.1	48.2	38.2	783.2
Heat Reject.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	15.2	13.8	15.2	14.9	15.4	15.1	15.6	15.6	15	15.5	14.8	15.2	181.2
Pumps & Aux.	9.7	8.8	9.7	9.3	9.7	9.3	9.6	9.6	9.3	9.7	9.4	9.7	113.9
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	23.7	22	25	24.6	23.7	24.6	25	24.4	24	24.4	22.7	25	289.1
Task Lights	2	1.9	2.2	2.2	2	2.2	2.2	2.1	2.1	2.1	1.9	2.2	25.5
Area Lights	17.7	16.8	19.3	19.3	17.7	19.3	19.3	18.5	18.5	18.5	16.9	19.3	221.1
Total	105.2	101.4	115.3	129	147.3	159.8	169.8	168.3	152	142.3	113.9	109.6	1,614.00



Electric Consumption (kWh x000) Baseline

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	26.26	25.64	28.84	33.15	39.2	41.7	44.6	44.53	39.81	36.99	29.37	26.79	416.88
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	16.93	15.29	16.93	16.38	16.93	16.38	16.93	16.93	16.38	16.93	16.38	16.93	199.32
Pumps & Aux.	2.93	2.65	2.93	2.84	2.93	2.84	2.93	2.93	2.84	2.93	2.84	2.93	34.54
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	3.66	3.45	3.97	3.95	3.66	3.95	3.97	3.82	3.8	3.81	3.49	3.97	45.5
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	6.57	6.22	7.19	7.18	6.57	7.18	7.19	6.88	6.87	6.88	6.24	7.19	82.16
Total	56.35	53.25	59.86	63.5	69.3	72.05	75.62	75.09	69.89	67.54	58.33	57.81	778.39

Gas Consumption (Btu x000,000) Baseline

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	348.6	299.4	320.6	272.7	266.7	245.3	250.8	252.6	254.9	281.3	307.3	346.2	3,446.30
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	2.2	2.1	2.4	2.4	2.1	2.2	2.1	2	2	1.9	2.3	2.5	25.7
Vent. Fans	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumps & Aux.	0	0	0	0	0	0	0	0	0	0	0	0	0
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	0	0	0	0	0	0	0	0	0	0	0	0	0
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	350.8	301.5	323	275.1	268.8	247.4	252.9	254.6	256.9	283.3	309.2	348.5	3,471.90

Electric Consumption (kWh x000) Post Retrofit

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	11.13	13.26	15.42	22.67	29.62	33.62	38.62	36.49	31.18	25.74	18.29	12.26	284.31
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	3.32	3.64	4.3	5.67	6.73	7.29	7.76	7.69	6.84	5.91	4.09	3.54	66.77
Vent. Fans	1.55	1.53	1.62	1.99	2.31	2.36	2.43	2.43	2.34	2.37	1.85	1.68	24.45
Pumps & Aux.	0	0	0	0	0	0	0	0	0	0	0	0	0
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	3.66	3.45	3.97	3.95	3.66	3.95	3.97	3.82	3.8	3.81	3.49	3.97	45.5
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	6.57	6.22	7.19	7.18	6.57	7.18	7.19	6.88	6.87	6.88	6.24	7.19	82.16
Total	26.24	28.11	32.49	41.47	48.89	54.39	57.97	57.3	51.02	44.71	31.97	28.63	503.2

Gas Consumption (Btu x000,000) Post Retrofit

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	87.83	72.58	74.18	54.49	44.63	44.1	42.28	40.11	44.47	47.81	60.64	32.83	705.97
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	2.19	2.11	2.44	2.4	2.12	2.19	2.1	1.96	1.95	2	1.91	2.28	25.66
Vent. Fans	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumps & Aux.	0	0	0	0	0	0	0	0	0	0	0	0	0
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	0	0	0	0	0	0	0	0	0	0	0	0	0
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	90.01	74.7	76.62	56.9	46.75	46.28	44.39	42.08	46.42	49.81	62.55	35.12	731.63

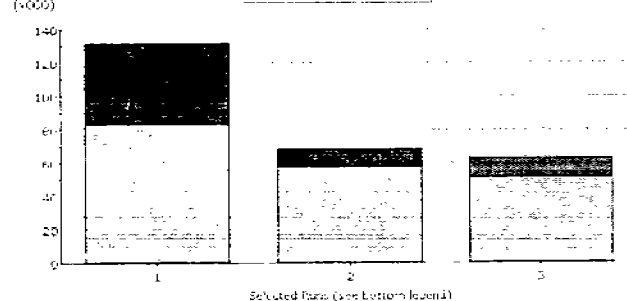
Electric Consumption (kWh x000) 76/70

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	9.3	11.13	13.24	19.12	24.33	28.05	30.63	30.29	25.39	21.04	13.21	10.14	235.88
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	2.19	2.41	2.88	3.79	4.43	4.81	5.21	5.1	4.45	3.82	2.64	2.36	44.09
Pumps & Aux.	1.15	1.14	1.29	1.49	1.82	1.97	2.2	2.18	1.91	1.66	1.28	1.21	19.3
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	3.66	3.45	3.97	3.95	3.66	3.95	3.97	3.82	3.8	3.81	3.49	3.97	45.5
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	6.57	6.22	7.19	7.18	6.57	7.18	7.19	6.88	6.87	6.88	6.24	7.19	82.16
Total	22.88	24.35	28.57	35.53	40.8	45.96	49.21	48.28	42.41	37.21	26.85	24.87	426.93

Gas Consumption (Btu x000,000) 76/70

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	0	0	0	0	0	0	0	0	0	0	0	0	0
Heat Rejct.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	91.3	78.96	80.62	65.93	57.12	58.92	58.18	55.8	53.76	60.48	66.19	98.14	830.4
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	2.18	2.11	2.43	2.39	2.11	2.18	2.09	1.96	1.94	2	1.9	2.27	25.56
Vent. Fans	0	0	0	0	0	0	0	0	0	0	0	0	0
Pumps & Aux.	0	0	0	0	0	0	0	0	0	0	0	0	0
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	0	0	0	0	0	0	0	0	0	0	0	0	0
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	93.48	81.06	83.05	68.33	59.23	61.1	60.28	57.76	60.7	62.47	68.1	100.4	855.96

Annual Utility Bills (\$)



1. Custom Electric = 1000000 - Base Case Electric (1000000 - 1000000) = 0
 2. Custom Gas = 1000000 - Base Case Gas (1000000 - 1000000) = 0
 3. Custom Total = 1000000 - Base Case Total (1000000 - 1000000) = 0

Main Library - Existing

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	24.8	29.6	34.7	51.8	72	84.8	91.6	94.5	76.4	64.1	38.3	27	689.4
Heat Reject.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	48	37.4	39	21.3	14.9	13.1	11	13.2	13.3	19.2	31.5	48.9	310.5
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	2.2	2.1	2.3	2.3	2.2	2.1	2	2	1.8	2.1	1.9	2.1	25.1
Vent. Fans	3.7	3.6	4.2	4.4	4.6	4.8	4.8	5	4.5	4.5	3.8	3.9	51.7
Pumps & Aux.	1.6	1.7	1.9	2.2	2.6	2.8	2.9	3	2.7	2.5	1.9	1.7	27.6
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	10.8	9.8	11	10.9	11	10.8	11	11.3	10.1	11.3	10.2	10.6	128.9
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	36.2	33.7	38	37.8	36.5	37.5	37.8	37.5	36.9	37.5	33.4	38.1	440.9
Total	127.4	117.8	131	130.8	143.9	155.8	161.1	166.5	145.6	141.1	121	132.2	1,674.10

Main Library - 76/70 Occupied - 80/68 Unoccupied

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	23.3	27.4	31.9	46.9	66.5	79	85.8	88.8	71.2	58.9	35.6	25.4	640.6
Heat Reject.	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigeration	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	39	28.6	27.9	9	3.3	1.9	1.2	1.4	2.2	6.3	20.5	40.4	181.6
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	2.2	2.1	2.3	2.3	2.2	2.1	2	2	1.8	2.1	1.9	2.1	25.1
Vent. Fans	3.6	3.3	3.8	3.7	3.7	3.7	3.8	3.9	3.6	3.7	3.4	3.7	43.9
Pumps & Aux.	1.6	1.7	1.9	2.2	2.6	2.8	2.9	3	2.7	2.5	1.9	1.7	27.6
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equip.	10.8	9.8	11	10.9	11	10.8	11	11.3	10.1	11.3	10.2	10.6	128.9
Task Lights	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Lights	36.2	33.7	38	37.8	36.5	37.5	37.8	37.5	36.9	37.5	33.4	38.1	440.9
Total	116.7	106.5	116.9	112.8	125.9	137.9	144.4	147.9	128.5	122.2	107.1	121.9	1,488.60

Electric Utility Time-of-Use Periods

Season 1: 1/1 - 3/31 & 11/1 - 12/31

On-Peak Off-Peak

Day 1: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Day 2: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Day 3: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Season 2: 4/1 - 10/31

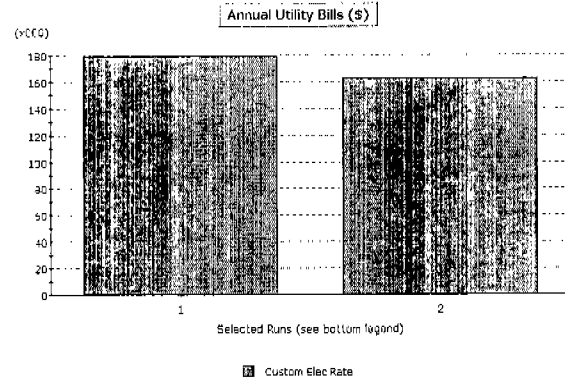
On-Peak Off-Peak

Day 1: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Day 2: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Day 3: Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon, Tue, Wed, Thu, Fri, Sat, Sun

Wizard Screen 146 of 50



1. Clearwater - Main Library - Baseline Design (08/08/09 @ 21:19) (annual bill: \$179,290)
2. Clearwater - Main Library - TSM Management EEM (08/08/09 @ 21:19) (annual bill: \$262,759)

Electric Utility Charges

Rate Name: Clearwater Main Library Type: Residential Clearwater

Season 1: 1/1 - 3/31 & 11/1 - 12/31

Customer Charge: \$0.00 \$0.00 \$0.00 \$0.00

Uniform Charge: \$0.00 \$0.00 \$0.00 \$0.00

TOU Periods

TOU Period	\$/kW	\$/kWh
1. On-Peak	0.0000	0.0000
2. Off-Peak	0.0000	0.0000
3. On-Peak	0.0000	0.0000
4. Off-Peak	0.0000	0.0000
5. On-Peak	0.0000	0.0000
6. Off-Peak	0.0000	0.0000

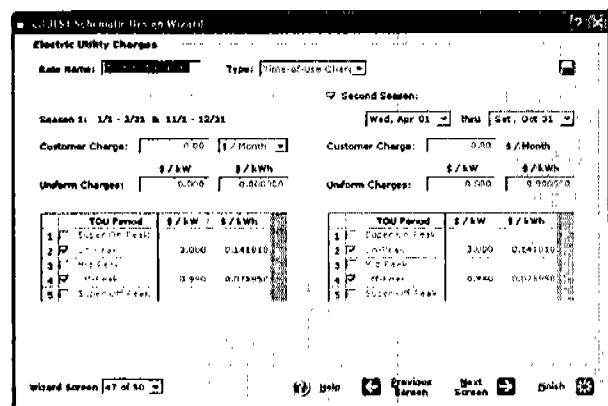
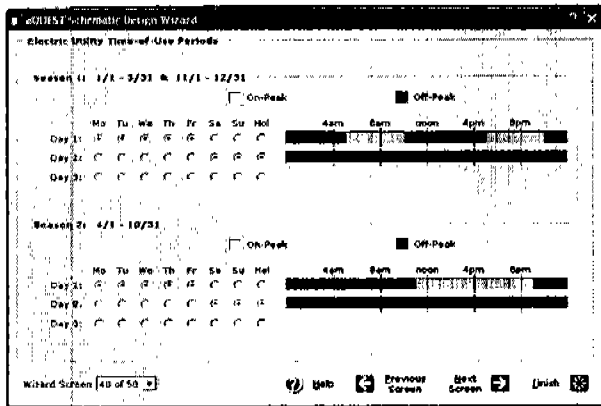
Wizard Screen 147 of 50

Long Center D - Existing

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Con	3.22	5.09	6.84	12.56	16.73	19.79	21.72	21.61	17.85	14.26	7.58	3.98	151.22
Heat Rejer	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigerati	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	0.4	0.58	0.81	1.3	1.51	1.67	1.79	1.78	1.55	1.34	0.83	0.49	14.06
Pumps & /	0.07	0.06	0.03	0	0	0	0	0	0	0	0.02	0.08	0.26
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equi	3.13	2.95	3.38	3.36	3.13	3.36	3.38	3.26	3.24	3.26	2.99	3.38	38.82
Task Light	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Light	8.17	7.72	8.9	8.88	8.17	8.87	8.9	8.54	8.51	8.53	7.78	8.9	101.87
Total	14.99	16.4	19.96	26.1	29.55	33.69	35.8	35.18	31.15	27.39	19.19	16.83	306.23

Long Center D - 76/70 Occupied - 80/68 Unoccupied

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Con	1.28	2.87	4.63	8.99	11.62	15.1	16.43	16.08	13.13	10.1	5.34	2.26	107.84
Heat Rejer	0	0	0	0	0	0	0	0	0	0	0	0	0
Refrigerati	0	0	0	0	0	0	0	0	0	0	0	0	0
Space Heat	0	0	0	0	0	0	0	0	0	0	0	0	0
HP Supp.	0	0	0	0	0	0	0	0	0	0	0	0	0
Hot Water	0	0	0	0	0	0	0	0	0	0	0	0	0
Vent. Fans	0.14	0.29	0.47	0.82	0.96	1.18	1.28	1.25	1.06	0.85	0.5	0.24	9.04
Pumps & /	0.07	0.06	0.03	0	0	0	0	0	0	0	0.02	0.08	0.26
Ext. Usage	0	0	0	0	0	0	0	0	0	0	0	0	0
Misc. Equi	3.13	2.95	3.38	3.36	3.13	3.36	3.38	3.26	3.24	3.26	2.99	3.38	38.82
Task Light	0	0	0	0	0	0	0	0	0	0	0	0	0
Area Light	8.17	7.72	8.9	8.88	8.17	8.87	8.9	8.54	8.51	8.53	7.78	8.9	101.87
Total	12.79	13.89	17.42	22.05	23.88	28.52	29.99	29.13	25.94	22.74	16.62	14.86	257.83



Global Temp Setpoint

76

Fire Station 49

Bin Weather OA Temp	Mean Coincident Wet Bulb Temp (F)	Enthalpy "h" (BTU/lb)	Total Hrs	Indoor Temp (F) Existing	Indoor Temp (F) Proposed	Delta T (F) Existing	Delta T (F) Proposed	UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH) Existing	Conduction (envelope) Heat Gain (MBH) Proposed	Delta h (BTU/lb) Existing	Delta h (BTU/lb) Proposed	Convection (air leakage) Heat Gain (MBH) Existing	Convection (air leakage) Heat Gain (MBH) Proposed	Total Heat Gain (MBH) Existing	Total Heat Gain (MBH) Proposed	Savings (MBH)	Savings (kWh)
A	B	C Calculated from A and B	D	E	F	G	H	I From Data Sheet Calculations	J	K	L	M	N =4.5" Leakage CFM * L * D /1,000	O =4.5" Leakage CFM * M * D /1,000	P = N + J	Q = O + K	R = P - Q	S = R / EER
97	78.8	42.3	3	72	76	=A - E	=A - F	625	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	108	92	154	131	23	2
95	76.3	39.8	2	72	76	23.0	19.0	625	29	24	13.3	11.0	60	50	89	74	15	1
93	76.9	40.4	49	72	76	21.0	17.0	625	644	521	13.9	11.6	1,545	1,288	2,188	1,809	379	28
91	77.2	40.8	189	72	76	19.0	15.0	625	2,246	1,773	14.3	11.9	6,097	5,106	8,343	6,879	1,464	110
89	76.6	40.2	272	72	76	17.0	13.0	625	2,892	2,211	13.7	11.4	8,415	6,989	11,307	9,200	2,106	158
87	75.4	39.0	358	72	76	15.0	11.0	625	3,358	2,463	12.5	10.2	10,131	8,255	13,490	10,717	2,772	208
85	74.1	37.8	420	72	76	13.0	9.0	625	3,415	2,364	11.3	9.0	10,719	8,517	14,133	10,881	3,253	244
83	73.3	37.0	439	72	76	11.0	7.0	625	3,020	1,922	10.6	8.2	10,478	8,176	13,498	10,098	3,400	255
81	72.6	36.4	544	72	76	9.0	5.0	625	3,062	1,701	9.9	7.6	12,213	9,361	15,275	11,062	4,213	316
79	72.4	36.3	591	72	76	7.0	3.0	625	2,587	1,109	9.8	7.4	13,049	9,951	15,637	11,060	4,577	344
77	71.5	35.5	346	72	76	5.0	1.0	625	1,082	216	9.0	6.7	7,019	5,205	8,101	5,421	2,680	201
75	70.7	34.8	800	72	76	3.0	(1.0)	625	1,501	(500)	8.3	6.0	14,980	10,785	16,481	10,285	6,196	465
73	68.6	33.0	953	72	76	1.0	(3.0)	625	596	(1,788)	6.5	4.2	14,001	9,004	14,597	7,216	7,380	554
71	66.4	31.2	537	72	76	(1.0)	(5.0)	625	(336)	(1,679)	4.7	2.4	5,724	2,909	5,389	1,230	4,159	312
Total Savings																		2,200

Fire Station 51

Bin Weather OA Temp	Mean Coincident Wet Bulb Temp (F)	Enthalpy "h" (BTU/lb)	Total Hrs	Indoor Temp (F) Existing	Indoor Temp (F) Proposed	Delta T (F) Existing	Delta T (F) Proposed	UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH) Existing	Conduction (envelope) Heat Gain (MBH) Proposed	Delta h (BTU/lb) Existing	Delta h (BTU/lb) Proposed	Convection (air leakage) Heat Gain (MBH) Existing	Convection (air leakage) Heat Gain (MBH) Proposed	Total Heat Gain (MBH) Existing	Total Heat Gain (MBH) Proposed	Savings (MBH)	Savings (kWh)
A	B	C Calculated from A and B	D	E	F	G	H	I From Data Sheet Calculations	J	K	L	M	N =4.5" Leakage CFM * L * D /1,000	O =4.5" Leakage CFM * M * D /1,000	P = N + J	Q = O + K	R = P - Q	S = R / EER
97	78.8	42.3	3	72	76	=A - E	=A - F	625	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	108	92	154	131	23	2
95	76.3	39.8	2	72	76	23.0	19.0	625	29	24	13.3	11.0	60	50	89	74	15	1
93	76.9	40.4	49	72	76	21.0	17.0	625	644	521	13.9	11.6	1,545	1,288	2,188	1,809	379	28
91	77.2	40.8	189	72	76	19.0	15.0	625	2,246	1,773	14.3	11.9	6,097	5,106	8,343	6,879	1,464	110
89	76.6	40.2	272	72	76	17.0	13.0	625	2,892	2,211	13.7	11.4	8,415	6,989	11,307	9,200	2,106	158
87	75.4	39.0	358	72	76	15.0	11.0	625	3,358	2,463	12.5	10.2	10,131	8,255	13,490	10,717	2,772	208
85	74.1	37.8	420	72	76	13.0	9.0	625	3,415	2,364	11.3	9.0	10,719	8,517	14,133	10,881	3,253	244
83	73.3	37.0	439	72	76	11.0	7.0	625	3,020	1,922	10.6	8.2	10,478	8,176	13,498	10,098	3,400	255
81	72.6	36.4	544	72	76	9.0	5.0	625	3,062	1,701	9.9	7.6	12,213	9,361	15,275	11,062	4,213	316
79	72.4	36.3	591	72	76	7.0	3.0	625	2,587	1,109	9.8	7.4	13,049	9,951	15,637	11,060	4,577	344
77	71.5	35.5	346	72	76	5.0	1.0	625	1,082	216	9.0	6.7	7,019	5,205	8,101	5,421	2,680	201
75	70.7	34.8	800	72	76	3.0	(1.0)	625	1,501	(500)	8.3	6.0	14,980	10,785	16,481	10,285	6,196	465
73	68.6	33.0	953	72	76	1.0	(3.0)	625	596	(1,788)	6.5	4.2	14,001	9,004	14,597	7,216	7,380	554
71	66.4	31.2	537	72	76	(1.0)	(5.0)	625	(336)	(1,679)	4.7	2.4	5,724	2,909	5,389	1,230	4,159	312
Total Savings																		2,200

FIRE STATION # 48 TRAINING CENTER

Bin Weather OA Temp	Mean Coincident Wet Bulb Temp (F)	Enthalpy "h" (BTU/lb)	Total Hrs	Indoor Temp (F) Existing	Indoor Temp (F) Proposed	Delta T (F) Existing	Delta T (F) Proposed	UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH) Existing	Conduction (envelope) Heat Gain (MBH) Proposed	Delta h (BTU/lb) Existing	Delta h (BTU/lb) Proposed	Convection (air leakage) Heat Gain (MBH) Existing	Convection (air leakage) Heat Gain (MBH) Proposed	Total Heat Gain (MBH) Existing	Total Heat Gain (MBH) Proposed	Savings (MBH)	Savings (kWh)
A	B	C Calculated from A and B	D	E	F	G	H	I From Data Sheet Calculations	J	K	L	M	N =4.5" Leakage CFM * L * D /1,000	O =4.5" Leakage CFM * M * D /1,000	P = N + J	Q = O + K	R = P - Q	S = R / EER
97	78.8	42.3	3	72.5	76	=A - E	=A - F	671	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	169	147	218	189	29	3
95	76.3	39.9	2	72.5	76	22.5	19.0	671	30	26	13.0	11.0	94	80	124	105	19	2
93	76.9	40.4	49	72.5	76	20.5	17.0	671	674	559	13.8	11.6	2,420	2,060	3,094	2,620	475	44
91	77.2	40.8	189	72.5	76	18.5	15.0	671	2,348	1,903	14.0	11.9	8,556	8,170	11,903	10,073	1,830	169
89	76.6	40.2	272	72.5	76	16.5	13.0	671	3,013	2,374	13.4	11.4	13,177	11,182	16,190	13,558	2,634	244
87	75.4	39.0	358	72.5	76	14.5	11.0	671	3,485	2,644	12.2	10.2	15,833	13,207	19,318	15,851	3,467	321
85	74.1	37.8	420	72.5	76	12.5	9.0	671	3,525	2,538	11.0	9.0	16,707	13,627	20,232	16,165	4,067	377
83	73.3	37.0	439	72.5	76	10.5	7.0	671	3,095	2,063	10.3	8.2	16,302	13,082	19,397	15,145	4,251	394
81	72.6	36.4	544	72.5	76	8.5	5.0	671	3,105	1,826	9.6	7.6	18,967	14,978	22,072	16,804	5,268	488
79	72.4	36.3	591	72.5	76	6.5	3.0	671	2,579	1,190	9.5	7.4	20,256	15,922	22,835	17,112	5,723	530
77	71.5	35.5	346	72.5	76	4.5	1.0	671	1,045	232	8.7	6.7	10,865	8,328	11,911	8,560	3,351	310
75	70.7	34.8	800	72.5	76	2.5	(1.0)	671	1,343	(537)	8.0	6.0	23,124	17,257	24,467	16,720	7,747	717
73	68.6	33.0	953	72.5	76	0.5	(3.0)	671	320	(1,920)	6.2	4.2	21,396	14,407	21,716	12,488	9,229	854
71	66.4	31.2	537	72.5	76	(1.5)	(5.0)	671	(541)	(1,803)	4.4	2.4	8,593	4,654	8,052	2,852	5,200	481
Total Savings																		4,934

FIRE STATION # 48 TRAINING CENTER -UNOCC

Bin Weather OA Temp	Mean Coincident Wet Bulb Temp (F)	Enthalpy "h" (BTU/lb)	Total Hrs	Indoor Temp (F) Existing	Indoor Temp (F) Proposed	Delta T (F) Existing	Delta T (F) Proposed	UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH) Existing	Conduction (envelope) Heat Gain (MBH) Proposed	Delta h (BTU/lb) Existing	Delta h (BTU/lb) Proposed	Convection (air leakage) Heat Gain (MBH) Existing	Convection (air leakage) Heat Gain (MBH) Proposed	Total Heat Gain (MBH) Existing	Total Heat Gain (MBH) Proposed	Savings (MBH)	Savings (kWh)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S

Assumptions:

Cooling is used at all temperatures above 70F.

