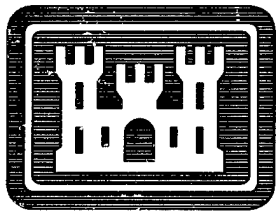
FINAL

LIGHTING STUDY
EEAP PROGRAM
FOR
LETTERKENNY
ARMY DEPOT



U.S. ARMY ENGINEER DISTRICT, NORFOLK

CORPS OF ENGINEERS

NORFOLK, VIRGINIA

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VOLUME 2 OF 3

SEPT ~~JUNE~~ 1995

DEPARTMENT OF THE ARMY
CONSTRUCTION ENGINEERING RESEARCH LABORATORIES, CORPS OF ENGINEERS
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SECTION 9.0
ATTACHMENTS

9.1 A/E Contract

9.2 Meeting Minutes and Monthly Reports

9.3 Electric Bills and Rate Schedule

9.4 Lighting Models

9.5 Energy Conservation Opportunities

ATTACHMENT 9.1

A/E Contract

TSM

ORDER FOR S PLIES OR SERVICES

(Contractor must submit four copies of invoice)

Form Approved
OMB No 0704-0187
Expires Aug 31, 1992

PAGE 1 OF

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of the collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0187), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send

1. CONTRACT / PURCH ORDER NO	2. DELIVERY ORDER NO	3. DATE OF ORDER	4. REQUISITION / PURCH REQUEST NO.	5. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG 1
DACA01-94-D-0037	0004	27 Sep 94		DO

6. ISSUED BY CODE
US ARMY ENGINEER DISTRICT, MOBILE
PO BOX 2288
MOBILE, AL 36628-0001

7. ADMINISTERED BY (If other than 6) CODE
US ARMY ENGINEER DISTRICT, NORFOLK
803 FRONT STREET
NORFOLK, VA 23510-1096

8. DELIVERY FOB
☐ DEST
☐ OTHER
(See Schedule if other)

9. CONTRACTOR CODE FACILITY CODE
NAME AND ADDRESS
ENTECH ENGINEERING, INC.
500 PENN STREET, PO BOX 32
READING, PA 19603

10. DELIVER TO FOB POINT BY (Date)
SEE APP A FOR SCH

11. MARK IF
☐ BUSINESS
☐ SMALL DISADVANTAGED
☐ WOMEN-OWNED

12. DISCOUNT TERMS
MA

13. MAIL INVOICES TO
SEE BLOCK 14

14. SHIP TO CODE
US ARMY ENGINEER DISTRICT, NORFOLK
ATTN: CENAO-EN-MP (MLECIK)
803 FRONT STREET
NORFOLK, VA 23510-1096

15. PAYMENT WILL BE MADE BY CODE
FINANCE & ACCOUNTING OFFICE
US ARMY ENGINEER DISTRICT, NORFOLK
803 FRONT STREET
NORFOLK, VA 23510-1096

MARK ALL PACKAGES AND PAPERS WITH CONTRACT OR ORDER NUMBER

16. TYPE OF ORDER
DELIVERY ☐ This delivery order is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.
PURCHASE ☐ Reference your ____ furnish the following on terms specified

ACCEPTANCE. THE CONTRACTOR HEREBY ACCEPTS THE OFFER REPRESENTED BY THE NUMBERED PURCHASE ORDER AS IT MAY PREVIOUSLY HAVE BEEN OR IS NOW MODIFIED, SUBJECT TO ALL OF THE TERMS AND CONDITIONS SET FORTH, AND AGREES TO PERFORM THE SAME.

NAME OF CONTRACTOR	SIGNATURE	TYPED NAME AND TITLE	DATE SIGNED

☐ If this box is marked, supplier must sign Acceptance and return the following number of copies:

17. ACCOUNTING AND APPROPRIATION DATA / LOCAL USE
2142050 408-8013 P70000000 S44110 RA4A834D04 DIRECT CITE TOTAL $126,484.00

18. ITEM NO.	19. SCHEDULE OF SUPPLIES / SERVICE	20. QUANTITY ORDERED / ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT
	DELIVERY ORDER FOR LIGHTING STUDY, EEAP PROGRAM, LETTERKENNY ARMY DEPOT, PA				$126,484.00

*If quantity accepted by the Government is same as quantity ordered, indicate by X. If different, enter actual quantity accepted below quantity ordered and encircle.

24. UNITED STATES OF AMERICA
BY EDWARD M. SLANA
27 SEP 94
CONTRACTING / ORDERING OFFICER

25. TOTAL $126,484.00
26. DIFFERENCE

26. QUANTITY IN COLUMN 20 HAS BEEN
☐ INSPECTED ☐ RECEIVED ☐ ACCEPTED AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED
DATE
SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

27. SHIP NO.
☐ PARTIAL ☐ FINAL

28. D.O. VOUCHER NO

29. INITIALS

30. PAID BY

31. PAYMENT
☐ COMPLETE ☐ PARTIAL ☐ FINAL

32. AMOUNT VERIFIED CORRECT FOR

33. CHECK NUMBER

34. BILL OF LADING NO

35. I certify this account is correct and proper for payment
DATE
SIGNATURE AND TITLE OF CERTIFYING OFFICER

37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED	40. TOTAL CONTAINERS	41. S/R ACCOUNT NUMBER	42. S/R VOUCHER NUMBER

DD Form 1155, MAY 90

PREVIOUS EDITIONS ARE OBSOLETE

CONTRACT NO. DACA01-94-D-0037

DELIVERY ORDER NO. 0004

SCOPE OF WORK
LIGHTING STUDY
FOR
LETTERKENNY ARMY DEPOT

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1. BRIEF DESCRIPTION OF WORK: The Architect Engineer (AE) shall:

1.1 Perform a limited site survey of specific buildings or areas to collect all data required to evaluate the specific ECOs included in this study.

1.2 Evaluate specific ECOs to determine their energy savings potential and economic feasibility.

1.3 Provide project documentation for recommended ECOs as detailed herein.

1.4 Prepare a comprehensive report to document all work performed, the results and all recommendations.

2. GENERAL

2.1 This Study is limited to the evaluation of the specific buildings, systems, or ECOs listed in APPENDIX A, DETAILED SCOPE OF WORK.

2.2 The information and analysis outlined herein are considered to be minimum requirements for adequate performance of this Study.

2.3 For the buildings, systems or ECOs listed in APPENDIX A, DETAILED SCOPE OF WORK, all methods of energy conservation as relates to LIGHTING, as well as it's effects on HVAC systems, and which are reasonable and practical shall be considered, including improvements of operational methods and procedures as well as the physical facilities All energy conservation opportunities which produce energy or dollar savings shall be documented in this report. Any energy conservation opportunity considered unfeasible shall also be documented in the report with reasons for elimination.

2.4 The study shall consider the use of all lighting sources applicable to each building, system, or ECO, including all effects lighting system changes may have on HVAC systems.

2.5 The "Energy Conservation Investment Program (ECIP) Guidance", described in letter from DAIM-FDF-U, dated 10 Jan 1994 establishes criteria for ECIP projects and shall be used for performing the economic analyses of all ECOs and projects. The Program Life Cycle Cost In Design (LCCID), has been developed for performing life cycle cost calculations in accordance with ECIP guidelines and is referenced in the ECIP Guidance. If any program other than LCCID is proposed for life cycle cost analysis, it must use the mode of calculation specified in the ECIP Guidance. The output must be in the format of the ECIP LCCA summary sheet, and it must be submitted for approval to the Contracting Officer.

2.6 Energy conservation opportunities determined to be technically and economically feasible shall be developed into projects acceptable to installation personnel. This may involve combining similar ECOs into larger packages which will qualify for ECIP, or O&M funding, and determining in coordination with

installation personnel the appropriate packaging and implementation approach for all feasible ECOs.

2.6.1 Projects which qualify for ECIP funding shall be identified, separately listed, and prioritized by the Savings to Investment Ratio (SIR).

2.6.2 All feasible Non-ECIP projects shall be ranked in order of highest to lowest SIR.

2.6.3 At some installations Energy Conservation and Management (ECAM) funding will be used instead of ECIP funding. The criteria for each program is the same. The Director of Public Works will indicate which program is used at this installation. This Scope of Work mentions only ECIP, however, ECAM is also meant.

3. PROJECT MANAGEMENT

3.1 Project Managers. The AE shall designate a project manager to serve as a point of contact and liaison for work require under this contract Upon award of this contract, the individual shall immediately be designated in writing. The AE's designated project manager shall be approved by the Contracting Officer prior to commencement of work. This designated individual shall be responsible for coordination of work required under this contract. The Contracting Officer will designate a project manager to serve as the Government's point of contact and liaison for all work required under this contract. This individual will be the Government's representative.

3.2 Installation Assistance. The Commanding Officer or authorized representative at the installation will designate an individual to assist the AE in obtaining information and establishing contacts necessary to accomplish the work required under this contract. This individual will be the installation representative.

3.3 Public Disclosures. The AE shall make no public announcements or disclosures relative to information contained or developed in this contract, except as authorized by the Contracting Officer.

3.4 Meetings. Meetings will be scheduled whenever requested by the AE or the Contracting Officer for the resolution of questions or problems encountered in the performance of the work. The AE's project manager and the Government's representative shall be required to attend and participate in all meetings pertinent to the work required under this contract as directed by the Contracting Officer. These meetings, if necessary, are in addition to the presentation and review conferences.

3.5 Site Visits, Inspections, and Investigations. The AE shall visit and inspect/investigate the site of the project as necessary and required during the preparation and accomplishment of the work.

3.6 Records.

3.6.1 The AE shall provide a record of all significant conferences, meetings, discussions, verbal directions, telephone conversations, etc., with Government representative(s) relative to this contract in which the AE and/or designated representative(s) thereof participated. These records shall be dated and shall identify the contract number, and modification number if applicable, participating personnel, subject discussed and conclusions reached. The AE shall forward to the Contracting Officer within ten calendar days, a reproducible copy of the records.

3.6.2 The AE shall provide a record of requests for and/or receipt of Government furnished material, data, documents, information, etc., which if not furnished in a timely manner, would significantly impair the normal progression of the work under this contract. The records shall be dated and shall identify the contract number and modification number, if applicable. The AE shall forward to the Contracting Officer within ten calendar days, a reproducible copy of the record of request or receipt of material.

3.7 Interviews. The AE and the Government's representative shall conduct entry and exit interviews with the Director of Public Works before starting work at the installation and after completion of the field work. The Government's representative shall schedule the interviews at least one week in advance.

3.7.1 Entry. The entry interview shall describe the intended procedures for the survey and shall be conducted prior to commencing work at the facility. As a minimum, the interview shall cover the following points:

- Schedules.
- Names of energy analysts who will be conducting the site survey.
- Proposed working hours.
- Support requirements from the Director of Public Works.

3.7.2 Exit. The exit interview shall briefly describe the items surveyed and probable areas of energy conservation. The interview shall also solicit input and advice from the Director of Public Works.

4. SERVICES AND MATERIALS. All services, materials (except those specifically enumerated to be furnished by the Government), labor, supervision and travel necessary to perform the work and render the data required under this contract are included in the lump sum price of the contract.

5. PROJECT DOCUMENTATION. All energy conservation opportunities which the AE has considered shall be included in one of the following categories and presented in the report as such.

5.1 ECIP Projects. To qualify as an ECIP project, an ECO, or several ECOs which have been combined, must have a construction cost estimate greater than $300,000, a Savings to Investment Ratio greater than 1.25 and a simple playback period of less than ten years. For ECAM projects, the $300,000 limitation may not

apply in such cases, the AE shall check with the installation for guidance. The overall project and each discrete part of the project shall have an SIR greater than 1.25. All projects meeting the above criteria shall be arranged as specified in paragraph 2.6.1 and shall be provided with programming documentation. Programming documentation shall consist of a DD Form 1391, life cycle cost analysis (LCCA) summary sheet(s) (with necessary backup data to verify the numbers presented), and a Project Development Brochure(PDB). A life cycle cost analysis summary sheet shall be developed for each ECO and for the overall project when more than one ECO are combined. The energy savings for projects consisting of multiple ECOs must take into account the synergistic effects of the individual ECOs.

5.2 Non-ECIP Projects. Projects which do not meet ECIP criteria with regard to cost estimate or play back period, but which have a SIR greater than 1.25 shall be documented. Projects or ECOs in this category shall be arranged as specified in paragraph 2.6.2 and shall be provided with the following documentation: the life cycle cost analysis (LCCA) summary sheet completely filled out, a description of the work to be accomplished, backup data for the LCCA, i.e., energy savings calculations and cost estimate(s), and the simple play back period. The energy savings for projects consisting of multiple ECOs must take into account the synergistic effects of the individual ECOs. In addition these projects shall have the necessary documentation prepared, as required by the Government's representative, for one of the following categories:

5.2.1. 0 & M Energy Projects: An O&M Energy project is one that results in needed maintenance or repair to an existing facility, or replaces a failed or failing existing facility, and also results in energy savings. The criteria are similar to the criteria for ECIP projects, i.e., $300,000 construction cost, SIR n 1.25, and simple play back period of less than ten years. In addition, if the project would replace a system or equipment that is considered failed or failing' due solely to obsolete technology or inefficiency, the equipment to be replaced must have been in use for at least three years; and the simple play back period must be three years or less.

5.2.2. Low Cost/No Cost Projects. These are projects which the Director of Public Works (DPW) can perform using his resources. Documentation shall be as required by the DPW.

5.3 Non-feasible ECOs. All ECOs which the AE has considered but which are not feasible, shall be documented in the report with reasons and justifications showing why they were rejected.

6. DETAILED SCOPE OF WORK. The Detailed Scope of Work is contained in APPENDIX A, DETAILED SCOPE OF WORK,.

7. WORK TO BE ACCOMPLISHED.

7.1 Perform A Limited site survey. The AE shall obtain all necessary data to evaluate the ECOs or projects by conducting a site survey. The AE shall document

his site survey on forms developed for the survey, or standard forms, and submit these completed forms as part of the report. Light levels shall be measured under typical operating conditions for all areas or spaces being evaluated. All test and/or measurement equipment shall be properly calibrated prior to its use. The requirements for color rendition and current maintenance and revamping practices shall be noted for consideration in the evaluations.

7.2 Evaluate Selected ECOs. The AE shall analyze the ECOs listed in APPENDIX A, DETAILED SCOPE OF WORK,. These ECOs shall be analyzed in detail to determine their feasibility. Savings to Investment Ratios (SIRS) shall be determined using current ECIP guidance. The AE shall provide all data and calculations needed to support the recommended ECO. All assumptions and engineering equations shall be clearly stated. Calculations shall be prepared showing how all numbers in the CEO were figured. Calculations shall be an orderly step by step progression from the first assumption to the final number. Descriptions of the products, manufacturers catalog cuts, pertinent drawings and sketches shall also be included. Construction cost estimates shall be provided and shall break out the costs associated with rehab work (architectural, electrical, mechanical) where applicable. Existing and proposed light levels shall be compared with levels recommended by the Illumination Engineering Society (IES) or the Corps of Engineers Architectural and Engineering Instructions (AEI) for the applicable space and activity. A life cycle cost analysis summary sheet shall be prepared for each ECO and included as part of the supporting data

7.3 Combine ECOs Into Recommended Projects. During the Interim Review Conference, as outlined in paragraph 7.4.1, the AE will be advised of the DPW's preferred packaging of recommended ECOs into projects for implementation. Some projects may be a combination of several ECOs, and others may contain only one. These projects will be evaluated and arranged as outlined in paragraphs 5.1, 5.2, and 5.3. Energy savings calculations shall take into account the synergistic effects of multiple ECOs within a project and the effects of one project upon another. The results of this effort will be reported in the Final Submittal per par 7.4.2.

7.4 Submittals, Presentations and Reviews. The work accomplished shall be fully documented by a comprehensive report. The report shall have a table of contents and shall be indexed Tabs and dividers shall clearly and distinctly divide sections, subsections, and appendices. All pages shall be numbered. Names of the person? primarily responsible for the project shall be included. The AE shall give a formal presentation of the interim submittal to installation. command, and other Government personnel. Slides or view graphs showing the results of the study to date shall be used during the presentation. During the presentation, the personnel in attendance shall be given ample opportunity to ask questions and discuss any changes deemed necessary to the study. A review conference will be conducted the same day, following the presentation. Each comment presented at the review conference will be discussed and resolved or action items assigned. It is anticipated that the presentation and review conference will require approximately one working day. The presentation and review conference will be at the installation on the date agreeable to the Director of Public Works, the AE and the Government's

representative. The Contracting Officer may require a re-submittal of any document(s), if such document(s)are not approved because they are determined by the Contracting Officer to be inadequate for the intended purpose.

7.4.1 Interim Submittal. An interim report shall be submitted for review after the field survey has been completed and an analysis has been performed on all of the ECOs. The report shall indicate the work which has been accomplished to date, illustrate the methods and justifications of the approaches taken and contain a plan of the work remaining to complete the study. Calculations showing energy and dollar savings, SIR, and simple play back period of all the ECOs shall be included. The results of the ECO analyses shall be summarized by lists as follows:

7.4.1.a. All ECOs eliminated from consideration shall be grouped into one listing with reasons for their elimination as discussed in par 5.3.

7.4.1.b. All ECOs which were analyzed shall be grouped into two listings, recommended and non-recommended, each arranged in order of descending SIR. These lists may be subdivided by building or areas appropriate for the study. The AE shall submit the Scope of Work and any modifications to the Scope of Work as an appendix to the report. A narrative summary describing the work and results to date shall be a part of this submittal. At the Interim Submittal and Review Conference, the Government's and AE's representatives shall coordinate with the Director of Public Works to provide the AE with direction for packaging or combining ECOs for programming purposes and also indicate the fiscal year for which the programming or implementation documentation shall be prepared. The survey forms completed during this Study shall be submitted with this report. The survey forms only may be submitted in final form with this submittal. They should be clearly marked at the time of submission that they are to be retained. They shall be bound in a standard three ring binder which will allow repeated disassembly and re-assembly of the material contained within.

7.4.2 Final Submittal. The AE shall prepare and submit the final report when all sections of the report are 1001 complete and all comments from the interim submittal have been resolved. The AE shall submit the Scope of Work for the study and any modifications to the Scope of Work as an appendix to the submittal. The report shall contain a narrative summary of conclusions and recommendations, together with all raw and supporting data, methods used, and sources of information. The report shall integrate all aspects of the study. The recommended projects, as determined in accordance with paragraph 5, shall be presented in order of priority by SIR. The lists of ECOs specified in paragraph 7.4.1 shall be included for continuity. The final report and all appendices shall be bound in standard three ring binders which will allow repeated disassembly and re-assembly. The final report shall be arranged to include:

7.4.2.a. An Executive Summary to give a brief overview of what was accomplished and the results of this study using graphs, tables and charts as much as possible (See APPENDIX B, EXECUTIVE SUMMARY GUIDELINE, for minimum requirements).

7.4.2.b. The narrative report describing the problem to be studied, the approach to be used, and the results of this study.

7.4.2.c. Documentation for the recommended projects.

1) Backup information as specified in par 5.1.

7.4.2.d. Appendices to include as a minimum:

1) Energy cost development and backup data.

2) Detailed calculations.

3) Cost estimates.

4) Computer printouts (where applicable).

5) Scope of Work.

CONTRACT NO. DACA01-94-D-0037
DELIVERY ORDER NO. 0004

APPENDIX A
DETAILED SCOPE OF WORK.
FY 94 LIGHTING STUDY
LETTERKENNY ARMY DEPOT, PENNSYLVANIA

1. All facilities to be investigated in this Study are located at LETTERKENNY ARMY DEPOT, PENNSYLVANIA.

2. The General Scope of Work outlines requirements for the Study and the report; and the detailed scope of work lists the specific areas to be Studied. If any conflicts arise between the General and the Detailed scopes of work, the Detailed Scope of Work shall govern.

3. The work consists of identifying and evaluating energy conservation opportunities (ECOs) for LIGHTINGs in specific areas or facilities. A list of suggested ECOs is provided in APPENDIX D, LIGHTING ECOs. The ECOs in APPENDIX D, are to be evaluated as applicable for the area or facilities listed in APPENDIX E, LIST OF AREAS/FACILITIES TO BE STUDIED.

4. Completion and Payment Schedule: The following schedule shall be used as a guide in approving payments on this contract. The Contracting Officer's representative is Mr. Bryant Wilkins of the Norfolk District, COE.

Interm Submittal	120 Calendar Days after Notice to Proceed
Pre-Final Submittal	200 Calendar Days after Notice to Proceed
Final Submittal	240 Calendar Days after Notice to Proceed

MILESTONE	PERCENT OF CONTRACT AMOUNT AUTHORIZED FOR PAYMENT
Entry Interview	10
Completion of Field Work	25
Receipt of Interim Submittal	75
Completion of Interim Presentation & Review	85
Receipt of Final Submittal	100

5. The installation representative for this contract will be Mr. Jeffrey Hager, Energy Program Coordinator, Directorate of Public Works , LETTERKENNY ARMY DEPOT. (717) 267-8005, FAX (717) 267-9713.

6. Government Furnished Information: The following documents are available for the use of the AE.

- As built drawings (as available) of buildings/systems
- Energy Conservation Investment Program (ECIP) Guidance, dated 10 Jan 1994
- ETL 11103282, Energy Conservation

- TM 58002, Cost Estimates, Military Construction
- AR 41515, 1 Jan 84, Military Construction, Army (MCA) Program Development
- Architectural and Engineering Instructions, Design Criteria; Chapter 12, Electrical Criteria, 9 December 1991
- The latest MCP Index

7. Direct Distribution of Submittals: The AE shall make direct distribution of correspondence, minutes, report submittals, and responses to comments as indicated by the following schedule:

AGENCY	CORRESPONDENCE	EXECUTIVE SUMMARIES	REPORTS	FIELD NOTES
Commander LETTERKENNY ARMY DEPOT ATTN: SDSLE-EP (Mr. Hagar) DPW/Energy Engineer Chambersburg, PA 17201-4150	1	3	3	1*
Commander Army Material Command ATTN: AMCEN-A(Ms Linda Custer) 5001 Eisenhower Ave. Alexandria, VA 22333-0001	-	1	1	-
Commander U. S. Army Engineer District, Norfolk ATTN: CENAO-EN-MP (Mr Mlecik) 803 Front Street Norfolk, VA 23510	1	3	3	1*
Commander USAED, North Atlantic ATTN: CENAD-EN-MM (Mr Wong) 90 Church Street New York, NY 10007	-	1	1	-

LK

Commander USAED, Mobile ATTN: CESAM-EN-DM (Battaglia) PO Box 2288; Mobile, AL 36628-0001	1	1	1	-
Commander US Army Corps of Engineers ATTN: CEMP-ET (Mr Gentil) 20 Massachusetts Avenue NW Washington, DC, 20314 1000	-	1 (Final Only)	-	-
Commander US Army Logistics Evaluation Agency ATTN: LOEA-PL (Mr Keath) New Cumberland Army Depot New Cumberland, PA, 17070 5007	-	1 (Final Only)	-	-

* Field Notes submitted in final form at interim submittal.

Progress reports will be prepared on a monthly basis to highlight the significant events of the prior month. This is especially true of actions completed, problems discovered, schedule changes and ECO developments. The progress reports will accompany monthly billings and will form the basis for progress meetings.

8. A computer program titled Life Cycle Costing in Design (LCCID) is available from the BLAST Support Office in Urbana, Illinois for a nominal fee. This computer program can be used for performing the economic calculations for ECIP and non-ECIP ECOs. The AE is encouraged to obtain and use this computer program. The BLAST Support Office can be contacted at 144 Mechanical Engineering Building, 1206 West Green Street, Urbana, Illinois 61801. The telephone number is (217) 3333977 or (800) 8425278.

9. METHOD

9.1 INVESTIGATION OF EXISTING CONDITIONS

The Contractor will collect information on the existing lighting systems and operations so as to have a reasonable understanding of operations, costs, energy use, problems, limitations, future needs, etc. This will be accomplished in the following steps.

Data Gathering. The Contractor will collect available data that will assist in energy use evaluations and recommendations. A partial list of data that will be sought are:

Energy bills and summaries
Prior studies and energy reports (if any)
Schedules

LK

Floor plans or building data
Site plans
Maintenance records
Copies of other pertinent drawings
Proposals from vendors or contractors
Electrical demand profiles
Energy management system profile
Others

Site Visits, Inspections. An The Contractor design/study team (normally two or three people) will visit the facility. Site inspection will be done of areas covered in the study. Operators may be briefly interviewed on the basic function and normal time of use of individual areas and systems.

The team will observe the arrangement, physical condition and effectiveness of the lighting systems. Data collected generally will include the following information.

Lighting levels
Fixture and ceiling heights
Electrical details including voltage, instantaneous amperage, kVA, and P.F.
Lighting characteristics
Lighting panel schedules (where possible)
Room or area dimensions

Photographs will be taken of key areas for later reference.

ANALYSIS OF SYSTEMS

The Contractor will utilize standard methods of engineering calculations to understand current energy consumption in such detail as to permit identification of further improvement options.

Utility Rate Analysis. A calculation will be performed for determining electrical costs associated with lighting use. The incremental cost of electricity will be used for all energy savings options including demand and usage.

The current rate structure that applies to electrical use will be checked. Using a computerized program developed by The Contractor, all bills for the past two years will be checked for accuracy. This program will also determine the incremental cost of each kW of demand and kWH of usage for calculations of Energy Conservation Opportunities (ECOs) and other reports. A copy of the applicable analysis, together with sample bills and published tariffs will be included in the report.

Check Regulatory Requirements. Where applicable, a check of all regulatory bodies affecting lighting will be made. Any recommendations that are subsequently made, must be made in compliance with such requirements including the Illuminating Engineering Society (IES).

Lighting Lists. Data obtained during the walk-through inspection is tabulated into a comprehensive lighting list for the facilities covered by the scope. Using another The Contractor computer program, the information provided contains the following:

Location - floor, room area in SF, etc.
Luminaries - number, type, height
Lamps - number, type, wattage
Ballasts
Light levels in foot-candles
Watts/SF
Hours of operation and kWHs
Contribution to demand
Monthly cost of operation

Copies of these calculations with recommendations noted in the margin are provided with the reports.

Electrical Models. A computerized list will show how each building's lighting load in the building contributes to energy use and cost. This list or model of actual use shows the contribution of all lighting summaries to demand in KW, usage in KWH, and cost per year in dollars. The arrangement of the model evaluates each major season (winter, summer, and intermediate months) as well as yearly totals.

A copy of the electrical model is included for the facility report. Note also that this model is used to determine the level of savings (electrical) that can be obtained from lighting Energy Conservation Opportunity improvements.

ENERGY CONSERVATION OPPORTUNITY INVESTIGATIONS

The Contractor will investigate all reasonable options of saving energy and energy-related costs in the operation of the lighting systems. The approach used to identify each option is briefly described below.

Existing Conditions. This section describes the nature of the existing operating system, its energy use, costs, advantages and disadvantages. Data is usually transferred to this section from the calculations.

Energy Conservation Opportunities. This section describes improvement ideas that are different from the existing conditions. They may describe a capital projects, modifications, or O&M procedures. The resulting improvements are described, energy costs, quantities and arrangements are briefly noted. Sufficient conceptual studies will be executed to determine feasibility, generate anticipated operational data and estimating values.

Construction Cost Estimate. A feasibility cost estimate in the format prescribed will be performed. The estimate breakdown will be included in the report showing known quantities and costs. Allowances for indirect costs and contingencies are included.

Annual Savings. The report will show the annual savings in energy, quantities, demand, costs, and BTU's. As the report is written, these savings are merely the difference between existing and proposed.

Discussion. This section of the report describes a number of relevant factors including payback period, impact on labor or non-energy costs, O&M concerns, appearances, comfort, life extension, etc. The intent of this section is to address normal impacts or uncertainties of various improvement ideas.

REPORT PREPARATION PHASE

The Contractor will prepare an Energy Analysis report which will fully document the steps previously described. The report will be prepared as follows.

Executive Summary - Section 1. The outline of the executive section is shown on Appendix B.

Methodology - Section 2. This part of the report describes the approach, sequence, assumptions, calculations methods, computer programs, sample outputs, etc. that were used for the study.

Facility Description - Section 3. The report will briefly discuss the buildings and systems covered by the study. It will show floor plans, layout flow diagrams, facility age and condition, major equipment characteristics by system, hours of operation, and concerns expressed by occupants and managers.

Energy Use and Costs - Section 4. The report will describe individual and combined energy consumption for the past two years. The report will describe rate structures, incremental cost calculations, trends, and analysis of use by source. This section critically establishes baseline use of energy for later improvement possibilities.

ECOs Recommended - Section 5. This section describes in detail each of the Energy Conservation Opportunities (ECOs) that are recommended for adoption and funding. The approach to each ECO write-up is described in Section 5, Project Documentation.

ECOs Not Recommended - Section 6. The report will also show ECOs that were investigated but not recommended for adoption due to economics, conflicts, with other ECOs or concerns of operations.

Discussion - Section 7. This part of the report will cover interesting findings of the study not related to other sections of the report. It may include

recommendations for non-energy problems, further studies, O&M procedures, training, etc.

Attachments. As part of the report, there will be enclosures for photos, backup calculations, referenced materials such as rate tariffs, codes, etc.

Applications and Funding Requests. As part of this study, applications for project funding will be made in accordance with Section 5, Project Documentation and directions from local authorized persons. The exact level of funding and funding program (expected to be ECIP), will be at the direction of the facility manager.

Suggested Implementation Schedules. The report will also contain a suggested timetable for implementing various projects or programs. This recommendation will be made in consultation with various facility managers.

Operation and Maintenance Instructions. Where appropriate, the study will recommend the formation of procedures or changes to processes that relate to improved energy usage and costs through Operation and Maintenance.

APPENDIX B
EXECUTIVE SUMMARY GUIDELINE.

1. Introduction.

2. Building Data (types, number of similar buildings, sizes etc.)

3. Present Energy Consumption of Buildings or Systems Studied.

- Total Annual Energy Used.
- Source Energy Consumption.
  Electricity KWH, Dollars, BTU
  Fuel Oil GALS, Dollars, BTU
  Natural Gas THERMS, Dollars, BTU
  Propane GALS, Dollars, BTU
  Other QTY, Dollars, BTU

4. Reevaluated Projects Results.

5. Energy Conservation Analysis.

- ECOs Investigated.
- ECOs Recommended.
- ECOs Rejected. (Provide economics or reasons)
- ECIP Projects Developed. (Provide list)*
- Non-ECIP Projects Developed. (Provide list)*
- Operational or Policy Change Recommendations.
-

* Include the following data from the life cycle cost analysis summary sheet; the cost (construction plus SIOH), the annual energy savings (type and amount), the annual dollar savings, the SIR, the simple pay back period and the analysis date.

6. Energy and Cost Savings.

- Total Potential Energy and Cost Savings.
- Percentage of Energy Conserved.
- Energy Use and Cost Before and After the Energy Conservation opportunities are Implemented.

APPENDIX C,
REQUIRED FORM DD1391 DATA.

To facilitate ECIP project approval, the following supplemental data shall be provided:

1. In title block clearly identify projects as "ECIP."

2. Complete description of each item of work to be accomplished including quantity, square footage, etc.

3. A comprehensive list of buildings, zones, or areas including building numbers, square foot floor area, designated temporary or permanent, and usage (administration, patient treatment, etc.).

4. List references, and assumptions, and provide calculations to support dollar and energy savings, and indicate any added costs.

4.1. If a specific building, zone, or area is used for sample calculations, identify building, zone or area, category, orientation, square footage, floor area, window and wall area for each exposure.

4.2. Identify weather data source.

4.3. Identify infiltration assumptions before and after improvements

4.4. Include source of expertise and demonstrate savings claimed. Identify any special or critical environmental conditions such as pressure relationships, exhaust or outside air quantities, temperatures, humidity, etc.

5. Lighting retrofit projects must identify number and type of fixtures, and wattage of each fixture being deleted and installed. New lighting shall be only of the level to meet current criteria. Lamp changes in existing fixtures is not considered an ECIP type project.

6. An ECIP life cycle cost analysis summary sheet as shown in the ECIP Guidance shall be provided for the complete project and for each discrete part included in the project. The SIR is applicable to all segments of the project. Supporting documentation consisting of basic engineering and economic calculations showing how savings were determined shall be included.

7. The DD Form 1391 face sheet shall include, for the complete project, the annual dollar and MBTU savings, SIR, simple amortization period and a statement attesting that all buildings and retrofit actions will be in active use throughout the amortization period.

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7. The DD Form 1391 face sheet shall include, for the complete project, the annual dollar and MBTU savings, SIR, simple amortization period and a statement attesting that all buildings and retrofit actions will be in active use throughout the amortization period.

8. The calendar year in which the cost was calculated shall be clearly shown on the DD Form 1391.

9. For each temporary building included in a project, separate documentation is required showing (1) a minimum 10 year continuing need, based on the installation's annual real property utilization survey, for active building retention after retrofit,(2) the specific retrofit action applicable and (3) an economic analysis supporting the specific retrofit.

10. Non-appropriated funded facilities will not be included in an ECIP project without an accompanying statement certifying that utility costs are not reimbursable.

11. Any requirements required by ECIP guidance dated 10 Jan 1994 and any revisions thereto. Note that non-escalated costs and savings are to be used in the economic analyses.

12. The five digit category number for all ECIP projects except for Family Housing is 80000. The category code number for Family Housing projects is 71100.

APPENDIX D
LIGHTING ECOs

Energy Savings Opportunities include but are not necessarily limited to:

Daylighting/photo controls

Reflectors

Delamping

Change exit signs to LEDs or compact fluorecents

Motion sensors

Fluorescents to HID luminaires

Replacement of Lamps
- Incandesents to fluorescents
- Standard fluorescent lamps to compact fluorescent
- Mercury vapor lamps to metal halide
- Mercury vapor lamps to high pressure sodium
- Mercury vapor lamps to low pressure sodium

Replace existing fluorescent fixtures with new fixtures having efficient reflectors, electronic balasts and energy conserving lamps

Task lighting

Magnetic to electronic ballasts

Reductions where illumination exceeds recommended levels.

Installation of additional switches to control lighting arrangements

APPENDIX E
LIST OF AREAS/FACILITIES TO BE STUDIED.

This study will include, but is not necessarily limited to, a thorough understanding of recommended improvements to the following:

This study will include a thorough review of existing lighting systems and suggest recommended improvements to the system of the facilities indicated on the attached list. The study will review and confirm the area in square feet, lighting levels, and the number of fixtures for each facility on the list.

The study will also include an analysis of existing street lighting at various locations throughout the Depot. It is estimated that approximately 1,000 existing mercury vapor street lights will be included in the street lighting study.

Building Location	Square Feet	# of Lighting Fixtures
1-S	51,177	771
RR	270	
Audio Visual	588	
2-S	17,434	251
RR	1,157	8
3	75,258	857
ADP RMS	16,296	345
RR	1,736	
4-S	6,743	139
RR	400	
5-N	11,481	162
ADP RMS	2,350	49
10	39,796	1,157
ADP RMS	7,901	120
RR	1,316	
20-1		2
198	960	9
199		8
200	1,063	9
211	856	11
529	2,583	37
KITCHEN	1,246	14
SECOND FLOOR	4,595	31
530		16
536		18
581	9,702	128
616	280	2
618	5,167	75
619	3,171	50

Building Location	Square Feet	# of Lighting Fixtures
629		13
637	1,400	42
639		15
639		3
640	1,256	12
645	1,920	28
646	2,778	42
412		44
412		26
416	3,106	32
417		25
418		25
421	14,350	164
REMOTE	500	12
428	1,520	21
500	28,774	343
HLTH CLINIC	4,526	47
NEW CLINIC	1,252	22
521	1,955	64
522	9,663	179
523	5,964	86
524	1,305	19
663-S	12,139	229
664	4,074	94
SECOND FLOOR OFC		
OFFICE		
2260	4,000	72
3311	6,499	151
3315		14
1N	30,120	129
4N		8
5S		
6	40,560	466
14	9,260	224
14	400	
19		5
37	549	42
42-S		9
42-S		9
47	783	4
47		
57	2,173	120
SHOP	53,425	589
102	1,750	28

Building Location	Square Feet	# of Lighting Fixtures
247		16
320		101
350	4.117	78
BREAK		28
HYD/TEST	3.400	16
370	5.752	1.169
COMPUTER RM		14
424	6.630	203
431	10.710	119
	2.160	
438		22
441	13.601	44
628	5.278	48
663-N		44
2268		12
2329		8
2755		23
3321		13
5425		9
31	90.180	152
32	90.180	137
33-N	45.000	75
	90.180	300
	90.180	175
42-S	50.927	210
43	90.527	256
44	90.180	169
47-S	90.860	152
51	85.559	366
52	90.180	93
53	90.180	90
54	90.180	
55	90.180	108
57	53.425	589
441	13.601	44
349	17.887	122
TOTAL	1.820.881	12.731

ATTACHMENT 9.2

Meeting Minutes and Monthly Reports

MEETING MINUTES NO. 1

Project:	Letterkenny Lighting Study Project No. 4130.01
Contract No.:	DACA01-94-D-0037
Meeting Date:	October 18, 1994
Minutes Issue Date:	
Attendees:	
Distribution:	

Discussions generally followed proposed agenda which was distributed at the start of the conference and is attached hereto as an exhibit. This report will organize and document the proceedings pursuant to the agenda.

Items Discussed:

1.1 Introductions were made and individuals roles were discussed.

1.2 Contractual schedule obligations were noted. Army Material Command may ask for projects at any time of the year. Letterkenny will most likely be asked to submit for project funding in January. These projects will wait until January of 1996 for submission.

1.3 Project Scope was reviewed without contest.

Entech will collect data on all interior lights (except emergency)
Entech will consider all lamps operational and insert a factor for repairs in progress.
Entech will not review codes with respect to the operation of the lighting system.
Entech will present the IES lighting standards in a comparison to the actual lighting levels for Letterkenny to determine if reductions are feasible.
Entech will make assumptions of the type of lamps, ballasts, and other characteristics of the luminaries based on information collected on-site. Actual model numbers and similar data will not be collected.

1.4 The Depot's standard working hours are 07:30-16:15, with buildings generally open between 06:00-17:00.

1.5 Access for Entech's field people will be assisted by badges. Keys will not be distributed to Entech. Escorts, where required, will be furnished by Jeff Hager.

1.6 Documentation required from DPW was discussed and the following was given to Entech:

A disc of the Depot's layout in AUTOCAD 12 format.

Prints of the Depot's building layout

Copy of the recent energy study performed by RS&H. (to be returned after review)

Summary of overall Energy usage for the Depot last year.

Copy of the utility companies rate schedule.

Name and phone number of the utility company representative for Letterkenny.

1.7 Other documentation needs were reviewed, Mr Hager will begin collection, and Mr. Haldeman will formally request. Copies of government documents will be requested through the Contracting Officer's Representative.

1.8 A copy of the distribution of documents matrix was distributed but not discussed.

1.9 Billing and change procedures were not discussed.

1.10 The use of the IES lighting standards is acceptable. No decision as to what type of funding will be requested.

1.11 Entech will contact Mr. Battalgia to determine if access to the ADDS/DIES energy reporting system is appropriate for Entech.

1.12 Entech will formally request data from the Depot.

1.13 Letterkenny will continue to assemble the data requested at the meeting.

1.14 Next meeting will be held on **------, ----------, 1994 at ----- a.m.** in Building

The above minutes reflect the writer's interpretation of the meeting events and discussions. Should there be any corrections which are deemed to be required to these minutes, please send a copy of your suggested corrections to the undersigned within 5 days of receipt. Receiving no corrections, these minutes shall stand as the meeting record.

Respectfully submitted,

Dwight Haldeman
Project Manager

cc:

EEAP MONTHLY REPORT

November 9, 1994

PROJECT: **LETTERKENNY LIGHTING STUDY**
CONTRACT: **DACA01-94-D-0037---DO-0004**
CONTRACTOR: **ENTECH ENGINEERING INC.,READING, PA.**

SUMMARY OF PROGRESS:

Last month Entech executed DD1155 and returned same. We petitioned for Project Manager approval as required and received an oral acceptance of the candidates. An Entry Interview was held and documentation prepared. Information was requested of the Government and much of the data was furnished. Plans to begin site work were developed.

FORECAST OF EFFORTS:

Planned for the month of November is the field collection of building data for inclusion in the study. The data will be collected and transferred into our computer models for analysis. With the amount of site investigation and its performance around the Christmas season, the date of the interim report may slip. We intend to begin work immediately and attempt to complete prior to the holiday. Should adjustments be in the best interests of the project, we will advise.

COMMERCIAL STATUS:

Invoice format and the proposed monthly schedule was submitted, reviewed, and approved. Invoice number one was submitted.

CORP ACTION ITEMS:

The Depot's Energy Coordinator has assembled and transmitted considerable data for the report. We still need a definition of the areas of the building to be included in the study when the area of the study does not include the entire building as well as some minor items needed to complete other transmissions. We expect Mr. Hager to deliver this information presently as he has in the recent past. We have requested and await certain government documents that may influence the study. Mr. Mlecik has promised these documents. Finally, payment on the aforementioned invoice is outstanding.

END OF MONTHLY REPORT

EEAP MONTHLY REPORT

December 9, 1994

PROJECT: **LETTERKENNY LIGHTING STUDY**
CONTRACT: **DACA01-94-D-0037---DO-0004**
CONTRACTOR: **ENTECH ENGINEERING INC.,READING, PA.**

SUMMARY OF PROGRESS:

Last month Entech received additional information from the Government. We also began our field investigation of the subject buildings. To date over one and one half million square feet has been reviewed on this project. This represents the majority of the total area and also over one half of the buildings. Plans to complete the site work are in place provided we receive timely instructions. The data that has been collected is being imputed into our computer models.

FORECAST OF EFFORTS:

Planned for the month of December is completion of the field collection of building data for inclusion in the study. We expect the outstanding data to be collected and transferred into our computer models for analysis. We would like to propose a progress meeting following the Christmas season, for the purpose of discussing our findings and how we expect to use the information in the interim report.

COMMERCIAL STATUS:

Invoice number two was submitted. Invoice number one remains unpaid.

CORP ACTION ITEMS:

We need a definition of the areas of the building to be included in the study when the area of the study does not include the entire building. This discussion is on-going with Mr.Hager.

We have requested and still await certain government documents that may influence the study. Mr. Mlecik has promised these documents.

Payment on invoices 1 & 2 is outstanding. Invoice number 1 is overdue and should be accruing interest.

END OF MONTHLY REPORT

EEAP MONTHLY REPORT

January 12, 1995

PROJECT: **LETTERKENNY LIGHTING STUDY**
CONTRACT: **DACA01-94-D-0037---DO-0004**
CONTRACTOR: **ENTECH ENGINEERING INC.,READING, PA.**

SUMMARY OF PROGRESS:

Last month Entech received additional information from the Government. We completed our field investigation of the subject buildings and inserted the data into our lighting models. We have also completed the incremental cost analysis based upon certain assumptions regarding the demand load. The energy use and its associated cost has been performed on a preliminary basis using the incremental cost data. An ECO list has been generated along with a matrix of the anticipated investigation of opportunities. Finally, a sample ECO analysis was performed to illustrate the intended format. All of the above was presented to the Government on 1-11-95. The Government will preform a review of the data Entech presented and confirm the prevailing post-meeting opinion that this effort will satisfy project requirements.

FORECAST OF EFFORTS:

Planned for the month of January is a short pause to allow Governmental review, followed by finalization of the lighting, cost and energy models. We expect this accomplishment to position us to perform the ECO analyses in February.

COMMERCIAL STATUS:

Invoice number three was submitted. Invoice number one has been paid. Invoice number two remains unpaid.

CORP ACTION ITEMS:

Entech needs to identify the assumptions used in the models for government review and comment.

Letterkenny is to furnish historical demand data for clarification of consumption patterns. We have requested and still await certain government documents that may influence the study. Mr. Mlecik has promised these documents.

Payment on invoices 2 & 3 is outstanding. Invoice number 2 is overdue and should be accruing interest. Invoice 1 was paid without the accrued interest.

END OF MONTHLY REPORT

EEAP LIGHTING STUDY

LETTERKENNY, PA

RESPONSE TO COMMENTS

Mobile District - Neiden

1. This EEAP Study reviews conceptual opportunities to save electric energy by considering revisions to the lighting system. The report does not pretend to offer a comprehensive design evaluation of lighting and, in fact, has highlighted many of the same concerns expressed in the review. Generally, the agreed upon methodology for this report analyses power consumption on a lumin per lumin basis using standard output values for the luminaires. This method sets forth a well founded *apple to apple* relationship for energy savings. It may not, as suggested by Mr. Neiden, present the full impact of the proposed project, equally however, such an effort is well beyond the scope of our contracted services.

   The requested ECO - Retrofitting Existing Luminaires With New T-8 Lamps and Electronic Ballasts was not considered due to the anticipated life of the existing fixture. To review this decision, in light of Mobile District's comment, we ran a partial analysis (attached) of this potential ECO and found a thirteen year payback. This payback does not consider maintenance costs which (because of the age of the fixtures) would extend the payback. Given these findings, we did not adjust the report.

2. Lighting fixtures have been matched against US Army Corp of Engineers' Standard 40-06-04, February 1991. The two references cited by Mr. Neiden are a 230V (which is a type 230 fixture with a vapor proof enclosure) and n/a (which are miscellaneous fixtures that are not cataloged in the standard). This clarification has been added to the report.

ECO-17
Letterkenny Army Depot
Efficient Industrial Fluorescent Lighting Retrofit

	Existing												Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Chrome Plate Area (CP)																					
Paper Storage Area	178	2	40	16,376	50	95.0%	15.6	3,554	$1,438.61	$1,057.55	$2,496.15	2 - F32T8 & 1 - 2L Electronic Ballast	60	10.1	2,318	$1,627.93	$6,230	$6,230	$1,078	$13,538	$868.23
Building 4																					
Warehouse																					
Warehouse Storage	858	2	40	78,936	50	95.0%	75.0	17,129	$6,934.40	$5,097.62	$12,032.03	2 - F32T8 & 1 - 2L Electronic Ballast	60	48.9	11,171	$7,846.97	$30,030	$30,030	$5,195	$65,255	$4,185.05
Warehouse Packaging	820	2	40	75,440	50	95.0%	71.7	16,370	$6,627.28	$4,871.85	$11,499.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	46.7	10,676	$7,499.44	$28,700	$28,700	$4,965	$62,365	$3,999.70
Warehs. Pac.Radio Active Room	10	2	40	920	50	95.0%	0.9	200	$80.82	$59.41	$140.23	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.6	130	$91.46	$350	$350	$61	$761	$48.78
Building 14																					
Warehouse																					
Tritium Installation Room #2	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Tritium Room	4	3	40	552	50	95.0%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Tritium Installation Room #1	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Tritium Storage Room	4	4	40	736	10	0.0%	0.0	32	$0.00	$9.51	$9.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.0	19	$5.79	$180	$160	$29	$369	$3.72
Tritium Final Area	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.6	365	$256.08	$675	$600	$110	$1,385	$164.62
Machine Shop Area	37	3	40	5,106	50	95.0%	4.9	1,108	$448.55	$329.74	$778.30	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.1	707	$496.30	$1,480	$1,480	$256	$3,216	$281.99
Second Floor																					
Small Parts Work Area	47	3	40	6,486	50	95.0%	6.2	1,407	$569.78	$418.86	$988.65	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.9	898	$630.44	$1,880	$1,880	$325	$4,085	$358.20
Building 33N																					
Warehouse																					
Warehouse	77	2	40	7,084	50	95.0%	6.7	1,537	$622.32	$457.48	$1,079.80	2 - F32T8 & 1 - 2L Electronic Ballast	60	4.4	1,003	$704.22	$2,695	$2,695	$466	$5,856	$375.58
Building 34																					
Warehouse																					
Warehouse-Parts Storage Racks	12	2	40	1,104	50	95.0%	1.0	240	$96.98	$71.30	$168.28	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	156	$109.75	$420	$420	$73	$913	$58.53
Building 42S																					
Warehouse																					
Warehoouse South	17	2	40	1561	50	95.0%	1.5	339	$137.39	$101.00	$238.40	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.0	221	$155.48	$595	$595	$103	$1,293	$82.92
Warehouse South	124	4	40	22816	50	95.0%	21.7	4,951	$2,004.35	$1,473.44	$3,477.79	4 - F32T8 & 1 - 4L Electronic Ballast	112	13.2	3,014	$2,116.91	$5,580	$4,960	$912	$11,452	$1,360.87
Warehouse South	11	3	40	1518	50	95.0%	1.4	329	$133.35	$98.03	$231.39	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.9	210	$147.55	$440	$440	$76	$956	$83.84
Building 43																					
Warehouse																					
Warehouse	258	2	40	23736	50	95.0%	22.5	5,151	$2,085.17	$1,532.85	$3,618.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	14.7	3,359	$2,359.58	$9,030	$9,030	$1,562	$19,622	$1,258.44
Building 44																					
Warehouse																					
Receiving Area	9	3	40	1,242	50	95.0%	1.2	270	$109.11	$80.21	$189.32	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	172	$120.72	$360	$360	$62	$782	$68.59
Building 47																					
Warehouse																					
Warehouse - North	20	2	40	1,840	90	95.0%	1.7	719	$161.64	$213.89	$375.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.1	469	$244.91	$700	$700	$121	$1,521	$130.62
Building 51																					
Warehouse																					
Warehouse Processing	96	3	40	13,248	50	95.0%	12.6	2,875	$1,163.82	$855.55	$2,019.36	3 - F32T8 & 1 - 3L Electronic Ballast	88	8.0	1,833	$1,287.71	$3,840	$3,840	$664	$8,344	$731.65
Warehouse Processing	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.6	365	$256.08	$675	$600	$110	$1,385	$164.62
Warehouse Milvan Processing	51	3	40	7,038	50	95.0%	6.7	1,527	$618.28	$454.51	$1,072.79	3 - F32T8 & 1 - 3L Electronic Ballast	88	4.3	974	$684.10	$2,040	$2,040	$353	$4,433	$388.69
Building 57S																					
Warehouse																					
Warehouse Area	309	3	40	42,642	90	95.0%	40.5	16,656	$3,746.03	$4,956.82	$8,702.85	3 - F32T8 & 1 - 3L Electronic Ballast	88	25.8	10,621	$5,549.64	$12,360	$12,360	$2,138	$26,858	$3,153.21
Building 424																					
Cable and Harness																					
Upholstery Work Shop	72	3	40	9,936	90	95.0%	9.4	3,881	$872.86	$1,154.99	$2,027.85	3 - F32T8 & 1 - 3L Electronic Ballast	88	6.0	2,475	$1,293.12	$2,880	$2,880	$498	$6,258	$734.73
Upholstery Work Shop	32	3	40	4,416	90	95.0%	4.2	1,725	$387.94	$513.33	$901.27	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.7	1,100	$574.72	$1,280	$1,280	$221	$2,781	$326.55
Rubber Mat Storage Room	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	412	$215.52	$480	$480	$83	$1,043	$122.45
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	412	$215.52	$480	$480	$83	$1,043	$122.45
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	412	$215.52	$480	$480	$83	$1,043	$122.45
TOTALS	3120			334696			317.3	83577	$29,000	$25,000	$54,000			204.3	53763	$35,000	$114,000	$114,000	$20,000	$248,000	$19,000

G:\PROJECTS\4130.01\SS\ECO\ECO_17.WK4

09-Aug-95

MOBILE DIST. OFFICE PROJECT REVIEW COMMENTS	DATE: 5 JUL 95	PAGE 1 of 1
TO: EN-DM Battaglia	FROM: (SECTION): Electrical (CESAM-EN-DE) (REVIEWER): Warren E. Neiden, Jr.,PE (334) 694-4031	
PROJECT: ESAP Lighting Study LOCATION: Letterkenny AD,	Year: FY-	Line Item No.
Type of Action: Preliminary		ELECTRICAL REVIEW

Item No.	Drawing No. or Par. No.	COMMENTS	Review Action
1.	ECO-11	This ECO proposes to replace Existing Industrial Fluorescent Fixtures with New HPS Fixtures. The ramifications of any proposal should be analyzed as well as indicate in this study so that the Letterkenny personnel can make wise decisions based on the facts. The following information should be included before any decision on this ECO is made: a. Provide lighting calculations for proposed lighting system so as to indicate that the lighting levels are the same. b. Address the uniformity of the proposed lighting as compared with the existing lighting system. c. Address the Color Rendering impact to go to this proposed lighting system. d. Compare the operation of the proposed lighting system with the existing....warm-up time on start-up, as well as the restrict time on power outages, etc. e. Does the existing lighting system incorporate "battery-backup ballast" for emergency or egress lighting requirements? If so address how the proposed lighting system will incorporate requirement and include the cost in your analysis as well. f. Provide fixture information with the Coefficient of Utilization values indicated to substantiate the reduction in fixtures required in this proposal. All of this information is just as necessary in making the right decision as the bottom line cost. Also the savings may be unfounded if these items are not addressed. I saw no ECO that considered just replacing these existing lamps and ballast with the more efficient T8 lamps and electronic ballast similar to that proposed in ECO-6.	
2.	Section 9.4	Provide fixture details to correspond with Fixture Type "230V", and "n/a" that are indicated in these tables.	

ATTACHMENT 9.3

Electric Bills and Rate Schedule

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

08/16/93 | 1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112001

MAIL TO: JUL OLD SUB

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/112001	DAAG 34-70-C-0016	CURRENT 07/15	401	07/16/93
		PREVIOUS 06/15		

METER	A	B
CURRENT READING	1331	1345
PREVIOUS READING	1173	1185
DIFFERENCE	158	160
MULTIPLIER	9600	9600
TOTAL KWH	1516800	1536000
KWH ADJUSTMENT	23942	
BILL USAGE	1540742	1536000
KW DEMAND	8341.0	
KW ADJUSTMENT	63.0	

TOTAL BILLED KW	8404.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	7.5370	15,074.00	
	6,404.0 @	7.4390	47,639.36	62,713.36
TOTAL KWH	3,076,742			
KWH ENERGY CHARGES	FOR 30 DAYS			
	3,076,742 @	.02314	71,195.81	71,195.81
SURCHARGE	-.2100 %			281.21-
ENERGY COST RATE @	.0018170			5,590.44
CURRENT NET BILL				139,218.40

AMOUNT DUE 139,218.40

ESTIMATED PA STATE TAXES OF 10,232.55 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,740.23
PAY AFTER 08/16/93 140,958.63

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Denny

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO
09/16/93	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112001

MAIL TO: AUG 040 308

41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
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17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

14095863 9 873614122000112001 28671687 9 28319864 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 08/16	401	08/17/93
		PREVIOUS 07/15		

METER	A	B		
CURRENT READING	1498	1515		
PREVIOUS READING	1331	1345		
DIFFERENCE	167	170		
MULTIPLIER	9600	9600		
TOTAL KWH	1603200	1632000		
KWH ADJUSTMENT	25436			
BILL USAGE	1628636	1632000		
KW DEMAND	8133.0			
KW ADJUSTMENT	61.0			
TOTAL BILLED KW	8194.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	6,194.0 @ 7.4390	46,077.17	61,151.17	
TOTAL BILLED KWH	3,260,636			
KWH ENERGY CHARGES	FOR 30 DAYS			
	3,260,636 @ .02314	75,451.12	75,451.12	
SURCHARGE	-.2100 %		286.86-	
ENERGY COST RATE @	.0018170		5,924.58	
CURRENT NET BILL				142,240.01
PREVIOUS BALANCE			140,958.63	
AMOUNT DUE				283,198.64

ESTIMATED PA STATE TAXES OF 10,454.64 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 3,518.23
PAY AFTER 09/16/93 286,716.87

PREVIOUS BALANCE OF 140,958.63 IS PAST DUE. IF PAYMENT HAS NOT BEEN MADE, YOUR ELECTRIC SERVICE MAY BE SUBJECT TO TERMINATION.

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO.
10/18/93	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112001

MAIL TO: SEP

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PITTSBURGH PA 15264-0575

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SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 09/15	401	09/16/93
		PREVIOUS 08/16		

METER	A	B
CURRENT READING	1654	1673
PREVIOUS READING	1498	1515
DIFFERENCE	156	158
MULTIPLIER	9600	9600
TOTAL KWH	1497600	1516800
KWH ADJUSTMENT	23757	
BILL USAGE	1521357	1516800
KW DEMAND	8041.0	
KW ADJUSTMENT	60.0	

TOTAL BILLED KW	8101.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	7.5370	15,074.00	
	6,101.0 @	7.4390	45,385.34	60,459.34
TOTAL BILLED KWH	3,038,157			
KWH ENERGY CHARGES	FOR 30 DAYS			
	3,038,157 @	.02314	70,302.95	70,302.95
SURCHARGE	-.2100 %			274.60-
ENERGY COST RATE @	.0018170			5,520.33
CURRENT NET BILL				136,008.02

AMOUNT DUE 136,008.02

ESTIMATED PA STATE TAXES OF 9,996.59 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,700.10
PAY AFTER 10/18/93 137,708.12

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PAYMENT DUE DATE	PAGE NO.
11/22/93	1

USE WHEN REFERRING TO BILL

ACCOUNT NO. 41/22/000/112001

MAIL TO: OCT

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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LETTERKENNY ARMY DEPOT
SDSLE ERW
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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 10/15	401	10/21/93
		PREVIOUS 09/15		

METER	A	B
CURRENT READING	1789	1808
PREVIOUS READING	1654	1673
DIFFERENCE	135	135
MULTIPLIER	9600	9600
TOTAL KWH	1296000	1296000
KWH ADJUSTMENT	21874	
BILL USAGE	1317874	1296000
KW DEMAND	7430.0	
KW ADJUSTMENT	55.0	

TOTAL BILLED KW	7485.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370		15,074.00	
	5,485.0 @ 7.4390		40,802.92	55,876.92
TOTAL BILLED KWH	2,613,874			
KWH ENERGY CHARGES	FOR 30 DAYS			
	2,613,874 @ .02314		60,485.04	60,485.04
SURCHARGE	-.2100 %			244.36-
ENERGY COST RATE @	.0018170			4,749.41
CURRENT NET BILL				120,867.01

AMOUNT DUE 120,867.01

ESTIMATED PA STATE TAXES OF 8,883.73 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,510.84
PAY AFTER 11/22/93 122,377.85

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CONNELLSVILLE, PA 15425

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PAYMENT DUE DATE	PAGE N
12/16/93	1

USE WHEN REFERRING TO BIL
ACCOUNT NO.
41/22/000/112001

MAIL TO: NOV

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1 Existing Sub.	DAAG 34-70-C-0016	CURRENT 11/15 PREVIOUS 10/15	401	11/16/93

METER	A	B
CURRENT READING	1920	1943
PREVIOUS READING	1789	1808
DIFFERENCE	131	135
MULTIPLIER	9600	9600
TOTAL KWH	1257600	1296000
KWH ADJUSTMENT	22101	
BILL USAGE	1279701	1296000
KW DEMAND	6728.0	
KW ADJUSTMENT	49.0	

TOTAL BILLED KW	6777.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	7.5370	15,074.00	
	4,777.0 @	7.4390	35,536.10	50,610.10
TOTAL BILLED KWH	2,575,701			
KWH ENERGY CHARGES	FOR 30 DAYS			
	2,575,701 @	.02314	59,601.72	59,601.72
SURCHARGE	-.2100 %			231.46-
ENERGY COST RATE @	.0018170			4,680.05
CURRENT NET BILL				114,660.43

AMOUNT DUE 114,660.43

ESTIMATED PA STATE TAXES OF 8,427.54 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,433.26
PAY AFTER 12/16/93 116,093.69

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

9 | 01/18/94 | 1

USE WHEN REFERRING TO BIL
ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: DEC

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41 22 000 112001
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SDSLE ERW
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-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 12/15	401	12/16/93
Existing		PREVIOUS 11/15		

METER	A	B
CURRENT READING	2055	2079
PREVIOUS READING	1920	1943
DIFFERENCE	135	136
MULTIPLIER	9600	9600
TOTAL KWH	1296000	1305600
KWH ADJUSTMENT	21914	
BILL USAGE	1317914	1305600
KW DEMAND	7119.0	
KW ADJUSTMENT	52.0	

TOTAL BILLED KW	7171.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	5,171.0 @ 7.4390	38,467.07	53,541.07	
TOTAL BILLED KWH	2,623,514			
KWH ENERGY CHARGES	FOR 30 DAYS			
	2,623,514 @ .02314	60,708.11	60,708.11	
SURCHARGE	-.2130 %		239.92-	
ENERGY COST RATE @	.0018170		4,766.92	
CURRENT NET BILL				118,776.18
PREVIOUS BALANCE			116,093.69	
AMOUNT DUE				234,869.87

ESTIMATED PA STATE TAXES OF 8,730.05 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,917.96
PAY AFTER 01/18/94 237,787.83

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CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO.
9 02/16/94	1

▼ USE WHEN REFERRING TO BILL

ACCOUNT NO.
41/22/000/112001

MAIL TO: JAN

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

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LETTERKENNY ARMY DEPOT
SDSLE ERW
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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 01/14	401	01/17/94
		PREVIOUS 12/15		

METER	A	B
CURRENT READING	2196	2221
PREVIOUS READING	2055	2079
DIFFERENCE	141	142
MULTIPLIER	9600	9600
TOTAL KWH	1353600	1363200
KWH ADJUSTMENT	22401	
BILL USAGE	1376001	1363200
KW DEMAND	7361.0	
KW ADJUSTMENT	54.0	

TOTAL BILLED KW	7415.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	5,415.0 @ 7.4390	40,282.19	55,356.19	
TOTAL BILLED KWH	2,739,201			
KWH ENERGY CHARGES	FOR 30 DAYS			
	2,739,201 @ .02314	63,385.11	63,385.11	
SURCHARGE	-.2100 %		249.36-	
ENERGY COST RATE @	.0018170		4,977.13	
CURRENT NET BILL				123,469.07
PREVIOUS BALANCE			1,433.26	
AMOUNT DUE				124,902.33

ESTIMATED PA STATE TAXES OF 9,074.98 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,561.28
PAY AFTER 02/16/94 126,463.61

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SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

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PAYMENT DUE DATE	PAGE NO.
03/18/94	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112001

MAIL TO: FEB

1/41/22/000/112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
LETTERKENNY RD
CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

12646361 9 173114122000112001 26037882 9 25718354 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11200/1	DAAG 34-70-C-0016	401	02/16/94

ACCOUNT BALANCE	01/17/94		124,902.33	
LATE PAYMENT CHARGE			1,561.28	
ACCOUNT BALANCE BROUGHT FORWARD				126,463.61

CURRENT BILLING FOR 032 DAYS USE 01/14/94 TO 02/15/94

METER	A	B
CURRENT READING	2351	2377
PREVIOUS READING	2196	2221
DIFFERENCE	155	156
MULTIPLIER	9600	9600
KWH	1488000	1497600
KWH ADJUSTMENT	24279	
KW DEMAND	7430.0	
DEMAND ADJUSTMENT	55.0	
TOTAL KWH	3009879	
TOTAL KW DEMAND	7485.0	

BILLING DEMAND CHARGE FOR 7,485.0 KW			
2,000.0 @ 7.5370		15,074.00	
5,485.0 @ 7.4390		40,802.92	
ENERGY CHARGE FOR 3,009,879 KWH			
2,994,000 @ .02314		69,281.16	
15,879 @ .02245		356.48	
BILLED CHARGES ON RATE 401			125,514.56
PA TAX SURCHARGE @ -.2100000%			263.58-
ENERGY COST RATE @ .0018170 /KWH			5,468.95
CHARGE FOR CURRENT BILL PERIOD			130,719.93
AMOUNT DUE			257,183.54
LATE PAYMENT CHARGE		3,195.28	
TOTAL AMOUNT DUE AFTER	03/18/94	260,378.82	

ESTIMATED PA STATE TAXES OF 9,607.91 INCLUDED IN THIS BILLING

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

	PAYMENT DUE DATE	PAGE NO
6	04/15/94	1

▼ USE WHEN REFERRING TO BILL

ACCOUNT NO.
1/41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: MAR

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1/41/22/000/112001
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SDSLE ERW
LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11200/1	DAAG 34-70-C-0016	401	03/16/94

Existing

ACCOUNT BALANCE	02/16/94		257,183.54	
PAYMENT RECEIVED			254,189.00-	
ACCOUNT BALANCE BROUGHT FORWARD				1,451.17

CURRENT BILLING FOR 028 DAYS USE 02/15/94 TO 03/15/94

METER	A	B
CURRENT READING	2484	2512
PREVIOUS READING	2351	2377
DIFFERENCE	133	135
MULTIPLIER	9600	9600
	1276800	1296000
ADJUSTMENT	21069	
KW DEMAND	7235.0	
DEMAND ADJUSTMENT	53.0	
TOTAL KWH	2593869	
TOTAL KW DEMAND	7288.0	

BILLING DEMAND CHARGE FOR 7,288.0 KW			
2,000.0 @ 7.5370		15,074.00	
5,288.0 @ 7.4390		39,337.43	
ENERGY CHARGE FOR 2,593,869 KWH			
2,593,869 @ .02314		60,022.13	
BILLED CHARGES ON RATE 401			114,433.56
PA TAX SURCHARGE @ -.2100000%			240.31-
ENERGY COST RATE @ .0013170 /KWH			4,713.06
CHARGE FOR CURRENT BILL PERIOD			118,906.31
AMOUNT DUE			120,357.48
LATE PAYMENT CHARGE		1,504.47	
TOTAL AMOUNT DUE AFTER	04/15/94	121,861.95	

ESTIMATED PA STATE TAXES OF 8,739.61 INCLUDED IN THIS BILLING

REFER INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO
6 05/18/94	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112001

MAIL TO: AHR

1/41/22/000/112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
LETTERKENNY RD
CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

00146931 9 17421412200011200l 12771004 9 12613360 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11200/1 Existing	DAAG 34-70-C-0016	401	04/18/94

ACCOUNT BALANCE	03/16/94	120,357.48	
LATE PAYMENT CHARGE		18.14	
PAYMENT RECEIVED		118,906.31-	
ACCOUNT BALANCE BROUGHT FORWARD			1,469.31

CURRENT BILLING FOR 031 DAYS USE 03/15/94 TO 04/15/94

METER	A	B
CURRENT READING	2630	2659
PREVIOUS READING	2484	2512
DIFFERENCE	146	147
MULTIPLIER	9600	9600
KWH	1401600	1411200
KWH ADJUSTMENT	23171	
KW DEMAND	7131.0	
DEMAND ADJUSTMENT	52.0	
TOTAL KWH	2835971	
TOTAL KW DEMAND	7183.0	

BILLING DEMAND CHARGE FOR	7,183.0 KW		
2,000.0 @	7.5370	15,074.00	
5,183.0 @	7.4390	38,556.34	
ENERGY CHARGE FOR	2,835,971 KWH		
2,835,971 @	.02314	65,624.37	
BILLED CHARGES ON RATE 401			119,254.71
PA TAX SURCHARGE			201.96-
ENERGY COST RATE @ .0019787 /KWH			5,611.54
CHARGE FOR CURRENT BILL PERIOD			124,664.29
AMOUNT DUE			126,133.60
LATE PAYMENT CHARGE		1,576.44	
TOTAL AMOUNT DUE AFTER	05/18/94	127,710.04	

ESTIMATED PA STATE TAXES OF 9,025.69 INCLUDED IN THIS BILLING

PREVIOUS BALANCE OF 1,469.31 IS PAST DUE. IF PAYMENT HAS NOT BEEN MADE, YOUR ELECTRIC SERVICE MAY BE SUBJECT TO TERMINATION.

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO
06/16/94	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112001

MAIL TO: MAY

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

1/41/22/000/112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
LETTERKENNY RD
CHAMBERSBURG PA
17201

00146931 9 17721412200011200l 11728251 9 11581666 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11200/1 Existing	DAAG 34-70-C-0016	401	05/17/94

ACCOUNT BALANCE	04/18/94	126,133.60	
PAYMENT RECEIVED		124,664.29-	
ACCOUNT BALANCE BROUGHT FORWARD			1,469.31

CURRENT BILLING FOR 031 DAYS USE 04/15/94 TO 05/16/94

METER	A	B
CURRENT READING	2761	2793
PREVIOUS READING	2630	2659
DIFFERENCE	131	134
MULTIPLIER	9600	9600
KWH	1257600	1286400
KWH ADJUSTMENT	22063	
KW DEMAND	6497.0	
DEMAND ADJUSTMENT	47.0	
TOTAL KWH	2566063	
TOTAL KW DEMAND	6544.0	

BILLING DEMAND CHARGE FOR	6,544.0 KW		
2,000.0 @	7.5370	15,074.00	
4,544.0 @	7.4390	33,802.82	
ENERGY CHARGE FOR	2,566,063 KWH		
2,566,063 @	.02314	59,378.70	
BILLED CHARGES ON RATE 401			108,255.52
ENERGY COST RATE @ .0023740 /KWH			6,091.83
CHARGE FOR CURRENT BILL PERIOD			114,347.35
AMOUNT DUE			115,816.66
LATE PAYMENT CHARGE		1,465.85	
TOTAL AMOUNT DUE AFTER	06/16/94	117,282.51	

TOTAL AMOUNT AFTER DUE DATE INCLUDES CURRENT LATE PAYMENT CHARGE OF 1,447.71 PLUS OUTSTANDING LATE PAYMENT CHARGES FROM PREVIOUS BILLS.

ESTIMATED PA STATE TAXES OF 8,278.75 INCLUDED IN THIS BILLING

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

PAYMENT DUE DATE	PAGE NO.
07/18/94	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: JUN

1/41/22/000/112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
LETTERKENNY RD
CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

00150582 9 579114122000112001 12715398 9 12558463 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11200/1	DAAG 34-70-C-0016	401	06/16/94

ACCOUNT BALANCE	05/17/94	115,816.66	
LATE PAYMENT CHARGE		36.51	
PAYMENT RECEIVED		114,347.35-	
ACCOUNT BALANCE BROUGHT FORWARD			1,505.82

CURRENT BILLING FOR 030 DAYS USE 05/16/94 TO 06/15/94

METER	A	B
CURRENT READING	2897	2930
PREVIOUS READING	2761	2793
DIFFERENCE	136	137
MULTIPLIER	9600	9600
KWH	1305600	1315200
KWH ADJUSTMENT	21994	
KW DEMAND	7534.0	
DEMAND ADJUSTMENT	55.0	
TOTAL KWH	2642794	
TOTAL KW DEMAND	7589.0	

BILLING DEMAND CHARGE FOR 7,589.0 KW			
2,000.0 @ 7.5370		15,074.00	
5,589.0 @ 7.4390		41,576.57	
ENERGY CHARGE FOR 2,642,794 KWH			
2,642,794 @ .02314		61,154.25	
BILLED CHARGES ON RATE 401			117,804.82
ENERGY COST RATE @ .0023740 /KWH			6,273.99
CHARGE FOR CURRENT BILL PERIOD			124,078.81
AMOUNT DUE			125,584.63
LATE PAYMENT CHARGE		1,569.35	
TOTAL AMOUNT DUE AFTER	07/18/94	127,153.98	

ESTIMATED PA STATE TAXES OF 8,983.31 INCLUDED IN THIS BILLING

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

Money

9 11/19/92 1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: OCT

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

00000000 9 078014122000112001 16576553 9 16371904 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 10/15	401	10/20/92
		PREVIOUS 09/15		

METER	A	B	C
CURRENT READING	0	4289	4450
PREVIOUS READING	0	4096	4255
DIFFERENCE	0	193	195
MULTIPLIER	1	9600	9600
TOTAL KWH	0	1852800	1872000
KWH ADJUSTMENT		27564	
BILL USAGE		1880364	
KW DEMAND	10817.0		
KW ADJUSTMENT	90.0		

TOTAL BILLED KW	10907.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	6.6650	13,330.00	
	8,907.0 @	6.5670	58,492.27	71,822.27
TOTAL BILLED KWH	3,752,364			
KWH ENERGY CHARGES	FOR 30 DAYS			
	3,752,364 @	.02256	84,653.33	84,653.33
SURCHARGE	1.0800 %			1,689.94
ENERGY COST RATE @	.0014800			5,553.50
CURRENT NET BILL				163,719.04

AMOUNT DUE 163,719.04

ESTIMATED PA STATE TAXES OF 12,033.35 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,046.49
PAY AFTER 11/19/92 165,765.53

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

9 12/21/92 1

USE WHEN REFERRING TO BIL
ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: NCV

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 11/16	401	11/19/92
		PREVIOUS 10/15		

METER	A	B	C
CURRENT READING	0	4519	4683
PREVIOUS READING	0	4289	4450
DIFFERENCE	0	230	233
MULTIPLIER	1	9600	9600
TOTAL KWH	0	2208000	2236800
KWH ADJUSTMENT		32361	
BILL USAGE		2240361	
KW DEMAND	10022.0		
KW ADJUSTMENT	80.0		

TOTAL BILLED KW	10102.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 6.6650	13,330.00		
	8,102.0 @ 6.5670	53,205.83	66,535.83	
TOTAL BILLED KWH	4,477,161			
KWH ENERGY CHARGES	FOR 30 DAYS			
	4,040,800 @ .02256	91,160.45		
	436,361 @ .02187	9,543.22	100,703.67	
SURCHARGE	1.0800 %		1,806.19	
ENERGY COST RATE @	.0014800		6,626.20	
CURRENT NET BILL				175,671.89

AMOUNT DUE 175,671.89

ESTIMATED PA STATE TAXES OF 12,911.88 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,195.90
PAY AFTER 12/21/92 177,867.79

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

Library B

9 01/20/93 1

USE WHEN REFERRING TO BILL ACCOUNT NO.