Air handler handles outdoor air ventilation heating and cooling load.

Delta "h" based on enthalpy corresponds existing and proposed temperature setpoints and 50% RH.

Exh G-8 - Cost Avoidance Calcs - HVAC Controls

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	= N + J	= O + K	=P - Q	= R / EER
93	76.6	40.4	11	76	80	17.0	13.0	671	126	96	11.6	9.1	463	364	588	460	128	12
91	77.2	40.8	46	76	80	15.0	11.0	671	463	340	11.9	9.5	1,988	1,575	2,452	1,915	537	50
89	76.6	40.2	87	76	80	13.0	9.0	671	759	526	11.4	8.9	3,577	2,794	4,336	3,320	1,016	94
87	75.4	39.0	119	76	80	11.0	7.0	671	879	559	10.2	7.7	4,390	3,320	5,269	3,880	1,389	129
85	74.1	37.8	153	76	80	9.0	5.0	671	925	514	9.0	6.5	4,964	3,589	5,889	4,102	1,786	165
83	73.3	37.0	189	76	80	7.0	3.0	671	888	381	8.2	5.8	5,632	3,933	6,520	4,314	2,207	204
81	72.6	36.4	294	76	80	5.0	1.0	671	987	197	7.6	5.1	8,095	5,452	9,082	5,649	3,433	318
79	72.4	36.3	405	76	80	3.0	(1.0)	671	816	(272)	7.4	5.0	10,911	7,270	11,727	6,998	4,729	438
77	71.5	35.5	256	76	80	1.0	(3.0)	671	172	(516)	6.7	4.2	6,162	3,860	6,333	3,344	2,989	277
75	70.7	34.8	608	76	80	(1.0)	(5.0)	671	(408)	(2,041)	6.0	3.5	13,115	7,649	12,707	5,608	7,099	657
73	68.6	33.0	740	76	80	(3.0)	(7.0)	671	(1,491)	(3,478)	4.2	1.7	11,187	4,534	9,697	0	9,697	898
71	66.4	31.2	400	76	80	(5.0)	(9.0)	671	(1,343)	(2,417)	2.4	(0.1)	3,467	-129	2,124	0	2,124	197

FIRE 48 TRAINING CTR OFFICE

Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)	Delta T (F)	UA	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings						
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)						
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	= N + J	= O + K	=P - Q	= R / EER
97	78.8	42.3	3	72.5	76	24.5	21.0	224	16	14	15.6	13.5	32	28	48	42	6	1
95	76.3	39.8	2	72.5	76	22.5	19.0	224	10	8	13.0	11.0	18	15	28	23	4	0
93	76.9	40.4	49	72.5	76	20.5	17.0	224	225	186	13.6	11.6	454	386	678	573	106	10
91	77.2	40.8	189	72.5	76	18.5	15.0	224	782	634	14.0	11.9	1,792	1,532	2,574	2,166	408	38
89	76.6	40.2	272	72.5	76	16.5	13.0	224	1,004	791	13.4	11.4	2,471	2,097	3,474	2,887	587	54
87	75.4	39.0	358	72.5	76	14.5	11.0	224	1,161	881	12.2	10.2	2,969	2,476	4,130	3,357	773	72
85	74.1	37.8	420	72.5	76	12.5	9.0	224	1,174	845	11.0	9.0	3,133	2,555	4,307	3,400	906	84
83	73.3	37.0	439	72.5	76	10.5	7.0	224	1,031	687	10.3	8.2	3,057	2,453	4,087	3,140	947	88
81	72.6	36.4	544	72.5	76	8.5	5.0	224	1,034	608	9.6	7.6	3,556	2,808	4,591	3,417	1,174	109
79	72.4	36.3	591	72.5	76	6.5	3.0	224	859	397	9.5	7.4	3,798	2,985	4,657	3,382	1,275	118
77	71.5	35.5	346	72.5	76	4.5	1.0	224	348	77	8.7	6.7	2,037	1,561	2,385	1,639	747	69
75	70.7	34.8	800	72.5	76	2.5	(1.0)	224	447	(179)	8.0	6.0	4,336	3,236	4,783	3,057	1,726	160
73	68.6	33.0	953	72.5	76	0.5	(3.0)	224	107	(639)	6.2	4.2	4,012	2,701	4,118	2,062	2,056	190
71	66.4	31.2	537	72.5	76	(1.5)	(5.0)	224	(180)	(601)	4.4	2.4	1,611	873	1,431	272	1,159	107
Total Savings = 4,100																		

FIRE 48 TRAINING CTR OFFICE - UNOCC

FIRE 48 TRAINING CTR OFFICE - UNOCC										Conduction (envelope)				Convect on (air leakage)		Total		Savings	
Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)	Delta h (BTU/lb)		Heat Gain (MBH)		Savings		Savings			
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	= N + J	= O + K	=P - Q	= R / EER	
93	76.9	40.4	11	76	80	17.0	13.0	224	42	32	11.6	9.1	87	68	129	100	28	3	
91	77.2	40.8	46	76	80	15.0	11.0	224	154	113	11.9	9.5	373	295	527	408	119	11	
89	76.6	40.2	87	76	80	13.0	9.0	224	253	175	11.4	8.9	671	524	924	699	224	21	
87	75.4	39.0	119	76	80	11.0	7.0	224	293	186	10.2	7.7	823	623	1,116	809	307	28	
85	74.1	37.8	153	76	80	9.0	5.0	224	308	171	9.0	6.5	931	673	1,239	844	395	37	
83	73.3	37.0	189	76	80	7.0	3.0	224	296	127	8.2	5.8	1,056	737	1,352	864	488	45	
81	72.6	36.4	294	76	80	5.0	1.0	224	329	66	7.8	5.1	1,518	1,022	1,847	1,088	759	70	
79	72.4	36.3	405	76	80	3.0	(1.0)	224	272	(91)	7.4	5.0	2,046	1,363	2,318	1,273	1,045	97	
77	71.5	35.5	256	76	80	1.0	(3.0)	224	57	(172)	6.7	4.2	1,155	724	1,213	552	661	61	
75	70.7	34.8	608	76	80	(1.0)	(5.0)	224	(136)	(680)	6.0	3.5	2,459	1,434	2,323	754	1,569	145	
73	68.6	33.0	740	76	80	(3.0)	(7.0)	224	(497)	(1,159)	4.2	1.7	2,098	850	1,601	0	1,601	148	
71	66.4	31.2	400	76	80	(5.0)	(9.0)	224	(447)	(805)	2.4	(0.1)	650	-24	203	0	203	19	
Total Savings																		695	

Assumptions:

Cooling is used at all temperatures above 70F.

At handler handles outdoor air ventilation heating and cooling load.

Delta "h" based on enthalpy corresponds existing and proposed temperature setpoints and 50% RH.

Exh G-8 - Cost Avoidance Calcs - HVAC Controls

Global Temp Setpoint

76

Assumptions:

Cooling is used at all temperatures above 70F.

Air handler handles outdoor air ventilation heating and cooling load.

Delta "h" based on enthalpy corresponds existing and proposed temperature setpoints and 50% RH.

Exh G-8 - Cost Avoidance Calcs - HVAC Controls

Global Temp Setpoint

76

LIBRARY, N. GREENWOOD BRANCH

Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)	Delta T (F)	UA	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings				
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3	2	73.5	76	23.5	21.0	769	36	32	15.0	13.5	109	98	145	130	14	1
95	76.3	39.8	2	73.5	76	21.5	19.0	769	33	29	12.5	11.0	90	80	123	109	14	1
93	76.9	40.4	37	73.5	76	19.5	17.0	769	555	484	13.1	11.6	1,752	1,556	2,307	2,040	267	25
91	77.2	40.8	127	73.5	76	17.5	15.0	769	1,709	1,465	13.4	11.9	6,162	5,490	7,872	6,955	917	85
89	76.6	40.2	128	73.5	76	15.5	13.0	769	1,526	1,280	12.8	11.4	5,940	5,262	7,466	6,542	924	86
87	75.4	39.0	145	73.5	76	13.5	11.0	769	1,505	1,227	11.7	10.2	6,117	5,349	7,623	6,576	1,047	97
85	74.1	37.8	162	73.5	76	11.5	9.0	769	1,433	1,121	10.4	9.0	6,114	5,256	7,547	6,377	1,170	108
83	73.3	37.0	143	73.5	76	9.5	7.0	769	1,045	770	9.7	8.2	5,019	4,261	6,064	5,031	1,032	96
81	72.6	36.4	136	73.5	76	7.5	5.0	769	784	523	9.1	7.6	4,465	3,744	5,249	4,267	982	91
79	72.4	36.3	89	73.5	76	5.5	3.0	769	376	205	8.9	7.4	2,869	2,398	3,246	2,603	643	59
77	71.5	35.5	43	73.5	76	3.5	1.0	769	116	33	8.1	6.7	1,263	1,035	1,378	1,068	310	29
75	70.7	34.8	111	73.5	76	1.5	(1.0)	769	128	(85)	7.4	6.0	2,982	2,394	3,110	2,309	801	74
73	68.6	33.0	101	73.5	76	(0.5)	(3.0)	769	(39)	(233)	5.6	4.2	2,062	1,527	2,023	1,294	729	68
71	66.4	31.2	59	73.5	76	(2.5)	(5.0)	769	(113)	(227)	3.9	2.4	824	511	710	284	426	39
Total Savings																		450

LIBRARY, N. GREENWOOD BRANCH - Unoccupied

Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)	Delta T (F)	UA	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings				
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	= N + J	= O + K	=P - Q	= R / EER
93	76.9	40.4	12	76	80	17.0	13.0	769	157	120	11.6	9.1	565	397	661	517	145	13
91	77.2	40.8	62	76	80	15.0	11.0	769	715	525	11.9	9.5	2,680	2,123	3,395	2,647	748	69
89	76.6	40.2	144	76	80	13.0	9.0	769	1,440	997	11.4	8.9	5,920	4,625	7,360	5,622	1,738	161
87	75.4	39.0	213	76	80	11.0	7.0	769	1,802	1,147	10.2	7.7	7,858	5,943	9,660	7,090	2,570	238
85	74.1	37.8	258	76	80	9.0	5.0	769	1,786	992	9.0	6.5	8,371	6,051	10,157	7,043	3,113	288
83	73.3	37.0	296	76	80	7.0	3.0	769	1,584	683	8.2	5.8	8,821	6,160	10,414	6,843	3,572	331
81	72.6	36.4	408	76	80	5.0	1.0	769	1,569	314	7.6	5.1	11,233	7,565	12,802	7,879	4,923	456
79	72.4	36.3	502	76	80	3.0	(1.0)	769	1,158	(386)	7.4	5.0	13,524	9,011	14,682	8,625	6,057	561
77	71.5	35.5	303	76	80	1.0	(3.0)	769	233	(699)	6.7	4.2	7,293	4,569	7,526	3,870	3,656	339
75	70.7	34.8	689	76	80	(1.0)	(5.0)	769	(530)	(2,649)	6.0	3.5	14,862	8,668	14,333	6,019	8,314	770
73	68.6	33.0	852	76	80	(3.0)	(7.0)	769	(1,966)	(4,587)	4.2	1.7	12,880	5,221	10,914	634	10,281	952
71	66.4	31.2	478	76	80	(5.0)	(9.0)	769	(1,838)	(3,309)	2.4	(0.1)	4,143	-154	2,305	0	2,305	213
Total Savings																		4,397

BEACH REC & LIBRARY - MOD

Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)	Delta T (F)	UA	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings				
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3	3	72	76	25.0	21.0	943	71	59	15.9	13.5	229	196	300	255	45	4
95	76.3	39.8	2	72	76	23.0	19.0	943	43	36	13.3	11.0	129	106	172	142	30	3
93	76.9	40.4	49	72	76	21.0	17.0	943	971	766	13.9	11.6	3,295	2,747	4,266	3,533	733	68
91	77.2	40.8	189	72	76	19.0	15.0	943	3,387	2,674	14.3	11.9	13,007	10,893	16,394	13,567	2,827	262
89	76.6	40.2	272	72	76	17.0	13.0	943	4,361	3,335	13.7	11.4	17,952	14,909	22,313	18,244	4,068	377
87	75.4	39.0	358	72	76	15.0	11.0	943	5,065	3,714	12.5	10.2	21,614	17,610	26,679	21,324	5,355	496
85	74.1	37.8	420	72	76	13.0	9.0	943	5,150	3,565	11.3	9.0	22,867	18,169	28,016	21,734	6,282	582
83	73.3	37.0	439	72	76	11.0	7.0	943	4,555	2,898	10.6	8.2	22,353	17,443	26,908	20,341	6,566	608
81	72.6	36.4	544	72	76	9.0	5.0	943	4,618	2,566	9.9	7.6	26,055	19,970	30,673	22,536	8,137	753
79	72.4	36.3	591	72	76	7.0	3.0	943	3,902	1,672	9.8	7.4	27,839	21,229	31,741	22,901	8,840	818
77	71.5	35.5	346	72	76	5.0	1.0	943	1,632	326	9.0	6.7	14,974	11,104	16,605	11,430	5,175	479
75	70.7	34.8	800	72	76	3.0	(1.0)	943	2,264	(755)	8.3	6.0	31,957	23,009	34,220	22,254	11,966	1,108
73	68.6	33.0	953	72	76	1.0	(3.0)	943	899	(2,897)	6.5	4.2	29,868	19,210	30,767	16,513	14,254	1,320
71	66.4	31.2	537	72	76	(1.0)	(5.0)	943	(506)	(2,532)	4.7	2.4	12,212	6,206	11,705	3,673	8,032	744
Total Savings																		7,621

BEACH REC & LIBRARY - MOD - Unocc

Bin Weather	Mean Coincident	Enthalpy "h"	Total	Indoor Temp (F)		Delta T (F)		UA		Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Savings	Savings	
OA Temp	Wet Bulb Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/hr/F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S

Assumptions:

Cooling is used at all temperatures above 70°F.

Air handler handles outdoor air ventilation on heating and cooling load.

Delta "h" based on enthalpy corresponds existing and proposed temperature setpoints and 50% RH.

Exh G-8 - Cost Avoidance Calcs - HVAC Controls

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculated from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER
93	76.9	40.4	11	76	80	17.0	13.0	943	176	135	11.6	9.1	617	485	793	620	173	16
91	77.2	40.8	41	76	80	15.0	11.0	943	580	425	11.9	9.5	2,363	1,872	2,943	2,297	646	60
89	76.6	40.2	74	76	80	13.0	9.0	943	907	628	11.4	8.9	4,056	3,169	4,964	3,797	1,166	108
87	75.4	39.0	110	76	80	11.0	7.0	943	1,141	726	10.2	7.7	5,411	4,092	6,552	4,819	1,734	161
85	74.1	37.8	136	76	80	9.0	5.0	943	1,154	841	9.0	6.5	5,883	4,253	7,038	4,895	2,143	198
83	73.3	37.0	175	76	80	7.0	3.0	943	1,155	495	8.2	5.8	6,953	4,856	8,109	5,351	2,758	255
81	72.6	36.4	282	76	80	5.0	1.0	943	1,330	266	7.6	5.1	10,352	6,972	11,682	7,238	4,444	411
79	72.4	36.3	377	76	80	3.0	(1.0)	943	1,067	(356)	7.4	5.0	13,542	9,023	14,609	8,667	5,941	550
77	71.5	35.5	245	76	80	1.0	(3.0)	943	231	(693)	6.7	4.2	7,862	4,926	8,094	4,232	3,861	358
75	70.7	34.8	599	76	80	(1.0)	(5.0)	943	(565)	(2,825)	6.0	3.5	17,228	10,048	16,563	7,223	9,440	874
73	68.6	33.0	716	76	80	(3.0)	(7.0)	943	(2,026)	(4,727)	4.2	1.7	14,432	5,850	12,406	1,122	11,284	1,045
71	66.4	31.2	394	76	80	(5.0)	(9.0)	943	(1,858)	(3,345)	2.4	(0.1)	7,304	-272	5,446	0	5,446	504
Total Savings																	4,446	

Assumptions:
Cooling is used at all temperatures above 70F.
Air handler handles outdoor air ventilation heating and cooling load.
Delta "n" based on enthalpy corresponding existing and proposed temperature setpoints and 50% RH.
Exh G-8 - Cost Avoidance Calcs - HVAC Controls

Global Temp Setpoint

76

PUBLIC WORKS BLDG. C

Bin OA Temp	Weather Mean Wet Bulb Temp (F)	Coincident Enthalpy (BTU/lb)	Total Hrs	Indoor Temp (F)		Delta T (F)		UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH)		Delta h (BTU/lb)		Convection (air leakage) Heat Gain (MBH)		Total Heat Gain (MBH)		Savings (MBH)	Savings (kWh)
				Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L* D /1,000	=4.5* Leakage CFM * M* D /1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3	3	72	76	25.0	21.0	1052	79	66	15.9	13.5	191	163	270	230	41	4
95	76.3	39.8	2	72	76	23.0	19.0	1052	48	40	13.3	11.0	107	88	156	128	27	3
93	76.9	40.4	49	72	76	21.0	17.0	1052	1,083	877	13.9	11.6	2,746	2,289	3,829	3,166	663	67
91	77.2	40.8	189	72	76	19.0	15.0	1052	3,779	2,984	14.3	11.9	10,839	9,077	14,618	12,061	2,557	258
89	76.6	40.2	272	72	76	17.0	13.0	1052	4,866	3,721	13.7	11.4	14,960	12,424	19,826	16,146	3,680	372
87	75.4	39.0	358	72	76	15.0	11.0	1052	5,652	4,145	12.5	10.2	18,011	14,675	23,663	18,819	4,844	489
85	74.1	37.8	420	72	76	13.0	9.0	1052	5,746	3,978	11.3	9.0	19,056	15,141	24,802	19,119	5,683	574
83	73.3	37.0	439	72	76	11.0	7.0	1052	5,082	3,234	10.6	8.2	18,627	14,536	23,710	17,770	5,940	600
81	72.6	36.4	544	72	76	9.0	5.0	1052	5,153	2,863	9.9	7.6	21,712	16,642	26,865	19,505	7,360	743
79	72.4	36.3	591	72	76	7.0	3.0	1052	4,354	1,866	9.8	7.4	23,199	17,691	27,553	19,557	7,996	808
77	71.5	35.5	346	72	76	5.0	1.0	1052	1,821	364	9.0	6.7	12,478	9,253	14,299	9,617	4,681	473
75	70.7	34.8	800	72	76	3.0	(1.0)	1052	2,526	(842)	8.3	6.0	26,631	19,174	29,156	18,332	10,824	1,093
73	68.6	33.0	953	72	76	1.0	(3.0)	1052	1,003	(3,009)	6.5	4.2	24,890	16,008	25,893	12,999	12,894	1,302
71	66.4	31.2	537	72	76	(1.0)	(5.0)	1052	(565)	(2,826)	4.7	2.4	10,177	5,172	9,611	2,346	7,266	734
Total Savings																		7,521