41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: DAAB

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 12/16	401	12/21/92
		PREVIOUS 11/16		

METER	A	B	C
CURRENT READING	0	4737	4904
PREVIOUS READING	0	4519	4683
DIFFERENCE	0	218	221
MULTIPLIER	1	9600	9600
TOTAL KWH	0	2092800	2121600
KWH ADJUSTMENT		30654	
BILL USAGE		2123454	
KW DEMAND	10149.0		
KW ADJUSTMENT	82.0		

TOTAL BILLED KW	10231.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	6.6650	13,330.00	
	8,231.0 @	6.5670	54,052.98	67,382.98
TOTAL BILLED KWH	4,245,054	TOTAL KWH		
KWH ENERGY CHARGES	FOR 30 DAYS			
	4,092,400 @	.02256	92,324.54	
	152,654 @	.02187	3,338.54	95,663.08
SURCHARGE	1.0800 %			1,760.90
ENERGY COST RATE @	.0014800			6,282.68
CURRENT NET BILL				171,089.64

AMOUNT DUE 171,089.64

ESTIMATED PA STATE TAXES OF 12,575.09 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,138.62
PAY AFTER 01/20/93 173,228.26

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

REFER INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO.
03/22/93	1

USE WHEN REFERRING TO BILL

ACCOUNT NO.
41/22/000/112001

MAIL TO: JAN

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
CHAMBERSBURG, PA 17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 01/15	402	02/19/93
		PREVIOUS 12/16		

METER	A	B
CURRENT READING	214	216
PREVIOUS READING	0	0
DIFFERENCE	214	216
MULTIPLIER	9600	9600
TOTAL KWH	2054400	2073600
KWH ADJUSTMENT	30081	
BILL USAGE	2084481	2073600
KW DEMAND	10333.0	
KW ADJUSTMENT	84.0	

TOTAL BILLED KW	10417.0			
KW DEMAND CHARGES FOR 30 DAYS				
	2,000.0 @ 6.6650		13,330.00	
	8,417.0 @ 6.5670		55,274.44	68,604.44
TOTAL BILLED KWH	4,158,081			
KWH ENERGY CHARGES FOR 30 DAYS				
	4,158,081 @ .02256		93,806.31	93,806.31
SURCHARGE 1.0800%				1,754.04
ENERGY COST RATE @ .0014800				6,153.96
CURRENT NET BILL				170,318.75
LESS CREDIT MEMO				170,318.75-
AMOUNT DUE				0.00

ESTIMATED PA STATE TAXES OF 12,518.43 INCLUDED IN THIS BILLING.

CORRECTED INVOICE

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE: 03/22/93

PAGE NO: 1

USE WHEN REFERRING TO BILL ACCOUNT NO.: 41/22/000/112001

MAIL TO: JAN

41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 02/16	401	02/19/93
		PREVIOUS 01/15		

METER	A	B
CURRENT READING	456	463
PREVIOUS READING	214	216
DIFFERENCE	242	247
MULTIPLIER	9600	9600
TOTAL KWH	2323200	2371200
KWH ADJUSTMENT	34061	
BILL USAGE	2357261	2371200
KW DEMAND	10264.0	
KW ADJUSTMENT	83.0	

TOTAL BILLED KW	10347.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 6.6650	13,330.00		
	8,347.0 @ 6.5670	54,814.75	68,144.75	
TOTAL BILLED KWH	4,728,461			
KWH ENERGY CHARGES	FOR 30 DAYS			
	4,138,800 @ .02256	93,371.33		
	589,661 @ .02187	12,895.89	106,267.22	
SURCHARGE	1.0800 %		1,883.65	
ENERGY COST RATE @	.0014800		6,998.12	
CURRENT NET BILL				183,293.74

AMOUNT DUE 183,293.74

ESTIMATED PA STATE TAXES OF 13,472.09 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,291.17
PAY AFTER 03/22/93 185,584.91

REFER INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

CREDIT MEMORANDUM

FORM 11-105 REV

▼ USE WHEN REFERRING TO BILL

ACCOUNT NO

41/22/000/112001

JAN

MAIL TO.

41 22 000 112001
LETTERKENNY army DEPOT
SDSLE ERW
* LETTERKENNY RD
CHAMBERSBURG, PA 17201

West Penn Power Company

PO BOX 640575
PITTSBURGH PA 15264-0575

ACCOUNT NO.	SERVICE LOCATION	DATE 02/19/93	RATE SCHEDULE 401
		$	$
41/22/000/11200/1	DAAG 34-70-C-0016		
TO CANCEL YOUR ELECTRIC SERVICE BILL DATED JANUARY 18, 1993 IN THE AMOUNT OF		$170,318.75	
	TOTAL		$170,318.75

DUE TO A CLERICAL ERROR, THE KILOWATTHOUR READINGS WERE TRANSPOSED FOR JANUARY 15, 1993

SEE CORRECTED INVOICE

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

03/22/93

USE WHEN REFERRING TO BILL ACCOUNT NO.
41/22/000/112001

MAIL TO: FEB

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 02/16	401	02/19/93
		PREVIOUS 01/15		

METER	A	B
CURRENT READING	456	463
PREVIOUS READING	214	216
DIFFERENCE	242	247
MULTIPLIER	9600	9600
TOTAL KWH	2323200	2371200
KWH ADJUSTMENT	34061	
BILL USAGE	2357261	2371200
KW DEMAND	10264.0	
KW ADJUSTMENT	83.0	

TOTAL BILLED KW	10347.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 6.6650	13,330.00		
	8,347.0 @ 6.5670	54,814.75	68,144.75	
TOTAL BILLED KWH	4,728,461			
KWH ENERGY CHARGES	FOR 30 DAYS			
	4,138,800 @ .02256	93,371.33		
	589,661 @ .02187	12,895.89	106,267.22	
SURCHARGE	1.0800 %		1,883.65	
ENERGY COST RATE @	.0014800		6,998.12	
CURRENT NET BILL				183,293.74

AMOUNT DUE 183,293.74

ESTIMATED PA STATE TAXES OF 13,472.09 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,291.17
PAY AFTER 03/22/93 185,584.91

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

04/16/93 | 1

USE WHEN REFERRING TO BIL
ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: MAR

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

18329374 9 57561412200011200l 35462685 9 35024874 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 03/15	401	03/17/93
		PREVIOUS 02/16		

METER	A	B
CURRENT READING	664	671
PREVIOUS READING	456	463
DIFFERENCE	208	208
MULTIPLIER	9600	9600
TOTAL KWH	1996800	1996800
KWH ADJUSTMENT	28969	
BILL USAGE	2025769	1996800
KW DEMAND	10322.0	
KW ADJUSTMENT	84.0	

TOTAL BILLED KW	10406.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @	6.6650	13,330.00	
	8,406.0 @	6.5670	55,202.20	68,532.20
TOTAL BILLED KWH	4,022,569			
KWH ENERGY CHARGES	FOR 30 DAYS			
	4,022,569 @	.02256	90,749.16	90,749.16
SURCHARGE	1.0800 %			1,720.24
ENERGY COST RATE @	.0014800			5,953.40
CURRENT NET BILL				166,955.00
PREVIOUS BALANCE				183,293.74
AMOUNT DUE				350,248.74

ESTIMATED PA STATE TAXES OF 12,271.19 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 4,378.11
PAY AFTER 04/16/93 354,626.85

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

05/17/93 1

USE WHEN REFERRING TO BIL
ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: APR

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
-- * LETTERKENNY RD
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 04/15	401	04/16/93
		PREVIOUS 03/15		

EXISTING SUBSTATION

METER	A	B
CURRENT READING	875	884
PREVIOUS READING	664	671
DIFFERENCE	211	213
MULTIPLIER	9600	9600
TOTAL KWH	2025600	2044800
KWH ADJUSTMENT	29832	
BILL USAGE	2055432	2044800
KW DEMAND	10149.0	
KW ADJUSTMENT	82.0	

TOTAL BILLED KW	10231.0			
KW DEMAND CHARGES	FOR 31 DAYS			
	2,000.0 @	6.6650	13,330.00	
	8,231.0 @	6.5670	54,052.98	67,382.98
TOTAL BILLED KWH	4,100,232			
KWH ENERGY CHARGES	FOR 31 DAYS			
	4,092,400 @	.02256	92,324.54	
	7,832 @	.02187	171.29	92,495.83
SURCHARGE				1,674.08
ENERGY COST RATE @	.0016431			6,737.09
CURRENT NET BILL				168,289.98

AMOUNT DUE 168,289.98

ESTIMATED PA STATE TAXES OF 12,369.31 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,103.62
PAY AFTER 05/17/93 170,393.60

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

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PAYMENT DUE DATE	PAGE NO.
9 06/16/93	1

▼ USE WHEN REFERRING TO BILL

ACCOUNT NO.
41/22/000/112001

TELEPHONE: (412) 626-5280

MAIL TO: MAY

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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41 22 000 112001
LETTERKENNY ARMY DEPOT
SDSLE ERW
* LETTERKENNY RD
-- CHAMBERSBURG PA
17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 05/14	401	05/17/93
		PREVIOUS 04/15		

METER	A	B
CURRENT READING	1024	1035
PREVIOUS READING	875	884
DIFFERENCE	149	151
MULTIPLIER	9600	9600
TOTAL KWH	1430400	1449600
KWH ADJUSTMENT	22804	
BILL USAGE	1453204	1449600
KW DEMAND	8006.0	
KW ADJUSTMENT	60.0	

TOTAL BILLED KW	8066.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 6.6650	13,330.00		
	6,066.0 @ 6.5670	39,835.42	53,165.42	
TOTAL BILLED KWH	2,902,804			
KWH ENERGY CHARGES	FOR 30 DAYS			
	2,902,804 @ .02256	65,487.26	65,487.26	
SURCHARGE	.9100 %		1,079.74	
ENERGY COST RATE @	.0018170		5,274.39	
CURRENT NET BILL				125,006.81

AMOUNT DUE 125,006.81

ESTIMATED PA STATE TAXES OF 9,188.00 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,562.59
PAY AFTER 06/16/93 126,569.40

"75 Years At Your Service"

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CONNELLSVILLE, PA 15425

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TELEPHONE: (412) 626-5280

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112001

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WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11200/1	DAAG 34-70-C-0016	CURRENT 06/15	401	06/16/93
		PREVIOUS 05/14		

METER	A	B
CURRENT READING	1173	1185
PREVIOUS READING	1024	1035
DIFFERENCE	149	150
MULTIPLIER	9600	9600
TOTAL KWH	1430400	1440000
KWH ADJUSTMENT	23776	
BILL USAGE	1454176	1440000
KW DEMAND	7799.0	
KW ADJUSTMENT	58.0	

TOTAL BILLED KW	7857.0			
KW DEMAND CHARGES	FOR 29 DAYS			
	2,000.0 @ 7.5370	13,660.81		
	5,857.0 @ 7.4390	39,485.51	53,146.32	
TOTAL BILLED KWH	2,894,176			
KWH ENERGY CHARGES	FOR 29 DAYS			
	2,894,176 @ .02314	60,692.68	60,692.68	
KW ADJUSTMENT	58.0			
TOTAL BILLED KW	7857.0			
KW DEMAND CHARGES	FOR 3 DAYS			
	2,000.0 @ 6.6650	1,249.69		
	5,857.0 @ 6.5670	3,605.90	4,855.59	
TOTAL BILLED KWH	2,894,176			
KWH ENERGY CHARGES	FOR 3 DAYS			
	2,894,176 @ .02256	6,121.18	6,121.18	
SURCHARGE			139.17-	
ENERGY COST RATE @	.0018170		5,258.72	
CURRENT NET BILL				129,935.32
AMOUNT DUE				129,935.32

ESTIMATED PA STATE TAXES OF 9,550.25 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,624.19
PAY AFTER 07/16/93 131,559.51

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SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

PAYMENT DUE DATE	PAGE N.
0 05/24/93	1

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ACCOUNT NO.
41/22/000/112051

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WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1	3	CURRENT 04/15	302	04/23/93
		PREVIOUS 04/04		

NEW SUBSTATION

METER	A			
CURRENT READING	44			
PREVIOUS READING	0			
DIFFERENCE	44			
MULTIPLIER	9600			
TOTAL KWH	422400			
KW DEMAND	1884.0			
TOTAL BILLED KW	1884.0			
KW DEMAND CHARGES	FOR 11 DAYS			
	100.0 @ 4.6800	171.60		
	1,784.0 @ 3.8100	2,492.25	2,663.85	
TOTAL BILLED KWH	422,400			
KWH ENERGY CHARGES	FOR 11 DAYS			
	14,667 @ .03662	537.11		
	407,733 @ .03226	13,153.47	13,690.58	
RKVA DEMAND CHARGE				
	418.0 @ .350		53.64	
VOLTAGE DISCOUNT			110.53-	
SURCHARGE			160.89	
ENERGY COST RATE @	.0032010		1,352.10	
FACILITIES CHARGE		1,906.30		
SURCHARGE		18.82	1,925.12	
CURRENT NET BILL				19,735.65
AMOUNT DUE				19,735.65

ESTIMATED PA STATE TAXES OF 1,450.57 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 246.70
PAY AFTER 05/24/93 19,982.35

REFER INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

PAYMENT DUE DATE	PAGE N
06/16/93	1

USE WHEN REFERRING TO BI
ACCOUNT NO.
41/22/000/112051

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PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1	3	CURRENT 05/14	302	05/17/93
		PREVIOUS 04/15		

METER	A			
CURRENT READING	189			
PREVIOUS READING	44			
DIFFERENCE	145			
MULTIPLIER	9600			
TOTAL KWH	1392000			
KW DEMAND	2333.0			
TOTAL BILLED KW	2333.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	100.0 @ 4.6800	468.00		
	2,233.0 @ 3.8100	8,507.73	8,975.73	
TOTAL BILLED KWH	1,392,000			
KWH ENERGY CHARGES	FOR 30 DAYS			
	40,000 @ .03662	1,464.80		
	1,352,000 @ .03226	43,615.52	45,080.32	
RKVA DEMAND CHARGE	689.0 @ .350		241.15	
VOLTAGE DISCOUNT			373.28-	
SURCHARGE	.9100 %		490.71	
ENERGY COST RATE @	.0032010		4,455.79	
FACILITIES CHARGE		5,199.00		
SURCHARGE		47.31	5,246.31	
CURRENT NET BILL				64,116.73
PREVIOUS BALANCE			19,735.65	
AMOUNT DUE				83,852.38

ESTIMATED PA STATE TAXES OF 4,712.58 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,048.15
PAY AFTER 06/16/93 84,900.53

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

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USE WHEN REFERRING TO BILL ACCOUNT NO.

41/22/000/112051

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TELEPHONE: (412) 626-5280

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3		CURRENT 06/15	302	06/16/93
		PREVIOUS 05/14		

METER	A			
CURRENT READING	373			
PREVIOUS READING	189			
DIFFERENCE	184			
MULTIPLIER	9600			
TOTAL KWH	1766400			
KW DEMAND	3142.0			
TOTAL BILLED KW	3142.0			
KW DEMAND CHARGES	FOR 29 DAYS			
	100.0 @ 5.2700	477.59		
	3,042.0 @ 4.4000	12,129.98	12,607.57	
TOTAL BILLED KWH	1,766,400			
KWH ENERGY CHARGES	FOR 29 DAYS			
	40,000 @ .03859	1,398.89		
	1,726,400 @ .03423	53,554.54	54,953.43	
RKVA DEMAND CHARGE				
	776.0 @ .400		281.30	
TOTAL BILLED KW	3142.0			
KW DEMAND CHARGES	FOR 3 DAYS			
	100.0 @ 4.6800	43.88		
	3,042.0 @ 3.8100	1,086.56	1,130.44	
TOTAL BILLED KWH	1,766,400			
KWH ENERGY CHARGES	FOR 3 DAYS			
	40,000 @ .03662	137.33		
	1,726,400 @ .03226	5,221.28	5,358.61	
RKVA DEMAND CHARGE				
	776.0 @ .350		25.46	
VOLTAGE DISCOUNT			616.62-	
SURCHARGE			82.42-	
ENERGY COST RATE @	.0032010		5,654.25	
FACILITIES CHARGE		5,199.00		
SURCHARGE		5.46-	5,193.54	
CURRENT NET BILL				84,505.56
AMOUNT DUE				84,505.56

ESTIMATED PA STATE TAXES OF 6,211.16 INCLUDED IN THIS BILLING.
(CONTINUED ON NEXT PAGE)

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USE WHEN REFERRING TO B:
ACCOUNT NO.
41/22/000/112051

TELEPHONE: (412) 626-5280

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MAIL TO: JOL NEW SOB

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WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/112051 1 3		CURRENT 07/15	302	07/16/93
		PREVIOUS 06/15		

METER	A			
CURRENT READING	564			
PREVIOUS READING	373			
DIFFERENCE	191			
MULTIPLIER	9600			
TOTAL KWH	1833600			
KW DEMAND	3391.0			
TOTAL BILLED KW	3391.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	100.0 @ 5.2700	527.00		
	3,291.0 @ 4.4000	14,480.40	15,007.40	
TOTAL BILLED KWH	1,833,600			
KWH ENERGY CHARGES	FOR 30 DAYS			
	40,000 @ .03859	1,543.60		
	1,793,600 @ .03423	61,394.93	62,938.53	
RKVA DEMAND CHARGE	758.0 @ .400		303.20	
VOLTAGE DISCOUNT			678.20-	
SURCHARGE	-.2100 %		162.90-	
ENERGY COST RATE @	.0032010		5,869.35	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				88,465.46
AMOUNT DUE				88,465.46

ESTIMATED PA STATE TAXES OF 6,502.21 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,105.82
PAY AFTER 08/16/93 89,571.28

"75 Years At Your Service"

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West Penn Power Company
SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

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0	PAYMENT DUE DATE	PAGE NO
	09/16/93	1

▼ USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112051

TELEPHONE: (412) 626-5280

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WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/112051 3		CURRENT 08/16	302	08/17/93
		PREVIOUS 07/15		

METER	A			
CURRENT READING	761			
PREVIOUS READING	564			
DIFFERENCE	197			
MULTIPLIER	9600			
TOTAL KWH	1891200			
KW DEMAND	3363.0			
TOTAL BILLED KW	3363.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	100.0 @ 5.2700	527.00		
	3,263.0 @ 4.4000	14,357.20	14,884.20	
TOTAL BILLED KWH	1,891,200			
KWH ENERGY CHARGES	FOR 30 DAYS			
	40,000 @ .03859	1,543.60		
	1,851,200 @ .03423	63,366.58	64,910.18	
RKVA DEMAND CHARGE				
	739.0 @ .400		295.60	
VOLTAGE DISCOUNT			672.60-	
SURCHARGE	-.2100 %		166.77-	
ENERGY COST RATE @	.0032010		6,053.73	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				90,492.42
PREVIOUS BALANCE			89,571.28	
AMOUNT DUE				180,063.70

ESTIMATED PA STATE TAXES OF 6,651.19 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,236.97
PAY AFTER 09/16/93 182,300.67

PREVIOUS BALANCE OF 89,571.28 IS PAST DUE. IF PAYMENT HAS NOT BEEN MADE, YOUR ELECTRIC SERVICE MAY BE SUBJECT TO TERMINATION.

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO
10/18/93	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
41/22/000/112051

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MAIL TO: SFP

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3		CURRENT 09/15	302	09/16/93
		PREVIOUS 08/16		

METER	A			
CURRENT READING	947			
PREVIOUS READING	761			
DIFFERENCE	186			
MULTIPLIER	9600			
TOTAL KWH	1785600			
KW DEMAND	3383.0			
TOTAL BILLED KW	3383.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	100.0 @ 5.2700	527.00		
	3,283.0 @ 4.4000	14,445.20	14,972.20	
TOTAL BILLED KWH	1,785,600			
KWH ENERGY CHARGES	FOR 30 DAYS			
	40,000 @ .03859	1,543.60		
	1,745,600 @ .03423	59,751.89	61,295.49	
RKVA DEMAND CHARGE				
	732.0 @ .400		292.80	
VOLTAGE DISCOUNT			676.60-	
SURCHARGE	-.2100 %		159.35-	
ENERGY COST RATE @	.0032010		5,715.71	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				86,628.33
AMOUNT DUE				86,628.33

ESTIMATED PA STATE TAXES OF 6,367.18 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,082.85
PAY AFTER 10/18/93 87,711.18

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REFER INQUIRIES TO:

West Penn Power Company
SOUTH 7TH STREET
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PAYMENT DUE DATE	PAGE N.
11/17/93	1

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ACCOUNT NO.
41/22/000/112051

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1	3	CURRENT 10/15	302	10/18/93
		PREVIOUS 09/15		

METER	A		
CURRENT READING	1120		
PREVIOUS READING	947		
DIFFERENCE	173		
MULTIPLIER	9600		
TOTAL KWH	1660800		
KW DEMAND	3210.0		
TOTAL BILLED KW	3210.0		
KW DEMAND CHARGES	FOR 30 DAYS		
	100.0 @ 5.2700	527.00	
	3,110.0 @ 4.4000	13,684.00	14,211.00
TOTAL BILLED KWH	1,660,800		
KWH ENERGY CHARGES	FOR 30 DAYS		
	40,000 @ .03859	1,543.60	
	1,620,800 @ .03423	55,479.98	57,023.58
RKVA DEMAND CHARGE			
	642.0 @ .400		256.80
VOLTAGE DISCOUNT			642.00-
SURCHARGE	-.2100 %		148.78-
ENERGY COST RATE @	.0032010		5,316.22
FACILITIES CHARGE		5,199.00	
SURCHARGE		10.92-	5,188.08
CURRENT NET BILL			81,204.90

AMOUNT DUE 81,204.90

ESTIMATED PA STATE TAXES OF 5,968.56 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,015.06
PAY AFTER 11/17/93 82,219.96

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

Corrected bill

PAYMENT DUE DATE	PAGE NO
12/22/93	1

USE WHEN REFERRING TO BILL
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ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3		CURRENT 11/15	401	11/22/93
New Sub.		PREVIOUS 10/15		

METER	A			
CURRENT READING	1295			
PREVIOUS READING	1120			
DIFFERENCE	175			
MULTIPLIER	9600			
TOTAL KWH	1680000			
KW DEMAND	3180.0			
TOTAL BILLED KW	3180.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	1,180.0 @ 7.4390	8,778.02	23,852.02	
TOTAL BILLED KWH	1,680,000			
KWH ENERGY CHARGES	FOR 30 DAYS			
	1,272,000 @ .02314	29,434.08		
	408,000 @ .02245	9,159.60	38,593.68	
RKVA DEMAND CHARGE				
	603.0 @ .400		241.20	
SURCHARGE	-.2100 %		131.64-	
ENERGY COST RATE @	.0018170		3,052.56	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				70,795.90
AMOUNT DUE				70,795.90

ESTIMATED PA STATE TAXES OF 5,203.50 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE	884.95
PAY AFTER 12/22/93	71,680.85

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

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PAYMENT DUE DATE 12/16/93 | PAGE 1

USE WHEN REFERRING TO BI
ACCOUNT NO.
41/22/000/112051

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3		CURRENT 11/15 PREVIOUS 10/15	302	11/16/93

METER	A			
CURRENT READING	1295			
PREVIOUS READING	1120			
DIFFERENCE	175			
MULTIPLIER	9600			
TOTAL KWH	1680000			
KW DEMAND	3079.0			
TOTAL BILLED KW	3079.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	100.0 @ 5.2700	527.00		
	2,979.0 @ 4.4000	13,107.60	13,634.60	
TOTAL BILLED KWH	1,680,000			
KWH ENERGY CHARGES	FOR 30 DAYS			
	40,000 @ .03859	1,543.60		
	1,640,000 @ .03423	56,137.20	57,680.80	
RKVA DEMAND CHARGE	638.0 @ .400		255.20	
VOLTAGE DISCOUNT			615.80-	
SURCHARGE	-.2100 %		149.00-	
ENERGY COST RATE @	.0032010		5,377.68	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				81,371.56
AMOUNT DUE				81,371.56

ESTIMATED PA STATE TAXES OF 5,980.81 INC

LATE PAYMENT CHARGE	1,017.14
PAY AFTER 12/16/93	82,388.70

This invoice was calculated @ rate 302 The new invoice (corrected) was calculated @ rate 401.

DAB 13 Jan 94
This is the first invoice that the new substation is on rate 401!

"75 Years At Your Service"

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE | PAGE
01/18/94 | 1

USE WHEN REFERRING TO E
ACCOUNT NO.
41/22/000/11205

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MAIL TO: DEC

41 22 000 112051
LETTERKENNY ARMY DEPOT

SDSLE-ERW
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-05

07079590 9 125414122000112051 14055670 9 13882143 00

WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3 New		CURRENT 12/15 PREVIOUS 11/15	401	12/16/93

METER	A			
CURRENT READING	1461			
PREVIOUS READING	1295			
DIFFERENCE	166			
MULTIPLIER	9600			
TOTAL KWH	1593600			
KW DEMAND	3093.0			
TOTAL BILLED KW	3093.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	1,093.0 @ 7.4390	8,130.83	23,204.83	
TOTAL BILLED KWH	1,593,600			
KWH ENERGY CHARGES	FOR 30 DAYS			
	1,237,200 @ .02314	28,628.81		
	356,400 @ .02245	8,001.18	36,629.99	
RKVA DEMAND CHARGE				
	583.0 @ .400		233.20	
SURCHARGE	-.2100 %		126.14-	
ENERGY COST RATE @	.0018170		2,895.57	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				68,025.53
PREVIOUS BALANCE			70,795.90	
AMOUNT DUE				138,821.43

ESTIMATED PA STATE TAXES OF 4,999.88 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 1,735.27
PAY AFTER 01/18/94 140,556.70

"75 Years At Your Service"

West Penn Power Compan
Part of the Allegheny Power System

REFER INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE NO
02/17/94	1

▼ USE WHEN REFERRING TO BILL

ACCOUNT NO.

41/22/000/112051

DAAG3470C0016/MODP0001

MAIL TO: JAH

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

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41 22 000 112051
LETTERKENNY ARMY DEPOT

SDSLE-ERW
-- CHAMBERSBURG PA
17201

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	READING DATES	RATE	DATE
41/22/000/11205/1 3		CURRENT 01/14	401	01/18/94
New		PREVIOUS 12/15		

METER	A			
CURRENT READING	1621			
PREVIOUS READING	1461			
DIFFERENCE	160			
MULTIPLIER	9600			
TOTAL KWH	1536000			
KW DEMAND	2955.0			
TOTAL BILLED KW	2955.0			
KW DEMAND CHARGES	FOR 30 DAYS			
	2,000.0 @ 7.5370	15,074.00		
	955.0 @ 7.4390	7,104.25	22,178.25	
TOTAL BILLED KWH	1,536,000			
KWH ENERGY CHARGES	FOR 30 DAYS			
	1,182,000 @ .02314	27,351.48		
	354,000 @ .02245	7,947.30	35,298.78	
RKVA DEMAND CHARGE				
	572.0 @ .400		228.80	
SURCHARGE	-.2100 %		121.18-	
ENERGY COST RATE @	.0018170		2,790.91	
FACILITIES CHARGE		5,199.00		
SURCHARGE		10.92-	5,188.08	
CURRENT NET BILL				65,563.64
PREVIOUS BALANCE			139,706.38	
AMOUNT DUE				205,270.02

ESTIMATED PA STATE TAXES OF 4,818.93 INCLUDED IN THIS BILLING.

LATE PAYMENT CHARGE 2,554.81
PAY AFTER 02/17/94 207,824.83

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

REFER INQUIRIES TO:

West Penn Power Company
SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

CREDIT MEMORANDUM

FORM 11-105 REV

▼ USE WHEN REFERRING TO BILL ACCOUNT NO

41/22/000/112051

41 22 000 112051
LETTERKENNY ARMY DEPOT
SDSLE-ERW
CHAMBERSBURG PA
17201

MAIL TO:

West Penn Power Company

PO BOX 640575
PITTSBURGH PA 15264-0575

DATE	RATE SCHEDULE
01/18/94	302

ACCOUNT NO.	SERVICE LOCATION	$	$
41/22/000/11205/1	3		

TO CANCEL SIX OF YOUR ELECTRIC SERVICE BILLS DATED AND IN THE FOLLOWING AMOUNTS

MAY 17, 1993	$64,116.73	
TOTAL		$ 64,116.73
JUNE 16, 1993	84,505.56	
TOTAL		84,505.56
JULY 16, 1993	88,465.46	
TOTAL		88,465.46
AUGUST 17, 1993	90,492.42	
TOTAL		90,492.42
SEPTEMBER 16, 1993	86,628.33	
TOTAL		86,628.33
OCTOBER 18, 1993	81,204.90	
TOTAL		81,204.90
GRAND TOTAL		$495,413.40

DUE TO RATE SCHEDULE STUDY. RATE 401 WILL BE EFFECTIVE APRIL 15, 1993.

SEE CORRECTED INVOICES

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

0 | 03/18/94 | 1

▼ USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112051

TELEPHONE: (412) 626-5280

DAAG3470C0016/MODP00018
MAIL TO: FEB

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1/41/22/000/112051
LETTERKENNY ARMY DEPOT

SDSLE-ERW
-- CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11205/1 3		401	02/16/94

New

ACCOUNT BALANCE	01/17/94	205,270.02	
PAYMENT RECEIVED		80,000.00-	
OTHER ADJUSTMENTS		198,740.37-	
ACCOUNT BALANCE BROUGHT FORWARD			73,470.35-
CURRENT BILLING FOR 032 DAYS USE 01/14/94 TO 02/15/94			
METER	A		
CURRENT READING	1785		
PREVIOUS READING	1621		
DIFFERENCE	164		
MULTIPLIER	9600		
	1574400		
KW DEMAND	2886.0		
BILLING DEMAND CHARGE FOR	2,886.0 KW		
2,000.0 @	7.5370	15,074.00	
886.0 @	7.4390	6,590.95	
ENERGY CHARGE FOR	1,574,400 KWH		
1,154,400 @	.02314	26,712.82	
420,000 @	.02245	9,429.00	
RKVA DEMAND CHARGE			
516.0 @	0.400	206.40	
BILLED CHARGES ON RATE 401			58,013.17
FACILITY CHARGE			5,199.00
PA TAX SURCHARGE @ -.2100000%			132.75-
ENERGY COST RATE @ .0018170 /KWH			2,860.68
CHARGE FOR CURRENT BILL PERIOD			65,940.10
CREDIT BALANCE - NO PAYMENT DUE			7,530.25-

ESTIMATED PA STATE TAXES OF 4,846.60 INCLUDED IN THIS BILLING

West Penn Power Company
SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

0 | 04/15/94 | 1

▼ USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112051

TELEPHONE: (412) 626-5280

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MAIL TO: MAR

1/41/22/000/112051
LETTERKENNY ARMY DEPOT

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CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11205/1 3 NEW		401	03/16/94

ACCOUNT BALANCE	02/16/94	7,530.25-	
PAYMENT RECEIVED		65,563.64-	
ACCOUNT BALANCE BROUGHT FORWARD			73,093.89-

CURRENT BILLING FOR 028 DAYS USE 02/15/94 TO 03/15/94

METER		A		
CURRENT READING		1937		
PREVIOUS READING		1785		
DIFFERENCE		152		
MULTIPLIER		9600		
		1459200		
DEMAND		3007.0		
BILLING DEMAND CHARGE FOR		3,007.0 KW		
2,000.0	@	7.5370	15,074.00	
1,007.0	@	7.4390	7,491.07	
ENERGY CHARGE FOR		1,459,200 KWH		
1,202,800	@	.02314	27,832.79	
256,400	@	.02245	5,756.18	
RKVA DEMAND CHARGE				
524.0	@	0.400	209.60	
BILLED CHARGES ON RATE 401				56,363.64
FACILITY CHARGE				5,199.00
PA TAX SURCHARGE @	-.2100000%			129.28-
ENERGY COST RATE @	.0018170 /KWH			2,651.37
CHARGE FOR CURRENT BILL PERIOD				64,084.73
CREDIT BALANCE - NO PAYMENT DUE				9,009.16-

ESTIMATED PA STATE TAXES OF 4,710.23 INCLUDED IN THIS BILLING

West Penn Power Company
Part of the Allegheny Power System

FOR INQUIRIES TO:

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

TELEPHONE: (412) 626-5280

PAYMENT DUE DATE	PAGE
05/18/94	1

USE WHEN REFERRING TO BI
ACCOUNT NO.
1/41/22/000/11205
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MAIL TO: FAR

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LETTERKENNY ARMY DEPOT

SDSLE-ERW
CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY

PO BOX 640575
PITTSBURGH PA 15264-057

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11205/1 3 New		401	04/18/94

ACCOUNT BALANCE 03/16/94		9,009.16-	
ACCOUNT BALANCE BROUGHT FORWARD			9,009.16-
CURRENT BILLING FOR 031 DAYS USE 03/15/94 TO 04/15/94			
METER	A		
CURRENT READING	2121		
PREVIOUS READING	1937		
DIFFERENCE	184		
MULTIPLIER	9600		
KWH	1766400		
KW DEMAND	3283.0		
BILLING DEMAND CHARGE FOR 3,283.0 KW			
2,000.0 @ 7.5370		15,074.00	
1,283.0 @ 7.4390		9,544.24	
ENERGY CHARGE FOR 1,766,400 KWH			
1,313,200 @ .02314		30,387.45	
453,200 @ .02245		10,174.34	
RKVA DEMAND CHARGE			
826.0 @ 0.400		330.40	
BILLED CHARGES ON RATE 401			65,510.43
FACILITY CHARGE			5,199.00
PA TAX SURCHARGE			119.74-
ENERGY COST RATE @ .0019787 /KWH			3,495.18
CHARGE FOR CURRENT BILL PERIOD			74,084.87
AMOUNT DUE			65,075.71
LATE PAYMENT CHARGE		813.45	
TOTAL AMOUNT DUE AFTER 05/18/94		65,889.16	

ESTIMATED PA STATE TAXES OF 5,363.74 INCLUDED IN THIS BILLING

West Penn Power Company

SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

0	06/16/94	1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112051

TELEPHONE: (412) 626-5280

DAAG3470C0016/MODP00018

MAIL TO:

MAY

WEST PENN POWER COMPANY

1/41/22/000/112051
LETTERKENNY ARMY DEPOT

SDSLE-ERW
CHAMBERSBURG PA
17201

PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11205/1 3 NEW		401	05/17/94

ACCOUNT BALANCE	04/18/94	65,075.71	
PAYMENT RECEIVED		65,075.71-	
ACCOUNT BALANCE BROUGHT FORWARD			.00

CURRENT BILLING FOR 031 DAYS USE 04/15/94 TO 05/16/94

METER	A
CURRENT READING	2321
PREVIOUS READING	2121
DIFFERENCE	200
MULTIPLIER	9600
KWH	1920000
DEMAND	4044.0

BILLING DEMAND CHARGE FOR	4,044.0 KW			
2,000.0	@	7.5370	15,074.00	
2,044.0	@	7.4390	15,205.32	
ENERGY CHARGE FOR	1,920,000 KWH			
1,617,600	@	.02314	37,431.26	
302,400	@	.02245	6,788.88	
RKVA DEMAND CHARGE				
1,099.0	@	0.400	439.60	
BILLED CHARGES ON RATE 401				74,939.06
FACILITY CHARGE				5,199.00
ENERGY COST RATE @ .0023740 /KWH				4,558.08
CHARGE FOR CURRENT BILL PERIOD				84,696.14
AMOUNT DUE				84,696.14

LATE PAYMENT CHARGE		1,058.70
TOTAL AMOUNT DUE AFTER	06/16/94	85,754.84

ESTIMATED PA STATE TAXES OF 6,132.00 INCLUDED IN THIS BILLING

"75 Years At Your Service"

West Penn Power Company
Part of the Allegheny Power System

West Penn Power Company
SOUTH 7TH STREET
CONNELLSVILLE, PA 15425

07/18/94 | 1

USE WHEN REFERRING TO BILL
ACCOUNT NO.
1/41/22/000/112051

TELEPHONE: (412) 626-5280

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MAIL TO: JAN

1/41/22/000/112051
LETTERKENNY ARMY DEPOT

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CHAMBERSBURG PA
17201

WEST PENN POWER COMPANY
PO BOX 640575
PITTSBURGH PA 15264-0575

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WHEN PAYING AT OFFICE OR AGENCY, PLEASE BRING ENTIRE BILL.
WHEN PAYING BY MAIL, PLEASE RETURN THIS PORTION OF BILL WITH PAYMENT IN ENCLOSED ENVELOPE.

ACCOUNT NUMBER	SERVICE LOCATION	RATE	BILLING DATE
1/41/22/000/11205/1 3		401	06/16/94

ACCOUNT BALANCE	05/17/94	84,696.14	
PAYMENT RECEIVED		84,696.14-	
ACCOUNT BALANCE BROUGHT FORWARD			.00

CURRENT BILLING FOR 030 DAYS USE 05/16/94 TO 06/15/94

METER	A		
CURRENT READING	2530		
PREVIOUS READING	2321		
DIFFERENCE	209		
MULTIPLIER	9600		
	2006400		
DEMAND	4147.0		
BILLING DEMAND CHARGE FOR	4,147.0 KW		
2,000.0 @	7.5370	15,074.00	
2,147.0 @	7.4390	15,971.53	
ENERGY CHARGE FOR	2,006,400 KWH		
1,658,800 @	.02314	38,384.63	
347,600 @	.02245	7,803.62	
RKVA DEMAND CHARGE			
1,173.0 @	0.400	469.20	
BILLED CHARGES ON RATE 401			77,702.98
FACILITY CHARGE			5,199.00
ENERGY COST RATE @ .0023740 /KWH			4,763.19
CHARGE FOR CURRENT BILL PERIOD			87,665.17
AMOUNT DUE			87,665.17

LATE PAYMENT CHARGE		1,095.81
TOTAL AMOUNT DUE AFTER	07/18/94	88,760.98

ESTIMATED PA STATE TAXES OF 6,346.96 INCLUDED IN THIS BILLING

West Penn Power Company
Part of the Allegheny Power System

PRIMARY POWER SERVICE
SCHEDULE 40

AVAILABILITY

Available for service at 25,000 volts or higher for loads of 2,000 kilowatts or greater, supplied at a single point of delivery. Also available at 12,470 volts where Company elects, at its sole option, to supply service direct from an adjacent 138,000 volt transmission line by a single transformation. An Electric Service Agreement shall be executed.

Riders Available - Opportunity Power and Curtailable Service Riders are available under this schedule.

MONTHLY RATE

Demand Charge

First 2,000 kilowatts of Customer's Demand..... $7.537 net per kilowatt
Additional kilowatts of Customer's Demand..... $7.439 net per kilowatt

Voltage Discount

For loads of 10,000 kilowatts or greater, the Company will furnish service at voltages above 100,000 volts if such service is provided at a single delivery point from the Company's transmission system and in the sole judgment of the Company the necessary capacity is available. When such service is supplied and the Customer owns and maintains all required facilities, the following discounts will be allowed, but in no case will the amount of the minimum bill be hereby reduced.

First 10,000 kilowatts of Customer's Demand.....70 cents net per kilowatt
Additional kilowatt of Customer's Demand.....22 cents net per kilowatt

To qualify for this transmission voltage service, the Customer must be billed for at least 10,000 kilowatts at least once in every 12-month period.

Transformer Charge

When Customer desires to take service under this Schedule at a voltage between 1,000 and 15,000 volts, Company shall provide one transformation at a charge of 40 cents net per kilowatt for the first 2,000 kilowatts and 20 cents net per kilowatt for additional kilowatts of the highest on-peak or off-peak demand for the month, but not less than any such demand previously established during the Term of the Electric Service Agreement nor less than the capacity specified therein. This transformer charge does not apply for those connections supplied at 12,470 volts by a single transformation from an adjacent 138,000 volt line.

Reactive Kilovolt-Ampere Charge

40 cents net per reactive kilovolt-ampere of Customer's Reactive Kilovolt-Ampere Demand in excess of 35% of Customer's Kilowatt Demand.

Energy Charge

First 400 kilowatt-hours per kilowatt
of Customer's Demand..... 2.314 cents net per kilowatt-hour
Additional kilowatt-hours..... 2.245 cents net per kilowatt-hour

Minimum Charge

Rate Schedule Billing.

Tax Adjustment Surcharge

The Tax Adjustment Surcharge included in this Tariff applies to charges under this Schedule except for charges made under the Energy Cost Rate.

Energy Cost Rate

The Energy Cost Rate applies to all kilowatt-hours supplied under this Schedule.

Continued on Page No. 47

PRIMARY POWER SERVICE
SCHEDULE 40

AVAILABILITY

Available for service at 25,000 volts or higher for loads of 2,000 kilowatts or greater, supplied at a single point of delivery. Also available at 12,470 volts where Company elects, at its sole option, to supply service direct from an adjacent 138,000 volt transmission line by a single transformation. An Electric Service Agreement shall be executed.

MONTHLY RATE

Demand Charge

First 2,000 kilowatts of Customer's Demand.....$6.355 net per kilowatt
Additional kilowatts of Customer's Demand.....$6.251 net per kilowatt

Energy Charge

First 400 kilowatt-hours per kilowatt
of Customer's Demand.....2.219 cents net per kilowatt-hour
Additional kilowatt-hours.....2.167 cents net per kilowatt-hour

Reactive Kilovolt-Ampere Charge

27 cents net per reactive kilovolt-ampere of Customer's Reactive Kilovolt-Ampere Demand in excess of 35% of Customer's Kilowatt Demand.

Transformer Charge

When Customer desires to take service under this Schedule at a voltage between 1,000 and 15,000 volts, Company shall provide one transformation at a charge of 33 cents net per kilowatt for the first 2,000 kilowatts and 17 cents net per kilowatt for additional kilowatts of the highest on-peak or off-peak demand for the month, but not less than any such demand previously established during the Term of the Electric Service Agreement nor less than the capacity specified therein. This transformer charge does not apply for those connections supplied at 12,470 volts by a single transformation from an adjacent 138,000 volt line.

Minimum Charge

Rate Schedule Billing.

Tax Adjustment Surcharge

The Tax Adjustment Surcharge included in this Tariff applies to charges under this Schedule except for charges made under the Energy Cost Rate.

Energy Cost Rate

The Energy Cost Rate applies to all kilowatt-hours supplied under this Schedule.

Continued on Page No. 47

ATTACHMENT 9.4

Lighting Models

Lighting Model
Letterkenny Army Depot
Building 1
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Office Area																
Office	9'10"	206	1.15	40	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Chief Requisition Office	9'10"	206	1.15	25	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Production Planning Conf. Rm.	9'10"	206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Chief Production Office	9'10"	206	1.15	45	5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Chief Maintenance Office	9'10"	206	1.15	35	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Manager Analysis Office	9'10"	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Logistics Office	9'10"	206	1.15	25	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Director of Maint. (Locked)																
Deputy Director Maint, Office	9'10"	206	1.15	35	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Director Maintenance Office	9'10"	206	1.15	30	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Corridor A	10'	218	1.15	10	16	1	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Corridor A (Entrance Lobby)	10'	230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Corridor A (Exit Sign)		604	1		1	1	20	I	20	168	95.0%	0.0	15	$0.15	$0.36	$0.51
Corridor B	10'	218	1.15		10	1	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
DPME Work Area	9'10"	206	1.15	40	18	3	40	F	2,484	50	95.0%	2.4	539	$18.18	$13.37	$31.55
DPME Copy Room	9'10"	206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
DPME Section Office	9'10"	206	1.15	45	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
DPME File Room		230	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
DPME Mens Room		206	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
DPME Mens Room		206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
DPME Womens Room		206	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
DPME Womens Room		206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Engineering Work Area	9'10"	206	1.15	40	113	3	40	F	15,594	50	95.0%	14.8	3,384	$114.16	$83.92	$198.08
Chief Engineering Support Office	9'10"	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Production Engineering Office	9'10"	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Chief Production Eng. Office	9'10"	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Conference Room Corridor	9'1"	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Conference Room A	9'1"	206	1.15	65	4	4	40	F	736	35	75.0%	0.6	112	$4.25	$2.77	$7.03
Conference Room B	9'1"	206	1.15	65	4	4	40	F	736	35	75.0%	0.6	112	$4.25	$2.77	$7.03
Chrome Plate Area (CP)																
CP-Office	8'	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
CP-Exit Lobby		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
CP-Shop Area A	1010"	231	1.15	35	63	2	75	F	10,868	50	95.0%	10.3	2,358	$79.56	$58.48	$138.04
CP-Shop Area A		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
CP-Shop Area A		230V	1.15		12	2	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
CP-Shop Area B	10'10"	231	1.15		28	2	75	F	4,830	50	95.0%	4.6	1,048	$35.36	$25.99	$61.35
CP-Shop Area B		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
CP-Shop Area B		230V	1.15		4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
CP-Mechanical Room #2	10'5"	103	1		4	1	100	I	400	15	0.0%	0.0	26	$0.00	$0.65	$0.65
CP-Room #3 Storage		230V	1.15		7	2	40	F	644	10	0.0%	0.0	28	$0.00	$0.69	$0.69
CP-Room #4 Storage		107	1		4	1	100	I	400	10	0.0%	0.0	17	$0.00	$0.43	$0.43
CP-Room #5 Storage		107	1		4	1	100	I	400	10	0.0%	0.0	17	$0.00	$0.43	$0.43
CP-Room #6 Storage	10'5"	230V	1.15	40	3	2	40	F	276	10	0.0%	0.0	12	$0.00	$0.30	$0.30
CP-Room #7 Storage		230V	1.15		1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
CP-Room #7 Storage		112	1		6	1	100	I	600	10	0.0%	0.0	26	$0.00	$0.65	$0.65
Corridor to Rooms #2-#6	10'5"	230	1.15	20	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Paper Storage Area	16'1"	228	1.15	30	178	2	40	F	16,376	50	95.0%	15.6	3,554	$119.88	$88.13	$208.01
Mail Room (locked)																
Print Room	10'10"	228	1.15		13	4	40	F	2,392	50	95.0%	2.3	519	$17.51	$12.87	$30.38

Lighting Model
Letterkenny Army Depot
Building 1
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Editors Office	10'10"	228	1.15		8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
IMA Support Office	10'10"	206	1.15	30	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Record Managers Office	10'10"	206	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Print Area (Abandon)																
Cafe Area		206	1.15		3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Receiving Bay		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Corridor to Cafe		240	1.15		6	4	20	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Exterior																
Exterior		502	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
Exterior		123	1		8	1	100	I	800	80	0.0%	0.0	278	$0.00	$6.89	$6.89
Exterior		103	1		5	1	100	I	500	80	0.0%	0.0	174	$0.00	$4.31	$4.31
Exterior		103	1		1	1	200	I	200	80	0.0%	0.0	69	$0.00	$1.72	$1.72
Exterior		107	1		2	1	100	I	200	80	0.0%	0.0	69	$0.00	$1.72	$1.72
Exterior		110	1		1	1	100	I	100	80	0.0%	0.0	35	$0.00	$0.86	$1.72
			TOTALS						75,438			66	16,025	$507	$397	$905

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KW = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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07-Apr-95

Lighting Model
Letterkenny Army Depot
Building 2-S
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Entrance Lobby South East	10'	228	1.15	25	1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Director/Commander Reception	9'10"	228	1.15	40	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Directors Office	9'10"	228	1.15		6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Commanders Office	9'10"	228	1.15	70	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Open Office Area	9'10"	228	1.15	30	98	4	40	F	18,032	50	95.0%	17.1	3,913	$132.01	$97.04	$229.05
Middle Office	9'10"	228	1.15		8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
South East Open Office Area	9'	206	1.15	30	18	4	40	F	3,312	50	95.0%	3.1	719	$24.25	$17.82	$42.07
South Entrance Lobby #1	9'	206	1.15	20	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
South Entrance Lobby Exit		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
South Entrance #2 Open Office	9'	206	1.15	30	12	3	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
South Entrance #2 Office	9'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Industrial Hygiene	9'	206	1.15	30	10	3	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Movement Branch Open Office	9'	206	1.15	40	36	4	40	F	6,624	50	95.0%	6.3	1,437	$48.49	$35.65	$84.14
Movement Branch Mgrs. Office	9'	206	1.15	55	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Conference Room	9'	228	1.15	80	8	4	40	F	1,472	35	75.0%	1.1	224	$8.51	$5.55	$14.05
G. Kirk Office	9'	228	1.15	70	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Entrance Lobby South West	10'	228	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
			TOTALS						41,568			39	8,940	$302	$222	$524

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KW = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

07-Apr-95

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

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Lighting Model
Letterkenny Army Depot
Building 3
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Computer Area																
Library	10'	206	1.15	30	25	3	40	F	3,450	126	95.0%	3.3	1,887	$25.26	$46.79	$72.04
Raised Floor Computer Rm. #5	9'	206	1.15	85	64	4	40	F	11,776	126	95.0%	11.2	6,440	$86.21	$159.70	$245.91
Raised Floor Computer Rm. #1	9'	206	1.15	50	54	4	40	F	9,936	126	95.0%	9.4	5,433	$72.74	$134.75	$207.49
Raised Floor Computer Rm. #2	9'	206	1.15	50	76	4	40	F	13,984	126	95.0%	13.3	7,647	$102.37	$189.65	$292.02
Raised Floor Computer Rm. #3	8'	206	1.15	70	65	4	40	F	11,960	126	95.0%	11.4	6,540	$87.56	$162.20	$249.75
Raised Flr. Co.Rm.#3 (Exit Sign)		604	1		3	2	15	I	90	168	95.0%	0.1	66	$0.66	$1.63	$2.29
Raised Floor Computer Center	9'	206	1.15	50	34	4	40	F	6,256	126	95.0%	5.9	3,421	$45.80	$84.84	$130.64
Raised Floor Comp. Ctr. Office	9'	206	1.15	50	9	4	40	F	1,656	126	95.0%	1.6	906	$12.12	$22.46	$34.58
Raised Floor Computer Rm. #6	9	206	1.15	50	76	4	40	F	13,984	126	95.0%	13.3	7,647	$102.37	$189.65	$292.02
Raised Floor Computer Rm. #7	8.5'	206	1.15	45	55	4	40	F	10,120	126	95.0%	9.6	5,534	$74.09	$137.24	$211.33
Raised Flr. Co. Rm.#7 (Exit Sign)		604	1		3	2	15	I	90	168	95.0%	0.1	66	$0.66	$1.63	$2.29
Raised Floor Computer Rm. #6A	9'4"	206	1.15	40	6	4	40	F	1,104	126	95.0%	1.0	604	$8.08	$14.97	$23.05
Computer Office 132A	10'	206	1.15	45	24	4	40	F	4,416	126	95.0%	4.2	2,415	$32.33	$59.89	$92.22
Computer Office 132	10'	206	1.15	30	4	3	40	F	552	126	95.0%	0.5	302	$4.04	$7.49	$11.53
Raised Fl. Tape Storage Rm. #8	8'	206	1.15	45	6	4	40	F	1,104	126	95.0%	1.0	604	$8.08	$14.97	$23.05
Vault	8'7"	228	1.15	60	8	4	40	F	1,472	84	95.0%	1.4	537	$10.78	$13.31	$24.08
EOC Open Office Area (Vacant)	9'9"	206	1.15	60	23	2	40	F	2,116	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Conference Room (Vacant)	9'9"	206	1.15	45	12	2	40	F	1,104	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Conference Rm. (Vacant)		110	1		6	1	75	I	450	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Conference Rm. (Exit) (Vacant)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
EOC Open Office Area Exit (V)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Audio Visual Room (Vacant)	9'9"	206	1.15	35	2	2	40	F	184	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Electrical Room (Vacant)	9'9"	206	1.15	35	2	2	40	F	184	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Office (Vacant)	9'9"	206	1.15	40	2	2	40	F	184	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Mens Room (Vacant)	9'9"	n/a	1		1	2	75	I	150	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Womens Room (Vacant)	9'9"	n/a	1		1	3	75	I	225	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Kitchen (Vacant)	9'9"	206	1.15		1	2	40	F	92	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Vault Office (Vacant)		214	1.15	50	7	2	40	F	644	0	0.0%	0.0	0	$0.00	$0.00	$0.00
South East Area																
Office 1-K	10'	206	1.15	50	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Office 1-J	10'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 2-K	10'	206	1.15	30	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Office 3-K	10'	206	1.15	30	7	3	40	F	966	50	95.0%	0.9	210	$7.07	$5.20	$12.27
Storage Area 5-K	10'	206	1.15	50	12	3	40	F	1,656	10	0.0%	0.0	72	$0.00	$1.78	$1.78
Supply Room 5-K	10'	230	1.15		24	3	40	F	3,312	10	0.0%	0.0	144	$0.00	$3.56	$3.56
Snack Bar 9-K	10'	228	1.15	40	12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Snack Bar 9-K	10'	230	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Smokers Lounge 10-K	10'	230	1.15	30	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Stairwell Lobby 11-K		230	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Stairwell Lobby Exit Sign		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Storage Room 12-K	10'	206	1.15	30	5	3	40	F	690	10	0.0%	0.0	30	$0.00	$0.74	$0.74
Storage Room 12-K	10'	220	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Open Office 14-K	10'	206	1.15		14	2	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Corridor 14-1-J		206	1.15		24	3	40	F	3,312	50	95.0%	3.1	719	$24.25	$17.82	$42.07
Room #8 12-J	10'	206	1.15		6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Mens Room 12-J		206	1.15		5	2	40	F	460	30	50.0%	0.2	60	$1.77	$1.49	$3.26
Womens Room		206	1.15		6	2	40	F	552	30	50.0%	0.3	72	$2.13	$1.78	$3.91
Office 2-J	10'	206	1.15	45	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
DMC Open Area 4-F	10'	206	1.15	35	70	3	40	F	9,660	50	95.0%	9.2	2,096	$70.72	$51.99	$122.70

Lighting Model
Letterkenny Army Depot
Building 3
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Office 6-J	10'	206	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Open Office Area 7-G	10'	206	1.15	45	39	3	40	F	5,382	50	95.0%	5.1	1,168	$39.40	$28.96	$68.36
Room #120 4-F	10'	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office 5-F	10'	206	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 6-F	10'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 7-F	10'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Automation Open Area 10-H	10'	206	1.15	20	25	3	40	F	3,450	50	95.0%	3.3	749	$25.26	$18.57	$43.82
DMC Office 8-J	10'	206	1.15	20	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #130 10-J	10'	206	1.15	35	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Open Office Area 13-G	10'	206	1.15		24	3	40	F	3,312	50	95.0%	3.1	719	$24.25	$17.82	$42.07
Office 1-H	10'	206	1.15	30	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office 1-G	10'	206	1.15	20	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Office 1-F	10'	206	1.15	20	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
South West Area																
Office 2-E	10'	206	1.15	15	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Office A 2-D	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office B 2-D	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 2-C	10'	206	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Corridor 4-1-C		206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 4-B	10'	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #117 Front 2-B	10'	206	1.15	30	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #117 Rear 2-B	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office Front 3-B	10'	206	1.15	40	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office Rear 3-B	10'	206	1.15	40	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office Front 4-B	10'	206	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office Rear 4-B	10'	206	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 5-B	10'	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 5-A	10'	206	1.15	35	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #111 6-A	10'	206	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Room #109 6-A	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #107 7-A	10'	206	1.15	35	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #105 8-A	10'	206	1.15	60	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Corridor 5-10-B	10'	206	1.15		10	2	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Corridor 5-10-B	10'	206	1.15		3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Corridor 5-10-B (Exit Sign)		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
North West Area																
Office 19-E	10'	206	1.15	50	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Office 19-A	10'	206	1.15	30	7	3	40	F	966	50	95.0%	0.9	210	$7.07	$5.20	$12.27
Office 21-D	10'	206	1.15	40	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Fan Room 21-C		230	1.15		4	2	40	F	368	5	0.0%	0.0	8	$0.00	$0.20	$0.20
Fan Room 21-C		230	1.15		2	3	40	F	276	5	0.0%	0.0	6	$0.00	$0.15	$0.15
Closet 22-A		206	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Office 23-A	10'	206	1.15	45	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 24-A	10'	206	1.15	40	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Lobby 25-A	10'	206	1.15	100	7	4	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Lobby Closet 25-A		206	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Office 26-A	10'4"	206	1.15	60	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 26-B	10'4"	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 26-C	10'4"	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 26-D	10'4"	206	1.15	40	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02

Lighting Model
Letterkenny Army Depot
Building 3
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Office 26-E	10'4"	206	1.15	45	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Open Office Area 25-19-A	10'	206	1.15		111	3	40	F	15,318	50	95.0%	14.6	3,324	$112.14	$82.44	$194.57
North East Area																
Office 16-K	9'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 17-K	9'	206	1.15	45	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Womens Room 15-J		206	1.15		7	2	40	F	644	30	50.0%	0.3	84	$2.48	$2.08	$4.56
Mens Room 16-J		206	1.15		5	2	40	F	460	30	50.0%	0.2	60	$1.77	$1.49	$3.26
Office 16-J	10'	206	1.15	45	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office 17-J	10'	206	1.15	40	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Corridor 22-14-J	10'	206	1.15		12	3	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Corridor 22-14-J Exit Sign		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Conference Room 20-J	10'	206	1.15		16	4	40	F	2,944	35	75.0%	2.2	447	$17.01	$11.09	$28.11
Office 21-J	10'	206	1.15	30	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office A 22-J	10'	206	1.15	20	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office B 22-J	10'	206	1.15	30	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Open Office Area 26-18-K	9'	206	1.15	40	40	3	40	F	5,520	50	95.0%	5.2	1,198	$40.41	$29.71	$70.12
Open Office Area (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Open Office Area 25-J	10'	206	1.15	30	14	3	40	F	1,932	50	95.0%	1.8	419	$14.14	$10.40	$24.54
Office 26-J	10'	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Corridor 23-J	10'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Open Office Area 20-F	10'	206	1.15		40	3	40	F	5,520	50	95.0%	5.2	1,198	$40.41	$29.71	$70.12
Office 21-H	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 22-H	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Fan Room 21-H		230	1.15		5	2	40	F	460	5	0.0%	0.0	10	$0.00	$0.25	$0.25
Fan Room 21-H		230	1.15		1	3	40	F	138	5	0.0%	0.0	3	$0.00	$0.07	$0.07
Fan Room 21-H		220	1.15		1	1	40	F	46	5	0.0%	0.0	1	$0.00	$0.02	$0.02
Office 21-G	10'	206	1.15	50	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Office A 21-F	10'	206	1.15	40	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office B 21-F	10'	206	1.15	40	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 26-H	10'	206	1.15	40	8	3	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Office 26-G	10'	206	1.15	15	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Conference 26-F	10'	206	1.15	55	6	3	40	F	828	35	75.0%	0.6	126	$4.79	$3.12	$7.90
Conference 26-F	10'	116	1		14	1	90	I	1,260	35	75.0%	0.9	191	$7.28	$4.75	$12.03
Conference 26-F (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Open Office Area 25-F	10'	206	1.15		57	3	40	F	7,866	50	95.0%	7.5	1,707	$57.58	$42.33	$99.92
Exterior																
Exterior		502	1.15		26	1	150	HPS	4,485	80	0.0%	0.0	1,557	$0.00	$38.62	$38.62
Exterior		106	1		4	1	100	I	400	80	0.0%	0.0	139	$0.00	$3.44	$3.44
			TOTALS						216,612			187	74,890	$1,443	$1,857	$3,300

INCREMENTAL DEMAND COST $/KW = 7.706
INCREMENTAL USAGE COST $/KW = 0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

07-Apr-95

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Lighting Model
Letterkenny Army Depot
Building 4
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse Storage	16'9"	230	1.15	45	858	2	40	F	78,936	50	95.0%	75.0	17,129	$577.87	$424.80	$1,002.67
Warehouse Packaging	16'9"	230	1.15	45	820	2	40	F	75,440	50	95.0%	71.7	16,370	$552.27	$405.99	$958.26
Warehs. Pac.Radio Active Room		230	1.15		10	2	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Warehouse Packaging Office	7'5"	206	1.15	20	8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Saw Operations	16'9"	230	1.15		8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Warehouse Packing Mens Room	15'11"	230	1.15	35	8	2	40	F	736	30	50.0%	0.4	96	$2.84	$2.38	$5.21
Warehouse Pac.Womens Room	15'11"	230	1.15	35	8	2	40	F	736	30	50.0%	0.4	96	$2.84	$2.38	$5.21
Exterior																
East		119	1		5	1	300	I	1,500	80	0.0%	0.0	521	$0.00	$12.92	$12.92
East		503	1.15		1	1	150	HPS	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
South		103	1		2	1	300	I	600	80	0.0%	0.0	208	$0.00	$5.17	$5.17
West		103	1		1	1	300	I	300	80	0.0%	0.0	104	$0.00	$2.58	$2.58
West		503	1.15		1	1	150	HPS	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
West		119	1		1	1	300	I	300	80	0.0%	0.0	104	$0.00	$2.58	$2.58
North		119	1		1	1	300	I	300	80	0.0%	0.0	104	$0.00	$2.58	$2.58
			TOTALS						161,585			150	35,372	$1,153	$877	$2,031

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY COPRS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 5N
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
West Entrance Lobby		206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
West Entrance Lobby (Exit Sign)		606	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Mens Room		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room		115	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Womens Room		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Room		115	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Product Receipt Office	10'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Rook Office	10'	206	1.15	40	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Open Office Area	10'	206	1.15	30	126	2	40	F	11,592	50	95.0%	11.0	2,515	$84.86	$62.38	$147.25
Open Office Area (Exit Sign)		606	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Snider Office	10'	206	1.15	60	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
			TOTALS						14,746			14	3,220	$107	$80	$187

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 6N
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
North East Entrance Lobby	10'	206	1.15	25	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
North East Entrance Corridor		215	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
North East Entrance Corridor		206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Deputy Chief of Staff Reception	10'	206	1.15	35	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Deputy Chf. of Staff Conf. Rm.	10'	206	1.15	50	5	3	40	F	690	35	75.0%	0.5	105	$3.99	$2.60	$6.59
Deputy Chief of Staff Office	(Locked)															
Director of Integrated Office	10'	206	1.15	35	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Conference Room	10'	206	1.15	50	3	4	40	F	552	35	75.0%	0.4	84	$3.19	$2.08	$5.27
Main Conference Room	(Locked)															
NFFG Local 1805 Office	10'	206	1.15	25	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Chastain Office	10'	206	1.15	20	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office (Locked)									0		0.0%	0.0	0	$0.00	$0.00	$0.00
Corridor to N. Exit	10'	206	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office	10'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Safety Division Office	10'	206	1.15	45	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office (Abandon)	10'	206	1.15		2	3	40	F	276	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Army Audit Agency	10'	206	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Ammunition Operation Conf.	10'	206	1.15	75	4	3	40	F	552	35	75.0%	0.4	84	$3.19	$2.08	$5.27
Tucker Office	10'	206	1.15	45	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Army Reserve Division	10'	206	1.15	35	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Corridor to Restroom	10'	206	1.15		6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
NFFE Office	10'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Mens Room		206	1.15		5	3	40	F	690	30	50.0%	0.3	90	$2.66	$2.23	$4.89
Womens Room		206	1.15		5	3	40	F	690	30	50.0%	0.3	90	$2.66	$2.23	$4.89
Janitors Closet		206	1.15		1	3	40	F	138	5	0.0%	0.0	3	$0.00	$0.07	$0.07
Open Office Area	10'	206	1.15	20	379	3	40	F	52,302	50	95.0%	49.7	11,350	$382.89	$281.47	$664.36
Exit Sign		602	1		8	2	15	I	240	168	95.0%	0.2	175	$1.76	$4.34	$6.10
			TOTALS						61,880			57	13,227	$442	$328	$770

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 10
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Computer Area																
Computer Room	9'7"	228	1.15	70	146	3	40	F	20,148	126	95.0%	19.1	11,018	$147.50	$273.24	$420.74
Tape Library	11'	206	1.15	40	8	4	40	F	1,472	84	95.0%	1.4	537	$10.78	$13.31	$24.08
Classified Tape Library	10'9"	215	1.15	10	8	2	40	F	736	84	95.0%	0.7	268	$5.39	$6.65	$12.04
Page Printing Room	11'	228	1.15	70	22	3	40	F	3,036	126	95.0%	2.9	1,660	$22.23	$41.17	$63.40
South East Area																
Entrance Lobby		206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office 14-A	9'11"	206	1.15	30	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Conference Room 12-A	9'11"	206	1.15	30	18	2	40	F	1,656	35	75.0%	1.2	252	$9.57	$6.24	$15.81
Office 11-A	9'11"	206	1.15	30	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office A 10-A	9'11"	206	1.15	40	8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office B 10-A	9'11"	206	1.15	40	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office A 9-A	9'11"	206	1.15	40	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office B 9-A	9'11"	206	1.15	40	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 11-B	11'	206	1.15	40	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office 10-B	11'	206	1.15	35	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office 9-B	11'	206	1.15	45	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Open Office Area 9-14-E	10'7"	228	1.15	50	188	2	40	F	17,296	50	95.0%	16.4	3,753	$126.62	$93.08	$219.70
Fan Room 12-E		103	1		2	1	300	I	600	5	0.0%	0.0	13	$0.00	$0.32	$0.32
South West Area																
Open Office Area 9-16-J	10'7"	228	1.15	50	214	2	40	F	19,688	50	95.0%	18.7	4,272	$144.13	$105.95	$250.08
Office 9-K	11'	206	1.15	30	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office 9-K		206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Office 9-K Closet		206	1.15		3	2	40	F	276	10	0.0%	0.0	12	$0.00	$0.30	$0.30
Office 10-K		206	1.15		4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office 11-K	8'	206	1.15	25	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 12-K	8'	206	1.15	45	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 13-K	11'	228	1.15	25	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Fan Room 12-F		103	1		2	1	300	I	600	5	0.0%	0.0	13	$0.00	$0.32	$50.32
North East Area																
Office 8-A	8'	206	1.15		6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Smokers Room 6-A	8'	206	1.15		16	2	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Auditorium 6-B		228	1.15	45	12	3	40	F	1,656	35	75.0%	1.2	252	$9.57	$6.24	$15.81
Auditorium 6-B		228	1.15		8	2	40	F	736	35	75.0%	0.6	112	$4.25	$2.77	$7.03
Vending Area 5-B		228	1.15		4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Exit Lobby 5-A		101	1		1	1	100	I	100	50	95.0%	0.1	22	$0.73	$0.54	$1.27
Cafe 5-B	10'6"	228	1.15	40	8	3	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Computer Room 1-A		206	1.15		20	2	40	F	1,840	50	95.0%	1.7	399	$13.47	$9.90	$23.37
Womens Room 3-B		228	1.15		12	2	40	F	1,104	30	50.0%	0.6	144	$4.25	$3.56	$7.82
Mens Room 3-A		228	1.15		8	2	40	F	736	30	50.0%	0.4	96	$2.84	$2.38	$5.21
Janitors Closet		228	1.15		3	2	40	F	276	5	0.0%	0.0	6	$0.00	$0.15	$0.15
Office 1-C	8'	206	1.15	45	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 1-D	8'	206	1.15	50	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 1-E	8'	206	1.15	70	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 1-E		206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Open Office Area 2-8-E	10'7"	228	1.15	50	247	2	40	F	22,724	50	95.0%	21.6	4,931	$166.36	$122.29	$288.65
Fan Room 4-E		103	1		2	1	300	I	600	5	0.0%	0.0	13	$0.00	$0.32	$0.32

Lighting Model
Letterkenny Army Depot
Building 10
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
North West Area																
Office 1-F	8'	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 1-G	8'	206	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 1-H	8'	206	1.15	50	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Fan Room 4-F		103	1		2	1	300	I	600	5	0.0%	0.0	13	$0.00	$0.32	$0.32
Conference Room 1-K	9'	206	1.15	50	6	3	40	F	828	35	75.0%	0.6	126	$4.79	$3.12	$7.90
Conference Room 1-K		116	1		2	1	75	I	150	35	75.0%	0.1	23	$0.87	$0.57	$1.43
Office 2-K	11'	206	1.15	40	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Office 3-K	11'	206	1.15	60	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 4-K	11'	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office 5-K	11'	206	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office A 6-K	11'	206	1.15	40	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office B 6-K	11'	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 7-K	11'	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office 8-K	11'	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Main Entrance Lobby	15'	116	1		19	1	75	I	1,425	50	95.0%	1.4	309	$10.43	$7.67	$18.10
Exterior																
Exterior		116	1		8	1	75	I	600	80	0.0%	0.0	208	$0.00	$5.17	$5.17
Exterior		103	1		1	1	75	I	75	80	0.0%	0.0	26	$0.00	$0.65	$0.65
Exterior		502	1.15		1	1	150	HPS	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
Exterior		506	1.15		3	1	150	HPS	518	80	0.0%	0.0	180	$0.00	$4.46	$4.46
Exterior		112	1		1	1	175	I	175	80	0.0%	0.0	61	$0.00	$1.51	$1.51
Exterior		n/a	1		8	1	75	I	600	80	0.0%	0.0	208	$0.00	$5.17	$5.17
			TOTALS						120,341			108	33,308	$830	$826	$1,706

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army depot
Building 14
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Entrance Lobby		103	1		1	1	100	I	100	50	95.0%	0.1	22	$0.73	$0.54	$1.27
Optical Shop	12'10"	230	1.15	90	36	3	40	F	4,968	50	95.0%	4.7	1,078	$36.37	$26.74	$63.11
Optical Shop		230	1.15		14	4	40	F	2,576	50	95.0%	2.4	559	$18.86	$13.86	$32.72
Corridor to Ladies Room		103	1		1	1	100	I	100	50	95.0%	0.1	22	$0.73	$0.54	$1.27
Corridor to Mens Room		103	1		1	1	100	I	100	50	95.0%	0.1	22	$0.73	$0.54	$1.27
Mens Room		103	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Ladies Room		103	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Machine Shop Area	11'9"	228	1.15	60	37	3	40	F	5,106	50	95.0%	4.9	1,108	$37.38	$27.48	$64.86
Quality Control/Shop Area	11'9"	230	1.15	55	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Quality Control/Shop Area		228	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Paint Room		230V	1.15		12	3	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Machine Shop Office	10'1"	230	1.15	35	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Machine Shop Office (Exit Sign)		604	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Machine Shop Breakroom	11'9"	228	1.15	65	7	4	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Receiving Room (Exit Sign)		604	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Machine Shop (Exit Sign)		604	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Mechanical Room		230V	1.15		1	3	40	F	138	5	0.0%	0.0	3	$0.00	$0.07	$0.07
Mechanical Room		106	1		2	1	100	I	200	5	0.0%	0.0	4	$0.00	$0.11	$0.11
Sand Blast Room	11'9"	230	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Receiving Room	11'9"	230	1.15	45	15	3	40	F	2,070	50	95.0%	2.0	449	$15.15	$11.14	$26.29
Tritium Room	12'	230	1.15	50	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Tritium Room Storage		230	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Tritium Installation Room #1	12'	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Tritium Installation Room #2	12'	216	1.15	40	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Tritium Storage Room	12'	216	1.15	40	4	4	40	F	736	10	0.0%	0.0	32	$0.00	$0.79	$0.79
Tritium Final Area	12'	230	1.15	45	15	4	40	F	2,760	50	95.0%	2.6	599	$20.21	$14.85	$35.06
Dark Room (Abandon)																
Second Floor																
Small Parts Work Area	12'	228	1.15	65	47	3	40	F	6,486	50	95.0%	6.2	1,407	$47.48	$34.91	$82.39
Exterior																
Exterior		103	1		16	1	100	I	1,600	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		103	1		1	1	300	I	300	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						34,706			30	6,938	$231	$172	$403

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 19
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse South	25'	301	1.15	6	43	1	150	HPS	7,418	50	95.0%	7.0	1,610	$54.30	$39.92	$94.22
Exterior Office	7'10"	218	1.15	30	5	2	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
Warehouse North	25'	301	1.15		27	1	400	HPS	12,420	50	95.0%	11.8	2,695	$90.92	$66.84	$157.76
Warehouse North	25'	103	1	35	2	1	200	I	400	50	95.0%	0.4	87	$2.93	$2.15	$5.08
Exit Sign		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Warehouse North Work Area		230	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Warehouse Work Area		228	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Mens Rest Room	7'6"	101	1		2	1	200	I	400	30	50.0%	0.2	52	$1.54	$1.29	$2.83
Womens Rest Room	7'6"	101	1		2	1	200	I	400	30	50.0%	0.2	52	$1.54	$1.29	$2.83
Exterior																
Exterior		107	1		1	1	150	I	150	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		119	1		10	1	150	I	1,500	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		107	1		17	1	300	I	5,100	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						28,630			20	4,709	$157	$117	$274

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building TS20-1
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Breakroom	9'6"	230V	1.15	40	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office	7'10"	206	1.15	30	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Warehouse Receiving		302	1.15		4	1	175	MV	805	50	95.0%	0.8	175	$5.89	$4.33	$10.23
Warehouse Storage		302	1.15		4	1	175	MV	805	50	95.0%	0.8	175	$5.89	$4.33	$10.23
Exterior																
Exterior (none)																
			TOTALS						2,254			2	489	$17	$12	$29

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
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MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 31
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	23'	302	1.15	3	152	1	175	MV	30,590	50	95.0%	29.1	6,638	$223.94	$164.62	$388.56
Warehouse		103	1		2	1	200	I	400	50	95.0%	0.4	87	$2.93	$2.15	$5.08
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Office	7'10"	230	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Receiving Area		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						32,158			31	6,978	$235	$173	$408

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 32
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	23'	302	1.15	4	137	1	175	MV	27571	50	95.0%	26.2	5,983	$201.84	$148.38	$350.22
Warehouse		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Warehouse		301	1.15		5	1	175	MV	1,006	50	95.0%	1.0	218	$7.37	$5.42	$12.78
Exit Doors		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Receiving Area		230	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office	7'-6'	230	1.15	55	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						30,776			29	6,678	$225	$166	$391

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 33N
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Office	7'-2"	228	1.15	25	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Receiving Area		230	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Warehouse	21'	n/a	1.15	6	77	2	40	F	7,084	50	95.0%	6.7	1,537	$51.86	$38.12	$89.98
Warehouse - High Bay		301	1.15		5	1	150	HPS	863	50	95.0%	0.8	187	$6.31	$4.64	$10.96
Fenced Area in Warehouse		n/a	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Fenced Area in Warehouse		103	1		1	1	200	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Fenced Area in Warehouse		231	1.15		2	2	75	F	345	50	95.0%	0.3	75	$2.53	$1.86	$4.38
Fenced Area in Warehouse		215	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Exterior																
Exterior		505			5	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		103	1		1	1	200	I	200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						9,842			9	2,092	$71	$52	$122

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 34
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	23'	302	1.15	4	271	1	175	MV	54539	50	95.0%	51.8	11,835	$399.26	$293.51	$692.77
Warehouse-Parts Storage Racks		230	1.15		12	2	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Warehouse		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Warehouse Elec. Dist. Equip.		230	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Office South	7'9"	230	1.15	15	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office North	6'10"	230	1.15	10	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior Floods		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						57,841			55	12,551	$423	$311	$735

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 37
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Modular Office																
Modular Office-Powertrain #1	8'	228	1.15	25	3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Modular Office-Powertrain #2	8'	228	1.15	50	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Modular Office-Powertrain #3	8'	228	1.15	60	3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Motor Room Office	8'	228	1.15		4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Motor Room Test Area	8'	228	1.15	65	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Motor Room Box Office	8'	206	1.15	70	3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Building 37 Office	8'	206	1.15	90	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Building Supply 47	8'	206	1.15	50	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Breakroom	8'	206	1.15	90	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Disassembly Office	8'	206	1.15	60	5	2	40	F	460	90	95.0%	0.4	180	$3.37	$4.46	$7.82
Transmission Office	8'	206	1.15	80	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
			TOTALS						6,532			6	2,551	$48	$63	$111

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 41
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse - Low Bay	23'	302	1.15	2	165	1	175	MV	33206	50	95.0%	31.5	7,206	$243.09	$178.70	$421.80
Warehouse - Stnd, Inc.		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Receiving		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Office	7'4"	230	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office 1 x4 - 1L		221	1.15		1	1	40	F	46	50	95.0%	0.0	10	$0.34	$0.25	$0.58
Exit Doors		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior Flood		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
																$0.00
																$0.00
																$0.00
																$0.00
																$0.00
			TOTALS						35,128			33	7,623	$257	$189	$446

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXUTRES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

Lighting Model
Letterkenny Army Depot
Building 42S
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse South	23'	301	1.15		15	1	175	MV	3019	50	95.0%	2.9	655	$22.10	$16.25	$38.35
Warehouse South		228	1.15		124	4	40	F	22816	50	95.0%	21.7	4,951	$167.03	$122.79	$289.82
Warehouse South		230	1.15		11	3	40	F	1518	50	95.0%	1.4	329	$11.11	$8.17	$19.28
Warehouse South		230	1.15		17	2	40	F	1564	50	95.0%	1.5	339	$11.45	$8.42	$19.87
Break Room	8'10"	228	1.15		6	4	40	F	1104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Exit Door		103	1		1	1	200	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Office	7'5"	206	1.15	35	9	4	40	F	1656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Mens Bathroom		218	1.15		4	2	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Womens Bathroom		218	1.15		4	2	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Janitors Closet		103	1		1	1	75	I	75	5	0.0%	0.0	2	$0.00	$0.04	$0.04
Exterior																
Exterior Flood		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Main Door Entance		103	1		1	1	1000	I	1000	80	0.0%	0.0	347	$0.00	$8.61	$8.61
																$0.00
																$0.00
																$0.00
																$0.00
																$0.00
			TOTALS						33,688			31	7,362	$236	$183	$419

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 43
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	21'	n/a	1.15	6	258	2	40	F	23736	50	95.0%	22.5	5,151	$173.76	$127.74	$301.50
Office - 1 x 4 w/metal differ	7'8"	228	1.15	25	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Lockers		230	1.15		3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Exit Doors - One Blocked Off		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior Flood		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						25,318			24	5,494	$185	$136	$322

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KW = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

07-Apr-95

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

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Lighting Model
Letterkenny Army Depot
Building 44
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	23'	302	1.15	3	149	1	175	MV	29,986	50	95.0%	28.5	6,507	$219.52	$161.37	$380.89
Warehouse		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Receiving Area		230	1.15		9	3	40	F	1,242	50	95.0%	1.2	270	$9.09	$6.68	$15.78
Office Area	7'11"	230	1.15	50	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior Floods		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			Totals						33,380			32	7,244	$244	$180	$424

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Buidling 47
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse - South	22'	302	1.15	3	143	1	150	HPS	24,668	90	95.0%	23.4	9,635	$180.58	$238.95	$419.53
Office - South		230	1.15		4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Exit Door - South		103	1		3	1	200	I	600	90	95.0%	0.6	234	$4.39	$5.81	$10.20
Mens Room South		103	1		2	1	200	I	400	54	95.0%	0.4	94	$2.93	$2.32	$5.25
Womens Room South		103	1		2	1	200	I	400	54	95.0%	0.4	94	$2.93	$2.32	$5.25
Receiving South		230	1.15		2	3	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Warehouse - North	22'	103	1	5	17	1	300	I	5,100	90	95.0%	4.8	1,992	$37.34	$49.40	$86.74
Warehouse - North		230	1.15		20	2	40	F	1,840	90	95.0%	1.7	719	$13.47	$17.82	$31.29
Warehouse - North		301	1.15		1	1	175	MV	201	90	95.0%	0.2	79	$1.47	$1.95	$3.42
Warehouse - North		302	1.15		13	1	175	MV	2,616	90	95.0%	2.5	1,022	$19.15	$25.34	$44.50
Exit Door - North		103	1		1	1	200	I	200	90	95.0%	0.2	78	$1.46	$1.94	$3.40
Office - North	8'	230	1.15	20	4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Filing Area - North	8'	215	1.15	30	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Filing Area - North		230	1.15		24	1	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Exterior																
Exterior		502	1.15		1	1	150	HPS	173	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		505			2	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						39,234			37	15,132	$286	$375	$661

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 51
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Entrance Lobby		206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Main Office	9'10"	206	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Warehouse Processing	21'	230	1.15	40	96	3	40	F	13,248	50	95.0%	12.6	2,875	$96.98	$71.30	$168.28
Warehouse Proc. Workstation		230	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Warehouse Work Room	9'10"	228	1.15	60	21	4	40	F	3,864	50	95.0%	3.7	838	$28.29	$20.79	$49.08
Warehouse Break Room	9'10"	228	1.15	80	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Warehouse Processing Storage		301	1.15		32	1	150	HPS	5,520	50	95.0%	5.2	1,198	$40.41	$29.71	$70.12
Warehouse Milvan Storage	21'	301	1.15	40	105	1	150	HPS	18,113	50	95.0%	17.2	3,930	$132.60	$97.47	$230.07
Warehouse Milvan Exit Door		103	1		2	1	200	I	400	50	95.0%	0.4	87	$2.93	$2.15	$5.08
Warehouse Milvan Processing	21'	230	1.15		51	3	40	F	7,038	50	95.0%	6.7	1,527	$51.52	$37.88	$89.40
Warehouse Processing	21'	228	1.15		15	4	40	F	2,760	50	95.0%	2.6	599	$20.21	$14.85	$35.06
Warehouse Milvan Office	9'4"	206	1.15	30	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Warehouse Milvan Mens Room	9'5"	206	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Warehouse Mil. Womens Room	9'5"	206	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Warehouse Mil. Work Station		228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Warehouse Radio Active Room		228	1.15		6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Self Service Entrance Lobby		206	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Self Service Office	9'10"	228	1.15	40	15	2	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Self Service Parts Room	9'10"	228	1.15	40	14	2	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Self Service Shelf Area	9'10"	228	1.15	60	69	2	40	F	6,348	50	95.0%	6.0	1,378	$46.47	$34.16	$80.63
Self Service Shelf Area		230	1.15		12	2	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Self Service Rear Corridor	10'	230	1.15		10	3	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Self Service Rear Mens Room	10'	101	1		3	1	200	I	600	30	50.0%	0.3	78	$2.31	$1.94	$4.25
Self Service Rear Womens Room	10'	101	1		2	1	200	I	400	30	50.0%	0.2	52	$1.54	$1.29	$2.83
Self Service Rear Locker Room	10'	101	1		3	1	100	I	300	30	50.0%	0.2	39	$1.16	$0.97	$2.12
Self Service Rear Office	9'9"	228	1.15	30	24	4	40	F	4,416	50	95.0%	4.2	958	$32.33	$23.77	$56.09
Boiler Room	19'7"	230	1.15		2	2	40	F	184	5	0.0%	0.0	4	$0.00	$0.10	$0.10
Boiler Room	19'7"	231	1.15		4	2	75	F	690	5	0.0%	0.0	15	$0.00	$0.37	$0.37
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						74,231			69	15,793	$531	$392	$923

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 52
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	21'	301	1.15	15	84	1	150	HPS	14,490	50	95.0%	13.8	3,144	$106.08	$77.98	$184.06
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Warehouse Receiving		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Warehouse Office	7'3"	228	1.15	30	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office (Abandon)	7'3"	228	1.15		2	4	40	F	368	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						16,118			15	3,418	$115	$85	$200

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 53
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	22'	301	1.15	4	82	1	150	HPS	14,145	50	95.0%	13.4	3,069	$103.55	$76.12	$179.67
Warehouse Receiving South		230	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Warehouse Receiving North		228	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Warehouse Battery Area		230	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Warehouse Office (2 lamps only)	7'6"	228	1.15	30	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						16,555			16	3,592	$121	$89	$210

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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Lighting Model
Letterkenny Army Depot
Building 54
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	21'	301	1.15	3	84	1	150	HPS	14,490	50	95.0%	13.8	3,144	$106.08	$77.98	$184.06
Warehouse Office	7'7"	230	1.15	20	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Warehouse Parts Area		220	1.15		6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						16,210			15	3,518	$119	$87	$206

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 55
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Warehouse	21'	301	1.15	10	116	1	150	HPS	20,010	50	95.0%	19.0	4,342	$146.49	$107.69	$254.17
Warehouse Office (Removed)																
Warehouse Battery Area		228	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exit Door		103	1		4	1	200	I	800	50	95.0%	0.8	174	$5.86	$4.31	$10.16
Exterior																
Exterior		505			8	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						20,994			20	4,556	$154	$113	$267

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 57S
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse - South																
Office Area/Parts Area	8'	206	1.15	25	23	4	40	F	4,232	90	95.0%	4.0	1,653	$30.98	$40.99	$71.98
Driver Exam Corridor	8'	206	1.15	45	6	4	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Robertson Office	8'	206	1.15	65	3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Office	8'	206	1.15	35	2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Office (Locked)	8'	206	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Office (Locked)	8'	206	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Classified Rm. (Locked)																
Classified Room (Locked)																
Office Area	8'	206	1.15	30	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Corridor Behind Office Area	8'	206	1.15		1	4	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Locker Room	8'	230	1.15		4	2	40	F	368	54	95.0%	0.3	86	$2.69	$2.14	$4.83
Equipment Operations Unit	9'7"	228	1.15		15	4	40	F	2,760	90	95.0%	2.6	1,078	$20.21	$26.74	$46.94
Ladies Room		230	1.15		3	2	40	F	276	54	95.0%	0.3	65	$2.02	$1.60	$3.62
Ladies Room		228	1.15		1	4	40	F	184	54	95.0%	0.2	43	$1.35	$1.07	$2.42
Warehouse Area	22'9"	230	1.15	20	309	3	40	F	42,642	90	95.0%	40.5	16,656	$312.17	$413.07	$725.24
Tool Parts Room (Locked)		230	1.15		11	3	40	F	1,518	90	95.0%	1.4	593	$11.11	$14.70	$25.82
Tool Parts Room (Locked)		228	1.15		5	4	40	F	920	90	95.0%	0.9	359	$6.74	$8.91	$15.65
Fire Equipment Cage Area		215	1.15		4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Snow Shovel Room (Locked)																
Bulk Warehouse Office #1	10'	215	1.15	65	12	4	40	F	2,208	90	95.0%	2.1	862	$16.16	$21.39	$37.55
Bulk Warehouse Office #2	10'	215	1.15	60	9	4	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
Breakroom	10'	215	1.15		6	4	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Office Area	10'	228	1.15		3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
			TOTALS						61,916			59	24,055	$453	$597	$1,050

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 102
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Lab																
Front Lab Workstation	9'	206	1.15	50	4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Entrance to Office	9'	206	1.15	25	2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Main Lab Area	9'	206	1.15	50	18	2	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
Storage Area	9'	206	1.15		3	3	40	F	414	10	0.0%	0.0	18	$0.00	$0.45	$0.45
Bathroom	9'	206	1.15		1	2	40	F	92	54	95.0%	0.1	22	$0.67	$0.53	$1.21
Boiler Room		215	1.15		3	2	40	F	276	5	0.0%	0.0	6	$0.00	$0.15	$0.15
Exit Signs		602	1		4	2	6	I	48	168	95.0%	0.0	35	$0.35	$0.87	$1.22
Exterior																
Exterior Lighting		502	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
			TOTALS						3,728			2	1,183	$17	$29	$47

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 199
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Work Area		228	1.15	50	6	4	40	F	1,104	50	95.0%	1.0	239.6	$8.08	$5.94	$14.02
Office		215	1.15		1	2	40	F	92	50	95.0%	0.1	20.0	$0.67	$0.50	$1.17
Storage Area (locked)																
			TOTALS						1,196			1	260	$9	$6	$15

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 200
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Lab																
Lab Area		228	1.15	25	11	4	40	F	2,024	50	95.0%	1.9	439	$14.82	$10.89	$25.71
			TOTALS						2,024			2	439	$15	$11	$26

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 211
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Kitchen	7'6"	215	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Womens Room	7'1"	215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room	6'11"	215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Main Office Area	7'1"	206	1.15	30	5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Managers Office	7'	206	1.15	15	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Exterior																
Exterior		502	1.15		1	1	150	HPS	173	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						2,105			2	403	$14	$10	$24

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 247
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Receiving Area	11'6"	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Receiving Area		230	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Receiving Area		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Receiving Area		230	1.15		6	1	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Receiving Area		215	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Copy Room	8'	230	1.15	40	1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Closet		228	1.15		1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Stair to Offices		101	1		1	1	75	I	75	50	95.0%	0.1	16	$0.55	$0.40	$0.95
Restroom		206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Kitchen	7'3"	206	1.15	55	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office	7'3"	204	1.15	20	1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Corridor to Office		206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Coat Room	7'3"	204	1.15	50	1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Storage Room	7'3"	204	1.15	10	1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Rear Office	7'3"	206	1.15	100	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Rear Office		204	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Rear Store Room	7'3"	206	1.15		3	4	40	F	552	10	0.0%	0.0	24	$0.00	$0.59	$0.59
Boiler Room		228	1.15		2	4	40	F	368	5	0.0%	0.0	8	$0.00	$0.20	$0.20
Exterior																
Exterior		106	1		5	1	60	I	300	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		112	1		1	1	150	I	150	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						4,619			3	633	$19	$16	$35

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

Lighting Model
Letterekenny Army Depot
Building 320
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Maintenance																
Maintenance Area	28'	301	1.15	30	32	1	400	HPS	14,720	50	95.0%	14.0	3,194	$107.76	$79.22	$186.98
Maintenance Area		301	1.15		7	1	400	MV	3,220	168	95.0%	3.1	2,348	$23.57	$58.22	$81.80
Exit Sign at Doors		602	1.15		10	1	6	F	69	50	95.0%	0.1	15	$0.51	$0.37	$0.88
Maintenance Area Office	7'6"	206	1.15		3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Maint. Area Machine Shop	28'	230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Main Office Area	9'10"	206	1.15	30	47	2	40	F	4,324	168	95.0%	4.1	3,153	$31.65	$78.19	$109.84
Main Office Area (Exit Sign)		602	1.15		1	1	26	F	30	50	95.0%	0.0	6	$0.22	$0.16	$0.38
Office No. 1	9'10"		1.15	40	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Division Office	9'10"	206	1.15		6	3	40	F	828	30	50.0%	0.4	108	$3.19	$2.67	$5.86
Main Office Mens Room :	9'	115	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Shower Room	9'	101	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Sink and Toilet Area	9'	220	1.15		4	2	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Toilet Area	9'	215	1.15		3	2	40	F	276	168	95.0%	0.3	201	$2.02	$4.99	$7.01
Exit Sign		602	1.15		1	1	6	F	7	30	50.0%	0.0	1	$0.03	$0.02	$0.05
Mens Locker Room	9'	218	1.15		11	1	40	F	506	168	95.0%	0.5	369	$3.70	$9.15	$12.85
Mens Locker Room (Exit Sign)		602	1.15		1	1	6	F	7	30	50.0%	0.0	1	$0.03	$0.02	$0.05
Mens Locker Room Office	9'	228	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Mens Locker Room Office		115	1		4	1	100	I	400	30	50.0%	0.2	52	$1.54	$1.29	$2.83
Mens Locker Room Lobby		115	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Womens Locker Room	9'	218	1.15		11	1	40	F	506	30	50.0%	0.3	66	$1.95	$1.63	$3.58
Womens Locker Rm (Exit Sign)		602	1.15		1	1	6	F	7	168	95.0%	0.0	5	$0.05	$0.12	$0.18
Womens Locker Room Office	9'	228	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Womens Locker Room Office		115	1		4	1	100	I	400	30	50.0%	0.2	52	$1.54	$1.29	$2.83
Womens Locker Room Lobby		115	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Exterior																
Exterior		124	1		8	1	60	I	480	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior					4		150	HPS	0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						28,112			25	9,978	$191	$247	$438

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
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MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 349
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Boiler Plant																
Entrance Cage Area		228	1.15		9	2	40	F	828	168	95.0%	0.8	604	$6.06	$14.97	$21.03
Breakroom	16'9"	228	1.15	30	4	4	40	F	736	84	95.0%	0.7	268	$5.39	$6.65	$12.04
Air Compressor Room	16'9"	103	1		26	1	300	I	7,800	40	75.0%	5.9	1,354	$45.08	$33.58	$78.66
Boiler Room Ground Level		230	1.15		4	1	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Boiler Room Ground Level		228	1.15		10	4	40	F	1,840	168	95.0%	1.7	1,342	$13.47	$33.27	$46.74
Boiler Room Ground Level		230	1.15		1	3	40	F	138	168	95.0%	0.1	101	$1.01	$2.50	$3.51
Second Level Boiler Room		103	1		17	1	300	I	5,100	168	95.0%	4.8	3,719	$37.34	$92.22	$129.55
Control Room	8'	206	1.15		2	2	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Chemical Storage		220	1.15		2	1	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Chemical Storage		230	1.15		2	1	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Exterior																
Exterior		112	1		4	1	150	I	600	80	0.0%	0.0	208	$0.00	$5.17	$5.17
Exterior		106	1		1	1	75	I	75	80	0.0%	0.0	26	$0.00	$0.65	$0.65
Substation		n/a	1		2	1	300	I	600	80	0.0%	0.0	208	$0.00	$5.17	$5.17
			TOTALS						18,269			14	8,106	$111	$201	$312

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 350
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Office #1																
Reception	8'	206	1.15	70	11	4	40	F	2,024	90	95.0%	1.9	791	$14.82	$19.61	$34.42
Reception (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Copy Room	8'	206	1.15	60	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Managers Office	8'	206	1.15	70	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Managers Office (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Corridor to Shop	8'	206	1.15		3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Boiler Room		215	1.15		1	2	40	F	92	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Mens Room	8'	206	1.15		5	4	40	F	920	54	95.0%	0.9	216	$6.74	$5.35	$12.08
Womens Room	8'	206	1.15		5	4	40	F	920	54	95.0%	0.9	216	$6.74	$5.35	$12.08
Conference Room	8'	206	1.15	70	12	4	40	F	2,208	63	95.0%	2.1	604	$16.16	$14.97	$31.14
Conference Room (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Office #2																
Reception Area	8'	206	1.15	50	8	4	40	F	1,472	90	95.0%	1.4	575	$10.78	$14.26	$25.04
Managers Office	8'	206	1.15	65	1	4	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Computer PLC I/O Room		103	1		7	1	100	I	700	90	95.0%	0.7	273	$5.12	$6.78	$11.91
Mens Room		103	1		16	1	100	I	1,600	54	95.0%	1.5	375	$11.71	$9.30	$21.01
Womens Room		103	1		16	1	100	I	1,600	54	95.0%	1.5	375	$11.71	$9.30	$21.01
Corridor to Shop		103	1		2	1	100	I	200	90	95.0%	0.2	78	$1.46	$1.94	$3.40
Office #3																
Breakroom	11'6"	103	1	15	7	1	100	I	700	90	95.0%	0.7	273	$5.12	$6.78	$11.91
New Bathroom (Under Const.)																
Work Area	8'	206	1.15	20	6	4	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Separate Office Area	11'6"	228	1.15	45	4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
ASRS plus Office Area Corridor		228	1.15		3	4	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
ASRS plus Ofc. Area (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
ASRS plus Office Computer Rm.	8'	206	1.15	50	8	4	40	F	1,472	90	95.0%	1.4	575	$10.78	$14.26	$25.04
ASRS plus Office (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Corridor btwn. ASRS&Breakrm.		103	1		1	1	100	I	100	90	95.0%	0.1	39	$0.73	$0.97	$1.70
Office #4																
Corridor to Shop		103	1		3	1	100	I	300	90	95.0%	0.3	117	$2.20	$2.91	$5.10
Mens Room		103	1		7	1	100	I	700	54	95.0%	0.7	164	$5.12	$4.07	$9.19
Office Area	11'6"	230	1.15	40	5	2	40	F	460	90	95.0%	0.4	180	$3.37	$4.46	$7.82
Library Conference Room	11'6"	230	1.15	40	2	3	40	F	276	63	95.0%	0.3	75	$2.02	$1.87	$3.89
Book Storage	11'6"	230	1.15	30	3	3	40	F	414	10	0.0%	0.0	18	$0.00	$0.45	$0.45
Book Storage		228	1.15		1	3	40	F	138	10	0.0%	0.0	6	$0.00	$0.15	$0.15
Quality Control Room	11'5"	228	1.15	20	6	3	40	F	828	90	95.0%	0.8	323	$6.06	$8.02	$14.08
Annex Office Area #6																
Planning Production Fabrication	8'	215	1.15	55	12	2	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Trades Branch Conference Rm.	8'	215	1.15	45	12	2	40	F	1,104	63	95.0%	1.0	302	$8.08	$7.49	$15.57
Trades Office Room #1	8'	215	1.15	40	12	2	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Trades Office Room #2	8'	215	1.15	45	12	2	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Ladies Room		215	1.15		3	2	40	F	276	54	95.0%	0.3	65	$2.02	$1.60	$3.62
Mens Room		215	1.15		6	2	40	F	552	54	95.0%	0.5	129	$4.04	$3.21	$7.25
Janitors Closet		101	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Machine Room		101	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05

Lighting Model
Letterkenny Army Depot
Building 350
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exit Sign			1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Stairway to Shop		215	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Mechanical Room (locked)																
Meeting Room	8'	215	1.15		19	2	40	F	1,748	63	95.0%	1.7	478	$12.80	$11.85	$24.65
Eye Exam Room (locked)																
Stairway to Shop		215	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Annex Office Corridor	8'	215	1.15		7	2	40	F	644	90	95.0%	0.6	252	$4.71	$6.24	$10.95
Annex Ofc. Corridor (Exit Sign)		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Stairway to Shop		215	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
			TOTALS						30,014			28	9,864	$214	$245	$458

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 370
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Equipment Repair																
Shop Area/Computer Area	15'4"	228	1.15	50	52	4	40	F	9,568	90	95.0%	9.1	3,737	$70.04	$92.68	$162.73
Shop Area Office		228	1.15		5	4	40	F	920	90	95.0%	0.9	359	$6.74	$8.91	$15.65
Phoniex Area*		228	1.15	80	87	4	30	F	12,006	90	95.0%	11.4	4,690	$87.89	$116.30	$204.19
Phoniex Aux./Computer Room*		228	1.15		16	4	30	F	2,208	90	95.0%	2.1	862	$16.16	$21.39	$37.55
Test Room		228	1.15		4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Test Room/Workstation		228	1.15		2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Shop Area Entrance		103	1		1	1	100	I	100	90	95.0%	0.1	39	$0.73	$0.97	$1.70
Phoniex Aux. Shop Area*	11'5"	228	1		87	3	30	F	7,830	90	95.0%	7.4	3,058	$57.32	$75.85	$133.17
Phoniex Aux. Breakroom*		228	1		12	4	28	F	1,344	90	95.0%	1.3	525	$9.84	$13.02	$22.86
Shop Area		228	1.15		318	4	40	F	58,512	90	95.0%	55.6	22,855	$428.35	$566.80	$995.15
Mens Room		228	1.15		3	4	40	F	552	54	95.0%	0.5	129	$4.04	$3.21	$7.25
Mens Room (Shower)		103	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Mens Room (Entrance)		103	1		1	1	100	I	100	54	95.0%	0.1	23	$0.73	$0.58	$1.31
Ladies Room		103	1		4	1	100	I	400	54	95.0%	0.4	94	$2.93	$2.32	$5.25
Corridor to Mens & Ladies Rm*		228	1		2	3	30	F	180	90	95.0%	0.2	70	$1.32	$1.74	$3.06
Corridor to Mens & Ladies Room		103	1		1	1	100	I	100	90	95.0%	0.1	39	$0.73	$0.97	$1.70
Shop Area Task Lighting		230	1.15		4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Shop Area Task Lighting		215	1.15		2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
* Refer to Note #4																
			TOTALS						95,576			91	37,131	$699	$921	$1,620

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

NOTE #4: ELECTRONIC BALLAST: BASED ON MANUFACTURER DATA, THE LAMP /BALLAST POWER INPUT FOR THREE F32T8 LAMPS WITH ELECTRONIC BALLAST EQUALS APPROXIMATELY 90 WATTS. THE LAMP/BALLAST POWER INPUT FOR FOUR F32T8 LAMPS WITH ELECTRONIC BALLAST EQUALS APPROXIMATELY 112 WATTS.

Lighting Model
Letterkenny Army Depot
Building 412
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Training & Conf. Center																
Computer Training Area	7'3"	206	1.15	40	11	4	40	F	2,024	50	95.0%	1.9	439	$14.82	$10.89	$25.71
Administration Area	7'3"	206	1.15	40	11	4	40	F	2,024	50	95.0%	1.9	439	$14.82	$10.89	$25.71
Center Class Room	7'3"	206	1.15	50	14	4	40	F	2,576	35	75.0%	1.9	391	$14.89	$9.70	$24.59
Conference Room	7'3"	206	1.15	55	33	4	40	F	6,072	35	75.0%	4.6	922	$35.09	$22.87	$57.97
Conference Room Exit Sign		604	1		3	2	15	I	90	168	95.0%	0.1	66	$0.66	$1.63	$2.29
Rear Exit Lobby		101	1		1	1	200	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Mens Room	7'3"	206	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Ladies Room	7'3"	206	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Exterior																
Exterior		123	1		2	1	75	I	150	80	0.0%	0.0	52	$0.00	$1.29	$1.29
Exterior		502	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
			TOTALS						14,194			11	2,641	$83	$65	$149

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 416
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Main Entrance (Exit Sign)		604	1		1	2	6	I	12	168	95.0%	0.0	9	$0.09	$0.22	$0.30
Mens Room		215	1.15		4	2	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Womens Room		215	1.15		4	2	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Managers Office	8'5"	206	1.15	55	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Main Office Area	8'5"	206	1.15	60	30	4	40	F	5,520	50	95.0%	5.2	1,198	$40.41	$29.71	$70.12
Rear (Exit Sign)		604	1		1	2	6	I	12	168	95.0%	0.0	9	$0.09	$0.22	$0.30
Exterior																
Exterior		502	1.15		2	1	150	HPS	345	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		507	1.15		1	1	150	HPS	173	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						7,166			6	1,391	$46	$34	$81

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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Lighting Model
Letterkenny Army Depot
Building 417
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Personnel Barracks																
Corridor	8'5"	206	1.15		9	2	40	F	828	168	95.0%	0.8	604	$6.06	$14.97	$21.03
Mens Room/Shower		215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Womens Room		215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Corridor Exit Sign		604	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Room #20	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #11	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #19	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #12	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #18	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #13	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #17	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #14	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Kitchen #16	8'5"	206	1.15		4	2	40	F	368	21	50.0%	0.2	34	$1.42	$0.83	$2.25
Kitchen #16		n/a	1.15		1	1	20	F	23	21	50.0%	0.0	2	$0.09	$0.05	$0.14
Day Room #15	8'5"	206	1.15		4	3	40	F	552	40	75.0%	0.4	96	$3.19	$2.38	$5.57
			TOTALS						5,465			4	1,793	$33	$44	$78

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 418
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Personnel Barracks																
Corridor	8'5"	206	1.15		9	2	40	F	828	168	95.0%	0.8	604	$6.06	$14.97	$21.03
Mens Room/Shower		215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Womens Room		215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Corridor Exit Sign		604	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Room #20	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #11	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #19	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #12	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #18	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #13	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #17	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Room #14	8'5"	206	1.15	25	4	2	40	F	368	40	75.0%	0.3	64	$2.13	$1.58	$3.71
Kitchen #16	8'5"	206	1.15		4	2	40	F	368	21	50.0%	0.2	34	$1.42	$0.83	$2.25
Kitchen #16		n/a	1.15		1	1	20	F	23	21	50.0%	0.0	2	$0.09	$0.05	$0.14
Day Room #15	8'5"	206	1.15		4	3	40	F	552	40	75.0%	0.4	96	$3.19	$2.38	$5.57
			TOTALS						5,465			4	1,793	$33	$44	$78

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 421
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Main Office Area North End	8'	206	1.15	40	28	4	40	F	5,152	50	95.0%	4.9	1,118	$37.72	$27.73	$65.44
Administration																
Main Office Area North End	8'	206	1.15	40	28	4	40	F	5,152	50	95.0%	4.9	1,118	$37.72	$27.73	$65.44
Property,Accountibility Office	8'	206	1.15	65	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Equipment Mgt. Office	8'	206	1.15	45	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
North Exit Lobby	8'	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Ladies Room	8'	206	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Conference Room	8'	206	1.15		2	4	40	F	368	35	75.0%	0.3	56	$2.13	$1.39	$3.51
Mens Room	8'	206	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Vending Area	8'	206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Ck. Depot Prop. Div. Reception	9'	206	1.15	25	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Managers Office	8'	206	1.15		6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Ck. Depot Prop. Div. Office	9'	206	1.15	60	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Main Office South End	9'8"	206	1.15	40	24	4	40	F	4,416	50	95.0%	4.2	958	$32.33	$23.77	$56.09
Contracting Office Area	9'9"	206	1.15	30	14	4	40	F	2,576	50	95.0%	2.4	559	$18.86	$13.86	$32.72
Contracting Office Conf. Room	9'9"	206	1.15	60	6	3	40	F	828	35	75.0%	0.6	126	$4.79	$3.12	$7.90
Janitors Closet		220	1.15		1	1	40	F	46	5	0.0%	0.0	1	$0.00	$0.02	$0.02
Mens Room		228	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Mens Room		220	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Cont. Office Purch. Office Area		206	1.15		26	4	40	F	4,784	50	95.0%	4.5	1,038	$35.02	$25.75	$60.77
Support Division Chief Office	9'9"	206	1.15	45	5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Support Division Chief Office	9'9"	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Managers Office	9'9"	206	1.15	45	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
File/Copy Room	9'11"	206	1.15	30	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
File/Copy Room on Files		220	1.15		4	1	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Womens Room		220	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Womens Room		220	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Acquisition Chief	9'10"	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Main Entrance Lobby	9'10"	206	1.15	25	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Imprest Office	9'10"	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Receptionist	9'10"	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Office	9'10"	206	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Bid Room #2	9'10"	206	1.15	55	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Office	9'10"	206	1.15	90	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office (left of Acquisition Chief)	9'10"	206	1.15	30	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exterior																
Exterior (no lamps)		103	1		16	1	100	I	1,600	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		502	1.15		3	1	150	HPS	518	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						29,902			25	5,807	$196	$144	$340

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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Lighting Model
Letterkenny Army Depot
Building 424
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Cable and Harness																
Work Area	19'10"	230	1.15	50	12	3	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
File Area	9'9"	206	1.15	40	5	3	40	F	690	90	95.0%	0.7	270	$5.05	$6.68	$11.74
Work Station	9'9"	206	1.15	40	5	3	40	F	690	90	95.0%	0.7	270	$5.05	$6.68	$11.74
Cable Termination Area	9'9"	206	1.15	50	6	2	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Cable Termination Area		230	1.15		1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Cable Tent Station	9'9"	206	1.15	35	3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Assembly Area	9'9"	206	1.15	40	21	3	40	F	2,898	90	95.0%	2.8	1,132	$21.22	$28.07	$49.29
Assembly Area Desk Lighting		215	1.15		3	2	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Break Room	9'9"	206	1.15	30	3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Break Room	9'9"	206	1.15		3	2	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Office (Day)	9'9"	206	1.15		4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Work Area	19'10"	228	1.15		12	3	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
Carpentry Work Shop		302	1.15		4	1	150	HPS	690	90	95.0%	0.7	270	$5.05	$6.68	$11.74
Carpentry Work Shop		302	1.15		1	1	175	MV	201	90	95.0%	0.2	79	$1.47	$1.95	$3.42
Carpentry Work Shop		301	1.15		8	1	400	HPS	3,680	90	95.0%	3.5	1,437	$26.94	$35.65	$62.59
Rubber Mat Storage Room	19'10"	230V	1.15	40	12	3	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
Upholstery Work Shop	19'10"	228	1.15		32	3	40	F	4,416	90	95.0%	4.2	1,725	$32.33	$42.78	$75.11
Upholstery Work Shop	19'10"	230	1.15		72	3	40	F	9,936	90	95.0%	9.4	3,881	$72.74	$96.25	$168.99
Upholstery Work Shop	19'10"	103	1		42	1	100	I	4,200	90	95.0%	4.0	1,641	$30.75	$40.68	$71.43
Unpacking	12'5"	230V	1.15		3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Unpacking	12'5"	228	1.15		4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Womens Room		103	1		1	1	100	I	100	54	95.0%	0.1	23	$0.73	$0.58	$1.31
Mens Room		103	1		1	1	100	I	100	54	95.0%	0.1	23	$0.73	$0.58	$1.31
Janitors Room		230	1.15		2	2	40	F	184	5	0.0%	0.0	4	$0.00	$0.10	$0.10
Office	8'5"	206	1.15	70	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Exterior																
Exterior		103	1		2	1	100	I	200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		103	1		7	1	200	I	1,400	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						38,263			35	14,222	$267	$353	$620

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 428
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Counseling																
Counseling Managers Office	7'5"	228	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Corridor to Managers Office	7'5"	220	1.15		6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Copy Room	7'	220	1.15	55	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Womens Room		201	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Mens Room		101	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Main Entrance Corridor	7'5"	220	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Counselers Office	7'5"	220	1.15	50	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Counselers Office	7'5"	220	1.15	45	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Conference Room (Day)	7'5"	220	1.15	60	8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
			TOTALS						2,592			2	545	$18	$14	$32

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 431
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Main Entrance Lobby	20'8"	228	1.15	15	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
TDME Office Area	11'8"	228	1.15	60	25	4	40	F	4,600	50	95.0%	4.4	998	$33.68	$24.76	$58.43
Executive Secretary	11'8"	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Computer Room	11'8"	206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Mens Room		228	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Womens Room		228	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
TDME Chief Office	11'8"	228	1.15	45	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
TDME Chief Lab Calibration	11'8"	228	1.15		3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Lab #1		206	1.15		12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Lab #1 (Entrance Lobby)		303	1.15		1	4	20	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Conference Room 1 & 2	9'10"	228	1.15	50	6	4	40	F	1,104	35	75.0%	0.8	168	$6.38	$4.16	$10.54
Lab #2		206	1.15		12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Lab #2 (Entrance Lobby)		303	1.15		1	2	20	F	46	50	95.0%	0.0	10	$0.34	$0.25	$0.58
Corridor Lab #3 & #4	20'8"	228	1.15		9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Lab #3		206	1.15		12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Lab #3 (Entrance Lobby)		303	1.15		1	4	20	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Supply Section		228	1.15		10	4	40	F	1,840	50	95.0%	1.7	399	$13.47	$9.90	$23.37
* Lab #4	10'9"	206	1.15	110	16	4	40	F	2,944	50	95.0%	2.8	639	$21.55	$15.84	$37.40
Lab #4 (Entrance Lobby)	10'9"	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Corridor around Lab #4		230	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Storage Shelf Area Light (lab#4)	25'8"	206	1.15		7	4	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Lab #5 Section 1		206	1.15		6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Lab #5 Section 2 (Locked)																
Lab #5 Temp. Storage (Locked)																
ACL Office	7'5"	206	1.15	50	5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Break Room	20'8"	230	1.15	30	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Corridor around ACL Office	20'8"	230	1.15		4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Exterior																
Exterior		508	1		4	1	500	I	2,000	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		502	1.15		2	1	150	HPS	345	0	0.0%	0.0	0	$0.00	$0.00	$0.00
All Labs Need Special Light Levels.																
			TOTALS						30,727			27	6,055	$205	$150	$355

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 438
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Repair Shop																
Shipping Area	16'8"	103	1	35	28	1	300	I	8,400	50	95.0%	8.0	1,823	$61.49	$45.21	$106.70
Shipping Area		215	1.15		3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Mens Room		103	1		2	1	300	I	600	30	50.0%	0.3	78	$2.31	$1.94	$4.25
Ladies Room		103	1		2	1	300	I	600	30	50.0%	0.3	78	$2.31	$1.94	$4.25
Office		103	1		2	1	300	I	600	50	95.0%	0.6	130	$4.39	$3.23	$7.62
Exterior																
Exterior		103	1		3	1	300	I	900	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						11,376			9	2,169	$73	$54	$126

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 441
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Outside Office	7'7"	206	1.15	30	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Warehouse	21'	103	1		33	1	300	I	9,900	50	95.0%	9.4	2,148	$72.47	$53.28	$125.75
Warehouse Parts Bay	21'	228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Exterior																
Exterior		103	1		24	1	300	I	7,200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						17,652			10	2,268	$77	$56	$133

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 500
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Command Wing Entrance	7'7"	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Conference Room #3	9'	206	1.15	60	4	4	40	F	736	35	75.0%	0.6	112	$4.25	$2.77	$7.03
G. Patterson Office	8'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Depot Commander	8'	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Commander Secretary	8'	206	1.15	120	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Commander Office	8'	206	1.15	80	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Depot Sergeant Majors Office	8'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Kitchen	8'	101	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Copy Room	8'	215	1.15	70	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Public Affairs Office	8'	206	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Admin. Prgm. Coordinators Ofc.	8'	206	1.15	65	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Protocol Office	8'	206	1.15	95	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Ladies Room		206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Mens Room		206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Corridor		206	1.15		8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Command Corridor (Exit Sign)		n/a	1		1	1	25	I	25	168	95.0%	0.0	18	$0.18	$0.45	$0.64
Closet		101	1		1	1	60	I	60	10	0.0%	0.0	3	$0.00	$0.06	$0.06
P. Gieseking Office		206	1.15	65	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Rear Office	8'	206	1.15	65	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Entrance to Rear Office	8'	206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Legal Office Corridor	8'	206	1.15		10	3	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Legal Office (Exit Sign)		n/a	1		3	1	25	I	75	168	95.0%	0.1	55	$0.55	$1.36	$1.91
Legal Office 15 Reception	8'	206	1.15	50	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Front Office 15A	8'	206	1.15	65	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Rear Office 15B	8'	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Conference Room #1	8'	206	1.15		2	3	40	F	276	35	75.0%	0.2	42	$1.60	$1.04	$2.63
Conference Room #1	8'	116	1	60	10	1	75	I	750	35	75.0%	0.6	114	$4.33	$2.83	$7.16
Conference Room #1	8'	206	1.15		6	3	40	F	828	35	75.0%	0.6	126	$4.79	$3.12	$7.90
Conference Room #1	8'	102	1		2	1	75	I	150	35	75.0%	0.1	23	$0.87	$0.57	$1.43
Office #17	8'	206	1.15	35	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Computer Room	8'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Mens Room	8'	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Mens Room		101	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Police Room	8'	206	1.15		3	3	40	F	414	168	95.0%	0.4	302	$3.03	$7.49	$10.52
Police Sign in Room	8'	206	1.15	40	4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Womens Room	8'	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Womens Room		101	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Employment Info. Office	8'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #23 (Locked)	8'															
Room #25 (Office)	8'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #24 (Locked)	8'															
Copy Room	8'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #26 (Office)	8'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office	8'	206	1.15	60	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Dispensary Waiting Room	8'	206	1.15	60	4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Dispensary Corridor	8'	206	1.15		14	2	40	F	1,288	90	95.0%	1.2	503	$9.43	$12.48	$21.91
Dispensary (Exit Sign)		602	1.15		4	2	7	F	64	168	95.0%	0.1	47	$0.47	$1.16	$1.64
Room #47 (Office)	8'	206	1.15	40	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Room #31 Open Office Area	8'	206	1.15	95	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02

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Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Office	8'	206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Womens Room (Part of #31)	8'	240	1.15		1	2	40	F	92	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Treatment Room #1 Room #46	8'	206	1.15	70	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Treatment Room #2 Room #45	8'	206	1.15	70	2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Pharmacy	8'	206	1.15	60	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Restroom	8'	206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Laboratory Room #33	8'	206	1.15	70	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Radiology Room #44 (Locked)																
Physical Therapy Room #34	8'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Waiting Room	8'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Waiting Room Restroom	8'	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Storage Closet	8'	215	1.15		1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Clean Utility Room (Rm. #35)	8'	215	1.15	35	2	4	40	F	368	5	0.0%	0.0	8	$0.00	$0.20	$0.20
Break Room (Room #36)	8'	206	1.15	100	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Occupational Health Room #43	8'	206	1.15	50	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Occupational Health Rm.#43A	8'	206	1.15	55	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Occupational Health Rm.#43A	8'	116	1		2	1	100	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Occupational Health Rm.#43B	8'	206	1.15	25	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Occupational Health Rm.#43C	8'	206	1.15	25	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Occupational Health Room #37	8'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Occupational Health Room #38	8'	206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office Room #42	8'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Occupational Health Room #39	8'	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Emergency Treatment Rm. #40	8'	206	1.15	75	6	4	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Restroom	8'	206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Conference Room (Room #41)	8'	206	1.15	35	5	4	40	F	920	35	75.0%	0.7	140	$5.32	$3.47	$8.78
Emergency Rm. Entrance Lobby	8'	206	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Emer. Rm. Ent. Lobby (Exit Sign)	8'	602	1.15		1	2	7	F	16	168	95.0%	0.0	12	$0.12	$0.29	$0.41
Second Floor																
Room #3 (Office)	8'	206	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Auditorium	9'9"	215	1.15	20	27	2	40	F	2,484	35	75.0%	1.9	377	$14.36	$9.36	$23.71
Auditorium (Exit Sign)		n/a	1		1	1	25	I	25	168	95.0%	0.0	18	$0.18	$0.45	$0.64
Auditorium Projection Room		215	1.15		3	2	40	F	276	10	0.0%	0.0	12	$0.00	$0.30	$0.30
Conference Room (Locked)		206	1.15		2	3	40	F	276	35	75.0%	0.2	42	$1.60	$1.04	$2.63
Center Bldg. Open Office Area	8'	206	1.15	35	26	4	40	F	4,784	50	95.0%	4.5	1,038	$35.02	$25.75	$60.77
Employee Relations Office	8'	206	1.15	100	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #10	8'	206	1.15	80	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Ctr. Bldg. Open Ofc. (Exit Sign)		n/a	1		1	1	25	I	25	168	95.0%	0.0	18	$0.18	$0.45	$0.64
Conference Room (in use)																
Room #1 (Locked)																
Computer Room	8'	228	1.15	30	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Room #7 (Office)	8'	206	1.15	80	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Basement Level																
Entrance/Vending Area	8'	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Ent./Vending Area (Exit Sign)	8'	602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Corridor	8'	206	1.15		10	3	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Corridor (Exit Sign)		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Room #2 (Office)	8'	206	1.15	75	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76

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Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Room #4 (Office)	8'	206	1.15	60	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Room #5 (Office)	8'	206	1.15	100	12	3	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Room #7 (Conference Room)	8'	206	1.15	60	2	3	40	F	276	35	75.0%	0.2	42	$1.60	$1.04	$2.63
Room #3A (Internal Review)	8'	206	1.15		6	3	40	F	828	35	75.0%	0.6	126	$4.79	$3.12	$7.90
Room #3 (Open Work Space)	8'	206	1.15	50	12	3	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Room #6 (Locked)																
Room #8 (Locked-Mechanical)																
Room #9 (Mechanical Room)		103	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
DPCA Office Coordinator		206	1.15		5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Room #11 (Open Office Area)	8'	206	1.15	65	10	3	40	F	1,380	50	95.0%	1.3	299	$10.10	$7.43	$17.53
Room #11A (Files)	8'	206	1.15	45	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #12	8'	206	1.15	25	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #13 (Copy Room)	8'	228	1.15	20	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Room #14-15 (Office)	8'	206	1.15	40	10	4	40	F	1,840	50	95.0%	1.7	399	$13.47	$9.90	$23.37
Womens Room		101	1		2	1	100	I	200	30	50.0%	0.1	26	$0.77	$0.65	$1.42
Mens Room		101	1		2	1	100	I	200	30	50.0%	0.1	26	$0.77	$0.65	$1.42
DPCA Office Corridor (Exit Sign)		n/a	1		1	1	25	I	25	168	95.0%	0.0	18	$0.18	$0.45	$0.64
Storage Room		206	1.15	30	8	4	40	F	1,472	10	0.0%	0.0	64	$0.00	$1.58	$1.58
Open Office Area Room #16	8'	206	1.15	35	32	3	40	F	4,416	50	95.0%	4.2	958	$32.33	$23.77	$56.09
Room #16 (File Down Lighting)		n/a	1.15		6	1	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #16 (File Down Lighting)		n/a	1.15		3	1	15	F	52	50	95.0%	0.0	11	$0.38	$0.28	$0.66
Room #16 (Rear Office)	8'	206	1.15	50	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Opn. Ofc. Area Rm#16(Exit Sign)		n/a	1		1	1	25	I	25	168	95.0%	0.0	18	$0.18	$0.45	$0.64
Stairwell #1 Dispensary Side		114	1		3	2	60	I	360	168	95.0%	0.3	262	$2.64	$6.51	$9.15
Stairwell #1 Dispensary Side		215	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Stairwell #2 Police Area		114	1		1	2	60	I	120	168	95.0%	0.1	87	$0.88	$2.17	$3.05
Stairwell #2 Police Area		215	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Stairwell #2 Police Area		206	1.15		2	2	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Stairwell #3 Legal Office		114	1		2	2	60	I	240	168	95.0%	0.2	175	$1.76	$4.34	$6.10
Stairwell #3 Legal Office		206	1.15		2	4	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Stairwell #4 Command Area		104	1		1	2	100	I	200	168	95.0%	0.2	146	$1.46	$3.62	$5.08
Stairwell #4 Command Area		114	1		1	2	60	I	120	168	95.0%	0.1	87	$0.88	$2.17	$3.05
			TOTALS						63,520			56	14,765	$429	$366	$795

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Basement Floor																
Open Area		206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Open Area		215	1.15		3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Storage Room		230	1.15		4	3	40	F	552	10	0.0%	0.0	24	$0.00	$0.59	$0.59
Locker Room		206	1.15		2	4	40	F	368	10	0.0%	0.0	16	$0.00	$0.40	$0.40
Furnance Room		230	1.15		1	3	40	F	138	5	0.0%	0.0	3	$0.00	$0.07	$0.07
Weight Room		206	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Pool Table Room		206	1.15		6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Stairs to First Floor		206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Stairs to First Wall Light		n/a	1.15		1	1	9	F	10	168	95.0%	0.0	8	$0.08	$0.19	$0.26
First Floor																
General Office Area	9'	206	1.15	45	18	2	40	F	1,656	90	95.0%	1.6	647	$12.12	$16.04	$28.16
General Office (Exit Sign)		604	1		1	1	15	I	15	168	95.0%	0.0	11	$0.11	$0.27	$0.38
Chief Office	9'	206	1.15	65	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Research Area/Library	9'	206	1.15	40	2	3	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Plans Review Conference Room	9'	206	1.15	50	6	2	40	F	552	35	75.0%	0.4	84	$3.19	$2.08	$5.27
Copier/Fax Machine Room	9'	206	1.15	45	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Storage Room	8'	206	1.15		2	4	40	F	368	10	0.0%	0.0	16	$0.00	$0.40	$0.40
Bunkroom	8'	206	1.15	30	1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Bunkroom Toilet	8'	215	1.15		1	2	40	F	92	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Mens Room	8'	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Assistance Chief Office	8'	206	1.15	60	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Watch Room	8'	206	1.15		2	4	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Watch Room		n/a	1		5	1	20	I	100	168	95.0%	0.1	73	$0.73	$1.81	$2.54
Radio Equipment Room	8'	206	1.15	80	2	4	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Union Office	8'	206	1.15	75	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Union Office Wall Light		n/a	1.15		1	1	9	F	10	168	95.0%	0.0	8	$0.08	$0.19	$0.26
Smokers Lounge	8'	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Ladies Room	8'	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Kitchen Area	8'	206	1.15	90	2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Kitchen Area Under Counter		n/a	1.15		2	1	20	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Dining Area	8'	206	1.15	110	4	4	40	F	736	30	50.0%	0.4	96	$2.84	$2.38	$5.21
Corridor	8'	206	1.15		5	2	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
Corridor (Exit Sign)		604	1		1	1	15	I	15	168	95.0%	0.0	11	$0.11	$0.27	$0.38
Corridor Wall Light		n/a	1.15		1	1	9	F	10	168	95.0%	0.0	8	$0.08	$0.19	$0.26
Stairs to Second Floor		215	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Stairs to Second Floor		206	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Stairs to Second Floor Wall Light		n/a	1.15		2	1	9	F	21	168	95.0%	0.0	15	$0.15	$0.37	$0.53
Second Floor																
Bunkroom A		206	1.15		4	4	40	F	736	10	0.0%	0.0	32	$0.00	$0.79	$0.79
Mens Shower		206	1.15		5	3	40	F	690	5	0.0%	0.0	15	$0.00	$0.37	$0.37
Ladies Shower		206	1.15		5	3	40	F	690	5	0.0%	0.0	15	$0.00	$0.37	$0.37
Day Room (under construction)																
Lt. Bunkroom A		206	1.15		1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Lt. Bunkroom A		115	1		1	1	60	I	60	10	0.0%	0.0	3	$0.00	$0.06	$0.06
Lt. Bunkroom B		206	1.15		1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Corridor		206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34

Lighting Model
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Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exterior																
Exterior		506	1.15		1	1	175	MV	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Exterior Flood		508	1		4	1	500	I	2,000	80	0.0%	0.0	694	$0.00	$17.22	$17.22
Exterior		106	1		1	1	60	I	60	80	0.0%	0.0	21	$0.00	$0.52	$0.52
Exterior		502	1.15		1	1	150	HPS	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
Exterior		112	1		1	1	75	I	75	80	0.0%	0.0	26	$0.00	$0.65	$0.65
			TOTALS						16,367			8	3,752	$65	$93	$158

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 522
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Main Entrance	9'5"	206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Lobby	9'5"	206	1.15	30	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Lobby		114	1		2	1	100	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Mens Room	10'	117	1		1	2	60	I	120	30	50.0%	0.1	16	$0.46	$0.39	$0.85
Commanding Generals Office	9'5"	206	1.15	70	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Commanding General Conf. Rm.	9'5"	206	1.15	115	9	4	40	F	1,656	35	75.0%	1.2	252	$9.57	$6.24	$15.81
Comm.Gen. Toilet Rm & Shower	9'5"	117	1		2	2	60	I	240	5	0.0%	0.0	5	$0.00	$0.13	$0.13
Left Reception Area	9'5"	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Reception Area	9'5"	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Kitchen Area		117	1		1	2	60	I	120	50	95.0%	0.1	26	$0.88	$0.65	$1.52
Rear Office #1 (not occupied)	9'5"	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Rear Office #2 (not occupied)	9'5"	206	1.15	55	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Rear Office #2 (not occupied)		206	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Right Reception Area	9'5"	206	1.15	30	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Womens Room		101	1		1	1	100	I	100	30	50.0%	0.1	13	$0.39	$0.32	$0.71
Storage Room	9'5"	206	1.15		2	4	40	F	368	10	0.0%	0.0	16	$0.00	$0.40	$0.40
Office of the Chief of Staff Recp.	9'5"	206	1.15	50	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Office of the Chief of Staff	9'5"	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Secretary's Ofc. to the General	9'5"	206	1.15	70	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Secretary's Ofc. to the General	9'5"	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Second Floor																
Corridor	9'5"	206	1.15		8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Conference Room	9'5"	206	1.15	60	10	4	40	F	1,840	35	75.0%	1.4	279	$10.63	$6.93	$17.57
Conference Projection Room	9'5"	206	1.15		2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Corridor to Projection Room	9'5"	206	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Kitchen Sink	9'5"	n/a	1.15		1	1	15	F	17	10	0.0%	0.0	1	$0.00	$0.02	$0.02
Mens Room		101	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Mens Room		114	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Protocol Office	9'5"	206	1.15	45	5	2	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
Protocol Office		206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Liason Office	9'5"	206	1.15	45	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Inspector Gen. Admin. Office	9'5"	206	1.15	45	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Inspector General Reception	9'5"	206	1.15	35	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Inspector General Office	9'5"	206	1.15	30	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Copy Room	9'5"	228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Womens Room		114	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Womens Room		117	1		1	2	60	I	120	30	50.0%	0.1	16	$0.46	$0.39	$0.85
Exterior																
Exterior		106	1		1	1	45	I	45	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		n/a	1		1	1	75	I	75	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		506	1.15		1	1	400	MV	460	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						15,569			12	2,818	$96	$70	$166

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE: F = FLUORESCENT I = INCANDESCENT HPS = HIGH PRESSURE SODIUM MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 523
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Descom Office A	8'2"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Descom Office B	8'2"	206	1.15	70	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Descom Office C	8'2"	206	1.15	50	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Mens Room		114	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Library	8'2"	206	1.15	35	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Janitors Closet		101	1		1	1	200	I	200	5	0.0%	0.0	4	$0.00	$0.11	$0.11
Kitchen	8'2"	206	1.15	40	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Kelly Office (Locked)																
Womens Room		101	1		1	1	200	I	200	30	50.0%	0.1	26	$0.77	$0.65	$1.42
Conference Room A	8'2"	206	1.15	110	8	3	40	F	1,104	35	75.0%	0.8	168	$6.38	$4.16	$10.54
Conference Room B	8'2"	206	1.15	70	2	4	40	F	368	35	75.0%	0.3	56	$2.13	$1.39	$3.51
Horn Office	8'2"	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Myers Office	8'2"	206	1.15	35	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Barnes Office	8'2"	206	1.15	50	6	3	40	F	828	50	95.0%	0.8	180	$6.06	$4.46	$10.52
Sheffield Office	8'2"	206	1.15	60	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Grayson Office	8'2'	206	1.15	60	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Helsel Office	8'2"	206	1.15	50	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Cornelius Office	8'2"	206	1.15		4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Hoover Office	8'2"	206	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Gerhart Office	8'2"	206	1.15	45	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Creamer Office	8'2"	206	1.15	50	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Corridor	8'2"	230	1.15		11	2	40	F	1,012	50	95.0%	1.0	220	$7.41	$5.45	$12.85
Exterior																
Exterior		123	1		1	1	60	I	60	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		106	1		1	1	75	I	75	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		118	1		1	1	60	I	60	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		112	1		1	1	75	I	75	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						10,160			9	1,989	$68	$49	$117

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 524
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Conference Center																
Entrance Lobby	9'9"	206	1.15	25	7	2	40	F	644	50	95.0%	0.6	140	$4.71	$3.47	$8.18
Special Video Conf. Room.			1.15		36	2	40	F	3,312	35	75.0%	2.5	503	$19.14	$12.48	$31.62
Left Side Conference Room		215	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Mens Restroom		206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Restroom		206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Right Side Conference Room		215	1.15		2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Back Side Conference Room		215	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Exterior																
Exterior		126	1		1	1	60	I	60	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						4,568			3	683	$25	$17	$41

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 529
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Bar Table Area	8'3"	206	1.15	35	19	4	40	F	3,496	60	95.0%	3.3	910	$25.59	$22.58	$48.17
Bar Table Area		112	1		16	1	75	I	1,200	60	95.0%	1.1	312	$8.78	$7.75	$16.53
Bar Table Area Pool Table Lgts.		n/a	1		2	3	60	I	360	60	95.0%	0.3	94	$2.64	$2.32	$4.96
A/C Room		101	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Bar Counter	8'3"	206	1.15		2	4	40	F	368	60	95.0%	0.3	96	$2.69	$2.38	$5.07
Food Counter	8'3"	206	1.15		4	4	40	F	736	60	95.0%	0.7	192	$5.39	$4.75	$10.14
Bar (Exit Sign)		602	1.15		1	2	7	F	16	168	95.0%	0.0	12	$0.12	$0.29	$0.41
Restroom Lobby		215	1.15		2	2	40	F	184	60	95.0%	0.2	48	$1.35	$1.19	$2.54
Mens Room		206	1.15		1	2	40	F	92	60	95.0%	0.1	24	$0.67	$0.59	$1.27
Womens Room		206	1.15		1	2	40	F	92	60	95.0%	0.1	24	$0.67	$0.59	$1.27
Kitchen (Exit Sign)		604	1		1	2	7	F	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Kitchen (Exit Sign)		602	1		2	2	7	F	28	168	95.0%	0.0	20	$0.20	$0.51	$0.71
Kitchen Dish Room	8'	206	1.15	70	6	3	40	F	828	60	95.0%	0.8	216	$6.06	$5.35	$11.41
Dumb Waiter Room	8'	206	1.15		1	4	40	F	184	60	95.0%	0.2	48	$1.35	$1.19	$2.54
Supply Closet	8'	215	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Dumb Waiter (Exit Sign)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Supply Closet (Exit Sign)		604	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Freezer Store Room	7'3"	230	1.15	50	2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Freezer Store Room (Exit Sign)		604	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Golf Shop Lunch Room	8'	206	1.15	20	6	2	40	F	552	60	95.0%	0.5	144	$4.04	$3.56	$7.61
Golf Equipment Shop	8'	206	1.15	30	9	2	40	F	828	60	95.0%	0.8	216	$6.06	$5.35	$11.41
Golf Equipment Shop Office	8'	206	1.15		1	2	40	F	92	60	95.0%	0.1	24	$0.67	$0.59	$1.27
Golf Equipment Shop Office	8'	206	1.15		1	4	40	F	184	60	95.0%	0.2	48	$1.35	$1.19	$2.54
Golf Eqpt. Shop Entrance Lobby	8'	206	1.15		2	2	40	F	184	60	95.0%	0.2	48	$1.35	$1.19	$2.54
Mens Room	8'	215	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Womens Room	8'	215	1.15		2	2	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Second Floor																
Stairwell		120	1		1	1	60	I	60	60	95.0%	0.1	16	$0.44	$0.39	$0.83
Gallery	9'8"	110	1		8	1	75	I	600	60	95.0%	0.6	156	$4.39	$3.87	$8.27
Corridor to Mens Room	7'2"	240	1.15		1	2	40	F	92	60	95.0%	0.1	24	$0.67	$0.59	$1.27
Mens Room		206	1.15		2	4	40	F	368	60	95.0%	0.3	96	$2.69	$2.38	$5.07
Food Prep Room	7'9"	206	1.15	130	5	4	40	F	920	60	95.0%	0.9	240	$6.74	$5.94	$12.68
Womens Restroom Mirror		n/a	1		9	1	40	I	360	60	95.0%	0.3	94	$2.64	$2.32	$4.96
Womens Restroom		206	1.15		4	2	40	F	368	60	95.0%	0.3	96	$2.69	$2.38	$5.07
Handicap Restroom		206	1.15		1	4	40	F	184	60	95.0%	0.2	48	$1.35	$1.19	$2.54
Linen Closet		215	1.15		1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Coat Room		206	1.15		2	4	40	F	368	10	0.0%	0.0	16	$0.00	$0.40	$0.40
Second Floor Entrance Lobby		206	1.15		2	4	40	F	368	60	95.0%	0.3	96	$2.69	$2.38	$5.07
Second Flr. Entrance (Exit Sign)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Dining Room	9'8"	206	1.15	50	14	4	40	F	2,576	60	95.0%	2.4	671	$18.86	$16.64	$35.49
Dining Room		116	1		67	1	100	I	6,700	60	95.0%	6.4	1,745	$49.05	$43.27	$92.32
Bar Dining Area	8'8"	116	1		11	1	100	I	1,100	60	95.0%	1.0	286	$8.05	$7.10	$15.16
Over Bar Counter	8'8"	116	1		12	1	100	I	1,200	60	95.0%	1.1	312	$8.78	$7.75	$16.53
Bar Dining Area	8'8"	110	1		3	1	75	I	225	60	95.0%	0.2	59	$1.65	$1.45	$3.10
Bar Dining Area (Exit Sign)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Dining Room (Exit Sign)		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36

Lighting Model
Letterkenny Army Depot
Building 529
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exterior																
Exterior		103	1		2	1	200	I	400	80	0.0%	0.0	139	$0.00	$3.44	$3.44
Main Entrance		119	1		2	1	60	I	120	80	0.0%	0.0	42	$0.00	$1.03	$1.03
Wall Pack		503	1.15		2	1	150	HPS	345	80	0.0%	0.0	120	$0.00	$2.97	$2.97
Picnic Table Grounds Pole Ltgs.					5	1			0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						26,712			24	6,866	$182	$170	$352

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 530
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Cable TV for Housing																
Open Office Area	12'2"	230	1.15	30	16	2	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Exterior																
Exterior (None)																
			TOTALS						1,472			1	319	$11	$8	$19

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 536
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Bath House																
Mens Locker Area	8'	206	1.15	20	7	2	40	F	644	168	95.0%	0.6	470	$4.71	$11.64	$16.36
Mens Shower Area	8'	215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Womens Locker Area	8'	206	1.15	15	3	2	40	F	276	168	95.0%	0.3	201	$2.02	$4.99	$7.01
Womens Shower Area		215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Womens Pool Shower Area		220	1.15		2	2	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Mens Pool Shower Area Locked		220	1.15		2	2	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Exterior																
Exterior		n/a	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
			TOTALS						2,714			2	1,715	$15	$43	$57

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 581
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Main Entrance Lobby		121	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Conference Room	7'8"	228	1.15	30	6	4	40	F	1,104	35	75.0%	0.8	168	$6.38	$4.16	$10.54
Dir. Resource Mgrs. Office	7'8"	228	1.15	65	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Dir. Resource Mgrs. Recp. Area	7'8"	228	1.15		5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Telephone Closet	7'8"	228	1.15		3	4	40	F	552	5	0.0%	0.0	12	$0.00	$0.30	$0.30
SIDS Office	7'3"	206	1.15	110	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Closet A		101	1		1	1	100	I	100	10	0.0%	0.0	4	$0.00	$0.11	$0.11
Closet B		101	1		1	1	100	I	100	10	0.0%	0.0	4	$0.00	$0.11	$0.11
LEAD Valve Engin. Area	7'3"	228	1.15	80	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Corridor	7'3"	228	1.15		5	2	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
Womens Room		101	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Womens Room		228	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Janitors Closet		101	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Mens Room		101	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Mens Room		228	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Mens Room Sink Lighting		220	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Breakroom	7'10"	228	1.15	30	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
LEAD Valve Engin. Office	7'3"	228	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Copy Room	7'10"	228	1.15	30	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Copy Room		228	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Open Office Area	7'4"	228	1.15	30	16	4	40	F	2,944	50	95.0%	2.8	639	$21.55	$15.84	$37.40
Second Floor																
Stairway to Second Floor		n/a	1		2	3	60	I	360	50	95.0%	0.3	78	$2.64	$1.94	$4.57
Room #1 Office	7'10"	228	1.15	40	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #1 Conference Area	7'10"	228	1.15	30	2	4	40	F	368	35	75.0%	0.3	56	$2.13	$1.39	$3.51
Room #4 Conference Room	7'10"	228	1.15	40	3	4	40	F	552	35	75.0%	0.4	84	$3.19	$2.08	$5.27
Room #3 Office	7'10"	228	1.15	80	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #6 Storage	7'10"	228	1.15	30	2	4	40	F	368	10	0.0%	0.0	16	$0.00	$0.40	$0.40
Closet		101	1		1	1	75	I	75	10	0.0%	0.0	3	$0.00	$0.08	$0.08
Room #5 & #7 Office	7'10"	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Room #9 Office	7'10"	228	1.15	20	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Room #11 Office	7'10"	228	1.15	20	1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Room #12 Office	7'10"	228	1.15	45	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #14 Office	7'10"	228	1.15	40	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Room #14A Office	7'10"	228	1.15	30	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #15 Office	7'10"	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Room #17 Conference Room	7'10"	228	1.15	40	3	4	40	F	552	35	75.0%	0.4	84	$3.19	$2.08	$5.27
Room #20	7'10"	228	1.15	45	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #20A	7'10"	228	1.15	45	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Room #19 Smoke Room	7'10"	228	1.15	50	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Room #8 & #10	7'4"	228	1.15	30	5	4	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Corridor		228	1.15		11	4	40	F	2,024	50	95.0%	1.9	439	$14.82	$10.89	$25.71

Lighting Model
Letterkenny Army Depot
Building 581
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exterior																
Exterior (Entrance)		115	1		1	1	75	I	75	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		101	1		1	1	200	I	200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior (Out of Service)		106	1		1	1	60	I	60	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		106	1		2	1	75	I	150	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						23,894			20	4,595	$155	$114	$269

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 616
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Police Building																
Police Conference Room	7'10"	230	1.15	10	4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Police Conference Room	7'10"	228	1.15		4	4	40	F	736	168	95.0%	0.7	537	$5.39	$13.31	$18.70
			TOTALS						1,104			1	805	$8	$20	$28

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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Lighting Model
Letterkenny Army Depot
Building 618
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Hunting & Fishing Office	7'5"	206	1.15	65	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Room #7	7'5"	206	1.15		2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Walter Office	7'5"	206	1.15	100	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Keefer Office	7'5"	206	1.15	95	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Merritt Office	7'5"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #4 (Locked)																
Middle Exit Door		115	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Handicap Restroom	7'5"	206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Mens Room	7'5"	206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Hoke Office	7'5"	206	1.15	80	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Coffee Mess	7'5"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Copy Room	7'5"	206	1.15	95	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #11 Office	7'5"	206	1.15	70	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
GIS Room (Locked)																
Corridor	7'10"	206	1.15		8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Corridor Exit		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Second Floor																
Warnock Office	7'5"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Quinn Office	7'5"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Conference Room	7'5"	206	1.15		3	3	40	F	414	35	75.0%	0.3	63	$2.39	$1.56	$3.95
Esptein Office	7'5"	206	1.15	90	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Williams Office	7'5"	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Gieseking Office	7'5"	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Haz Waste Conference Room	7'5"	206	1.15	70	5	3	40	F	690	35	75.0%	0.5	105	$3.99	$2.60	$6.59
Yocum Office	7'5"	206	1.15	70	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Room #20 (Locked)																
Corridor	7'5"	206	1.15		8	2	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Exit Signs		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Yeager Office	7'5"	206	1.15	85	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Cassner	7'5"	206	1.15	40	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Stairwell to Second Floor		206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Womens Room		206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Exterior																
Exterior		106	1		6	1	200	I	1,200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						9,446			7	1,704	$56	$42	$99

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
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MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 619
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Dining Area																
Storage Room	9'5"	206	1.15	60	3	3	40	F	414	10	0.0%	0.0	18	$0.00	$0.45	$0.45
Rear Dining Area	10'	206	1.15	55	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Rear Dining Area	10'	206	1.15		1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Serving Area	9'6"	206	1.15	45	7	2	40	F	644	50	95.0%	0.6	140	$4.71	$3.47	$8.18
Open Dining Area	10'	206	1.15	35	27	3	40	F	3,726	50	95.0%	3.5	809	$27.28	$20.05	$47.33
Mens Room		206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Mens Room Sink		218	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Womens Room		206	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Womens Room Sink		218	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Staff Office	9'6"	206	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Exit Sign		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Entrance Lobby		206	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Boiler Room		103	1		2	1	300	I	600	5	0.0%	0.0	13	$0.00	$0.32	$0.32
Exterior																
Exterior		106	1		1	1	67	I	67	80	0.0%	0.0	23	$0.00	$0.58	$0.58
Exterior		502	1.15		2	1	150	HPS	345	80	0.0%	0.0	120	$0.00	$2.97	$2.97
Exterior		101	1		1	1	60	I	60	80	0.0%	0.0	21	$0.00	$0.52	$0.52
			TOTALS						7,802			6	1,540	$44	$38	$82

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 628
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Information Security	7'	206	1.15	40	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Badge Photo Room	7'	206	1.15	40	4	3	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Badge Photo Room File		n/a	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Conference Room A	7'	206	1.15	125	3	3	40	F	414	35	75.0%	0.3	63	$2.39	$1.56	$3.95
First Floor Corridor	7'	206	1.15		5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Womens Restroom & Shower		206	1.15		3	3	40	F	414	30	50.0%	0.2	54	$1.60	$1.34	$2.93
Handicap Restroom		206	1.15		1	3	40	F	138	30	50.0%	0.1	18	$0.53	$0.45	$0.98
Copy Room	7'	206	1.15	100	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Smoking Room	7'	230	1.15		1	1	40	F	46	50	95.0%	0.0	10	$0.34	$0.25	$0.58
Automation Security Office	7'	206	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Police Officers Room #3 Office	7'	206	1.15	70	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Room #1 Office	7'	206	1.15	85	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Physical Security	7'	206	1.15	50	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Vault (Locked)																
Second Floor																
Stairway to Second Floor		206	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Corridor	7'	206	1.15		5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Investigation Office Room #19	7'	206	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Investigation Office Room #18	7'	206	1.15	55	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Interview Room #17	7'	206	1.15	120	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Secretary & Plans Div. Office	7'	206	1.15	100	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Chief Secretary & Plans Div. Ofc.	7'	206	1.15	95	3	3	40	F	414	50	95.0%	0.4	90	$3.03	$2.23	$5.26
Mens Room & Shower	7'	206	1.15		3	3	40	F	414	30	50.0%	0.2	54	$1.60	$1.34	$2.93
Janitors Closet in Mens Room		215	1.15		1	2	40	F	92	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Room #14 Supplies (Locked)																
Director - PM Office Room #11	7'	206	1.15	25	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Directorate Secretary Office	7'	206	1.15	80	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Training Office (Locked)																
Exterior																
Exterior			1		6	1	200	I	1,200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						8,698			7	1,498	$50	$37	$87

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 637
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Chapel																
Entrance Lobby		110	1		3	1	75	I	225	40	75.0%	0.2	39	$1.30	$0.97	$2.27
Entrance Lobby		n/a	1		1	1	60	I	60	40	75.0%	0.0	10	$0.35	$0.26	$0.61
Back Area of Chapel		115	1		3	1	60	I	180	40	75.0%	0.1	31	$1.04	$0.77	$1.82
Back Area of Chapel		110	1		1	1	75	I	75	40	75.0%	0.1	13	$0.43	$0.32	$0.76
Chapel Lighting		220	1.15	20	40	1	40	F	1,840	40	75.0%	1.4	319	$10.63	$7.92	$18.56
Electrical Room		101	1		1	1	100	I	100	5	0.0%	0.0	2	$0.00	$0.05	$0.05
Alter		110	1		3	1	300	I	900	40	75.0%	0.7	156	$5.20	$3.87	$9.08
Second Level		115	1		4	1	60	I	240	40	75.0%	0.2	42	$1.39	$1.03	$2.42
Second Level		101	1		1	1	60	I	60	40	75.0%	0.0	10	$0.35	$0.26	$0.61
Restroom Area		115	1		3	1	60	I	180	10	0.0%	0.0	8	$0.00	$0.19	$0.19
Corridor Behind Alter		215	1.15		2	2	40	F	184	40	75.0%	0.1	32	$1.06	$0.79	$1.86
Exterior																
Exterior		112	1		1	1	150	I	150	80	0.0%	0.0	52	$0.00	$1.29	$1.29
			TOTALS						4,194			3	715	$22	$18	$39

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HSP = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 639
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Physical Fitness Center																
Gym Entrance	8'1"	230	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Gym Entrance	8'1"	220	1.15		1	1	40	F	46	168	95.0%	0.0	34	$0.34	$0.83	$1.17
Gym Office	8'1"	228	1.15	70	2	4	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
LEAD Store Room	8'1"	101	1		2	1	75	I	150	10	0.0%	0.0	7	$0.00	$0.16	$0.16
LEAD Store Room	8'1"	230	1.15	40	1	2	40	F	92	10	0.0%	0.0	4	$0.00	$0.10	$0.10
Basketball Court	17'	103	1	10	24	1	300	I	7,200	168	95.0%	6.8	5,250	$52.71	$130.19	$182.90
Exit Sign		602	1		1	1	15	I	15	168	95.0%	0.0	11	$0.11	$0.27	$0.38
Corridor to Restroom	8'1"	206	1.15		2	2	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Corridor to Mens Locker Room	8'1"	206	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Mens Locker Room	8'1"	206	1.15		4	4	40	F	736	168	95.0%	0.7	537	$5.39	$13.31	$18.70
Mens Shower Room	8'1"	215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Mens Rear Locker Room	8'1"	206	1.15		1	4	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Corridor to Womens Locker Rm.	8'1"	206	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Womens Locker Room	8'1"	206	1.15		4	4	40	F	736	168	95.0%	0.7	537	$5.39	$13.31	$18.70
Womens Shower Room	8'1"	215	1.15		4	2	40	F	368	168	95.0%	0.3	268	$2.69	$6.65	$9.35
Womens Rear Locker Room	8'1"	206	1.15		1	4	40	F	184	168	95.0%	0.2	134	$1.35	$3.33	$4.67
Corridor to Sauna	8'1"	206	1.15		3	2	40	F	276	168	95.0%	0.3	201	$2.02	$4.99	$7.01
Rear Entrance Lobby		216	1.15		1	2	40	F	92	168	95.0%	0.1	67	$0.67	$1.66	$2.34
Weight Room Restroom		206	1.15		2	2	40	F	184	101	95.0%	0.2	81	$1.35	$2.00	$3.35
Weight Room		230	1.15		14	3	40	F	1,932	168	95.0%	1.8	1,409	$14.14	$34.93	$49.08
Weight Room (note #4)		230	1		5	2	30	F	300	168	95.0%	0.3	219	$2.20	$5.42	$7.62
Weight Room Nautilus (note #4)		206	1		12	2	30	F	720	168	95.0%	0.7	525	$5.27	$13.02	$18.29
Weight Room Abandoned Ofc.		206	1.15		2	2	40	F	184	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Raquetball Court	20'	206	1.15	70	12	6	40	F	3,312	84	95.0%	3.1	1,207	$24.25	$29.94	$54.19
Elec. Closet in Basketball Area		101	1		2	1	100	I	200	10	0.0%	0.0	9	$0.00	$0.22	$0.22
Upstairs Store Room		230	1.15		2	3	40	F	276	10	0.0%	0.0	12	$0.00	$0.30	$0.30
Exterior																
Exterior		104	1		3	1	75	I	225	80	0.0%	0.0	78	$0.00	$1.94	$1.94
Exterior		106	1		4	1	75	I	300	80	0.0%	0.0	104	$0.00	$2.58	$2.58
Exterior		502	1.15		2	1	150	HPS	345	80	0.0%	0.0	120	$0.00	$2.97	$2.97
			TOTALS						19,253			17	11,818	$128	$293	$421

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

NOTE #4: ELECTRONIC BALLAST: BASED ON MANUFACTURER DATA, THE LAMP/BALLAST POWER INPUT FOR TWO F32T8 LAMPS WITH ELECTRONIC BALLAST EQUALS APPROXIMATELY 60 WATTS.