PUBLIC WORKS BLDG. C - Unocc

Bin OA Temp	Weather Mean Wet Bulb Temp (F)	Coincident Enthalpy (BTU/lb)	Total Hrs	Indoor Temp (F)		Delta T (F)		UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH)		Delta h (BTU/lb)		Convection (air leakage) Heat Gain (MBH)		Total Heat Gain (MBH)		Savings (MBH)	Savings (kWh)
				Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L* D /1,000	=4.5* Leakage CFM * M* D /1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3		76	80	21.0	17.0	1052	0	0	13.5	11.1	0	0	0	0	0	0
95	76.3	39.8		76	80	19.0	15.0	1052	0	0	11.0	8.5	0	0	0	0	0	0
93	76.9	40.4	11	76	80	17.0	13.0	1052	197	150	11.6	9.1	514	404	711	555	156	16
91	77.2	40.8	46	76	80	15.0	11.0	1052	726	533	11.9	9.5	2,209	1,750	2,935	2,282	653	66
89	76.6	40.2	87	76	80	13.0	9.0	1052	1,190	824	11.4	8.9	3,974	3,105	5,164	3,929	1,235	125
87	75.4	39.0	119	76	80	11.0	7.0	1052	1,378	877	10.2	7.7	4,878	3,689	6,256	4,566	1,690	171
85	74.1	37.8	153	76	80	9.0	5.0	1052	1,449	805	9.0	6.5	5,516	3,987	6,965	4,792	2,172	219
83	73.3	37.0	189	76	80	7.0	3.0	1052	1,392	597	8.2	5.8	6,258	4,370	7,650	4,967	2,684	271
81	72.6	36.4	294	76	80	5.0	1.0	1052	1,547	309	7.6	5.1	8,994	5,057	10,541	6,367	4,174	422
79	72.4	36.3	405	76	80	3.0	(1.0)	1052	1,279	(426)	7.4	5.0	12,123	8,078	13,402	7,651	5,750	581
77	71.5	35.5	256	76	80	1.0	(3.0)	1052	269	(808)	6.7	4.2	6,846	4,269	7,116	3,481	3,635	367
75	70.7	34.8	608	76	80	(1.0)	(5.0)	1052	(640)	(3,199)	6.0	3.5	14,572	8,499	13,933	5,300	8,633	872
73	68.6	33.0	740	76	80	(3.0)	(7.0)	1052	(2,336)	(5,452)	4.2	1.7	12,430	5,038	10,094	-413	10,507	1,061
71	66.4	31.2	400	76	80	(5.0)	(9.0)	1052	(2,105)	(3,789)	2.4	(0.1)	3,852	-143	1,747	0	1,747	176
Total Savings																		4,347

PUBLIC WORKS BLDG. A

Bin OA Temp	Weather Mean Wet Bulb Temp (F)	Coincident Enthalpy (BTU/lb)	Total Hrs	Indoor Temp (F)		Delta T (F)		UA (BTU/hr/F)	Conduction (envelope) Heat Gain (MBH)		Delta h (BTU/lb)		Convection (air leakage) Heat Gain (MBH)		Total Heat Gain (MBH)		Savings (MBH)	Savings (kWh)
				Existing	Proposed	Existing	Proposed		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculations	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L* D /1,000	=4.5* Leakage CFM * M* D /1,000	=N + J	=O + K	=P - Q	=R / EER

97	78.8	42.3	3	72	76	25.0	21.0	996	75	63	15.9	13.5	368	314	443	377	66	7
95	76.3	39.8	2	72	76	23.0	19.0	996	46	38	13.3	11.0	206	170	252	208	44	4
93	76.9	40.4	49	72	76	21.0	17.0	996	1,024	829	13.9	11.6	5,286	4,407	6,311	5,236	1,074	109
91	77.2	40.8	189	72	76	19.0	15.0	996	3,575	2,822	14.3	11.9	20,865	17,474	24,440	20,296	4,144	419
89	76.6	40.2	272	72	76	17.0	13.0	996	4,603	3,520	13.7	11.4	28,797	23,917	33,401	27,437	5,963	602
87	75.4	39.0	358	72	76	15.0	11.0	996	5,346	3,921	12.5	10.2	34,672	28,249	40,018	32,169	7,849	793
85	74.1	37.8	420	72	76	13.0	9.0	996	5,436	3,763	11.3	9.0	36,682	29,146	42,118	32,909	9,208	930
83	73.3	37.0	439	72	76	11.0	7.0	996	4,808	3,059	10.6	8.2	35,858	27,981	40,665	31,041	9,625	972
81	72.6	36.4	544	72	76	9.0	5.0	996	4,874	2,708	9.9	7.6	41,796	32,036	46,670	34,744	11,927	1,205
79	72.4	36.3	591	72	76	7.0	3.0	996	4,119	1,765	9.8	7.4	44,658	34,055	48,777	35,820	12,957	1,309
77	71.5	35.5	346	72	76	5.0	1.0	996	1,722	344	9.0	6.7	24,020	17,812	25,742	18,157	7,586	766
75	70.7	34.8	800	72	76	3.0	(1.0)	996	2,389	(796)	8.3	6.0	51,264	35,910	53,653	36,114	17,539	1,772
73	68.6	33.0	953	72	76	1.0	(3.0)	996	949	(2,846)	6.5	4.2	47,914	33,815	48,863	27,969	20,894	2,110
71	66.4	31.2	537	72	76	(1.0)	(5.0)	996	(535)	(2,673)	4.7	2.4	19,590	9,955	19,055	7,282	11,773	1,189

Total Savings 12,487

PUBLIC WORKS BLDG. A - Unocc

PUBLIC WORKS BLDG. A - Unocc										Conduction (envelope)				Convection (air leakage)				Total		Savings (MBH)	Savings (kWh)
Bin	Weather	Mean Coincident	Enthalpy (BTU/lb)	Total Hrs	Indoor Temp (F)		Delta T (F)		UA (BTU/hr/F)	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)					
OA Temp	Wet Bulb Temp (F)				Existing	Proposed	Existing	Proposed	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed				
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S			
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	=N + J	=O + K	=P - Q	=R / EER			
97	78.8	42.3		76	80	21.0	17.0	996	0	0	13.5	11.1	0	0	0	0	0	0			
95	76.3	39.8		76	80	19.0	15.0	996	0	0	11.0	8.5	0	0	0	0	0	0			
93	76.9	40.4	11	76	80	17.0	13.0	996	186	142	11.6	9.1	458	360	644	502	142	14			
91	77.2	40.8	46	76	80	15.0	11.0	996	687	504	11.9	9.5	1,968	1,558	2,655	2,062	592	60			
89	76.6	40.2	87	76	80	13.0	9.0	996	1,126	780	11.4	8.9	3,539	2,765	4,665	3,545	1,120	113			
87	75.4	39.0	119	76	80	11.0	7.0	996	1,303	829	10.2	7.7	4,344	3,286	5,648	4,115	1,533	155			
85	74.1	37.8	153	76	80	9.0	5.0	996	1,371	762	9.0	6.5	4,912	3,551	6,283	4,313	1,970	199			
83	73.3	37.0	189	76	80	7.0	3.0	996	1,317	564	8.2	5.8	5,574	3,892	6,891	4,457	2,434	246			
81	72.6	36.4	294	76	80	5.0	1.0	996	1,463	293	7.6	5.1	8,010	5,395	9,474	5,687	3,786	382			
79	72.4	36.3	405	76	80	3.0	(1.0)	996	1,210	(403)	7.4	5.0	10,797	7,194	12,007	6,791	5,216	527			
77	71.5	35.5	256	76	80	1.0	(3.0)	996	255	(765)	6.7	4.2	6,097	3,820	6,352	3,055	3,297	333			
75	70.7	34.8	608	76	80	(1.0)	(5.0)	996	(605)	(3,027)	6.0	3.5	12,979	7,570	12,373	4,543	7,830	791			
73	68.6	33.0	740	76	80	(3.0)	(7.0)	996	(2,210)	(5,157)	4.2	1.7	11,071	4,487	8,860	-670	9,530	963			
71	66.4	31.2	400	76	80	(5.0)	(9.0)	996	(1,991)	(3,584)	2.4	(0.1)	3,431	-128	1,440	0	1,440	145			

Total Savings 3,928

ENGINEERING FIELD OPERATION #E

ENGINEERING FIELD OPERATION #E										Conduction (envelope)				Convection (air eakç Total				Savings		Savings	
Bin Weath	Mean Coincident	Enthalpy T	Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)	Delta h (BTU/lb)		Heat Gain (MBH)	Heat Gain (MBH)	Savings		Savings					
OA Temp	Wet Buld Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr/ F	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(MBH)					
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S			
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM * L * D /1,000	=4.5* Leakage CFM * M * D /1,000	= N + J	= O + K	= P - Q	= R / EER			
97	78.8	42.3	3	72	76	25.0	21.0	601	45	38	15.9	13.5	115	98	180	136	24	2			
95	76.3	39.8	2	72	76	23.0	19.0	601	28	23	13.3	11.0	64	53	92	76	16	2			
93	76.9	40.4	49	72	76	21.0	17.0	601	618	501	13.9	11.6	1,648	1,374	2,266	1,874	392	40			
91	77.2	40.8	189	72	76	19.0	15.0	601	2,158	1,704	14.3	11.9	6,503	5,446	8,661	7,150	1,511	153			
89	76.6	40.2	272	72	76	17.0	13.0	601	2,779	2,125	13.7	11.4	8,976	7,455	11,755	9,580	2,175	220			
87	75.4	39.0	358	72	76	15.0	11.0	601	3,227	2,367	12.5	10.2	10,807	8,805	14,034	11,171	2,863	289			
85	74.1	37.8	420	72	76	13.0	9.0	601	3,281	2,272	11.3	9.0	11,433	9,085	14,715	11,356	3,358	339			
83	73.3	37.0	439	72	76	11.0	7.0	601	2,902	1,847	10.6	8.2	11,176	8,721	14,078	10,568	3,510	355			
81	72.6	36.4	544	72	76	9.0	5.0	601	2,942	1,635	9.9	7.6	13,027	9,985	15,970	11,620	4,350	439			
79	72.4	36.3	591	72	76	7.0	3.0	601	2,486	1,066	9.8	7.4	13,919	10,614	16,406	11,680	4,726	477			

77	71.5	35.5	346	72	76	5.0	1.0	601	1,040	208	9.0	6.7	7,487	5,552	8,526	5,760	2,767	279
75	70.7	34.8	800	72	76	3.0	(1.0)	601	1,442	(481)	8.3	6.0	15,978	11,505	17,421	11,024	6,397	646
73	68.6	33.0	953	72	76	1.0	(3.0)	601	573	(1,718)	6.5	4.2	14,934	9,605	15,507	7,887	7,620	770
71	66.4	31.2	537	72	76	(1.0)	(5.0)	601	(323)	(1,614)	4.7	2.4	6,106	3,103	5,783	1,489	4,294	434
Total Savings																		4,445

ENGINEERING FIELD OPERATION #E - Unocc

ENGINEERING FIELD OPERATION #1 - 00000				Bin Weather Mean Coincident		Enthalpy "i" Total		Indoor Temp (F)		Delta T (F)		UA		Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings					
OA Temp		Wet Bulb Temp (F)		Temp (F)		(BTU/lb)		Hrs		Existing	Proposed	Existing	Proposed	(BTU/ hr / F	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)				
A	B			C	D	E	F	G	H	I From Data Sheet Calculati ons	J	K	L	M	N	O	P	Q	R	S								
				Calculate d from A and B				=A - E	=A - F		=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER								
97	78.8	42.3		76	80	21.0	17.0	601	0	0	13.5	11.1	0	0	0	0	0	0	0	0								
95	76.3	39.8		76	80	19.0	15.0	601	0	0	11.0	8.5	0	0	0	0	0	0	0	0								
93	76.9	40.4	11	76	80	17.0	13.0	601	112	86	11.6	9.1	308	242	421	328	92	9										
91	77.2	40.8	46	76	80	15.0	11.0	601	415	304	11.9	9.5	1,326	1,050	1,740	1,354	386	39										
89	76.6	40.2	87	76	80	13.0	9.0	601	680	471	11.4	8.9	2,384	1,863	3,064	2,334	731	74										
87	75.4	39.0	119	76	80	11.0	7.0	601	787	501	10.2	7.7	2,927	2,214	3,713	2,714	999	101										
85	74.1	37.8	153	76	80	9.0	5.0	601	828	460	9.0	6.5	3,309	2,392	4,137	2,852	1,285	130										
83	73.3	37.0	189	76	80	7.0	3.0	601	795	341	8.2	5.8	3,755	2,622	4,550	2,963	1,587	160										
81	72.6	36.4	294	76	80	5.0	1.0	601	883	177	7.6	5.1	5,396	3,634	6,280	3,811	2,469	249										
79	72.4	36.3	405	76	80	3.0	(1.0)	601	730	(243)	7.4	5.0	7,274	4,847	8,004	4,603	3,401	344										
77	71.5	35.5	256	76	80	1.0	(3.0)	601	154	(462)	6.7	4.2	4,108	2,573	4,262	2,112	2,150	217										
75	70.7	34.8	608	76	80	(1.0)	(5.0)	601	(365)	(1,827)	6.0	3.5	8,743	5,099	8,378	3,273	5,106	516										
73	68.6	33.0	740	76	80	(3.0)	(7.0)	601	(1,334)	(3,113)	4.2	1.7	7,458	3,023	6,124	-90	6,214	628										
71	66.4	31.2	400	76	80	(5.0)	(9.0)	601	(1,202)	(2,163)	2.4	(0.1)	2,311	-86	1,109	0	1,109	112										
Total Savings																		2,579										

GRAPHICS/ RECORDS RETENTION

Detailed Energy Analysis - Room 101																			Total Savings	
Bin Weather		Mean Coincident	Enthalpy "i" Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings		
OA Temp	Wet Bulb Temp (F)	Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr / F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S		
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N + J	= O + K	=P - Q	= R / EER		
97	78.8		42.3	3	72	76	25.0		21.0	541	41	34	15.9	13.5	151	129	191	163	29	3
95	76.3	39.8	2	72	76	23.0	19.0	541	25	21	13.3	11.0	84	70	109	90	19	2		
93	76.9	40.4	49	72	76	21.0	17.0	541	557	451	13.9	11.6	2,163	1,803	2,719	2,253	466	47		
91	77.2	40.8	189	72	76	19.0	15.0	541	1,942	1,533	14.3	11.9	8,536	7,148	10,478	8,682	1,796	181		
89	76.6	40.2	272	72	76	17.0	13.0	541	2,501	1,913	13.7	11.4	11,781	9,784	14,282	11,697	2,585	261		
87	75.4	39.0	358	72	76	15.0	11.0	541	2,905	2,130	12.5	10.2	14,184	11,556	17,089	13,686	3,402	344		
85	74.1	37.8	420	72	76	13.0	9.0	541	2,953	2,045	11.3	9.0	15,006	11,923	17,960	13,968	3,991	403		
83	73.3	37.0	439	72	76	11.0	7.0	541	2,612	1,662	10.6	8.2	14,669	11,447	17,281	13,109	4,172	421		
81	72.6	36.4	544	72	76	9.0	5.0	541	2,648	1,471	9.9	7.6	17,098	13,106	19,747	14,577	5,170	522		
79	72.4	36.3	591	72	76	7.0	3.0	541	2,238	959	9.8	7.4	18,269	13,931	20,507	14,890	5,617	567		
77	71.5	35.5	346	72	76	5.0	1.0	541	936	187	9.0	6.7	9,826	7,287	10,762	7,474	3,288	332		
75	70.7	34.8	800	72	76	3.0	(1.0)	541	1,298	(433)	8.3	6.0	20,972	15,100	22,270	14,667	7,603	768		
73	68.6	33.0	953	72	76	1.0	(3.0)	541	515	(1,546)	6.5	4.2	19,601	12,606	20,117	11,060	9,057	915		
71	66.4	31.2	537	72	76	(1.0)	(5.0)	541	(290)	(1,452)	4.7	2.4	8,014	4,073	7,724	2,620	5,103	515		
Total Savings																		5,283		

GRAPHICS/ RECORDS RETENTION - UNOCC

GRAPHICS/ RECORDS RETENTION - UNOCC										Conduction (envelope)				Convection (air leakage)				Total	
Bin Weather		Mean Coincident	Enthalpy "i"	Total	Indoor Temp (F)		Delta T (F)	UA		Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings				
OA Temp	Wet Bulb Temp (F)	Temp (F)	(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)		
A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S

		Calculate d from A and B						From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER
97	78.8	42.3		76	80	21.0	17.0	541	0	0	13.5	11.1	0	0	0	0	0	0
95	76.3	39.8		76	80	19.0	15.0	541	0	0	11.0	8.5	0	0	0	0	0	0
93	76.9	40.4	11	76	80	17.0	13.0	541	101	77	11.6	9.1	405	318	506	396	110	11
91	77.2	40.8	46	76	80	15.0	11.0	541	373	274	11.9	9.5	1,740	1,378	2,113	1,652	461	47
89	76.6	40.2	87	76	80	13.0	9.0	541	612	424	11.4	8.9	3,130	2,445	3,741	2,869	873	88
87	75.4	39.0	119	76	80	11.0	7.0	541	708	451	10.2	7.7	3,841	2,905	4,549	3,356	1,194	121
85	74.1	37.8	153	76	80	9.0	5.0	541	745	414	9.0	6.5	4,344	3,140	5,088	3,554	1,535	155
83	73.3	37.0	189	76	80	7.0	3.0	541	716	307	8.2	5.8	4,928	3,441	5,644	3,748	1,896	191
81	72.6	36.4	294	76	80	5.0	1.0	541	795	159	7.6	5.1	7,083	4,770	7,878	4,929	2,949	298
79	72.4	36.3	405	76	80	3.0	(1.0)	541	657	(219)	7.4	5.0	9,547	6,361	10,204	6,142	4,062	410
77	71.5	35.5	256	76	80	1.0	(3.0)	541	138	(415)	6.7	4.2	5,391	3,378	5,530	2,962	2,568	259
75	70.7	34.8	608	76	80	(1.0)	(5.0)	541	(329)	(1,644)	6.0	3.5	11,476	6,693	11,147	5,049	6,098	616
73	68.6	33.0	740	76	80	(3.0)	(7.0)	541	(1,201)	(2,802)	4.2	1.7	9,789	3,968	8,588	1,166	7,422	750
71	66.4	31.2	400	76	80	(5.0)	(9.0)	541	(1,082)	(1,947)	2.4	(0.1)	3,034	-113	1,952	0	1,952	197
Total Savings																		3,743

TRANSFER STATION OFFICE

Bin Weather		Mean Coincident	Enthalpy "I	Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings
OA Temp	Wet Bulb Temp (F)		(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr/ F	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER	
97	78.8	42.3	3	72	76	25.0	21.0	146	11	9	15.9	13.5	19	16	30	26	5	0	
95	76.3	39.8	2	72	76	23.0	19.0	146	7	6	13.3	11.0	11	9	17	14	3	0	
93	76.9	40.4	49	72	76	21.0	17.0	146	150	122	13.9	11.6	275	229	425	351	74	8	
91	77.2	40.8	189	72	76	19.0	15.0	146	524	414	14.3	11.9	1,084	908	1,608	1,322	287	29	
89	76.6	40.2	272	72	76	17.0	13.0	146	675	516	13.7	11.4	1,496	1,242	2,171	1,759	412	42	
87	75.4	39.0	358	72	76	15.0	11.0	146	784	575	12.5	10.2	1,801	1,467	2,585	2,042	543	55	
85	74.1	37.8	420	72	76	13.0	9.0	146	797	552	11.3	9.0	1,906	1,514	2,703	2,066	637	64	
83	73.3	37.0	439	72	76	11.0	7.0	146	705	449	10.6	8.2	1,863	1,454	2,568	1,902	666	67	
81	72.6	36.4	544	72	76	9.0	5.0	146	715	397	9.9	7.6	2,171	1,664	2,886	2,061	825	83	
79	72.4	36.3	591	72	76	7.0	3.0	146	604	259	9.8	7.4	2,320	1,769	2,924	2,028	896	91	
77	71.5	35.5	346	72	76	5.0	1.0	146	253	51	9.0	6.7	1,248	925	1,500	976	525	53	
75	70.7	34.8	800	72	76	3.0	(1.0)	146	350	(117)	8.3	6.0	2,663	1,917	3,013	1,801	1,213	123	
73	68.6	33.0	953	72	76	1.0	(3.0)	146	139	(417)	6.5	4.2	2,489	1,601	2,628	1,183	1,445	146	
71	66.4	31.2	537	72	76	(1.0)	(5.0)	146	(78)	(392)	4.7	2.4	1,018	517	939	125	814	82	
Total Savings																		843	

TRANSFER STATION OFFICE - UNOCC

Bin Weather		Mean Coincident	Enthalpy "I"	Total	Indoor Temp (F)		Delta T (F)	UA	Heat Gain (MBH)	Delta h (BTU/lb)	Heat Gain (MBH)	Heat Gain (MBH)	Savings	Savings				
OA Temp	Wet Bulb Temp (F)		(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr /F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER
97	78.8	42.3		76	80	21.0	17.0	0	0	0	13.5	11.1	0	0	0	0	0	0
95	76.3	39.8		76	80	19.0	15.0	0	0	0	11.0	8.5	0	0	0	0	0	0
93	76.9	40.4	11	76	80	17.0	13.0	0	0	0	11.6	9.1	51	40	51	40	11	1
91	77.2	40.8	46	76	80	15.0	11.0	0	0	0	11.9	9.5	221	175	221	175	46	5
89	76.6	40.2	87	76	80	13.0	9.0	0	0	0	11.4	8.9	397	310	397	310	87	9