Lighting Model
Letterkenny Army Depot
Building 640
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Camper Check-In																
Main Entrance Area	8'	206	1.15	40	2	4	40	F	368	20	50.0%	0.2	32	$1.42	$0.79	$2.21
Office #1	8'	206	1.15	95	1	4	40	F	184	20	50.0%	0.1	16	$0.71	$0.40	$1.11
Office #2	8'	206	1.15	95	1	4	40	F	184	20	50.0%	0.1	16	$0.71	$0.40	$1.11
Mens Room	8'	206	1.15		2	4	40	F	368	20	50.0%	0.2	32	$1.42	$0.79	$2.21
Womens Room	8'	206	1.15		2	4	40	F	368	20	50.0%	0.2	32	$1.42	$0.79	$2.21
Laundry Room	8'	206	1.15	80	1	4	40	F	184	20	50.0%	0.1	16	$0.71	$0.40	$1.11
			TOTALS						1,656			1	144	$6	$4	$10

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 645
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Day Care																
Entrance Lobby	8'	206	1.15		1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Entrance Lobby Exit Sign		602	1		2	2	7	I	28	168	95.0%	0.0	20	$0.20	$0.51	$0.71
Play Area	8'	206	1.15	40	16	2	40	F	1,472	90	95.0%	1.4	575	$10.78	$14.26	$25.04
Play Area Exit Sign		602	1		3	2	15	I	90	168	95.0%	0.1	66	$0.66	$1.63	$2.29
Bathroom #1	8'	206	1.15		1	2	40	F	92	54	95.0%	0.1	22	$0.67	$0.53	$1.21
Bathroom #2	8'	206	1.15		1	2	40	F	92	54	95.0%	0.1	22	$0.67	$0.53	$1.21
Kitchen Area	8'	206	1.15		1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Changing Area	8'	206	1.15		2	2	40	F	184	54	95.0%	0.2	43	$1.35	$1.07	$2.42
Baby Area	8'	206	1.15		4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Bathroom #3	8'	206	1.15		1	2	40	F	92	54	95.0%	0.1	22	$0.67	$0.53	$1.21
Staff Office	8'	206	1.15		3	2	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Exterior																
Exterior		123	1		4	1	100	I	400	80	0.0%	0.0	139	$0.00	$3.44	$3.44
Exterior		502	1.15		1	1	150	HPS	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
			TOTALS						3,451			3	1,291	$21	$32	$53

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
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MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 646
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Youth Center																
Entrance Area	8'6"	206	1.15	75	2	3	40	F	276	126	95.0%	0.3	151	$2.02	$3.74	$5.76
Entrance Area Exit Sign		602	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Kitchen	8'6"	206	1.15	50	2	2	40	F	184	126	95.0%	0.2	101	$1.35	$2.50	$3.84
Kitchen		206	1.15		1	3	40	F	138	126	95.0%	0.1	75	$1.01	$1.87	$2.88
Open Area	8'6"	206	1.15	60	20	2	40	F	1,840	126	95.0%	1.7	1,006	$13.47	$24.95	$38.42
Open Area Exit Sign		602	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Staff Office	8'6"	206	1.15	80	2	3	40	F	276	126	95.0%	0.3	151	$2.02	$3.74	$5.76
Play Room	8'6"	206	1.15	60	2	3	40	F	276	126	95.0%	0.3	151	$2.02	$3.74	$5.76
Corridor to Play Room	8'6"	206	1.15		1	2	40	F	92	126	95.0%	0.1	50	$0.67	$1.25	$1.92
Lounge Area	8'6"	206	1.15	45	5	3	40	F	690	126	95.0%	0.7	377	$5.05	$9.36	$14.41
File Room	8'6"	206	1.15	30	2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Boys Room		206	1.15		2	2	40	F	184	76	95.0%	0.2	61	$1.35	$1.51	$2.85
Girls Room		206	1.15		2	2	40	F	184	76	95.0%	0.2	61	$1.35	$1.51	$2.85
Closet (Locked)																
			TOTALS						4,414			4	2,258	$31	$56	$87

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HSP = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 663
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration & Trades																
Main Entrance Lobby		206	1.15		4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Open Office Area	9'4"	206	1.15	35	47	3	40	F	6,486	90	95.0%	6.2	2,533	$47.48	$62.83	$110.31
Office	9'2"	206	1.15	60	2	3	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Office	9'4"	206	1.15	40	3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Director of Public Works	9'4"	206	1.15	60	3	2	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Director of Public Works	9'4"	206	1.15		1	4	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Conference Room	9'4"	206	1.15	40	7	3	40	F	966	63	95.0%	0.9	264	$7.07	$6.55	$13.62
Business Managers Office	9'4"	206	1.15	40	3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Mens Room	9'4"	206	1.15		2	3	40	F	276	54	95.0%	0.3	65	$2.02	$1.60	$3.62
Womens Room	9'4"	206	1.15		2	3	40	F	276	54	95.0%	0.3	65	$2.02	$1.60	$3.62
Computer Room	9'4"	230	1.15		1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Copy Room	9'4"	215	1.15	40	1	4	40	F	184	54	95.0%	0.2	43	$1.35	$1.07	$2.42
Print Room	9'4"	215	1.15	25	1	4	40	F	184	54	95.0%	0.2	43	$1.35	$1.07	$2.42
Corridor to Drawing Files Area		206	1.15		2	3	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Drawing Files Area		114	1		3	1	300	I	900	54	95.0%	0.9	211	$6.59	$5.23	$11.82
Drawing Files Area		228	1.15		8	4	40	F	1,472	54	95.0%	1.4	345	$10.78	$8.56	$19.33
Housing Office (Locked)																
Engineering Office Area		206	1.15	30	8	4	40	F	1,472	90	95.0%	1.4	575	$10.78	$14.26	$25.04
Drafting Office Area		228	1.15		34	4	40	F	6,256	90	95.0%	5.9	2,444	$45.80	$60.60	$106.40
Receiving - Supply Area		230	1.15	25	14	2	40	F	1,288	90	95.0%	1.2	503	$9.43	$12.48	$21.91
Corridor to Snack Bar		206	1.15		1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Corridor to Snack Bar		220	1.15		3	1	75	F	259	90	95.0%	0.2	101	$1.89	$2.51	$4.40
Office	9'6"	206	1.15	40	4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Electrical Supply		114	1		9	1	300	I	2,700	90	95.0%	2.6	1,055	$19.77	$26.15	$45.92
Electrical Supply		230	1.15		2	3	40	F	276	90	95.0%	0.3	108	$2.02	$2.67	$4.69
Electrical Supply		220	1.15		7	1	75	F	604	90	95.0%	0.6	236	$4.42	$5.85	$10.27
Operations & Maint. Room	9'6"	206	1.15	45	12	4	40	F	2,208	90	95.0%	2.1	862	$16.16	$21.39	$37.55
Operations & Maint. Conf. Room	9'6"	206	1.15	45	2	3	40	F	276	63	95.0%	0.3	75	$2.02	$1.87	$3.89
Work Planning & Control Office	9'6"	206	1.15	45	12	4	40	F	2,208	90	95.0%	2.1	862	$16.16	$21.39	$37.55
Production Division Office #1	9'6"	206	1.15	55	1	2	40	F	92	90	95.0%	0.1	36	$0.67	$0.89	$1.56
Production Division Office #1	9'6"	206	1.15		2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Production Division Office #2	9'6"	206	1.15	30	2	2	40	F	184	90	95.0%	0.2	72	$1.35	$1.78	$3.13
Production Division Office #3	9'6"	206	1.15	50	4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Lunch Area	9'6"	206	1.15	50	8	4	40	F	1,472	90	95.0%	1.4	575	$10.78	$14.26	$25.04
Lower Level Womens Room		101	1		2	1	200	I	400	54	95.0%	0.4	94	$2.93	$2.32	$5.25
Lower Level Womens Room		106	1		1	1	100	I	100	54	95.0%	0.1	23	$0.73	$0.58	$1.31
Lower Level Mens Room		114	1		2	1	300	I	600	54	95.0%	0.6	141	$4.39	$3.49	$7.88
Lower Level Mens Room		106	1		1	1	100	I	100	54	95.0%	0.1	23	$0.73	$0.58	$1.31
Lower Level Mens Room		101	1		2	1	200	I	400	54	95.0%	0.4	94	$2.93	$2.32	$5.25
Snack Bar (Locked)																
Corridor Outside Snack Bar		114	1		3	1	300	I	900	90	95.0%	0.9	352	$6.59	$8.72	$15.31
Heating & Plumbing Shop Area	9'6"		1.15	50	19	4	40	F	3,496	90	95.0%	3.3	1,366	$25.59	$33.87	$59.46
Heating Branch Office Front Rm		206	1.15		6	4	40	F	1,104	90	95.0%	1.0	431	$8.08	$10.69	$18.78
Heating Branch Office Back Rm		206	1.15		2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Heating Supply Cage		230	1.15		4	4	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Welding Shop Area	9'6"	230	1.15	40	30	3	40	F	4,140	90	95.0%	3.9	1,617	$30.31	$40.10	$70.41
Welding Shop Area		230V	1.15		8	2	40	F	736	90	95.0%	0.7	287	$5.39	$7.13	$12.52
Computer Room	9'10"	206	1.15	50	4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Dispatch Corridor	9'10"	230	1.15		1	3	40	F	138	90	95.0%	0.1	54	$1.01	$1.34	$2.35

Lighting Model
Letterkenny Army Depot
Building 663
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Dispatch Office	9'10"	206	1.15		2	4	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
Building & Structural Office	9'10"	206	1.15	20	4	2	40	F	368	90	95.0%	0.3	144	$2.69	$3.56	$6.26
S. C. Office	10'1"	228	1.15	30	3	3	40	F	414	90	95.0%	0.4	162	$3.03	$4.01	$7.04
Carpenter Shop Area		230V	1.15	30	28	3	40	F	3,864	90	95.0%	3.7	1,509	$28.29	$37.43	$65.72
Carpenter Supply Room		230V	1.15		4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Lunch Room	10'1"	230V	1.15	25	4	3	40	F	552	90	95.0%	0.5	216	$4.04	$5.35	$9.39
Restroom		230	1.15		1	2	40	F	92	54	95.0%	0.1	22	$0.67	$0.53	$1.21
			TOTALS						53,883			51	20,122	$394	$499	$893

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 664
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
First Floor																
Entrance Lobby		230	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Corridor to Restroom	7'7"	228	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Issue Center Office	7'7"	206	1.15	90	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Empty Office	7'7"	206	1.15		4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Restroom		101	1		1	1	75	I	75	30	50.0%	0.0	10	$0.29	$0.24	$0.53
Open Office Area	7'7"	206	1.15	80	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Locker Room		230	1.15		2	3	40	F	276	30	50.0%	0.1	36	$1.06	$0.89	$1.95
Locker/Shower Room		230	1.15		5	2	40	F	460	30	50.0%	0.2	60	$1.77	$1.49	$3.26
Locker/Shower Room		103	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Bed Area (Abandoned)		230	1.15		2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Open Office Area Closet A		206	1.15		2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Open Office Area Closet B		206	1.15		2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Middle Bldg. Exit Lobby		103	1		3	1	75	I	225	50	95.0%	0.2	49	$1.65	$1.21	$2.86
Theatre (Locked)																
Custodial Service (Locked)																
Second Floor																
Chaplain's Office	7'	215	1.15	20	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Reading Room	7'	204	1.15	45	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Administrative Office	7'	204	1.15	15	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Library	7'	204	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Restroom #1	7'	n/a	1.15		1	2	20	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Restroom #2	7'	n/a	1.15		1	2	20	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Class Room	7'	204	1.15	20	1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Sunday School Room	7'	204	1.15	30	5	2	40	F	460	50	95.0%	0.4	100	$3.37	$2.48	$5.84
Kitchen	7'	n/a	1.15		1	2	32	F	74	50	95.0%	0.1	16	$0.54	$0.40	$0.93
Kitchen		n/a	1.15	20	1	2	22	F	51	50	95.0%	0.0	11	$0.37	$0.27	$0.64
Library Stacks	8'2"	230	1.15	115	36	2	40	F	3,312	50	95.0%	3.1	719	$24.25	$17.82	$42.07
Restroom		n/a	1.15		1	1	32	F	37	30	50.0%	0.0	5	$0.14	$0.12	$0.26
Restroom		n/a	1.15		1	1	22	F	25	30	50.0%	0.0	3	$0.10	$0.08	$0.18
Library Check-Out	8'2"	215	1.15	35	2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Copy Room	8'2"	n/a	1.15	30	1	1	32	F	37	50	95.0%	0.0	8	$0.27	$0.20	$0.47
Copy Room			1.15		1	1	22	F	25	50	95.0%	0.0	5	$0.19	$0.14	$0.32
Reading Room	8'	215	1.15	30	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Closet	8'	103	1		2	1	75	I	150	10	0.0%	0.0	7	$0.00	$0.16	$0.16
Childrens Room	8'	215	1.15	50	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Closet	8'	101	1		1	1	100	I	100	10	0.0%	0.0	4	$0.00	$0.11	$0.11
Office	8'	215	1.15	50	2	3	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
			TOTALS						12,450			11	2,474	$82	$61	$143

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE: F = FLUORESCENT I = INCANDESCENT HPS = HIGH PRESSURE SODIUM MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

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07-Apr-95

Lighting Model
Letterkenny Army Depot
Building 2260
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Entrance Lobby		115	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Distri. Branch Chief Reception	10'	206	1.15	66	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Distri. Branch Chief Office	10'	206	1.15	70	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Property Disposal Officer	10'	206	1.15	70	8	4	40	F	1,472	50	95.0%	1.4	319	$10.78	$7.92	$18.70
Open Office Area	10'	206	1.15	90	52	4	40	F	9,568	50	95.0%	9.1	2,076	$70.04	$51.49	$121.54
Storage Room	10'	206	1.15	30	1	4	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Handicap Restroom	10'	206	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Ladies Room		206	1.15		2	4	40	F	368	30	50.0%	0.2	48	$1.42	$1.19	$2.61
Ladies Room Entrance		n/a	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Mens Room		206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room		206	1.15		1	4	40	I	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Mens Room		206	1.15		1	4	40	F	184	30	50.0%	0.1	24	$0.71	$0.59	$1.30
Exit Lobby		206	1.15		1	4	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exterior																
Exterior		106	1		2	1	60	I	120	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						14,500			13	2,995	$100	$74	$174

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
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NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 2329
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Pesticide																
Pesticide Storage		215	1.15	20	6	2	40	F	552	10	0.0%	0.0	24	$0.00	$0.59	$0.59
Pesticide Sink Area		215	1.15	15	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Restroom		206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Locker Room	7'10"	206	1.15	65	2	2	40	F	184	10	0.0%	0.0	8	$0.00	$0.20	$0.20
Staff Office	7'10"	206	1.15	70	3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Corridor	7'10"	206	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Exterior																
Exterior		502	1.15		2	1	150	HPS	345	80	0.0%	0.0	120	$0.00	$2.97	$2.97
			TOTALS						1,909			1	323	$6	$8	$14

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

Lighting Model
Letterkenny Army Depot
Building 2755
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Main Entrance Lobby	8'3"	117	1		1	2	60	I	120	50	95.0%	0.1	26	$0.88	$0.65	$1.52
Open Office Area	8'3"	206	1.15	45	12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Main Corridor	8'3"	206	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
File Room	8'10"	206	1.15	50	3	4	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Main Exit Sign		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Corridor to Rest Room	8'10"	206	1.15		3	2	40	F	276	50	95.0%	0.3	60	$2.02	$1.49	$3.51
Corridor to Exit Sign		602	1		1	2	7	I	14	168	95.0%	0.0	10	$0.10	$0.25	$0.36
Breakroom	13'	230	1.15	30	6	2	40	F	552	50	95.0%	0.5	120	$4.04	$2.97	$7.01
Breakroom Sink		101	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Womens Room		220	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Womens Room		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Room Shower		116	1		1	1	60	I	60	30	50.0%	0.0	8	$0.23	$0.19	$0.42
Womens Room Mirror		n/a	1.15		1	2	20	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Mens Room		220	1.15		2	1	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room Shower		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room Shower (Not Used)		116	1		2	1	60	I	120	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Mens Room Mirror		n/a	1.15		1	1	40	F	46	30	50.0%	0.0	6	$0.18	$0.15	$0.33
Warehouse Area Building #1	16'	702	1.15		10	1	150	HPS	1,725	50	95.0%	1.6	374	$12.63	$9.28	$21.91
Lab Room	10'	709	1.15	40	5	3	40	F	690	50	95.0%	0.7	150	$5.05	$3.71	$8.76
Warehouse Area Bay #1 Exit		EXP	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Warehouse Area Bay #2	16'	709	1.15		16	1	150	HPS	2,760	168	95.0%	2.6	2,012	$20.21	$49.91	$70.11
Warehouse Area Bay #2 Exit		EXP	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Warehouse Area Bay #3	16'	709	1.15	30	16	1	150	HPS	2,760	50	95.0%	2.6	599	$20.21	$14.85	$35.06
Warehouse Area Bay #3 Exit		EXP	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Warehouse Area Bay #9	16'	709	1.15	30	16	1	150	HPS	2,760	50	95.0%	2.6	599	$20.21	$14.85	$35.06
Warehouse Area Bay #9 Exit		EXP	1		1	2	15	I	30	168	95.0%	0.0	22	$0.22	$0.54	$0.76
Warehouse Area Bay #5	16'	709	1.15		17	1	175	MV	3,421	50	95.0%	3.3	742	$25.05	$18.41	$43.46
Warehouse Area Bay #5A	12'	709	1.15	5	2	1	175	MV	403	50	95.0%	0.4	87	$2.95	$2.17	$5.11
Warehouse Area Bay #5B	12'	709	1.15	5	2	1	175	MV	403	50	95.0%	0.4	87	$2.95	$2.17	$5.11
Warehouse Area Bay #5C	12'	709	1.15	5	2	1	175	MV	403	50	95.0%	0.4	87	$2.95	$2.17	$5.11
Warehouse Area Bay #5 Exit		EXP	1		2	2	15	I	60	168	95.0%	0.1	44	$0.44	$1.08	$1.52
Exterior																
Exterior		503	1.15		3	1	150	HPS	518	80	0.0%	0.0	180	$0.00	$4.46	$4.46
Exterior		720	1.15		9	1	150	HPS	1,553	80	0.0%	0.0	539	$0.00	$13.37	$13.37
			TOTALS						22,146			19	6,574	$144	$163	$307

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

Lighting Model
Letterkenny Army Depot
Building 3311
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Administration																
Entrance Lobby		220	1.15		1	1	40	F	46	50	95.0%	0.0	10	$0.34	$0.25	$0.58
Entrance Corridor	9'9"	220	1.15		8	1	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Directors Office	9'7"	228	1.15	75	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Director Surveillance Office	9'7"	215	1.15	30	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #1	9'11"	228	1.15	70	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Conference Room	9'4"	206	1.15	95	8	4	40	F	1,472	35	75.0%	1.1	224	$8.51	$5.55	$14.05
Office #2	9'9"	228	1.15	70	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Open Office Area	9'9"	228	1.15	50	30	4	40	F	5,520	50	95.0%	5.2	1,198	$40.41	$29.71	$70.12
Office #3	9'7"	228	1.15	50	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Office #4	9'8"	228	1.15	45	12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Office #5	9'10"	228	1.15	65	12	4	40	F	2,208	50	95.0%	2.1	479	$16.16	$11.88	$28.05
Vault		101	1		1	1	100	I	100	10	0.0%	0.0	4	$0.00	$0.11	$0.11
Exit Corridor		218	1.15		2	1	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Copy and Mail Room	7'4"	228	1.15	30	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Womens Room	10'6"	220	1.15		2	1	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Room	8'1"	220	1.15		2	1	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room	10'6"	220	1.15		2	1	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Mens Room	8'1"	220	1.15		2	1	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Office #6	9'10"	228	1.15	30	9	4	40	F	1,656	50	95.0%	1.6	359	$12.12	$8.91	$21.04
Office #7	10'	228	1.15	25	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #8	10'	228	1.15	25	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #9	7'7"	228	1.15	60	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #9		218	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Vending Area	10'4"	228	1.15	20	6	4	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Vending Area		228	1.15		1	2	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Exit Lobby (no lamp)		101	1		0			I	0	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Smoke Room	7'10"	230	1.15	20	1	3	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Smoke Room	7'10"	220	1.15		2	1	40	F	92	50	95.0%	0.1	20	$0.67	$0.50	$1.17
Ice Room		101	1		1	1	200	I	200	10	0.0%	0.0	9	$0.00	$0.22	$0.22
Boiler Room		103	1		1	1	300	I	300	5	0.0%	0.0	7	$0.00	$0.16	$0.16
Surveillance Office #1	10'5"	228	1.15	70	18	4	40	F	3,312	50	95.0%	3.1	719	$24.25	$17.82	$42.07
Surveillance Office #2	10'5"	228	1.15	60	4	4	40	F	736	50	95.0%	0.7	160	$5.39	$3.96	$9.35
Office #10	7'3"	103	1	15	1	1	100	I	100	50	95.0%	0.1	22	$0.73	$0.54	$1.27
Office #10		220	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office #11	7'3"	220	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office #12	7'3"	230	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office #13	7'3"	206	1.15	70	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Entrance #13 & #14	7'3"	220	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Office #14	7'3"	220	1.15	45	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office #15	7'3"	220	1.15	45	4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Mechanical Room		230	1.15		2	3	40	F	276	5	0.0%	0.0	6	$0.00	$0.15	$0.15
Mechanical Room		230	1.15		1	2	40	F	92	5	0.0%	0.0	2	$0.00	$0.05	$0.05

Lighting Model
Letterkenny Army Depot
Building 3311
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exterior																
Exterior		103	1		2	1	200	I	400	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior		107	1		1	1	200	I	200	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						28,992			26	5,851	$197	$145	$342

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991

Lighting Model
Letterkenny Army Depot
Building 3315
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Entrance		116	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Office Area		228	1.15		12	2	40	F	1,104	50	95.0%	1.0	240	$8.08	$5.94	$14.02
Mens Room		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Room		215	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Managers Office	8'	206	1.15	80	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Paint Storage (locked)																
Warehouse Area (daylight)	13'4"	302	1.15	65	14	1	150	HPS	2,415	50	95.0%	2.3	524	$17.68	$13.00	$30.68
Break Room	8'	206	1.15	50	2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Exit Lobby		116	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Exit Lobby		116	1		1	1	60	I	60	50	95.0%	0.1	13	$0.44	$0.32	$0.76
Key Area	13'4"	220	1.15	20	10	2	40	F	920	50	95.0%	0.9	200	$6.74	$4.95	$11.69
Key Area		228	1.15		2	2	40	F	184	50	95.0%	0.2	40	$1.35	$0.99	$2.34
Key Area		111	1		2	1	100	I	200	50	95.0%	0.2	43	$1.46	$1.08	$2.54
Exterior																
Exterior		502	1.15		1	1	150	HPS	173	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						6,096			6	1,269	$43	$31	$74

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 3321
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Hunter Check-In																
Meeting Room	7'5"	221	1.15	15	3	1	40	F	138	50	95.0%	0.1	30	$1.01	$0.74	$1.75
Meeting Room		230	1.15		4	2	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Meeting Room		228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Locker Room		228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Office		228	1.15		2	4	40	F	368	50	95.0%	0.3	80	$2.69	$1.98	$4.67
Exterior																
Exterior		103	1		4	1	100	I	400	0	0.0%	0.0	0	$0.00	$0.00	$0.00
Exterior Spot Lighting		112	1		1	1	150	I	150	0	0.0%	0.0	0	$0.00	$0.00	$0.00
			TOTALS						2,160			2	349	$12	$9	$20

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
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HPS = HIGH PRESSURE SODIUM
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MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Building 5426
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Warehouse																
Office	8'	206	1.15	85	7	4	40	F	1,288	50	95.0%	1.2	279	$9.43	$6.93	$16.36
Mens Room	8'	206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Womens Room	8'	206	1.15		1	2	40	F	92	30	50.0%	0.0	12	$0.35	$0.30	$0.65
Exterior																
Exterior		503	1.15		2	1	150	HPS	345	80	0.0%	0.0	120	$0.00	$2.97	$2.97
			TOTALS						1,817			1	423	$10	$10	$21

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Lighting Model
Letterkenny Army Depot
Road/Parking Lot Lighting
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminalres	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Exterior Lighting																
Building #1399		403	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #1398		403	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #1398		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #2323		403	1.15		3	1	250	HPS	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Kenny Gardens		403	1.15		4	1	250	HPS	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Kenny Gardens		402	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
South Patrol Road		402	1.15		4	1	250	HPS	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Building #616		402	1.15		2	1	250	MV	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #616		403	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #619		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #619		403	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Gate #17		403	1.15		1	1	175	MV	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Gate #17		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Pennsylvania Avenue		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Pennsylvania Avenue		402	1.15		5	1	250	HPS	1,438	80	0.0%	0.0	499	$0.00	$12.38	$12.38
Travel Camp		n/a	1.15		1	1	150	MV	173	80	0.0%	0.0	60	$0.00	$1.49	$1.49
Building #646		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Salvage Yard		402	1.15		2	1	250	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Sergeant Major's House		403	1.15		1	1	175	HPS	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Guard Shack, Ammo Area Ent.		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Ammo Packing Area		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Ammo Packing Area		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Ammo Packing Area		n/a	1.15		1	1	250	LYT	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #3311		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #3315		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #3238		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #3245		403	1.15		3	1	175	MV	604	80	0.0%	0.0	210	$0.00	$5.20	$5.20
Building #3253 (Flood)		507	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
Building #3253 (Dual Flood)		507	1.15		4	1	150	HPS	690	80	0.0%	0.0	240	$0.00	$5.94	$5.94
Building #365		403	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #360		403	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Building #349		507	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Building #370		n/a	1.15		5	1	180	LYT	1,035	80	0.0%	0.0	359	$0.00	$8.91	$8.91
Building #370		505	1.15		14	1	400	MV	6,440	80	0.0%	0.0	2,236	$0.00	$55.45	$55.45
Building #370		503	1.15		4	1	400	HPS	1,840	80	0.0%	0.0	639	$0.00	$15.84	$15.84
Building #370 Guard Shack		507	1.15		2	1	250	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #330 North		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
California Avenue		n/a	1.15		3	1	250	SYT	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
California Avenue		402	1.15		9	1	250	MV	2,588	80	0.0%	0.0	898	$0.00	$22.28	$22.28
Building #330 South Dock #2		507	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #320 South		507	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #320 South		507	1.15		3	1	175	HPS	604	80	0.0%	0.0	210	$0.00	$5.20	$5.20
Building #320 Parking		n/a	1.15		2	1	180	LYT	414	80	0.0%	0.0	144	$0.00	$3.56	$3.56
Gate #6 (twin)		n/a	1.15		8	4	80	F	2,944	80	0.0%	0.0	1,022	$0.00	$25.35	$25.35
Gate #6		n/a	1.15		2	1	180	LYT	414	80	0.0%	0.0	144	$0.00	$3.56	$3.56
Building #350 Parking Lot		n/a	1.15		4	1	180	LYT	828	80	0.0%	0.0	287	$0.00	$7.13	$7.13
Building #350 Parking Lot		507	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Credit Union		507	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Overcash Drive		402	1.15		21	1	250	MV	6,038	80	0.0%	0.0	2,096	$0.00	$51.99	$51.99

Lighting Model
Letterkenny Army Depot
Road/Parking Lot Lighting
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Overcash Drive		402	1.15		2	1	250	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Overcash Drive		n/a	1.15		3	1	180	LYT	621	80	0.0%	0.0	216	$0.00	$5.35	$5.35
Overcash Drive		507	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #51 South		507	1.15		1	1	1000	MV	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Washington Avenue		402	1.15		3	1	250	HPS	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Washington Avenue		402	1.15		6	1	250	MV	1,725	80	0.0%	0.0	599	$0.00	$14.85	$14.85
Michigan Avenue		402	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Michigan Avenue		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #1 East Parking		n/a	1.15		4	1	180	LYT	828	80	0.0%	0.0	287	$0.00	$7.13	$7.13
Building #1 East Parking		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #238 Parking Lot		n/a	1.15		2	1	180	LYT	414	80	0.0%	0.0	144	$0.00	$3.56	$3.56
Oregon Avenue		402	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Building #57 South Parking		507	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Arkansas Avenue		507	1.15		5	1	250	MV	1,438	80	0.0%	0.0	499	$0.00	$12.38	$12.38
Arkansas Avenue		403	1.15		1	1	175	MV	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Kansas Avenue		507	1.15		4	1	250	MV	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Texas Avenue		402	1.15		2	1	250	MV	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #500		507	1.15		1	1	400	MV	460	80	0.0%	0.0	160	$0.00	$3.96	$3.96
Building #521 Parking Lot		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Building #521 Parking Lot		n/a	1.15		1	1	180	SYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Building #521 Parking Lot		n/a	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Gate #1		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Gate #1		n/a	1.15		2	4	80	F	736	80	0.0%	0.0	256	$0.00	$6.34	$6.34
Gate #1		n/a	1.15		3	4	80	F	1,104	80	0.0%	0.0	383	$0.00	$9.51	$9.51
Coffey Avenue		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Coffey Avenue		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Coffey Avenue		402	1.15		5	1	250	MV	1,438	80	0.0%	0.0	499	$0.00	$12.38	$12.38
Kenny Hills		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
529 Parking Lot		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
522 Parking Lot		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Access Road to Golf Club		402	1.15		2	1	250	MV	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #505		403	1.15		1	1	500	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Visitors Residents		403	1.15		1	1	500	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #37 Parking Lot		507	1.15		2	1	250	MV	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Building #37 Parking Lot		403	1.15		1	1	175	MV	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Building #37 Parking Lot		403	1.15		1	1	175	HPS	201	80	0.0%	0.0	70	$0.00	$1.73	$1.73
Building #37 Parking Lot		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Building #421 Parking Lot		n/a	1.15		1	1	180	LYT	207	80	0.0%	0.0	72	$0.00	$1.78	$1.78
Carbaugh Avenue		402	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Bldgs#416, 417 & 418 Parking Lo		402	1.15		2	1	250	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Bldgs#416, 417 & 418 Parking Lo		n/a	1.15		1	1	1000	LYT	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Building #433		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #424		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #426		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
New Jersey Avenue		402	1.15		3	1	250	MV	863	80	0.0%	0.0	299	$0.00	$7.43	$7.43
Wisconson Avenue		402	1.15		4	1	250	MV	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Wisconson Avenue		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Wisconson Avenue		507	1.15		1	1	1000	HPS	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Building #3 Parking Lot		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #S-353		507	1.15		1	1	1000	HPS	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90

Lighting Model
Letterkenny Army Depot
Road/Parking Lot Lighting
Table Designation

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $
Building #652		402	1.15		2	1	250	HPS	575	80	0.0%	0.0	200	$0.00	$4.95	$4.95
Wash Rack Area		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Storage Pad Hazardous Material		507	1.15		1	1	1000	MV	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Tank Farm		402	1.15		5	1	250	HPS	1,438	80	0.0%	0.0	499	$0.00	$12.38	$12.38
Building #691		507	1.15		1	1	400	MV	460	80	0.0%	0.0	160	$0.00	$3.96	$3.96
Building #691		507	1.15		1	1	1000	HPS	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Building #691		403	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #696		507	1.15		1	1	1000	MV	1,150	80	0.0%	0.0	399	$0.00	$9.90	$9.90
Building #683 Parking Lot		402	1.15		1	1	250	HPS	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #663 West		402	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Building #663 West		402	1.15		6	1	250	HPS	1,725	80	0.0%	0.0	599	$0.00	$14.85	$14.85
Building #663 West		507	1.15		1	1	250	MV	288	80	0.0%	0.0	100	$0.00	$2.48	$2.48
Parking Area		n/a	1.15		8	1	250	MV	2,300	80	0.0%	0.0	799	$0.00	$19.80	$19.80
			TOTALS						83,392			0	28,954	$0	$718	$718

INCREMENTAL DEMAND COST $/KW = $7.706
INCREMENTAL USAGE COST $/KWH = $0.0248

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR
LYT = LONG YELLOW TUBE
SYT = SHORT YELLOW TUBE

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

Sample Lighting Model
Letterkenny Army Depot
Building #
Table 2.3.1

Room Area or Description	Ceiling Height Ft	Luminaire Type Army #	Luminaire Factor 1	Light Levels Meas (FC)	# Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Lamp Type	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Monthly Demand (Kw)	Monthly Usage (Kwh)	Monthly Cost $

INCREMENTAL DEMAND COST $/KW =
INCREMENTAL USAGE COST $/KWH =

NOTE #1: LUMINAIRE FACTOR: FOR BALLASTED FIXTURES, A BALLAST FACTOR OF 1.15 IS USED AND FOR INCANDESCENT FIXTURES A FACTOR OF 1 IS USED.

NOTE #2: LAMP TYPE:
F = FLUORESCENT
HPS = HIGH PRESSURE SODIUM
I = INCANDESCENT
MV = MERCURY VAPOR

NOTE #3: LUMINAIRE TYPE ARMY #: U.S. ARMY CORPS OF ENGINEERS, LIGHTING FIXTURES, STANDARD DETAIL NO. 40-06-04, FEBRUARY 1991.

ATTACHMENT 9.5

Energy Conservation Opportunities

ECO-1
Incandescent Exit Signs to Fluorescent Exit Signs

Existing. Twenty-two of the buildings at the Letterkenny Army Depot contain approximately 95 incandescent exit signs of various mounting and directional types. Included with the 95 exit signs are 8 decorative exit sign luminaires in building 500. The attached data table for ECO-1 lists the areas which currently utilize these luminaires. The existing exit signs utilize six watt (6), seven watt (7), fifteen watt (15), twenty watt (20) and twenty-five watt (25) incandescent lamps. The total watts for the existing exit signs is 2,423 watts. The exit signs operate 24 hours per day and contribute approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	27.6 kW/yr (2.3 kW/mo x 12 mo/yr)
Electric Usage	=	21,204 kWh/yr (1,767 kWh/mo x 12 mo/yr)
Electric Cost	=	$740 (27.6 kW/yr x $7.706/kW) + (21,204 kWh/yr x $.0248/kWh) = $739, use $740

Proposed. Remove and replace all existing 87 exit sign interior housings with a fluorescent retrofit system. Reference the attached data table for ECO-1. Replace the remaining 8 decorative fixtures with a PL-5, lamp/ballast retrofit. The fluorescent PL retrofit system for the exit signs consists of a single ballast and 1 seven (7) watt compact fluorescent lamp. The new exit signs will consume 8 watts of electricity per luminaire and the PL-5 will consume 6 watts per luminaire. The new luminaires generally have a long life expectancy. The exit sign fluorescent lamps have an average life of 15,000 hours plus, which is about three times the life of the incandescent lamps they are replacing. The annual electric demand, usage and cost of the proposed ECO is noted below:

Electric Demand	=	8.4 kW/yr (.7 kW/mo x 12 mo/yr)
Electric Usage	=	6,528 kWh/yr (544 kW/mo x 12 mo/yr)
Electric Cost	=	$230 (8.4 kW/yr x $7.706/kW) + (6,528 kWh/yr x $.0248/kWh) = $227, use $230

Implementation Cost. The expected construction cost for implementing the project is expected to be $4,900. The breakdown is noted below and shown on the attached ECO data table.

Material	$2,300
Labor	$2,600
Engineering	$ 0
Total	**$4,900**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	19.2 kW/yr (27.6 - 8.4)
Electric Usage	=	14,676 kWh/yr (21,204 - 6,528)
Energy Cost	=	$510/yr ($740 - $230)
Annual Energy Savings	=	50.1 mmBtu/yr
Energy Usage	=	50.1 mmBtu/yr (14,676 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing incandescent exit signs with fluorescent lamps, a maintenance savings will result because the fluorescent lamps have a three times longer life than incandescent lamps. The annual maintenance savings is noted below:

Data

Incandescent Lamp Life	=	5,000 hours
Fluorescent Lamp Life	=	15,000 hours
Operation Period Per Year	=	8,760 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$4 each
Fluorescent Lamp Cost	=	$10 each
Total Quantity Exit Signs	=	95

Calculation

Maintenance (Incandescent)	=	$18.70 (20 x 1/3 + 4) x 8,760/5,000
Maintenance (Fluorescent)	=	$9.70 (20 x 1/3 + 10) x 8,760/15,000
Annual Recurring Maintenance Savings	=	$860 (18.7 - 9.7) x 95 = $855, use $860

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 3.76 years with a savings to investment ratio of 4.64.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO1
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO-1
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 4900.		
B. SIOH	$ 270.		
C. DESIGN COST	$ 0.		
D. TOTAL COST (1A+1B+1C)	$ 5170.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 5170.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	50.	$ 364.	18.17	$ 6618.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 150.	17.22	$ 2583.
N. TOTAL		50.	$ 514.		$ 9201.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 860.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 14809.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-) (4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-) (3A2+3Bd4)	$ 14809.
4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$ 1374.
5. SIMPLE PAYBACK PERIOD (1G/4)	3.76 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$ 24010.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= (IF < 1 PROJECT DOES NOT QUALIFY)	4.64
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):	9.63 %

ECO-1
Letterkenny Army Depot
Incandescent Exit Signs to Fluorescent Exit Signs

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																				
Office Area																				
Corridor A (Exit Sign)	1	1	20	20	168	95%	0.0	15	$1.76	$4.34	$6.10	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$3.64
Building 2-S																				
Administration																				
South Entrance Lobby Exit	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 3																				
Computer Area																				
EOC Open Office Area Exit (V)	1	2	7	14	168	95%	0.0	10	$1.29	$2.98	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.82
Raised Flr. Co.Rm.#3 (Exit Sign)	3	2	15	90	168	95%	0.1	66	$7.91	$19.64	$27.55	Fluorescent Exit Sign Retrofit Kit	8	0.0	18	$7.36	$75	$84	$0	$159	$20.19
Conference Rm. (Exit) (Vacant)	1	2	7	14	168	95%	0.0	10	$1.29	$2.98	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.82
Raised Flr. Co. Rm.#7 (Exit Sign)	3	2	15	90	168	95%	0.1	66	$7.91	$19.64	$27.55	Fluorescent Exit Sign Retrofit Kit	8	0.0	18	$7.36	$75	$84	$0	$159	$20.19
South East Area																				
Stairwell Lobby Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
South West Area																				
Corridor 5-10-B (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
North East Area																				
Corridor 22-14-J Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Conference 26-F (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Open Office Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 5N																				
Administration																				
Open Office Area (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
West Entrance Lobby (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 6N																				
Administration																				
Exit Sign	8	2	15	240	168	95%	0.2	175	$21.08	$52.08	$73.16	Fluorescent Exit Sign Retrofit Kit	8	0.1	47	$19.63	$200	$224	$0	$424	$53.53
Building 14																				
First Floor																				
Receiving Room (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Machine Shop Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Machine Shop (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 19																				
Warehouse																				
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Building 102																				
Lab																				
Exit Signs	4	2	6	48	168	95%	0.0	35	$4.22	$10.42	$14.63	Fluorescent Exit Sign Retrofit Kit	8	0.0	23	$9.82	$100	$112	$0	$212	$4.82
Building 350																				
Office #1																				
Conference Room (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Managers Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Reception (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Office #3																				
ASRS plus Ofc. Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
ASRS plus Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Annex Office Area #6																				
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Annex Ofc. Corridor (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Building 412																				
Training & Conf. Center																				
Conference Room Exit Sign	3	2	15	90	168	95%	0.1	66	$7.91	$19.53	$27.44	Fluorescent Exit Sign Retrofit Kit	8	0.0	18	$7.36	$75	$84	$0	$159	$20.07

ECO-1
Letterkenny Army Depot
Incandescent Exit Signs to Fluorescent Exit Signs

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 416																					
Administration																					
Main Entrance (Exit Sign)	1	2	6	12	168	95%	0.0	9	$1.05	$2.60	$3.66	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.20
Rear (Exit Sign)	1	2	6	12	168	95%	0.0	9	$1.05	$2.60	$3.66	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.20
Building 417																					
Personnel Barracks																					
Corridor Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Building 418																					
Personnel Barracks																					
Corridor Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Building 500																					
First Floor																					
Command Corridor (Exit Sign)	1	1	25	25	168	95%	0.0	18	$2.20	$5.42	$7.62	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	4	$1.75	$18	$20	$0	$38	$5.87
Legal Office (Exit Sign)	3	1	25	75	168	95%	0.1	55	$6.59	$16.27	$22.86	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	13	$5.26	$54	$60	$0	$114	$17.60
Second Floor																					
Auditorium (Exit Sign)	1	1	25	25	168	95%	0.0	18	$2.20	$5.42	$7.62	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	4	$1.75	$18	$20	$0	$38	$5.87
Ctr. Bldg. Open Ofc. (Exit Sign)	1	1	25	25	168	95%	0.0	18	$2.20	$5.42	$7.62	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	4	$1.75	$18	$20	$0	$38	$5.87
Basement Floor																					
Ent/Vending Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Opn. Ofc. Area Rm#16(Exit Sign)	1	1	25	25	168	95%	0.0	18	$2.20	$5.42	$7.62	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	4	$1.75	$18	$20	$0	$38	$5.87
DPCA Office Corridor (Exit Sign)	1	1	25	25	168	95%	0.0	18	$2.20	$5.42	$7.62	PL-5, Lamp/Ballast Retrofit, Twin	6	0.0	4	$1.75	$18	$20	$0	$38	$5.87
Corridor (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 521																					
First Floor																					
General Office (Exit Sign)	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$2.12
Corridor (Exit Sign)	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$2.12
Building 529																					
First Floor																					
Supply Closet (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Dumb Waiter (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Freezer Store Room (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Second Floor																					
Bar Dining Area (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Second Flr. Entrance (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Dining Room (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Building 618																					
First Floor																					
Corridor Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Second Floor																					
Exit Signs	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Building 619																					
Dining Area																					
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Building 639																					
Physical Fitness Center																					
Exit Sign	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$2.12
Building 645																					
Day Care																					
Play Area Exit Sign	3	2	15	90	168	95%	0.1	66	$7.91	$19.53	$27.44	Fluorescent Exit Sign Retrofit Kit	8	0.0	18	$7.36	$75	$84	$0	$159	$20.07
Entrance Lobby Exit Sign	2	2	7	28	168	95%	0.0	20	$2.46	$6.08	$8.54	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$3.63
Building 646																					
Youth Center																					
Open Area Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Entrance Area Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69

ECO-1
Letterkenny Army Depot
Incandescent Exit Signs to Fluorescent Exit Signs

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 2755																					
Warehouse																					
Warehouse Area Bay #3 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Warehouse Area Bay #2 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Warehouse Area Bay #9 Exit	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$6.69
Warehouse Area Bay #1 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Warehouse Area Bay #5 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	Fluorescent Exit Sign Retrofit Kit	8	0.0	12	$4.91	$50	$56	$0	$106	$13.38
Main Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
Corridor to Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	Fluorescent Exit Sign Retrofit Kit	8	0.0	6	$2.45	$25	$28	$0	$53	$1.81
TOTALS	95			2423			2.3	1767	$210	$530	$740			0.7	544	$230	$2,300	$2,600	$0	$4,900	$510

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16-May-95

ECO-2
Incandescent Exit Signs to LED Exit Signs

Existing. Twenty-two of the buildings at the Letterkenny Army Depot contain approximately 87 incandescent exit signs of various mounting and directional types. The attached data table for ECO-2 lists the areas which currently utilize these luminaires. The existing exit signs utilize six watt (6), seven watt (7), fifteen watt (15), and twenty watt (20) incandescent lamps. The total watts for the existing exit signs is 2,223 watts. The exit signs operate 24 hours per day and contribute approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	25.2 kW/yr (2.1 kW/mo x 12 mo/yr)
Electric Usage	=	19,452 kWh/yr (1,621 kWh/mo x 12 mo/yr)
Electric Cost	=	$680 (25.2 kW/yr x $7.706/kW) + (19,452 kWh/yr x $.0248/kWh) = $677, use $680

Proposed. Remove and replace all existing 87 exit sign interior housings with a LED retrofit system. Reference the attached data table for ECO-2. The LED retrofit system for the exit signs consists of a LED panel which consumes about 2 watts. The new luminaires generally have a 25 year plus life expectancy. The annual electric demand, usage and cost of the proposed ECO is noted below:

Electric Demand	=	2.4 kW/yr (.2 kW/mo x 12 mo/yr)
Electric Usage	=	1,524 kWh/yr (127 kWh/mo x 12 mo/yr)
Electric Cost	=	$60 (2.4 kW/yr x $7.706/kW) + (1,524 kWh/yr x $.0248/kWh) = $56, use $60

Implementation Cost. The expected construction cost for implementing the project is expected to be $6,400. The breakdown is noted below and shown on the attached data table.

Material	$3,900
Labor	$2,400
Engineering	$ 0
Total	**$6,300, use $6,400**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	22.8 kW/yr (25.2 - 2.4)
Electric Usage	=	17,928 kWh/yr (19,452 - 1,524)
Energy Cost	=	$620/yr ($680 - $60)
Annual Energy Savings	=	61.2 mmBtu/yr
Energy Usage	=	61.2 mmBtu/yr (17,928 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing incandescent exit signs with an LED board, a maintenance savings will result. The annual maintenance savings is noted below:

Data

Incandescent Lamp Life	=	5,000 hours
LED Board Life	=	25 years
Operation Period Per Year	=	8,760 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$4 each
Total Quantity Exit Signs	=	87

Calculation

Maintenance (Incandescent)	=	$18.70 (20 x 1/3 + 4) x 8,760/5,000
Maintenance (LED)	=	$0.00
Annual Recurring Maintenance Savings	=	$1,600 (18.7 x 87) = $1,627, use $1,600

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 3.03 years with a savings to investment ratio of 5.74.

LIFE CYCLE COST ANALYSIS SUMMARY STUDY: ECO2
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO2
ANALYSIS DATE: 03-27-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$	6400.	
B. SIOH	$	350.	
C. DESIGN COST	$	0.	
D. TOTAL COST (1A+1B+1C)	$	6750.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$	0.	
F. PUBLIC UTILITY COMPANY REBATE	$	0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 6750.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	61.	$ 445.	18.17	$ 8084.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 180.	17.22	$ 3100.
N. TOTAL		61.	$ 625.		$ 11184.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 1600.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 27552.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 27552.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 2225.

5. SIMPLE PAYBACK PERIOD (1G/4) 3.03 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 38736.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= 5.74
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): 10.56 %

ECO-2
Letterkenny Army Depot
Incandescent Exit Signs to LED Exit Signs

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Office Area																					
Corridor A (Exit Sign)	1	1	20	20	168	95%	0.0	15	$1.76	$4.34	$6.10	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$5.49
Building 2-S																					
Administration																					
South Entrance Lobby Exit	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 3																					
Computer Area																					
EOC Open Office Area Exit (V)	1	2	7	14	168	95%	0.0	10	$1.29	$2.98	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Raised Flr. Co.Rm.#3 (Exit Sign)	3	2	15	90	168	95%	0.1	66	$7.91	$19.64	$27.55	LED Exit Sign Retrofit Kit	2	0.0	4	$1.83	$135	$84	$0	$219	$25.72
Conference Rm. (Exit) (Vacant)	1	2	7	14	168	95%	0.0	10	$1.29	$2.98	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Raised Flr. Co. Rm.#7 (Exit Sign)	3	2	15	90	168	95%	0.1	66	$7.91	$19.64	$27.55	LED Exit Sign Retrofit Kit	2	0.0	4	$1.83	$135	$84	$0	$219	$25.72
South East Area																					
Stairwell Lobby Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
South West Area																					
Corridor 5-10-B (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
North East Area																					
Corridor 22-14-J Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Conference 26-F (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Open Office Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 5N																					
Administration																					
Open Office Area (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
West Entrance Lobby (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 6N																					
Administration																					
Exit Sign	8	2	15	240	168	95%	0.2	175	$21.08	$52.08	$73.16	LED Exit Sign Retrofit Kit	2	0.0	12	$4.88	$360	$224	$0	$584	$68.28
Building 14																					
First Floor																					
Receiving Room (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Machine Shop Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Machine Shop (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 19																					
Warehouse																					
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Building 102																					
Lab																					
Exit Signs	4	2	6	48	168	95%	0.0	35	$4.22	$10.42	$14.63	LED Exit Sign Retrofit Kit	2	0.0	6	$2.44	$180	$112	$0	$292	$12.19
Building 350																					
Office #1																					
Conference Room (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Managers Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Reception (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Office #3																					
ASRS plus Ofc. Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
ASRS plus Office (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Annex Office Area #6																					
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Annex Ofc. Corridor (Exit Sign)	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Building 412																					
Training & Conf. Center																					
Conference Room Exit Sign	3	2	15	90	168	95%	0.1	66	$7.91	$19.53	$27.44	LED Exit Sign Retrofit Kit	2	0.0	4	$1.83	$135	$84	$0	$219	$25.61

ECO-2
Letterkenny Army Depot
Incandescent Exit Signs to LED Exit Signs

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 416																				
Administration																				
Main Entrance (Exit Sign)	1	2	6	12	168	95%	0.0	9	$1.05	$2.60	$3.66	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.05
Rear (Exit Sign)	1	2	6	12	168	95%	0.0	9	$1.05	$2.60	$3.66	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.05
Building 417																				
Personnel Barracks																				
Corridor Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Building 418																				
Personnel Barracks																				
Corridor Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Building 500																				
Basement Floor																				
Ent/Vending Area (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Corridor (Exit Sign)	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 521																				
First Floor																				
General Office (Exit Sign)	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.96
Corridor (Exit Sign)	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.96
Building 529																				
First Floor																				
Supply Closet (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Dumb Waiter (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Freezer Store Room (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Second Floor																				
Bar Dining Area (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Second Flr. Entrance (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Dining Room (Exit Sign)	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Building 618																				
First Floor																				
Corridor Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Second Floor																				
Exit Signs	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Building 619																				
Dining Area																				
Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Building 639																				
Physical Fitness Center																				
Exit Sign	1	1	15	15	168	95%	0.0	11	$1.32	$3.25	$4.57	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.96
Building 645																				
Day Care																				
Play Area Exit Sign	3	2	15	90	168	95%	0.1	66	$7.91	$19.53	$27.44	LED Exit Sign Retrofit Kit	2	0.0	4	$1.83	$135	$84	$0	$219	$25.61
Entrance Lobby Exit Sign	2	2	7	28	168	95%	0.0	20	$2.46	$6.08	$8.54	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$7.32
Building 646																				
Youth Center																				
Open Area Exit Sign	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Entrance Area Exit Sign	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54

ECO-2
Letterkenny Army Depot
Incandescent Exit Signs to LED Exit Signs

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 2755																					
Warehouse																					
Warehouse Area Bay #3 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Warehouse Area Bay #2 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Warehouse Area Bay #9 Exit	1	2	15	30	168	95%	0.0	22	$2.64	$6.51	$9.15	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$8.54
Warehouse Area Bay #1 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Warehouse Area Bay #5 Exit	2	2	15	60	168	95%	0.1	44	$5.27	$13.02	$18.29	LED Exit Sign Retrofit Kit	2	0.0	3	$1.22	$90	$56	$0	$146	$17.07
Main Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
Corridor to Exit Sign	1	2	7	14	168	95%	0.0	10	$1.23	$3.04	$4.27	LED Exit Sign Retrofit Kit	2	0.0	1	$0.61	$45	$28	$0	$73	$3.66
TOTALS	87			2223			2.1	1621	$200	$480	$680			0.2	127	$60	$3,900	$2,400	$0	$6,400	$620

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16-May-95

ECO-3
Incandescent Area Light over Paper Exit Sign

Existing. Thirteen of the warehouse buildings at the Letterkenny Army Depot contain approximately 47 incandescent luminaires with 200 watt lamps illuminating paper exit signs. The attached data table for ECO-3 lists the areas which currently utilize these luminaires. The total watts for the existing lamps is 9,400 watts. The lamps operate an average of 50 hours per week and contribute approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	106.8 kW/yr (8.9 kW/mo x 12 mo/yr)
Electric Usage	=	26,148 kWh/yr (2,179 kWh/mo x 12 mo/yr)
Electric Cost	=	$1,500 (106.8 kW/yr x $7.706/kW) + (26,148 kWh/yr x $.0248/kWh) = $1,471, use $1,500

Proposed. Remove and replace all existing 47 incandescent luminaires with LED exit signs. Reference the attached data table for ECO-3. The LED exit sign will consume 2 watts of electricity per luminaire. The new luminaires generally have a 25-year plus life expectancy. The average life of 200 watt incandescent lamp is 750 hours, which makes this project a maintenance saver. The annual electric demand, usage and cost of the proposed ECO is noted below:

Electric Demand	=	1.2 kW/yr (.1 kW/mo x 12 mo/yr)
Electric Usage	=	264 kWh/yr (22 kW/mo x 12 mo/yr)

Electric Cost	=	$20 (1.2 kW/yr x $7.706/kW) + (264 kWh/yr x $.0248/kWh) = $16, use $20

Implementation Cost. The expected construction cost for implementing the project is expected to be $4,600. The breakdown is noted below and shown on the attached ECO data table.

Material	$2,700
Labor	$1,900
Engineering	$ 0
Total	**$4,600**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	105.6 kW/yr (106.8 - 1.2)
Electric Usage	=	25,884 kWh/yr (26,148 - 264)
Energy Cost	=	$1,500/yr ($1,500 - $20) = $1,480, use $1,500
Annual Energy Saved	=	88.3 mmBtu/yr
Energy Usage	=	88.3 mmBtu/yr (25,884 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By replacing the existing incandescent lamps with LED exit signs, a maintenance savings will result. The annual maintenance is noted below:

Data

Incandescent Lamp Life	=	750 hours
LED Board Life	=	25 years
Operation Period Per Year	=	2,600 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$1 each
Total Quantity of Lamps	=	47

Calculation.

Maintenance (Indandescent)	=	$26.58 (20 x 1/3 + 1) x 2,600/750
Maintenance (LED)	=	$0.00
Annual Recurring Maintenance Savings	=	$1,200 (26.58 - 0) x 47 = $1,249, use $1,200

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 1.83 years with a savings to investment ratio of 9.54.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO3
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO3
ANALYSIS DATE: 03-27-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 4600.		
B. SIOH	$ 253.		
C. DESIGN COST	$ 0.		
D. TOTAL COST (1A+1B+1C)	$ 4853.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.		
F. PUBLIC UTILITY COMPANY REBATE	$ 0.		
G. TOTAL INVESTMENT (1D - 1E - 1F)		$	4853.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	88.	$ 642.	18.17	$ 11664.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 810.	17.22	$ 13948.
N. TOTAL		88.	$ 1452.		$ 25612.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) — $ 1200.
(1) DISCOUNT FACTOR (TABLE A) — 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) — $ 20664.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 20664.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 2652.

5. SIMPLE PAYBACK PERIOD (1G/4) — 1.83 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) — $ 46276.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= — 9.54
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): — 12.83 %

ECO-3
Letterkenny Army Depot
Incandescent Area Light over Paper Exit Sign to LED Exit Sign

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 31																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 32																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 34																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 41																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 42S																				
Warehouse																				
Exit Door	1	1	200	200	50	95%	0.2	43	$17.57	$12.92	$30.49	LED Exit Sign , Single Face	2	0.0	0	$0.30	$58	$40	$0	$98	$30.18
Building 43																				
Warehouse																				
Exit Doors - One Blocked Off	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 44																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 47																				
Warehouse																				
Exit Door - South	3	1	200	600	90	95%	0.6	234	$52.71	$69.75	$122.45	LED Exit Sign , Single Face	2	0.0	2	$1.22	$174	$120	$0	$294	$121.23
Exit Door - North	1	1	200	200	90	95%	0.2	78	$17.57	$23.25	$40.82	LED Exit Sign , Single Face	2	0.0	1	$0.41	$58	$40	$0	$98	$40.41
Building 51																				
Warehouse																				
Warehouse Milvan Exit Door	2	1	200	400	50	95%	0.4	87	$35.14	$25.83	$60.97	LED Exit Sign , Single Face	2	0.0	1	$0.61	$116	$80	$0	$196	$60.36
Building 52																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 53																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 54																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
Building 55																				
Warehouse																				
Exit Door	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	LED Exit Sign , Single Face	2	0.0	2	$1.22	$232	$160	$0	$392	$120.72
TOTALS	47			9400			8.9	2179	$830	$650	$1,500			0.1	22	$20	$2,700	$1,900	$0	$4,600	$1,500

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16-May-95

ECO-4A
Incandescent Area Lighting Lamp Retrofit

Existing. Twenty-four of the buildings at Letterkenny Army Depot utilize approximately 306 incandescent luminaires of various wattages and types. The attached data table for ECO-4A lists the areas which currently utilize these incandescent fixtures. The annual electric demand, usage, and cost are as follows:

Electric Demand	=	300 kW/yr (25 kW/mo x 12 mo/yr)
Electric Usage	=	87,792 kWh/yr (7,316 kW/mo x 12 mo/yr)
Electric Cost	=	$4,500 (300 kW/yr x $7.706/kW) + (87,792 kWh/yr x $0.0248 kWh) = $4,489, use $4,500

Proposed. The attached ECO-4A data table provides an option for an energy efficient lamp replacement in the existing areas which currently utilize incandescent fixtures. The retrofit is expected to have the following annual electric demand, usage, and cost:

Electric Demand	=	172.8 kW/yr (14.4 kW/mo x 12 mo/yr)
Electric Usage	=	48,120 kWh/yr (4,010 kW/mo x 12 mo/yr)
Electric Cost	=	$2,500 (172.8 kW/yr x $7.706/kW) + (48,120 kWh/yr x $0.0248/kWh) = $2,525 use $2,500

Implementation Cost. The expected construction cost for the project is $9,700. The cost breakdown is noted below and shown on the attached ECO data table.

Material	$6,300
Labor	$3,400
Engineering	$ 0
Total	**$9,700**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	127.2 kW (300 - 172.8)
Electric Usage	=	39,672 kWh (87,792 - 48,120)
Energy Cost	=	$2,000 ($4,500 - $2,500)
Annual Energy Savings	=	135.4 mmBtu
Energy Usage	=	135.4 mmBtu (39,672 kWh x 3,413 Btu/kWh ÷ 1,000,000 Btu/mmBtu)

Maintenance Savings. By retrofitting the existing incandescent lamps with fluorescent and halogen lamps, a maintenance savings will result because the fluorescent lamps have a three times longer life than incandescent lamps. The annual maintenance savings is noted below:

Data

Incandescent Lamp Life Avg	=	1,000 hours
Fluorescent Lamp Life Avg	=	10,000 hours
Operation Period Per Year Avg	=	2,475 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$1 each
Fluorescent Lamp Cost	=	$10 each
Total Quantity	=	306

Calculation

Maintenance (Incandescent)	=	$18.98 (20 x 1/3 + 1) x 2,475/1,000
Maintenance (Fluorescent)	=	$4.13 (20 x 1/3 + 10) x 2,475/10,000
Annual Recurring Maintenance Savings	=	$4,500 (18.98 - 4.13) x 306 = $4,544, use $4,500

Discussion. The retrofit is estimated to provide a reduction in cooling costs and an increase in heating costs; however, these are expected to offset each other. The construction costs are based on the project being performed by an outside contractor. The Depot could implement the project as part of its continuing operation and maintenance program where fixtures could be changed out by maintenance personnel. This approach would reduce some of the labor cost but would extend out the energy savings time frame.

This ECO project will maintain existing light levels while using less energy. The use of fluorescent and halogen lamps has the potential of providing maintenance savings because of their longer lamp life.

A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, annual recurring maintenance costs, and fixture replacement costs. The fixture replacement costs are based on the assumption that the existing fixtures will need to be replaced within the next 10 years. The fixture replacement was assumed to occur in three phases, year 5, year 7, and year 10. The replacement dollar amounts were taken from ECO-4B. The total construction cost for ECO-4B was divided by three and the dollars escalated 5, 7, and 10 years into the future assuming a 4% yearly increase. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 2.39 years with a saving to investment ratio of 6.72.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO4A
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO4A
ANALYSIS DATE: 03-27-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 9700.		
B. SIOH	$ 535.		
C. DESIGN COST	$ 0.		
D. TOTAL COST (1A+1B+1C)	$ 10235.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 10235.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	135.	$ 984.	18.17	$ 17886.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 980.	17.22	$ 16876.
N. TOTAL		135.	$ 1964.		$ 34761.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 4500.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 77490.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
1. FIXTURE 1	$ -16500.	5	.86	-14190.
2. FIXTURE 2	$ -17850.	7	.81	-14459.
3. FIXTURE 3	$ -20100.	10	.74	-14874.
d. TOTAL	$ -54450.			-43523.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 33968.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 4286.

5. SIMPLE PAYBACK PERIOD (1G/4) 2.39 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 68729.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= 6.72
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): 11.26 %

ECO-4A
Letterkenny Army Depot
Incandescent Area Lighting Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 5N																					
Administration																					
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	50 Watt Halogen Lamp	50	0.0	7	$4.25	$5	$10	$0	$15	$0.85
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	50 Watt Halogen Lamp	50	0.0	7	$4.25	$5	$10	$0	$15	$0.85
Building 10																					
North East Area																					
Exit Lobby 5-A	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	7	$4.91	$33	$10	$0	$43	$10.33
Building 14																					
First Floor																					
Entrance Lobby	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	7	$4.91	$33	$10	$0	$43	$10.33
Ladies Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Corridor to Mens Room	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	7	$4.91	$33	$10	$0	$43	$10.33
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Corridor to Ladies Room	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	7	$4.91	$33	$10	$0	$43	$10.33
Building 51																					
Warehouse																					
Self Service Rear Locker Room	3	1	100	300	30	50%	0.2	39	$13.87	$11.62	$25.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	13	$8.21	$99	$30	$0	$129	$17.29
Building 247																					
Warehouse																					
Stair to Offices	1	1	75	75	50	95%	0.1	16	$6.59	$4.84	$11.43	PL-22 Lamp/Ballast Retrofit, Quad	25	0.0	5	$3.86	$31	$10	$0	$41	$7.58
Building 320																					
Maintenance																					
Womens Locker Room Lobby	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	90 Watt Halogen Lamp	90	0.0	12	$7.65	$8	$10	$0	$18	$0.85
Main Office Mens Room :	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	90 Watt Halogen Lamp	90	0.0	12	$7.65	$8	$10	$0	$18	$0.85
Womens Locker Room Office	4	1	100	400	30	50%	0.2	52	$18.49	$15.50	$33.99	90 Watt Halogen Lamp	90	0.2	47	$30.59	$32	$40	$0	$72	$3.40
Mens Locker Room Lobby	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	90 Watt Halogen Lamp	90	0.0	12	$7.65	$8	$10	$0	$18	$0.85
Mens Locker Room Office	4	1	100	400	30	50%	0.2	52	$18.49	$15.50	$33.99	90 Watt Halogen Lamp	90	0.2	47	$30.59	$32	$40	$0	$72	$3.40
Shower Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Building 350																					
Office #2																					
Computer PLC I/O Room	7	1	100	700	90	95%	0.7	273	$61.49	$81.37	$142.86	PL-28 Lamp/Ballast Retrofit, Quad	32	0.2	88	$46.00	$231	$70	$0	$301	$96.86
Mens Room	16	1	100	1600	54	95%	1.5	375	$140.56	$111.59	$252.15	PL-28 Lamp/Ballast Retrofit, Quad	32	0.5	121	$81.19	$528	$160	$0	$688	$170.96
Womens Room	16	1	100	1600	54	95%	1.5	375	$140.56	$111.59	$252.15	PL-28 Lamp/Ballast Retrofit, Quad	32	0.5	121	$81.19	$528	$160	$0	$688	$170.96
Corridor to Shop	2	1	100	200	90	95%	0.2	78	$17.57	$23.25	$40.82	PL-28 Lamp/Ballast Retrofit, Quad	32	0.1	25	$13.14	$66	$20	$0	$86	$27.67
Office #3																					
Breakroom	7	1	100	700	90	95%	0.7	273	$61.49	$81.37	$142.86	PL-28 Lamp/Ballast Retrofit, Quad	32	0.2	88	$46.00	$231	$70	$0	$301	$96.86
Corridor btwn. ASRS&Breakrm.	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	13	$6.57	$33	$10	$0	$43	$13.84
Office #4																					
Corridor to Shop	3	1	100	300	90	95%	0.3	117	$26.35	$34.87	$61.23	PL-28 Lamp/Ballast Retrofit, Quad	32	0.1	38	$19.72	$99	$30	$0	$129	$41.51
Mens Room	7	1	100	700	54	95%	0.7	164	$61.49	$48.82	$110.32	PL-28 Lamp/Ballast Retrofit, Quad	32	0.2	53	$35.52	$231	$70	$0	$301	$74.79
Building 370																					
Equipment Repair																					
Corridor to Mens & Ladies Room	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	13	$6.57	$33	$10	$0	$43	$13.84
Ladies Room	4	1	100	400	54	95%	0.4	94	$35.14	$27.90	$63.04	PL-28 Lamp/Ballast Retrofit, Quad	32	0.1	30	$20.30	$132	$40	$0	$172	$42.74
Shop Area Entrance	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	13	$6.57	$33	$10	$0	$43	$13.84
Mens Room (Entrance)	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	8	$5.07	$33	$10	$0	$43	$10.68
Building 424																					
Cable & Harness																					
Mens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	8	$5.07	$33	$10	$0	$43	$10.68
Womens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	8	$5.07	$33	$10	$0	$43	$10.68
Building 428																					
Counseling																					
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	90 Watt Halogen Lamp	90	0.0	12	$7.65	$8	$10	$0	$18	$0.85
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76

ECO-4A
Letterkenny Army Depot
Incandescent Area Lighting Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																				
First Floor																				
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Occupational Health Rm.#43A	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	90 Watt Halogen Lamp	90	0.2	39	$27.44	$16	$20	$0	$36	$3.05
Conference Room #1	10	1	75	750	35	75%	0.6	114	$52.02	$33.90	$85.92	PL-22 Lamp/Ballast Retrofit, Quad	25	0.2	38	$28.98	$310	$100	$0	$410	$56.94
Conference Room #1	2	1	75	150	35	75%	0.1	23	$10.40	$6.78	$17.18	50 Watt Halogen Lamp	50	0.1	15	$11.46	$10	$20	$0	$30	$5.73
Kitchen	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	3	$2.28	$16	$10	$0	$26	$6.87
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Basement Level																				
Stairwell #4 Command Area	1	2	60	120	168	95%	0.1	87	$10.54	$26.04	$36.58	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	22	$9.11	$32	$20	$0	$52	$27.47
Stairwell #2 Police Area	1	2	60	120	168	95%	0.1	87	$10.54	$26.04	$36.58	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	22	$9.11	$32	$20	$0	$52	$27.47
Womens Room	2	1	100	200	30	50%	0.1	26	$9.25	$7.75	$17.00	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	8	$5.47	$66	$20	$0	$86	$11.52
Stairwell #1 Dispensary Side	3	2	60	360	168	95%	0.3	262	$31.63	$78.12	$109.74	PL-13, Lamp/Ballast Retrofit, Quad	15	0.1	65	$27.34	$96	$60	$0	$156	$82.40
Stairwell #4 Command Area	1	2	100	200	168	95%	0.2	146	$17.57	$43.40	$60.97	PL-28 Lamp/Ballast Retrofit, Quad	32	0.1	47	$19.63	$66	$20	$0	$86	$41.34
Mens Room	2	1	100	200	30	50%	0.1	26	$9.25	$7.75	$17.00	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	8	$5.47	$66	$20	$0	$86	$11.52
Stairwell #3 Legal Office	2	2	60	240	168	95%	0.2	175	$21.08	$52.08	$73.16	PL-13, Lamp/Ballast Retrofit, Quad	15	0.1	44	$18.23	$64	$40	$0	$104	$54.93
Building 521																				
First Floor																				
Watch Room	5	1	20	100	168	95%	0.1	73	$8.78	$21.70	$30.48	PL-5, Lamp/Ballast Retrofit	6	0.0	21	$8.76	$90	$100	$0	$190	$21.72
Building 522																				
First Floor																				
Kitchen Area	1	2	60	120	50	95%	0.1	26	$10.54	$7.75	$18.29	50 Watt Halogen Lamp	50	0.1	22	$15.24	$10	$20	$0	$30	$3.05
Lobby	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	PL-28 Lamp/Ballast Retrofit, Quad	32	0.1	14	$9.82	$66	$20	$0	$86	$20.67
Mens Room	1	2	60	120	30	50%	0.1	16	$5.55	$4.65	$10.20	50 Watt Halogen Lamp	50	0.1	13	$8.50	$10	$20	$0	$30	$1.70
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	4	$2.74	$33	$10	$0	$43	$5.76
Second Floor																				
Womens Room	1	2	60	120	30	50%	0.1	16	$5.55	$4.65	$10.20	50 Watt Halogen Lamp	50	0.1	13	$8.50	$10	$20	$0	$30	$1.70
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Building 523																				
Administration																				
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Building 529																				
First Floor																				
Bar Table Area Pool Table Lgts.	2	3	60	360	60	95%	0.3	94	$31.63	$27.90	$59.52	PL-13, Lamp/Ballast Retrofit, Quad	15	0.1	23	$14.83	$96	$60	$0	$156	$44.69
Bar Table Area	16	1	75	1200	60	95%	1.1	312	$105.42	$92.99	$198.41	PL-22 Lamp/Ballast Retrofit, Quad	25	0.4	105	$66.93	$496	$160	$0	$656	$131.48
Second Floor																				
Gallery	8	1	75	600	60	95%	0.6	156	$52.71	$46.50	$99.21	PL-22 Lamp/Ballast Retrofit, Quad	25	0.2	53	$33.47	$248	$80	$0	$328	$65.74
Bar Dining Area	3	1	75	225	60	95%	0.2	59	$19.77	$17.44	$37.20	PL-22 Lamp/Ballast Retrofit, Quad	25	0.1	20	$12.55	$93	$30	$0	$123	$24.65
Over Bar Counter	12	1	100	1,200	60	95%	1.1	312	$105.42	$92.99	$198.41	90 Watt Halogen Lamp	90	1.0	281	$178.57	$96	$120	$0	$216	$19.84
Bar Dining Area	11	1	100	1100	60	95%	1.0	286	$96.63	$85.24	$181.88	90 Watt Halogen Lamp	90	0.9	258	$163.69	$88	$110	$0	$198	$18.19
Dining Room	67	1	100	6,700	60	95%	6.4	1745	$588.58	$519.22	$1,108	90 Watt Halogen Lamp	90	5.7	1,570	$997.02	$536	$670	$0	$1,206	$110.78
Womens Restroom Mirror	9	1	40	360	60	95%	0.3	99	$31.63	$27.90	$59.52	PL-7, Lamp/Ballast Retrofit	8	0.1	19	$11.98	$162	$180	$0	$342	$47.54
Building 581																				
First Floor																				
Main Entrance Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Second Floor																				
Stairway to Second Floor	2	3	60	360	50	95%	0.3	78	$31.63	$23.25	$54.87	50 Watt Halogen Lamp	50	0.3	65	$45.73	$30	$60	$0	$90	$9.15
Building 618																				
First Floor																				
Middle Exit Door	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52

ECO-4A
Letterkenny Army Depot
Incandescent Area Lighting Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 637																				
Chapel																				
Entrance Lobby	3	1	75	225	40	75%	0.2	39	$15.60	$11.62	$27.23	PL-22 Lamp/Ballast Retrofit, Quad	25	0.1	13	$9.19	$93	$30	$0	$123	$18.04
Alter	3	1	300	900	40	75%	0.7	156	$62.42	$46.50	$108.92	120 Watt Elliptical Reflector Flood	120	0.3	62	$43.57	$90	$60	$0	$150	$65.35
Second Level	1	1	60	60	40	75%	0.0	10	$4.16	$3.10	$7.26	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	3	$1.81	$16	$10	$0	$26	$5.45
Second Level	4	1	60	240	40	75%	0.2	42	$16.64	$12.40	$29.04	50 Watt Halogen Lamp	50	0.2	35	$24.20	$20	$40	$0	$60	$4.84
Entrance Lobby	1	1	60	60	40	75%	0.0	10	$4.16	$3.10	$7.26	50 Watt Halogen Lamp	50	0.0	9	$6.05	$5	$10	$0	$15	$1.21
Back Area of Chapel	1	1	75	75	40	75%	0.1	13	$5.20	$3.87	$9.08	PL-22 Lamp/Ballast Retrofit, Quad	25	0.0	4	$3.06	$31	$10	$0	$41	$6.01
Back Area of Chapel	3	1	60	180	40	75%	0.1	31	$12.48	$9.30	$21.78	50 Watt Halogen Lamp	50	0.1	26	$18.15	$15	$30	$0	$45	$3.63
Building 663																				
Administration & Trades																				
Lower Level Mens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	90 W Incandescent Lamp	90	0.1	21	$14.18	$1	$10	$0	$11	$1.58
Lower Level Womens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	90 W Incandescent Lamp	90	0.1	21	$14.18	$1	$10	$0	$11	$1.58
Building 664																				
First Floor																				
Locker/Shower Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Middle Bldg. Exit Lobby	3	1	75	225	50	95%	0.2	49	$19.77	$14.53	$34.30	PL-22 Lamp/Ballast Retrofit, Quad	25	0.1	16	$11.57	$93	$30	$0	$123	$22.73
Restroom	1	1	75	75	30	50%	0.0	10	$3.47	$2.91	$6.37	PL-22 Lamp/Ballast Retrofit, Quad	25	0.0	3	$2.15	$31	$10	$0	$41	$4.22
Building 2260																				
Administration																				
Entrance Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52
Ladies Room Entrance	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Building 2755																				
Warehouse																				
Main Entrance Lobby	1	2	60	120	50	95%	0.1	26	$10.54	$7.75	$18.29	50 Watt Halogen Lamp	50	0.1	22	$15.24	$10	$20	$0	$30	$3.05
Womens Room Shower	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	2	$1.27	$16	$10	$0	$26	$3.83
Breakroom Sink	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	PL-13, Lamp/Ballast Retrofit, Quad	15	0.0	3	$2.28	$16	$10	$0	$26	$6.87
Building 3311																				
Administration																				
Office #10	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	PL-28 Lamp/Ballast Retrofit, Quad	32	0.0	7	$4.91	$33	$10	$0	$43	$10.33
Building 3315																				
Warehouse																				
Entrance	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52
Exit Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52
Exit Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	50 Watt Halogen Lamp	50	0.0	11	$7.62	$5	$10	$0	$15	$1.52
Key Area	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	90 Watt Halogen Lamp	90	0.2	39	$27.44	$16	$20	$0	$36	$3.05
TOTALS	306			28580			25.0	7316	$2,300	$2,200	$4,500			14.4	4010	$2,500	$6,300	$3,400	$0	$9,700	$2,000

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16-May-95

ECO-4B
Incandescent Area Lighting Fixture Replacement

Existing. Thirty-four of the buildings at Letterkenny Army Depot utilize approximately 354 incandescent luminaires of various wattages and types. The attached data table for ECO-4B lists the areas which currently utilize these incandescent fixtures. The annual electric demand, usage, and cost are as follows:

Electric Demand	=	435.6 kW/yr (36.3 kW/mo x 12 mo/yr)
Electric Usage	=	123,024 kWh/yr (10,252 kWh/mo x 12 mo/yr)
Electric Cost	=	$6,400 (435.6 kW/yr x $7.706/kW) + (123,024 kWh/yr x $0.0248 kWh) = $6,407, use $6,400

Proposed. The attached ECO-4B data table provides an option for an energy efficient luminaire replacement in the existing areas which currently utilize incandescent fixtures. The retrofit is expected to have the following annual electric demand, usage, and cost:

Electric Demand	=	174 kW/yr (14.5 kW/mo x 12 mo/yr)
Electric Usage	=	48,456 kWh/yr (4,038 kW/mo x 12 mo/yr)
Electric Cost	=	$2,500 (174 kW/yr x $7.706/kW) + (48,456 kWh/yr x $0.0248/kWh) = $2,542, use $2,500

Implementation Cost. The expected construction cost for the project is $24,000. The cost breakdown is noted below and shown on the attached ECO data table.

Material	$ 9,500
Labor	$11,900
Engineering	$ 2,600
Total	**$24,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	261.6 kW (435.6 - 174)
Electric Usage	=	74,568 kWh (123,024 - 48,456)
Energy Cost	=	$3,900 ($6,400 - $2,500)
Annual Energy Savings	=	254.5 mmBtu
Energy Usage	=	254.5 mmBtu (74,568 kWh x 3,413 Btu/kWh ÷ 1,000,000 Btu/mmBtu)

Maintenance Savings. By retrofitting the existing incandescent luminaires, a maintenance savings will result. The annual maintenance savings resulting from the implementation of this project is noted below:

Data

Incandescent Lamp Life Avg	=	1,000 hours
Fluorescent Lamp Life Avg	=	10,000 hours
Operation Period Per Year	=	2,475 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$1 each
Fluorescent Lamp Cost	=	$10 each
Total Quantity	=	354

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO4B
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO4B
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 21400.	
B. SIOH	$ 1177.	
C. DESIGN COST	$ 2600.	
D. TOTAL COST (1A+1B+1C)	$ 25177.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 25177.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	255.	$ 1850.	18.17	$ 33618.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 2000.	17.22	$ 34440.
N. TOTAL		255.	$ 3850.		$ 68058.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 5300.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 91266.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 91266.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 9150.

5. SIMPLE PAYBACK PERIOD (1G/4) 2.75 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 159324.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= 6.33
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): 11.00 %

ECO-4B
Letterkenny Army Depot
Incandescent Area Lighting Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3																				
North East Area																				
Conference 26-F	14	1	90	1260	35	75%	0.9	191	$87.39	$56.96	$144.34	Down Light with 75 Watt ER30 Lamp	75	0.8	159	$120.29	$308	$462	$92	$862	$24.06
Building 5N																				
Administration																				
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Down Light with PQ13	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Down Light with PQ13	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Building 10																				
North East Area																				
Exit Lobby 5-A	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$10.69
North West Area																				
Main Entrance Lobby	19	1	75	1425	50	95%	1.4	309	$125.18	$92.03	$217.21	Down Light with PQ13	15	0.3	62	$43.30	$418	$627	$125	$1,170	$173.91
Conference Room 1-K	2	1	75	150	35	75%	0.1	23	$10.40	$6.78	$17.18	Down Light with PQ13	15	0.0	5	$3.43	$44	$66	$13	$123	$13.76
Building 14																				
First Floor																				
Entrance Lobby	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$10.69
Ladies Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Corridor to Mens Room	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$10.69
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Corridor to Ladies Room	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$10.69
Building 19																				
Warehouse																				
Mens Rest Room	2	1	200	400	30	50%	0.2	52	$18.49	$15.50	$33.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	15	$9.86	$78	$66	$17	$161	$24.14
Womens Rest Room	2	1	200	400	30	50%	0.2	52	$18.49	$15.50	$33.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	15	$9.86	$78	$66	$17	$161	$24.14
Building 31																				
Warehouse																				
Warehouse	2	1	200	400	50	95%	0.4	87	$35.14	$25.83	$60.97	Two-Lamp,4-Foot Industrial Strip	58	0.1	25	$17.68	$78	$66	$17	$161	$43.29
Building 32																				
Warehouse																				
Warehouse	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	Two-Lamp,4-Foot Industrial Strip	58	0.2	50	$35.36	$156	$132	$35	$323	$86.58
Building 33N																				
Warehouse																				
Fenced Area in Warehouse	1	1	200	200	50	95%	0.2	43	$17.57	$12.92	$30.49	Two-Lamp,4-Foot Industrial Strip	58	0.1	13	$8.84	$39	$33	$9	$81	$21.64
Building 34																				
Warehouse																				
Warehouse	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	Two-Lamp,4-Foot Industrial Strip	58	0.2	50	$35.36	$156	$132	$35	$323	$86.58
Building 41																				
Warehouse																				
Warehouse - Stnd, Inc.	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	Two-Lamp,4-Foot Industrial Strip	58	0.2	50	$35.36	$156	$132	$35	$323	$86.58
Building 44																				
Warehouse																				
Warehouse	4	1	200	800	50	95%	0.8	174	$70.28	$51.66	$121.94	Two-Lamp,4-Foot Industrial Strip	58	0.2	50	$35.36	$156	$132	$35	$323	$86.58
Building 47																				
Warehouse																				
Mens Room South	2	1	200	400	54	95%	0.4	9	$35.14	$2.79	$37.93	Two-Lamp,4-Foot Industrial Strip	58	0.1	27	$18.28	$78	$66	$17	$161	$19.65
Womens Room South	2	1	200	400	54	95%	0.4	9	$35.14	$2.79	$37.93	Two-Lamp,4-Foot Industrial Strip	58	0.1	27	$18.28	$78	$66	$17	$161	$19.65
Building 51																				
Warehouse																				
Self Service Rear Mens Room	3	1	200	600	30	50%	0.3	78	$27.74	$23.25	$50.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	23	$14.79	$117	$99	$26	$242	$36.20
Self Service Rear Locker Room	3	1	100	300	30	50%	0.2	39	$13.87	$11.62	$25.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	12	$7.62	$81	$105	$22	$208	$17.87
Self Service Rear Womens Room	2	1	200	400	30	50%	0.2	52	$18.49	$15.50	$33.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	15	$9.86	$78	$66	$17	$161	$24.14

ECO-4B
Letterkenny Army Depot
Incandescent Area Lighting Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 247																				
Warehouse																				
Stair to Offices	1	1	75	75	50	95%	0.1	16	$6.59	$4.84	$11.43	Round Surface Mt. w/ 2-PL9 Lamps	21	0.0	4	$3.16	$27	$35	$7	$69	$8.28
Building 320																				
Maintenance																				
Womens Locker Room Lobby	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Down Light with 75 Watt ER30 Lamp	75	0.0	10	$6.37	$22	$33	$7	$62	$2.12
Main Office Mens Room :	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Down Light with 75 Watt ER30 Lamp	75	0.0	10	$6.37	$22	$33	$7	$62	$2.12
Womens Locker Room Office	4	1	100	400	30	50%	0.2	52	$18.49	$15.50	$33.99	Down Light with 75 Watt ER30 Lamp	75	0.2	39	$25.50	$88	$132	$26	$246	$8.50
Mens Locker Room Lobby	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Down Light with 75 Watt ER30 Lamp	75	0.0	10	$6.37	$22	$33	$7	$62	$2.12
Mens Locker Room Office	4	1	100	400	30	50%	0.2	52	$18.49	$15.50	$33.99	Down Light with 75 Watt ER30 Lamp	75	0.2	39	$25.50	$88	$132	$26	$246	$8.50
Shower Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Building 350																				
Office #2																				
Computer PLC I/O Room	7	1	100	700	90	95%	0.7	273	$61.49	$81.37	$142.86	Round Surface Mt. w/ 2-PL13 Lamps	30	0.2	82	$42.72	$189	$245	$52	$486	$100.15
Mens Room	16	1	100	1600	54	95%	1.5	375	$140.56	$111.59	$252.15	Round Surface Mt. w/ 2-PL13 Lamps	30	0.5	112	$75.39	$432	$560	$119	$1,111	$176.76
Womens Room	16	1	100	1600	54	95%	1.5	375	$140.56	$111.59	$252.15	Round Surface Mt. w/ 2-PL13 Lamps	30	0.5	112	$75.39	$432	$560	$119	$1,111	$176.76
Corridor to Shop	2	1	100	200	90	95%	0.2	78	$17.57	$23.25	$40.82	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	23	$12.20	$54	$70	$15	$139	$28.61
Office #3																				
Breakroom	7	1	100	700	90	95%	0.7	273	$61.49	$81.37	$142.86	Round Surface Mt. w/ 2-PL13 Lamps	30	0.2	82	$42.72	$189	$245	$52	$486	$100.15
Corridor btwn. ASRS&Breakrm.	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	12	$6.10	$27	$35	$7	$69	$14.31
Office #4																				
Corridor to Shop	3	1	100	300	90	95%	0.3	117	$26.35	$34.87	$61.23	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	35	$18.31	$81	$105	$22	$208	$42.92
Mens Room	7	1	100	700	54	95%	0.7	164	$61.49	$48.82	$110.32	Round Surface Mt. w/ 2-PL13 Lamps	30	0.2	49	$32.98	$189	$245	$52	$486	$77.33
Building 370																				
Equipment Repair																				
Corridor to Mens & Ladies Room	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	12	$6.10	$27	$35	$7	$69	$14.31
Ladies Room	4	1	100	400	54	95%	0.4	94	$35.14	$27.90	$63.04	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	28	$18.85	$108	$140	$30	$278	$44.19
Shop Area Entrance	1	1	100	100	90	95%	0.1	39	$8.78	$11.62	$20.41	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	12	$6.10	$27	$35	$7	$69	$14.31
Mens Room (Entrance)	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	7	$4.71	$27	$35	$7	$69	$11.05
Building 412																				
Training & Conf. Center																				
Rear Exit Lobby	1	1	200	200	50	95%	0.2	43	$17.57	$12.92	$30.49	Two-Lamp,4-Foot Industrial Strip	58	0.1	13	$8.84	$39	$33	$9	$81	$21.64
Building 424																				
Cable & Harness																				
Mens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	7	$4.71	$27	$35	$7	$69	$11.05
Womens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	7	$4.71	$27	$35	$7	$69	$11.05
Building 428																				
Counselling																				
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Building 438																				
Repair Shop																				
Mens Room	2	1	300	600	30	50%	0.3	78	$27.74	$23.25	$50.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	15	$9.86	$78	$66	$17	$161	$41.13
Ladies Room	2	1	300	600	30	50%	0.3	78	$27.74	$23.25	$50.99	Two-Lamp,4-Foot Industrial Strip	58	0.1	15	$9.86	$78	$66	$17	$161	$41.13
Office	2	1	300	600	50	95%	0.6	130	$52.71	$38.75	$91.46	Two-Lamp,4-Foot Industrial Strip	58	0.1	25	$17.68	$78	$66	$17	$161	$73.77

ECO-4B
Letterkenny Army Depot
Incandescent Area Lighting Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																				
First Floor																				
Mens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Occupational Health Rm.#43A	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	Down Light with 75 Watt ER30 Lamp	75	0.1	33	$22.86	$44	$66	$13	$123	$7.62
Conference Room #1	10	1	75	750	35	75%	0.6	114	$52.02	$33.90	$85.92	Down Light with PQ13	15	0.1	23	$17.13	$220	$330	$66	$616	$68.79
Kitchen	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Basement Level																				
Stairwell #4 Command Area	1	2	60	120	168	95%	0.1	87	$10.54	$26.04	$36.58	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	22	$9.11	$27	$35	$7	$69	$27.47
Stairwell #2 Police Area	1	2	60	120	168	95%	0.1	87	$10.54	$26.04	$36.58	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	22	$9.11	$27	$35	$7	$69	$27.47
Womens Room	2	1	100	200	30	50%	0.1	26	$9.25	$7.75	$17.00	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	8	$5.08	$54	$70	$15	$139	$11.91
Stairwell #1 Dispensary Side	3	2	60	360	168	95%	0.3	262	$31.63	$78.12	$109.74	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	65	$27.34	$81	$105	$22	$208	$82.40
Stairwell #4 Command Area	1	2	100	200	168	95%	0.2	146	$17.57	$43.40	$60.97	Two-Lamp,4-Foot Industrial Strip	58	0.1	42	$17.68	$39	$33	$9	$81	$43.29
Mens Room	2	1	100	200	30	50%	0.1	26	$9.25	$7.75	$17.00	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	8	$5.08	$54	$70	$15	$139	$11.91
Stairwell #3 Legal Office	2	2	60	240	168	95%	0.2	175	$21.08	$52.08	$73.16	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	44	$18.23	$54	$70	$15	$139	$54.93
Building 522																				
First Floor																				
Kitchen Area	1	2	60	120	50	95%	0.1	26	$10.54	$7.75	$18.29	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$13.73
Lobby	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	Round Surface Mt. w/ 2-PL13 Lamps	30	0.1	13	$9.12	$54	$70	$15	$139	$21.37
Mens Room	1	2	60	120	30	50%	0.1	16	$5.55	$4.65	$10.20	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$7.66
Womens Room	1	1	100	100	30	50%	0.1	13	$4.62	$3.87	$8.50	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$5.96
Second Floor																				
Womens Room	1	2	60	120	30	50%	0.1	16	$5.55	$4.65	$10.20	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	4	$2.54	$27	$35	$7	$69	$7.66
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Building 523																				
Administration																				
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Womens Room	1	1	200	200	30	50%	0.1	26	$9.25	$7.75	$17.00	Two-Lamp,4-Foot Industrial Strip	58	0.0	8	$4.93	$39	$33	$9	$81	$12.07
Building 529																				
Second Floor																				
Over Bar Counter	12	1	100	1,200	60	95%	1.1	312	$105.42	$92.99	$198.41	Down Light with 75 Watt ER30 Lamp	75	0.9	234	$148.81	$264	$396	$79	$739	$49.60
Bar Dining Area	11	1	100	1100	60	95%	1.0	286	$96.63	$85.24	$181.88	Down Light with 75 Watt ER30 Lamp	75	0.8	215	$136.41	$242	$363	$73	$678	$45.47
Dining Room	67	1	100	6,700	60	95%	6.4	1745	$588.58	$519.22	$1,107.80	Down Light with 75 Watt ER30 Lamp	75	4.8	1,309	$830.85	$1,474	$2,211	$442	$4,127	$276.95
Building 581																				
First Floor																				
Main Entrance Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Mens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Womens Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Second Floor																				
Stairway to Second Floor	2	3	60	360	50	95%	0.3	78	$31.63	$23.25	$54.87	1 Lamp Wraparound	30	0.1	13	$9.15	$116	$70	$22	$208	$45.73
Building 618																				
First Floor																				
Middle Exit Door	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Building 637																				
Chapel																				
Entrance Lobby	3	1	75	225	40	75%	0.2	39	$15.60	$11.62	$27.23	Round Surface Mt. w/ 2-PL9 Lamps	21	0.0	11	$7.52	$81	$105	$22	$208	$19.71
Second Level	1	1	60	60	40	75%	0.0	10	$4.16	$3.10	$7.26	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	3	$1.81	$22	$33	$7	$62	$5.45
Second Level	4	1	60	240	40	75%	0.2	42	$16.64	$12.40	$29.04	Down Light with PQ13	15	0.0	10	$7.24	$88	$132	$26	$246	$21.81
Entrance Lobby	1	1	60	60	40	75%	0.0	10	$4.16	$3.10	$7.26	Down Light with PQ13	15	0.0	3	$1.81	$22	$33	$7	$62	$5.45
Back Area of Chapel	1	1	75	75	40	75%	0.1	13	$5.20	$3.87	$9.08	Round Surface Mt. w/ 2-PL9 Lamps	21	0.0	4	$2.51	$27	$35	$7	$69	$6.57
Back Area of Chapel	3	1	60	180	40	75%	0.1	31	$12.48	$9.30	$21.78	Down Light with PQ13	15	0.0	8	$5.43	$66	$99	$20	$185	$16.36

ECO-4B
Letterkenny Army Depot
Incandescent Area Lighting Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 663																				
Administration & Trades																				
Lower Level Womens Room	2	1	200	400	54	95%	0.4	94	$35.14	$27.90	$63.04	Two-Lamp,4-Foot Industrial Strip	58	0.1	27	$18.28	$78	$66	$17	$161	$44.76
Lower Level Mens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	7	$4.71	$27	$35	$7	$69	$11.05
Corridor Outside Snack Bar	3	1	300	900	90	95%	0.9	352	$79.06	$104.62	$183.68	Two-Lamp,4 Foot Industrial Strip	58	0.2	68	$35.51	$117	$99	$26	$242	$148.17
Lower Level Mens Room	2	1	200	400	54	95%	0.4	94	$35.14	$27.90	$63.04	Two-Lamp,4-Foot Industrial Strip	58	0.1	27	$18.28	$78	$66	$17	$161	$44.76
Electrical Supply	9	1	300	2,700	90	95%	2.6	1055	$237.19	$313.85	$551.05	Two-Lamp,4-Foot Industrial Strip	58	0.5	204	$106.54	$351	$297	$78	$726	$444.51
Drawing Files Area	3	1	300	900	54	95%	0.9	211	$79.06	$62.77	$141.83	Two-Lamp,4-Foot Industrial Strip	58	0.2	41	$27.42	$117	$99	$26	$242	$114.41
Lower Level Womens Room	1	1	100	100	54	95%	0.1	23	$8.78	$6.97	$15.76	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	7	$4.71	$27	$35	$7	$69	$11.05
Lower Level Mens Room	2	1	300	600	54	95%	0.6	141	$52.71	$41.85	$94.56	Two-Lamp,4-Foot Industrial Strip	58	0.1	27	$18.28	$78	$66	$17	$161	$76.28
Building 664																				
First Floor																				
Locker/Shower Room	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Middle Bldg. Exit Lobby	3	1	75	225	50	95%	0.2	49	$19.77	$14.53	$34.30	Round Surface Mt. w/ 2-PL9 Lamps	21	0.1	13	$9.47	$81	$105	$22	$208	$24.83
Restroom	1	1	75	75	30	50%	0.0	10	$3.47	$2.91	$6.37	Round Surface Mt. w/ 2-PL9 Lamps	21	0.0	3	$1.76	$27	$35	$7	$69	$4.61
Building 2260																				
Administration																				
Entrance Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Ladies Room Entrance	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Building 2755																				
Warehouse																				
Main Entrance Lobby	1	2	60	120	50	95%	0.1	26	$10.54	$7.75	$18.29	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$16.01
Womens Room Shower	1	1	60	60	30	50%	0.0	8	$2.77	$2.32	$5.10	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	2	$1.27	$22	$33	$7	$62	$3.83
Breakroom Sink	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Round Surface Mt. w/ 1-PL13 Lamp	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Building 3311																				
Administration																				
Office #10	1	1	100	100	50	95%	0.1	22	$8.78	$6.46	$15.24	Round Surface Mt. w/ 2-PL13 Lamps	30	0.0	6	$4.56	$27	$35	$7	$69	$10.69
Building 3315																				
Warehouse																				
Entrance	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Exit Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Exit Lobby	1	1	60	60	50	95%	0.1	13	$5.27	$3.87	$9.15	Down Light with PQ13	15	0.0	3	$2.28	$22	$33	$7	$62	$6.87
Key Area	2	1	100	200	50	95%	0.2	43	$17.57	$12.92	$30.49	Down Light with 75 Watt ER30 Lamp	75	0.1	33	$22.86	$44	$66	$13	$123	$7.62
TOTALS	354			42020			36.3	10252	$3,400	$3,100	$6,400			14.5	4038	$2,500	$9,500	$11,900	$2,600	$24,000	$3,900

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16-May-95

ECO-5
HID Lighting

Existing. Six of the buildings at the Letterkenny Army Depot contain approximately 187 incandescent luminaires at mounting heights of 20 feet above the floor or more. The attached data table for ECO-5 lists the areas which currently utilize these luminaires. The luminaires range in operation from 168 hours to 40 hours per week, most contributing approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	525.6 kW/yr (43.8 kW/mo x 12 mo/yr)
Electric Usage	=	215,112 kWh/yr (17,926 kWh/mo x 12 mo/yr)
Electric Cost	=	$9,400 (525.6 kW/yr x $7.706/kW) + (215,112 kWh/yr x $.0248/kWh) = $9,385, use $9,400

Proposed. Remove and replace all existing incandescent luminaires and replace with high-pressure sodium or metal halide luminaires. Reference the attached data table for ECO-5. The new luminaires have a long life expectancy. The lamps for metal halide average 10,000 hours of operation. The high-pressure sodium lamps average 24,000 hours of operation. The metal halide and high-pressure sodium lamps have a life of 13 and 32 times respectively when compared to the life of the incandescent lamps they are replacing. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	140.4 kW/yr (11.7 kW/mo x 12 mo/yr)
Electric Usage	=	59,424 kWh/yr (4,952 kWh/mo x 12 mo/yr)
Electric Cost	=	$2,600 (140.4 kW/yr x $7.706/kW) + (59,424 kWh/yr x $.0248/kWh) = $2,555, use $2,600

Implementation Cost. The expected construction cost for implementing the project is expected to be $41,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$29,000
Labor	$ 7,200
Engineering	$ 4,400
Total	**$40,600, use $41,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	385.2 kW/yr (525.6 - 140.4)
Electric Usage	=	155,688 kWh/yr (215,112 - 59,424)
Energy Cost	=	$6,800/yr ($9,400 - $2,600)
Annual Energy Savings	=	531.4 mmBtu/yr
Energy Usage	=	531.4 mmBtu/yr (155,688 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings.

By retrofitting the existing incandescent luminaires with HID luminaires, a maintenance savings will result. The annual maintenance savings is noted below:

Data

Incandescent Lamp Life	=	750 hours
HID Lamp Life Avg	=	16,000 hours
Operation Period Per Year	=	4,873 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$1 each
HID Lamp Cost	=	$65 each
Total Quantity Incandescent	=	187
Total Quantity HID	=	74

Calculation

Maintenance (Incandescent)	=	$49.81 (20 x 1/3 + 1) x 4,873/750
Maintenance (Fluorescent)	=	$21.83 (20 x 1/3 + 65) x 4,873/16,000
Annual Recurring Maintenance Savings	=	$7,700 (49.81 x 187) - (21.83 x 74) = $7,699, use $7,700

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 2.88 years with a savings to investment ratio of 6.06.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO5
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO5
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 36200.		
B. SIOH	$ 1991.		
C. DESIGN COST	$ 4400.		
D. TOTAL COST (1A+1B+1C)	$ 42591.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 42591.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	531.	$ 3863.	18.17	$ 70196.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 3000.	17.22	$ 51660.
N. TOTAL		531.	$ 6863.		$ 121856.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 7900.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 136038.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-) (4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4)	$ 136038.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$ 14763.
5. SIMPLE PAYBACK PERIOD (1G/4)	2.88 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$ 257894.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= (IF < 1 PROJECT DOES NOT QUALIFY)	6.06
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):	10.80 %

ECO-5
Letterkenny Army Depot
HID Lighting

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Qty of Luminaires	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 47																						
Warehouse																						
Warehouse - North	17	1	300	5100	90	95%	4.8	1992	$448	$593	$1,041	150 Watt HPS, High Bay Aisle Lighter	7	173	1.1	472	$246.44	$2,800	$700	$420	$3,920	$794.42
Building 349																						
Boiler Plant																						
Second Level Boiler Room	17	1	300	5100	168	95%	4.8	3719	$448	$1,107	$1,555	175 Watt MH, Low Bay	8	201	1.5	1,174	$490.78	$3,200	$800	$480	$4,480	$1,064.02
Air Compressor Room	26	1	300	7800	40	75%	5.9	1354	$541	$403	$944	175 Watt MH, Low Bay	12	201	1.8	419	$292.26	$4,800	$1,200	$720	$6,720	$651.65
Building 424																						
Cable & Harness																						
Upholstery Work Shop	42	1	100	4200	90	95%	4.0	1641	$369	$488	$857	100 Watt MH, High Bay	9	115	1.0	404	$211.23	$3,150	$675	$459	$4,284	$645.95
Building 438																						
Repair Shop																						
Shipping Area	28	1	300	8400	50	95%	8.0	1823	$738	$542	$1,280	150 Watt HPS, Low Bay	12	173	2.0	449	$315.53	$4,800	$1,200	$720	$6,720	$964.87
Building 441																						
Warehouse																						
Warehouse	33	1	300	9900	50	95%	9.4	2148	$870	$639	$1,509	150 Watt HPS, Low Bay	14	173	2.3	524	$368.11	$5,600	$1,400	$840	$7,840	$1,140.92
Building 639																						
Physical Fitness																						
Basketball Court	24	1	300	7,200	168	95%	6.8	5250	$633	$1,562	$2,195	150 Watt MH, High Bay , Gymnasium	12	173	2.0	1,509	$631.01	$4,800	$1,200	$720	$6,720	$1,563.80
TOTALS	187			47700			43.8	17926	$4,000	$5,300	$9,400				11.7	4952	$2,600	$29,000	$7,200	$4,400	$41,000	$6,800

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16-May-95

ECO-6
Efficient Fluorescent Lighting Retrofit

Existing. Seventy-two buildings at the Letterkenny Army Depot contain approximately 7,382 fluorescent luminaries of various types. The total watts for the existing luminaires is 1,030,607 watts. The luminaires operate between 30 and 168 hours per week and contribute approximately 50% to 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	11,486 kW/yr (957.2 kW/mo x 12 mo/yr)
Electric Usage	=	3,588,264 kWh/yr (299,022 kWh/mo x 12 mo/yr)
Electric Cost	=	$177,000 (11,486 kW/yr x $7.706/kW) + (3,588,264 kWh/yr x $.0248/kWh) = $177,500, use $177,000

Proposed. Remove the existing lamps and ballast and install T-8 lighting system with electronic ballast. Reference the attached data tables for ECO-6. The average electric usage per T-8 lamp with an electronic ballast is 31 watts. The T-8 lamps are thinner than the standard T-12 lamps but will fit into the existing pin connectors. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	7,182 kW/yr (598.5 kW/mo x 12 mo/yr)
Electric Usage	=	2,238,540 kWh/yr (186,545 kW/mo x 12 mo/yr)

Electric Cost	=	$110,000 (7,182 kW/yr x $7.706/kW) + (2,238,540 kWh/yr x $.0248/kWh) = $110,860, use $110,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $628,000. The breakdown is noted below and shown on the attached ECO data sheet.

Material	$295,000
Labor	$283,000
Engineering	$ 50,000
Total	**$628,000**

Energy Savings. The annual electric demand, usage, and cost saved is noted below:

Electric Demand	=	4,304 kW/yr (11,486 - 7182)
Electric Usage	=	1,349,724 kWh/yr (3,588,264 - 2,238,540)
Energy Cost	=	$67,000/yr ($177,000 - $110,000)
Annual Energy Savings	=	4,607 mmBtu/yr
Energy Usage	=	4,607 mmBtu/yr (1,349,724 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. The T-8 lamps have the same rated average life as the existing T-12 lamps, 20,000 hours; therefore, there is no annual recurring maintenance savings. The installation of T-8s will reduce the existing required lamp and ballast changes, since all new lamps and ballast are being installed.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO6
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO6
ANALYSIS DATE: 05-11-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 578000.	
B. SIOH	$ 31790.	
C. DESIGN COST	$ 50000.	
D. TOTAL COST (1A+1B+1C)	$ 659790.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 659790.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	4607.	$ 33493.	18.17	$ 608566.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 33000.	17.22	$ 568260.
N. TOTAL		4607.	$ 66493.		$ 1176826.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) — $ 0.
(1) DISCOUNT FACTOR (TABLE A) — 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) — $ 0.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 0.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 66493.

5. SIMPLE PAYBACK PERIOD (1G/4) — 9.92 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) — $ 1176826.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= — 1.78
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): — 5.51 %

Summary ECO6A - ECO6E
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
ECO-6A																				
Summary	3561			484254			453.7	141491	$42,000	$42,000	$84,000			285.8	88571	$53,000	$141,000	$137,000	$24,000	$302,000	$31,000
ECO-6B																				
Summary	551			76,337			72.0	21347	$7,000	$6,000	$13,000			44.1	13,016	$8,000.00	$22,000	$21,000	$4,000	$47,000	$5,000
ECO-6C																				
Summary	1272			190,118			174.3	61002	$16,000	$18,000	$34,000			107.8	37,869	$21,000.00	$52,000	$49,000	$9,000	$110,000	$13,000
ECO-6D																				
Summary	894			128,800			117.7	30327	$11,000	$9,000	$20,000			73.5	18,972	$12,000.00	$36,000	$34,000	$6,000	$76,000	$7,500
ECO-6E																				
Summary	1104			151,099			139.5	44856	$13,000	$13,000	$26,000			87.3	28,116	$16,000.00	$44,000	$42,000	$7,000	$93,000	$10,000
TOTALS	7382			1030607			957.2	299022	$89,000	$88,000	$177,000			598.5	186545	$110,000	$295,000	$283,000	$50,000	$628,000	$67,000

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22-May-95

ECO-6A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Office Area																					
Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
DPME Womens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
DPME Mens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
DPME Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
DPME Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Chief Engineering Support Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Engineering Work Area	113	3	40	15594	50	95%	14.8	3383.9	$1,369.91	$1,007.05	$2,376.96	3 - F32T8 & 1 - 3L Electronic Ballast	88	9.4	2,158	$1,515.74	$4,520	$4,520	$782	$9,822	$861.22
DPME Section Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Production Engineering Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Chief Production Eng. Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Conference Room Corridor	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Conference Room A	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	68	$51.32	$180	$160	$29	$369	$32.99
DPME File Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
DPME Work Area	18	3	40	2484	50	95%	2.4	539.0	$218.22	$160.41	$378.63	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.5	344	$241.45	$720	$720	$125	$1,565	$137.18
DPME Copy Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Chief Requisition Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Logistics Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Production Planning Conf. Rm.	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Chief Production Office	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Chief Maintenance Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Manager Analysis Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Conference Room B	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	68	$51.32	$180	$160	$29	$369	$32.99
Corridor B	10	1	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.3	67	$47.25	$300	$350	$56	$706	$22.86
Deputy Director Maint. Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Director Maintenance Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Corridor A	16	1	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	1 - F32T8 &1 - 1L Electronic Ballast	31	0.5	108	$75.60	$480	$560	$90	$1,130	$36.58
Corridor A (Entrance Lobby)	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Chrome Plate Area (CP)																					
CP Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Editors Office	8	4	40	1472	50	95%	1.4	319	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Print Room	13	4	40	2,392	50	95%	2.3	519	$210.13	$154.47	$364.61	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.4	316	$221.93	$585	$520	$96	$1,201	$142.67
IMA Support Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Record Managers Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Cafe Area	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Receiving Bay	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Corridor to Rooms #2 #6	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
CP Shop Area B	28	2	75	4,830	50	95%	4.6	1048	$424.31	$311.92	$736.23	2 - F96T8 & 1 - 2L Electronic Ballast	104	2.8	632	$443.87	$1,120	$980	$182	$2,282	$292.36
CP Shop Area A	63	2	75	10,868	50	95%	10.3	2358	$954.69	$701.81	$1,656.51	2 - F96T8 & 1 - 2L Electronic Ballast	104	6.2	1,422	$998.71	$2,520	$2,205	$409	$5,134	$657.80
CP Shop Area A	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
CP Shop Area A	12	2	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	156	$109.75	$420	$420	$73	$913	$58.53
CP-Shop Area B	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
CP-Exit Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
CP-Shop Area B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Corridor to Cafe	6	4	20	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F17T8 & 2 - 2L Electronic Ballast	58	0.3	76	$53.04	$360	$360	$62	$782	$31.10
Building 2																					
Administration																					
South Entrance #2 Open Office	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	229	$160.96	$480	$480	$83	$1,043	$91.46
G. Kirk Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Conference Room	8	4	40	1,472	35	75%	1.1	224	$102.09	$66.54	$168.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.7	136	$102.65	$360	$320	$59	$739	$65.99
Movement Branch Mgrs. Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Movement Branch Open Office	36	4	40	6,624	50	95%	6.3	1437	$581.91	$427.77	$1,009.68	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.8	875	$614.59	$1,620	$1,440	$265	$3,325	$395.09
Industrial Hygiene	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	191	$134.14	$400	$400	$69	$869	$76.21
South Entrance #2 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Entrance Lobby South East	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Director/Commander Reception	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
South Entrance Lobby #1	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
South East Open Office Area	18	4	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.9	437	$307.29	$810	$720	$132	$1,662	$197.55
Middle Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Open Office Area	98	4	40	18,032	50	95%	17.1	3913	$1,584.08	$1,164.49	$2,748.57	4 - F32T8 & 1 - 4L Electronic Ballast	112	10.4	2,382	$1,673.05	$4,410	$3,920	$721	$9,051	$1,075.53
Comunanders Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Directors Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Entrance Lobby South West	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88

ECO-6A
Buildings 1 - 10
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	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3																				
Computer Area																				
Library	25	3	40	3,450	126	95%	3.3	1887	$303.08	$561.45	$864.53	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.1	1,203	$551.29	$1,000	$1,000	$173	$2,173	$313.23
Computer Office 132	4	3	40	552	126	95%	0.5	302	$48.49	$89.83	$138.32	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	192	$88.21	$160	$160	$28	$348	$50.12
Vault	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	327	$175.92	$360	$320	$59	$739	$113.09
Raised Fl. Tape Storage Rm. #8	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	367	$168.40	$270	$240	$44	$554	$108.25
Raised Floor Computer Center	34	4	40	6,256	126	95%	5.9	3421	$545.58	$1,018.09	$1,563.67	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.6	2,082	$954.24	$1,530	$1,360	$250	$3,140	$609.44
Raised Floor Computer Rm. #1	54	4	40	9,936	126	95%	9.4	5433	$872.86	$1,616.98	$2,489.84	4 - F32T8 & 1 - 4L Electronic Ballast	112	5.7	3,307	$1,515.56	$2,430	$2,160	$397	$4,987	$974.29
Raised Floor Computer Rm. #2	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	4 - F32T8 & 1 - 4L Electronic Ballast	112	8.1	4,655	$2,133.00	$3,420	$3,040	$559	$7,019	$1,371.22
Raised Floor Computer Rm. #3	65	4	40	11,960	126	95%	11.4	6540	$1,050.67	$1,946.37	$2,997.03	4 - F32T8 & 1 - 4L Electronic Ballast	112	6.9	3,981	$1,824.28	$2,925	$2,600	$478	$6,003	$1,172.75
Raised Floor Computer Rm. #6	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	4 - F32T8 & 1 - 4L Electronic Ballast	112	8.1	4,655	$2,133.00	$3,420	$3,040	$559	$7,019	$1,371.22
Raised Floor Comp. Ctr. Office	9	4	40	1,656	126	95%	1.6	906	$145.48	$269.50	$414.97	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	551	$252.59	$405	$360	$66	$831	$162.38
Raised Floor Computer Rm. #5	64	4	40	11,776	126	95%	11.2	6440	$1,034.50	$1,916.42	$2,950.92	4 - F32T8 & 1 - 4L Electronic Ballast	112	6.8	3,920	$1,796.21	$2,880	$2,560	$471	$5,911	$1,154.71
Raised Floor Computer Rm. #7	55	4	40	10,120	126	95%	9.6	5534	$889.03	$1,646.92	$2,535.95	4 - F32T8 & 1 - 4L Electronic Ballast	112	5.9	3,369	$1,543.62	$2,475	$2,200	$404	$5,079	$992.33
Raised Floor Computer Rm. #6A	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	367	$168.40	$270	$240	$44	$554	$108.25
Computer Office 132A	24	4	40	4,416	126	95%	4.2	2415	$387.94	$718.66	$1,106.60	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.6	1,470	$673.58	$1,080	$960	$176	$2,216	$433.02
South East Area																				
Office 1-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Office 6-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 6-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Open Office Area 7-G	39	3	40	5,382	50	95%	5.1	1168	$472.80	$347.57	$820.37	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.3	745	$523.13	$1,560	$1,560	$270	$3,390	$297.23
Room #120 4-F	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office 5-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Automation Open Area 10-H	25	3	40	3,450	50	95%	3.3	749	$303.08	$222.80	$525.88	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.1	477	$335.34	$1,000	$1,000	$173	$2,173	$190.53
Office 7-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 2-J	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
DMC Office 8-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Room #130 10-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Open Office Area 13-G	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.0	458	$321.93	$960	$960	$166	$2,086	$182.91
Office 1 H	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office 1-G	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
DMC Open Area 4-F	70	3	40	9,660	50	95%	9.2	2096	$848.62	$623.84	$1,472.45	3 - F32T8 & 1 - 3L Electronic Ballast	88	5.9	1,337	$938.95	$2,800	$2,800	$484	$6,084	$533.50
Mens Room 12 J	5	2	40	460	30	50%	0.2	60	$21.27	$17.82	$39.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$25.50	$175	$175	$30	$380	$13.60
Womens Room	6	2	40	552	30	50%	0.3	72	$25.52	$21.39	$46.91	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	47	$30.59	$210	$210	$36	$456	$16.32
Office 1 J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Snack Bar 9-K	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Office 3-K	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.6	134	$93.90	$280	$280	$48	$608	$53.35
Snack Bar 9-K	12	4	40	2,208	50	95%	2.1	479	$193.97	$142.59	$336.56	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	292	$204.86	$540	$480	$88	$1,108	$131.70
Smokers Lounge 10-K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Room #8 12-J	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Stairwell Lobby 11-K	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Open Office 14-K	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.8	182	$128.04	$490	$490	$85	$1,065	$68.29
Corridor 14-1-J	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.0	458	$321.93	$960	$960	$166	$2,086	$182.91
Office 1-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
South West Area																				
Room #109 6-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 5-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Room #111 6-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Room #105 8-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Room #107 7-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office Rear 4-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Corridor 5-10-B	10	2	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.6	130	$91.46	$350	$350	$61	$761	$48.78
Corridor 5-10-B	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Office 5-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office Front 4-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office A 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Corridor 4-1-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office B 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 2-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Room #117 Front 2-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 4-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office Rear 3 B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Room #117 Rear 2-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office Front 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office 2-E	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62

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	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
North West Area																					
Office 19-E	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Office 26-E	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 26-D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Office 26-C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 26-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 26-A	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 24-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Lobby 25-A	7	4	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.7	170	$119.50	$315	$280	$51	$646	$76.82
Office 19-A	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.6	134	$93.90	$280	$280	$48	$608	$53.35
Office 23-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 21-D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Open Office Area 25-19-A	111	3	40	15,318	50	95%	14.6	3324	$1,345.66	$989.22	$2,334.89	3 - F32T8 & 1 - 3L Electronic Ballast	88	9.3	2,120	$1,488.91	$4,440	$4,440	$768	$9,648	$845.97
North East Area																					
Office 21-G	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Office 16-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office A 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Office B 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Office 21-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 26-H	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.7	153	$107.31	$320	$320	$55	$695	$60.97
Office 26-G	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Conference 26-F	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	80	$60.49	$240	$240	$42	$522	$34.37
Office 22-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office 26 J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Open Office Area 20-F	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.3	764	$536.55	$1,600	$1,600	$277	$3,477	$304.86
Corridor 23-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Corridor 22-14-J	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	229	$160.96	$480	$480	$83	$1,043	$91.46
Womens Room 15-J	7	2	40	644	30	50%	0.3	84	$29.78	$24.95	$54.73	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	55	$35.69	$245	$245	$42	$532	$19.04
Mens Room 16-J	5	2	40	460	30	50%	0.2	60	$21.27	$17.82	$39.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$25.50	$175	$175	$30	$380	$13.60
Office 16 J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office 17-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office 21-J	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Conference Room 20-J	16	4	40	2,944	35	75%	2.2	447	$204.18	$133.08	$337.26	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	272	$205.29	$720	$640	$118	$1,478	$131.97
Office 17-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Office A 22-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office B 22-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Open Office Area 26-18-K	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.3	764	$536.55	$1,600	$1,600	$277	$3,477	$304.86
Open Office Area 25-J	14	3	40	1,932	50	95%	1.8	419	$169.72	$124.77	$294.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.2	267	$187.79	$560	$560	$97	$1,217	$106.70
Open Office Area 25-F	57	3	40	7,866	50	95%	7.5	1707	$691.02	$507.98	$1,199.00	3 - F32T8 & 1 - 3L Electronic Ballast	88	4.8	1,088	$764.58	$2,280	$2,280	$394	$4,954	$434.42
Building 4																					
Warehouse																					
Warehouse Packaging Office	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Warehouse Packing Mens Room	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	62	$40.79	$280	$280	$48	$608	$21.76
Warehouse Pac Womens Room	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	62	$40.79	$280	$280	$48	$608	$21.76
Building 5																					
Administration																					
Rook Office	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Open Office Area	126	2	40	11,592	50	95%	11.0	2515	$1,018.34	$748.60	$1,766.94	2 - F32T8 & 1 - 2L Electronic Ballast	60	7.2	1,641	$1,152.35	$4,410	$4,410	$763	$9,583	$614.59
West Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Product Receipt Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Womens Room	1	2	40	92	30	50%	0.0	12	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Mens Room	1	2	40	92	30	50%	0.0	12	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Snider Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77

ECO-6A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 6																					
Administration																					
Corridor to Restroom	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Army Audit Agency	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Ammunition Operation Conf.	4	3	40	552	35	75%	0.4	84	$38.28	$24.95	$63.24	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	53	$40.32	$160	$160	$28	$348	$22.91
Tucker Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Army Reserve Division	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
NFFE Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Safety Division Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Mens Room	5	3	40	690	30	50%	0.3	90	$31.90	$26.74	$58.64	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	57	$37.39	$200	$200	$35	$435	$21.25
Womens Room	5	3	40	690	30	50%	0.3	90	$31.90	$26.74	$58.64	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	57	$37.39	$200	$200	$35	$435	$21.25
Open Office Area	379	3	40	52,302	50	95%	49.7	11350	$4,594.65	$3,377.62	$7,972.27	3 - F32T8 & 1 - 3L Electronic Ballast	88	31.7	7,237	$5,083.77	$15,160	$15,160	$2,623	$32,943	$2,888.50
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
North East Entrance Corridor	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Director of Integrated Office	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
North East Entrance Corridor	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Deputy Chief of Staff Reception	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Deputy Chf. of Staff Conf. Rm.	5	3	40	690	35	75%	0.5	105	$47.85	$31.19	$79.05	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	67	$50.41	$200	$200	$35	$435	$28.64
Conference Room	3	4	40	552	35	75%	0.4	84	$38.28	$24.95	$63.24	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	51	$38.49	$135	$120	$22	$277	$24.74
Corridor to N. Exit	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
NFFG Local 1805 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Chastain Office	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
North East Entrance Lobby	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Building 10																					
Computer Area																					
Computer Room	146	3	40	20,148	126	95%	19.1	11018	$1,769.97	$3,278.88	$5,048.85	3 - F32T8 & 1 - 3L Electronic Ballast	88	12.2	7,026	$3,219.55	$5,840	$5,840	$1,010	$12,690	$1,829.29
Tape Library	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	327	$175.92	$360	$320	$59	$739	$113.09
Classified Tape Library	8	2	40	736	84	95%	0.7	268	$64.66	$79.85	$144.51	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	175	$94.24	$280	$280	$48	$608	$50.26
Page Printing Room	22	3	40	3,036	126	95%	2.9	1660	$266.71	$494.08	$760.79	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.8	1,059	$485.14	$880	$880	$152	$1,912	$275.65
South East Area																					
Office B 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Open Office Area 9-14-E	188	2	40	17,296	50	95%	16.4	3753	$1,519.43	$1,116.96	$2,636.39	2 - F32T8 & 1 - 2L Electronic Ballast	60	10.7	2,448	$1,719.38	$6,580	$6,580	$1,138	$14,298	$917.00
Office 9-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 10-B	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office 11-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office A 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Office 14-A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office B 10-A	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Office A 10-A	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Office 11-A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Conference Room 12 A	18	2	40	1,656	35	75%	1.2	252	$114.85	$74.86	$189.71	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.8	164	$123.72	$630	$630	$109	$1,369	$65.99
Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
South West Area																					
Open Office Area 9-16 J	214	2	40	19,688	50	95%	18.7	4272	$1,729.56	$1,271.44	$3,000.99	2 - F32T8 & 1 - 2L Electronic Ballast	60	12.2	2,786	$1,957.17	$7,490	$7,490	$1,296	$16,276	$1,043.82
Office 9-K	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Office 9-K	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Office 10-K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office 11-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 12-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 13-K	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
North East Area																					
Open Office Area 2-8-E	247	2	40	22,724	50	95%	21.6	4931	$1,996.27	$1,467.50	$3,463.76	2 - F32T8 & 1 - 2L Electronic Ballast	60	14.1	3,216	$2,258.98	$8,645	$8,645	$1,496	$18,786	$1,204.79
Office 1-E	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office 1-E	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 1-D	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 1-C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Womens Room 3-B	12	2	40	1,104	30	50%	0.6	144	$51.04	$42.78	$93.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	94	$61.19	$420	$420	$73	$913	$32.63
Mens Room 3-A	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	62	$40.79	$280	$280	$48	$608	$21.76
Smokers Room 6-A	16	2	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.9	208	$146.33	$560	$560	$97	$1,217	$78.04
Computer Room 1-A	20	2	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.1	260	$182.91	$700	$700	$121	$1,521	$97.55
Cafe 5-B	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.7	153	$107.31	$320	$320	$55	$695	$60.97
Vending Area 5-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Auditorium 6-B	8	2	40	736	35	75%	0.6	112	$51.04	$33.27	$84.32	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	73	$54.99	$280	$280	$48	$608	$29.33
Auditorium 6-B	12	3	40	1,656	35	75%	1.2	252	$114.85	$74.86	$189.71	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	160	$120.97	$480	$480	$83	$1,043	$68.74
Office 8-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27

ECO-6A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
North West Area																					
Office 5-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 8-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 7-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office B 6-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office A 6 K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 3-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 4-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office 1-G	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Conference Room 1-K	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	80	$60.49	$240	$240	$42	$522	$34.37
Office 1-H	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Office 1-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
TOTALS	3561			484254			453.7	141491	$42,000	$42,000	$84,000			285.8	88571	$53,000	$141,000	$137,000	$24,000	$302,000	$31,000

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22-May-95

ECO-6B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 14																					
First Floor																					
Receiving Room	15	3	40	2070	50	95%	2.0	449.2	$181.85	$133.68	$315.53	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.3	286	$201.20	$600	$600	$104	$1,304	$114.32
Sand Blast Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Machine Shop Breakroom	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.7	170	$119.50	$315	$280	$51	$646	$76.82
Machine Shop Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Paint Room	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	229	$160.96	$480	$480	$83	$1,043	$91.46
Quality Control/Shop Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Quality Control/Shop Area	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Optical Shop	14	4	40	2576	50	95%	2.4	559.0	$226.30	$166.36	$392.65	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.5	340	$239.01	$630	$560	$103	$1,293	$153.65
Building 19																					
Warehouse																					
Exterior Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	65	$45.73	$175	$175	$30	$380	$24.39
Warehouse North Work Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Warehouse Work Area	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Building TS20-1																					
Warehouse																					
Breakroom	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Building 31																					
Warehouse																					
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Receiving Area	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Building 32																					
Warehouse																					
Receiving Area	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Building 33N																					
Warehouse																					
Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Receiving Area	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Fenced Area in Warehouse	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Fenced Area in Warehouse	2	2	75	345	50	95%	0.3	75	$30.31	$22.28	$52.59	2 - F96T8 & 1 - 2L Electronic Ballast	104						$0		
Fenced Area in Warehouse	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112						$0		
Building 34																					
Warehouse																					
Warehouse Elec. Dist. Equip.	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Office South	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office North	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Building 37																					
Modular																					
Modular Office-Powertrain #1	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
Modular Office-Powertrain #2	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Modular Office-Powertrain #3	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
Motor Room Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Motor Room Test Area	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Motor Room Box Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
Building 37 Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112						$0		
Building Supply 47	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Breakroom	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Disassembly Office	5	2	40	460	90	95%	0.4	180	$40.41	$53.47	$93.88	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	117	$61.23	$175	$175	$30	$380	$32.65
Transmission Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Building 41																					
Warehouse																					
Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office 1 x4 - 1L	1	1	40	46	50	95%	0.0	10	$4.04	$2.97	$7.01	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.0	7	$4.73	$30	$35	$6	$71	$2.29

ECO-6B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 42S																					
Warehouse																					
Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
Mens Bathroom	4	2	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$20.40	$140	$140	$24	$304	$10.88
Womens Bathroom	4	2	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$20.40	$140	$140	$24	$304	$10.88
Break Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Building 43																					
Warehouse																					
Office - 1 x 4 w/metal differ	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Lockers	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Building 44																					
Warehouse																					
Office Area	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Building 47																					
Warehouse																					
Office - South	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Receiving South	2	3	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	69	$35.92	$80	$80	$14	$174	$20.41
Office - North	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Filing Area - North	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Filing Area - North	24	1	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.7	291	$151.84	$720	$840	$135	$1,695	$73.47
Building 51																					
Warehouse																					
Self Service Parts Room	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.8	182	$128.04	$490	$490	$85	$1,065	$68.29
Self Service Shelf Area	69	2	40	6,348	50	95%	6.0	1378	$557.66	$409.95	$967.61	2 - F32T8 & 1 - 2L Electronic Ballast	60	3.9	898	$631.05	$2,415	$2,415	$418	$5,248	$336.56
Self Service Shelf Area	12	2	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	156	$109.75	$420	$420	$73	$913	$58.53
Entrance Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Self Service Rear Corridor	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	191	$134.14	$400	$400	$69	$869	$76.21
Self Service Entrance Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Self Service Rear Office	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.6	583	$409.73	$1,080	$960	$176	$2,216	$263.39
Self Service Office	15	2	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.9	195	$137.18	$525	$525	$91	$1,141	$73.17
Warehouse Mil. Womens Room	2	2	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Warehouse Radio Active Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Warehouse Break Room	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
Warehouse Proc. Workstation	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Warehouse Work Room	21	4	40	3,864	50	95%	3.7	838	$339.45	$249.53	$588.98	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.2	510	$358.51	$945	$840	$154	$1,939	$230.47
Warehouse Mil. Work Station	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Warehouse Milvan Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Warehouse Milvan Mens Room	2	2	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Main Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Building 52																					
Warehouse																					
Warehouse Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Warehouse Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Building 53																					
Warehouse																					
Warehouse Receiving South	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Warehouse Receiving North	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Warehouse Battery Area	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Warehouse Office (2 lamps only)	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Building 54																					
Warehouse																					
Warehouse Office	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Warehouse Parts Area	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Building 55																					
Warehouse																					
Warehouse Battery Area	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97

ECO-6B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 57S																					
Warehouse																					
Office Area/Parts Area	23	4	40	4,232	90	95%	4.0	1653	$371.77	$491.94	$863.71	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.4	1,006	$525.74	$1,035	$920	$169	$2,124	$337.97
Tool Parts Room (Locked)	5	4	40	920	90	95%	0.9	359	$80.82	$106.94	$187.76	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	219	$114.29	$225	$200	$37	$462	$73.47
Tool Parts Room (Locked)	11	3	40	1,518	90	95%	1.4	593	$133.35	$176.46	$309.81	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.9	378	$197.56	$440	$440	$76	$956	$112.25
Bulk Warehouse Office #1	12	4	40	2,208	90	95%	2.1	862	$193.97	$256.66	$450.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	525	$274.30	$540	$480	$88	$1,108	$176.33
Fire Equipment Cage Area	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Ladies Room	3	2	40	276	54	95%	0.3	65	$24.25	$19.25	$43.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$28.37	$105	$105	$18	$228	$15.13
Bulk Warehouse Office #2	9	4	40	1,656	90	95%	1.6	647	$145.48	$192.50	$337.97	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	394	$205.72	$405	$360	$66	$831	$132.25
Breakroom	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	262	$137.15	$270	$240	$44	$554	$88.17
Ladies Room	1	4	40	184	54	95%	0.2	43	$16.16	$12.83	$29.00	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	26	$17.65	$45	$40	$7	$92	$11.35
Equipment Operations Unit	15	4	40	2,760	90	95%	2.6	1078	$242.46	$320.83	$563.29	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.6	656	$342.87	$675	$600	$110	$1,385	$220.42
Driver Exam Corridor	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	262	$137.15	$270	$240	$44	$554	$88.17
Locker Room	4	2	40	368	54	95%	0.3	86	$32.33	$25.67	$57.99	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	56	$37.82	$140	$140	$24	$304	$20.17
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Robertson Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
Office	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Corridor Behind Office Area	1	4	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	44	$22.86	$45	$40	$7	$92	$14.69
Office Area	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Office Area	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
TOTALS	551			76337			72.0	21347	$7,000	$6,000	$13,000			44.1	13016	$8,000	$22,000	$21,000	$4,000	$46,000	$5,000

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22-May-95

ECO-6C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 102																				
Lab																				
Front Lab Workstation	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Entrance to Office	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Main Lab Area	18	2	40	1656	90	95%	1.6	646.8	$145.18	$192.50	$337.68	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.0	422	$220.42	$630	$630	$109	$1,369	$117.26
Bathroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	14	$9.46	$35	$35	$6	$76	$5.04
Building 199																				
Warehouse																				
Work Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Building 200																				
Lab																				
Lab Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	267	$187.79	$495	$440	$81	$1,016	$120.72
Building 211																				
Administration																				
Kitchen	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Main Office Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Managers Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Building 247																				
Warehouse																				
Receiving Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Rear Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Corridor to Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Kitchen	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Receiving Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Receiving Area	6	1	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	1 - F32T8 &1 - 1L Electronic Ballast	31	0.2	40	$28.35	$180	$210	$34	$424	$13.72
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Building 320																				
Maintenance																				
Division Office	6	3	40	828	30	50%	0.4	107.8	$38.28	$32.08	$70.37	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	69	$44.87	$240	$240	$42	$522	$25.50
Maint. Area Machine Shop	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Womens Locker Room Office	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
Womens Locker Room	11	1	40	506	30	50%	0.3	65.9	$23.40	$19.61	$43.00	1 - F32T8 &1 - 1L Electronic Ballast	31	0.2	44	$28.98	$330	$385	$62	$777	$14.02
Maintenance Area Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Mens Locker Room Office	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
Office No. 1	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Mens Locker Room	11	1	40	506	168	95%	0.5	368.9	$44.45	$109.79	$154.25	1 - F32T8 &1 - 1L Electronic Ballast	31	0.3	249	$103.95	$330	$385	$62	$777	$50.30
Toilet Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	131	$54.87	$105	$105	$18	$228	$29.26
Main Office Area	47	2	40	4324	168	95%	4.1	3152.7	$379.86	$938.25	$1,318.10	2 - F32T8 & 1 - 2L Electronic Ballast	60	2.7	2,056	$859.63	$1,645	$1,645	$285	$3,575	$458.47
Sink and Toilet Area	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$20.40	$140	$140	$24	$304	$10.88
Building 349																				
Boiler Plant																				
Entrance Cage Area	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	394	$164.61	$315	$315	$54	$684	$87.79
Control Room	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	87	$36.58	$70	$70	$12	$152	$19.51
Boiler Room Ground Level	10	4	40	1840	168	95%	1.7	1341.6	$161.64	$399.25	$560.90	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.1	817	$341.41	$450	$400	$74	$924	$219.48
Boiler Room Ground Level	1	3	40	138	168	95%	0.1	100.6	$12.12	$29.94	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	64	$26.83	$40	$40	$7	$87	$15.24
Breakroom	4	4	40	736	84	95%	0.7	268.3	$64.66	$79.85	$144.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	163	$87.96	$180	$160	$29	$369	$56.55
Boiler Room Ground Level	4	1	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	1 - F32T8 &1 - 1L Electronic Ballast	31	0.1	90	$37.80	$120	$140	$22	$282	$18.29

ECO-6C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 350																					
Office #1																					
Mens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	131	$88.25	$225	$200	$37	$462	$56.73
Conference Room	12	4	40	2208	63	95%	2.1	603.7	$193.97	$179.66	$373.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	367	$227.43	$540	$480	$88	$1,108	$146.20
Womens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	131	$88.25	$225	$200	$37	$462	$56.73
Corridor to Shop	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
Managers Office	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Copy Room	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Reception	11	4	40	2024	90	95%	1.9	790.6	$177.81	$235.27	$413.08	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	481	$251.44	$495	$440	$81	$1,016	$161.64
Office #2																					
Reception Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	350	$182.87	$360	$320	$59	$739	$117.56
Managers Office	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	44	$22.86	$45	$40	$7	$92	$14.69
Office #3																					
Work Area	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	262	$137.15	$270	$240	$44	$554	$88.17
Separate Office Area	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
ASRS plus Office Area Corridor	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	131	$68.57	$135	$120	$22	$277	$44.08
ASRS plus Office Computer Rm.	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	350	$182.87	$360	$320	$59	$739	$117.56
New Bathroom (Under Const.)																					
Office #4																					
Office Area	5	2	40	460	90	95%	0.4	179.7	$40.41	$53.47	$93.88	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	117	$61.23	$175	$175	$30	$380	$32.65
Library Conference Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	48	$29.78	$80	$80	$14	$174	$16.92
Quality Control Room	6	3	40	828	90	95%	0.8	323.4	$72.74	$96.25	$168.99	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	206	$107.76	$240	$240	$42	$522	$61.23
Annex Office Area #6																					
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Annex Office Corridor	7	2	40	644	90	95%	0.6	251.5	$56.57	$74.86	$131.43	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	164	$85.72	$245	$245	$42	$532	$45.72
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Meeting Room	19	2	40	1748	63	95%	1.7	477.9	$153.56	$142.23	$295.79	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.1	312	$192.91	$665	$665	$115	$1,445	$102.88
Planning Production Fabrication	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	281	$146.95	$420	$420	$73	$913	$78.37
Trades Branch Conference Rm.	12	2	40	1104	63	95%	1.0	301.9	$96.98	$89.83	$186.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	197	$121.84	$420	$420	$73	$913	$64.98
Mens Room	6	2	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	84	$56.73	$210	$210	$36	$456	$30.26
Ladies Room	3	2	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$28.37	$105	$105	$18	$228	$15.13
Trades Office Room #2	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	281	$146.95	$420	$420	$73	$913	$78.37
Trades Office Room #1	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	281	$146.95	$420	$420	$73	$913	$78.37
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Building 370																					
Equipment Repair																					
Mens Room	3	4	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	79	$52.95	$135	$120	$22	$277	$34.04
Shop Area Task Lighting	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Shop Area	318	4	40	58512	90	95%	55.6	22854.8	$5,140.19	$6,801.58	$11,942	4 - F32T8 & 1 - 4L Electronic Ballast	112	33.8	13,912	$7,268.90	$14,310	$12,720	$2,338	$29,368	$4,672.87
Shop Area Office	5	4	40	920	90	95%	0.9	359.4	$80.82	$106.94	$187.76	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	219	$114.29	$225	$200	$37	$462	$73.47
Test Room/Workstation	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Test Room	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Shop Area Task Lighting	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Building 412																					
Training & Conf. Center																					
Computer Training Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	267	$187.79	$495	$440	$81	$1,016	$120.72
Administration Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	267	$187.79	$495	$440	$81	$1,016	$120.72
Center Class Room	14	4	40	2576	35	75%	1.9	391.3	$178.66	$116.45	$295.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	238	$179.63	$630	$560	$103	$1,293	$115.48
Conference Room	33	4	40	6072	35	75%	4.6	922.3	$421.12	$274.49	$695.60	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.8	561	$423.41	$1,485	$1,320	$243	$3,048	$272.19
Mens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Ladies Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Building 416																					
Administration																					
Mens Room	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$20.40	$140	$140	$24	$304	$10.88
Womens Room	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$20.40	$140	$140	$24	$304	$10.88
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Main Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.2	729	$512.16	$1,350	$1,200	$221	$2,771	$329.24

ECO-6C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 417																					
Personnel Barracks																					
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	394	$164.61	$315	$315	$54	$684	$87.79
Room #13	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Kitchen #16	4	2	40	368	21	50%	0.2	33.5	$17.01	$9.98	$27.00	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	22	$17.61	$140	$140	$24	$304	$9.39
Room #14	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #17	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #12	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #18	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Room #19	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #11	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #20	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Day Room #15	4	3	40	552	40	75%	0.4	95.8	$38.28	$28.52	$66.80	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	61	$42.60	$160	$160	$28	$348	$24.20
Building 418																					
Personnel Barracks																					
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	394	$164.61	$315	$315	$54	$684	$87.79
Room #13	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Kitchen #16	4	2	40	368	21	50%	0.2	33.5	$17.01	$9.98	$27.00	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	22	$17.61	$140	$140	$24	$304	$9.39
Room #14	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #17	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #12	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #18	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Room #19	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #11	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Room #20	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	42	$29.04	$140	$140	$24	$304	$15.49
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Day Room #15	4	3	40	552	40	75%	0.4	95.8	$38.28	$28.52	$66.80	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	61	$42.60	$160	$160	$28	$348	$24.20
Building 421																					
Administration																					
Main Office Area North End	28	4	40	5152	50	95%	4.9	1118.0	$452.59	$332.71	$785.31	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.0	681	$478.01	$1,260	$1,120	$206	$2,586	$307.29
Womens Room	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Support Division Chief Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Managers Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
File/Copy Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
File/Copy Room on Files	4	1	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	1 - F32T8 &1 - 1L Electronic Ballast	31	0.1	27	$18.90	$120	$140	$22	$282	$9.15
Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Main Entrance Lobby	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Acquisition Chief	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Cont. Office Purch. Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.8	632	$443.87	$1,170	$1,040	$191	$2,401	$285.34
Imprest Office	1	4	40	184	50	95%	0.2	40.0	$16.16	$11.90	$28.07	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$11.00
Receptionist	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Bid Room #2	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Support Division Chief Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Mens Room	1	1	40	46	30	50%	0.0	6	$2.13	$1.78	$3.91	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Property Accountibility Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Vending Area	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Equipment Mgt. Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
North Exit Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Ladies Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Conference Room	2	4	40	368	35	75%	0.3	56	$25.52	$16.64	$42.16	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	34	$25.66	$90	$80	$15	$185	$16.50
Mens Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Managers Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85

ECO-6C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Clk. Depot Prop. Div. Reception	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Mens Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Clk. Depot Prop. Div. Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Main Office South End	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.6	583	$409.73	$1,080	$960	$176	$2,216	$263.39
Contracting Office Area	14	4	40	2,576	50	95%	2.4	559	$226.30	$166.36	$392.65	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.5	340	$239.01	$630	$560	$103	$1,293	$153.65
Contracting Office Conf. Room	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	80	$60.49	$240	$240	$42	$522	$34.37
Office (left of Acquisition Chief)	1	4	40	184	50	95%	0.2	40	$16.16	$11.90	$28.07	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$11.00
Building 424																					
Cable & Harness																					
Unpacking	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Unpacking	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
File Area	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	172	$89.80	$200	$200	$35	$435	$51.02
Cable Tent Station	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Work Station	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	172	$89.80	$200	$200	$35	$435	$51.02
Cable Termination Area	6	2	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	141	$73.47	$210	$210	$36	$456	$39.19
Cable Termination Area	1	2	40	92	90	95%	0.1	36	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Assembly Area Desk Lighting	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	70	$36.74	$105	$105	$18	$228	$19.59
Assembly Area	21	3	40	2,898	90	95%	2.8	1132	$254.58	$336.87	$591.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.8	722	$377.16	$840	$840	$145	$1,825	$214.30
Break Room	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Break Room	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	70	$36.74	$105	$105	$18	$228	$19.59
Office (Day)	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Office	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Building 428																					
Counseling																					
Counseling Managers Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Corridor to Managers Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Copy Room	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Main Entrance Corridor	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Conference Room (Day)	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Building 431																					
Administration																					
Main Entrance Lobby	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Lab #4 (Entrance Lobby)	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Supply Section	10	4	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.1	243	$170.72	$450	$400	$74	$924	$109.75
Corridor around Lab #4	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
TDME Office Area	25	4	40	4,600	50	95%	4.4	998	$404.10	$297.06	$701.17	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.7	608	$426.80	$1,125	$1,000	$184	$2,309	$274.37
ACL Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Womens Room	1	4	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
Executive Secretary	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Computer Room	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Mens Room	1	4	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
TDME Chief Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
TDME Chief Lab Calibration	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Conference Room 1 & 2	6	4	40	1,104	35	75%	0.8	168	$76.57	$49.91	$126.47	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	102	$76.98	$270	$240	$44	$554	$49.49
Building 438																					
Repair Shop																					
Shipping Area	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Building 441																					
Warehouse																					
Outside Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Warehouse Parts Bay	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
TOTALS	1272			190118			174.3	61002	$16,000	$18,000	$34,000			107.8	37869	$21,000	$52,000	$49,000	$9,000	$110,000	$13,000

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22-May-95

ECO-6D
Buildings 500 - 581
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																				
First Floor																				
Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Laboratory Room #33	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Dispensary Corridor	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.8	328	$171.44	$490	$490	$85	$1,065	$91.43
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Room #47 (Office)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Pharmacy	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Room #31 Open Office Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Treatment Room #2 Room #45	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Treatment Room #1 Room #46	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Physical Therapy Room #34	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Command Wing Entrance	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Waiting Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Waiting Room Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Occupational Health Room #38	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Emergency Rm. Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Conference Room (Room #41)	5	4	40	920	35	75%	0.7	139.7	$63.81	$41.59	$105.39	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	85	$64.15	$225	$200	$37	$462	$41.24
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Emergency Treatment Rm. #40	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	262	$137.15	$270	$240	$44	$554	$88.17
Occupational Health Room #39	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office Room #42	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Occupational Health Room #37	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Occupational Health Rm.#43C	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Occupational Health Rm.#43B	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Occupational Health Rm.#43A	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Occupational Health Room #43	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Break Room (Room #36)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Dispensary Waiting Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Room #26 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Admin. Prgm. Coordinators Ofc.	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
P. Gieseking Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Ladies Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Protocol Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Copy Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Public Affairs Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Entrance to Rear Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Depot Sergeant Majors Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Commander Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Commander Secretary	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Depot Commander	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
G. Patterson Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Legal Office 15 Reception	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Legal Office Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	191	$134.14	$400	$400	$69	$869	$76.21
Computer Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Front Office 15A	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Womens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Police Sign in Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Police Room	3	3	40	414	168	95%	0.4	301.9	$36.37	$89.83	$126.20	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	192	$80.48	$120	$120	$21	$261	$45.73
Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Office #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Conference Room #3	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	68	$51.32	$180	$160	$29	$369	$32.99
Conference Room #1	6	3	40	828	35	75%	0.6	125.8	$57.43	$37.43	$94.86	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	80	$60.49	$240	$240	$42	$522	$34.37
Conference Room #1	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	27	$20.16	$80	$80	$14	$174	$11.46
Room #25 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Rear Office 15B	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Employment Info. Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Second Floor																				
Room #3 (Office)	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Office #10	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90