87	75.4	39.0	119	76	80	11.0	7.0	0	0	0	10.2	7.7	488	369	488	369	119	12
85	74.1	37.8	153	76	80	9.0	5.0	0	0	0	9.0	6.5	552	399	552	399	153	15
83	73.3	37.0	189	76	80	7.0	3.0	0	0	0	8.2	5.8	626	437	626	437	189	19
81	72.6	36.4	294	76	80	5.0	1.0	0	0	0	7.6	5.1	899	606	899	606	294	30
79	72.4	36.3	405	76	80	3.0	(1.0)	0	0	0	7.4	5.0	1,212	808	1,212	808	405	41
77	71.5	35.5	256	76	80	1.0	(3.0)	0	0	0	6.7	4.2	685	429	685	429	256	26
75	70.7	34.8	608	76	80	(1.0)	(5.0)	0	0	0	6.0	3.5	1,457	850	1,457	850	607	61
73	68.6	33.0	740	76	80	(3.0)	(7.0)	0	0	0	4.2	1.7	1,243	504	1,243	504	739	75
71	66.4	31.2	400	76	80	(5.0)	(9.0)	0	0	0	2.4	(0.1)	385	-14	385	0	385	39

Total Savings 332

SOLID WASTE ADMIN.																		
Bin Weather		Mean Coincident		Enthalpy * Total		Indoor Temp (F)		Delta T (F)		UA		Heat Gain (MBH)		Delta h (BTU/lb)		Convection (air leakage)		Total
OA Temp	Wet Bulb Temp (F)	Enthalpy (BTU/lb)	Total Hrs	Existing	Proposed	Existing	Proposed	Existing	Proposed	(BTU/hr)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculations	=I * D * G / 1,000	=I * H * D / 1,000	=C-enthalpy existing (BTU/lb)	=C-enthalpy new (BTU/lb)	=4.5' Leakage CFM * L * D / 1,000	=4.5' Leakage CFM * M * D / 1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3	3	73	76	24.0	21.0	605	44	38	15.3	13.5	175	155	219	193	26	3
95	76.3	39.8	2	73	76	22.0	19.0	605	27	23	12.8	11.0	97	84	124	107	17	2
93	76.9	40.4	49	73	76	20.0	17.0	605	593	504	13.4	11.6	2,504	2,175	3,097	2,679	418	42
91	77.2	40.8	189	73	76	18.0	15.0	605	2,058	1,715	13.7	11.9	9,894	8,623	11,952	10,338	1,614	163
89	76.6	40.2	272	73	76	16.0	13.0	605	2,633	2,139	13.1	11.4	13,632	11,803	16,265	13,942	2,322	235
87	75.4	39.0	358	73	76	14.0	11.0	605	3,032	2,382	12.0	10.2	16,348	13,941	19,380	16,323	3,057	309
85	74.1	37.8	420	73	76	12.0	9.0	605	3,049	2,287	10.7	9.0	17,208	14,384	20,257	16,670	3,586	362
83	73.3	37.0	439	73	76	10.0	7.0	605	2,656	1,859	10.0	8.2	16,761	13,809	19,416	15,668	3,748	379
81	72.6	36.4	544	73	76	8.0	5.0	605	2,633	1,645	9.4	7.6	19,468	15,810	22,100	17,455	4,645	469
79	72.4	36.3	591	73	76	6.0	3.0	605	2,145	1,072	9.2	7.4	20,780	13,806	22,925	17,879	5,046	510
77	71.5	35.5	346	73	76	4.0	1.0	605	837	209	8.4	6.7	11,117	3,790	11,954	9,000	2,954	298
75	70.7	34.8	800	73	76	2.0	(1.0)	605	968	(484)	7.7	6.0	23,594	13,215	24,562	17,732	6,831	690
73	68.6	33.0	953	73	76	-	(3.0)	605	0	(1,729)	5.9	4.2	21,615	15,208	21,615	13,478	8,137	822
71	66.4	31.2	537	73	76	(2.0)	(5.0)	605	(650)	(1,624)	4.2	2.4	8,524	4,913	7,874	3,289	4,585	463

Total Savings 4746

SOLID WASTE ADMIN. - UNOCC																		
Bin Weather		Mean Coincident		Enthalpy * Total		Indoor Temp (F)		Delta T (F)		UA		Heat Gain (MBH)		Delta h (BTU/lb)		Convection (air leakage)		Total
OA Temp	Wet Bulb Temp (F)	Enthalpy (BTU/lb)	Total Hrs	Existing	Proposed	Existing	Proposed	(BTU/hr)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculations	=I * D * G / 1,000	=I * H * D / 1,000	=C-enthalpy existing (BTU/lb)	=C-enthalpy new (BTU/lb)	=4.5' Leakage CFM * L * D / 1,000	=4.5' Leakage CFM * M * D / 1,000	=N + J	=O + K	=P - Q	=R / EER
97	78.8	42.3		76	80	21.0	17.0	605	0	0	13.5	11.1	0	0	0	0	0	0
95	76.3	39.8		76	80	19.0	15.0	605	0	0	11.0	8.5	0	0	0	0	0	0
93	76.9	40.4	11	76	80	17.0	13.0	605	113	87	11.6	9.1	488	384	601	470	131	13
91	77.2	40.8	46	76	80	15.0	11.0	605	417	306	11.9	9.5	2,099	1,662	2,516	1,968	548	55
89	76.6	40.2	87	76	80	13.0	9.0	605	684	474	11.4	8.9	3,775	2,950	4,459	3,423	1,036	105
87	75.4	39.0	119	76	80	11.0	7.0	605	792	504	10.2	7.7	4,634	3,505	5,426	4,009	1,417	143
85	74.1	37.8	153	76	80	9.0	5.0	605	833	463	9.0	6.5	5,240	3,788	6,073	4,251	1,822	184
83	73.3	37.0	189	76	80	7.0	3.0	605	800	343	8.2	5.8	5,945	4,152	6,745	4,495	2,251	227
81	72.6	36.4	294	76	80	5.0	1.0	605	889	178	7.6	5.1	8,544	5,754	9,434	5,932	3,501	354
79	72.4	36.3	405	76	80	3.0	(1.0)	605	735	(245)	7.4	5.0	11,517	7,674	12,252	7,429	4,823	487
77	71.5	35.5	256	76	80	1.0	(3.0)	605	155	(485)	6.7	4.2	6,504	4,075	6,659	3,610	3,049	308
75	70.7	34.8	608	76	80	(1.0)	(5.0)	605	(368)	(1,839)	6.0	3.5	13,844	3,074	13,476	6,235	7,241	731
73	68.6	33.0	740	76	80	(3.0)	(7.0)	605	(1,343)	(3,133)	4.2	1.7	11,809	4,786	10,466	1,653	8,813	890
71	66.4	31.2	400	76	80	(5.0)	(9.0)	605	(1,210)	(2,178)	2.4	(0.1)	3,660	-136	2,450	0	2,450	247

Total Savings 3746

GAS SERVICE WAREHOUSE

Bin Weather		Mean Coincident	Enthalpy "i"	Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings
OA Temp	Wet Bulb Temp (F)		(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr/ F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)
A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B					=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER
97	78.8	42.3	3	72	76	25.0	21.0	451	34	28	15.9	13.5	134	115	168	143	25	3	
95	76.3	39.8	2	72	76	23.0	19.0	451	21	17	13.3	11.0	75	62	96	79	17	2	
93	76.9	40.4	49	72	76	21.0	17.0	451	464	376	13.9	11.6	1,931	1,610	2,395	1,986	410	41	
91	77.2	40.8	189	72	76	19.0	15.0	451	1,620	1,279	14.3	11.9	7,621	6,383	9,241	7,661	1,580	160	
89	76.6	40.2	272	72	76	17.0	13.0	451	2,086	1,595	13.7	11.4	10,518	8,736	12,604	10,331	2,273	230	
87	75.4	39.0	358	72	76	15.0	11.0	451	2,423	1,777	12.5	10.2	12,664	10,318	15,087	12,095	2,992	302	
85	74.1	37.8	420	72	76	13.0	9.0	451	2,463	1,705	11.3	9.0	13,398	10,646	15,862	12,351	3,510	355	
83	73.3	37.0	439	72	76	11.0	7.0	451	2,178	1,386	10.6	8.2	13,097	10,220	15,276	11,607	3,669	371	
81	72.6	36.4	544	72	76	9.0	5.0	451	2,209	1,227	9.9	7.6	15,266	11,701	17,475	12,928	4,547	459	
79	72.4	36.3	591	72	76	7.0	3.0	451	1,866	800	9.8	7.4	16,312	12,439	18,178	13,239	4,940	499	
77	71.5	35.5	346	72	76	5.0	1.0	451	780	156	9.0	6.7	8,774	6,506	9,554	6,662	2,892	292	
75	70.7	34.8	800	72	76	3.0	(1.0)	451	1,083	(361)	8.3	6.0	18,725	13,482	19,807	13,121	6,686	675	
73	68.6	33.0	953	72	76	1.0	(3.0)	451	430	(1,290)	6.5	4.2	17,501	11,256	17,931	9,966	7,965	805	
71	66.4	31.2	537	72	76	(1.0)	(5.0)	451	(242)	(1,211)	4.7	2.4	7,155	3,636	6,913	2,425	4,488	453	
Total Savings																		1,646	

GAS SERVICE WAREHOUSE - UNOCC

Bin Weather		Mean Coincident	Enthalpy "i" Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings	
OA Temp	Wet Bulb Temp (F)		(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr/ F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	=N +J	=O +K	=P - Q	=R / EER	
97	78.8	42.3		76	80	21.0	17.0	451	0	0	13.5	11.1	0	0	0	0	0	0	
95	76.3	39.8		76	80	19.0	15.0	451	0	0	11.0	8.5	0	0	0	0	0	0	
93	76.9	40.4	11	76	80	17.0	13.0	451	84	65	11.6	9.1	361	284	446	349	97	10	
91	77.2	40.8	46	76	80	15.0	11.0	451	311	228	11.9	9.5	1,553	1,230	1,865	1,459	406	41	
89	76.6	40.2	87	76	80	13.0	9.0	451	510	353	11.4	8.9	2,794	2,183	3,304	2,536	768	78	
87	75.4	39.0	119	76	80	11.0	7.0	451	591	376	10.2	7.7	3,430	2,594	4,020	2,970	1,051	106	
85	74.1	37.8	153	76	80	9.0	5.0	451	621	345	9.0	6.5	3,878	2,804	4,499	3,149	1,351	136	
83	73.3	37.0	189	76	80	7.0	3.0	451	597	256	8.2	5.8	4,400	3,073	4,997	3,328	1,668	169	
81	72.6	36.4	294	76	80	5.0	1.0	451	663	133	7.6	5.1	6,324	4,259	6,987	4,392	2,595	262	
79	72.4	36.3	405	76	80	3.0	(1.0)	451	548	(183)	7.4	5.0	8,524	5,680	9,072	5,497	3,575	361	
77	71.5	35.5	256	76	80	1.0	(3.0)	451	115	(346)	6.7	4.2	4,814	3,016	4,929	2,669	2,260	228	
75	70.7	34.8	608	76	80	(1.0)	(5.0)	451	(274)	(1,371)	6.0	3.5	10,246	5,976	9,972	4,605	5,367	542	
73	68.6	33.0	740	76	80	(3.0)	(7.0)	451	(1,001)	(2,337)	4.2	1.7	8,740	3,543	7,738	1,206	6,533	660	
71	66.4	31.2	400	76	80	(5.0)	(9.0)	451	(902)	(1,624)	2.4	(0.1)	2,709	-101	1,806	0	1,806	182	
Total Savings																		2,776	

GAS ADMIN. BUILDING

Bin Weather		Mean Coincident	Enthalpy "i"	Total	Indoor Temp (F)		Delta T (F)		UA	Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings	Savings
OA Temp	Wet Bulb Temp (F)		(BTU/lb)	Hrs	Existing	Proposed	Existing	Proposed	(BTU/hr / F)	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)
A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
		Calculate d from A and B					=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	=N +J	=O +K	=P - Q	= R / EER
97	78.8	42.3	3		72	76	25.0	21.0	451	34	28	15.9	13.5	172	147	206	175	31	

95	76.3	39.8	2	72	76	23.0	19.0	451	21	17	13.3	11.0	96	80	117	97	20	2
93	76.9	40.4	49	72	76	21.0	17.0	451	464	376	13.9	11.6	2,471	2,060	2,936	2,436	499	50
91	77.2	40.8	189	72	76	19.0	15.0	451	1,620	1,279	14.3	11.9	9,755	8,170	11,375	9,449	1,926	195
89	76.6	40.2	272	72	76	17.0	13.0	451	2,086	1,595	13.7	11.4	13,464	11,182	15,550	12,777	2,772	280
87	75.4	39.0	358	72	76	15.0	11.0	451	2,423	1,777	12.5	10.2	16,210	13,207	18,633	14,984	3,649	369
85	74.1	37.8	420	72	76	13.0	9.0	451	2,463	1,705	11.3	9.0	17,150	13,627	19,613	15,332	4,281	432
83	73.3	37.0	439	72	76	11.0	7.0	451	2,178	1,386	10.6	8.2	16,765	13,082	18,943	14,468	4,475	452
81	72.6	36.4	544	72	76	9.0	5.0	451	2,209	1,227	9.9	7.6	19,541	14,978	21,750	16,205	5,545	560
79	72.4	36.3	591	72	76	7.0	3.0	451	1,866	800	9.8	7.4	20,879	15,922	22,745	16,721	6,024	608
77	71.5	35.5	346	72	76	5.0	1.0	451	780	156	9.0	6.7	11,230	8,328	12,011	8,484	3,527	356
75	70.7	34.8	800	72	76	3.0	(1.0)	451	1,083	(361)	8.3	6.0	23,968	17,257	25,050	16,896	8,154	824
73	68.6	33.0	953	72	76	1.0	(3.0)	451	430	(1,290)	6.5	4.2	22,401	14,407	22,831	13,117	9,714	981
71	66.4	31.2	537	72	76	(1.0)	(5.0)	451	(242)	(1,211)	4.7	2.4	9,159	4,654	8,917	3,443	5,474	553
Total Savings																		5,666

GAS ADMIN. BUILDING - UNOCC

GAS ADMIN. BUILDING - UNOCC				Conduction (envelope)								Convection (air leakage) Total								Savings	
Bln Weath Mean Coincident		Enthalpy "I" Total		Indoor Temp (F)		Delta T (F)		UA		Heat Gain (MBH)		Delta h (BTU/lb)		Heat Gain (MBH)		Heat Gain (MBH)		Savings			
OA Temp	Wet Bulb Temp (F)		Hrs	Existing	Proposed	Existing	Proposed	(BTU/ hr/ F	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	(MBH)	(kWh)			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S			
		Calculate d from A and B				=A - E	=A - F	From Data Sheet Calculati ons	=I* D* G /1,000	=I* H* D /1,000	=C- enthalpy existing (BTU/lb)	=C- enthalpy new (BTU/lb)	=4.5* Leakage CFM *L * D /1,000	=4.5* Leakage CFM *M * D /1,000	= N +J	= O + K	=P - Q	= R / EER			
97	78.8	42.3		76	80	21.0	17.0	0	0	0	13.5	11.1	0	0	0	0	0	0			
95	76.3	39.8		76	80	19.0	15.0	0	0	0	11.0	8.5	0	0	0	0	0	0			
93	76.9	40.4	11	76	80	17.0	13.0	0	0	0	11.6	9.1	463	364	463	364	99	10			
91	77.2	40.8	46	76	80	15.0	11.0	0	0	0	11.9	9.5	1,988	1,575	1,988	1,575	414	42			
89	76.6	40.2	87	76	80	13.0	9.0	0	0	0	11.4	8.9	3,577	2,794	3,577	2,794	782	79			
87	75.4	39.0	119	76	80	11.0	7.0	0	0	0	10.2	7.7	4,390	3,320	4,390	3,320	1,070	108			
85	74.1	37.8	153	76	80	9.0	5.0	0	0	0	9.0	6.5	4,964	3,589	4,964	3,589	1,375	139			
83	73.3	37.0	189	76	80	7.0	3.0	0	0	0	8.2	5.8	5,632	3,933	5,632	3,933	1,699	172			
81	72.6	36.4	294	76	80	5.0	1.0	0	0	0	7.6	5.1	8,095	5,452	8,095	5,452	2,643	267			
79	72.4	36.3	405	76	80	3.0	(1.0)	0	0	0	7.4	5.0	10,911	7,270	10,911	7,270	3,641	368			
77	71.5	35.5	256	76	80	1.0	(3.0)	0	0	0	6.7	4.2	6,162	3,860	6,162	3,860	2,301	232			
75	70.7	34.8	608	76	80	(1.0)	(5.0)	0	0	0	6.0	3.5	13,115	7,649	13,115	7,649	5,466	552			
73	68.6	33.0	740	76	80	(3.0)	(7.0)	0	0	0	4.2	1.7	11,187	4,534	11,187	4,534	6,653	672			
71	66.4	31.2	400	76	80	(5.0)	(9.0)	0	0	0	2.4	(0.1)	3,467	-129	3,467	0	3,467	350			
Total Savings																		2,991			

Area	Gross Wall Area (sq ft)	Window Glass % of Walls	Areas (sq ft)			U Values			Conduction Load UA (BTU/ hr°F)	Convection Load (leakage)				Cooling Equipment EER
			Walls (sq ft)	Windows (sq ft)	Roof (sq ft)	Walls	Windows	Roof		Floor Area (sq ft)	Floor Heights (ft)	Leakage Rate (ACH)	Leakage Rate (CFM)	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
	Field Observation and Measurements		= B*(1-C) = B*C						= I*F + H*E + G*D	Based on "semi-tight" construction =M*K*L*1/ [60 min/ hr]				Equipment Efficiency Rating
FIRE STATION # 44	3,600	10%	3,240	360	1,400	0.102	0.45	0.034	540	1,400	10	0.67	156	13.3
FIRE STATION # 45 - 24/7 Area	2,500	15%	2,125	375	3,150	0.102	0.45	0.034	493	3,150	10	0.67	352	9.0
FIRE STATION # 45 - Office Area	1,900	15%	1,615	285	2,100	0.102	0.45	0.034	364	2,100	10	0.67	235	9.0
FIRE STATION # 46	4,200	10%	3,780	420	2,250	0.102	0.45	0.034	651	2,250	10	0.67	251	9.9
FIRE STATION # 47	2,400	15%	2,040	360	4,800	0.102	0.45	0.034	533	4,800	10	0.67	536	13.3
FIRE STATION # 49	2,900	18%	2,393	508	4,500	0.102	0.45	0.034	625	4,500	10	0.67	503	13.3
FIRE STATION # 50	3,000	15%	2,550	450	5,400	0.102	0.45	0.034	646	5,400	10	0.67	603	9.9
FIRE STATION # 51	2,900	18%	2,393	508	4,500	0.102	0.45	0.034	625	4,500	10	0.67	503	13.3
FIRE ANNEX	1,700	15%	1,445	255	1,650	0.102	0.45	0.034	318	1,650	10	0.67	184	10.8
POLICE PISTOL RANGE	3,220	15%	2,737	483	3,000	0.102	0.45	0.034	599	3,000	10	0.67	335	9.9
CNTRYSD PD IMPOUND LOT	1,800	15%	1,530	270	600	0.102	0.45	0.034	298	600	10	0.67	67	9.9
POLICE, SOUTH GREENWOOD	1,000	15%	850	150	600	0.102	0.45	0.034	175	600	10	0.67	67	9.9
POLICE, NORTH GREENWOOD	1,557	10%	1,402	156	1,500	0.102	0.45	0.034	264	1,500	10	0.67	168	9.9
POLICE, CLW BEACH STA.	2,600	10%	2,340	260	4,000	0.102	0.45	0.034	492	4,000	10	0.67	447	10.8
LIBRARY, N. GREENWOOD - MOD	3,400	15%	2,890	510	7,200	0.102	0.45	0.034	769	7,200	10	0.67	804	10.8
BEACH REC & LIBRARY - MOD	4,000	15%	3,400	600	9,600	0.102	0.45	0.034	943	9,600	10	0.67	1,072	10.8
LIBRARY, COUNTRYSIDE BR.	5,000	20%	4,000	1,000	600	0.102	0.45	0.034	878	15,400	10	0.67	1,720	9.9
LIBRARY, EAST BRANCH	5,000	20%	4,000	1,000	600	0.102	0.45	0.034	878	15,400	10	0.67	1,720	9.9
PUBLIC WORKS BLDG. G	3,600	10%	3,240	360	4,500	0.124	0.45	0.065	856	4,500	10	0.67	503	9.9
PUBLIC WORKS BLDG. C	3,400	10%	3,060	340	8,000	0.124	0.45	0.065	1,052	8,000	10	0.67	893	9.9
PUBLIC WORKS BLDG. B	2,200	10%	1,980	220	3,000	0.124	0.45	0.065	540	3,000	10	0.67	335	9.9
PUBLIC WORKS BLDG. A	3,400	10%	3,060	340	7,125	0.124	0.45	0.065	996	7,125	10	0.67	796	9.9
ENGINEERING FIELD OPERATION #E	3,200	10%	2,880	320	4,800	0.102	0.45	0.034	601	4,800	10	0.67	536	9.9
FRED COURNOYER REC. CTR.	2,100	10%	1,890	210	2,750	0.102	0.45	0.034	381	2,750	10	0.67	307	9.9
MCMULLEN TENNIS COMPLEX	2,700	20%	2,160	540	3,500	0.116	0.45	0.034	613	3,500	10	0.67	391	9.0
BLDG. & MAINT. SHOP	6,450	15%	5,483	968	5,400	0.060	0.45	0.034	948	9,450	10	0.67	1,055	9.9
SIGN SHOP, TRANSPORTATION	2,800	10%	2,520	280	4,800	0.060	0.45	0.034	440	4,800	10	0.67	536	9.9
GRAPHICS/ RECORDS RETENTION	3,300	10%	2,970	330	6,300	0.060	0.45	0.034	541	6,300	10	0.67	704	9.9
TRANSFER STATION OFFICE	1,200	10%	1,080	120	800	0.060	0.45	0.034	146	800	10	0.67	89	9.9
SOLID WASTE ADMIN.	3,500	10%	3,150	350	7,600	0.060	0.45	0.034	605	7,600	10	0.67	849	9.9
ROSS NORTON REC. CENTER GYM (NEW)	10,000	0%	10,000	0	9,775	0.060	0.45	0.034	932	9,775	10	0.67	1,092	10.8
ROSS NORTON REC. CENTER (NEW)	4,660	15%	3,961	699	10,445	0.060	0.45	0.034	907	10,445	10	0.67	1,166	10.8
N. GREENWOOD REC GYM	11,750	0%	11,750	0	13,300	0.060	0.45	0.034	1,157	13,300	10	0.67	1,485	9.9
N. GREENWOOD REC	7,800	15%	6,630	1,170	12,525	0.060	0.45	0.034	1,350	12,525	10	0.67	1,399	9.9
MORNINGSIDE REC CENTER	7,600	15%	6,460	1,140	8,125	0.060	0.45	0.034	1,177	16,250	10	0.67	1,815	9.9
GAS SERVICE WAREHOUSE	3,000	15%	2,550	450	2,813	0.060	0.45	0.034	451	5,625	10	0.67	628	9.9
GAS ADMIN. BUILDING	6,000	15%	5,100	900	3,600	0.060	0.45	0.034	833	7,200	10	0.67	804	9.9
ECM SOCCER CONCESSION	2,200	15%	1,870	330	3,000	0.060	0.45	0.034	363	3,000	10	0.67	335	9.9
COUNTRYSIDE REC. CENTER	9,300	15%	7,905	1,395	23,400	0.060	0.45	0.034	1,898	23,400	10	0.67	2,613	11.7
C'SIDE CONCESSION/BATHROOM	2,000	15%	1,700	300	2,500	0.060	0.45	0.034	322	2,500	10	0.67	279	9.9
FIRE STATION # 48 TRAINING CENTER	3,600	15%	3,060	540	7,200	0.060	0.45	0.034	671	7,200	10	0.67	804	10.8
FIRE 48 TRAINING CTR OFFICE	1,500	15%	1,275	225	1,350	0.060	0.45	0.034	224	1,350	10	0.67	151	10.8
POLICE, NORTH GREENWOOD	1,500													
POLICE, COUNTRYSIDE STA.	13,500													
MUNICIPAL SERVICES BLDG.	68,264													
POLICE, CLW BEACH STA.	6,370													
NURSERY	1000													