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	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Computer Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Employee Relations Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Auditorium	27	2	40	2484	35	75%	1.9	377.3	$172.28	$112.29	$284.57	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.2	246	$185.59	$945	$945	$163	$2,053	$98.98
Center Bldg. Open Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.8	632	$443.87	$1,170	$1,040	$191	$2,401	$285.34
Conference Room (Locked)	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	27	$20.16	$80	$80	$14	$174	$11.46
Room #7 (Office)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Basement Level																					
Stairwell #2 Police Area	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Stairwell #3 Legal Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	163	$68.28	$90	$80	$15	$185	$43.90
Room #16 (Rear Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Stairwell #1 Dispensary Side	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Room #16 (File Down Lighting)	6	1	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.2	40	$28.35	$180	$210	$34	$424	$13.72
Open Office Area Room #16	32	3	40	4416	50	95%	4.2	958.3	$387.94	$285.18	$673.12	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.7	611	$429.24	$1,280	$1,280	$221	$2,781	$243.88
Stairwell #2 Police Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	87	$36.58	$70	$70	$12	$152	$19.51
Room #14-15 (Office)	10	4	40	1840	50	95%	1.7	399.3	$161.64	$118.83	$280.47	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.1	243	$170.72	$450	$400	$74	$924	$109.75
Room #13 (Copy Room)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Room #3A (Internal Review)	6	3	40	828	35	75%	0.6	125.8	$57.43	$37.43	$94.86	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	80	$60.49	$240	$240	$42	$522	$34.37
Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	191	$134.14	$400	$400	$69	$869	$76.21
Room #2 (Office)	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Room #4 (Office)	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Room #5 (Office)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	229	$160.96	$480	$480	$83	$1,043	$91.46
Room #7 (Conference Room)	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	27	$20.16	$80	$80	$14	$174	$11.46
Room #3 (Open Work Space)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.0	229	$160.96	$480	$480	$83	$1,043	$91.46
Room #12	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
DPCA Office Coordinator	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Room #11 (Open Office Area)	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.8	191	$134.14	$400	$400	$69	$869	$76.21
Room #11A (Files)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Entrance/Vending Area	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Building 521																					
Basement Floor																					
Open Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Open Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Weight Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Pool Table Room	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Stairs to First Floor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
First Floor																					
Smokers Lounge	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Ladies Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Kitchen Area	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	65	$45.73	$175	$175	$30	$380	$24.39
Dining Area	4	4	40	736	30	50%	0.4	95.8	$34.03	$28.52	$62.55	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	58	$38.07	$180	$160	$29	$369	$24.48
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
General Office Area	18	2	40	1656	90	95%	1.6	646.8	$145.48	$192.50	$337.97	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.0	422	$220.42	$630	$630	$109	$1,369	$117.56
Radio Equipment Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	163	$68.28	$90	$80	$15	$185	$43.90
Union Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Copier/Fax Machine Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Chief Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Research Area/Library	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	69	$35.92	$80	$80	$14	$174	$20.41
Plans Review Conference Room	6	2	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	55	$41.24	$210	$210	$36	$456	$22.00
Watch Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	163	$68.28	$90	$80	$15	$185	$43.90
Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Assistance Chief Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Second Floor																					
Corridor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97

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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 522																					
First Floor																					
Office of the Chief of Staff	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Office of the Chief of Staff Recp.	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Rear Office #2 (not occupied)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Secretary's Ofc. to the General	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Right Reception Area	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Main Entrance	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Rear Office #2 (not occupied)	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Rear Office #1 (not occupied)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Lobby	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Reception Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Left Reception Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Commanding General Conf. Rm.	9	4	40	1656	35	75%	1.2	251.5	$114.85	$74.86	$189.71	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.8	153	$115.48	$405	$360	$66	$831	$74.23
Commanding Generals Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Secretary's Ofc. to the General	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Second Floor																					
Inspector Gen. Admin. Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Copy Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Inspector General Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Inspector General Reception	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Protocol Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	65	$45.73	$175	$175	$30	$380	$24.39
Liason Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Protocol Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Conference Room	10	4	40	1840	35	75%	1.4	279.5	$127.61	$83.18	$210.79	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.8	170	$128.31	$450	$400	$74	$924	$82.48
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Building 523																					
Administration																					
Cornelius Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Grayson Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Helsel Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Descom Office A	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Hoover Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Barnes Office	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	115	$80.48	$240	$240	$42	$522	$45.73
Gerhart Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Creamer Office	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Sheffield Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Conference Room B	2	4	40	368	35	75%	0.3	55.9	$25.52	$16.64	$42.16	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	34	$25.66	$90	$80	$15	$185	$16.50
Myers Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Horn Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Descom Office B	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Conference Room A	8	3	40	1104	35	75%	0.8	167.7	$76.57	$49.91	$126.47	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	107	$80.65	$320	$320	$55	$695	$45.82
Kitchen	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Library	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Descom Office C	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Corridor	11	2	40	1012	50	95%	1.0	219.6	$88.90	$65.35	$154.26	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.6	143	$100.60	$385	$385	$67	$837	$53.65
Building 524																					
Conference Center																					
Entrance Lobby	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	91	$64.02	$245	$245	$42	$532	$34.14
Mens Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Womens Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72

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Buildings 500 - 581
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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 529																					
First Floor																					
Golf Shop Lunch Room	6	2	40	552	60	95%	0.5	143.7	$48.49	$42.78	$91.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	94	$59.52	$210	$210	$36	$456	$31.75
Golf Equipment Shop Office	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$18.52	$45	$40	$7	$92	$11.90
Golf Equipment Shop	9	2	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	141	$89.29	$315	$315	$54	$684	$47.62
Golf Equipment Shop Office	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$9.92	$35	$35	$6	$76	$5.29
Golf Eqpt. Shop Entrance Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$19.84	$70	$70	$12	$152	$10.58
Mens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Bar Table Area	19	4	40	3496	60	95%	3.3	910.4	$307.12	$270.92	$578.04	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.0	554	$351.85	$855	$760	$140	$1,755	$226.19
Kitchen Dish Room	6	3	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.5	137	$87.30	$240	$240	$42	$522	$49.60
Restroom Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	31	$19.84	$70	$70	$12	$152	$10.58
Bar Counter	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	58	$37.04	$90	$80	$15	$185	$23.81
Food Counter	4	4	40	736	60	95%	0.7	191.7	$64.66	$57.04	$121.69	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	117	$74.07	$180	$160	$29	$369	$47.62
Mens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$9.92	$35	$35	$6	$76	$5.29
Dumb Waiter Room	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$18.52	$45	$40	$7	$92	$11.90
Womens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$9.92	$35	$35	$6	$76	$5.29
Womens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$10.20	$70	$70	$12	$152	$5.44
Second Floor																					
Corridor to Mens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	16	$9.92	$35	$35	$6	$76	$5.29
Mens Room	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	58	$37.04	$90	$80	$15	$185	$23.81
Food Prep Room	5	4	40	920	60	95%	0.9	239.6	$80.82	$71.30	$152.12	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	146	$92.59	$225	$200	$37	$462	$59.52
Womens Restroom	4	2	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	62	$39.68	$140	$140	$24	$304	$21.16
Second Floor Entrance Lobby	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	58	$37.04	$90	$80	$15	$185	$23.81
Dining Room	14	4	40	2576	60	95%	2.4	670.8	$226.30	$199.63	$425.92	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.5	408	$259.26	$630	$560	$103	$1,293	$166.67
Handicap Restroom	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$18.52	$45	$40	$7	$92	$11.90
Building 530																					
Cable TV for Housing																					
Open Office Area	16	2	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.9	208	$146.33	$560	$560	$97	$1,217	$78.04
Building 536																					
Bath House																					
Mens Locker Area	7	2	40	644	168	95%	0.6	469.6	$56.57	$139.74	$196.31	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	306	$128.03	$245	$245	$42	$532	$68.28
Mens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Womens Locker Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	131	$54.87	$105	$105	$18	$228	$29.26
Womens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Womens Pool Shower Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	87	$36.58	$70	$70	$12	$152	$19.51
Mens Pool Shower Area Locked	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	87	$36.58	$70	$70	$12	$152	$19.51
Building 581																					
First Floor																					
SIDS Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Mens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Copy Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
LEAD Valve Engin. Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Breakroom	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Mens Room Sink Lighting	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Dir. Resource Mgrs. Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Dir. Resource Mgrs. Recp. Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Conference Room	6	4	40	1104	35	75%	0.8	167.7	$76.57	$49.91	$126.47	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	102	$76.98	$270	$240	$44	$554	$49.49
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	65	$45.73	$175	$175	$30	$380	$24.39
LEAD Valve Engin. Area	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Open Office Area	16	4	40	2944	50	95%	2.8	638.8	$258.63	$190.12	$448.75	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.7	389	$273.15	$720	$640	$118	$1,478	$175.60

ECO-6D
Buildings 500 - 581
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Second Floor																				
Room #15 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Room #17 Conference Room	3	4	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	51	$38.49	$135	$120	$22	$277	$24.74
Room #20A	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Room #20	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #14 Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Room #19 Smoke Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #8 & #10	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.5	122	$85.36	$225	$200	$37	$462	$54.87
Room #14A Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #11 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Room #12 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #1 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #9 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Room #5 & #7 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Room #3 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Room #4 Conference Room	3	4	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	51	$38.49	$135	$120	$22	$277	$24.74
Room #1 Conference Area	2	4	40	368	35	75%	0.3	55.9	$25.52	$16.64	$42.16	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	34	$25.66	$90	$80	$15	$185	$16.50
Corridor	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.2	267	$187.79	$495	$440	$81	$1,016	$120.72
TOTALS	894			128800			117.7	30327	$11,000	$9,000	$20,000			73.5	18972	$12,000	$36,000	$34,000	$6,000	$77,000	$7,500

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22-May-95

ECO-6E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 616																					
Police Building																					
Police Conference Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Police Conference Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	327	$136.57	$180	$160	$29	$369	$87.79
Building 618																					
First Floor																					
Hoke Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Room #11 Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Coffee Mess	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Handicap Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Room #7	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Merritt Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Keefer Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Walter Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Hunting & Fishing Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Second Floor																					
Warnock Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	104	$73.17	$280	$280	$48	$608	$39.02
Stairwell to Second Floor	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Cassner	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Yeager Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Yocum Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Quinn Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Haz Waste Conference Room	5	3	40	690	35	75%	0.5	104.8	$47.85	$31.19	$79.05	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	67	$50.41	$200	$200	$35	$435	$28.64
Gieseking Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Williams Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Esptein Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Conference Room	3	3	40	414	35	75%	0.3	62.9	$28.71	$18.72	$47.43	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	40	$30.24	$120	$120	$21	$261	$17.18
Womens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Building 619																					
Dining Area																					
Womens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Staff Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Womens Room Sink	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Mens Room Sink	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Rear Dining Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Open Dining Area	27	3	40	3726	50	95%	3.5	808.5	$327.32	$240.62	$567.95	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.3	516	$362.17	$1,080	$1,080	$187	$2,347	$205.78
Serving Area	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.4	91	$64.02	$245	$245	$42	$532	$34.14
Rear Dining Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Building 628																					
First Floor																					
Information Security	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Badge Photo Room	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	76	$53.65	$160	$160	$28	$348	$30.49
Badge Photo Room File	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Conference Room A	3	3	40	414	35	75%	0.3	62.9	$28.71	$18.72	$47.43	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	40	$30.24	$120	$120	$21	$261	$17.18
First Floor Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Womens Restroom & Shower	3	3	40	414	30	50%	0.2	53.9	$19.14	$16.04	$35.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	34	$22.44	$120	$120	$21	$261	$12.75
Handicap Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.0	11	$7.48	$40	$40	$7	$87	$4.25
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Smoking Room	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	1 - F32T8 & 1 - 1L Electronic Ballast	31	0.0	7	$4.73	$30	$35	$6	$71	$2.29
Automation Security Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Police Officers Room #3 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Room #1 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Physical Security	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62

ECO-6E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Second Floor																					
Stairway to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Investigation Office Room #19	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Investigation Office Room #18	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Interview Room #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Secretary & Plans Div. Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Chief Secretary & Plans Div. Ofc.	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	57	$40.24	$120	$120	$21	$261	$22.86
Mens Room & Shower	3	3	40	414	30	50%	0.2	53.9	$19.14	$16.04	$35.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	34	$22.44	$120	$120	$21	$261	$12.75
Director - PM Office Room #11	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Directorate Secretary Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Building 637																					
Chapel																					
Chapel Lighting	40	1	40	1840	40	75%	1.4	319.4	$127.61	$95.06	$222.67	1 - F32T8 &1 - 1L Electronic Ballast	31	0.9	215	$150.06	$1,200	$1,400	$225	$2,825	$72.61
Corridor Behind Alter	2	2	40	184	40	75%	0.1	31.9	$12.76	$9.51	$22.27	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	21	$14.52	$70	$70	$12	$152	$7.75
Building 639																					
Physical Fitness Center																					
Rear Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Weight Room Restroom	2	2	40	184	101	95%	0.2	80.7	$16.16	$24.00	$40.17	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	53	$26.20	$70	$70	$12	$152	$13.97
Weight Room	14	3	40	1932	168	95%	1.8	1408.7	$169.72	$419.22	$588.94	3 - F32T8 & 1 - 3L Electronic Ballast	88	1.2	898	$375.56	$560	$560	$97	$1,217	$213.38
Gym Entrance	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Womens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	82	$34.14	$45	$40	$7	$92	$21.95
Corridor to Sauna	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	131	$54.87	$105	$105	$18	$228	$29.26
Corridor to Womens Locker Rm.	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Womens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Corridor to Mens Locker Room	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	44	$18.29	$35	$35	$6	$76	$9.75
Gym Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	163	$68.28	$90	$80	$15	$185	$43.90
Corridor to Restroom	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	87	$36.58	$70	$70	$12	$152	$19.51
Mens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	327	$136.57	$180	$160	$29	$369	$87.79
Womens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	327	$136.57	$180	$160	$29	$369	$87.79
Mens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	175	$73.16	$140	$140	$24	$304	$39.02
Mens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	82	$34.14	$45	$40	$7	$92	$21.95
Gym Entrance	1	1	40	46	168	95%	0.0	33.5	$4.04	$9.98	$14.02	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	23	$9.45	$30	$35	$6	$71	$4.57
Building 640																					
Camper Check-In																					
Main Entrance Area	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	19	$16.14	$90	$80	$15	$185	$10.38
Office #1	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	10	$8.07	$45	$40	$7	$92	$5.19
Office #2	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	10	$8.07	$45	$40	$7	$92	$5.19
Mens Room	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	19	$16.14	$90	$80	$15	$185	$10.38
Womens Room	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	19	$16.14	$90	$80	$15	$185	$10.38
Laundry Room	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	10	$8.07	$45	$40	$7	$92	$5.19
Building 645																					
Day Care																					
Entrance Lobby	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Changing Area	2	2	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	28	$18.91	$70	$70	$12	$152	$10.09
Bathroom #3	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	14	$9.46	$35	$35	$6	$76	$5.04
Baby Area	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Bathroom #2	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	14	$9.46	$35	$35	$6	$76	$5.04
Kitchen Area	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Bathroom #1	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	14	$9.46	$35	$35	$6	$76	$5.04
Play Area	16	2	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.9	375	$195.93	$560	$560	$97	$1,217	$104.49
Staff Office	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	70	$36.74	$105	$105	$18	$228	$19.59

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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 646																					
Youth Center																					
Entrance Area	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	96	$44.10	$80	$80	$14	$174	$25.06
Lounge Area	5	3	40	690	126	95%	0.7	377.3	$60.62	$112.29	$172.91	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	241	$110.26	$200	$200	$35	$435	$62.65
Girls Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	40	$22.32	$70	$70	$12	$152	$11.90
Boys Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	40	$22.32	$70	$70	$12	$152	$11.90
Staff Office	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	96	$44.10	$80	$80	$14	$174	$25.06
Corridor to Play Room	1	2	40	92	126	95%	0.1	50.3	$8.08	$14.97	$23.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	33	$15.04	$35	$35	$6	$76	$8.02
Play Room	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	96	$44.10	$80	$80	$14	$174	$25.06
Open Area	20	2	40	1840	126	95%	1.7	1006.2	$161.64	$299.44	$461.08	2 - F32T8 & 1 - 2L Electronic Ballast	60	1.1	656	$300.71	$700	$700	$121	$1,521	$160.38
Kitchen	1	3	40	138	126	95%	0.1	75.5	$12.12	$22.46	$34.58	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	48	$22.05	$40	$40	$7	$87	$12.53
Kitchen	2	2	40	184	126	95%	0.2	100.6	$16.16	$29.94	$46.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	66	$30.07	$70	$70	$12	$152	$16.04
Building 663																					
Administration & Trades																					
Heating & Plumbing Shop Area	19	4	40	3496	90	95%	3.3	1365.5	$307.12	$406.38	$713.50	4 - F32T8 & 1 - 4L Electronic Ballast	112	2.0	831	$434.31	$855	$760	$140	$1,755	$279.20
Main Entrance Lobby	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Lunch Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	350	$182.87	$360	$320	$59	$739	$117.56
Production Division Office #3	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Production Division Office #2	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	47	$24.49	$70	$70	$12	$152	$13.06
Heating Branch Office Front Rm	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	262	$137.15	$270	$240	$44	$554	$88.17
Heating Branch Office Back Rm	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Production Division Office #1	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Building & Structural Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Lunch Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Carpenter Supply Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Carpenter Shop Area	28	3	40	3864	90	95%	3.7	1509.3	$339.45	$449.16	$788.61	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.3	962	$502.88	$1,120	$1,120	$194	$2,434	$285.73
S. C. Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Dispatch Office	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Heating Supply Cage	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	175	$91.43	$180	$160	$29	$369	$58.78
Dispatch Corridor	1	3	40	138	90	95%	0.1	53.9	$12.12	$16.04	$28.16	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	34	$17.96	$40	$40	$7	$87	$10.20
Computer Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	137	$71.84	$160	$160	$28	$348	$40.82
Welding Shop Area	8	2	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.5	187	$97.96	$280	$280	$48	$608	$52.25
Welding Shop Area	30	3	40	4140	90	95%	3.9	1617.1	$363.69	$481.24	$844.94	3 - F32T8 & 1 - 3L Electronic Ballast	88	2.5	1,031	$538.80	$1,200	$1,200	$208	$2,608	$306.14
Production Division Office #1	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	87	$45.72	$90	$80	$15	$185	$29.39
Operations & Maint. Conf. Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	48	$29.78	$80	$80	$14	$174	$16.92
Work Planning & Control Office	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	525	$274.30	$540	$480	$88	$1,108	$176.33
Business Managers Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Copy Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	26	$17.65	$45	$40	$7	$92	$11.35
Computer Room	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Womens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	41	$27.74	$80	$80	$14	$174	$15.76
Mens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	41	$27.74	$80	$80	$14	$174	$15.76
Conference Room	7	3	40	966	63	95%	0.9	264.1	$84.86	$78.60	$163.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.6	168	$104.24	$280	$280	$48	$608	$59.23
Corridor to Drawing Files Area	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	69	$35.92	$80	$80	$14	$174	$20.41
Director of Public Works	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	44	$22.86	$45	$40	$7	$92	$14.69
Director of Public Works	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	70	$36.74	$105	$105	$18	$228	$19.59
Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.3	103	$53.88	$120	$120	$21	$261	$30.61
Office	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	69	$35.92	$80	$80	$14	$174	$20.41
Print Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	26	$17.65	$45	$40	$7	$92	$11.35
Drawing Files Area	8	4	40	1472	54	95%	1.4	345.0	$129.31	$102.67	$231.98	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	210	$141.20	$360	$320	$59	$739	$90.77
Open Office Area	47	3	40	6486	90	95%	6.2	2533.4	$569.78	$753.95	$1,324	3 - F32T8 & 1 - 3L Electronic Ballast	88	3.9	1,616	$844.12	$1,880	$1,880	$325	$4,085	$479.61
Corridor to Snack Bar	3	1	75	258.75	90	95%	0.2	101.1	$22.73	$30.08	$52.81	1 - F96T8 & 1 - 2L Electronic Ballast	52	0.1	61	$31.84	$96	$105	$17	$218	$20.97
Operations & Maint. Room	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	525	$274.30	$540	$480	$88	$1,108	$176.33
Electrical Supply	7	1	75	603.75	90	95%	0.6	235.8	$53.04	$70.18	$123.22	1 - F96T8 & 1 - 2L Electronic Ballast	52	0.3	142	$74.29	$224	$245	$41	$510	$48.93
Electrical Supply	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	69	$35.92	$80	$80	$14	$174	$20.41
Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	94	$48.98	$140	$140	$24	$304	$26.12
Corridor to Snack Bar	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	23	$12.25	$35	$35	$6	$76	$6.53
Receiving - Supply Area	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.8	328	$171.44	$490	$490	$85	$1,065	$91.43
Drafting Office Area	34	4	40	6256	90	95%	5.9	2443.6	$549.58	$727.21	$1,277	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.6	1,487	$777.18	$1,530	$1,360	$250	$3,140	$499.61
Engineering Office Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	350	$182.87	$360	$320	$59	$739	$117.56
Restroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	14	$9.46	$35	$35	$6	$76	$5.04

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	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 664																				
First Floor																				
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Locker/Shower Room	5	2	40	460	30	50%	0.2	59.9	$21.27	$17.82	$39.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$25.50	$175	$175	$30	$380	$13.60
Corridor to Restroom	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Locker Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	23	$14.96	$80	$80	$14	$174	$8.50
Open Office Area	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
Empty Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Issue Center Office	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
Second Floor																				
Library Check-Out	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Chaplain's Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Reading Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Childrens Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Library Stacks	36	2	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	2 - F32T8 & 1 - 2L Electronic Ballast	60	2.1	469	$329.24	$1,260	$1,260	$218	$2,738	$175.60
Reading Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Administrative Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Library	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Class Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Sunday School Room	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	65	$45.73	$175	$175	$30	$380	$24.39
Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.2	38	$26.83	$80	$80	$14	$174	$15.24
Building 2260																				
Administration																				
Ladies Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	29	$19.04	$90	$80	$15	$185	$12.24
Mens Room	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Handicap Restroom	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	15	$9.52	$45	$40	$7	$92	$6.12
Distri. Branch Chief Reception	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Open Office Area	52	4	40	9568	50	95%	9.1	2076.3	$840.53	$617.89	$1,458	4 - F32T8 & 1 - 4L Electronic Ballast	112	5.5	1,264	$887.74	$2,340	$2,080	$382	$4,802	$570.69
Property Disposal Officer	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.9	194	$136.58	$360	$320	$59	$739	$87.80
Distri. Branch Chief Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Exit Lobby	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.1	24	$17.07	$45	$40	$7	$92	$10.97
Building 2329																				
Pesticide																				
Pesticide Sink Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Staff Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Corridor	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Building 2755																				
Warehouse																				
Lab Room	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.4	95	$67.07	$200	$200	$35	$435	$38.11
Corridor to Rest Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	39	$27.44	$105	$105	$18	$228	$14.63
Main Corridor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
File Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.3	73	$51.22	$135	$120	$22	$277	$32.92
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	8	$5.27	$60	$70	$11	$141	$2.55
Open Office Area	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	292	$204.86	$540	$480	$88	$1,108	$131.70
Mens Room Shower	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Womens Room	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Breakroom	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.3	78	$54.87	$210	$210	$36	$456	$29.27
Mens Room Mirror	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	4	$2.63	$30	$35	$6	$71	$1.27
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72

ECO-6E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Lighting Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3311																					
Administration																					
Surveillance Office #1	18	4	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.9	437	$307.29	$810	$720	$132	$1,662	$197.55
Smoke Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3 - F32T8 & 1 - 3L Electronic Ballast	88	0.1	19	$13.41	$40	$40	$7	$87	$7.62
Smoke Room	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	1 - F32T8 &1 - 1L Electronic Ballast	31	0.1	13	$9.45	$60	$70	$11	$141	$4.57
Vending Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	13	$9.15	$35	$35	$6	$76	$4.88
Surveillance Office #2	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Entrance Lobby	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	7	$4.73	$30	$35	$6	$71	$2.29
Office #9	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office #14	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office #15	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office #13	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Entrance #13 & #14	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office #10	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office #12	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Office #11	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Vending Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Office #8	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office #9	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Office #4	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	292	$204.86	$540	$480	$88	$1,108	$131.70
Directors Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Director Surveillance Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office #1	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Conference Room	8	4	40	1472	35	75%	1.1	223.6	$102.09	$66.54	$168.63	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.7	136	$102.65	$360	$320	$59	$739	$65.99
Office #2	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Open Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	4 - F32T8 & 1 - 4L Electronic Ballast	112	3.2	729	$512.16	$1,350	$1,200	$221	$2,771	$329.24
Office #3	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.6	146	$102.43	$270	$240	$44	$554	$65.85
Exit Corridor	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	1 - F32T8 &1 - 1L Electronic Ballast	31	0.1	13	$9.45	$60	$70	$11	$141	$4.57
Office #5	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.3	292	$204.86	$540	$480	$88	$1,108	$131.70
Entrance Corridor	8	1	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	1 - F32T8 &1 - 1L Electronic Ballast	31	0.2	54	$37.80	$240	$280	$45	$565	$18.29
Copy and Mail Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.4	97	$68.29	$180	$160	$29	$369	$43.90
Womens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	8	$5.27	$60	$70	$11	$141	$2.55
Womens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	8	$5.27	$60	$70	$11	$141	$2.55
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	8	$5.27	$60	$70	$11	$141	$2.55
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1 - F32T8 &1 - 1L Electronic Ballast	31	0.0	8	$5.27	$60	$70	$11	$141	$2.55
Office #6	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4 - F32T8 & 1 - 4L Electronic Ballast	112	1.0	219	$153.65	$405	$360	$66	$831	$98.77
Office #7	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Building 3315																					
Warehouse																					
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office Area	12	2	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.7	156	$109.75	$420	$420	$73	$913	$58.53
Break Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Key Area	10	2	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.6	130	$91.46	$350	$350	$61	$761	$48.78
Key Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.1	26	$18.29	$70	$70	$12	$152	$9.76
Building 3321																					
Hunter Check-In																					
Meeting Room	3	1	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	1 - F32T8 &1 - 1L Electronic Ballast	31	0.1	20	$14.18	$90	$105	$17	$212	$6.86
Meeting Room	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.2	52	$36.58	$140	$140	$24	$304	$19.51
Meeting Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Locker Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.2	49	$34.14	$90	$80	$15	$185	$21.95
Building 5426																					
Warehouse																					
Office	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	4 - F32T8 & 1 - 4L Electronic Ballast	112	0.7	170	$119.50	$315	$280	$51	$646	$76.82
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2 - F32T8 & 1 - 2L Electronic Ballast	60	0.0	8	$5.10	$35	$35	$6	$76	$2.72
TOTALS	1104			151099			139.5	44856	$13,000	$13,000	$26,000			87.3	28116	$16,000	$44,000	$42,000	$7,000	$94,000	$10,000

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22-May-95

ECO-7
Fluorescent Lamp Retrofit

Existing. Seventy-two buildings at the Letterkenny Army Depot contain approximately 7,376 fluorescent luminaries of various types. The total watts for the existing luminaires is 1,030,055 watts. The luminaires operate between 35 and 168 hours per week and contribute approximately 50% to 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	11,480 kW/yr (956.7 kW/mo 12 mo/yr)
Electric Usage	=	3,586,836 kWh/yr (298,903 kWh/mo x 12 mo/yr)
Electric Cost	=	$177,000 (11,480 kW/yr x $7.706/kW) + (3,586,836 kWh/yr x $.0248/kWh) = $177,418, use $177,000

Proposed. Remove the existing F40T12 and F96T12 lamps and install energy efficient lower wattage lamps. Reference the attached data tables for ECO-7. By installing the lower wattage lamps, the resulting light output will be reduced. For a standard 40 watt lamp, replacing it with a 34 watt lamp will reduce the lumen output from 2,650 to 2,300, approximately 13%. For a standard 75 watt lamp, replacing it with a 60 watt lamp will reduce the lumen output from 5,350 to 4,750, approximately 11%. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	9,736 kW/yr (811.3 kW/mo x 12 mo/yr)
Electric Usage	=	3,042,048 kWh/yr (253,504 kW/mo x 12 mo/yr)

Electric Cost	=	$150,000 (9,736 kW/yr x $7.706/kW) + (3,042,048 kWh/yr x $.0248/kWh) = $150,468, use $150,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $145,000. The breakdown is noted below and shown on the attached ECO data sheet.

Material	$ 90,000
Labor	$ 55,000
Engineering	$ 0
Total	**$145,000**

Energy Savings. The annual electric demand, usage, and cost saved is noted below:

Electric Demand	=	1,744 kW/yr (11,480 - 9,736)
Electric Usage	=	544,788 kWh/yr (3,586,836 - 3,042,048)
Energy Cost	=	$27,000/yr ($177,000 - $150,000)
Annual Energy Savings	=	1,859 mmBtu/yr
Energy Usage	=	1,859 mmBtu/yr (544,788 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. The energy efficient lower wattage lamps have the same rated average life as the existing lamps, 20,000 hours; therefore, there is no annual recurring maintenance savings. The installation of new lamps will reduce the normal required lamp changes, since all new lamps are being installed.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO7
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO7
ANALYSIS DATE: 03-27-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 145000.	
B. SIOH	$ 7975.	
C. DESIGN COST	$ 0.	
D. TOTAL COST (1A+1B+1C)	$ 152975.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 152975.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	1859.	$ 13515.	18.17	$ 245566.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 13000.	17.22	$ 223860.
N. TOTAL		1859.	$ 26515.		$ 469426.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) — $ 0.
(1) DISCOUNT FACTOR (TABLE A) — 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) — $ 0.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-) (4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 0.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 26515.

5. SIMPLE PAYBACK PERIOD (1G/4) — 5.77 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) — $ 469426.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= — 3.07
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): — 7.83 %

Summary ECO7A - ECO7E
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
ECO-7A																					
Summary	3555			483702			453.2	141371	$42,000	$42,000	$84,000			384.5	119995	$71,000	$42,000	$26,000	$0	$68,000	$13,000
ECO-7B																					
Summary	551			76337			72.0	21347	$7,000	$6,000	$13,000			60.0	17769	$11,000	$7,000	$4,000	$0	$11,000	$2,000
ECO-7C																					
Summary	1272			190118			174.3	61002	$16,000	$18,000	$34,000			148.1	51852	$29,000	$17,000	$10,000	$0	$27,000	$5,000
ECO-7D																					
Summary	894			128800			117.7	30327	$11,000	$9,000	$20,000			100.0	25778	$17,000	$11,000	$7,000	$0	$18,000	$3,000
ECO-7E																					
Summary	1104			151099			139.5	44856	$13,000	$13,000	$26,000			118.5	38111	$22,000	$13,000	$8,000	$0	$21,000	$4,000
TOTALS	7376			1030055			956.7	298903	$89,000	$88,000	$177,000			811.3	253504	$150,000	$90,000	$55,000	$0	$145,000	$27,000

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22-May-95

ECO-7A
Buildings 1 - 10
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Office Area																					
Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
DPME Womens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
DPME Mens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
DPME Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
DPME Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Chief Engineering Support Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Engineering Work Area	113	3	40	15594	50	95%	14.8	3383.9	$1,369.91	$1,007.05	$2,376.96	3- F40T12/EW Energy Saving Lamps	117	12.6	2,876	$2,020.41	$1,356	$848	$0	$2,204	$356.54
DPME Section Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Production Engineering Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Chief Production Eng. Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Conference Room Corridor	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Conference Room A	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4- F40T12/EW Energy Saving Lamps	156	0.5	95	$71.67	$64	$40	$0	$104	$12.65
DPME File Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
DPME Work Area	18	3	40	2484	50	95%	2.4	539.0	$218.22	$160.41	$378.63	3- F40T12/EW Energy Saving Lamps	117	2.0	458	$321.84	$216	$135	$0	$351	$56.79
DPME Copy Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Chief Requisition Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Logistics Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Production Planning Conf. Rm.	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Chief Production Office	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Chief Maintenance Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Manager Analysis Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Conference Room B	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4- F40T12/EW Energy Saving Lamps	156	0.5	95	$71.67	$64	$40	$0	$104	$12.65
Corridor B	10	1	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	1- F40T12/EW Energy Saving Lamp	39	0.4	85	$59.60	$40	$25	$0	$65	$10.52
Deputy Director Maint, Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Director Maintenance Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Corridor A	16	1	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	1- F40T12/EW Energy Saving Lamp	39	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Corridor A (Entrance Lobby)	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Chrome Plate Area (CP)																					
CP-Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Editors Office	8	4	40	1472	50	95%	1.4	319	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Print Room	13	4	40	2,392	50	95%	2.3	519	$210.13	$154.47	$364.61	4- F40T12/EW Energy Saving Lamps	156	1.9	441	$309.92	$208	$130	$0	$338	$54.69
IMA Support Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Record Managers Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Cafe Area	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Receiving Bay	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Corridor to Rooms #2-#6	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
CP-Shop Area B	28	2	75	4,830	50	95%	4.6	1048	$424.31	$311.92	$736.23	2 - F96T12/EW Energy Saving Lamps	138	3.7	838	$588.98	$428	$140	$0	$568	$147.25
CP-Shop Area A	63	2	75	10,868	50	95%	10.3	2358	$954.69	$701.81	$1,656.51	2 - F96T12/EW Energy Saving Lamps	138	8.3	1,887	$1,325.21	$964	$315	$0	$1,279	$331.30
CP-Shop Area A	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
CP-Shop Area A	12	2	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	2- F40T12/EW Energy Saving Lamps	78	0.9	204	$143.04	$96	$60	$0	$156	$25.24
CP-Shop Area B	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
CP-Exit Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
CP-Shop Area B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Building 2																					
Administration																					
South Entrance #2 Open Office	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	3- F40T12/EW Energy Saving Lamps	117	1.3	305	$214.56	$144	$90	$0	$234	$37.86
G. Kirk Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Conference Room	8	4	40	1,472	35	75%	1.1	224	$102.09	$66.54	$168.63	4- F40T12/EW Energy Saving Lamps	156	0.9	190	$143.34	$128	$80	$0	$208	$25.29
Movement Branch Mgrs. Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Movement Branch Open Office	36	4	40	6,624	50	95%	6.3	1437	$581.91	$427.77	$1,009.68	4- F40T12/EW Energy Saving Lamps	156	5.3	1,222	$858.23	$576	$360	$0	$936	$151.45
Industrial Hygiene	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	3- F40T12/EW Energy Saving Lamps	117	1.1	255	$178.80	$120	$75	$0	$195	$31.55
South Entrance #2 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Entrance Lobby South East	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Director/Commander Reception	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
South Entrance Lobby #1	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
South East Open Office Area	18	4	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	4- F40T12/EW Energy Saving Lamps	156	2.7	611	$429.11	$288	$180	$0	$468	$75.73
Middle Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Open Office Area	98	4	40	18,032	50	95%	17.1	3913	$1,584.08	$1,164.49	$2,748.57	4- F40T12/EW Energy Saving Lamps	156	14.6	3,326	$2,336.29	$1,568	$980	$0	$2,548	$412.29
Commanders Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Directors Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Entrance Lobby South West	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10

ECO-7A
Buildings 1 - 10
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3																					
Computer Area																					
Library	25	3	40	3,450	126	95%	3.3	1887	$303.08	$561.45	$864.53	3- F40T12/EW Energy Saving Lamps	117	2.8	1,604	$734.85	$300	$188	$0	$488	$129.68
Computer Office 132	4	3	40	552	126	95%	0.5	302	$48.49	$89.83	$138.32	3- F40T12/EW Energy Saving Lamps	117	0.4	257	$117.58	$48	$30	$0	$78	$20.75
Vault	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	4- F40T12/EW Energy Saving Lamps	156	1.2	456	$245.66	$128	$80	$0	$208	$43.35
Raised Fl. Tape Storage Rm. #8	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	4- F40T12/EW Energy Saving Lamps	156	0.9	513	$235.15	$96	$60	$0	$156	$41.50
Raised Floor Computer Center	34	4	40	6,256	126	95%	5.9	3421	$545.58	$1,018.09	$1,563.67	4- F40T12/EW Energy Saving Lamps	156	5.1	2,908	$1,332.53	$544	$340	$0	$884	$231.15
Raised Floor Computer Rm. #1	54	4	40	9,936	126	95%	9.4	5433	$872.86	$1,616.98	$2,489.84	4- F40T12/EW Energy Saving Lamps	156	8.0	4,618	$2,116.37	$864	$540	$0	$1,404	$373.48
Raised Floor Computer Rm. #2	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	4- F40T12/EW Energy Saving Lamps	156	11.3	6,500	$2,978.59	$1,216	$760	$0	$1,976	$525.63
Raised Floor Computer Rm. #3	65	4	40	11,960	126	95%	11.4	6540	$1,050.67	$1,946.37	$2,997.03	4- F40T12/EW Energy Saving Lamps	156	9.7	5,559	$2,547.48	$1,040	$650	$0	$1,690	$449.55
Raised Floor Computer Rm. #6	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	4- F40T12/EW Energy Saving Lamps	156	11.3	6,500	$2,978.59	$1,216	$760	$0	$1,976	$525.63
Raised Floor Comp. Ctr. Office	9	4	40	1,656	126	95%	1.6	906	$145.48	$269.50	$414.97	4- F40T12/EW Energy Saving Lamps	156	1.3	770	$352.73	$144	$90	$0	$234	$62.25
Raised Floor Computer Rm. #5	64	4	40	11,776	126	95%	11.2	6440	$1,034.50	$1,916.42	$2,950.92	4- F40T12/EW Energy Saving Lamps	156	9.5	5,474	$2,508.29	$1,024	$640	$0	$1,664	$442.64
Raised Floor Computer Rm. #7	55	4	40	10,120	126	95%	9.6	5534	$889.03	$1,646.92	$2,535.95	4- F40T12/EW Energy Saving Lamps	156	8.2	4,704	$2,155.56	$880	$550	$0	$1,430	$380.39
Raised Floor Computer Rm. #6A	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	4- F40T12/EW Energy Saving Lamps	156	0.9	513	$235.15	$96	$60	$0	$156	$41.50
Computer Office 132A	24	4	40	4,416	126	95%	4.2	2415	$387.94	$718.66	$1,106.60	4- F40T12/EW Energy Saving Lamps	156	3.6	2,053	$940.61	$384	$240	$0	$624	$165.99
South East Area																					
Office 1-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Office 6-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 6-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Open Office Area 7-G	39	3	40	5,382	50	95%	5.1	1168	$472.80	$347.57	$820.37	3- F40T12/EW Energy Saving Lamps	117	4.3	993	$697.31	$468	$293	$0	$761	$123.05
Room #120 4-F	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office 5-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Automation Open Area 10-H	25	3	40	3,450	50	95%	3.3	749	$303.08	$222.80	$525.88	3- F40T12/EW Energy Saving Lamps	117	2.8	636	$446.99	$300	$188	$0	$488	$78.88
Office 7-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 2-J	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
DMC Office 8-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Room #130 10-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Open Office Area 13-G	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	3- F40T12/EW Energy Saving Lamps	117	2.7	611	$429.11	$288	$180	$0	$468	$75.73
Office 1-H	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office 1-G	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
DMC Open Area 4-F	70	3	40	9,660	50	95%	9.2	2096	$848.62	$623.84	$1,472.45	3- F40T12/EW Energy Saving Lamps	117	7.8	1,782	$1,251.58	$840	$525	$0	$1,365	$220.87
Mens Room 12-J	5	2	40	460	30	50%	0.2	60	$21.27	$17.82	$39.09	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$33.23	$40	$25	$0	$65	$5.86
Womens Room	6	2	40	552	30	50%	0.3	72	$25.52	$21.39	$46.91	2- F40T12/EW Energy Saving Lamps	78	0.2	61	$39.87	$48	$30	$0	$78	$7.04
Office 1-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Snack Bar 9-K	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Office 3-K	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	3- F40T12/EW Energy Saving Lamps	117	0.8	178	$125.16	$84	$53	$0	$137	$22.09
Snack Bar 9-K	12	4	40	2,208	50	95%	2.1	479	$193.97	$142.59	$336.56	4- F40T12/EW Energy Saving Lamps	156	1.8	407	$286.08	$192	$120	$0	$312	$50.48
Smokers Lounge 10-K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Room #8 12-J	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Stairwell Lobby 11-K	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Open Office 14-K	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	2- F40T12/EW Energy Saving Lamps	78	1.0	238	$166.88	$112	$70	$0	$182	$29.45
Corridor 14-1-J	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	3- F40T12/EW Energy Saving Lamps	117	2.7	611	$429.11	$288	$180	$0	$468	$75.73
Office 1-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
South West Area																					
Room #109 6-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 5-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Room #111 6-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Room #105 8-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #107 7-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office Rear 4-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Corridor 5-10-B	10	2	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	2- F40T12/EW Energy Saving Lamps	78	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Corridor 5-10-B	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 5-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office Front 4-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office A 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor 4-1-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office B 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 2-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Room #117 Front 2-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 4-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office Rear 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Room #117 Rear 2-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office Front 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office 2-E	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16

ECO-7A
Buildings 1 - 10
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
North West Area																					
Office 19-E	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Office 26-E	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 26 D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Office 26 C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 26 B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 26-A	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 24-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Lobby 25-A	7	4	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	4- F40T12/EW Energy Saving Lamps	156	1.0	238	$166.88	$112	$70	$0	$182	$29.45
Office 19-A	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	3- F40T12/EW Energy Saving Lamps	117	0.8	178	$125.16	$84	$53	$0	$137	$22.09
Office 23-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 21-D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Open Office Area 25-19-A	111	3	40	15,318	50	95%	14.6	3324	$1,345.66	$989.22	$2,334.89	3- F40T12/EW Energy Saving Lamps	117	12.4	2,825	$1,984.65	$1,332	$833	$0	$2,165	$350.23
North East Area																					
Office 21-G	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Office 16-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office A 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office B 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 21-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 26-H	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	3- F40T12/EW Energy Saving Lamps	117	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Office 26-G	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Conference 26-F	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3- F40T12/EW Energy Saving Lamps	117	0.5	107	$80.63	$72	$45	$0	$117	$14.23
Office 22-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 26-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Open Office Area 20-F	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	3- F40T12/EW Energy Saving Lamps	117	4.5	1,018	$715.19	$480	$300	$0	$780	$126.21
Corridor 23-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor 22-14-J	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	3- F40T12/EW Energy Saving Lamps	117	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Womens Room 15-J	7	2	40	644	30	50%	0.3	84	$29.78	$24.95	$54.73	2- F40T12/EW Energy Saving Lamps	78	0.3	71	$46.52	$56	$35	$0	$91	$8.21
Mens Room 16-J	5	2	40	460	30	50%	0.2	60	$21.27	$17.82	$39.09	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$33.23	$40	$25	$0	$65	$5.86
Office 16-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office 17-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office 21-J	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Conference Room 20-J	16	4	40	2,944	35	75%	2.2	447	$204.18	$133.08	$337.26	4- F40T12/EW Energy Saving Lamps	156	1.9	380	$286.67	$256	$160	$0	$416	$50.59
Office 17-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Office A 22-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office B 22 J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Open Office Area 26-18-K	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	3- F40T12/EW Energy Saving Lamps	117	4.5	1,018	$715.19	$480	$300	$0	$780	$126.21
Open Office Area 25 J	14	3	40	1,932	50	95%	1.8	419	$169.72	$124.77	$294.49	3- F40T12/EW Energy Saving Lamps	117	1.6	356	$250.32	$168	$105	$0	$273	$44.17
Open Office Area 25 F	57	3	40	7,866	50	95%	7.5	1707	$691.02	$507.98	$1,199.00	3- F40T12/EW Energy Saving Lamps	117	6.4	1,451	$1,019.15	$684	$428	$0	$1,112	$179.85
Building 4																					
Warehouse																					
Warehouse Packaging Office	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Warehouse Packing Mens Room	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2- F40T12/EW Energy Saving Lamps	78	0.3	81	$53.17	$64	$40	$0	$104	$9.38
Warehouse Pac.Womens Room	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2- F40T12/EW Energy Saving Lamps	78	0.3	81	$53.17	$64	$40	$0	$104	$9.38
Building 5																					
Administration																					
Rook Office	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Open Office Area	126	2	40	11,592	50	95%	11.0	2515	$1,018.34	$748.60	$1,766.94	2- F40T12/EW Energy Saving Lamps	78	9.4	2,138	$1,501.90	$1,008	$630	$0	$1,638	$265.04
West Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Product Receipt Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Womens Room	1	2	40	92	30	50%	0.0	12	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Mens Room	1	2	40	92	30	50%	0.0	12	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Snider Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86

ECO-7A
Buildings 1 - 10
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 6																					
Administration																					
Corridor to Restroom	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Army Audit Agency	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Ammunition Operation Conf.	4	3	40	552	35	75%	0.4	84	$38.28	$24.95	$63.24	3- F40T12/EW Energy Saving Lamps	117	0.4	71	$53.75	$48	$30	$0	$78	$9.49
Tucker Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Army Reserve Division	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
NFFE Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Safety Division Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Mens Room	5	3	40	690	30	50%	0.3	90	$31.90	$26.74	$58.64	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$49.84	$60	$38	$0	$98	$8.80
Womens Room	5	3	40	690	30	50%	0.3	90	$31.90	$26.74	$58.64	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$49.84	$60	$38	$0	$98	$8.80
Open Office Area	379	3	40	52,302	50	95%	49.7	11350	$4,594.65	$3,377.62	$7,972.27	3- F40T12/EW Energy Saving Lamps	117	42.2	9,647	$6,776.43	$4,548	$2,843	$0	$7,391	$1,195.84
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
North East Entrance Corridor	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Director of Integrated Office	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
North East Entrance Corridor	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Deputy Chief of Staff Reception	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Deputy Chf. of Staff Conf. Rm.	5	3	40	690	35	75%	0.5	105	$47.85	$31.19	$79.05	3- F40T12/EW Energy Saving Lamps	117	0.4	89	$67.19	$60	$38	$0	$98	$11.86
Conference Room	3	4	40	552	35	75%	0.4	84	$38.28	$24.95	$63.24	4- F40T12/EW Energy Saving Lamps	156	0.4	71	$53.75	$48	$30	$0	$78	$9.49
Corridor to N. Exit	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
NFFG Local 1805 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Chastain Office	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
North East Entrance Lobby	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Building 10																					
Computer Area																					
Computer Room	146	3	40	20,148	126	95%	19.1	11018	$1,769.97	$3,278.88	$5,048.85	3- F40T12/EW Energy Saving Lamps	117	16.3	9,365	$4,291.52	$1,752	$1,095	$0	$2,847	$757.33
Tape Library	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	4- F40T12/EW Energy Saving Lamps	156	1.2	456	$245.66	$128	$80	$0	$208	$43.35
Classified Tape Library	8	2	40	736	84	95%	0.7	268	$64.66	$79.85	$144.51	2- F40T12/EW Energy Saving Lamps	78	0.6	228	$122.83	$64	$40	$0	$104	$21.68
Page Printing Room	22	3	40	3,036	126	95%	2.9	1660	$266.71	$494.08	$760.79	3- F40T12/EW Energy Saving Lamps	117	2.5	1,411	$646.67	$264	$165	$0	$429	$114.12
South East Area																					
Office B 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Open Office Area 9-14-E	188	2	40	17,296	50	95%	16.4	3753	$1,519.43	$1,116.96	$2,636.39	2- F40T12/EW Energy Saving Lamps	78	14.0	3,190	$2,240.93	$1,504	$940	$0	$2,444	$395.46
Office 9-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 10-B	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office 11-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office A 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 14-A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office B 10-A	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office A 10-A	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 11 A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Conference Room 12-A	18	2	40	1,656	35	75%	1.2	252	$114.85	$74.86	$189.71	2- F40T12/EW Energy Saving Lamps	78	1.1	214	$161.25	$144	$90	$0	$234	$28.46
Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
South West Area																					
Open Office Area 9-16-J	214	2	40	19,688	50	95%	18.7	4272	$1,729.56	$1,271.44	$3,000.99	2- F40T12/EW Energy Saving Lamps	78	15.9	3,631	$2,550.85	$1,712	$1,070	$0	$2,782	$450.15
Office 9-K	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office 9-K	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Office 10 K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office 11-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 12-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 13 K	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
North East Area																					
Open Office Area 2-8-E	247	2	40	22,724	50	95%	21.6	4931	$1,996.27	$1,467.50	$3,463.76	2- F40T12/EW Energy Saving Lamps	78	18.3	4,191	$2,944.20	$1,976	$1,235	$0	$3,211	$519.56
Office 1-E	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office 1-E	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 1-D	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 1 C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Womens Room 3-B	12	2	40	1,104	30	50%	0.6	144	$51.04	$42.78	$93.82	2- F40T12/EW Energy Saving Lamps	78	0.5	122	$79.75	$96	$60	$0	$156	$14.07
Mens Room 3-A	8	2	40	736	30	50%	0.4	96	$34.03	$28.52	$62.55	2- F40T12/EW Energy Saving Lamps	78	0.3	81	$53.17	$64	$40	$0	$104	$9.38
Smokers Room 6-A	16	2	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	2- F40T12/EW Energy Saving Lamps	78	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Computer Room 1-A	20	2	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	2- F40T12/EW Energy Saving Lamps	78	1.5	339	$238.40	$160	$100	$0	$260	$42.07
Cafe 5-B	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	3- F40T12/EW Energy Saving Lamps	117	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Vending Area 5-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Auditorium 6-B	8	2	40	736	35	75%	0.6	112	$51.04	$33.27	$84.32	2- F40T12/EW Energy Saving Lamps	78	0.5	95	$71.67	$64	$40	$0	$104	$12.65
Auditorium 6-B	12	3	40	1,656	35	75%	1.2	252	$114.85	$74.86	$189.71	3- F40T12/EW Energy Saving Lamps	117	1.1	214	$161.25	$144	$90	$0	$234	$28.46
Office 8-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62

ECO-7A
Buildings 1 - 10
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
North West Area																				
Office 5-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 8-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 7-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office B 6-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office A 6-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 3-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 4 K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office 1-G	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Conference Room 1-K	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3- F40T12/EW Energy Saving Lamps	117	0.5	107	$80.63	$72	$45	$0	$117	$14.23
Office 1-H	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Office 1-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
TOTALS	3555			483702			453.2	141371	$42,000	$42,000	$84,000			384.5	119995	$71,000	$42,000	$26,000	$0	$68,000	$13,000

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22-May-95

ECO-7B
Buildings 14 - 57
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 14																					
First Floor																					
Receiving Room	15	3	40	2070	50	95%	2.0	449.2	$181.85	$133.68	$315.53	3- F40T12/EW Energy Saving Lamps	117	1.7	382	$268.20	$180	$113	$0	$293	$47.33
Sand Blast Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Machine Shop Breakroom	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	4- F40T12/EW Energy Saving Lamps	156	1.0	238	$166.88	$112	$70	$0	$182	$29.45
Machine Shop Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Paint Room	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3- F40T12/EW Energy Saving Lamps	117	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Quality Control/Shop Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Quality Control/Shop Area	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Optical Shop	14	4	40	2576	50	95%	2.4	559.0	$226.30	$166.36	$392.65	4- F40T12/EW Energy Saving Lamps	156	2.1	475	$333.76	$224	$140	$0	$364	$58.90
Building 19																					
Warehouse																					
Exterior Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2- F40T12/EW Energy Saving Lamps	78	0.4	85	$59.60	$40	$25	$0	$65	$10.52
Warehouse North Work Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Warehouse Work Area	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building TS20-1																					
Warehouse																					
Breakroom	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Building 31																					
Warehouse																					
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Receiving Area	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Building 32																					
Warehouse																					
Receiving Area	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building 33N																					
Warehouse																					
Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Receiving Area	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Fenced Area in Warehouse	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Fenced Area in Warehouse	2	2	75	345	50	95%	0.3	75	$30.31	$22.28	$52.59	2 - F96T12/EW Energy Saving Lamps	138						$0		
Fenced Area in Warehouse	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156						$0		
Building 34																					
Warehouse																					
Warehouse Elec. Dist. Equip.	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Office South	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office North	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Building 37																					
Modular																					
Modular Office-Powertrain #1	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Modular Office-Powertrain #2	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Modular Office-Powertrain #3	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Motor Room Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Motor Room Test Area	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Motor Room Box Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Building 37 Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156						$0		
Building Supply 47	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Breakroom	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Disassembly Office	5	2	40	460	90	95%	0.4	180	$40.41	$53.47	$93.88	2- F40T12/EW Energy Saving Lamps	78	0.4	153	$79.80	$40	$25	$0	$65	$14.08
Transmission Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Building 41																					
Warehouse																					
Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office 1 x4 - 1L	1	1	40	46	50	95%	0.0	10	$4.04	$2.97	$7.01	1- F40T12/EW Energy Saving Lamp	39	0.0	8	$5.96	$4	$3	$0	$7	$1.05

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Buildings 14 - 57
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 42S																					
Warehouse																					
Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Mens Bathroom	4	2	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	2- F40T12/EW Energy Saving Lamps	78	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Womens Bathroom	4	2	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	2- F40T12/EW Energy Saving Lamps	78	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Break Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Building 43																					
Warehouse																					
Office - 1 x 4 w/metal differ	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Lockers	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Building 44																					
Warehouse																					
Office Area	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Building 47																					
Warehouse																					
Office - South	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Receiving South	2	3	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	3- F40T12/EW Energy Saving Lamps	117	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Office - North	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Filing Area - North	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Filing Area - North	24	1	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	1- F40T12/EW Energy Saving Lamp	39	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Building 51																					
Warehouse																					
Self Service Parts Room	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	2- F40T12/EW Energy Saving Lamps	78	1.0	238	$166.88	$112	$70	$0	$182	$29.45
Self Service Shelf Area	69	2	40	6,348	50	95%	6.0	1378	$557.66	$409.95	$967.61	2- F40T12/EW Energy Saving Lamps	78	5.1	1,171	$822.47	$552	$345	$0	$897	$145.14
Self Service Shelf Area	12	2	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	2- F40T12/EW Energy Saving Lamps	78	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Entrance Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Self Service Rear Corridor	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	3- F40T12/EW Energy Saving Lamps	117	1.1	255	$178.80	$120	$75	$0	$195	$31.55
Self Service Entrance Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Self Service Rear Office	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	4- F40T12/EW Energy Saving Lamps	156	3.6	815	$572.15	$384	$240	$0	$624	$100.97
Self Service Office	15	2	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	2- F40T12/EW Energy Saving Lamps	78	1.1	255	$178.80	$120	$75	$0	$195	$31.55
Warehouse Mil. Womens Room	2	2	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Warehouse Radio Active Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Warehouse Break Room	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Warehouse Proc. Workstation	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Warehouse Work Room	21	4	40	3,864	50	95%	3.7	838	$339.45	$249.53	$588.98	4- F40T12/EW Energy Saving Lamps	156	3.1	713	$500.63	$336	$210	$0	$546	$88.35
Warehouse Mil. Work Station	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Warehouse Milvan Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Warehouse Milvan Mens Room	2	2	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Main Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Building 52																					
Warehouse																					
Warehouse Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Warehouse Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Building 53																					
Warehouse																					
Warehouse Receiving South	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Warehouse Receiving North	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Warehouse Battery Area	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Warehouse Office (2 lamps only)	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building 54																					
Warehouse																					
Warehouse Office	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Warehouse Parts Area	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Building 55																					
Warehouse																					
Warehouse Battery Area	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21

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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 57S																					
Warehouse																					
Office Area/Parts Area	23	4	40	4,232	90	95%	4.0	1653	$371.77	$491.94	$863.71	4- F40T12/EW Energy Saving Lamps	156	3.4	1,405	$734.16	$368	$230	$0	$598	$129.56
Tool Parts Room (Locked)	5	4	40	920	90	95%	0.9	359	$80.82	$106.94	$187.76	4- F40T12/EW Energy Saving Lamps	156	0.7	305	$159.60	$80	$50	$0	$130	$28.16
Tool Parts Room (Locked)	11	3	40	1,518	90	95%	1.4	593	$133.35	$176.46	$309.81	3- F40T12/EW Energy Saving Lamps	117	1.2	504	$263.34	$132	$83	$0	$215	$46.47
Bulk Warehouse Office #1	12	4	40	2,208	90	95%	2.1	862	$193.97	$256.66	$450.63	4- F40T12/EW Energy Saving Lamps	156	1.8	733	$383.04	$192	$120	$0	$312	$67.59
Fire Equipment Cage Area	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Ladies Room	3	2	40	276	54	95%	0.3	65	$24.25	$19.25	$43.50	2- F40T12/EW Energy Saving Lamps	78	0.2	55	$36.97	$24	$15	$0	$39	$6.52
Bulk Warehouse Office #2	9	4	40	1,656	90	95%	1.6	647	$145.48	$192.50	$337.97	4- F40T12/EW Energy Saving Lamps	156	1.3	550	$287.28	$144	$90	$0	$234	$50.70
Breakroom	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	4- F40T12/EW Energy Saving Lamps	156	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Ladies Room	1	4	40	184	54	95%	0.2	43	$16.16	$12.83	$29.00	4- F40T12/EW Energy Saving Lamps	156	0.1	37	$24.65	$16	$10	$0	$26	$4.35
Equipment Operations Unit	15	4	40	2,760	90	95%	2.6	1078	$242.46	$320.83	$563.29	4- F40T12/EW Energy Saving Lamps	156	2.2	916	$478.80	$240	$150	$0	$390	$84.49
Driver Exam Corridor	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	4- F40T12/EW Energy Saving Lamps	156	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Locker Room	4	2	40	368	54	95%	0.3	86	$32.33	$25.67	$57.99	2- F40T12/EW Energy Saving Lamps	78	0.3	73	$49.30	$32	$20	$0	$52	$8.70
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Robertson Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Office	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Corridor Behind Office Area	1	4	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	4- F40T12/EW Energy Saving Lamps	156	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Office Area	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Office Area	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
TOTALS	551			76337			72.0	21347	$7,000	$6,000	$13,000			60.0	17769	$11,000	$7,000	$4,000	$0	$11,000	$2,000

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22-May-95

ECO-7C
Buildings 102-441
Letterkenny Army Depot
Fluorescent LampRetrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 102																					
Lab																					
Front Lab Workstation	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Entrance to Office	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Main Lab Area	18	2	40	1656	90	95%	1.6	646.8	$145.18	$192.50	$337.68	2- F40T12/EW Energy Saving Lamps	78	1.3	550	$287.28	$144	$90	$0	$234	$50.40
Bathroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2- F40T12/EW Energy Saving Lamps	78	0.1	18	$12.32	$8	$5	$0	$13	$2.17
Building 199																					
Warehouse																					
Work Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Building 200																					
Lab																					
Lab Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4- F40T12/EW Energy Saving Lamps	156	1.6	373	$262.24	$176	$110	$0	$286	$46.28
Building 211																					
Administration																					
Kitchen	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Main Office Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Managers Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Building 247																					
Warehouse																					
Receiving Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Rear Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor to Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Kitchen	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Receiving Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Receiving Area	6	1	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	1- F40T12/EW Energy Saving Lamp	39	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Building 320																					
Maintenance																					
Division Office	6	3	40	828	30	50%	0.4	107.8	$38.28	$32.08	$70.37	3- F40T12/EW Energy Saving Lamps	117	0.4	92	$59.81	$72	$45	$0	$117	$10.55
Maint. Area Machine Shop	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Womens Locker Room Office	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Womens Locker Room	11	1	40	506	30	50%	0.3	65.9	$23.40	$19.61	$43.00	1- F40T12/EW Energy Saving Lamp	39	0.2	56	$36.55	$44	$28	$0	$72	$6.45
Maintenance Area Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Mens Locker Room Office	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Office No. 1	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Mens Locker Room	11	1	40	506	168	95%	0.5	368.9	$44.45	$109.79	$154.25	1- F40T12/EW Energy Saving Lamp	39	0.4	314	$131.11	$44	$28	$0	$72	$23.14
Toilet Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2- F40T12/EW Energy Saving Lamps	78	0.2	171	$71.51	$24	$15	$0	$39	$12.62
Main Office Area	47	2	40	4324	168	95%	4.1	3152.7	$379.86	$938.25	$1,318.10	2- F40T12/EW Energy Saving Lamps	78	3.5	2,680	$1,120.39	$376	$235	$0	$611	$197.72
Sink and Toilet Area	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2- F40T12/EW Energy Saving Lamps	78	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Building 349																					
Boiler Plant																					
Entrance Cage Area	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2- F40T12/EW Energy Saving Lamps	78	0.7	513	$214.54	$72	$45	$0	$117	$37.86
Control Room	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Boiler Room Ground Level	10	4	40	1840	168	95%	1.7	1341.6	$161.64	$399.25	$560.90	4- F40T12/EW Energy Saving Lamps	156	1.5	1,140	$476.76	$160	$100	$0	$260	$84.13
Boiler Room Ground Level	1	3	40	138	168	95%	0.1	100.6	$12.12	$29.94	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.1	86	$35.76	$12	$8	$0	$20	$6.31
Breakroom	4	4	40	736	84	95%	0.7	268.3	$64.66	$79.85	$144.51	4- F40T12/EW Energy Saving Lamps	156	0.6	228	$122.83	$64	$40	$0	$104	$21.68
Boiler Room Ground Level	4	1	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	1- F40T12/EW Energy Saving Lamp	39	0.1	114	$47.68	$16	$10	$0	$26	$8.41

ECO-7C
Buildings 102-441
Letterkenny Army Depot
Fluorescent LampRetrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 350																				
Office #1																				
Mens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	4- F40T12/EW Energy Saving Lamps	156	0.7	183	$123.24	$80	$50	$0	$130	$21.75
Conference Room	12	4	40	2208	63	95%	2.1	603.7	$193.97	$179.66	$373.63	4- F40T12/EW Energy Saving Lamps	156	1.8	513	$317.59	$192	$120	$0	$312	$56.05
Womens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	4- F40T12/EW Energy Saving Lamps	156	0.7	183	$123.24	$80	$50	$0	$130	$21.75
Corridor to Shop	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Managers Office	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Copy Room	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Reception	11	4	40	2024	90	95%	1.9	790.6	$177.81	$235.27	$413.08	4- F40T12/EW Energy Saving Lamps	156	1.6	672	$351.12	$176	$110	$0	$286	$61.96
Office #2																				
Reception Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4- F40T12/EW Energy Saving Lamps	156	1.2	489	$255.36	$128	$80	$0	$208	$45.06
Managers Office	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	4- F40T12/EW Energy Saving Lamps	156	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Office #3																				
Work Area	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4- F40T12/EW Energy Saving Lamps	156	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Separate Office Area	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
ASRS plus Office Area Corridor	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	4- F40T12/EW Energy Saving Lamps	156	0.4	183	$95.76	$48	$30	$0	$78	$16.90
ASRS plus Office Computer Rm.	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4- F40T12/EW Energy Saving Lamps	156	1.2	489	$255.36	$128	$80	$0	$208	$45.06
New Bathroom (Under Const.)																				
Office #4																				
Office Area	5	2	40	460	90	95%	0.4	179.7	$40.41	$53.47	$93.88	2- F40T12/EW Energy Saving Lamps	78	0.4	153	$79.80	$40	$25	$0	$65	$14.08
Library Conference Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	3- F40T12/EW Energy Saving Lamps	117	0.2	64	$39.70	$24	$15	$0	$39	$7.01
Quality Control Room	6	3	40	828	90	95%	0.8	323.4	$72.74	$96.25	$168.99	3- F40T12/EW Energy Saving Lamps	117	0.7	275	$143.64	$72	$45	$0	$117	$25.35
Annex Office Area #6																				
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Annex Office Corridor	7	2	40	644	90	95%	0.6	251.5	$56.57	$74.86	$131.43	2- F40T12/EW Energy Saving Lamps	78	0.5	214	$111.72	$56	$35	$0	$91	$19.72
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Meeting Room	19	2	40	1748	63	95%	1.7	477.9	$153.56	$142.23	$295.79	2- F40T12/EW Energy Saving Lamps	78	1.4	406	$251.42	$152	$95	$0	$247	$44.37
Planning Production Fabrication	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2- F40T12/EW Energy Saving Lamps	78	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Trades Branch Conference Rm.	12	2	40	1104	63	95%	1.0	301.9	$96.98	$89.83	$186.82	2- F40T12/EW Energy Saving Lamps	78	0.9	257	$158.79	$96	$60	$0	$156	$28.02
Mens Room	6	2	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	2- F40T12/EW Energy Saving Lamps	78	0.4	110	$73.94	$48	$30	$0	$78	$13.05
Ladies Room	3	2	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	2- F40T12/EW Energy Saving Lamps	78	0.2	55	$36.97	$24	$15	$0	$39	$6.52
Trades Office Room #2	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2- F40T12/EW Energy Saving Lamps	78	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Trades Office Room #1	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	2- F40T12/EW Energy Saving Lamps	78	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Building 370																				
Equipment Repair																				
Mens Room	3	4	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	4- F40T12/EW Energy Saving Lamps	156	0.4	110	$73.94	$48	$30	$0	$78	$13.05
Shop Area Task Lighting	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Shop Area	318	4	40	58512	90	95%	55.6	22854.8	$5,140.19	$6,801.58	$11,942	4- F40T12/EW Energy Saving Lamps	156	47.2	19,427	$10,150.50	$5,088	$3,180	$0	$8,268	$1,791.27
Shop Area Office	5	4	40	920	90	95%	0.9	359.4	$80.82	$106.94	$187.76	4- F40T12/EW Energy Saving Lamps	156	0.7	305	$159.60	$80	$50	$0	$130	$28.16
Test Room/Workstation	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Test Room	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Shop Area Task Lighting	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Building 412																				
Training & Conf. Center																				
Computer Training Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4- F40T12/EW Energy Saving Lamps	156	1.6	373	$262.24	$176	$110	$0	$286	$46.28
Administration Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4- F40T12/EW Energy Saving Lamps	156	1.6	373	$262.24	$176	$110	$0	$286	$46.28
Center Class Room	14	4	40	2576	35	75%	1.9	391.3	$178.66	$116.45	$295.11	4- F40T12/EW Energy Saving Lamps	156	1.6	333	$250.84	$224	$140	$0	$364	$44.27
Conference Room	33	4	40	6072	35	75%	4.6	922.3	$421.12	$274.49	$695.60	4- F40T12/EW Energy Saving Lamps	156	3.9	784	$591.26	$528	$330	$0	$858	$104.34
Mens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Ladies Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Building 416																				
Administration																				
Mens Room	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2- F40T12/EW Energy Saving Lamps	78	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Womens Room	4	2	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	2- F40T12/EW Energy Saving Lamps	78	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Main Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	4- F40T12/EW Energy Saving Lamps	156	4.5	1,018	$715.19	$480	$300	$0	$780	$126.21

ECO-7C
Buildings 102-441
Letterkenny Army Depot
Fluorescent LampRetrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 417																				
Personnel Barracks																				
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2- F40T12/EW Energy Saving Lamps	78	0.7	513	$214.54	$72	$45	$0	$117	$37.86
Room #13	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Kitchen #16	4	2	40	368	21	50%	0.2	33.5	$17.01	$9.98	$27.00	2- F40T12/EW Energy Saving Lamps	78	0.2	29	$22.95	$32	$20	$0	$52	$4.05
Room #14	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #17	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #12	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #18	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Room #19	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #11	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #20	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Day Room #15	4	3	40	552	40	75%	0.4	95.8	$38.28	$28.52	$66.80	3- F40T12/EW Energy Saving Lamps	117	0.4	81	$56.78	$48	$30	$0	$78	$10.02
Building 418																				
Personnel Barracks																				
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	2- F40T12/EW Energy Saving Lamps	78	0.7	513	$214.54	$72	$45	$0	$117	$37.86
Room #13	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Kitchen #16	4	2	40	368	21	50%	0.2	33.5	$17.01	$9.98	$27.00	2- F40T12/EW Energy Saving Lamps	78	0.2	29	$22.95	$32	$20	$0	$52	$4.05
Room #14	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #17	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #12	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #18	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Room #19	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #11	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Room #20	4	2	40	368	40	75%	0.3	63.9	$25.52	$19.01	$44.53	2- F40T12/EW Energy Saving Lamps	78	0.2	54	$37.85	$32	$20	$0	$52	$6.68
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Day Room #15	4	3	40	552	40	75%	0.4	95.8	$38.28	$28.52	$66.80	3- F40T12/EW Energy Saving Lamps	117	0.4	81	$56.78	$48	$30	$0	$78	$10.02
Building 421																				
Administration																				
Main Office Area North End	28	4	40	5152	50	95%	4.9	1118.0	$452.59	$332.71	$785.31	4- F40T12/EW Energy Saving Lamps	156	4.2	950	$667.51	$448	$280	$0	$728	$117.80
Womens Room	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Support Division Chief Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Managers Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
File/Copy Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
File/Copy Room on Files	4	1	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	1- F40T12/EW Energy Saving Lamp	39	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Main Entrance Lobby	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Acquisition Chief	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Cont. Office Purch. Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	4- F40T12/EW Energy Saving Lamps	156	3.9	882	$619.83	$416	$260	$0	$676	$109.38
Imprest Office	1	4	40	184	50	95%	0.2	40.0	$16.16	$11.90	$28.07	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.23
Receptionist	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Bid Room #2	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Support Division Chief Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Mens Room	1	1	40	46	30	50%	0.0	6	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Property Accountibility Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Vending Area	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Equipment Mgt. Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
North Exit Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Ladies Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Conference Room	2	4	40	368	35	75%	0.3	56	$25.52	$16.64	$42.16	4- F40T12/EW Energy Saving Lamps	156	0.2	48	$35.83	$32	$20	$0	$52	$6.32
Mens Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Managers Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Ck. Depot Prop. Div. Reception	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Mens Room	2	4	40	368	30	50%	0.2	48	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69

ECO-7C
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Fluorescent LampRetrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Ck. Depot Prop. Div. Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Main Office South End	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	4- F40T12/EW Energy Saving Lamps	156	3.6	815	$572.15	$384	$240	$0	$624	$100.97
Contracting Office Area	14	4	40	2,576	50	95%	2.4	559	$226.30	$166.36	$392.65	4- F40T12/EW Energy Saving Lamps	156	2.1	475	$333.76	$224	$140	$0	$364	$58.90
Contracting Office Conf. Room	6	3	40	828	35	75%	0.6	126	$57.43	$37.43	$94.86	3- F40T12/EW Energy Saving Lamps	117	0.5	107	$80.63	$72	$45	$0	$117	$14.23
Office (left of Acquisition Chief)	1	4	40	184	50	95%	0.2	40	$16.16	$11.90	$28.07	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.23
Building 424																					
Cable & Harness																					
Unpacking	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Unpacking	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
File Area	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	3- F40T12/EW Energy Saving Lamps	117	0.6	229	$119.70	$60	$38	$0	$98	$21.12
Cable Tent Station	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Work Station	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	3- F40T12/EW Energy Saving Lamps	117	0.6	229	$119.70	$60	$38	$0	$98	$21.12
Cable Termination Area	6	2	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	2- F40T12/EW Energy Saving Lamps	78	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Cable Termination Area	1	2	40	92	90	95%	0.1	36	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Assembly Area Desk Lighting	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	2- F40T12/EW Energy Saving Lamps	78	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Assembly Area	21	3	40	2,898	90	95%	2.8	1132	$254.58	$336.87	$591.46	3- F40T12/EW Energy Saving Lamps	117	2.3	962	$502.74	$252	$158	$0	$410	$88.72
Break Room	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Break Room	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	2- F40T12/EW Energy Saving Lamps	78	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Office (Day)	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Office	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Building 428																					
Counseling																					
Counseling Managers Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Corridor to Managers Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Copy Room	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Main Entrance Corridor	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Conference Room (Day)	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Building 431																					
Administration																					
Main Entrance Lobby	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Lab #4 (Entrance Lobby)	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Supply Section	10	4	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	4- F40T12/EW Energy Saving Lamps	156	1.5	339	$238.40	$160	$100	$0	$260	$42.07
Corridor around Lab #4	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
TDME Office Area	25	4	40	4,600	50	95%	4.4	998	$404.10	$297.06	$701.17	4- F40T12/EW Energy Saving Lamps	156	3.7	848	$595.99	$400	$250	$0	$650	$105.18
ACL Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Womens Room	1	4	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Executive Secretary	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Computer Room	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Mens Room	1	4	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
TDME Chief Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
TDME Chief Lab Calibration	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Conference Room 1 & 2	6	4	40	1,104	35	75%	0.8	168	$76.57	$49.91	$126.47	4- F40T12/EW Energy Saving Lamps	156	0.7	143	$107.50	$96	$60	$0	$156	$18.97
Building 438																					
Repair Shop																					
Shipping Area	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Building 441																					
Warehouse																					
Outside Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Warehouse Parts Bay	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
TOTALS	1272			190118			174.3	61002	$16,000	$18,000	$34,000			148.1	51852	$29,000	$17,000	$10,000	$0	$27,000	$5,000

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22-May-95

ECO-7D
Buildings 500 - 581
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																					
First Floor																					
Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Laboratory Room #33	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Dispensary Corridor	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	2- F40T12/EW Energy Saving Lamps	78	1.0	428	$223.44	$112	$70	$0	$182	$39.43
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Room #47 (Office)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Pharmacy	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Room #31 Open Office Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Treatment Room #2 Room #45	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Treatment Room #1 Room #46	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Physical Therapy Room #34	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Command Wing Entrance	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Waiting Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Waiting Room Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Occupational Health Room #38	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Emergency Rm. Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Conference Room (Room #41)	5	4	40	920	35	75%	0.7	139.7	$63.81	$41.59	$105.39	4- F40T12/EW Energy Saving Lamps	156	0.6	119	$89.59	$80	$50	$0	$130	$15.81
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Emergency Treatment Rm. #40	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4- F40T12/EW Energy Saving Lamps	156	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Occupational Health Room #39	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office Room #42	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Occupational Health Room #37	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Occupational Health Rm.#43C	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Occupational Health Rm.#43B	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Occupational Health Rm.#43A	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Occupational Health Room #43	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Break Room (Room #36)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Dispensary Waiting Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Room #26 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Admin. Prgm. Coordinators Ofc.	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
P. Gieseking Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Ladies Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Protocol Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Copy Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Public Affairs Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Entrance to Rear Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Depot Sergeant Majors Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Commander Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Commander Secretary	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Depot Commander	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
G. Patterson Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Legal Office 15 Reception	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Legal Office Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3- F40T12/EW Energy Saving Lamps	117	1.1	255	$178.80	$120	$75	$0	$195	$31.55
Computer Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Front Office 15A	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Womens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Police Sign in Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Police Room	3	3	40	414	168	95%	0.4	301.9	$36.37	$89.83	$126.20	3- F40T12/EW Energy Saving Lamps	117	0.3	257	$107.27	$36	$23	$0	$59	$18.93
Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Office #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Conference Room #3	4	4	40	736	35	75%	0.6	111.8	$51.04	$33.27	$84.32	4- F40T12/EW Energy Saving Lamps	156	0.5	95	$71.67	$64	$40	$0	$104	$12.65
Conference Room #1	6	3	40	828	35	75%	0.6	125.8	$57.43	$37.43	$94.86	3- F40T12/EW Energy Saving Lamps	117	0.5	107	$80.63	$72	$45	$0	$117	$14.23
Conference Room #1	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3- F40T12/EW Energy Saving Lamps	117	0.2	36	$26.88	$24	$15	$0	$39	$4.74
Room #25 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Rear Office 15B	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Employment Info. Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Second Floor																					
Room #3 (Office)	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Office #10	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83

ECO-7D
Buildings 500 - 581
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Computer Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Employee Relations Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Auditorium	27	2	40	2484	35	75%	1.9	377.3	$172.28	$112.29	$284.57	2- F40T12/EW Energy Saving Lamps	78	1.6	321	$241.88	$216	$135	$0	$351	$42.68
Center Bldg. Open Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	4- F40T12/EW Energy Saving Lamps	156	3.9	882	$619.83	$416	$260	$0	$676	$109.38
Conference Room (Locked)	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3- F40T12/EW Energy Saving Lamps	117	0.2	36	$26.88	$24	$15	$0	$39	$4.74
Room #7 (Office)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Basement Level																					
Stairwell #2 Police Area	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Stairwell #3 Legal Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4- F40T12/EW Energy Saving Lamps	156	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Room #16 (Rear Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Stairwell #1 Dispensary Side	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Room #16 (File Down Lighting)	6	1	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	1- F40T12/EW Energy Saving Lamp	39	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Open Office Area Room #16	32	3	40	4416	50	95%	4.2	958.3	$387.94	$285.18	$673.12	3- F40T12/EW Energy Saving Lamps	117	3.6	815	$572.15	$384	$240	$0	$624	$100.97
Stairwell #2 Police Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Room #14-15 (Office)	10	4	40	1840	50	95%	1.7	399.3	$161.64	$118.83	$280.47	4- F40T12/EW Energy Saving Lamps	156	1.5	339	$238.40	$160	$100	$0	$260	$42.07
Room #13 (Copy Room)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Room #3A (Internal Review)	6	3	40	828	35	75%	0.6	125.8	$57.43	$37.43	$94.86	3- F40T12/EW Energy Saving Lamps	117	0.5	107	$80.63	$72	$45	$0	$117	$14.23
Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3- F40T12/EW Energy Saving Lamps	117	1.1	255	$178.80	$120	$75	$0	$195	$31.55
Room #2 (Office)	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Room #4 (Office)	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Room #5 (Office)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3- F40T12/EW Energy Saving Lamps	117	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Room #7 (Conference Room)	2	3	40	276	35	75%	0.2	41.9	$19.14	$12.48	$31.62	3- F40T12/EW Energy Saving Lamps	117	0.2	36	$26.88	$24	$15	$0	$39	$4.74
Room #3 (Open Work Space)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	3- F40T12/EW Energy Saving Lamps	117	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Room #12	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
DPCA Office Coordinator	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Room #11 (Open Office Area)	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	3- F40T12/EW Energy Saving Lamps	117	1.1	255	$178.80	$120	$75	$0	$195	$31.55
Room #11A (Files)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Entrance/Vending Area	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Building 521																					
Basement Floor																					
Open Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Open Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Weight Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Pool Table Room	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Stairs to First Floor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
First Floor																					
Smokers Lounge	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Ladies Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Kitchen Area	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2- F40T12/EW Energy Saving Lamps	78	0.4	85	$59.60	$40	$25	$0	$65	$10.52
Dining Area	4	4	40	736	30	50%	0.4	95.8	$34.03	$28.52	$62.55	4- F40T12/EW Energy Saving Lamps	156	0.3	81	$53.17	$64	$40	$0	$104	$9.38
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
General Office Area	18	2	40	1656	90	95%	1.6	646.8	$145.48	$192.50	$337.97	2- F40T12/EW Energy Saving Lamps	78	1.3	550	$287.28	$144	$90	$0	$234	$50.70
Radio Equipment Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4- F40T12/EW Energy Saving Lamps	156	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Union Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Copier/Fax Machine Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Chief Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Research Area/Library	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3- F40T12/EW Energy Saving Lamps	117	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Plans Review Conference Room	6	2	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	2- F40T12/EW Energy Saving Lamps	78	0.4	71	$53.75	$48	$30	$0	$78	$9.49
Watch Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4- F40T12/EW Energy Saving Lamps	156	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Mens Room	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Assistance Chief Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Second Floor																					
Corridor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21

ECO-7D
Buildings 500 - 581
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Fluorescent Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 522																					
First Floor																					
Office of the Chief of Staff	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Office of the Chief of Staff Recp.	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Rear Office #2 (not occupied)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Secretary's Ofc. to the General	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Right Reception Area	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Main Entrance	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Rear Office #2 (not occupied)	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Rear Office #1 (not occupied)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Lobby	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Reception Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Left Reception Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Commanding General Conf. Rm.	9	4	40	1656	35	75%	1.2	251.5	$114.85	$74.86	$189.71	4- F40T12/EW Energy Saving Lamps	156	1.1	214	$161.25	$144	$90	$0	$234	$28.46
Commanding Generals Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Secretary's Ofc. to the General	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Second Floor																					
Inspector Gen. Admin. Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Copy Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Inspector General Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Inspector General Reception	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Protocol Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2- F40T12/EW Energy Saving Lamps	78	0.4	85	$59.60	$40	$25	$0	$65	$10.52
Liason Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Protocol Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Conference Room	10	4	40	1840	35	75%	1.4	279.5	$127.61	$83.18	$210.79	4- F40T12/EW Energy Saving Lamps	156	1.2	238	$179.17	$160	$100	$0	$260	$31.62
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Building 523																					
Administration																					
Cornelius Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Grayson Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Helsel Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Descom Office A	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Hoover Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Barnes Office	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	3- F40T12/EW Energy Saving Lamps	117	0.7	153	$107.28	$72	$45	$0	$117	$18.93
Gerhart Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Creamer Office	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Sheffield Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Conference Room B	2	4	40	368	35	75%	0.3	55.9	$25.52	$16.64	$42.16	4- F40T12/EW Energy Saving Lamps	156	0.2	48	$35.83	$32	$20	$0	$52	$6.32
Myers Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Horn Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Descom Office B	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Conference Room A	8	3	40	1104	35	75%	0.8	167.7	$76.57	$49.91	$126.47	3- F40T12/EW Energy Saving Lamps	117	0.7	143	$107.50	$96	$60	$0	$156	$18.97
Kitchen	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Library	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Descom Office C	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Corridor	11	2	40	1012	50	95%	1.0	219.6	$88.90	$65.35	$154.26	2- F40T12/EW Energy Saving Lamps	78	0.8	187	$131.12	$88	$55	$0	$143	$23.14
Building 524																					
Conference Center																					
Entrance Lobby	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	2- F40T12/EW Energy Saving Lamps	78	0.5	119	$83.44	$56	$35	$0	$91	$14.72
Mens Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Womens Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17

ECO-7D
Buildings 500 - 581
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Fluorescent Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 529																					
First Floor																					
Golf Shop Lunch Room	6	2	40	552	60	95%	0.5	143.7	$48.49	$42.78	$91.27	2- F40T12/EW Energy Saving Lamps	78	0.4	122	$77.58	$48	$30	$0	$78	$13.69
Golf Equipment Shop Office	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4- F40T12/EW Energy Saving Lamps	156	0.1	41	$25.86	$16	$10	$0	$26	$4.56
Golf Equipment Shop	9	2	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	2- F40T12/EW Energy Saving Lamps	78	0.7	183	$116.37	$72	$45	$0	$117	$20.54
Golf Equipment Shop Office	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$12.93	$8	$5	$0	$13	$2.28
Golf Eqpt. Shop Entrance Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	2- F40T12/EW Energy Saving Lamps	78	0.1	41	$25.86	$16	$10	$0	$26	$4.56
Mens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Bar Table Area	19	4	40	3496	60	95%	3.3	910.4	$307.12	$270.92	$578.04	4- F40T12/EW Energy Saving Lamps	156	2.8	774	$491.33	$304	$190	$0	$494	$86.71
Kitchen Dish Room	6	3	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	3- F40T12/EW Energy Saving Lamps	117	0.7	183	$116.37	$72	$45	$0	$117	$20.54
Restroom Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	2- F40T12/EW Energy Saving Lamps	78	0.1	41	$25.86	$16	$10	$0	$26	$4.56
Bar Counter	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4- F40T12/EW Energy Saving Lamps	156	0.3	81	$51.72	$32	$20	$0	$52	$9.13
Food Counter	4	4	40	736	60	95%	0.7	191.7	$64.66	$57.04	$121.69	4- F40T12/EW Energy Saving Lamps	156	0.6	163	$103.44	$64	$40	$0	$104	$18.25
Mens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$12.93	$8	$5	$0	$13	$2.28
Dumb Waiter Room	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4- F40T12/EW Energy Saving Lamps	156	0.1	41	$25.86	$16	$10	$0	$26	$4.56
Womens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$12.93	$8	$5	$0	$13	$2.28
Womens Room	2	2	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Second Floor																					
Corridor to Mens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	2- F40T12/EW Energy Saving Lamps	78	0.1	20	$12.93	$8	$5	$0	$13	$2.28
Mens Room	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4- F40T12/EW Energy Saving Lamps	156	0.3	81	$51.72	$32	$20	$0	$52	$9.13
Food Prep Room	5	4	40	920	60	95%	0.9	239.6	$80.82	$71.30	$152.12	4- F40T12/EW Energy Saving Lamps	156	0.7	204	$129.30	$80	$50	$0	$130	$22.82
Womens Restroom	4	2	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	2- F40T12/EW Energy Saving Lamps	78	0.3	81	$51.72	$32	$20	$0	$52	$9.13
Second Floor Entrance Lobby	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	4- F40T12/EW Energy Saving Lamps	156	0.3	81	$51.72	$32	$20	$0	$52	$9.13
Dining Room	14	4	40	2576	60	95%	2.4	670.8	$226.30	$199.63	$425.92	4- F40T12/EW Energy Saving Lamps	156	2.1	570	$362.04	$224	$140	$0	$364	$63.89
Handicap Restroom	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	4- F40T12/EW Energy Saving Lamps	156	0.1	41	$25.86	$16	$10	$0	$26	$4.56
Building 530																					
Cable TV for Housing																					
Open Office Area	16	2	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	2- F40T12/EW Energy Saving Lamps	78	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Building 536																					
Bath House																					
Mens Locker Area	7	2	40	644	168	95%	0.6	469.6	$56.57	$139.74	$196.31	2- F40T12/EW Energy Saving Lamps	78	0.5	399	$166.87	$56	$35	$0	$91	$29.45
Mens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Womens Locker Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2- F40T12/EW Energy Saving Lamps	78	0.2	171	$71.51	$24	$15	$0	$39	$12.62
Womens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Womens Pool Shower Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Mens Pool Shower Area Locked	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Building 581																					
First Floor																					
SIDS Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Mens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Copy Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
LEAD Valve Engin. Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Breakroom	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Mens Room Sink Lighting	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Dir. Resource Mgrs. Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Dir. Resource Mgrs. Recp. Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Womens Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Conference Room	6	4	40	1104	35	75%	0.8	167.7	$76.57	$49.91	$126.47	4- F40T12/EW Energy Saving Lamps	156	0.7	143	$107.50	$96	$60	$0	$156	$18.97
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2- F40T12/EW Energy Saving Lamps	78	0.4	85	$59.60	$40	$25	$0	$65	$10.52
LEAD Valve Engin. Area	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Open Office Area	16	4	40	2944	50	95%	2.8	638.8	$258.63	$190.12	$448.75	4- F40T12/EW Energy Saving Lamps	156	2.4	543	$381.43	$256	$160	$0	$416	$67.31

ECO-7D
Buildings 500 - 581
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Second Floor																				
Room #15 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Room #17 Conference Room	3	4	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	4- F40T12/EW Energy Saving Lamps	156	0.4	71	$53.75	$48	$30	$0	$78	$9.49
Room #20A	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Room #20	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #14 Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Room #19 Smoke Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #8 & #10	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	4- F40T12/EW Energy Saving Lamps	156	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Room #14A Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #11 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Room #12 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #1 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #9 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Room #5 & #7 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Room #3 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Room #4 Conference Room	3	4	40	552	35	75%	0.4	83.8	$38.28	$24.95	$63.24	4- F40T12/EW Energy Saving Lamps	156	0.4	71	$53.75	$48	$30	$0	$78	$9.49
Room #1 Conference Area	2	4	40	368	35	75%	0.3	55.9	$25.52	$16.64	$42.16	4- F40T12/EW Energy Saving Lamps	156	0.2	48	$35.83	$32	$20	$0	$52	$6.32
Corridor	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	4- F40T12/EW Energy Saving Lamps	156	1.6	373	$262.24	$176	$110	$0	$286	$46.28
TOTALS	894			128800			117.7	30327	$11,000	$9,000	$20,000			100.0	25778	$17,000	$11,000	$7,000	$0	$18,000	$3,000

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22-May-95

ECO-7E
Buildings 616 - 5426
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 616																					
Police Building																					
Police Conference Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Police Conference Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4- F40T12/EW Energy Saving Lamps	156	0.6	456	$190.70	$64	$40	$0	$104	$33.65
Building 618																					
First Floor																					
Hoke Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Room #11 Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Coffee Mess	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Handicap Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Room #7	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Merritt Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Keefer Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Walter Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Hunting & Fishing Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Second Floor																					
Warnock Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	2- F40T12/EW Energy Saving Lamps	78	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Stairwell to Second Floor	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Cassner	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Yeager Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Yocum Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Quinn Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Haz Waste Conference Room	5	3	40	690	35	75%	0.5	104.8	$47.85	$31.19	$79.05	3- F40T12/EW Energy Saving Lamps	117	0.4	89	$67.19	$60	$38	$0	$98	$11.86
Gieseking Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Williams Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Espten Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Conference Room	3	3	40	414	35	75%	0.3	62.9	$28.71	$18.72	$47.43	3- F40T12/EW Energy Saving Lamps	117	0.3	53	$40.31	$36	$23	$0	$59	$7.11
Womens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Building 619																					
Dining Area																					
Womens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Staff Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Womens Room Sink	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Mens Room Sink	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Rear Dining Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Mens Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Open Dining Area	27	3	40	3726	50	95%	3.5	808.5	$327.32	$240.62	$567.95	3- F40T12/EW Energy Saving Lamps	117	3.0	687	$482.75	$324	$203	$0	$527	$85.19
Serving Area	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	2- F40T12/EW Energy Saving Lamps	78	0.5	119	$83.44	$56	$35	$0	$91	$14.72
Rear Dining Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Building 628																					
First Floor																					
Information Security	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Badge Photo Room	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	3- F40T12/EW Energy Saving Lamps	117	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Badge Photo Room File	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Conference Room A	3	3	40	414	35	75%	0.3	62.9	$28.71	$18.72	$47.43	3- F40T12/EW Energy Saving Lamps	117	0.3	53	$40.31	$36	$23	$0	$59	$7.11
First Floor Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Womens Restroom & Shower	3	3	40	414	30	50%	0.2	53.9	$19.14	$16.04	$35.18	3- F40T12/EW Energy Saving Lamps	117	0.2	46	$29.91	$36	$23	$0	$59	$5.28
Handicap Restroom	1	3	40	138	30	50%	0.1	18.0	$6.38	$5.35	$11.73	3- F40T12/EW Energy Saving Lamps	117	0.1	15	$9.97	$12	$8	$0	$20	$1.76
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Smoking Room	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	1- F40T12/EW Energy Saving Lamp	39	0.0	8	$5.96	$4	$3	$0	$7	$1.05
Automation Security Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Police Officers Room #3 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Room #1 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Physical Security	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16

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Fluorescent Lamp Retrofit

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Second Floor																					
Stairway to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Investigation Office Room #19	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Investigation Office Room #18	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Interview Room #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Secretary & Plans Div. Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Chief Secretary & Plans Div. Ofc.	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	3- F40T12/EW Energy Saving Lamps	117	0.3	76	$53.64	$36	$23	$0	$59	$9.47
Mens Room & Shower	3	3	40	414	30	50%	0.2	53.9	$19.14	$16.04	$35.18	3- F40T12/EW Energy Saving Lamps	117	0.2	46	$29.91	$36	$23	$0	$59	$5.28
Director - PM Office Room #11	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Directorate Secretary Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Building 637																					
Chapel																					
Chapel Lighting	40	1	40	1840	40	75%	1.4	319.4	$127.61	$95.06	$222.67	1- F40T12/EW Energy Saving Lamp	39	1.2	272	$189.27	$160	$100	$0	$260	$33.40
Corridor Behind Alter	2	2	40	184	40	75%	0.1	31.9	$12.76	$9.51	$22.27	2- F40T12/EW Energy Saving Lamps	78	0.1	27	$18.93	$16	$10	$0	$26	$3.34
Building 639																					
Physical Fitness Center																					
Rear Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Weight Room Restroom	2	2	40	184	101	95%	0.2	80.7	$16.16	$24.00	$40.17	2- F40T12/EW Energy Saving Lamps	78	0.1	69	$34.14	$16	$10	$0	$26	$6.03
Weight Room	14	3	40	1932	168	95%	1.8	1408.7	$169.72	$419.22	$588.94	3- F40T12/EW Energy Saving Lamps	117	1.6	1,197	$500.60	$168	$105	$0	$273	$88.34
Gym Entrance	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Womens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Corridor to Sauna	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	2- F40T12/EW Energy Saving Lamps	78	0.2	171	$71.51	$24	$15	$0	$39	$12.62
Corridor to Womens Locker Rm.	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Womens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Corridor to Mens Locker Room	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	2- F40T12/EW Energy Saving Lamps	78	0.1	57	$23.84	$8	$5	$0	$13	$4.21
Gym Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	4- F40T12/EW Energy Saving Lamps	156	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Corridor to Restroom	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Mens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4- F40T12/EW Energy Saving Lamps	156	0.6	456	$190.70	$64	$40	$0	$104	$33.65
Womens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	4- F40T12/EW Energy Saving Lamps	156	0.6	456	$190.70	$64	$40	$0	$104	$33.65
Mens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	2- F40T12/EW Energy Saving Lamps	78	0.3	228	$95.35	$32	$20	$0	$52	$16.83
Mens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.1	114	$47.68	$16	$10	$0	$26	$8.41
Gym Entrance	1	1	40	46	168	95%	0.0	33.5	$4.04	$9.98	$14.02	1- F40T12/EW Energy Saving Lamp	39	0.0	29	$11.92	$4	$3	$0	$7	$2.10
Building 640																					
Camper Check-In																					
Main Entrance Area	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4- F40T12/EW Energy Saving Lamps	156	0.2	27	$22.54	$32	$20	$0	$52	$3.98
Office #1	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4- F40T12/EW Energy Saving Lamps	156	0.1	14	$11.27	$16	$10	$0	$26	$1.99
Office #2	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4- F40T12/EW Energy Saving Lamps	156	0.1	14	$11.27	$16	$10	$0	$26	$1.99
Mens Room	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4- F40T12/EW Energy Saving Lamps	156	0.2	27	$22.54	$32	$20	$0	$52	$3.98
Womens Room	2	4	40	368	20	50%	0.2	31.9	$17.01	$9.51	$26.52	4- F40T12/EW Energy Saving Lamps	156	0.2	27	$22.54	$32	$20	$0	$52	$3.98
Laundry Room	1	4	40	184	20	50%	0.1	16.0	$8.51	$4.75	$13.26	4- F40T12/EW Energy Saving Lamps	156	0.1	14	$11.27	$16	$10	$0	$26	$1.99
Building 645																					
Day Care																					
Entrance Lobby	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Changing Area	2	2	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	2- F40T12/EW Energy Saving Lamps	78	0.1	37	$24.65	$16	$10	$0	$26	$4.35
Bathroom #3	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2- F40T12/EW Energy Saving Lamps	78	0.1	18	$12.32	$8	$5	$0	$13	$2.17
Baby Area	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Bathroom #2	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2- F40T12/EW Energy Saving Lamps	78	0.1	18	$12.32	$8	$5	$0	$13	$2.17
Kitchen Area	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Bathroom #1	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2- F40T12/EW Energy Saving Lamps	78	0.1	18	$12.32	$8	$5	$0	$13	$2.17
Play Area	16	2	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	2- F40T12/EW Energy Saving Lamps	78	1.2	489	$255.36	$128	$80	$0	$208	$45.06
Staff Office	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	2- F40T12/EW Energy Saving Lamps	78	0.2	92	$47.88	$24	$15	$0	$39	$8.45

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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 646																					
Youth Center																					
Entrance Area	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3- F40T12/EW Energy Saving Lamps	117	0.2	128	$58.79	$24	$15	$0	$39	$10.37
Lounge Area	5	3	40	690	126	95%	0.7	377.3	$60.62	$112.29	$172.91	3- F40T12/EW Energy Saving Lamps	117	0.6	321	$146.97	$60	$38	$0	$98	$25.94
Girls Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	2- F40T12/EW Energy Saving Lamps	78	0.1	52	$29.09	$16	$10	$0	$26	$5.13
Boys Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	2- F40T12/EW Energy Saving Lamps	78	0.1	52	$29.09	$16	$10	$0	$26	$5.13
Staff Office	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3- F40T12/EW Energy Saving Lamps	117	0.2	128	$58.79	$24	$15	$0	$39	$10.37
Corridor to Play Room	1	2	40	92	126	95%	0.1	50.3	$8.08	$14.97	$23.05	2- F40T12/EW Energy Saving Lamps	78	0.1	43	$19.60	$8	$5	$0	$13	$3.46
Play Room	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	3- F40T12/EW Energy Saving Lamps	117	0.2	128	$58.79	$24	$15	$0	$39	$10.37
Open Area	20	2	40	1840	126	95%	1.7	1006.2	$161.64	$299.44	$461.08	2- F40T12/EW Energy Saving Lamps	78	1.5	855	$391.92	$160	$100	$0	$260	$69.16
Kitchen	1	3	40	138	126	95%	0.1	75.5	$12.12	$22.46	$34.58	3- F40T12/EW Energy Saving Lamps	117	0.1	64	$29.39	$12	$8	$0	$20	$5.19
Kitchen	2	2	40	184	126	95%	0.2	100.6	$16.16	$29.94	$46.11	2- F40T12/EW Energy Saving Lamps	78	0.1	86	$39.19	$16	$10	$0	$26	$6.92
Building 663																					
Administration & Trades																					
Heating & Plumbing Shop Area	19	4	40	3496	90	95%	3.3	1365.5	$307.12	$406.38	$713.50	4- F40T12/EW Energy Saving Lamps	156	2.8	1,161	$606.48	$304	$190	$0	$494	$107.03
Main Entrance Lobby	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Lunch Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4- F40T12/EW Energy Saving Lamps	156	1.2	489	$255.36	$128	$80	$0	$208	$45.06
Production Division Office #3	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Production Division Office #2	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	2- F40T12/EW Energy Saving Lamps	78	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Heating Branch Office Front Rm	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	4- F40T12/EW Energy Saving Lamps	156	0.9	367	$191.52	$96	$60	$0	$156	$33.80
Heating Branch Office Back Rm	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Production Division Office #1	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Building & Structural Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Lunch Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Carpenter Supply Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Carpenter Shop Area	28	3	40	3864	90	95%	3.7	1509.3	$339.45	$449.16	$788.61	3- F40T12/EW Energy Saving Lamps	117	3.1	1,283	$670.32	$336	$210	$0	$546	$118.29
S. C. Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Dispatch Office	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Heating Supply Cage	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	4- F40T12/EW Energy Saving Lamps	156	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Dispatch Corridor	1	3	40	138	90	95%	0.1	53.9	$12.12	$16.04	$28.16	3- F40T12/EW Energy Saving Lamps	117	0.1	46	$23.94	$12	$8	$0	$20	$4.22
Computer Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	3- F40T12/EW Energy Saving Lamps	117	0.4	183	$95.76	$48	$30	$0	$78	$16.90
Welding Shop Area	8	2	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	2- F40T12/EW Energy Saving Lamps	78	0.6	244	$127.68	$64	$40	$0	$104	$22.53
Welding Shop Area	30	3	40	4140	90	95%	3.9	1617.1	$363.69	$481.24	$844.94	3- F40T12/EW Energy Saving Lamps	117	3.3	1,375	$718.20	$360	$225	$0	$585	$126.74
Production Division Office #1	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	4- F40T12/EW Energy Saving Lamps	156	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Operations & Maint. Conf. Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	3- F40T12/EW Energy Saving Lamps	117	0.2	64	$39.70	$24	$15	$0	$39	$7.01
Work Planning & Control Office	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	4- F40T12/EW Energy Saving Lamps	156	1.8	733	$383.04	$192	$120	$0	$312	$67.59
Business Managers Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Copy Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	4- F40T12/EW Energy Saving Lamps	156	0.1	37	$24.65	$16	$10	$0	$26	$4.35
Computer Room	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Womens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	3- F40T12/EW Energy Saving Lamps	117	0.2	55	$36.97	$24	$15	$0	$39	$6.52
Mens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	3- F40T12/EW Energy Saving Lamps	117	0.2	55	$36.97	$24	$15	$0	$39	$6.52
Conference Room	7	3	40	966	63	95%	0.9	264.1	$84.86	$78.60	$163.46	3- F40T12/EW Energy Saving Lamps	117	0.8	225	$138.95	$84	$53	$0	$137	$24.52
Corridor to Drawing Files Area	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3- F40T12/EW Energy Saving Lamps	117	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Director of Public Works	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	4- F40T12/EW Energy Saving Lamps	156	0.1	61	$31.92	$16	$10	$0	$26	$5.63
Director of Public Works	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	2- F40T12/EW Energy Saving Lamps	78	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	3- F40T12/EW Energy Saving Lamps	117	0.3	137	$71.82	$36	$23	$0	$59	$12.67
Office	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3- F40T12/EW Energy Saving Lamps	117	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Print Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	4- F40T12/EW Energy Saving Lamps	156	0.1	37	$24.65	$16	$10	$0	$26	$4.35
Drawing Files Area	8	4	40	1472	54	95%	1.4	345.0	$129.31	$102.67	$231.98	4- F40T12/EW Energy Saving Lamps	156	1.2	293	$197.18	$128	$80	$0	$208	$34.80
Open Office Area	47	3	40	6486	90	95%	6.2	2533.4	$569.78	$753.95	$1,324	3- F40T12/EW Energy Saving Lamps	117	5.2	2,153	$1,125.17	$564	$353	$0	$917	$198.56
Corridor to Snack Bar	3	1	75	258.75	90	95%	0.2	101.1	$22.73	$30.08	$52.81	1 - F96T12/EW Energy Saving Lamp	69	0.2	81	$42.25	$23	$8	$0	$30	$10.56
Operations & Maint. Room	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	4- F40T12/EW Energy Saving Lamps	156	1.8	733	$383.04	$192	$120	$0	$312	$67.59
Electrical Supply	7	1	75	603.75	90	95%	0.6	235.8	$53.04	$70.18	$123.22	1 - F96T12/EW Energy Saving Lamp	69	0.5	189	$98.58	$54	$18	$0	$71	$24.64
Electrical Supply	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	3- F40T12/EW Energy Saving Lamps	117	0.2	92	$47.88	$24	$15	$0	$39	$8.45
Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	2- F40T12/EW Energy Saving Lamps	78	0.3	122	$63.84	$32	$20	$0	$52	$11.27
Corridor to Snack Bar	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	2- F40T12/EW Energy Saving Lamps	78	0.1	31	$15.96	$8	$5	$0	$13	$2.82
Receiving - Supply Area	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	2- F40T12/EW Energy Saving Lamps	78	1.0	428	$223.44	$112	$70	$0	$182	$39.43
Drafting Office Area	34	4	40	6256	90	95%	5.9	2443.6	$549.58	$727.21	$1,277	4- F40T12/EW Energy Saving Lamps	156	5.1	2,077	$1,085.27	$544	$340	$0	$884	$191.52
Engineering Office Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	4- F40T12/EW Energy Saving Lamps	156	1.2	489	$255.36	$128	$80	$0	$208	$45.06
Restroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	2- F40T12/EW Energy Saving Lamps	78	0.1	18	$12.32	$8	$5	$0	$13	$2.17

ECO-7E
Buildings 616 - 5426
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 664																					
First Floor																					
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Locker/Shower Room	5	2	40	460	30	50%	0.2	59.9	$21.27	$17.82	$39.09	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$33.23	$40	$25	$0	$65	$5.86
Corridor to Restroom	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Locker Room	2	3	40	276	30	50%	0.1	35.9	$12.76	$10.69	$23.46	3- F40T12/EW Energy Saving Lamps	117	0.1	31	$19.94	$24	$15	$0	$39	$3.52
Open Office Area	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Empty Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Issue Center Office	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Second Floor																					
Library Check-Out	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Chaplain's Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Reading Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Childrens Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Library Stacks	36	2	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	2- F40T12/EW Energy Saving Lamps	78	2.7	611	$429.11	$288	$180	$0	$468	$75.73
Reading Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Administrative Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Library	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Class Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Sunday School Room	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	2- F40T12/EW Energy Saving Lamps	78	0.4	85	$59.60	$40	$25	$0	$65	$10.52
Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	3- F40T12/EW Energy Saving Lamps	117	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Building 2260																					
Administration																					
Ladies Room	2	4	40	368	30	50%	0.2	47.9	$17.01	$14.26	$31.27	4- F40T12/EW Energy Saving Lamps	156	0.2	41	$26.58	$32	$20	$0	$52	$4.69
Mens Room	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Handicap Restroom	1	4	40	184	30	50%	0.1	24.0	$8.51	$7.13	$15.64	4- F40T12/EW Energy Saving Lamps	156	0.1	20	$13.29	$16	$10	$0	$26	$2.35
Distri. Branch Chief Reception	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Open Office Area	52	4	40	9568	50	95%	9.1	2076.3	$840.53	$617.89	$1,458	4- F40T12/EW Energy Saving Lamps	156	7.7	1,765	$1,239.66	$832	$520	$0	$1,352	$218.76
Property Disposal Officer	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	4- F40T12/EW Energy Saving Lamps	156	1.2	272	$190.72	$128	$80	$0	$208	$33.66
Distri. Branch Chief Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Exit Lobby	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	4- F40T12/EW Energy Saving Lamps	156	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building 2329																					
Pesticide																					
Pesticide Sink Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Restroom	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Staff Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Corridor	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building 2755																					
Warehouse																					
Lab Room	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	3- F40T12/EW Energy Saving Lamps	117	0.6	127	$89.40	$60	$38	$0	$98	$15.78
Corridor to Rest Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	2- F40T12/EW Energy Saving Lamps	78	0.2	51	$35.76	$24	$15	$0	$39	$6.31
Main Corridor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
File Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	4- F40T12/EW Energy Saving Lamps	156	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1- F40T12/EW Energy Saving Lamp	39	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Open Office Area	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4- F40T12/EW Energy Saving Lamps	156	1.8	407	$286.08	$192	$120	$0	$312	$50.48
Mens Room Shower	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Womens Room	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Breakroom	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	2- F40T12/EW Energy Saving Lamps	78	0.4	102	$71.52	$48	$30	$0	$78	$12.62
Mens Room Mirror	1	1	40	46	30	50%	0.0	6.0	$2.13	$1.78	$3.91	1- F40T12/EW Energy Saving Lamp	39	0.0	5	$3.32	$4	$3	$0	$7	$0.59
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17

ECO-7E
Buildings 616 - 5426
Letterkenny Army Depot
Fluorescent Lamp Retrofit

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3311																				
Administration																				
Surveillance Office #1	18	4	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	4- F40T12/EW Energy Saving Lamps	156	2.7	611	$429.11	$288	$180	$0	$468	$75.73
Smoke Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	3- F40T12/EW Energy Saving Lamps	117	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Smoke Room	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	1- F40T12/EW Energy Saving Lamp	39	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Vending Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	2- F40T12/EW Energy Saving Lamps	78	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Surveillance Office #2	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Entrance Lobby	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	1- F40T12/EW Energy Saving Lamp	39	0.0	8	$5.96	$4	$3	$0	$7	$1.05
Office #9	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office #14	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office #15	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office #13	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Entrance #13 & #14	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office #10	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office #12	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Office #11	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Vending Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Office #8	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office #9	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office #4	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4- F40T12/EW Energy Saving Lamps	156	1.8	407	$286.08	$192	$120	$0	$312	$50.48
Directors Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Director Surveillance Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office #1	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Conference Room	8	4	40	1472	35	75%	1.1	223.6	$102.09	$66.54	$168.63	4- F40T12/EW Energy Saving Lamps	156	0.9	190	$143.34	$128	$80	$0	$208	$25.29
Office #2	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Open Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	4- F40T12/EW Energy Saving Lamps	156	4.5	1,018	$715.19	$480	$300	$0	$780	$126.21
Office #3	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	4- F40T12/EW Energy Saving Lamps	156	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Exit Corridor	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	1- F40T12/EW Energy Saving Lamp	39	0.1	17	$11.92	$8	$5	$0	$13	$2.10
Office #5	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	4- F40T12/EW Energy Saving Lamps	156	1.8	407	$286.08	$192	$120	$0	$312	$50.48
Entrance Corridor	8	1	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	1- F40T12/EW Energy Saving Lamp	39	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Copy and Mail Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	4- F40T12/EW Energy Saving Lamps	156	0.6	136	$95.36	$64	$40	$0	$104	$16.83
Womens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1- F40T12/EW Energy Saving Lamp	39	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Womens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1- F40T12/EW Energy Saving Lamp	39	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1- F40T12/EW Energy Saving Lamp	39	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Mens Room	2	1	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	1- F40T12/EW Energy Saving Lamp	39	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Office #6	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	4- F40T12/EW Energy Saving Lamps	156	1.3	305	$214.56	$144	$90	$0	$234	$37.86
Office #7	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Building 3315																				
Warehouse																				
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office Area	12	2	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	2- F40T12/EW Energy Saving Lamps	78	0.9	204	$143.04	$96	$60	$0	$156	$25.24
Break Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Key Area	10	2	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	2- F40T12/EW Energy Saving Lamps	78	0.7	170	$119.20	$80	$50	$0	$130	$21.04
Key Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	2- F40T12/EW Energy Saving Lamps	78	0.1	34	$23.84	$16	$10	$0	$26	$4.21
Building 3321																				
Hunter Check-In																				
Meeting Room	3	1	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	1- F40T12/EW Energy Saving Lamp	39	0.1	25	$17.88	$12	$8	$0	$20	$3.16
Meeting Room	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	2- F40T12/EW Energy Saving Lamps	78	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Meeting Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Locker Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	4- F40T12/EW Energy Saving Lamps	156	0.3	68	$47.68	$32	$20	$0	$52	$8.41
Building 5426																				
Warehouse																				
Office	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	4- F40T12/EW Energy Saving Lamps	156	1.0	238	$166.88	$112	$70	$0	$182	$29.45
Mens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
Womens Room	1	2	40	92	30	50%	0.0	12.0	$4.25	$3.56	$7.82	2- F40T12/EW Energy Saving Lamps	78	0.0	10	$6.65	$8	$5	$0	$13	$1.17
TOTALS	1104			151099			139.5	44856	$13,000	$13,000	$26,000			118.5	38111	$22,000	$13,000	$8,000	$0	$21,000	$4,000

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22-May-95

ECO-8
Efficient Fluorescent Fixture Replacement

Existing. Seventy buildings at the Letterkenny Army Depot contain approximately 6,660 fluorescent luminaries of various types. The total watts for the existing luminaires is 942,563 watts. The luminaires operate between 50 and 168 hours per week and contribute approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	10,744 kW/yr (895.3 kW/mo x 12 mo/yr)
Electric Usage	=	3,411,696 kWh/yr (284,308 kWh/mo x 12 mo/yr)
Electric Cost	=	$169,000 (10,744 kW/yr x $7.706/kW) + (3,411,696 kWh/yr x $.0248/kWh) = $167,403, use $169,000

Proposed. Remove the luminaires and install new luminaires with T-8 lamps and electronic ballast. Reference the attached data tables for ECO-8. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	6,676 kW/yr (556.3 kW/mo x 12 mo/yr)
Electric Usage	=	2,114,736 kWh/yr (176,228 kW/mo x 12 mo/yr)
Electric Cost	=	$104,000 (6,676 kW/yr x $7.706/kW) + (2,114,736 kWh/yr x $.0248/kWh) = $103,891, use $104,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $879,000. The breakdown is noted below and shown on the attached ECO data sheet.

Material	$414,000
Labor	$371,000
Engineering	$ 94,000
Total	**$879,000**

Energy Savings. The annual electric demand, usage, and cost saved is noted below:

Electric Demand	=	4,068 kW/yr (10,744 - 6,676)
Electric Usage	=	1,296,960 kWh/yr (3,411,696 - 2,114,736)
Energy Cost	=	$63,000/yr ($169,000 - $104,000) (use $63,000 due to rounding)
Annual Energy Savings	=	4,426 mmBtu/yr
Energy Usage	=	4,426 mmBtu/yr (1,296,960 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. The T-8 lamps have the same rated average life as the existing T-12 lamps, 20,000 hours; therefore, there is no annual recurring maintenance savings. The installation of new luminaires will reduce the existing required lamp and ballast changes, since all new lamps and ballast are being installed.

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 14.6 years with a savings to investment ratio of 1.21.

This ECO will maintain existing light levels while using less energy.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO8
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO8
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 785000.	
B. SIOH	$ 43175.	
C. DESIGN COST	$ 94000.	
D. TOTAL COST (1A+1B+1C)	$ 922175.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 922175.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	4426.	$ 32177.	18.17	$ 584656.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 31000.	17.22	$ 533820.
N. TOTAL		4426.	$ 63177.		$ 1118476.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) — $ 0.
(1) DISCOUNT FACTOR (TABLE A) — 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) — $ 0.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 0.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 63177.

5. SIMPLE PAYBACK PERIOD (1G/4) — 14.60 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) — $ 1118476.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= — 1.21
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): — 3.90 %

Summary ECO8A - ECO8E
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
ECO-8A																					
Summary	3374			461392			438.3	138096	$41,000	$41,000	$82,000			276.0	86426	$51,000	$209,000	$193,000	$48,000	$451,000	$30,000
ECO-8B																					
Summary	521			73071			69.4	20734	$6,000	$6,000	$13,000			40.8	11968	$7,000	$31,000	$27,000	$7,000	$65,000	$5,000
ECO-8C																					
Summary	1073			165278			156.9	57100	$15,000	$17,000	$32,000			96.8	35551	$20,000	$70,000	$58,000	$15,000	$143,000	$12,000
ECO-8D																					
Summary	757			109940			104.4	27528	$10,000	$8,000	$18,000			65.0	17119	$11,000	$47,000	$43,000	$10,800	$100,000	$6,700
ECO-8E																					
Summary	935			132883			126.2	40850	$12,000	$12,000	$24,000			77.6	25224	$15,000	$57,000	$50,000	$13,000	$120,000	$9,000
TOTALS	6660			942563			895.3	284308	$84,000	$84,000	$169,000			556.3	176288	$104,000	$414,000	$371,000	$94,000	$879,000	$63,000

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22-May-95

ECO-8A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Office Area																					
Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Chief Engineering Support Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Engineering Work Area	113	3	40	15594	50	95%	14.8	3383.9	$1,369.91	$1,007.05	$2,376.96	Recessed 2x4, 3L-T8,Elec Ballast	88	9.4	2,158	$1,515.74	$6,950	$6,498	$1,614	$15,061	$861.22
DPME Section Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$512	$460	$117	$1,089	$87.80
Production Engineering Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Chief Production Eng. Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Conference Room Corridor	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
DPME File Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Industrial 4', 4L-T8,Elec Ballast	112	0.1	24	$17.07	$55	$46	$12	$113	$10.97
DPME Work Area	18	3	40	2484	50	95%	2.4	539.0	$218.22	$160.41	$378.63	Recessed 2x4, 3L-T8,Elec Ballast	88	1.5	344	$241.45	$1,107	$1,035	$257	$2,399	$137.18
DPME Copy Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Chief Requisition Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Logistics Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Production Planning Conf. Rm.	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Chief Production Office	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$320	$288	$73	$681	$54.87
Chief Maintenance Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Manager Analysis Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor B	10	1	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Surface wraparound, 1L-T8,Elec Ballast	31	0.3	67	$47.25	$506	$328	$100	$934	$22.86
Deputy Director Maint. Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Director Maintenance Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Corridor A	16	1	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Surface wraparound, 1L-T8,Elec Ballast	31	0.5	108	$75.60	$810	$524	$160	$1,494	$36.58
Corridor A (Entrance Lobby)	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Chrome Plate Area (CP)																					
CP Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Editors Office	8	4	40	1472	50	95%	1.4	319	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Print Room	13	4	40	2,392	50	95%	2.3	519	$210.13	$154.47	$364.61	Pendant 1x4, 4L-T8,Elec Ballast	112	1.4	316	$221.93	$910	$748	$199	$1,857	$142.67
IMA Support Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Record Managers Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Cafe Area	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Receiving Bay	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Corridor to Rooms #2-#6	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Industrial 4', 2L-T8,Elec Ballast	60	0.2	52	$36.58	$180	$184	$44	$408	$19.51
CP Shop Area B	28	2	75	4,830	50	95%	4.6	1048	$424.31	$311.92	$736.23	Industrial 8', 2L-T8, Elec Ballast	104	2.8	632	$443.87	$1,820	$1,680	$420	$3,920	$292.36
CP Shop Area A	63	2	75	10,868	50	95%	10.3	2358	$954.69	$701.81	$1,656.51	Industrial 8', 2L-T8, Elec Ballast	104	6.2	1,422	$998.71	$4,095	$3,780	$945	$8,820	$657.80
CP Shop Area A	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
CP Shop Area B	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
CP Exit Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Corridor to Cafe	6	4	20	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x2, 4L-T8,Elec Ballast	65	0.4	85	$59.45	$408	$276	$82	$766	$24.69
Building 2																					
Administration																					
South Entrance #2 Open Office	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Recessed 2x4, 3L-T8,Elec Ballast	88	1.0	229	$160.96	$738	$690	$171	$1,599	$91.46
G. Kirk Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Movement Branch Mgrs. Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Movement Branch Open Office	36	4	40	6,624	50	95%	6.3	1437	$581.91	$427.77	$1,009.68	Recessed 2x4, 4L-T8,Elec Ballast	112	3.8	875	$614.59	$2,304	$2,070	$525	$4,899	$395.09
Industrial Hygiene	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	Recessed 2x4, 3L-T8,Elec Ballast	88	0.8	191	$134.14	$615	$575	$143	$1,333	$76.21
South Entrance #2 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Entrance Lobby South East	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$60	$58	$14	$132	$4.88
Director/Commander Reception	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Pendant 1x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$630	$518	$138	$1,286	$98.77
South Entrance Lobby #1	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
South East Open Office Area	18	4	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	Recessed 2x4, 4L-T8,Elec Ballast	112	1.9	437	$307.29	$1,152	$1,035	$262	$2,449	$197.55
Middle Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Open Office Area	98	4	40	18,032	50	95%	17.1	3913	$1,584.08	$1,164.49	$2,748.57	Pendant 1x4, 4L-T8,Elec Ballast	112	10.4	2,382	$1,673.05	$6,860	$5,635	$1,499	$13,994	$1,075.53
Commanders Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Directors Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Entrance Lobby South West	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$60	$58	$14	$132	$4.88
Building 3																					
Computer Area																					
Library	25	3	40	3,450	126	95%	3.3	1887	$303.08	$561.45	$864.53	Recessed 2x4, 3L-T8,Elec Ballast	88	2.1	1,203	$551.29	$1,538	$1,438	$357	$3,332	$313.23
Computer Office 132	4	3	40	552	126	95%	0.5	302	$48.49	$89.83	$138.32	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	192	$88.21	$246	$230	$57	$533	$50.12
Vault	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	327	$175.92	$560	$460	$122	$1,142	$113.09
Raised Fl. Tape Storage Rm. #8	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	367	$168.40	$384	$345	$87	$816	$108.25
Raised Floor Computer Center	34	4	40	6,256	126	95%	5.9	3421	$545.58	$1,018.09	$1,563.67	Recessed 2x4, 4L-T8,Elec Ballast	112	3.6	2,082	$954.24	$2,176	$1,955	$496	$4,627	$609.44
Raised Floor Computer Rm. #1	54	4	40	9,936	126	95%	9.4	5433	$872.86	$1,616.98	$2,489.84	Recessed 2x4, 4L-T8,Elec Ballast	112	5.7	3,307	$1,515.56	$3,456	$3,105	$787	$7,348	$974.29
Raised Floor Computer Rm. #2	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	Recessed 2x4, 4L-T8,Elec Ballast	112	8.1	4,655	$2,133.00	$4,864	$4,370	$1,108	$10,342	$1,371.22

ECO-8A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Raised Floor Computer Rm. #3	65	4	40	11,960	126	95%	11.4	6540	$1,050.67	$1,946.37	$2,997.03	Recessed 2x4, 4L-T8,Elec Ballast	112	6.9	3,981	$1,824.28	$4,160	$3,738	$948	$8,846	$1,172.75
Raised Floor Computer Rm. #6	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	Recessed 2x4, 4L-T8,Elec Ballast	112	8.1	4,655	$2,133.00	$4,864	$4,370	$1,108	$10,342	$1,371.22
Raised Floor Comp. Ctr. Office	9	4	40	1,656	126	95%	1.6	906	$145.48	$269.50	$414.97	Recessed 2x4, 4L-T8,Elec Ballast	112	1.0	551	$252.59	$576	$518	$131	$1,225	$162.38
Raised Floor Computer Rm. #5	64	4	40	11,776	126	95%	11.2	6440	$1,034.50	$1,916.42	$2,950.92	Recessed 2x4, 4L-T8,Elec Ballast	112	6.8	3,920	$1,796.21	$4,096	$3,680	$933	$8,709	$1,154.71
Raised Floor Computer Rm. #7	55	4	40	10,120	126	95%	9.6	5534	$889.03	$1,646.92	$2,535.95	Recessed 2x4, 4L-T8,Elec Ballast	112	5.9	3,369	$1,543.62	$3,520	$3,163	$802	$7,485	$992.33
Raised Floor Computer Rm. #6A	6	4	40	1,104	126	95%	1.0	604	$96.98	$179.66	$276.65	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	367	$168.40	$384	$345	$87	$816	$108.25
Compuier Office 132A	24	4	40	4,416	126	95%	4.2	2415	$387.94	$718.66	$1,106.60	Recessed 2x4, 4L-T8,Elec Ballast	112	2.6	1,470	$673.58	$1,536	$1,380	$350	$3,266	$433.02
South East Area																					
Office 1-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Office 6-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 6-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Open Office Area 7-G	39	3	40	5,382	50	95%	5.1	1168	$472.80	$347.57	$820.37	Recessed 2x4, 3L-T8,Elec Ballast	88	3.3	745	$523.13	$2,399	$2,243	$557	$5,198	$297.23
Room #120 4-F	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Office 5-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Automation Open Area 10-H	25	3	40	3,450	50	95%	3.3	749	$303.08	$222.80	$525.88	Recessed 2x4, 3L-T8,Elec Ballast	88	2.1	477	$335.34	$1,538	$1,438	$357	$3,332	$190.53
Office 7-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 2-J	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
DMC Office 8-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #130 10-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Open Office Area 13-G	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	Recessed 2x4, 3L-T8,Elec Ballast	88	2.0	458	$321.93	$1,476	$1,380	$343	$3,199	$182.91
Office 1-H	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office 1-G	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
DMC Open Area 4-F	70	3	40	9,660	50	95%	9.2	2096	$848.62	$623.84	$1,472.45	Recessed 2x4, 3L-T8,Elec Ballast	88	5.9	1,337	$938.95	$4,305	$4,025	$1,000	$9,330	$533.50
Office 1-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Snack Bar 9-K	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Office 3-K	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	Recessed 2x4, 3L-T8,Elec Ballast	88	0.6	134	$93.90	$431	$403	$100	$933	$53.35
Snack Bar 9-K	12	4	40	2,208	50	95%	2.1	479	$193.97	$142.59	$336.56	Pendant 1x4, 4L-T8,Elec Ballast	112	1.3	292	$204.86	$840	$690	$184	$1,714	$131.70
Smokers Lounge 10-K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Industrial 4', 2L-T8,Elec Ballast	60	0.2	52	$36.58	$180	$184	$44	$408	$19.51
Room #8 12-J	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Stairwell Lobby 11-K	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Industrial 4', 3L-T8,Elec Ballast	88	0.2	38	$26.83	$100	$92	$23	$215	$15.24
Open Office 14-K	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	Recessed 2x4, 2L-T8,Elec Ballast	60	0.8	182	$128.04	$805	$805	$193	$1,803	$68.29
Corridor 14-1-J	24	3	40	3,312	50	95%	3.1	719	$290.95	$213.89	$504.84	Recessed 2x4, 3L-T8,Elec Ballast	88	2.0	458	$321.93	$1,476	$1,380	$343	$3,199	$182.91
Office 1-F	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
South West Area																					
Room #109 6-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 5-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #111 6-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Room #105 8-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Room #107 7-A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office Rear 4-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Corridor 5-10-B	10	2	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	Recessed 2x4, 2L-T8,Elec Ballast	60	0.6	130	$91.46	$575	$575	$138	$1,288	$48.78
Corridor 5-10-B	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Office 5-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office Front 4-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office A 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor 4-1-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office B 2-D	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 2-C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #117 Front 2-B	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 4-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office Rear 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Room #117 Rear 2-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office Front 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office 2-E	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62

ECO-8A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
North West Area																				
Office 19-E	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Office 26-E	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 26-D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Office 26-C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 26-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 26-A	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 24-A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Lobby 25-A	7	4	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	Recessed 2x4, 4L-T8,Elec Ballast	112	0.7	170	$119.50	$448	$403	$102	$953	$76.82
Office 19-A	7	3	40	966	50	95%	0.9	210	$84.86	$62.38	$147.25	Recessed 2x4, 3L-T8,Elec Ballast	88	0.6	134	$93.90	$431	$403	$100	$933	$53.35
Office 23-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 21-D	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Open Office Area 25-19-A	111	3	40	15,318	50	95%	14.6	3324	$1,345.66	$989.22	$2,334.89	Recessed 2x4, 3L-T8,Elec Ballast	88	9.3	2,120	$1,488.91	$6,827	$6,383	$1,585	$14,794	$845.97
North East Area																				
Office 21-G	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Office 16-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office A 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Office B 21-F	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Office 21-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 26-H	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 3L-T8,Elec Ballast	88	0.7	153	$107.31	$492	$460	$114	$1,066	$60.97
Office 26-G	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 22-H	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office 26-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Open Office Area 20-F	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	Recessed 2x4, 3L-T8,Elec Ballast	88	3.3	764	$536.55	$2,460	$2,300	$571	$5,331	$304.86
Corridor 23-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor 22-14-J	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Recessed 2x4, 3L-T8,Elec Ballast	88	1.0	229	$160.96	$738	$690	$171	$1,599	$91.46
Office 16-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office 17-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office 21-J	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 17-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Office A 22-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office B 22-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Open Office Area 26-18-K	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	Recessed 2x4, 3L-T8,Elec Ballast	88	3.3	764	$536.55	$2,460	$2,300	$571	$5,331	$304.86
Open Office Area 25-J	14	3	40	1,932	50	95%	1.8	419	$169.72	$124.77	$294.49	Recessed 2x4, 3L-T8,Elec Ballast	88	1.2	267	$187.79	$861	$805	$200	$1,866	$106.70
Open Office Area 25-F	57	3	40	7,866	50	95%	7.5	1707	$691.02	$507.98	$1,199.00	Recessed 2x4, 3L-T8,Elec Ballast	88	4.8	1,088	$764.58	$3,506	$3,278	$814	$7,597	$434.42
Building 4																					
Warehouse																					
Warehouse Packaging Office	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Building 5																					
Administration																					
Rook Office	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Open Office Area	126	2	40	11,592	50	95%	11.0	2515	$1,018.34	$748.60	$1,766.94	Recessed 2x4, 2L-T8,Elec Ballast	60	7.2	1,641	$1,152.35	$7,245	$7,245	$1,739	$16,229	$614.59
West Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Product Receipt Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Snider Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Recessed 2x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$576	$518	$131	$1,225	$98.77
Building 6																					
Administration																					
Corridor to Restroom	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Army Audit Agency	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Tucker Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Army Reserve Division	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
NFFE Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Safety Division Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Open Office Area	379	3	40	52,302	50	95%	49.7	11350	$4,594.65	$3,377.62	$7,972.27	Recessed 2x4, 3L-T8,Elec Ballast	88	31.7	7,237	$5,083.77	$23,309	$21,793	$5,412	$50,513	$2,888.50
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
North East Entrance Corridor	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$4.88
Director of Integrated Office	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
North East Entrance Corridor	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Deputy Chief of Staff Reception	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Corridor to N. Exit	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
NFFG Local 1805 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Chastain Office	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
North East Entrance Lobby	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62

ECO-8A
Buildings 1 - 10
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 10																				
Computer Area																				
Computer Room	146	3	40	20,148	126	95%	19.1	11018	$1,769.97	$3,278.88	$5,048.85	Pendant 1x4, 3L-T8,Elec Ballast	88	12.2	7,026	$3,219.55	$9,490	$8,395	$2,146	$20,031	$1,829.29
Tape Library	8	4	40	1,472	84	95%	1.4	537	$129.31	$159.70	$289.01	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	327	$175.92	$512	$460	$117	$1,089	$113.09
Classified Tape Library	8	2	40	736	84	95%	0.7	268	$64.66	$79.85	$144.51	Surface 1x4, 2L-T8,Elec Ballast	60	0.5	175	$94.24	$538	$300	$101	$939	$50.26
Page Printing Room	22	3	40	3,036	126	95%	2.9	1660	$266.71	$494.08	$760.79	Pendant 1x4, 3L-T8,Elec Ballast	88	1.8	1,059	$485.14	$1,430	$1,265	$323	$3,018	$275.65
South East Area																				
Office B 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
Open Office Area 9-14-E	188	2	40	17,296	50	95%	16.4	3753	$1,519.43	$1,116.96	$2,636.39	Pendant 1x4, 2L-T8,Elec Ballast	60	10.7	2,448	$1,719.38	$11,280	$10,810	$2,651	$24,741	$917.00
Office 9-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 10-B	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Office 11-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Office A 9-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
Office 14-A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Office B 10-A	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
Office A 10-A	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Office 11-A	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Entrance Lobby	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
South West Area																				
Open Office Area 9-16-J	214	2	40	19,688	50	95%	18.7	4272	$1,729.56	$1,271.44	$3,000.99	Pendant 1x4, 2L-T8,Elec Ballast	60	12.2	2,786	$1,957.17	$12,840	$12,305	$3,017	$28,162	$1,043.82
Office 9-K	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
Office 9-K	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Office 10-K	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Office 11-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 12-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 13-K	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Pendant 1x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$360	$345	$85	$790	$29.27
North East Area																				
Open Office Area 2-8-E	247	2	40	22,724	50	95%	21.6	4931	$1,996.27	$1,467.50	$3,463.76	Pendant 1x4, 2L-T8,Elec Ballast	60	14.1	3,216	$2,258.98	$14,820	$14,203	$3,483	$32,506	$1,204.79
Office 1-E	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Office 1-E	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 1-D	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 1-C	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Smokers Room 6-A	16	2	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Recessed 2x4, 2L-T8,Elec Ballast	60	0.9	208	$146.33	$920	$920	$221	$2,061	$78.04
Computer Room 1-A	20	2	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	Recessed 2x4, 2L-T8,Elec Ballast	60	1.1	260	$182.91	$1,150	$1,150	$276	$2,576	$97.55
Cafe 5-B	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Pendant 1x4, 3L-T8,Elec Ballast	88	0.7	153	$107.31	$520	$460	$118	$1,098	$60.97
Vending Area 5-B	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$240	$230	$56	$526	$19.51
Office 8-A	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
North West Area																				
Office 5-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 8-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 7-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office B 6-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office A 6-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 3-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 4-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office 1-G	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Office 1-H	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Office 1-F	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
TOTALS	3374			461392			438.3	138096	$41,000	$41,000	$82,000			276.0	86426	$51,000	$209,000	$193,000	$48,000	$451,000	$30,000

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22-May-95

ECO-8B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 14																				
First Floor																				
Receiving Room	15	3	40	2070	50	95%	2.0	449.2	$181.85	$133.68	$315.53	Industrial 4', 3L-T8,Elec Ballast	88	1.3	286	$201.20	$750	$690	$173	$1,613	$114.32
Sand Blast Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Industrial 4', 3L-T8,Elec Ballast	88	0.2	38	$26.83	$100	$92	$23	$215	$15.24
Machine Shop Breakroom	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	Pendant 1x4, 4L-T8,Elec Ballast	112	0.7	170	$119.50	$490	$403	$107	$1,000	$76.82
Machine Shop Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Industrial 4', 2L-T8,Elec Ballast	60	0.2	39	$27.44	$135	$138	$33	$306	$14.63
Quality Control/Shop Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Quality Control/Shop Area	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	Industrial 4', 3L-T8,Elec Ballast	88	0.5	115	$80.48	$300	$276	$69	$645	$45.73
Optical Shop	14	4	40	2576	50	95%	2.4	559.0	$226.30	$166.36	$392.65	Industrial 4', 4L-T8,Elec Ballast	112	1.5	340	$239.01	$770	$644	$170	$1,584	$153.65
Building 19																				
Warehouse																				
Exterior Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	34	$23.63	$253	$164	$50	$467	$46.49
Warehouse North Work Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Warehouse Work Area	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$70	$58	$15	$143	$10.97
Building TS20-1																				
Warehouse																				
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Building 31																				
Warehouse																				
Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Industrial 4', 3L-T8,Elec Ballast	88	0.2	38	$26.83	$100	$92	$23	$215	$15.24
Receiving Area	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Building 32																				
Warehouse																				
Receiving Area	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Industrial 4', 3L-T8,Elec Ballast	88	0.3	57	$40.24	$150	$138	$35	$323	$22.86
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76
Building 33N																				
Warehouse																				
Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Pendant 1x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$195	$173	$44	$412	$22.86
Receiving Area	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76
Fenced Area in Warehouse	2	2	75	345	50	95%	0.3	75	$30.31	$22.28	$52.59	Industrial 8', 2L-T8, Elec Ballast	104	0.2	45	$31.70	$130	$120	$30	$280	$20.88
Fenced Area in Warehouse	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Surface 1x4, 2L-T8,Elec Ballast	60								
Building 34																				
Warehouse																				
Warehouse Elec. Dist. Equip.	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Office South	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76
Office North	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Industrial 4', 3L-T8,Elec Ballast	88	0.2	38	$26.83	$100	$92	$23	$215	$15.24
Building 37																				
Modular																				
Modular Office-Powertrain #1	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$210	$173	$46	$429	$44.08
Modular Office-Powertrain #2	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$280	$230	$61	$571	$58.78
Modular Office-Powertrain #3	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$210	$173	$46	$429	$44.08
Motor Room Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$280	$230	$61	$571	$58.78
Motor Room Test Area	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$140	$115	$31	$286	$29.39
Motor Room Box Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$192	$173	$44	$409	$44.08
Building 37 Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112								
Building Supply 47	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Breakroom	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$256	$230	$58	$544	$58.78
Disassembly Office	5	2	40	460	90	95%	0.4	180	$40.41	$53.47	$93.88	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	117	$61.23	$288	$288	$69	$644	$32.65
Transmission Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$256	$230	$58	$544	$58.78
Building 41																				
Warehouse																				
Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76

ECO-8B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 42S																				
Warehouse																				
Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Recessed 2x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$576	$518	$131	$1,225	$98.77
Break Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Building 43																				
Warehouse																				
Office - 1 x 4 w/metal differ	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Lockers	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Industrial 4', 3L-T8,Elec Ballast	88	0.3	57	$40.24	$150	$138	$35	$323	$22.86
Building 44																				
Warehouse																				
Office Area	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Industrial 4', 3L-T8,Elec Ballast	88	0.3	76	$53.65	$200	$184	$46	$430	$30.49
Building 47																				
Warehouse																				
Office - South	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Industrial 4', 3L-T8,Elec Ballast	88	0.3	137	$71.84	$200	$184	$46	$430	$40.82
Receiving South	2	3	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	Industrial 4', 3L-T8,Elec Ballast	88	0.2	69	$35.92	$100	$92	$23	$215	$20.41
Office - North	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Industrial 4', 2L-T8,Elec Ballast	60	0.2	94	$48.98	$180	$184	$44	$408	$26.12
Filing Area - North	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$269	$150	$50	$469	$101.23
Filing Area - North	24	1	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	Industrial 4', 1L-T8,Elec Ballast	31	0.7	291	$151.84	$960	$1,104	$248	$2,312	$73.47
Building 51																				
Warehouse																				
Self Service Parts Room	14	2	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	Pendant 1x4, 2L-T8,Elec Ballast	60	0.8	182	$128.04	$840	$805	$197	$1,842	$68.29
Self Service Shelf Area	69	2	40	6,348	50	95%	6.0	1378	$557.66	$409.95	$967.61	Pendant 1x4, 2L-T8,Elec Ballast	60	3.9	898	$631.05	$4,140	$3,968	$973	$9,081	$336.56
Self Service Shelf Area	12	2	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Industrial 4', 2L-T8,Elec Ballast	60	0.7	156	$109.75	$540	$552	$131	$1,223	$58.53
Entrance Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Self Service Rear Corridor	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	Industrial 4', 3L-T8,Elec Ballast	88	0.8	191	$134.14	$500	$460	$115	$1,075	$76.21
Self Service Entrance Lobby	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$58	$58	$14	$129	$4.88
Self Service Rear Office	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	Pendant 1x4, 4L-T8,Elec Ballast	112	2.6	583	$409.73	$1,680	$1,380	$367	$3,427	$263.39
Self Service Office	15	2	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	Pendant 1x4, 2L-T8,Elec Ballast	60	0.9	195	$137.18	$900	$863	$212	$1,975	$73.17
Warehouse Radio Active Room	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Warehouse Break Room	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Pendant 1x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$630	$518	$138	$1,286	$98.77
Warehouse Proc. Workstation	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Warehouse Work Room	21	4	40	3,864	50	95%	3.7	838	$339.45	$249.53	$588.98	Pendant 1x4, 4L-T8,Elec Ballast	112	2.2	510	$358.51	$1,470	$1,208	$321	$2,999	$230.47
Warehouse Mil. Work Station	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Warehouse Milvan Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
Main Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Building 52																				
Warehouse																				
Warehouse Receiving	1	2	40	92	50	95%	0.1	20	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Warehouse Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Building 53																				
Warehouse																				
Warehouse Receiving South	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Industrial 4', 3L-T8,Elec Ballast	88	0.3	76	$53.65	$200	$184	$46	$430	$30.49
Warehouse Receiving North	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Warehouse Battery Area	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Warehouse Office (2 lamps only)	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$120	$115	$28	$263	$9.76
Building 54																				
Warehouse																				
Warehouse Office	4	2	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Industrial 4', 2L-T8,Elec Ballast	60	0.2	52	$36.58	$180	$184	$44	$408	$19.51
Warehouse Parts Area	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Surface wraparound, 1L-T8,Elec Ballast	31	0.2	40	$28.35	$304	$197	$60	$560	$55.79
Building 55																				
Warehouse																				
Warehouse Battery Area	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$70	$58	$15	$143	$10.97

ECO-8B
Buildings 14 - 57
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 57S																					
Warehouse																					
Office Area/Parts Area	23	4	40	4,232	90	95%	4.0	1653	$371.77	$491.94	$863.71	Recessed 2x4, 4L-T8,Elec Ballast	112	2.4	1,006	$525.74	$1,472	$1,323	$335	$3,130	$337.97
Tool Parts Room (Locked)	5	4	40	920	90	95%	0.9	359	$80.82	$106.94	$187.76	Pendant 1x4, 4L-T8,Elec Ballast	112	0.5	219	$114.29	$350	$288	$77	$715	$73.47
Tool Parts Room (Locked)	11	3	40	1,518	90	95%	1.4	593	$133.35	$176.46	$309.81	Industrial 4', 3L-T8,Elec Ballast	88	0.9	378	$197.56	$550	$506	$127	$1,183	$112.25
Bulk Warehouse Office #1	12	4	40	2,208	90	95%	2.1	862	$193.97	$256.66	$450.63	Surface 1x4, 2L-T8,Elec Ballast	60	0.7	281	$146.95	$807	$450	$151	$1,408	$303.69
Fire Equipment Cage Area	4	2	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$269	$150	$50	$469	$26.12
Ladies Room	3	2	40	276	54	95%	0.3	65	$24.25	$19.25	$43.50	Industrial 4', 2L-T8,Elec Ballast	60	0.2	42	$28.37	$135	$138	$33	$306	$15.13
Bulk Warehouse Office #2	9	4	40	1,656	90	95%	1.6	647	$145.48	$192.50	$337.97	Surface 1x4, 2L-T8,Elec Ballast	60	0.5	211	$110.21	$605	$338	$113	$1,056	$227.77
Breakroom	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	Surface 1x4, 2L-T8,Elec Ballast	60	0.3	141	$73.47	$404	$225	$75	$704	$151.84
Ladies Room	1	4	40	184	54	95%	0.2	43	$16.16	$12.83	$29.00	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	26	$17.65	$70	$58	$15	$143	$11.35
Equipment Operations Unit	15	4	40	2,760	90	95%	2.6	1078	$242.46	$320.83	$563.29	Pendant 1x4, 4L-T8,Elec Ballast	112	1.6	656	$342.87	$1,050	$863	$230	$2,143	$220.42
Driver Exam Corridor	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	262	$137.15	$384	$345	$87	$816	$88.17
Locker Room	4	2	40	368	54	95%	0.3	86	$32.33	$25.67	$57.99	Industrial 4', 2L-T8,Elec Ballast	60	0.2	56	$37.82	$180	$184	$44	$408	$20.17
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$115	$115	$28	$258	$13.06
Robertson Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$192	$173	$44	$409	$44.08
Office	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$115	$115	$28	$258	$13.06
Office (Locked)	2	2	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$115	$115	$28	$258	$13.06
Corridor Behind Office Area	1	4	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	44	$22.86	$64	$58	$15	$137	$14.69
Office Area	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$256	$230	$58	$544	$58.78
Office Area	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$210	$173	$46	$429	$44.08
TOTALS	521			73071			69.4	20734	$6,000	$6,000	$13,000			40.8	11968	$7,000	$31,000	$27,000	$7,000	$65,000	$5,000

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22-May-95

ECO-8C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 102																				
Lab																				
Front Lab Workstation	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$230	$230	$55	$515	$26.12
Entrance to Office	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$115	$115	$28	$258	$13.06
Main Lab Area	18	2	40	1656	90	95%	1.6	646.8	$145.18	$192.50	$337.68	Recessed 2x4, 2L-T8,Elec Ballast	60	1.0	422	$220.42	$1,035	$1,035	$248	$2,318	$117.26
Bathroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$58	$58	$14	$129	$5.04
Building 199																				
Warehouse																				
Work Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$4.88
Building 200																				
Lab																				
Lab Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	Pendant 1x4, 4L-T8,Elec Ballast	112	1.2	267	$187.79	$770	$633	$168	$1,571	$120.72
Building 211																				
Administration																				
Kitchen	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$4.88
Main Office Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$320	$288	$73	$681	$54.87
Managers Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Building 247																				
Warehouse																				
Receiving Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Office	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	0	0	0.0	0	$0.00	$0	$0	$0	$0	$14.02
Rear Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	0	0	0.0	0	$0.00	$0	$0	$0	$0	$56.09
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor to Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Kitchen	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Receiving Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$4.88
Receiving Area	6	1	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	($60.36)
Receiving Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Building 320																				
Maintenance																				
Maint. Area Machine Shop	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Maintenance Area Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Mens Locker Room	11	1	40	506	168	95%	0.5	368.9	$44.45	$109.79	$154.25	Surface wraparound, 1L-T8,Elec Ballast	31	0.3	249	$103.95	$557	$360	$110	$1,027	$50.30
Toilet Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	131	$54.87	$202	$113	$38	$352	$29.26
Main Office Area	47	2	40	4324	168	95%	4.1	3152.7	$379.86	$938.25	$1,318.10	Recessed 2x4, 2L-T8,Elec Ballast	60	2.7	2,056	$859.63	$2,703	$2,703	$649	$6,054	$458.47
Building 349																				
Boiler Plant																				
Entrance Cage Area	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	Pendant 1x4, 2L-T8,Elec Ballast	60	0.5	394	$164.61	$540	$518	$127	$1,185	$87.79
Control Room	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	87	$36.58	$115	$115	$28	$258	$19.51
Boiler Room Ground Level	10	4	40	1840	168	95%	1.7	1341.6	$161.64	$399.25	$560.90	Pendant 1x4, 4L-T8,Elec Ballast	112	1.1	817	$341.41	$700	$575	$153	$1,428	$219.48
Boiler Room Ground Level	1	3	40	138	168	95%	0.1	100.6	$12.12	$29.94	$42.07	Industrial 4', 3L-T8,Elec Ballast	88	0.1	64	$26.83	$50	$46	$12	$108	$15.24
Breakroom	4	4	40	736	84	95%	0.7	268.3	$64.66	$79.85	$144.51	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	163	$87.96	$280	$230	$61	$571	$56.55
Boiler Room Ground Level	4	1	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	327	$136.57	$280	$230	$61	$571	($80.48)
Building 350																				
Office #1																				
Mens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	131	$88.25	$320	$288	$73	$681	$56.73
Conference Room	12	4	40	2208	63	95%	2.1	603.7	$193.97	$179.66	$373.63	Recessed 2x4, 4L-T8,Elec Ballast	112	1.3	367	$227.43	$768	$690	$175	$1,633	$146.20
Womens Room	5	4	40	920	54	95%	0.9	215.6	$80.82	$64.17	$144.99	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	131	$88.25	$320	$288	$73	$681	$56.73
Corridor to Shop	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$192	$173	$44	$409	$44.08
Managers Office	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$256	$230	$58	$544	$58.78
Copy Room	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Reception	11	4	40	2024	90	95%	1.9	790.6	$177.81	$235.27	$413.08	Recessed 2x4, 4L-T8,Elec Ballast	112	1.2	481	$251.44	$704	$633	$160	$1,497	$161.64