24 Hour Operation

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Jul 1 # hrs: 2860

Jan Sun	Feb Mon	Mar Tue	Apr Wed	May Thu	Jun Fri	Jul Sat	Aug Sun	Sep Mon	Oct Tue	Nov Wed	Dec Thu
1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12	12	12	12	12
13	13	13	13	13	13	13	13	13	13	13	13
14	14	14	14	14	14	14	14	14	14	14	14
15	15	15	15	15	15	15	15	15	15	15	15
16	16	16	16	16	16	16	16	16	16	16	16
17	17	17	17	17	17	17	17	17	17	17	17
18	18	18	18	18	18	18	18	18	18	18	18
19	19	19	19	19	19	19	19	19	19	19	19
20	20	20	20	20	20	20	20	20	20	20	20
21	21	21	21	21	21	21	21	21	21	21	21
22	22	22	22	22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23	23	23	23	23
24	24	24	24	24	24	24	24	24	24	24	24

Mid-pts	DB (F)	Total Hrs	WB (F)	h (BTU/lb)	January Hrs	WB (F)	h (BTU/lb)	February Hrs	WB (F)	h (BTU/lb)	March Hrs	WB (F)	h (BTU/lb)	April Hrs	WB (F)	h (BTU/lb)	May Hrs	WB (F)	h (BTU/lb)	June Hrs
97 96 to 98		3	78.8	42.1																2
95 94 to 96		2	75.3	39.6																2
93 92 to 94		49	76.9	40.2																19
91 90 to 92		189	77.2	40.5																60
89 88 to 90		272	76.6	40				1	73.6	37				2	65.3	30	23	76.7	40.1	68
87 86 to 88		358	75.4	38.8				1	72.9	36.4				17	67.9	32.2	57	74.7	38.1	56
85 84 to 86		420	74.1	37.5				1	70	33.9	3	66.8	31.2	50	69.8	33.8	60	73.1	36.6	53
83 82 to 84		439	73.3	36.9				7	71.2	34.9	8	67.7	32	48	69.2	33.2	68	72.9	36.5	42
81 80 to 82		544	72.6	36.2				23	68.7	32.8	37	68	32.2	47	69.1	33.2	62	72	35.7	59
79 78 to 80		591	72.4	36.1	6	71.7	35.4	26	68.7	32.8	24	66.9	31.4	42	68.3	32.5	81	72.5	36.1	69
77 76 to 78		346	71.5	35.3	4	69.8	33.8	16	65.8	30.5	14	66.9	31.4	28	67.4	31.8	30	72.3	36	29
75 74 to 76		800	70.7	34.6	11	69.2	33.3	30	64.7	29.7	27	66.5	31.1	61	67.9	32.2	85	71.3	35.1	69
73 72 to 74		953	68.6	32.8	51	67.5	31.9	48	65.4	30.2	46	64.7	29.7	83	66.2	30.9	112	69.3	33.4	149
71 70 to 72		537	66.4	31	30	64.9	29.9	53	64.1	29.3	53	66.2	30.9	77	64.8	29.8	66	67.7	32.1	32
69 68 to 70		454	64.3	29.5	51	64.6	29.7	47	64.4	29.6	57	62.4	28.1	63	63.8	29.1	46	65.5	30.3	9
67 66 to 68		452	62.2	27.9	33	61.2	27.2	56	60.1	26.5	59	60.9	27	51	62.6	28.2	23	64.2	29.4	1
65 64 to 66		394	61	27.1	37	59.3	25.9	59	59.1	25.8	63	60.6	26.8	50	61.2	27.2	21	63	28.5	1
63 62 to 64		293	58.8	25.6	52	58.6	25.5	38	58.3	25.2	51	58.3	25.3	34	59.3	25.9	4	62	27.8	
61 60 to 62		252	56.8	24.3	69	57.4	24.7	33	55.8	23.6	51	57	24.4	15	57.3	24.6	1	60.5	26.8	
59 58 to 60		112	54.7	23	41	55.5	23.4	7	51.5	21.1	18	53.5	22.2	10	55.4	23.4				
57 56 to 58		185	52.9	21.9	65	53.4	22.2	25	51.8	21.3	31	52.8	21.8	10	53.8	22.4				
55 54 to 56		333	51	20.8	89	51.4	21	42	49.8	20.2	96	51.1	20.8	28	53.6	22.3				
53 52 to 54		184	48.5	19.4	39	48	19.2	28	47.2	18.7	27	49.3	19.9	3	51.2	20.9				
51 50 to 52		144	46.1	18.2	49	46.5	18.4	26	44.4	17.3	20	46.8	18.5							
49 48 to 50		102	44.4	17.3	29	44.7	17.5	20	42	16.1	15	45.6	17.9	1	48.4	19.4				
47 46 to 48		73	43.3	16.8	20	43.9	17.1	8	40.7	15.5	10	42.8	16.5							
45 44 to 46		83	41.1	15.7	27	42.4	16.3	22	39	14.7	16	42.2	16.2							

43 42 to 44	50	39.1	14.8	19	40.1	15.2	10	37.4	14	6	41.5	15.9
41 40 to 42	18	38.3	14.4	4	38.6	14.6	2	37.6	14.1	6	39.7	15.1
39 38 to 40	37	35.7	13.3	7	36.4	13.6	10	35.3	13.1	4	38.5	14.5
37 36 to 38	57	34	12.6	9	34.9	12.9	19	33.7	12.5	2	36.3	13.5
35 34 to 36	18	31.7	11.6	2	34.1	12.6	9	31.4	11.5			
33 32 to 34	15	30.5	11.1				5	30.6	11.2			
31 30 to 32	1	28.8	10.4									
29 28 to 30												

Occupied Hours

Units: I-P 12842 TAMPAN 27 58 W 82 32 9.843 ft

Date: Jul 1 # hrs: 2860

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					

8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18

Mid-pts	DB (F)	Total			January			February			March			April			May			June		
		Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs		
97 96 to 98		3	78.8	42.1																	2	
95 94 to 96		2	76.3	39.6																	2	
93 92 to 94		38	76.4	39.7																	16	
91 90 to 92		143	76.9	40.2																	50	
89 88 to 90		185	76.6	39.9											1	63.1	28.4	15	75.7	39	44	
87 86 to 88		239	75.4	38.8											9	68.7	32.8	39	74.7	38.1	34	
85 84 to 86		267	73.9	37.4							3	66.8	31.2	36	70.7	34.5	37	73.2	36.8	29		
83 82 to 84		250	73.2	36.7				5	71.2	35	5	65.9	30.5	29	70.5	34.4	38	73	36.6	24		
81 80 to 82		250	71.6	35.3				18	69.2	33.3	31	67.5	31.9	27	71	34.8	38	71.6	35.3	23		
79 78 to 80		186	71.1	34.9	5	72.4	36.1	15	68.7	32.8	21	66.4	31	18	70.1	34.1	22	71.5	35.3	10		
77 76 to 78		90	69.3	33.3	3	70.6	34.5	10	67	31.5	10	67.1	31.6	10	67.5	31.9	6	69.1	33.2	3		
75 74 to 76		192	68.4	32.6	8	70.7	34.6	17	66.7	31.2	23	66.4	31	23	65.8	30.6	19	70.3	34.3	2		
73 72 to 74		213	66.4	31	27	67.5	31.9	16	64.6	29.6	28	64.6	29.7	22	64.3	29.4	26	69.5	33.6	3		
71 70 to 72		137	63.9	29.1	14	64.8	29.8	24	60.8	26.9	20	64.9	29.9	22	61.9	27.6	6	68.7	32.9			
69 68 to 70		99	62.9	28.4	15	64.2	29.3	13	62.1	27.8	18	61.4	27.3	13	61.5	27.4	2	65.1	30			
67 66 to 68		95	60.1	26.5	15	59.2	25.8	16	57.9	25	12	60.4	26.6	5	60.4	26.6	1	63.8	29.1			
65 64 to 66		68	59.2	25.9	12	55.4	23.4	7	55.8	23.6	24	61.5	27.5	3	59.4	26						
63 62 to 64		62	56.3	23.9	22	56.3	24	10	55.5	23.5	15	56.3	23.9									

61 60 to 62	52	55.5	23.4	19	55	23.2	6	54.1	22.6	10	56.2	23.9			
59 58 to 60	30	51.9	21.3	13	52.2	21.5	3	49.3	19.8	7	51.3	21	1	52.5	21.7
57 56 to 58	42	49.4	19.9	20	49.8	20.1	7	49.8	20.1	7	51.7	21.2	1	51.1	20.9
55 54 to 56	63	48.1	19.2	18	48.1	19.2	12	47.5	18.9	15	49.6	20			
53 52 to 54	46	46.4	18.3	11	44.3	17.2	7	45.5	17.8	1	45.3	17.7			
51 50 to 52	40	43.1	16.6	19	44.2	17.2	9	42.1	16.2	2	44.8	17.5			
49 48 to 50	19	41.3	15.8	8	42.4	16.3	7	40.3	15.3						
47 46 to 48	9	40.7	15.5	4	42.2	16.2	3	40.1	15.2						
45 44 to 46	13	38.3	14.4	4	40.7	15.5	6	37.9	14.2						
43 42 to 44	11	37.3	14	2	39.6	15	4	37	13.8	1	42.4	16.3			
41 40 to 42															
39 38 to 40	7	34.2	12.6	1	35.6	13.2	2	33.9	12.5						
37 36 to 38	6	33	12.1	2	34.7	12.9	2	32.3	11.9						
35 34 to 36	1	29.2	10.6				1	29.2	10.6						
33 32 to 34	2	29.6	10.7												
31 30 to 32															
29 28 to 30															

Unoccupied Hours

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Jul 1 # hrs: 5900

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8						8
9						9
10						10
11						11
12						12
13						13
14						14
15						15
16						16
17						17
18						18
19	19	19	19	19	19	19
20	20	20	20	20	20	20
21	21	21	21	21	21	21
22	22	22	22	22	22	22
23	23	23	23	23	23	23
24	24	24	24	24	24	24

		Total	January			February			March			April			May			June		
Mid-pts	DB (F)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs
93 92 to 94		11	78.5	41.8																3
91 90 to 92		46	78	41.3														1	80	43.4
89 88 to 90		87	76.8	40.2					1	73.6	37			1	67.3	31.6	8	78.7	42.1	24
87 86 to 88		119	75.4	38.8					1	72.9	36.4			8	67.1	31.5	18	74.9	38.3	22
85 84 to 86		153	74.3	37.8					1	70	33.9			14	67.7	32	23	72.8	36.3	24
83 82 to 84		189	73.6	37.1					2	71	34.8	3	70.6	34.5	19	67.1	31.5	30	72.7	36.3
81 80 to 82		294	73.5	37					5	66.6	31.1	6	70.1	34	20	66.4	31	24	72.8	36.4
79 78 to 80		405	73.1	36.7	1	67.7	32	11	68.7	32.9	3	69.9	33.8	24	66.8	31.3	59	72.8	36.5	59
77 76 to 78		256	72.3	36	1	67	31.5	6	63.8	29	4	66.5	31.1	18	67.4	31.8	24	73.1	36.7	26

75 74 to 76	608	71.4	35.2	3	64.9	29.8	13	62.1	27.8	4	66.8	31.4	38	69	33.1	66	71.6	35.4	67
73 72 to 74	740	69.2	33.3	24	67.6	32	32	65.8	30.5	18	64.9	29.9	61	66.9	31.4	86	69.3	33.4	146
71 70 to 72	400	67.2	31.7	16	65.1	30	29	66.7	31.2	33	66.9	31.5	55	65.9	30.7	60	67.6	32	32
69 68 to 70	355	64.7	29.7	36	64.8	29.8	34	65.3	30.2	39	62.9	28.4	50	64.4	29.5	44	65.5	30.3	9
67 66 to 68	357	62.7	28.3	18	62.9	28.4	40	61	27.1	47	61	27	46	62.8	28.4	22	64.2	29.4	1
65 64 to 66	326	61.3	27.3	25	61.1	27.1	52	59.6	26.1	39	60	26.4	47	61.3	27.3	21	63	28.5	1
63 62 to 64	231	59.4	26	30	60.3	26.6	28	59.2	25.9	36	59.1	25.8	34	59.3	25.9	4	62	27.8	
61 60 to 62	200	57.1	24.5	50	58.3	25.3	27	56.1	23.9	41	57.1	24.5	15	57.3	24.6	1	60.5	26.8	
59 58 to 60	82	55.7	23.6	28	56.9	24.4	4	53.1	22	11	54.8	23.1	9	55.7	23.6				
57 56 to 58	143	53.8	22.5	45	54.9	23.1	18	52.6	21.7	24	53.1	22	9	54.1	22.6				
55 54 to 56	270	51.6	21.2	71	52.2	21.5	30	50.7	20.7	81	51.3	21	28	53.6	22.3				
53 52 to 54	138	49.2	19.8	28	49.4	19.9	21	47.7	19	26	49.4	19.9	3	51.2	20.9				
51 50 to 52	104	47.2	18.7	30	48	19.1	17	45.6	17.9	18	47	18.6							
49 48 to 50	83	45.1	17.7	21	45.6	17.9	13	42.9	16.6	15	45.6	17.9	1	48.4	19.4				
47 46 to 48	64	43.7	16.9	16	44.3	17.3	5	41	15.7	10	42.8	16.5							
45 44 to 46	70	41.6	15.9	23	42.7	16.5	16	39.3	14.9	16	42.2	16.2							
43 42 to 44	39	39.5	15	17	40.1	15.3	6	37.6	14.1	5	41.3	15.8							
41 40 to 42	18	38.3	14.4	4	38.6	14.6	2	37.6	14.1	6	39.7	15.1							
39 38 to 40	30	36	13.4	6	36.6	13.7	8	35.6	13.2	4	38.5	14.5							
37 36 to 38	51	34.2	12.6	7	34.9	13	17	33.9	12.5	2	36.3	13.5							
35 34 to 36	17	31.8	11.7	2	34.1	12.6	8	31.6	11.6										
33 32 to 34	13	30.7	11.2				5	30.6	11.2										
31 30 to 32	1	28.8	10.4																
29 28 to 30																			

Countryside Library Unoccupied

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Jul 1 #hrs: 6154

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
1	1	1	1	1	1	1					
2	2	2	2	2	2	2					
3	3	3	3	3	3	3					
4	4	4	4	4	4	4					
5	5	5	5	5	5	5					
6	6	6	6	6	6	6					
7	7	7	7	7	7	7					
8	8					8					
9	9					9					
10						10					
11						11					
						12					
						13					
						14					
						15					
						16					
						17					
18						18					
19						19					
20						20					
21	21					21					
22	22					22					
23	23					23					
24	24					24					

		Total	January		February		March		April		May		June	
Mid-pts	DB (F)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs
97 96 to 98			1	79.9	43.3									
95 94 to 96														

Convenior **North Greenwood Lib Occupied**
Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft
Date: Aug # hrs: 1560
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Sun Mon Tue Wed Thu Fri Sat

13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		2							2					
95 94 to 96		2							2					
93 92 to 94		37							15	9	13			
91 90 to 92		127						4	43	39	36	4	1	
89 88 to 90		128					1	15	22	24	31	22	10	3
87 86 to 88		145					9	34	16	11	18	34	21	2
85 84 to 86		162				3	31	23	11	13	11	22	42	6
83 82 to 84		143		5	5	5	24	27	7	8	14	16	28	9
81 80 to 82		136		15	28	13	20	7	4	9	10	12	16	2
79 78 to 80		89	4	11	18	6	6	4	7	2	6	11	12	2
77 76 to 78		43	2	5	8	6			2		3	2	14	1
75 74 to 76		111	5	14	15	12	3	2	5	4	8	4	23	16
73 72 to 74		101	19	10	11	6	5	1	4		1	1	23	20
71 70 to 72		59	7	13	6	9	1						9	14
69 68 to 70		36	8	5	7	2							5	9
67 66 to 68		38	9	7	3	1							6	12
65 64 to 66		30	9	4	10								1	6
63 62 to 64		35	16	4	10								2	3
61 60 to 62		19	11	1	3									4
59 58 to 60		15	7	1	4									3
57 56 to 58		19	10	2	3								1	3
55 54 to 56		26	8	7	4									7
53 52 to 54		23	4	3										16
51 50 to 52		20	10	5										5
49 48 to 50		10	2	6										2
47 46 to 48		1	1											
45 44 to 46		2		2										
43 42 to 44		1												1
41 40 to 42														
39 38 to 40														
37 36 to 38														
35 34 to 36														
33 32 to 34														
31 30 to 32														
29 28 to 30														

Conventior North Greenwood Unoccupied

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 7200

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
	1	1	1	1	1	1					1
	2	2	2	2	2	2				2	2
	3	3	3	3	3	3				3	3

	4	4	4	4	4	4	4										
	5	5	5	5	5	5	5										
	6	6	6	6	6	6	6										
	7	7	7	7	7	7	7										
	8	8	8	8	8	8	8										
	9	9	9	9	9	9	9										
	10	10	10	10	10	10	10										
	11	11	11	11	11	11	11										
	12	12	12	12	12												
	13																
	14																
	15																
	16																
	17																
	18					18	18										
	19	19	19	19	19	19	19										
	20	20	20	20	20	20	20										
	21	21	21	21	21	21	21										
	22	22	22	22	22	22	22										
	23	23	23	23	23	23	23										
	24	24	24	24	24	24	24										
Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs			
97 96 to 98		1								1							
95 94 to 96																	
93 92 to 94		12							4	2	6						
91 90 to 92		62						1	17	27	16	1					
89 88 to 90		144		1			1	8	46	42	29	11	6				
87 86 to 88		213		1			8	23	40	62	42	24	12	1			
85 84 to 86		258		1			19	37	42	40	49	44	25	1			
83 82 to 84		296		2		3	24	41	35	46	44	55	38	8			
81 80 to 82		408		8		9	34	42	52	83	72	55	33	17			3
79 78 to 80		502	2	15		6	36	75	65	84	80	63	51	18			7
77 76 to 78		303	2	11		6	22	30	29	62	71	46	14	4			6
75 74 to 76		689	6	16		12	49	82	67	118	122	115	60	24			18
73 72 to 74		862	32	38		35	77	107	148	45	68	130	87	58			27
71 70 to 72		478	23	40		47	68	65	32	6	7	25	91	48			26
69 68 to 70		418	43	42		50	61	46	9			14	65	47			41
67 66 to 68		414	24	49		56	50	23	1			6	70	64			71
65 64 to 66		364	28	55		53	50	21	1			5	37	58			56
63 62 to 64		258	36	34		41	34	4					17	40			52
61 60 to 62		233	58	32		48	15	1					4	38			37
59 58 to 60		97	34	6		14	10						1	22			10
57 56 to 58		166	55	23		28	10						1	31			18
55 54 to 56		307	81	35		92	28							38			33
53 52 to 54		161	35	25		27	3							25			46
51 50 to 52		124	39	21		20								20			24
49 48 to 50		92	27	14		15	1							10			25
47 46 to 48		72	19	8		10								15			20
45 44 to 46		81	27	20		16								1			17
43 42 to 44		49	19	10		6											14
41 40 to 42		18	4	2		6											6
39 38 to 40		37	7	10		4											16
37 36 to 38		57	9	19		2											27
35 34 to 36		18	2	9													7
33 32 to 34		15		5													10
31 30 to 32		1															1
29 28 to 30																	

Convention **Beach Rec & Library Unoccupied**

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 5640

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
1	1	1	1	1	1	1	1				
2	2	2	2	2	2	2	2				
3	3	3	3	3	3	3	3				
4	4	4	4	4	4	4	4				
5	5	5	5	5	5	5	5				
6	6	6	6	6	6	6	6				
7	7	7	7	7	7	7	7				
8											
9											
10											
11											
12											
13											13
14											14
15											15
16											16
17											17
18				18			18		18		18
19				19			19		19		19
20	20			20			20		20		20
21	21			21			21		21		21
22	22			22			22		22		22
23	23			23			23		23		23
24	24			24			24		24		24

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
93 92 to 94		11							3	2	6			
91 90 to 92		41						1	10	20	9	1		
89 88 to 90		74			1		1	9	23	16	10	9	5	
87 86 to 88		110			1		8	19	15	26	19	12	10	
85 84 to 86		136			1		14	20	22	20	27	22	10	
83 82 to 84		175			2		3	16	27	19	30	30	15	4
81 80 to 82		282			5		6	23	19	32	71	55	40	11
79 78 to 80		377	1	10	2	21	55	55	74	67	45	34	7	6
77 76 to 78		245	1	6	4	15	23	26	58	64	35	7	1	5
75 74 to 76		599	3	13	6	35	66	67	119	110	107	44	17	12
73 72 to 74		716	23	29	18	56	83	145	45	68	115	73	40	21
71 70 to 72		394	15	27	33	54	57	32	6	7	24	80	39	20
69 68 to 70		347	37	33	38	48	43	9			14	61	35	29
67 66 to 68		347	16	38	47	44	22	1			6	69	51	53
65 64 to 66		314	22	53	37	45	21	1			4	34	52	45
63 62 to 64		223	31	27	35	34	4					16	32	44
61 60 to 62		183	48	25	37	13	1					4	26	29
59 58 to 60		76	27	4	10	7						1	20	7
57 56 to 58		134	41	16	23	9						1	29	15
55 54 to 56		256	69	29	76	27							31	24
53 52 to 54		131	27	18	25	3							22	36
51 50 to 52		98	30	16	16								17	19
49 48 to 50		81	19	13	15	1							10	23
47 46 to 48		62	16	5	10								13	18
45 44 to 46		66	21	17	14								1	13
43 42 to 44		39	16	6	5									12

51 50 to 52	78	24	12	11		17	14
49 48 to 50	69	14	12	14	1	10	18
47 46 to 48	53	13	3	10		14	13
45 44 to 46	60	21	10	15		1	13
43 42 to 44	29	12	6	5			6
41 40 to 42	12	4	1	5			2
39 38 to 40	24	5	5	4			10
37 36 to 38	49	7	15	2			25
35 34 to 36	17	2	8				7
33 32 to 34	12		5				7
31 30 to 32	1						1
29 28 to 30							

Conventior **Ross Norton Occupied**
 Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft
 Date: Aug #hrs: 4634
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Sun Mon Tue Wed Thu Fri Sat

	7	7	7	7	7	
	8	8	8	8	8	8
	9	9	9	9	9	9
	10	10	10	10	10	10
	11	11	11	11	11	11
12	12	12	12	12	12	12
13	13	13	13	13	13	13
14	14	14	14	14	14	14
15	15	15	15	15	15	15
16	16	16	16	16	16	16
17	17	17	17	17	17	17
	18	18	18	18	18	
	19	19	19	19	19	
	20	20	20	20		
	21	21	21	21		

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		3							2	1				
95 94 to 96		2							2					
93 92 to 94		49							19	19				
91 90 to 92		186						5	59	64	52	5	1	
89 88 to 90		262		1			2	23	64	61	60	32	16	3
87 86 to 88		338		1			17	56	53	63	55	57	33	3
85 84 to 86		370		1		3	48	52	43	41	48	61	66	7
83 82 to 84		372		7		8	43	62	35	37	41	58	64	17
81 80 to 82		405		23		37	41	51	41	37	47	48	42	33
79 78 to 80		329	6	25		24	35	45	23	31	27	36	41	27
77 76 to 78		145	4	13		12	19	9	9	9	16	17	13	17
75 74 to 76		326	11	27		26	38	27	16	23	27	26	35	39
73 72 to 74		402	42	32		42	41	37	18	9	8	33	32	67
71 70 to 72		227	25	38		32	30	16			1	5	24	33

69 68 to 70	181	29	21	31	23	9		12	29	27
67 66 to 68	167	22	25	27	10	5	1	6	29	42
65 64 to 66	126	20	12	33	11	4		4	17	25
63 62 to 64	112	26	16	26	4			1	13	26
61 60 to 62	104	32	12	21	2			1	16	20
59 58 to 60	57	22	4	12	4			1	6	8
57 56 to 58	80	37	12	13	2				8	8
55 54 to 56	111	27	16	34	2				11	21
53 52 to 54	80	22	14	4					4	36
51 50 to 52	65	25	12	10					5	13
49 48 to 50	32	14	9	2						7
47 46 to 48	17	6	4						1	6
45 44 to 46	26	10	11						1	4
43 42 to 44	21	6	6	1						8
41 40 to 42	5	1	1							3
39 38 to 40	14	1	6	1						6
37 36 to 38	12	4	4							4
35 34 to 36	3		3							
33 32 to 34	4									4
31 30 to 32	1									1
29 28 to 30										

Conventior **Ross Norton unoccupied - 78**

Units: I-P 12542 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 1460

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
1	1	1	1	1	1	1					1
2	2	2	2	2	2	2					2
3	3	3	3	3	3	3					3

24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs			
83 82 to 84		3								1	2						
81 80 to 82		36							1	23	11	1					
79 78 to 80		82						13	17	21	19	8	4				
77 76 to 78		85						8	13	29	22	12		1			
75 74 to 76		183					10	17	24	33	43	47	6	3			

73 72 to 74	200	1	1		10	37	52	14	25	36	19	5	
71 70 to 72	113	3	7	8	19	20	9	3	2	7	23	6	6
69 68 to 70	103	7	7	10	13	16	4			5	29	6	6
67 66 to 68	125	6	11	12	24	8				3	29	17	15
65 64 to 66	92	6	16	8	17	5				1	6	20	13
63 62 to 64	70	11	10	8	12						8	9	12
61 60 to 62	53	10	8	17	1							9	8
59 58 to 60	15	4		2	1							6	2
57 56 to 58	40	9	6	10	1							7	7
55 54 to 56	74	22	11	18	10							7	6
53 52 to 54	36	7	3	9	2							7	8
51 50 to 52	27	6	6	6								7	2
49 48 to 50	39	10	7	5								7	10
47 46 to 48	20	8	2	3								3	4
45 44 to 46	15	4	4	3									4
43 42 to 44	11	4	3	3									1
41 40 to 42	3	1		2									
39 38 to 40	8	3	2										3
37 36 to 38	18	2	2										14
35 34 to 36	3		1										2
33 32 to 34	6		5										1
31 30 to 32													
29 28 to 30													

Conventior **Ross Norton Unocc - 71.5**
 Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft
 Date: Aug # hrs: 2666
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Sun Mon Tue Wed Thu Fri Sat

4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7							7
8							
9							
10							
11							

18						18
19						19
20					20	20
21					21	21
22	22	22	22	22	22	22
23	23	23	23	23	23	23

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
91 90 to 92		3							1	2				
89 88 to 90		10							4	5		1		
87 86 to 88		20						1	3	10	5	1		

85 84 to 86	50				2	8	10	12	12	5	1		
83 82 to 84	64				5	6	7	16	15	13	2		
81 80 to 82	103				6	11	17	27	23	16	3		
79 78 to 80	180		1		7	23	29	39	36	25	17	3	
77 76 to 78	116		3	2	9	13	7	26	33	20	3		
75 74 to 76	291		3	1	13	41	29	67	56	50	23	5	3
73 72 to 74	351	8	15	4	32	38	79	26	35	62	37	9	6
71 70 to 72	197	2	8	13	28	30	23	3	4	13	44	18	11
69 68 to 70	170	15	19	16	27	21	5			9	24	17	17
67 66 to 68	160	5	20	20	17	10	1			2	35	24	26
65 64 to 66	176	11	31	22	22	12	1			4	27	22	24
63 62 to 64	111	15	12	17	18	4					8	20	17
61 60 to 62	95	27	13	13	12	1					3	13	13
59 58 to 60	40	15	3	4	5							10	3
57 56 to 58	65	19	7	8	7						1	17	6
55 54 to 56	148	40	15	44	16							20	13
53 52 to 54	68	10	11	14	1							14	18
51 50 to 52	52	18	8	4								8	14
49 48 to 50	31	5	4	8	1							3	10
47 46 to 48	36	6	2	7								11	10
45 44 to 46	42	13	7	13									9
43 42 to 44	18	9	1	2									6
41 40 to 42	10	2	1	4									3
39 38 to 40	15	3	2	3									7
37 36 to 38	27	3	13	2									9
35 34 to 36	12	2	5										5
33 32 to 34	5												5
31 30 to 32													
29 28 to 30													

Conventior North Greenwood Occupied

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 3016

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					

11	11	11	11	11		
12	12	12	12	12		
13	13	13	13	13	13	
14	14	14	14	14	14	
15	15	15	15	15	15	
16	16	16	16	16	16	
17	17	17	17	17	17	
18	18	18	18	18	18	
19	19	19	19	19	19	
20	20	20	20	20		
21	21	21	21	21		

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		2							2					
95 94 to 96		2							2					
93 92 to 94		44							16	11	17			
91 90 to 92		157						4	54	51	42	5	1	
89 88 to 90		208					1	19	51	44	50	27	13	3
87 86 to 88		253					11	48	35	39	43	49	25	3
85 84 to 86		267				3	42	40	19	26	26	43	61	7
83 82 to 84		263			5	8	36	47	20	21	26	37	49	14
81 80 to 82		275		22		33	29	37	22	20	30	31	24	24
79 78 to 80		210	5	21		21	24	28	14	15	13	22	22	20
77 76 to 78		86	3	9		11	13	5	4	4	6	6	6	16
75 74 to 76		211	9	20		23	23	10	7	11	12	18	22	33
73 72 to 74		247	35	19		32	24	14	6	6		8	17	51
71 70 to 72		129	15	26		13	15	9					10	21
69 68 to 70		97	17	12		20	7	4					4	18
67 66 to 68		95	16	17		17	4							13
65 64 to 66		73	17	9		20	3							10
63 62 to 64		73	22	9		19	2							5
61 60 to 62		56	22	5		12	1							6
59 58 to 60		29	10	4		6	2							3
57 56 to 58		41	18	7		6								3
55 54 to 56		55	17	9		13								3
53 52 to 54		49	16	9		1								1
51 50 to 52		37	16	9		4								
49 48 to 50		19	6	7		1								
47 46 to 48		10	4	2										
45 44 to 46		11	2	7										
43 42 to 44		11	4	1										
41 40 to 42		2												
39 38 to 40		4			3									
37 36 to 38														
35 34 to 36														
33 32 to 34														
31 30 to 32														
29 28 to 30														

Conventior **North Greenwood Unoccupied 72**

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 3244

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					

4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11						
12						
13						
14						

15
16
17
18
19
20
21
22
23

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		1								1				
95 94 to 96														
93 92 to 94		5							3		2			
91 90 to 92		23						1	4	10	8			
89 88 to 90		52		1			1	4	15	16	6	6	3	
87 86 to 88		92		1			6	7	15	31	17	7	8	
85 84 to 86		123		1			8	15	29	20	26	19	5	
83 82 to 84		131		2			7	17	18	23	21	26	14	3
81 80 to 82		165		1	3		16	17	25	26	25	24	18	8
79 78 to 80		201	1	3	2		13	22	19	40	37	24	29	7
77 76 to 78		117	1	5	2		10	10	8	25	27	15	9	1
75 74 to 76		303	2	8	4		18	47	20	61	56	40	26	11
73 72 to 74		393	13	18	11		32	45	76	26	39	72	34	20
71 70 to 72		218	9	14	27		32	30	23	3	5	15	31	21
69 68 to 70		186	23	22	16		31	18	5			7	22	18
67 66 to 68		181	9	20	24		17	15	1			3	37	25
65 64 to 66		192	7	29	27		27	16	1			4	31	23
63 62 to 64		112	11	12	15		17	4					9	23
61 60 to 62		101	25	17	14		10	1					4	17
59 58 to 60		50	17	2	7		6						1	12
57 56 to 58		83	31	11	13		6						1	17
55 54 to 56		156	43	14	51		16							18
53 52 to 54		75	14	11	10		1							12
51 50 to 52		59	20	7	9									10
49 48 to 50		34	11	5	6		1							3
47 46 to 48		37	6	3	7									12
45 44 to 46		49	18	9	11									1
43 42 to 44		21	7	6	1									
41 40 to 42		10	3	2	3									
39 38 to 40		19	2	5	4									
37 36 to 38		31	7	12	2									
35 34 to 36		14	2	7										
33 32 to 34		9												
31 30 to 32		1												
29 28 to 30														

Conventior **Morninside Rec Center - OCC**

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 1560

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					

10	10	10
11	11	11
12	12	12
13	13	13
14	14	14
15	15	15
16	16	16
17	17	17
18	18	18
19	19	19

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		2							2					
95 94 to 96		2							2					
93 92 to 94		25							10	4	11			
91 90 to 92		79						1	28	28	22			
89 88 to 90		121						11	32	27	29	12	7	3
87 86 to 88		149					3	26	22	26	28	27	15	2
85 84 to 86		168					23	25	17	11	23	29	36	4
83 82 to 84		128			3		13	26	11	5	17	16	27	10
81 80 to 82		139		10	21		21	22	5	3	12	13	18	13
79 78 to 80		88	4	6	15		11	7	1	6	2	11	14	11
77 76 to 78		37	1	3	7		7	4		1	1	3	1	9
75 74 to 76		107	6	9	20		11	6		5	5	8	9	19
73 72 to 74		124	17	8	26		10	10		4		1	3	30
71 70 to 72		68	4	15	13		11	1						12
69 68 to 70		47	4	8	10		4	1						8
67 66 to 68		55	5	11	8		3							8
65 64 to 66		43	7	6	12		3							4
63 62 to 64		36	17	7	4									1
61 60 to 62		31	16	3	4									2
59 58 to 60		10	6	2										
57 56 to 58		22	13	5									2	2
55 54 to 56		25	12	5									2	6
53 52 to 54		22	8	4										10
51 50 to 52		14	5	5										4
49 48 to 50		10	3	5										2
47 46 to 48		3	1	1										1
45 44 to 46		5	1	4										
43 42 to 44														
41 40 to 42														
39 38 to 40														
37 36 to 38														
35 34 to 36														
33 32 to 34														
31 30 to 32														
29 28 to 30														

Conventior Morninside Rec Center - Unocc

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 6680

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
1		1		1		1		1		1	
2		2		2		2		2		2	
3		3		3		3		3		3	
4		4		4		4		4		4	
5		5		5		5		5		5	
6		6		6		6		6		6	
7		7		7		7		7		7	
8		8		8		8		8		8	
9		9		9		9		9		9	
10										10	
11										11	
12										12	
13										13	
14										14	
15										15	
16										16	
17										17	
18										18	
19										19	
20		20		20		20		20		20	
21		21		21		21		21		21	
22		22		22		22		22		22	
23		23		23		23		23		23	
24		24		24		24		24		24	

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		1								1				
95 94 to 96														
93 92 to 94		20							5	7	8			
91 90 to 92		87						3	28	29	22	5		
89 88 to 90		116			1		1	9	30	31	24	15	5	
87 86 to 88		167			1		8	28	29	40	25	22	14	
85 84 to 86		184			1	3	18	24	31	30	31	28	18	
83 82 to 84		256			2	8	26	33	28	43	37	47	27	5
81 80 to 82		363			9	10	21	34	48	82	66	50	22	19
79 78 to 80		459		1	12	5	28	67	63	83	79	57	44	13
77 76 to 78		286		1	9	4	18	25	28	61	70	45	13	7
75 74 to 76		656		3	18	5	47	76	68	116	117	112	52	23
73 72 to 74		790		26	35	17	72	98	149	45	68	129	84	41
71 70 to 72		447		18	36	36	66	63	32	6	7	25	90	41
69 68 to 70		397		46	37	43	59	45	9			14	65	42
67 66 to 68		389		22	45	50	48	23	1			6	70	61
65 64 to 66		346		28	53	49	47	21	1			5	37	54
63 62 to 64		253		35	31	44	34	4					17	40
61 60 to 62		218		53	30	44	15	1					4	36
59 58 to 60		96		31	4	18	10						1	21
57 56 to 58		155		51	18	29	10						1	30
55 54 to 56		298		75	33	93	28							36
53 52 to 54		152		29	21	27	3							25
51 50 to 52		118		36	21	20								20
49 48 to 50		89		25	15	15	1							10
47 46 to 48		68		18	7	10								15
45 44 to 46		77		26	18	16								1
43 42 to 44		47		18	10	6								

41 40 to 42	17	4	2	6	5
39 38 to 40	37	7	10	4	16
37 36 to 38	57	9	19	2	27
35 34 to 36	18	2	9		7
33 32 to 34	15		5		10
31 30 to 32	1				1
29 28 to 30					

Convention **Countryside Rec Occ**

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 4420

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					

7	7	7	7	7	
8	8	8	8	8	8
9	9	9	9	9	9
10	10	10	10	10	10
11	11	11	11	11	11
12	12	12	12	12	12
13	13	13	13	13	13
14	14	14	14	14	14
15	15	15	15	15	15
16	16	16	16	16	16
17	17	17	17	17	17
18	18	18	18	18	
19	19	19	19	19	
20	20	20	20	20	
21	21	21	21	21	

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
97 96 to 98		3							2	1				
95 94 to 96		2							2					
93 92 to 94		44							16	11	17			
91 90 to 92		168						4	57	56	45	5	1	
89 88 to 90		232					1	19	58	54	57	27	13	3
87 86 to 88		303					11	50	50	60	52	51	26	3
85 84 to 86		341				3	43	45	38	43	46	54	62	7
83 82 to 84		353		5	8	39	56	56	36	39	41	56	58	15
81 80 to 82		376		22	34	31	52	42	35	49	46	36	26	3
79 78 to 80		317	5	23	22	32	47	23	29	27	40	40	24	5
77 76 to 78		138	3	11	11	18	10	9	9	15	19	13	17	3
75 74 to 76		314	9	22	26	39	28	19	19	27	26	35	39	25
73 72 to 74		381	39	27	36	42	40	18	9	8	33	32	58	39
71 70 to 72		225	20	36	30	31	16			1	7	27	34	23
69 68 to 70		180	25	21	31	24	9					13	30	27
67 66 to 68		171	21	25	27	10	5				1	7	30	45
65 64 to 66		129	20	14	33	11	4					4	17	26
63 62 to 64		117	29	16	28	7						1	13	23
61 60 to 62		102	31	13	19	3						1	16	19

59 58 to 60	53	18	5	11	4	1	6	8
57 56 to 58	73	31	12	11	2		9	8
55 54 to 56	112	26	16	35	2		12	21
53 52 to 54	78	22	14	5			4	33
51 50 to 52	68	27	12	11			5	13
49 48 to 50	31	14	9	2				6
47 46 to 48	17	6	4				1	6
45 44 to 46	26	10	11				1	4
43 42 to 44	23	8	6	1				8
41 40 to 42	5	1	1					3
39 38 to 40	15	1	6	1				7
37 36 to 38	15	4	6					5
35 34 to 36	3		3					
33 32 to 34	4							4
31 30 to 32	1							1
29 28 to 30								

Conventior Countryside Rec Unoccupied 73

Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft

Date: Aug # hrs: 2150

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Sun Mon Tue Wed Thu Fri Sat

6	6	6	6	6	6	6	6
7							7
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							18
19							19
20							20
21							21
22	22	22	22	22	22	22	22
23	23	23	23	23	23	23	23

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
93 92 to 94		5							3		2			
91 90 to 92		21						1	3	10	7			
89 88 to 90		40			1		1	4	10	12	3	6	3	
87 86 to 88		55			1		6	7	6	13	8	7	7	
85 84 to 86		79			1		7	15	15	10	14	12	5	
83 82 to 84		83			2		9	12	6	14	15	15	8	2
81 80 to 82		127			1	3	16	10	16	26	19	18	9	7
79 78 to 80		171		1	3	2	10	21	29	33	27	19	16	6
77 76 to 78		101		1	5	3	10	10	7	15	28	15	3	4
75 74 to 76		214		2	8	1	12	24	20	49	32	34	20	3

73 72 to 74	257	8	20	10	26	29	43	10	16	37	33	17	8
71 70 to 72	138	7	10	11	19	17	9	1	2	5	32	14	11
69 68 to 70	125	14	12	14	21	13	1			4	17	14	15
67 66 to 68	101	6	18	14	12	3	1			1	14	17	15
65 64 to 66	100	9	18	15	10	5	1			2	14	12	14
63 62 to 64	75	9	11	12	8	1					5	15	14
61 60 to 62	73	23	8	13	5	1					1	11	11
59 58 to 60	32	17		5	3							5	2
57 56 to 58	51	21	3	7	5						1	9	5
55 54 to 56	97	29	11	23	9							16	9
53 52 to 54	51	7	8	11								10	15
51 50 to 52	37	12	6	2								5	12
49 48 to 50	22	2	2	7	1								10
47 46 to 48	23	5	1	3								7	7
45 44 to 46	24	6	4	10									4
43 42 to 44	11	4		2									5
41 40 to 42	7	1	1	2									3
39 38 to 40	8	2		1									5
37 36 to 38	14	1	6	2									5
35 34 to 36	4	1	3										
33 32 to 34	4												4
31 30 to 32													
29 28 to 30													

Conventior Countryside Rec Unoccupied 78
Units: I-P 12842 TAMPA N 27 58 W 82 32 9.843 ft
Date: Aug # hrs: 2190

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Sun	Mon	Tue	Wed	Thu	Fri	Sat					
	1	1	1	1	1	1	1	1	1	1	1
	2	2	2	2	2	2	2	2	2	2	2
	3	3	3	3	3	3	3	3	3	3	3
	4	4	4	4	4	4	4	4	4	4	4
	5	5	5	5	5	5	5	5	5	5	5

Mid-pts	DB (F)	Total Hrs	January Hrs	February Hrs	March Hrs	April Hrs	May Hrs	June Hrs	July Hrs	August Hrs	September Hrs	October Hrs	November Hrs	December Hrs
	83 82 to 84		3							1	2			
	81 80 to 82		41						1	26	13	1		
	79 78 to 80	103						13	17	29	28	10	6	

77 76 to 78	107					10	13	40	28	15		1	
75 74 to 76	272				10	33	30	55	67	63	9	5	
73 72 to 74	315	4	1		15	43	88	30	44	61	23	6	
71 70 to 72	174	3	7	12	27	33	23	5	4	13	32	9	6
69 68 to 70	149	12	14	12	18	24	8			10	35	8	8
67 66 to 68	180	6	13	18	29	15				4	49	23	23
65 64 to 66	165	8	27	15	29	12				3	19	30	22
63 62 to 64	101	14	11	11	19	3					11	14	18
61 60 to 62	77	15	12	19	7						2	11	11
59 58 to 60	27	6	2	2	3							11	3
57 56 to 58	61	13	10	13	3							14	8
55 54 to 56	124	34	15	38	17							10	10
53 52 to 54	55	10	6	11	3							11	14
51 50 to 52	39	10	8	7								10	4
49 48 to 50	49	13	9	6								10	11
47 46 to 48	33	9	3	7								7	7
45 44 to 46	33	11	7	6									9
43 42 to 44	16	7	4	3									2
41 40 to 42	6	2		4									
39 38 to 40	14	4	4	2									4
37 36 to 38	28	4	7										17
35 34 to 36	11	1	3										7
33 32 to 34	7		5										2
31 30 to 32													
29 28 to 30													

July			August			September			October			November			December		
WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs
78.2	41.5	1	79.9	43.3													
76.3	39.6																
75.8	39.2	11	77.1	40.4	19	77.8	41.1										
76.5	39.9	66	77.4	40.7	52	77.7	41	5	76.8	40.1	1	76.6	39.9				
76.4	39.8	66	77.3	40.7	60	77.4	40.7	33	76.6	39.9	16	73.8	37.2	3	74.9	38.3	
75.8	39.2	73	76.9	40.3	60	77.5	40.9	58	75.4	38.8	33	72.5	36	3	72.8	36.4	
75.2	38.7	53	76.2	39.6	60	77	40.4	66	75	38.4	67	72.3	35.9	7	69.8	33.7	
74.8	38.3	54	75.8	39.2	58	76.1	39.6	71	74.7	38.2	66	71.4	35.1	17	69	33.1	
74.3	37.8	87	75.4	38.8	81	75.6	39	65	74	37.5	45	70.8	34.7	33	68.4	32.6	5
73.5	37.1	91	74.4	37.9	82	75	38.5	69	73.5	37	62	72.2	35.9	30	69.7	33.7	9
72.3	36	64	73.5	37	71	73.8	37.4	49	72.8	36.4	16	69.8	33.8	18	68.2	32.4	7
71.8	35.6	123	72.6	36.2	126	73.1	36.7	123	71.7	35.4	64	70.4	34.4	47	68	32.3	34
70.6	34.6	49	71.2	35	68	71.3	35.1	131	70	34	88	69.4	33.5	81	65	29.9	47
68.8	33	6	68.8	33	7	69.4	33.5	25	67.7	32.1	91	67.7	32.1	57	65.6	30.4	40
66.3	31							14	65.9	30.7	65	65.8	30.6	52	63.4	28.7	50
64.4	29.5							6	64	29.2	70	64.2	29.4	70	61.6	27.5	83
63.4	28.8							5	63	28.5	37	62.7	28.3	59	61.3	27.3	62
											17	61	27.1	42	58.6	25.5	55
											4	59.2	25.9	38	56.5	24.1	41
											1	58.5	25.4	22	55.3	23.4	13
											1	56.9	24.4	32	54	22.6	21
														38	51.5	21.1	40
														25	49.5	20	62
														20	47.6	19	29
														10	47	18.6	27
														15	44.5	17.4	20
														1	38.4	14.5	17

[illegible]

9	56.7	24.2	8	55.2	23.3
1	53.8	22.4	5	52.8	21.8
2	47.1	18.7	5	44.5	17.3
4	50.3	20.4	14	46.2	18.2
1	51.8	21.3	26	47.4	18.8
1	41.4	15.9	9	41.3	15.8
			4	41	15.7
1	39.2	14.8	1	38.2	14.4
			3	36	13.4
			4	35.2	13.1
			4	34	12.6
			2	31.9	11.7
			2	29.6	10.7

July			August			September			October			November			December		
WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs
77.6	40.9	2	78.8	42.2	6	78.8	42.2										
77.5	40.8	23	78	41.4	11	78.1	41.5	1	78.9	42.3							
76.1	39.5	25	77.4	40.7	14	78.3	41.7	9	77.8	41.1	5	70.9	34.6				
76	39.4	30	76.6	40	18	77.9	41.3	12	76	39.4	10	71.9	35.6				
75.3	38.7	26	76.1	39.5	32	77.2	40.6	22	74.4	37.8	11	70.5	34.3				
74.5	38	29	75.7	39.1	30	76.2	39.6	36	75.2	38.6	17	70.4	34.3	5	69.8	33.8	
74.2	37.7	71	75.4	38.9	57	75.5	39	44	74.1	37.7	17	69.4	33.5	12	68.9	33	33.4
73.4	37	78	74.4	37.9	71	75	38.4	48	73.9	37.4	37	72.4	36.1	8	69.3	33.4	30.1
72.3	36	61	73.5	37.1	64	73.8	37.4	38	73	36.6	8	69.9	33.9	1	73.5	37.1	29.1

71.8	35.6	117	72.5	36.2	113	73.1	36.7	111	71.7	35.5	49	70.7	34.6	14	68.4	32.6	13	63.3	28.7
70.6	34.5	45	71.2	35	68	71.3	35.1	119	70.1	34	77	69.4	33.5	39	65.3	30.2	25	65.5	30.3
68.8	33	6	68.8	33	7	69.4	33.5	24	67.8	32.2	80	67.8	32.1	38	66.7	31.3	20	65.8	30.6
66.3	31							14	65.9	30.7	63	65.8	30.6	38	63.5	28.8	28	63.6	28.9
64.4	29.5							6	64	29.2	70	64.2	29.4	52	62.3	28	55	62.7	28.3
63.4	28.8							5	63	28.5	35	62.7	28.3	54	61.7	27.6	47	62	27.8
											17	61	27.1	35	59	25.7	47	58.7	25.5
											4	59.2	25.9	29	56.5	24.1	33	56.1	23.8
											1	58.5	25.4	21	55.4	23.4	8	54.3	22.7
											1	56.9	24.4	30	54.4	22.8	16	51.7	21.2
														34	51.7	21.2	26	49.3	19.9
														24	49.4	19.9	36	49.3	19.8
														19	48	19.1	20	46.9	18.6
														10	47	18.6	23	44.5	17.3
														14	44.9	17.6	19	43.3	16.7
														1	38.4	14.5	14	41.8	16
																	11	38.9	14.7
																	6	37	13.8
																	12	35.3	13.1
																	25	34	12.6
																	7	31.4	11.5
																	8	30.7	11.2
																	1	28.8	10.4

July			August			September			October			November			December		
WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs	WB (F)	h (BTU/lb)	Hrs
			1	79.9	43.3												

46

WB (F)	October		November		December	
	Hrs	WB (F)	Hrs	WB (F)	Hrs	WB (F)
	1	76.6				
76.7	7	74.7				
75.8	11	73.9	1	68.4		
75	18	70.2	3	68.8		
74.6	23	70.5	5	70.4		
74.2	22	70.3	9	69.1	4	67.1
73.6	40	72.3	13	70.2	6	65.8
72.9	9	69.2	3	69.5	6	64.5
71.8	48	70.6	18	69.5	16	64.1
70.1	76	69.7	48	65.6	19	64.6
67.8	86	67.7	39	66.6	21	65.7
65.9	63	65.9	41	64	33	64.4
64	70	64.2	53	62.7	55	63
63	37	62.7	50	62.1	47	62.1
	17	61	34	59.3	43	58.9
	4	59.2	31	56.9	26	56.2
	1	58.5	22	55.3	7	54.8
	1	56.9	29	54.6	16	50.2
			33	51.9	22	48.8
			24	49.6	44	48.3
			18	47.8	23	45.5
			10	47	25	44.3
			15	44.5	19	42.9
			1	38.4	15	41.3
					15	37.9
					5	36.9
					15	35.1
					26	33.9
					7	31.4
					8	30.6
					1	28.8

Detailed Savings Calculations for City Hall Building Lighting Can be found in Exhibit G-7: Lighting Details

Detailed Savings Calculations for the Building Lighting Can be found in Exhibit G-7: Lighting Details

POOL PUMP SAVINGS

Facility	Pre kWh	Post kWh	\$ Sav	% Sav
Long Center	248,347	129,245	\$12,831	48.0%
Guaranteed Contract Savings: 92%			\$11,805	

HIGH EFFICIENCY MOTOR RETROFIT

Honeywell

Job Name: City of Clearwater

Building: Long Center

OVERVIEW:

Two (2) existing 20 HP, 3 phase motors are installed on a constant volume pumping system for main pool water circulation. These motors and pumps run 24 hours a day 365 days a year to maintain water flow for the pools. Both motors currently run and flow is maintained by throttling back on a valve on the main return line to the pool. Energy Savings Will Result from the following measures: 1) High Efficiency Motors, 2) and Reduced Pump operation to coincide with permitted flow rates.

ASSUMPTIONS:

Existing annual operating period.....	3,134 hrs/yr
Proposed annual operating period.....	3,134 hrs/yr
Annual demand periods of motor operation.....	12 months
Existing motor amps - (measured) Lap 1 ON.....	21.1 A
Existing motor amps - (measured) Lap 2 ON.....	20.8 A
Proposed motor amps - (measured) Lap 1 ON.....	22.9 A
Proposed motor amps - (measured) Lap 2 OFF.....	0.0 A
Existing motor volts (measured) - Lap 1	482 V
Existing motor volts (measured) - Lap 2	484 V
Existing motor efficiency (nameplate).....	0.89
Existing motor power factor (nameplate) Lap 1	0.81
Existing motor power factor (nameplate) Lap 2.....	0.810
New motor efficiency (nameplate).....	0.930
Avoided cost of demand.....	\$3.00 /KW
Avoided cost of electricity.....	\$0.142 /KWH
Power conversion factor.....	1,000 W/KW
3 phase power conversion factor.....	1.732

SYMBOL:

A

B

C

D

E

F

G

H

I

UTILITY SAVINGS CALCULATIONS:

Existing Demand = 28.35 KW

Existing kWh Consumption = 88,849 kWh

Proposed Demand (One Motor) = 15.50 KW

Demand Savings (High Eff) = 0.75 KW

Proposed kWh Consumption = 46,239 kWh

Cost Savings = \$6,532 /yr

UTILITY SAVINGS FORMULAS:

$$\text{Existing Demand} = \frac{\left(\begin{matrix} \text{existing} \\ \text{amps} \end{matrix} \right) \times \text{volts} \times 1.732 \times \left(\begin{matrix} \text{existing} \\ \text{power} \\ \text{factor} \end{matrix} \right)}{1,000}$$

$$= \frac{C \times D \times 1.732 \times F}{1,000} = J$$

$$\text{Demand Savings} = \left(\begin{matrix} \text{existing} \\ \text{demand} \end{matrix} \right) \times \left[1 - \frac{\left(\begin{matrix} \text{exist.} \\ \text{eff.} \end{matrix} \right)}{\left(\begin{matrix} \text{new} \\ \text{eff.} \end{matrix} \right)} \right]$$

$$= J \times \left[1 - \frac{E}{G} \right] = K$$

$$\text{Energy Savings} = \left(\begin{matrix} \text{demand} \\ \text{savings} \end{matrix} \right) \times \left(\begin{matrix} \text{operating} \\ \text{period} \end{matrix} \right)$$

$$= K \times A = L$$

$$\text{Cost Savings} = \left(\begin{matrix} \text{energy} \\ \text{savings} \end{matrix} \right) \times \left(\begin{matrix} \text{elect.} \\ \text{cost} \end{matrix} \right) + \left(\begin{matrix} \text{demand} \\ \text{savings} \end{matrix} \right) \times \left(\begin{matrix} \text{demand} \\ \text{months} \end{matrix} \right) \times \left(\begin{matrix} \text{demand} \\ \text{cost} \end{matrix} \right)$$

$$= L \times I + K \times B \times H$$

HIGH EFFICIENCY MOTOR RETROFIT

Honeywell

Job Name: City of Clearwater

Building: Long Center

OVERVIEW:

Two (2) existing 20 HP, 3 phase motors are installed on a constant volume pumping system for main pool water circulation. These motors and pumps run 24 hours a day 365 days a year to maintain water flow for the pools. Both motors currently run and flow is maintained by throttling back on a valve on the main return line to the pool. Energy Savings Will Result from the following measures: 1) High Efficiency Motors, 2) and Reduced Pump operation to coincide with permitted flow rates.

ASSUMPTIONS:

Existing annual operating period.....	5,626 hrs/yr
Proposed annual operating period.....	5,626 hrs/yr
Annual demand periods of motor operation.....	12 months
Existing motor amps - (measured) Lap 1 ON.....	21.1 A
Existing motor amps - (measured) Lap 2 ON.....	20.8 A
Proposed motor amps - (measured) Lap 1 ON.....	22.9 A
Proposed motor amps - (measured) Lap 2 OFF.....	0.0 A
Existing motor volts (measured) - Lap 1	482 V
Existing motor volts (measured) - Lap 2	484 V
Existing motor efficiency (nameplate).....	0.885
Existing motor power factor (nameplate) Lap 1	0.810
Existing motor power factor (nameplate) Lap 2.....	0.810
New motor efficiency (nameplate).....	0.930
Avoided cost of demand.....	\$3.00 /KW
Avoided cost of electricity.....	\$0.076 /KWH
Power conversion factor.....	1,000 W/KW
3 phase power conversion factor.....	1.732

SYMBOL:

A
B
C
D
E
F
G
H
I

UTILITY SAVINGS CALCULATIONS:

Existing Demand	=	28.35 KW
Existing kWh Consumption	=	159,498 kWh
Proposed Demand (One Motor)	=	15.50 KW
Demand Savings (High Eff)	=	0.75 KW
Proposed kWh Consumption	=	83,006 kWh
Cost Savings	=	\$6,299 /yr

UTILITY SAVINGS FORMULAS:

$$\text{Existing Demand} = \frac{\left(\frac{\text{existing}}{\text{amps}} \right) \times \text{volts} \times 1.732 \times \left(\frac{\text{existing}}{\text{power factor}} \right)}{1,000}$$

$$= \frac{C \times D \times 1.732 \times F}{1,000} = J$$

$$\text{Demand Savings} = \left(\frac{\text{existing}}{\text{demand}} \right) \times \left[1 - \frac{\left(\frac{\text{exist.}}{\text{eff.}} \right)}{\left(\frac{\text{new}}{\text{eff.}} \right)} \right]$$

$$= J \times \left[1 - \frac{E}{G} \right] = K$$

$$\text{Energy Savings} = \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{operating}}{\text{period}} \right)$$

$$= K \times A = L$$

$$\text{Cost Savings} = \left(\frac{\text{energy}}{\text{savings}} \right) \times \left(\frac{\text{elect.}}{\text{cost}} \right) + \left(\frac{\text{demand}}{\text{savings}} \right) \times \left(\frac{\text{demand}}{\text{months}} \right) \times \left(\frac{\text{demand}}{\text{cost}} \right)$$

$$= L \times I + K \times B \times H$$

FIELD MEASUREMENTS

Long Center - Main Pool

Measured:

Measured:	P-1	P-2	P-1	P-2
State	ON	ON	ON	OFF
Restriction	10%	10%	20%	20%
GPM -Actual	2,300		1,857	
GPM -Design	1,736			
V _{ab}	481.00	482.00	481.00	482.00
V _{bc}	481.00	484.00	481.00	484.00
V _{ac}	483.00	485.00	483.00	485.00
V _{avo}	481.67	483.67	481.67	483.67
I _a	20.10	21.00	22.51	0.00
I _b	21.50	20.30	22.12	0.00
I _c	21.60	21.10	24.20	0.00
I _{avo}	21.07	20.80	22.94	0.00
PF	81%	81%	81%	81%
KW	14.24	14.11	15.50	0.00

Name Plate:

I	26	26	26	26
V	460	460	460	460
HP	20	20	20	20
Rated Eff.	89%	89%	89%	89%
0.7457	0.7457	0.7457	0.7457	0.7457
KW	16.9	16.9	16.9	16.9
LOAD %	84%	84%	92%	0%

ROOF RETROFIT

Honeywell

Job Name: City of Clearwater

Building: Long Center - 1501 N. Belcher Rd.

OVERVIEW:

The installation of a new polyurethane foam roof system with reflective coating will reduce infiltration, solar heat gain and winter heat loss to the building. This will reduce the cooling and heating energy usage in the building. A new roof will also reduce maintenance and repair costs due to leaks.

ASSUMPTIONS:

SYMBOL:

Total Roof Area	64,713 sqft	A
Existing roof/ceiling/attic estimated total R-value.....	9.5	B
New roof/ceiling/attic estimated total R-value.....	20.2	C
Existing roof surface color (1=light, 4=dark).....	4	D1
New roof surface color (1=light, 4=dark).....	1	D2
Building Location (Latitudes 24-48 N).....	28 N Lat	E
Occupancy Hours.....	100 Hrs / wk	F
Cooling season length.....	45 wk/yr	G
Heating season length.....	5 wk/yr	H
Avg Indoor Cooling Temp.....	76 Deg F	I
Avg Indoor Heating Temp.....	71 Deg F	J
Avg Cooling Outdoor Temp (From BIN Data).....	82 Deg F	K
Avg Heating Outdoor Temp (From BIN Data).....	46 Deg F	L
Heat Pump / HVAC performance factor.....	1.01 KW/ton	M
Avoided cost of electricity.....	\$0.1418 /KWH	N
Cooling conversion factor.....	12,000 BTU/ton-hr	O

UTILITY SAVINGS CALCULATIONS:

Total Energy Savings:	=	79,374 KWH
Cost Savings	=	\$11,256 /yr

UTILITY SAVINGS FORMULAS:

	Symbol	Entry	Table Value	Symbol
Factors from ASHRAE tables:				
Solar Heat Gain Factor (SHGF):	E	28	1037	U
Old Surface Color Factor:	D1	4	0.3	V1
New Surface Color Factor:	D2	1	0.15	V2

$$OldSolAirTemp = SumrOAT + (OldColorFactor \times 3 \times SHGF / 24) - 7$$

$$P1 = 114.2978$$

$$= K + (V1 \times 3 \times U / 24) - 7 = P1$$

$$NewSolAirTemp = SumrOAT + (NewColorFactor \times 3 \times SHGF / 24) - 7$$

$$P2 = 94.86338$$

$$= K + (V2 \times 3 \times U / 24) - 7 = P2$$

$$OldC\lg Loss = RoofArea \times (OldSolAirTemp - IndoorC\lg Temp) \times C\lg Season \times Occup / (OldR)$$

$$Q = 1.17E+09$$

$$= Ax(P1 - I) \times G \times F / B = Q$$

$$OldHtgLoss = RoofArea \times (IndoorHtgTemp - WntrOAT) \times HtgSeason \times Occup / (OldR)$$

$$= Ax(J - L) \times H \times F / B = R \quad R = 86609836$$

$$NewC\lg Loss = RoofArea \times (NewSolAirTemp - IndoorC\lg Temp) \times C\lg Season \times Occup / (NewR)$$

$$S = 2.72E+08$$

$$= Ax(P2 - I) \times G \times F / C = S$$

$$NewHtgLoss = RoofArea \times (IndoorHtgTemp - WntrOAT) \times HtgSeason \times Occup / (NewR)$$

$$= Ax(J - L) \times H \times F / C = T \quad T = 40813167$$

$$EnergySavings = ((OldC\lg Loss - NewC\lg Loss) + (OldHtgLoss - NewHtgLoss)) \times EquipFactor / C\lg Conv$$

$$= ((Q - S) + (R - T)) \times M / O = W(KWH)$$

Avg Solar Heat Gain Factors (SHGF):

Derived from ASHRAE 1993 Fundamentals Handbook, Pgs 27.20 - 27.24 (Tables 12-16)

Values are Average for April - September for Horizontal Surface

Latitudes 24, 32, 40, and 48 are from tables, others are extrapolated.

Latitude	SHGF	Sample Cities
24	1045	S. of Key West, Central Mexico
25	1043	Key West
26	1041	Miami
27	1039	West Palm Beach
28	1037	Tampa, Corpus Christi
29	1034	Orlando
30	1032	New Orleans, Houston, San Antonio
31	1030	Jacksonville, Brunswick, GA,
32	1028	Savannah, GA, Jackson, MS
33	1023	Dallas, San Diego
34	1018	Atlanta, Los Angeles, Phoenix
35	1013	Charlotte, Memphis, Amarillo, Albuquerque, Bakersfield
36	1008	Greensboro, Nashville, Tulsa, Las Vegas
37	1003	Norfolk, Roanoke, Fresno
38	998	Charleston, WV, Lexington, KY, Wichita, San Francisco
39	993	Baltimore, Wash DC, Cincinnati, St Louis, Kansas City, Carson City
40	988	Philadelphia, Columbus, Indianapolis, Denver
41	980	New York, Pittsburgh, Salt Lake City
42	972	Boston, Toledo, Chicago, Des Moines
43	964	Buffalo, Syracuse, Detroit, Milwaukee
44	957	Augusta, Maine, Eugene, OR, Toronto
45	949	Minneapolis, Green Bay
46	941	Montreal, Helena, Portland
47	933	Quebec, Duluth, Bismarck
48	925	Southern Canada, Intl Falls, MN, Seattle, WA

Surface color factors (a/h) Pg 26.5:

Color	a/h value	ECM entry
Light color (reflective)	0.15	1
	0.2	2
	0.25	3
Dark color (absorbing)	0.3	4

Electric Utility Rate Baseline

Rate	Demand/Non	Rate Code	Voltage	Account	kWh			
					On-Peak		Off-Peak	
					Energy	Fuel	Energy	Fuel
GSDT-1	Demand	53	Secondary	N/A	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948
GS-1	Non-Demand	60	Secondary	N/A	\$ 0.05638	\$ 0.05933	\$ -	\$ -
GSD-1	Demand	70	Secondary	N/A	\$ 0.03095	\$ 0.05933	\$ -	\$ -
LS-1	Non-Demand	16	N/A	N/A	\$ 0.02105	\$ 0.05522		
GST-1	Non-Demand	100	Secondary	N/A	\$ 0.12926	\$ 0.08015	\$ 0.02283	\$ 0.04948
GSLM-2	Demand	169	Secondary	73051-92711	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948
GSLM-2	Demand	169	Secondary	09544-56332	\$ 0.05043	\$ 0.08015	\$ 0.02045	\$ 0.04948
GSLM-2	Demand	171	Secondary	44991-14344	\$ 0.03095	\$ 0.05933	\$ -	\$ -

On-Peak Periods for Time Of Use Rates

On-Peak periods for TOU rates are Monday through Friday as follows:

November through March 6 to 10 a.m. / 6 to 10 p.m.

April through October.....Noon to 9 p.m.

All other hours, including Saturday, Sunday, and six major holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas) and the adjacent weekday if a holiday falls on Saturday or Sunday, are considered Off-Peak.

**Unit Costs
kW**

kWh

kW

		Base	On Peak	GRT	MFF	MUT	Total Tax	kWh		kW	
								On-Peak	Off-Peak	Base	On Peak
\$	0.91	\$	2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
\$	-	\$	-	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.12566	\$ -	\$ -	\$ -
\$	3.71	\$	-	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.09805	\$ -	\$ 4.03	\$ -
				2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.08283	\$ -	\$ -	\$ -
				2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.22742	\$ 0.07853	\$ -	\$ -
\$	0.91	\$	2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
\$	0.91	\$	2.76	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.14181	\$ 0.07595	\$ 0.99	\$ 3.00
\$	3.71	\$	-	2.56410%	6.03800%	0.00000%	8.60210%	\$ 0.09805	\$ -	\$ 4.03	\$ -

Exhibit G-9
Operation Maintenance Savings

Operation & Maintenance Savings Summary

Scope	Annual \$	15 yr \$
HVAC Replacement Cost	\$ 39,423	\$ 591,345
HVAC Major Repair Costs	\$ 13,844	\$ 207,660
HVAC PMs	\$ 13,401	\$ 201,015
Vehicles, tools, consumables	\$ 4,500	\$ 67,500
Controls	\$ -	\$ -
Pool Pump Motor Replacement	\$ 400	\$ 6,000
Building Lighting	\$ 6,344	\$ 95,160
Re-pipe gas lines to Long Ctr RTUs	\$ 5,667	\$ 85,000
New Duct Sock System	\$ 2,987	
Duct Cleaning	\$ 3,967	\$ 59,500
Roof Repair	\$ 11,719	\$ 175,792
Totals	\$ 102,252	\$ 721,835

Buildings

O&M Savings

City Hall	\$11,137
Transfer Station - DX 1	\$1,000
Public Works E - DX2; DX3	\$3,328
Gas Division	\$10,800
Long Center RTU-1, pool motor, gym duct socks	\$57,924
Long Center Roof	\$11,719
Lighting - All Building (Except City Hall)	\$6,024
Lighting - City Hall	\$320
	\$102,252

O&M Savings: HVAC EQUIPMENT REPLACEMENT

Building	Bldg Sq.Ft.	Tons	Model #	Yr Installed	Replacement Cost	Annualized Cost
Gas Department	34,465					
<i>Air cooled chiller</i>			CGAEC60	1993	\$ 90,000.00	\$ 6,000
Long Center	75,600					
<i>RTU 1</i>		7.5	4TWA	1994	\$ 26,000.00	\$ 1,733
<i>RTU 2</i>		7.5	4TWA	1994	\$ 26,000.00	\$ 1,733
<i>RTU 3</i>		12.5	4TWA	1994	\$ 31,000.00	\$ 2,067
<i>RTU 4</i>		12.5	4TWA	1994	\$ 31,000.00	\$ 2,067
<i>RTU 5</i>		12.5	4TWA	1994	\$ 31,000.00	\$ 2,067
<i>RTU 6</i>		15.0	4TWA	1994	\$ 38,500.00	\$ 2,567
<i>RTU 7</i>		15.0	4TWA	1994	\$ 38,500.00	\$ 2,567
<i>RTU 8</i>		17.5	4TWA	1994	\$ 44,750.00	\$ 2,983
<i>RTU 9</i>		17.5	4TWA	1994	\$ 44,750.00	\$ 2,983
<i>RTU 10</i>		17.5	4TWA	1994	\$ 44,750.00	\$ 2,983
<i>OA Motorized Damper1</i>					\$ 3,000.00	\$ 200
<i>OA Motorized Damper2</i>					\$ 3,000.00	\$ 200
<i>OA Motorized Damper3</i>					\$ 3,000.00	\$ 200
<i>OA Motorized Damper4</i>					\$ 3,000.00	\$ 200
Transfer Station	11,240					
<i>DX# 1 Split</i>		2.0		1996	\$ 5,000.00	\$ 333
Public Works Bldg E						
<i>DX #2 (Split)</i>		7.5	TTA 090	1996	\$ 9,055.00	\$ 604
<i>DX# 3 Split</i>		7.5	TTA 072	1996	\$ 9,055.00	\$ 604
City Hall	24,581					
<i>Central Station AHU 1</i>		20 hp	MCCB035		\$ 55,000.00	\$ 3,667
<i>Central Station AHU 2</i>		20 hp	MCCB035		\$ 55,000.00	\$ 3,667
Total					\$ 591,360.00	\$ 39,424

HVAC Life Cycle Major Repair
O&M Savings: HVAC Maintenance

Ongoing Repair Costs	RTU-1	RTU-2	RTU-3	RTU-4	RTU-5	RTU-6	RTU-7	RTU-8	RTU-9	RTU-10	DX-1	DX-2	DX-3	15-Yr Cost	Annual Cost
Number of Compressors	2	2	2	2	2	2	2	2	2	2	1	1.0	1		
Unit Size	7.5	7.5	12.5	12.5	12.5	15.0	15.0	17.5	17.5	17.5	2	7.5	6		
Condition	Original	Original	Original	Original	Original	Original	Original	Original	Original	Original	2/3 Life	2/3 Life	2/3 Life		
Est. Cost ea. (Material Only)	\$650	\$650	\$1,200	\$1,800	\$1,800	\$2,625	\$2,625	\$3,400	\$3,400	\$3,400	\$250	\$1,800	\$1,800		
Est. Labor Cost	\$420	\$420	\$420	\$420	\$420	\$420	\$420	\$420	\$420	\$420	\$235	\$420	\$420		
Est. Total Installed Cost	\$2,140	\$2,140	\$3,240	\$4,440	\$4,440	\$6,090	\$6,090	\$7,640	\$7,640	\$7,640	\$485	\$2,220	\$2,220	\$56,425	\$3,762
SF Size (hp)	3	3	3	3	3	3	3	5	5	5	.5	1.5	1.		
Condition	old	old	old	old	old	old	old	old	old	old	2/3 Life	2/3 Life	2/3 Life		
Est. Cost ea. (Material Only)	\$475	\$475	\$475	\$475	\$475	\$475	\$475	\$650	\$650	\$650	\$240	\$240	\$240		
Est. Labor Cost	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$105	\$105	\$105		
Est. Total Installed Cost	\$625	\$625	\$625	\$625	\$625	\$625	\$625	\$800	\$800	\$800	\$345	\$345	\$345	\$7,810	\$521
Number of Condenser Fans	1	1	2	2	2	2	2	4	4	4	1	1	1		
Condition	old	old	old	old	old	old	old	old	old	old	2/3 Life	2/3 Life	2/3 Life		
Condenser Fan Size (hp)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0	1.0	0.5	0.5	0.5		
Est. Cost ea. (Material Only)	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230	\$230		
Est. Labor Cost	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90	\$90		
Est. Total Installed Cost	\$320	\$320	\$640	\$540	\$640	\$640	\$640	\$1,280	\$1,280	\$1,280	\$320	\$320	\$320	\$8,640	\$576
Est. Evaporator Coil Cost	\$5,790	\$5,790	\$5,790	\$5,790	\$5,790	\$5,790	\$5,790	\$7,250	\$7,250	\$7,250	\$1,000	\$4,500	\$4,500		
Est. Evaporator Labor Cost	\$960	\$960	\$960	\$960	\$960	\$960	\$960	\$960	\$960	\$960	\$300	\$960	\$960		
Est. Total Installed Cost	\$6,750	\$6,750	\$6,750	\$6,750	\$6,750	\$6,750	\$6,750	\$8,210	\$8,210	\$8,210	\$1,300	\$5,460	\$5,460	\$84,100	\$5,607
Misc. Parts (Relays, Boards etc.)	\$100	\$100	\$150	\$150	\$150	\$200	\$200	\$250	\$250	\$250	\$100	\$100	\$100	\$2,100	\$140
Est. Age (Yrs)	19	19	19	19	19	19	19	19	19	19	10	10	10		
Total														\$ 159,075	\$ 10,605

City Hall Central AHUs	AHU - 1	AHU - 2	Total
Number of Blower Motors	1	1	
Unit Size	20 hp	20 hp	
Est. Cost ea. (Material Only)	\$ 1,500	\$ 1,500	
Est. Labor Cost	\$ 120	\$ 120	
	\$ 1,620	\$ 1,620	\$ 3,240

Total Annual Cost:	
RTUs / DX:	\$ 10,605
City Hall Central AHUs	\$ 3,240
TOTAL ANNUAL COST:	\$ 13,845

O&M Savings: HVAC PM

Building	Tons	Model #	PM Labor	PM Materials	PMs/Yr.	Administrative Costs	Annual PM Cost
Gas Department							
<i>Air cooled chiller</i>		CGAEC60	\$ 4,800.00				\$ 4,800.00
Long Center							
<i>RTU 1</i>	7.5	4TWA	\$ 511.20	\$ 69.64	12	\$ 19.20	\$ 600.04
<i>RTU 2</i>	7.5	4TWA	\$ 511.20	\$ 69.64	12	\$ 19.20	\$ 600.04
<i>RTU 3</i>	12.5	4TWA	\$ 571.20	\$ 69.64	12	\$ 19.20	\$ 660.04
<i>RTU 4</i>	12.5	4TWA	\$ 571.20	\$ 69.64	12	\$ 19.20	\$ 660.04
<i>RTU 5</i>	12.5	4TWA	\$ 571.20	\$ 69.64	12	\$ 19.20	\$ 660.04
<i>RTU 6</i>	15.0	4TWA	\$ 571.20	\$ 79.76	12	\$ 19.20	\$ 670.16
<i>RTU 7</i>	15.0	4TWA	\$ 571.20	\$ 79.76	12	\$ 19.20	\$ 670.16
<i>RTU 8</i>	17.5	4TWA	\$ 571.20	\$ 84.52	12	\$ 19.20	\$ 674.92
<i>RTU 9</i>	17.5	4TWA	\$ 571.20	\$ 84.52	12	\$ 19.20	\$ 674.92
<i>RTU 10</i>	17.5	4TWA	\$ 571.20	\$ 84.52	12	\$ 19.20	\$ 674.92
<i>Total</i>							
Transfer Station							
<i>DX# 1 Split</i>	2.0		\$ 420.00	\$ 58.25	12	\$ 19.20	\$ 497.45
Public Works Bldg E							
<i>DX# 2 (Split)</i>	7.5	TTA 090	\$ 420.00	\$ 58.25	12	\$ 19.20	\$ 497.45
<i>DX# 3 Split</i>	6.0	TTA 072	\$ 420.00	\$ 58.25	12	\$ 19.20	\$ 497.45
<i>Total</i>							
City Hall							
<i>Central Station AHU</i>	20 hp	MCCB035	\$ 165.00	\$ 98.00	12	\$ 19.20	\$ 282.20
<i>Central Station AHU</i>	20 hp	MCCB036	\$ 165.00	\$ 98.00	12	\$ 19.20	\$ 282.20
Total			\$ 11,982.00	\$ 1,132.03		\$ 288.00	\$ 13,402.03

O&M Savings: Vehicles Tools and Consumables

HVAC	Hr \$											Annual Cost
	\$ 30.00	RTU-1	RTU-2	RTU-3	RTU-4	RTU-5	RTU-6	RTU-7	RTU-8	RTU-9	RTU-10	
Vehicle, Tools, Consumables	\$4,500	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$450	\$4,500

O&M Savings

Duct Cleaning & Piping	RTU-1	RTU-2	RTU-3	RTU-4	RTU-5	RTU-6	RTU-7	RTU-8	RTU-9	RTU-10	15 yr Cost	Annual Cost
Repiping Gas Heat w/Galvanized Pipe *	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00	\$ 3,300.00		
Est. Labor Cost	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00		
Est. Total Installed Cost	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 8,500.00	\$ 85,000.00	\$ 5,666.67
Duct Cleaning **	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 42,500.00	\$ 2,833.33
Total One Time Costs	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 12,750.00	\$ 127,500.00	\$ 8,500.00

Duct Cleaning & Piping	GYM OAU-1	GYM OAU-2	GYM OAU-3	GYM OAU-4
New Duct Sock System	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00	\$ 6,000.00
Est. Labor Cost	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00	\$ 5,200.00
Est. Total Installed Cost	\$ 11,200.00	\$ 11,200.00	\$ 11,200.00	\$ 11,200.00
Duct Cleaning **	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00	\$ 4,250.00
Total One Time Costs	\$ 15,450.00	\$ 15,450.00	\$ 15,450.00	\$ 15,450.00

15 yr Cost	Annual Cost
\$ 44,800.00	\$ 2,986.67
\$ 17,000.00	\$ 1,133.33
\$ 61,800.00	\$ 4,120.00

Honeywell will use conservative estimates for O&M savings. O&M Savings taken (shown above) are less than the estimated costs:

\$	4,400.00	Cost of installing 1 section at a time over 10 occasions	*
\$	7,500.00	Cost of cleaning 1 section at a time over 10 occasions	**

O&M Savings

Pool Pump Motor Replacement

Building	Hp	Cost	15-Yr Annualized
Long Center Pool			\$ -
Pump Motor 1	20	\$ 3,000.00	\$ 200.00
Pump Motor 2	20	\$ 3,000.00	\$ 200.00
Total		\$ 6,000.00	\$ 400.00

Long Center Roof Repairs
From 01/14/2008 To 12/1/2009

WORK ORDER	Date	WORK ORDER DESCRIPTION	LABOR	CONTRACTUAL	PURCHASED MATERIAL	TOTAL COST
0800670	1/14/2008	Check roof.	\$ 15.00	\$ 120.00	\$ -	\$ 135.00
0801446	1/30/2008	Repair roof leaks over pool, in bleacher area.	\$ 375.00	\$ 4,452.30	\$ -	\$ 4,827.30
0803868	3/18/2008	We have a leak that has developed in the roof in the Athletics Office (2nd floor @ the Long Center).	\$ 120.00	\$ -	\$ -	\$ 120.00
0804554	4/1/2008	The below leak was repaired, but has returned. We have one tile that has a water spot from last nights rain.	\$ 60.00	\$ 828.00	\$ -	\$ 888.00
0809416	7/14/2008	Check roof leaks.	\$ 135.00	\$ -	\$ -	\$ 135.00
0811156	8/14/2008	We have a leak at the north corner from the roof when it rains (by blue tarps). Also, to fix the problem you may be using the lift.	\$ 420.20	\$ 794.43	\$ 938.65	\$ 2,153.28
0811540	8/22/2008	With the recent rain, the leak that was reported below is now much worse. There is a constant stream of water coming down to the deck from this area.	\$ 60.00	\$ -	\$ -	\$ 60.00
0901519	1/30/2009	We have a leak from the ceiling in the restroom next to the concession area.	\$ 240.00	\$ -	\$ -	\$ 240.00
0904014	3/3/2009	Roof repair per Specifications and Addendum	\$ -	\$ 10,600.00	\$ -	\$ 10,600.00
0904602	4/14/2009	We have 4 roof leaks.	\$ 150.00	\$ -	\$ -	\$ 150.00
0906082	5/18/2009	Leak in the west side corner roof drain. Is the same issue as had on the east side.	\$ 120.00	\$ 710.00	\$ -	\$ 830.00
0906090		We have three leaks over the pool mezzanine and a leak in the men's locker-room janitors closet.	\$ 135.00	\$ 550.00	\$ -	\$ 685.00
0907808		We have 9 roof leaks over the pool mezzanine, two leaks over the pool, and possibly a leak in the communications and electrical mechanical rooms.	\$ 1,725.00	\$ -	\$ -	\$ 1,725.00
0908878	7/22/2009	Replace damaged downspouts.	\$ 240.00	\$ -	\$ 110.38	\$ 350.38
0910541	9/1/2009	We seem to have a roof leak over the east side of the gym mezzanine.	\$ 450.00	\$ -	\$ -	\$ 450.00
0912616	10/12/2009	We have 5 roof leaks over the pool mezzanine.	\$ 90.00	\$ -	\$ -	\$ 90.00
	Report Total:		\$ 4,335.20	\$ 18,054.73	\$ 1,049.03	\$ 23,438.96
	Annual Avg Cost		\$ 2,167.60	\$ 9,027.37	\$ 524.52	\$ 11,719.48

O&M Savings - Lighting

Annual Maintenance Material Savings*

All Buildings except City Hall:	\$	6,024
City Hall	\$	320
Total Building Lighting O&M Savings:	\$	6,344

* See Exhibit G for lighting details

ATTACHMENT J PROJECT ACCEPTANCE

Project Final Acceptance Procedure:

As portions of the Project near completion, the Honeywell Project Manager will start the Project Close-Out Process. The Honeywell Project Manager shall use the Scope-of-Work (SOW) listed in Attachment A as the basis for the Close-Out Process and shall demonstrate to the Owner's Representative that each separate item of the SOW is substantially complete. The sign off process will be by portion of the Scope of Work or by individual Energy Conservation Measure (ECM). After each portion of the Scope of Work has been demonstrated and a "Punch List" detailing minor deficiencies, if any, is generated, the Owner's Representative shall execute the Delivery and Acceptance Certificate to acknowledge substantial completion and Honeywell will complete the "Punch List" within two weeks. Execution of this Delivery and Acceptance Certificate signifies the start of the warranty provided in the Agreement for this portion of the Work.

Schedule of Acceptance: The acceptance process will follow the following schedule:

All ECMs by: _____

OR

School/Building/Facility by: _____

School/Building/Facility by: _____

OR

ECM #	ECM Name	Acceptance Date
1	Building Lighting Retrofit	
2	HVAC Retrofit	
3	High Efficiency Motors	
4	Cool Roof	

Support Services: Honeywell will start the support services of the Facility in accordance with the Service Agreement per Attachment D when the Final Delivery and Acceptance Certificate is signed.

FINAL DELIVERY AND ACCEPTANCE CERTIFICATE

Project Name: City of Clearwater Phase II

Agreement Effective Date: _____

Scope-of-Work (SOW) Item/Energy Conservation Measure (ECM): See Attachment A

To: Honeywell International Inc.

Reference is made to the above listed Agreement between the undersigned and Honeywell International Inc. and to the Scope of Work as defined in Attachment A herein. In connection therewith, we confirm to you the following:

1. The Scope of Work (SOW) Item/ Energy Conservation Measure (ECM) referenced above and also listed in Attachment A of the Agreement has been demonstrated to the satisfaction of the Owner's Representative as being substantially complete
2. All of the Work has been delivered to and received by the undersigned and that said Work has been examined and /or tested and is in good operating order and condition and is in all respects satisfactory to the undersigned and as represented, and that said Work has been accepted by the undersigned and complies with all terms of the Agreement. Consequently, you are hereby authorized to invoice for the Final Payment, as defined in Attachment E, The Payment Schedule.

Owner Name: _____

By: _____
(Authorized Signature)

(Printed Name and Title)

(Date)