ECO-8C
Buildings 102-441
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Office #2																					
Reception Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	350	$182.87	$512	$460	$117	$1,089	$117.56
Managers Office	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	44	$22.86	$64	$58	$15	$137	$14.69
Office #3																					
Work Area	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	262	$137.15	$384	$345	$87	$816	$88.17
Separate Office Area	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$280	$230	$61	$571	$58.78
ASRS plus Office Area Corridor	3	4	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	131	$68.57	$210	$173	$46	$429	$44.08
ASRS plus Office Computer Rm.	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	350	$182.87	$512	$460	$117	$1,089	$117.56
Office #4																					
Office Area	5	2	40	460	90	95%	0.4	179.7	$40.41	$53.47	$93.88	Industrial 4', 2L-T8,Elec Ballast	50	0.3	117	$61.23	$225	$230	$55	$510	$32.65
Library Conference Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	Industrial 4', 3L-T8,Elec Ballast	88	0.2	48	$29.78	$100	$92	$23	$215	$16.92
Quality Control Room	6	3	40	828	90	95%	0.8	323.4	$72.74	$96.25	$168.99	Pendant 1x4, 3L-T8,Elec Ballast	88	0.5	206	$107.76	$390	$345	$88	$823	$61.23
Annex Office Area #6																					
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$135	$75	$25	$235	$13.06
Annex Office Corridor	7	2	40	644	90	95%	0.6	251.5	$56.57	$74.86	$131.43	Surface 1x4, 2L-T8,Elec Ballast	60	0.4	164	$85.72	$471	$263	$88	$821	$45.72
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$135	$75	$25	$235	$13.06
Meeting Room	19	2	40	1748	63	95%	1.7	477.9	$153.56	$142.23	$295.79	Surface 1x4, 2L-T8,Elec Ballast	60	1.1	312	$192.91	$1,278	$713	$239	$2,229	$102.88
Planning Production Fabrication	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Surface 1x4, 2L-T8,Elec Ballast	60	0.7	281	$146.95	$807	$450	$151	$1,408	$78.37
Trades Branch Conference Rm.	12	2	40	1104	63	95%	1.0	301.9	$96.98	$89.83	$186.82	Surface 1x4, 2L-T8,Elec Ballast	60	0.7	197	$121.84	$807	$450	$151	$1,408	$64.98
Mens Room	6	2	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	Surface 1x4, 2L-T8,Elec Ballast	60	0.3	84	$56.73	$404	$225	$75	$704	$30.26
Ladies Room	3	2	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	42	$28.37	$202	$113	$38	$352	$15.13
Trades Office Room #2	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Surface 1x4, 2L-T8,Elec Ballast	60	0.7	281	$146.95	$807	$450	$151	$1,408	$78.37
Trades Office Room #1	12	2	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Surface 1x4, 2L-T8,Elec Ballast	60	0.7	281	$146.95	$807	$450	$151	$1,408	$78.37
Stairway to Shop	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$135	$75	$25	$235	$13.06
Building 370																					
Equipment Repair																					
Mens Room	3	4	40	552	54	95%	0.5	129.4	$48.49	$38.50	$86.99	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	79	$52.95	$210	$173	$46	$429	$34.04
Shop Area Task Lighting	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Industrial 4', 2L-T8,Elec Ballast	60	0.2	94	$48.98	$180	$184	$44	$408	$26.12
Shop Area	318	4	40	58512	90	95%	55.6	22854.8	$5,140.19	$6,801.58	$11,942	Pendant 1x4, 4L-T8,Elec Ballast	112	33.8	13,912	$7,268.90	$22,260	$18,285	$4,865	$45,410	$4,672.87
Shop Area Office	5	4	40	920	90	95%	0.9	359.4	$80.82	$106.94	$187.76	Pendant 1x4, 4L-T8,Elec Ballast	112	0.5	219	$114.29	$350	$288	$77	$715	$73.47
Test Room/Workstation	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$140	$115	$31	$286	$29.39
Test Room	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$280	$230	$61	$571	$58.78
Shop Area Task Lighting	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$135	$75	$25	$235	$13.06
Building 412																					
Training & Conf. Center																					
Computer Training Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	Recessed 2x4, 4L-T8,Elec Ballast	112	1.2	267	$187.79	$704	$633	$160	$1,497	$120.72
Administration Area	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	Recessed 2x4, 4L-T8,Elec Ballast	112	1.2	267	$187.79	$704	$633	$160	$1,497	$120.72
Building 416																					
Administration																					
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Main Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	Recessed 2x4, 4L-T8,Elec Ballast	112	3.2	729	$512.16	$1,920	$1,725	$437	$4,082	$329.24
Building 417																					
Personnel Barracks																					
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	394	$164.61	$518	$518	$124	$1,159	$87.79
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Building 418																					
Personnel Barracks																					
Corridor	9	2	40	828	168	95%	0.8	603.7	$72.74	$179.66	$252.40	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	394	$164.61	$518	$518	$124	$1,159	$87.79
Mens Room/Shower	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Womens Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02

ECO-8C
Buildings 102-441
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Efficient Fluorescent Fixture Replacement

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 421																					
Administration																					
Main Office Area North End	28	4	40	5152	50	95%	4.9	1118.0	$452.59	$332.71	$785.31	Recessed 2x4, 4L-T8,Elec Ballast	112	3.0	681	$478.01	$1,792	$1,610	$408	$3,810	$307.29
Support Division Chief Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Managers Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
File/Copy Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
File/Copy Room on Files	4	1	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	27	$18.90	$202	$131	$40	$373	$9.15
Main Entrance Lobby	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Acquisition Chief	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Cont. Office Purch. Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	Recessed 2x4, 4L-T8,Elec Ballast	112	2.8	632	$443.87	$1,664	$1,495	$379	$3,538	$285.34
Imprest Office	1	4	40	184	50	95%	0.2	40.0	$16.16	$11.90	$28.07	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$11.00
Receptionist	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Bid Room #2	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Support Division Chief Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$320	$288	$73	$681	$54.87
Property Accountibility Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Vending Area	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Equipment Mgt. Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
North Exit Lobby	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Managers Office	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Ck. Depot Prop. Div. Reception	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Ck. Depot Prop. Div. Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Main Office South End	24	4	40	4,416	50	95%	4.2	958	$387.94	$285.18	$673.12	Recessed 2x4, 4L-T8,Elec Ballast	112	2.6	583	$409.73	$1,536	$1,380	$350	$3,266	$263.39
Contracting Office Area	14	4	40	2,576	50	95%	2.4	559	$226.30	$166.36	$392.65	Recessed 2x4, 4L-T8,Elec Ballast	112	1.5	340	$239.01	$896	$805	$204	$1,905	$153.65
Office (left of Acquisition Chief)	1	4	40	184	50	95%	0.2	40	$16.16	$11.90	$28.07	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$11.00
Building 424																					
Cable & Harness																					
Unpacking	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Pendant 1x4, 3L-T8,Elec Ballast	88	0.3	137	$71.84	$260	$230	$59	$549	$40.82
File Area	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	172	$89.80	$308	$288	$71	$666	$51.02
Cable Tent Station	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	103	$53.88	$185	$173	$43	$400	$30.61
Work Station	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	172	$89.80	$308	$288	$71	$666	$51.02
Cable Termination Area	6	2	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	141	$73.47	$345	$345	$83	$773	$39.19
Cable Termination Area	1	2	40	92	90	95%	0.1	36	$8.08	$10.69	$18.78	Industrial 4', 2L-T8,Elec Ballast	60	0.1	23	$12.25	$45	$46	$11	$102	$6.53
Assembly Area Desk Lighting	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	70	$36.74	$202	$113	$38	$352	$19.59
Assembly Area	21	3	40	2,898	90	95%	2.8	1132	$254.58	$336.87	$591.46	Recessed 2x4, 3L-T8,Elec Ballast	88	1.8	722	$377.16	$1,292	$1,208	$300	$2,799	$214.30
Break Room	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	103	$53.88	$185	$173	$43	$400	$30.61
Break Room	3	2	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	70	$36.74	$173	$173	$41	$386	$19.59
Office (Day)	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	137	$71.84	$246	$230	$57	$533	$40.82
Office	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Building 428																					
Counseling																					
Counseling Managers Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Corridor to Managers Office	6	2	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Surface wraparound, 1L-T8,Elec Ballast	31	0.2	40	$28.35	$304	$197	$60	$560	$55.79
Copy Room	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Main Entrance Corridor	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Counselers Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Conference Room (Day)	8	2	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Surface wraparound, 1L-T8,Elec Ballast	31	0.2	54	$37.80	$405	$262	$80	$747	$74.38
Building 431																					
Administration																					
Main Entrance Lobby	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Lab #4 (Entrance Lobby)	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Supply Section	10	4	40	1,840	50	95%	1.7	399	$161.64	$118.83	$280.47	Pendant 1x4, 4L-T8,Elec Ballast	112	1.1	243	$170.72	$700	$575	$153	$1,428	$109.75
Corridor around Lab #4	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Industrial 4', 3L-T8,Elec Ballast	88	0.3	76	$53.65	$200	$184	$46	$430	$30.49
TDME Office Area	25	4	40	4,600	50	95%	4.4	998	$404.10	$297.06	$701.17	Pendant 1x4, 4L-T8,Elec Ballast	112	2.7	608	$426.80	$1,750	$1,438	$383	$3,571	$274.37
ACL Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$320	$288	$73	$681	$54.87
Womens Room	1	4	40	184	30	50%	0.1	24	$8.51	$7.13	$15.64	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	15	$9.52	$70	$58	$15	$143	$6.12
Executive Secretary	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Computer Room	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
TDME Chief Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
TDME Chief Lab Calibration	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92

ECO-8C
Buildings 102-441
Letterkenny Army Depot
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	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 438																					
Repair Shop																					
Shipping Area	3	2	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$202	$113	$38	$352	$14.63
Building 441																					
Warehouse																					
Outside Office	2	2	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Warehouse Parts Bay	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
TOTALS	1073			165278			156.9	57100	$15,000	$17,000	$32,000			96.8	35551	$20,000	$70,000	$58,000	$15,000	$143,000	$12,000

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22-May-95

ECO-8D
Buildings 500 - 581
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																				
First Floor																				
Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Laboratory Room #33	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Dispensary Corridor	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	Recessed 2x4, 2L-T8,Elec Ballast	60	0.8	328	$171.44	$805	$805	$193	$1,803	$91.43
Room #47 (Office)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Pharmacy	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Room #31 Open Office Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Treatment Room #2 Room #45	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Treatment Room #1 Room #46	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Physical Therapy Room #34	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Command Wing Entrance	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Waiting Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Occupational Health Room #38	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Emergency Rm. Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$58	$58	$14	$129	$9.75
Emergency Treatment Rm. #40	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	262	$137.15	$384	$345	$87	$816	$88.17
Occupational Health Room #39	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office Room #42	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Occupational Health Room #37	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Occupational Health Rm.#43C	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Occupational Health Rm.#43B	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Occupational Health Rm.#43A	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Occupational Health Room #43	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Break Room (Room #36)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Dispensary Waiting Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	137	$71.84	$246	$230	$57	$533	$40.82
Room #26 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Admin. Prgm. Coordinators Ofc.	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
P. Gieseking Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Protocol Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Copy Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$202	$113	$38	$352	$14.63
Public Affairs Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Entrance to Rear Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Depot Sergeant Majors Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Commander Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Commander Secretary	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Depot Commander	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
G. Patterson Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Rear Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Legal Office 15 Reception	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Legal Office Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	Recessed 2x4, 3L-T8,Elec Ballast	88	0.8	191	$134.14	$615	$575	$143	$1,333	$76.21
Computer Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Front Office 15A	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Police Sign in Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	137	$71.84	$246	$230	$57	$533	$40.82
Police Room	3	3	40	414	168	95%	0.4	301.9	$36.37	$89.83	$126.20	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	192	$80.48	$185	$173	$43	$400	$45.73
Office #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #25 (Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Rear Office 15B	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Employment Info. Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Second Floor																				
Room #3 (Office)	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Office #10	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Computer Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Employee Relations Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Center Bldg. Open Office Area	26	4	40	4784	50	95%	4.5	1038.1	$420.27	$308.95	$729.21	Recessed 2x4, 4L-T8,Elec Ballast	112	2.8	632	$443.87	$1,664	$1,495	$379	$3,538	$285.34
Room #7 (Office)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Basement Level																				
Stairwell #2 Police Area	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$67	$38	$13	$118	$9.75
Stairwell #3 Legal Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	163	$68.28	$128	$115	$29	$272	$43.90
Room #16 (Rear Office)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Stairwell #1 Dispensary Side	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$67	$38	$13	$118	$9.75
Open Office Area Room #16	32	3	40	4416	50	95%	4.2	958.3	$387.94	$285.18	$673.12	Recessed 2x4, 3L-T8,Elec Ballast	88	2.7	611	$429.24	$1,968	$1,840	$457	$4,265	$243.88
Stairwell #2 Police Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	87	$36.58	$115	$115	$28	$258	$19.51

ECO-8D
Buildings 500 - 581
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*					*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Room #14-15 (Office)	10	4	40	1840	50	95%	1.7	399.3	$161.64	$118.83	$280.47	Recessed 2x4, 4L-T8,Elec Ballast	112	1.1	243	$170.72	$640	$575	$146	$1,361	$109.75
Room #13 (Copy Room)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Corridor	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	Recessed 2x4, 3L-T8,Elec Ballast	88	0.8	191	$134.14	$615	$575	$143	$1,333	$76.21
Room #2 (Office)	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Room #4 (Office)	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Room #5 (Office)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	Recessed 2x4, 3L-T8,Elec Ballast	88	1.0	229	$160.96	$738	$690	$171	$1,599	$91.46
Room #3 (Open Work Space)	12	3	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	Recessed 2x4, 3L-T8,Elec Ballast	88	1.0	229	$160.96	$738	$690	$171	$1,599	$91.46
Room #12	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
DPCA Office Coordinator	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Room #11 (Open Office Area)	10	3	40	1380	50	95%	1.3	299.5	$121.23	$89.12	$210.35	Recessed 2x4, 3L-T8,Elec Ballast	88	0.8	191	$134.14	$615	$575	$143	$1,333	$76.21
Room #11A (Files)	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Entrance/Vending Area	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Building 521																					
Basement Floor																					
Open Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Open Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$202	$113	$38	$352	$14.63
Weight Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Pool Table Room	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Stairs to First Floor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
First Floor																					
Smokers Lounge	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	65	$45.73	$288	$288	$69	$644	$24.39
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$4.88
Stairs to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$58	$58	$14	$129	$4.88
General Office Area	18	2	40	1656	90	95%	1.6	646.8	$145.48	$192.50	$337.97	Recessed 2x4, 2L-T8,Elec Ballast	60	1.0	422	$220.42	$1,035	$1,035	$248	$2,318	$117.56
Radio Equipment Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	163	$68.28	$128	$115	$29	$272	$43.90
Union Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Copier/Fax Machine Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Chief Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Research Area/Library	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	69	$35.92	$123	$115	$29	$267	$20.41
Watch Room	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	163	$68.28	$128	$115	$29	$272	$43.90
Assistance Chief Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Second Floor																					
Corridor	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Building 522																					
First Floor																					
Office of the Chief of Staff	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Office of the Chief of Staff Recp.	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Rear Office #2 (not occupied)	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Secretary's Ofc. to the General	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Right Reception Area	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Main Entrance	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Rear Office #2 (not occupied)	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Rear Office #1 (not occupied)	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Lobby	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Reception Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Left Reception Area	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Commanding Generals Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Secretary's Ofc. to the General	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Second Floor																					
Inspector Gen. Admin. Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
Copy Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Inspector General Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Inspector General Reception	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Protocol Office	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	65	$45.73	$288	$288	$69	$644	$24.39
Liason Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Protocol Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Building 523																					
Administration																					
Cornelius Office	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Grayson Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Helsel Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90

ECO-8D
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	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Descom Office A	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Hoover Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Barnes Office	6	3	40	828	50	95%	0.8	179.7	$72.74	$53.47	$126.21	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	115	$80.48	$369	$345	$86	$800	$45.73
Gerhart Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Creamer Office	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
Sheffield Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Myers Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Horn Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
Descom Office B	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	78	$54.87	$345	$345	$83	$773	$29.27
Kitchen	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Library	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Descom Office C	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$230	$230	$55	$515	$19.51
Corridor	11	2	40	1012	50	95%	1.0	219.6	$88.90	$65.35	$154.26	Industrial 4', 2L-T8,Elec Ballast	60	0.6	143	$100.60	$495	$506	$120	$1,121	$53.65
Building 524																					
Conference Center																					
Entrance Lobby	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	Recessed 2x4, 2L-T8,Elec Ballast	60	0.4	91	$64.02	$403	$403	$97	$902	$34.14
Building 529																					
First Floor																					
Golf Shop Lunch Room	6	2	40	552	60	95%	0.5	143.7	$48.49	$42.78	$91.27	Recessed 2x4, 2L-T8,Elec Ballast	60	0.3	94	$59.52	$345	$345	$83	$773	$31.75
Golf Equipment Shop Office	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	29	$18.52	$64	$58	$15	$137	$11.90
Golf Equipment Shop	9	2	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	141	$89.29	$518	$518	$124	$1,159	$47.62
Golf Equipment Shop Office	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	Recessed 2x4, 2L-T8,Elec Ballast	50	0.1	16	$9.92	$58	$58	$14	$129	$5.29
Golf Eqpt. Shop Entrance Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	31	$19.84	$115	$115	$28	$258	$10.58
Bar Table Area	19	4	40	3496	60	95%	3.3	910.4	$307.12	$270.92	$578.04	Recessed 2x4, 4L-T8,Elec Ballast	112	2.0	554	$351.85	$1,216	$1,093	$277	$2,586	$226.19
Kitchen Dish Room	6	3	40	828	60	95%	0.8	215.6	$72.74	$64.17	$136.90	Recessed 2x4, 3L-T8,Elec Ballast	88	0.5	137	$87.30	$369	$345	$86	$800	$49.60
Restroom Lobby	2	2	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	31	$19.84	$135	$75	$25	$235	$10.58
Bar Counter	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	58	$37.04	$128	$115	$29	$272	$23.81
Food Counter	4	4	40	736	60	95%	0.7	191.7	$64.66	$57.04	$121.69	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	117	$74.07	$256	$230	$58	$544	$47.62
Mens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	16	$9.92	$58	$58	$14	$129	$5.29
Dumb Waiter Room	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	29	$18.52	$64	$58	$15	$137	$11.90
Womens Room	1	2	40	92	60	95%	0.1	24.0	$8.08	$7.13	$15.21	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	16	$9.92	$58	$58	$14	$129	$5.29
Second Floor																					
Corridor to Mens Room	1	2	40	92	60	95%	0.1	24.0													
Mens Room	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	58	$37.04	$128	$115	$29	$272	$23.81
Food Prep Room	5	4	40	920	60	95%	0.9	239.6	$80.82	$71.30	$152.12	Recessed 2x4, 4L-T8,Elec Ballast	112	0.5	146	$92.59	$320	$288	$73	$681	$59.52
Womens Restroom	4	2	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	62	$39.68	$230	$230	$55	$515	$21.16
Second Floor Entrance Lobby	2	4	40	368	60	95%	0.3	95.8	$32.33	$28.52	$60.85	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	58	$37.04	$128	$115	$29	$272	$23.81
Dining Room	14	4	40	2576	60	95%	2.4	670.8	$226.30	$199.63	$425.92	Recessed 2x4, 4L-T8,Elec Ballast	112	1.5	408	$259.26	$896	$805	$204	$1,905	$166.67
Handicap Restroom	1	4	40	184	60	95%	0.2	47.9	$16.16	$14.26	$30.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	29	$18.52	$64	$58	$15	$137	$11.90
Building 530																					
Cable TV for Housing																					
Open Office Area	16	2	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	Industrial 4', 2L-T8,Elec Ballast	60	0.9	208	$146.33	$720	$736	$175	$1,631	$78.04
Building 536																					
Bath House																					
Mens Locker Area	7	2	40	644	168	95%	0.6	469.6	$56.57	$139.74	$196.31	Recessed 2x4, 2L-T8,Elec Ballast	60	0.4	306	$128.03	$403	$403	$97	$902	$68.28
Mens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Womens Locker Area	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	131	$54.87	$173	$173	$41	$386	$29.26
Womens Shower Area	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Womens Pool Shower Area	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	45	$18.90	$101	$66	$20	$187	$37.19
Mens Pool Shower Area Locked	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	45	$18.90	$101	$66	$20	$187	$37.19

ECO-8D
Buildings 500 - 581
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 581																				
First Floor																				
SIDS Office	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$512	$460	$117	$1,089	$87.80
Copy Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$60	$58	$14	$132	$4.88
Copy Room	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$70	$58	$15	$143	$10.97
LEAD Valve Engin. Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Breakroom	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Dir. Resource Mgrs. Office	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Dir. Resource Mgrs. Recp. Area	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	Pendant 1x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$350	$288	$77	$715	$54.87
Corridor	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Pendant 1x4, 2L-T8,Elec Ballast	60	0.3	65	$45.73	$300	$288	$71	$659	$24.39
LEAD Valve Engin. Area	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$560	$460	$122	$1,142	$87.80
Open Office Area	16	4	40	2944	50	95%	2.8	638.8	$258.63	$190.12	$448.75	Pendant 1x4, 4L-T8,Elec Ballast	112	1.7	389	$273.15	$1,120	$920	$245	$2,285	$175.60
Second Floor																				
Room #15 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Room #20A	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Room #20	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Room #14 Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Room #19 Smoke Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Room #8 & #10	5	4	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	Pendant 1x4, 4L-T8,Elec Ballast	112	0.5	122	$85.36	$350	$288	$77	$715	$54.87
Room #14A Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Room #11 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$70	$58	$15	$143	$10.97
Room #12 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Room #1 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Room #9 Office	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Pendant 1x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$70	$58	$15	$143	$10.97
Room #5 & #7 Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Room #3 Office	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Pendant 1x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$210	$173	$46	$429	$32.92
Corridor	11	4	40	2024	50	95%	1.9	439.2	$177.81	$130.71	$308.51	Pendant 1x4, 4L-T8,Elec Ballast	112	1.2	267	$187.79	$770	$633	$168	$1,571	$120.72
TOTALS	757			109940			104.4	27528	$10,000	$8,000	$18,000			65.0	17119	$11,000	$47,000	$43,000	$10,800	$100,000	$6,700

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22-May-95

ECO-8E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 616																				
Police Building																				
Police Conference Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Industrial 4', 2L-T8,Elec Ballast	60	0.2	175	$73.16	$180	$184	$44	$408	$39.02
Police Conference Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	327	$136.57	$280	$230	$61	$571	$87.79
Building 618																				
First Floor																				
Hoke Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Room #11 Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Coffee Mess	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #7	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Merrill Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Keefer Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Walter Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Hunting & Fishing Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Second Floor																				
Warnock Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Corridor	8	2	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 2L-T8,Elec Ballast	60	0.5	104	$73.17	$460	$460	$110	$1,030	$39.02
Stairwell to Second Floor	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Cassner	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Yeager Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Yocum Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Quinn Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Gieseking Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Williams Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Epstein Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Building 619																				
Dining Area																				
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$58	$58	$14	$129	$4.88
Staff Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Rear Dining Area	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Open Dining Area	27	3	40	3726	50	95%	3.5	808.5	$327.32	$240.62	$567.95	Recessed 2x4, 3L-T8,Elec Ballast	88	2.3	516	$362.17	$1,661	$1,553	$386	$3,599	$205.78
Serving Area	7	2	40	644	50	95%	0.6	139.7	$56.57	$41.59	$98.16	Recessed 2x4, 2L-T8,Elec Ballast	60	0.4	91	$64.02	$403	$403	$97	$902	$34.14
Rear Dining Area	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Building 628																				
First Floor																				
Information Security	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Badge Photo Room	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	76	$53.65	$246	$230	$57	$533	$30.49
First Floor Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Copy Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Smoking Room	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	Industrial 4', 1L-T8, Elec Ballast	31	0.0	7	$4.73	$40	$46	$10	$96	$2.29
Automation Security Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Police Officers Room #3 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Room #1 Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Physical Security	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	19	$13.41	$62	$58	$14	$133	$7.62
Second Floor																				
Stairway to Second Floor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$58	$58	$14	$129	$4.88
Corridor	5	3	40	690	50	95%	0.7	149.7	$60.62	$44.56	$105.18	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	95	$67.07	$308	$288	$71	$666	$38.11
Investigation Office Room #19	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Investigation Office Room #18	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Interview Room #17	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Secretary & Plans Div. Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Chief Secretary & Plans Div. Ofc.	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	57	$40.24	$185	$173	$43	$400	$22.86
Director - PM Office Room #11	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24
Directorate Secretary Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	38	$26.83	$123	$115	$29	$267	$15.24

ECO-8E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand ($)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 639																				
Physical Fitness Center																				
Rear Entrance Lobby	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$67	$38	$13	$118	$9.75
Weight Room Restroom	2	2	40	184	101	95%	0.2	80.7	$16.16	$24.00	$40.17	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	53	$26.20	$115	$115	$28	$258	$13.97
Weight Room	14	3	40	1932	168	95%	1.8	1408.7	$169.72	$419.22	$588.94	Industrial 4', 3L-T8,Elec Ballast	88	1.2	898	$375.56	$700	$644	$161	$1,505	$213.38
Gym Entrance	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Industrial 4', 2L-T8,Elec Ballast	60	0.1	44	$18.29	$45	$46	$11	$102	$9.75
Womens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	82	$34.14	$64	$58	$15	$137	$21.95
Corridor to Sauna	3	2	40	276	168	95%	0.3	201.2	$24.25	$59.89	$84.13	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	131	$54.87	$173	$173	$41	$386	$29.26
Corridor to Womens Locker Rm.	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$58	$58	$14	$129	$9.75
Womens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Corridor to Mens Locker Room	1	2	40	92	168	95%	0.1	67.1	$8.08	$19.96	$28.04	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	44	$18.29	$58	$58	$14	$129	$9.75
Gym Office	2	4	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	163	$68.28	$140	$115	$31	$286	$43.90
Corridor to Restroom	2	2	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	87	$36.58	$115	$115	$28	$258	$19.51
Mens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	327	$136.57	$256	$230	$58	$544	$87.79
Womens Locker Room	4	4	40	736	168	95%	0.7	536.6	$64.66	$159.70	$224.36	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	327	$136.57	$256	$230	$58	$544	$87.79
Mens Shower Room	4	2	40	368	168	95%	0.3	268.3	$32.33	$79.85	$112.18	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	175	$73.16	$269	$150	$50	$469	$39.02
Mens Rear Locker Room	1	4	40	184	168	95%	0.2	134.2	$16.16	$39.93	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	82	$34.14	$64	$58	$15	$137	$21.95
Gym Entrance	1	1	40	46	168	95%	0.0	33.5	$4.04	$9.98	$14.02	Surface wraparound, 1L-T8,Elec Ballast	31	0.0	23	$9.45	$51	$33	$10	$93	$4.57
Building 645																				
Day Care																				
Entrance Lobby	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	23	$12.25	$58	$58	$14	$129	$6.53
Changing Area	2	2	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	28	$18.91	$115	$115	$28	$258	$10.09
Bathroom #3	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$58	$58	$14	$129	$5.04
Baby Area	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$230	$230	$55	$515	$26.12
Bathroom #2	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$58	$58	$14	$129	$5.04
Kitchen Area	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	23	$12.25	$58	$58	$14	$129	$6.53
Bathroom #1	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$58	$58	$14	$129	$5.04
Play Area	16	2	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	Recessed 2x4, 2L-T8,Elec Ballast	60	0.9	375	$195.93	$920	$920	$221	$2,061	$104.49
Staff Office	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	70	$36.74	$173	$173	$41	$386	$19.59
Building 646																				
Youth Center																				
Entrance Area	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	96	$44.10	$123	$115	$29	$267	$25.06
Lounge Area	5	3	40	690	126	95%	0.7	377.3	$60.62	$112.29	$172.91	Recessed 2x4, 3L-T8,Elec Ballast	88	0.4	241	$110.26	$308	$288	$71	$666	$62.65
Girls Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	40	$22.32	$115	$115	$28	$258	$11.90
Boys Room	2	2	40	184	76	95%	0.2	60.7	$16.16	$18.06	$34.23	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	40	$22.32	$115	$115	$28	$258	$11.90
Staff Office	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	96	$44.10	$123	$115	$29	$267	$25.06
Corridor to Play Room	1	2	40	92	126	95%	0.1	50.3	$8.08	$14.97	$23.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	33	$15.04	$58	$58	$14	$129	$8.02
Play Room	2	3	40	276	126	95%	0.3	150.9	$24.25	$44.92	$69.16	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	96	$44.10	$123	$115	$29	$267	$25.06
Open Area	20	2	40	1840	126	95%	1.7	1006.2	$161.64	$299.44	$461.08	Recessed 2x4, 2L-T8,Elec Ballast	60	1.1	656	$300.71	$1,150	$1,150	$276	$2,576	$160.38
Kitchen	1	3	40	138	126	95%	0.1	75.5	$12.12	$22.46	$34.58	Recessed 2x4, 3L-T8,Elec Ballast	88	0.1	48	$22.05	$62	$58	$14	$133	$12.53
Kitchen	2	2	40	184	126	95%	0.2	100.6	$16.16	$29.94	$46.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	66	$30.07	$115	$115	$28	$258	$16.04
Building 663																				
Administration & Trades																				
Heating & Plumbing Shop Area	19	4	40	3496	90	95%	3.3	1365.5	$307.12	$406.38	$713.50	Pendant 1x4, 4L-T8,Elec Ballast	112	2.0	831	$434.31	$1,330	$1,093	$291	$2,714	$279.20
Main Entrance Lobby	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	175	$91.43	$256	$230	$58	$544	$58.78
Lunch Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	350	$182.87	$512	$460	$117	$1,089	$117.56
Production Division Office #3	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$230	$230	$55	$515	$26.12
Production Division Office #2	2	2	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	47	$24.49	$115	$115	$28	$258	$13.06
Heating Branch Office Front Rm	6	4	40	1104	90	95%	1.0	431.2	$96.98	$128.33	$225.32	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	262	$137.15	$384	$345	$87	$816	$88.17
Heating Branch Office Back Rm	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Production Division Office #1	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	23	$12.25	$58	$58	$14	$129	$6.53
Building & Structural Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$230	$230	$55	$515	$26.12
S. C. Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	Pendant 1x4, 3L-T8,Elec Ballast	88	0.3	103	$53.88	$195	$173	$44	$412	$30.61
Dispatch Office	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Heating Supply Cage	4	4	40	736	90	95%	0.7	287.5	$64.66	$85.55	$150.21	Industrial 4', 4L-T8,Elec Ballast	112	0.4	175	$91.43	$220	$184	$48	$452	$58.78
Dispatch Corridor	1	3	40	138	90	95%	0.1	53.9	$12.12	$16.04	$28.16	Industrial 4', 3L-T8,Elec Ballast	88	0.1	34	$17.96	$50	$46	$12	$108	$10.20
Computer Room	4	3	40	552	90	95%	0.5	215.6	$48.49	$64.17	$112.66	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	137	$71.84	$246	$230	$57	$533	$40.82
Welding Shop Area	30	3	40	4140	90	95%	3.9	1617.1	$363.69	$481.24	$844.94	Industrial 4', 3L-T8,Elec Ballast	88	2.5	1,031	$538.80	$1,500	$1,380	$346	$3,226	$306.14
Production Division Office #1	2	4	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	87	$45.72	$128	$115	$29	$272	$29.39
Operations & Maint. Conf. Room	2	3	40	276	63	95%	0.3	75.5	$24.25	$22.46	$46.70	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	48	$29.78	$123	$115	$29	$267	$16.92
Work Planning & Control Office	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	Recessed 2x4, 4L-T8,Elec Ballast	112	1.3	525	$274.30	$768	$690	$175	$1,633	$176.33
Business Managers Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	103	$53.88	$185	$173	$43	$400	$30.61

ECO-8E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Copy Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$67	$38	$13	$118	$19.54
Computer Room	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	Industrial 4', 2L-T8,Elec Ballast	60	0.1	23	$12.25	$45	$46	$11	$102	$6.53
Womens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	41	$27.74	$123	$115	$29	$267	$15.76
Mens Room	2	3	40	276	54	95%	0.3	64.7	$24.25	$19.25	$43.50	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	41	$27.74	$123	$115	$29	$267	$15.76
Conference Room	7	3	40	966	63	95%	0.9	264.1	$84.86	$78.60	$163.46	Recessed 2x4, 3L-T8,Elec Ballast	88	0.6	168	$104.24	$431	$403	$100	$933	$59.23
Corridor to Drawing Files Area	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	69	$35.92	$123	$115	$29	$267	$20.41
Director of Public Works	1	4	40	184	90	95%	0.2	71.9	$16.16	$21.39	$37.55	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	44	$22.86	$64	$58	$15	$137	$14.69
Director of Public Works	3	2	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	70	$36.74	$173	$173	$41	$386	$19.59
Office	3	3	40	414	90	95%	0.4	161.7	$36.37	$48.12	$84.49	Recessed 2x4, 3L-T8,Elec Ballast	88	0.3	103	$53.88	$185	$173	$43	$400	$30.61
Office	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Recessed 2x4, 3L-T8,Elec Ballast	88	0.2	69	$35.92	$123	$115	$29	$267	$20.41
Print Room	1	4	40	184	54	95%	0.2	43.1	$16.16	$12.83	$29.00	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	14	$9.46	$67	$38	$13	$118	$19.54
Drawing Files Area	8	4	40	1472	54	95%	1.4	345.0	$129.31	$102.67	$231.98	Pendant 1x4, 4L-T8,Elec Ballast	112	0.9	210	$141.20	$560	$460	$122	$1,142	$90.77
Open Office Area	47	3	40	6486	90	95%	6.2	2533.4	$569.78	$753.95	$1,324	Recessed 2x4, 3L-T8,Elec Ballast	88	3.9	1,616	$844.12	$2,891	$2,703	$671	$6,264	$479.61
Corridor to Snack Bar	3	1	75	258.75	90	95%	0.2	101.1	$22.73	$30.08	$52.81	Strip, 1L-T8, Elec Ballast	31	0.1	36	$18.98	$75	$86	$19	$180	$33.83
Operations & Maint. Room	12	4	40	2208	90	95%	2.1	862.4	$193.97	$256.66	$450.63	Recessed 2x4, 4L-T8,Elec Ballast	112	1.3	525	$274.30	$768	$690	$175	$1,633	$176.33
Electrical Supply	7	1	75	603.75	90	95%	0.6	235.8	$53.04	$70.18	$123.22	Strip, 1L-T8, Elec Ballast	31	0.2	85	$44.29	$175	$200	$45	$420	$78.93
Electrical Supply	2	3	40	276	90	95%	0.3	107.8	$24.25	$32.08	$56.33	Industrial 4', 3L-T8,Elec Ballast	88	0.2	69	$35.92	$100	$92	$23	$215	$20.41
Office	4	2	40	368	90	95%	0.3	143.7	$32.33	$42.78	$75.11	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	94	$48.98	$230	$230	$55	$515	$26.12
Corridor to Snack Bar	1	2	40	92	90	95%	0.1	35.9	$8.08	$10.69	$18.78	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	23	$12.25	$58	$58	$14	$129	$6.53
Receiving - Supply Area	14	2	40	1288	90	95%	1.2	503.1	$113.15	$149.72	$262.87	Industrial 4', 2L-T8,Elec Ballast	60	0.8	328	$171.44	$630	$644	$153	$1,427	$91.43
Drafting Office Area	34	4	40	6256	90	95%	5.9	2443.6	$549.58	$727.21	$1,277	Pendant 1x4, 4L-T8,Elec Ballast	112	3.6	1,487	$777.18	$2,380	$1,955	$520	$4,855	$499.61
Engineering Office Area	8	4	40	1472	90	95%	1.4	575.0	$129.31	$171.11	$300.42	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	350	$182.87	$512	$460	$117	$1,089	$117.56
Restroom	1	2	40	92	54	95%	0.1	21.6	$8.08	$6.42	$14.50	Industrial 4', 2L-T8,Elec Ballast	60	0.1	14	$9.46	$45	$46	$11	$102	$5.04
Building 664																					
First Floor																					
Entrance Lobby	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Industrial 4', 2L-T8,Elec Ballast	60	0.1	13	$9.15	$45	$46	$11	$102	$4.88
Corridor to Restroom	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Open Office Area	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	Recessed 2x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$576	$518	$131	$1,225	$98.77
Empty Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Issue Center Office	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	Recessed 2x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$576	$518	$131	$1,225	$98.77
Second Floor																					
Library Check-Out	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$135	$75	$25	$235	$9.76
Chaplain's Office	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$11.89
Reading Room	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$135	$75	$25	$235	$23.78
Childrens Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$67	$38	$13	$118	$11.89
Library Stacks	36	2	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	Industrial 4', 2L-T8,Elec Ballast	60	2.1	469	$329.24	$1,620	$1,656	$393	$3,669	$175.60
Reading Room	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 1x4,2L-T8,Elec Ballast	60	0.1	26	$18.29	$110	$88	$24	$222	$9.76
Administrative Office	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 1x4,2L-T8,Elec Ballast	60	0.1	26	$18.29	$110	$88	$24	$222	$9.76
Library	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 1x4,2L-T8,Elec Ballast	60	0.1	13	$9.15	$55	$44	$12	$111	$4.88
Class Room	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 1x4,2L-T8,Elec Ballast	60	0.1	13	$9.15	$55	$44	$12	$111	$4.88
Sunday School Room	5	2	40	460	50	95%	0.4	99.8	$40.41	$29.71	$70.12	Recessed 1x4,2L-T8,Elec Ballast	60	0.3	65	$45.73	$275	$220	$59	$554	$24.39
Office	2	3	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$135	$75	$25	$235	$23.78
Building 2260																					
Administration																					
Distri. Branch Chief Reception	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Recessed 2x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$384	$345	$87	$816	$65.85
Open Office Area	52	4	40	9568	50	95%	9.1	2076.3	$840.53	$617.89	$1,458	Recessed 2x4, 4L-T8,Elec Ballast	112	5.5	1,264	$887.74	$3,328	$2,990	$758	$7,076	$570.69
Property Disposal Officer	8	4	40	1472	50	95%	1.4	319.4	$129.31	$95.06	$224.37	Recessed 2x4, 4L-T8,Elec Ballast	112	0.9	194	$136.58	$512	$460	$117	$1,089	$87.80
Distri. Branch Chief Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Recessed 2x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$256	$230	$58	$544	$43.90
Exit Lobby	1	4	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 4L-T8,Elec Ballast	112	0.1	24	$17.07	$64	$58	$15	$137	$10.97
Building 2329																					
Pesticide																					
Pesticide Sink Area	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Surface 1x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$202	$113	$38	$352	$14.63
Staff Office	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
Corridor	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$115	$115	$28	$258	$9.76
Building 2755																					
Warehouse																					
Corridor to Rest Room	3	2	40	276	50	95%	0.3	59.9	$24.25	$17.82	$42.07	Recessed 2x4, 2L-T8,Elec Ballast	60	0.2	39	$27.44	$173	$173	$41	$386	$14.63
Main Corridor	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Recessed 2x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$58	$58	$14	$129	$4.88
File Room	3	4	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Recessed 2x4, 4L-T8,Elec Ballast	112	0.3	73	$51.22	$192	$173	$44	$409	$32.92
Open Office Area	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	Recessed 2x4, 4L-T8,Elec Ballast	112	1.3	292	$204.86	$768	$690	$175	$1,633	$131.70
Breakroom	6	2	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Industrial 4', 2L-T8,Elec Ballast	60	0.3	78	$54.87	$270	$276	$66	$612	$29.27

ECO-8E
Buildings 616 - 5426
Letterkenny Army Depot
Efficient Fluorescent Fixture Replacement

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 3311																					
Administration																					
Surveillance Office #1	18	4	40	3312	50	95%	3.1	718.7	$290.95	$213.89	$504.84	Pendant 1x4, 4L-T8,Elec Ballast	112	1.9	437	$307.29	$1,260	$1,035	$275	$2,570	$197.55
Smoke Room	1	3	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Industrial 4', 3L-T8,Elec Ballast	88	0.1	19	$13.41	$50	$46	$12	$108	$7.62
Smoke Room	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$4.57
Vending Area	1	2	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	13	$9.15	$60	$58	$14	$132	$4.88
Surveillance Office #2	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Entrance Lobby	1	1	40	46	50	95%	0.0	10.0	$4.04	$2.97	$7.01	Surface wraparound, 1L-T8,Elec Ballast	31	0.0	7	$4.73	$51	$33	$10	$93	$2.29
Office #9	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Office #14	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	27	$18.90	$202	$131	$40	$373	$37.19
Office #15	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	27	$18.90	$202	$131	$40	$373	$37.19
Office #13	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Entrance #13 & #14	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Office #10	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Office #12	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Industrial 4', 2L-T8,Elec Ballast	60	0.1	26	$18.29	$90	$92	$22	$204	$9.76
Office #11	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$18.60
Vending Area	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Office #8	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Office #9	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 2L-T8,Elec Ballast	60	0.2	52	$36.58	$240	$230	$56	$526	$19.51
Office #4	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	Pendant 1x4, 4L-T8,Elec Ballast	112	1.3	292	$204.86	$840	$690	$184	$1,714	$131.70
Directors Office	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Director Surveillance Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Surface 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$135	$75	$25	$235	$37.80
Office #1	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Office #2	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Open Office Area	30	4	40	5520	50	95%	5.2	1197.8	$484.92	$356.48	$841.40	Pendant 1x4, 4L-T8,Elec Ballast	112	3.2	729	$512.16	$2,100	$1,725	$459	$4,284	$329.24
Office #3	6	4	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 4L-T8,Elec Ballast	112	0.6	146	$102.43	$420	$345	$92	$857	$65.85
Exit Corridor	2	1	40	92	50	95%	0.1	20.0	$8.08	$5.94	$14.02	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	13	$9.45	$101	$66	$20	$187	$4.57
Office #5	12	4	40	2208	50	95%	2.1	479.1	$193.97	$142.59	$336.56	Pendant 1x4, 4L-T8,Elec Ballast	112	1.3	292	$204.86	$840	$690	$184	$1,714	$131.70
Entrance Corridor	8	1	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Surface wraparound, 1L-T8,Elec Ballast	31	0.2	54	$37.80	$405	$262	$80	$747	$18.29
Copy and Mail Room	4	4	40	736	50	95%	0.7	159.7	$64.66	$47.53	$112.19	Pendant 1x4, 4L-T8,Elec Ballast	112	0.4	97	$68.29	$280	$230	$61	$571	$43.90
Office #6	9	4	40	1656	50	95%	1.6	359.4	$145.48	$106.94	$252.42	Pendant 1x4, 4L-T8,Elec Ballast	112	1.0	219	$153.65	$630	$518	$138	$1,286	$98.77
Office #7	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Building 3315																					
Warehouse																					
Managers Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Office Area	12	2	40	1104	50	95%	1.0	239.6	$96.98	$71.30	$168.28	Pendant 1x4, 2L-T8,Elec Ballast	60	0.7	156	$109.75	$720	$690	$169	$1,579	$58.53
Break Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Recessed 2x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$128	$115	$29	$272	$21.95
Key Area	10	2	40	920	50	95%	0.9	199.6	$80.82	$59.41	$140.23	Surface wraparound, 1L-T8,Elec Ballast	31	0.3	67	$47.25	$506	$328	$100	$934	$92.98
Key Area	2	2	40	184	50	95%	0.2	39.9	$16.16	$11.88	$28.05	Pendant 1x4, 2L-T8,Elec Ballast	60	0.1	26	$18.29	$120	$115	$28	$263	$9.76
Building 3321																					
Hunter Check-In																					
Meeting Room	3	1	40	138	50	95%	0.1	29.9	$12.12	$8.91	$21.04	Surface wraparound, 1L-T8,Elec Ballast	31	0.1	20	$14.18	$152	$98	$30	$280	$6.86
Meeting Room	4	2	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Industrial 4', 2L-T8,Elec Ballast	60	0.2	52	$36.58	$180	$184	$44	$408	$19.51
Meeting Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Locker Room	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Office	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Pendant 1x4, 4L-T8,Elec Ballast	112	0.2	49	$34.14	$140	$115	$31	$286	$21.95
Building 5426																					
Warehouse																					
Office	7	4	40	1288	50	95%	1.2	279.5	$113.15	$83.18	$196.33	Recessed 2x4, 4L-T8,Elec Ballast	112	0.7	170	$119.50	$448	$403	$102	$953	$76.82
TOTALS	935			132883			126.2	40850	$12,000	$12,000	$24,000			77.6	25224	$15,000	$57,000	$50,000	$13,000	$120,000	$9,000

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22-May-95

ECO-9
Fluorescent Reflectors

Existing. Thirty of the buildings at the Letterkenny Army Depot contain approximately 1,342 fluorescent luminaires that contain three and four lamps. The luminaires generally are located in office and administration areas. These luminaires provide illumination levels of 40 foot candles or greater for three lamp luminaires and 50 foot candles or greater for four lamp luminaires. Typically, the office areas contained desk lamps which were energized as well as the room lights.

In accordance with DOE/EE-0008, Advance Lighting Guidelines: 1993 and the Illuminating Engineering Society, the target maintained light levels for the selected areas is 20 - 50 foot candles. The attached data table for ECO-9 lists the areas which Entech has determined to fall into these categories.

Electric Demand	=	2,518 kW/yr (209.8 kW/mo x 12 mo/yr)
Electric Usage	=	911,556 kWh/yr (75,963 kWh/mo x 12 mo/yr)
Electric Cost	=	$42,000 (2,518 kW/yr x $7.706/kW) + (911,556 kWh/yr x $.0248/kWh) = $42,010, use $42,000

Proposed. The three lamp luminaires will have 1 lamp and 1 ballast removed while the four lamp luminaires will have 2 lamps and 1 ballast removed. All luminaires will receive new high reflectivity specular aluminum reflector. In accordance with DOE/EE-0008, delamping a four lamp F40T12 with magnetic ballast to two lamps and adding a reflector will result in a 41% reduction in the light output of the luminaire. Assuming the reduction to be linear, delamping a three lamp

F40T12 with magnetic ballast to two lamps and adding a reflector will result in a 21% reduction in the luminaire light output. Entech expects the resulting illumination levels to be 30 foot candles or more based on the criteria used to select the areas for reflectors.

Electric Demand	=	1,408 kW/yr (117.3 kW/mo x 12 mo/yr)
Electric Usage	=	493,428 kWh/yr (41,119 kW/mo x 12 mo/yr)
Electric Cost	=	$23,000 (1,408 kW/yr x $7.706/kW) + (493,428 kWh/yr x $.0248/kWh) = $23,087, use $23,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $180,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$107,000
Labor	$ 54,000
Engineering	$ 19,000
Total	**$180,000**

Energy Savings. The annual electric demand, usage, and cost savings is noted below:

Electric Demand	=	1,110 kW/yr (2,518 - 1,408)
Electric Usage	=	418,128 kWh/yr (911,556 - 493,428)
Energy Cost	=	$19,000/yr ($42,000 - $23,000)

Annual Energy Savings	=	1,427 mmBtu/yr
Energy Usage	=	1,427 mmBtu/yr (418,128 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By delamping and adding reflectors, a maintenance savings will result because there will be approximately 271 less lamps and 671 less ballast to replace. The annual maintenance savings is noted below:

Data

Fluorescent Lamp Life	=	20,000 hours
Ballast Life	=	100,000 hours
Operation Period Per Year	=	3,224 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Fluorscent Lamp Cost	=	$4 each
Ballast Cost	=	$20 each
Total Quantity Lamps Removed	=	271
Total Quantity Ballast Removed	=	671

Calculation

Maintenance (Fluorescent Lamp)	=	$1.72 (20 x 1/3 + 4) x 3,224/20,000
Maintenance (Ballast)	=	$.86 (20 x 1/3 + 20) x 3,224/100,000
Annual Recurring Maintenance Savings	=	$1,000 (1.72 x 271) + (.86 x 671) = $1,043, use $1,000

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 9.45 years with a savings to investment ratio of 1.87.

LIFE CYCLE COST ANALYSIS SUMMARY STUDY: ECO9
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO9
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 161000.		
B. SIOH	$ 8855.		
C. DESIGN COST	$ 19000.		
D. TOTAL COST (1A+1B+1C)	$ 188855.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 188855.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	1427.	$ 10374.	18.17	$ 188501.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 8600.	17.22	$ 148092.
N. TOTAL		1427.	$ 18974.		$ 336593.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 1000.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 17220.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4)	$ 17220.
4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$ 19974.
5. SIMPLE PAYBACK PERIOD (1G/4)	9.45 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$ 353813.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= (IF < 1 PROJECT DOES NOT QUALIFY)	1.87
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):	5.72 %

ECO-9
Letterkenny Army Depot
Fluorescent Reflectors

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Office Area																					
Office	3	3	40	414	50	95%	0.4	89.8	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Engineering Work Area	113	3	40	15594	50	95%	14.8	3383.9	$1,369.91	$1,007.05	$2,376.96	Remove 1L-F40T12, add Reflector	92	9.9	2,256	$1,584.64	$9,040	$4,520	$1,627	$15,187	$792.32
Production Engineering Office	4	3	40	552	50	95%	0.5	119.8	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Conference Room Corridor	2	4	40	368	50	95%	0.3	79.9	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
DPME Work Area	18	3	40	2484	50	95%	2.4	539.0	$218.22	$160.41	$378.63	Remove 1L-F40T12, add Reflector	92	1.6	359	$252.42	$1,440	$720	$259	$2,419	$126.21
Building 2																					
Administration																					
Movement Branch Mgrs. Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Building 3																					
Computer Area																					
Raised Floor Computer Center	34	4	40	6,256	126	95%	5.9	3421	$545.58	$1,018.09	$1,563.67	Remove 2L-F40T12, add Reflector	92	3.0	1,711	$783.84	$2,720	$1,360	$490	$4,570	$779.84
Raised Floor Computer Rm. #1	54	4	40	9,936	126	95%	9.4	5433	$872.86	$1,616.98	$2,489.84	Remove 2L-F40T12, add Reflector	92	4.7	2,717	$1,244.92	$4,320	$2,160	$778	$7,258	$1,244.92
Raised Floor Computer Rm. #2	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	Remove 2L-F40T12, add Reflector	92	6.6	3,824	$1,752.11	$6,080	$3,040	$1,094	$10,214	$1,752.11
Raised Floor Computer Rm. #3	65	4	40	11,960	126	95%	11.4	6540	$1,050.67	$1,946.37	$2,997.03	Remove 2L-F40T12, add Reflector	92	5.7	3,270	$1,498.52	$5,200	$2,600	$936	$8,736	$1,498.52
Raised Floor Computer Rm. #6	76	4	40	13,984	126	95%	13.3	7647	$1,228.47	$2,275.75	$3,504.22	Remove 2L-F40T12, add Reflector	92	6.6	3,824	$1,752.11	$6,080	$3,040	$1,094	$10,214	$1,752.11
Raised Floor Comp. Ctr. Office	9	4	40	1,656	126	95%	1.6	906	$145.48	$269.50	$414.97	Remove 2L-F40T12, add Reflector	92	0.8	453	$207.49	$720	$360	$130	$1,210	$207.49
Raised Floor Computer Rm. #5	64	4	40	11,776	126	95%	11.2	6440	$1,034.50	$1,916.42	$2,950.92	Remove 2L-F40T12, add Reflector	92	5.6	3,220	$1,475.46	$5,120	$2,560	$922	$8,602	$1,475.46
South East Area																					
Office 1-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07
Open Office Area 7-G	39	3	40	5,382	50	95%	5.1	1168	$472.80	$347.57	$820.37	Remove 1L-F40T12, add Reflector	92	3.4	779	$546.91	$3,120	$1,560	$562	$5,242	$273.46
Office 2-J	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Remove 1L-F40T12, add Reflector	92	0.4	100	$70.12	$400	$200	$72	$672	$35.06
South West Area																					
Room #105 8-A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Office 2 C	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Office 4-B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Office Rear 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Office Front 3-B	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
North West Area																					
Office 19-E	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Remove 1L-F40T12, add Reflector	92	0.4	100	$70.12	$400	$200	$72	$672	$35.06
Office 26-B	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office 26 A	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office 24 A	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Lobby 25 A	7	4	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	Remove 2L-F40T12, add Reflector	92	0.6	140	$98.16	$560	$280	$101	$941	$98.16
Office 23 A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
North East Area																					
Office 21 G	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Remove 2L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$84.14
Office 16-K	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Office 26 H	8	3	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Remove 1L-F40T12, add Reflector	92	0.7	160	$112.19	$640	$320	$115	$1,075	$56.09
Office 26-J	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Office 16-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Office 17-J	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Office 17-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07
Open Office Area 26-18-K	40	3	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	Remove 1L-F40T12, add Reflector	92	3.5	799	$560.93	$3,200	$1,600	$576	$5,376	$280.47
Building 5																					
Administration																					
Product Receipt Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Snider Office	9	4	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Remove 2L-F40T12, add Reflector	92	0.8	180	$126.21	$720	$360	$130	$1,210	$126.21
Building 6																					
Administration																					
Tucker Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Safety Division Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Building 10																					
North East Area																					
Office 1-E	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Office 1-D	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
North West Area																					
Office 8-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office 3-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office 4-K	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office 2-K	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07

ECO-9
Letterkenny Army Depot
Fluorescent Reflectors

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Office 1-H	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Building 37																					
Modular																					
Motor Room Box Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Remove 2L-F40T12, add Reflector	92	0.3	108	$56.33	$240	$120	$43	$403	$56.33
Building 37 Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Remove 2L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$75.11
Building Supply 47	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Remove 2L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$37.55
Breakroom	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Remove 2L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$75.11
Transmission Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Remove 2L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$75.11
Building 57S																					
Warehouse																					
Robertson Office	3	4	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Remove 2L-F40T12, add Reflector	92	0.3	108	$56.33	$240	$120	$43	$403	$56.33
Building 247																					
Warehouse																					
Rear Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Kitchen	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Remove 2L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$14.02
Building 350																					
Office #1																					
Conference Room	12	4	40	2,208	63	95%	2.1	604	$193.97	$179.66	$373.63	Remove 2L-F40T12, add Reflector	92	1.0	302	$186.82	$960	$480	$173	$1,613	$186.82
Managers Office	4	4	40	736	90	95%	0.7	287	$64.66	$85.55	$150.21	Remove 2L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$75.11
Copy Room	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Remove 2L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$37.55
Reception	11	4	40	2,024	90	95%	1.9	791	$177.81	$235.27	$413.08	Remove 2L-F40T12, add Reflector	92	1.0	395	$206.54	$880	$440	$158	$1,478	$206.54
Office #2																					
Reception Area	8	4	40	1,472	90	95%	1.4	575	$129.31	$171.11	$300.42	Remove 2L-F40T12, add Reflector	92	0.7	287	$150.21	$640	$320	$115	$1,075	$150.21
Managers Office	1	4	40	184	90	95%	0.2	72	$16.16	$21.39	$37.55	Remove 2L-F40T12, add Reflector	92	0.1	36	$18.78	$80	$40	$14	$134	$18.78
Office #3																					
ASRS plus Office Computer Rm.	8	4	40	1,472	90	95%	1.4	575	$129.31	$171.11	$300.42	Remove 2L-F40T12, add Reflector	92	0.7	287	$150.21	$640	$320	$115	$1,075	$150.21
Building 416																					
Administration																					
Managers Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Main Office Area	30	4	40	5,520	50	95%	5.2	1198	$484.92	$356.48	$841.40	Remove 2L-F40T12, add Reflector	92	2.6	599	$420.70	$2,400	$1,200	$432	$4,032	$420.70
Building 421																					
Administration																					
Receptionist	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Bid Room #2	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Property Accountibility Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Equipment Mgt. Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Ck. Depot Prop. Div. Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Building 424																					
Cable & Harness																					
File Area	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	Remove 1L-F40T12, add Reflector	92	0.4	180	$93.88	$400	$200	$72	$672	$46.94
Work Station	5	3	40	690	90	95%	0.7	270	$60.62	$80.21	$140.82	Remove 1L-F40T12, add Reflector	92	0.4	180	$93.88	$400	$200	$72	$672	$46.94
Assembly Area	21	3	40	2,898	90	95%	2.8	1132	$254.58	$336.87	$591.46	Remove 1L-F40T12, add Reflector	92	1.8	755	$394.30	$1,680	$840	$302	$2,822	$197.15
Office	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Remove 2L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$37.55
Building 431																					
Administration																					
ACL Office	5	4	40	920	50	95%	0.9	200	$80.82	$59.41	$140.23	Remove 2L-F40T12, add Reflector	92	0.4	100	$70.12	$400	$200	$72	$672	$70.12

ECO-9
Letterkenny Army Depot
Fluorescent Reflectors

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 500																					
First Floor																					
Laboratory Room #33	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Pharmacy	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Remove 2L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$14.02
Room #31 Open Office Area	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Remove 2L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$84.14
Treatment Room #2 Room #45	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Remove 2L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$37.55
Treatment Room #1 Room #46	2	4	40	368	90	95%	0.3	144	$32.33	$42.78	$75.11	Remove 2L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$37.55
Physical Therapy Room #34	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Emergency Treatment Rm. #40	6	4	40	1,104	90	95%	1.0	431	$96.98	$128.33	$225.32	Remove 2L-F40T12, add Reflector	92	0.5	216	$112.66	$480	$240	$86	$806	$112.66
Occupational Health Room #39	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office Room #42	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Occupational Health Room #37	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Occupational Health Rm.#43A	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Remove 2L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$14.02
Break Room (Room #36)	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Dispensary Waiting Room	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Remove 1L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$37.55
Room #26 (Office)	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Admin. Prgm. Coordinators Ofc.	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
P. Gaeseking Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Protocol Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Depot Sergeant Majors Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Commander Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Commander Secretary	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Depot Commander	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
G. Patterson Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Rear Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Legal Office 15 Reception	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07
Front Office 15A	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Police Sign in Room	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Remove 1L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$37.55
Room #25 (Office)	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Rear Office 15B	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Employment Info. Office	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Second Floor																					
Office #10	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Employee Relations Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Room #7 (Office)	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Basement Level																					
Room #16 (Rear Office)	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Room #2 (Office)	5	3	40	690	50	95%	0.7	150	$60.62	$44.56	$105.18	Remove 1L-F40T12, add Reflector	92	0.4	100	$70.12	$400	$200	$72	$672	$35.06
Room #4 (Office)	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07
Room #5 (Office)	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Remove 1L-F40T12, add Reflector	92	1.0	240	$168.28	$960	$480	$173	$1,613	$84.14
Room #3 (Open Work Space)	12	3	40	1,656	50	95%	1.6	359	$145.48	$106.94	$252.42	Remove 1L-F40T12, add Reflector	92	1.0	240	$168.28	$960	$480	$173	$1,613	$84.14
Room #11 (Open Office Area)	10	3	40	1,380	50	95%	1.3	299	$121.23	$89.12	$210.35	Remove 1L-F40T12, add Reflector	92	0.9	200	$140.23	$800	$400	$144	$1,344	$70.12
Room #11A (Files)	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Building 521																					
First Floor																					
Radio Equipment Room	2	4	40	368	168	95%	0.3	268	$32.33	$79.85	$112.18	Remove 2L-F40T12, add Reflector	92	0.2	134	$56.09	$160	$80	$29	$269	$56.09
Union Office	1	4	40	184	50	95%	0.2	40	$16.16	$11.88	$28.05	Remove 2L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$14.02
Research Area/Library	2	3	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	Remove 1L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$18.78
Assistance Chief Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Building 522																					
First Floor																					
Office of the Chief of Staff	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Office of the Chief of Staff Recp.	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 2L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$42.07
Secretary's Ofc. to the General	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Remove 2L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$84.14
Rear Office #1 (not occupied)	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Left Reception Area	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Commanding Generals Office	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 2L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$42.07
Secretary's Ofc. to the General	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05

ECO-9
Letterkenny Army Depot
Fluorescent Reflectors

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 523																					
Administration																					
Grayson Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Helsel Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Descom Office A	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Hoover Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Barnes Office	6	3	40	828	50	95%	0.8	180	$72.74	$53.47	$126.21	Remove 1L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$42.07
Gerhart Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Sheffield Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Kitchen	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Remove 1L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$7.01
Building 529																					
First Floor																					
Kitchen Dish Room	6	3	40	828	60	95%	0.8	216	$72.74	$64.17	$136.90	Remove 1L-F40T12, add Reflector	92	0.5	144	$91.27	$480	$240	$86	$806	$45.63
Second Floor																					
Food Prep Room	5	4	40	920	60	95%	0.9	240	$80.82	$71.30	$152.12	Remove 2L-F40T12, add Reflector	92	0.4	120	$76.06	$400	$200	$72	$672	$76.06
Dining Room	14	4	40	2,576	60	95%	2.4	671	$226.30	$199.63	$425.92	Remove 2L-F40T12, add Reflector	92	1.2	335	$212.96	$1,120	$560	$202	$1,882	$212.96
Building 581																					
First Floor																					
SIDS Office	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Remove 2L-F40T12, add Reflector	92	0.7	160	$112.19	$640	$320	$115	$1,075	$112.19
Building 618																					
First Floor																					
Hoke Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Room #11 Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Copy Room	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Coffee Mess	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Merritt Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Keefer Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Walter Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Hunting & Fishing Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Second Floor																					
Warnock Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Yeager Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Quinn Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Gieseking Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Esptein Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Building 619																					
Dining Area																					
Staff Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Rear Dining Area	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Building 628																					
First Floor																					
Information Security	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Badge Photo Room	4	3	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 1L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$28.05
Copy Room	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Automation Security Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Police Officers Room #3 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Room #1 Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Physical Security	1	3	40	138	50	95%	0.1	30	$12.12	$8.91	$21.04	Remove 1L-F40T12, add Reflector	92	0.1	20	$14.02	$80	$40	$14	$134	$7.01
Second Floor																					
Investigation Office Room #19	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Investigation Office Room #18	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Interview Room #17	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Secretary & Plans Div. Office	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Chief Secretary & Plans Div. Ofc.	3	3	40	414	50	95%	0.4	90	$36.37	$26.74	$63.11	Remove 1L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$21.04
Directorate Secretary Office	2	3	40	276	50	95%	0.3	60	$24.25	$17.82	$42.07	Remove 1L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$14.02
Building 646																					
Youth Center																					
Entrance Area	2	3	40	276	126	95%	0.3	151	$24.25	$44.92	$69.16	Remove 1L-F40T12, add Reflector	92	0.2	101	$46.11	$160	$80	$29	$269	$23.05
Lounge Area	5	3	40	690	126	95%	0.7	377	$60.62	$112.29	$172.91	Remove 1L-F40T12, add Reflector	92	0.4	252	$115.27	$400	$200	$72	$672	$57.64
Staff Office	2	3	40	276	126	95%	0.3	151	$24.25	$44.92	$69.16	Remove 1L-F40T12, add Reflector	92	0.2	101	$46.11	$160	$80	$29	$269	$23.05
Play Room	2	3	40	276	126	95%	0.3	151	$24.25	$44.92	$69.16	Remove 1L-F40T12, add Reflector	92	0.2	101	$46.11	$160	$80	$29	$269	$23.05

ECO-9
Letterkenny Army Depot
Fluorescent Reflectors

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 663																					
Administration & Trades																					
Lunch Area	8	4	40	1,472	90	95%	1.4	575	$129.31	$171.11	$300.42	Remove 2L-F40T12, add Reflector	92	0.7	287	$150.21	$640	$320	$115	$1,075	$150.21
Computer Room	4	3	40	552	90	95%	0.5	216	$48.49	$64.17	$112.66	Remove 1L-F40T12, add Reflector	92	0.3	144	$75.11	$320	$160	$58	$538	$37.55
Operations & Maint. Conf. Room	2	3	40	276	63	95%	0.3	75	$24.25	$22.46	$46.70	Remove 1L-F40T12, add Reflector	92	0.2	50	$31.14	$160	$80	$29	$269	$15.57
Work Planning & Control Office	12	4	40	2,208	90	95%	2.1	862	$193.97	$256.66	$450.63	Remove 2L-F40T12, add Reflector	92	1.0	431	$225.32	$960	$480	$173	$1,613	$225.32
Business Managers Office	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	Remove 1L-F40T12, add Reflector	92	0.3	108	$56.33	$240	$120	$43	$403	$28.16
Conference Room	7	3	40	966	63	95%	0.9	264	$84.86	$78.60	$163.46	Remove 1L-F40T12, add Reflector	92	0.6	176	$108.98	$560	$280	$101	$941	$54.49
Office	3	3	40	414	90	95%	0.4	162	$36.37	$48.12	$84.49	Remove 1L-F40T12, add Reflector	92	0.3	108	$56.33	$240	$120	$43	$403	$28.16
Office	2	3	40	276	90	95%	0.3	108	$24.25	$32.08	$56.33	Remove 1L-F40T12, add Reflector	92	0.2	72	$37.55	$160	$80	$29	$269	$18.78
Building 2260																					
Administration																					
Distri. Branch Chief Reception	6	4	40	1,104	50	95%	1.0	240	$96.98	$71.30	$168.28	Remove 2L-F40T12, add Reflector	92	0.5	120	$84.14	$480	$240	$86	$806	$84.14
Open Office Area	52	4	40	9,568	50	95%	9.1	2076	$840.53	$617.89	$1,458.43	Remove 2L-F40T12, add Reflector	92	4.5	1,038	$729.21	$4,160	$2,080	$749	$6,989	$729.21
Property Disposal Officer	8	4	40	1,472	50	95%	1.4	319	$129.31	$95.06	$224.37	Remove 2L-F40T12, add Reflector	92	0.7	160	$112.19	$640	$320	$115	$1,075	$112.19
Distri. Branch Chief Office	4	4	40	736	50	95%	0.7	160	$64.66	$47.53	$112.19	Remove 2L-F40T12, add Reflector	92	0.3	80	$56.09	$320	$160	$58	$538	$56.09
Building 2755																					
Warehouse																					
File Room	3	4	40	552	50	95%	0.5	120	$48.49	$35.65	$84.14	Remove 2L-F40T12, add Reflector	92	0.3	60	$42.07	$240	$120	$43	$403	$42.07
Building 3311																					
Administration																					
Office #13	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Building 3315																					
Warehouse																					
Managers Office	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Break Room	2	4	40	368	50	95%	0.3	80	$32.33	$23.77	$56.09	Remove 2L-F40T12, add Reflector	92	0.2	40	$28.05	$160	$80	$29	$269	$28.05
Building 5426																					
Warehouse																					
Office	7	4	40	1,288	50	95%	1.2	279	$113.15	$83.18	$196.33	Remove 2L-F40T12, add Reflector	92	0.6	140	$98.16	$560	$280	$101	$941	$98.16
TOTALS	1342			220892			209.8	75963	$19,000	$23,000	$42,000			117.3	41119	$23,000	$107,000	$54,000	$19,000	$180,000	$19,000

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22-May-95

ECO-10
Industrial Fluorescent to Metal Halide

Existing. Twelve of the buildings at the Letterkenny Army Depot contain approximately 3,120 fluorescent luminaires. The attached data table for ECO-10 lists the areas which currently utilize these luminaires. The total watts for the existing luminaires is 334,696 watts. The luminaires operate between 50 and 90 hours per week and contribute approximately 95% of their connected load to the demand. The annual electric demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	3,808 kW/yr (317.3 kW/mo x 12 mo/yr)
Electric Usage	=	1,002,924 kWh/yr (83,577 kWh/mo x 12 mo/yr)
Electric Cost	=	$54,000 (3,808 kW/yr x $7.706/kW) + (1,002,924 kWh/yr x $.0248/kWh) = $54,217, use $54,000

Proposed. Replace the current lighting system with metal halide light sources. In all areas, a fewer number of fixtures is required. Reference the attached data table for ECO-10. The annual electric demand, usage and cost of the proposed ECO is noted below:

Electric Demand	=	2,870 kW/yr (239.2 kW/mo x 12 mo/yr)
Electric Usage	=	756,888 kWh/yr (63,074 kW/mo x 12 mo/yr)
Electric Cost	=	$41,000 (2,870 kW/yr x $7.706/kW) + (756,888 kWh/yr x $.0248/kWh) = $40,887, use $41,000

Implementation. The expected construction cost for implementing the project is expected to be $357,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$260,000
Labor	$ 59,000
Engineering	$ 38,000
Total	**$357,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	938 kW/yr (3,808 - 2,870)
Electric Usage	=	246,036 kWh/yr (1,002,924 - 756,888)
Energy Cost	=	$13,000/yr ($54,000 - $41,000)
Annual Energy Savings	=	840 mmBtu/yr
Energy Usage	=	840 mmBtu/yr (246,036 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing fluorescent luminaires with metal Halide luminaires, a maintenance savings will result. The annual maintenance savings is noted below:

Data

Fluorescent Lamp Life	=	20,000 hours
MH Lamp Life (<400W)	=	10,000 hours
MH Lamp Life (>400W)	=	20,000 hours
Operation Period Per Year	=	2,600 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Fluorescent Lamp Cost	=	$4 each

MH Lamp Cost	=	$55 each (<400) $65 each (>400)
Total Quantity Fluorescent	=	7,276
Total Quantity MH <400W	=	87
Total Quantity MH >400W	=	504

Calculation

Maintenance (Fluorescent)	=	$1.39 (20 x 1/3 + 4) x 2,600/20,000
Maintenance (MH <400W)	=	$16.03 (20 x 1/3 + 55) x 2,600/10,000
Maintenance (MH >400W)	=	$9.31 (20 x 1/3 + 65) x 2,600/20,000
Annual Recurring Maintenance Savings	=	$4,000 (1.39 x 7,276) - (16.03 x 87) - (9.31 x 504) = $4,026, use $4,000

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. A life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 21.76 years with a savings to investment ratio of .81.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO10
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO10
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 319000.	
B. SIOH	$ 17545.	
C. DESIGN COST	$ 38000.	
D. TOTAL COST (1A+1B+1C)	$ 374545.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 374545.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	840.	$ 6107.	18.17	$ 110961.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 7200.	17.22	$ 123984.
N. TOTAL		840.	$ 13307.		$ 234945.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 4000.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 68880.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4)	$ 68880.
4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$ 17307.
5. SIMPLE PAYBACK PERIOD (1G/4)	21.64 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$ 303825.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= (IF < 1 PROJECT DOES NOT QUALIFY)	.81
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):	2.24 %

ECO10
Letterkenny Army Depot
Industrial Fluorescent to Metal Halide

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Qty of Luminaires	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Chrome Plate Area (CP)																					
Paper Storage Area	178	2	40	16,376	50	95.0%	15.6	3,554	$1,438.61	$1,057.55	$2,496.15	400 Watt MH, High Bay	27	460	11.8	2,695	$1,893.15	$12,015	$2,700	$1,766	$16,481	$603.00
Building 4																					
Warehouse																					
Warehouse Storage	858	2	40	78,936	50	95.0%	75.0	17,129	$6,934.40	$5,097.62	$12,032.03	400 Watt MH, High Bay	127	460	55.5	12,677	$8,904.82	$56,515	$12,700	$8,306	$77,521	$3,127.20
Warehouse Packaging	820	2	40	75,440	50	95.0%	71.7	16,370	$6,627.28	$4,871.85	$11,499.14	400 Watt MH, High Bay	121	460	52.9	12,078	$8,484.12	$53,845	$12,100	$7,913	$73,858	$3,015.02
Warehs. Pac.Radio Active Room	10	2	40	920	50	95.0%	0.9	200	$80.82	$59.41	$140.23	175 Watt MH, Low Bay	4	201	0.8	174	$122.55	$1,600	$400	$240	$2,240	$17.68
Building 14																					
Warehouse																					
Tritium Installation Room #2	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	70 Watt MH, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$87.80
Tritium Room	4	3	40	552	50	95.0%	0.5	120	$48.49	$35.65	$84.14	70 Watt MH, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$59.75
Tritium Installation Room #1	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	70 Watt MH, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$87.80
Tritium Storage Room	4	4	40	736	10	0.0%	0.0	32	$0.00	$9.51	$9.51	70 Watt MH, Low Bay	2	80	0.0	7	$2.07	$760	$200	$115	$1,075	$7.44
Tritium Final Area	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	250 Watt MH, Low Bay	8	287	2.2	498	$349.97	$3,320	$800	$494	$4,614	$70.73
Machine Shop Area	37	3	40	5,106	50	95.0%	4.9	1,108	$448.55	$329.74	$778.30	250 Watt MH, Low Bay	15	287	4.1	934	$656.20	$6,225	$1,500	$927	$8,652	$122.09
Second Floor																					
Small Parts Work Area	47	3	40	6,486	50	95.0%	6.2	1,407	$569.78	$418.86	$988.65	250 Watt MH, Low Bay	19	287	5.2	1,183	$831.19	$7,885	$1,900	$1,174	$10,959	$157.46
Building 33N																					
Warehouse																					
Warehouse	77	2	40	7,084	50	95.0%	6.7	1,537	$622.32	$457.48	$1,079.80	400 Watt MH, High Bay	12	460	5.2	1,198	$841.40	$5,340	$1,200	$785	$7,325	$238.40
Building 34																					
Warehouse																					
Warehouse-Parts Storage Racks	12	2	40	1,104	50	95.0%	1.0	240	$96.98	$71.30	$168.28	175 Watt MH, Low Bay	5	201	1.0	218	$153.19	$2,000	$500	$300	$2,800	$15.09
Building 42S																					
Warehouse																					
Warehoouse South	17	2	40	1564	50	95.0%	1.5	339	$137.39	$101.00	$238.40	175 Watt MH, High Bay	7	201	1.3	305	$214.47	$2,800	$700	$420	$3,920	$23.93
Warehouse South	124	4	40	22816	50	95.0%	21.7	4,951	$2,004.35	$1,473.44	$3,477.79	400 Watt MH, High Bay	37	460	16.2	3,693	$2,594.32	$16,465	$3,700	$2,420	$22,585	$883.47
Warehouse South	11	3	40	1518	50	95.0%	1.4	329	$133.35	$98.03	$231.39	175 Watt MH, High Bay	7	201	1.3	305	$214.47	$2,800	$700	$420	$3,920	$16.92
Building 43																					
Warehouse																					
Warehouse	258	2	40	23736	50	95.0%	22.5	5,151	$2,085.17	$1,532.85	$3,618.02	400 Watt MH, High Bay	38	460	16.6	3,793	$2,664.43	$16,910	$3,800	$2,485	$23,195	$953.59
Building 44																					
Warehouse																					
Receiving Area	9	3	40	1,242	50	95.0%	1.2	270	$109.11	$80.21	$189.32	175 Watt MH, Low Bay	6	201	1.1	262	$183.83	$2,400	$600	$360	$3,360	$5.49
Building 47																					
Warehouse																					
Warehouse North	20	2	40	1,840	90	95.0%	1.7	719	$161.64	$213.89	$375.53	175 Watt MH, Low Bay	8	201	1.5	628	$328.18	$3,200	$800	$480	$4,480	$47.35
Building 51																					
Warehouse																					
Warehouse Processing	96	3	40	13,248	50	95.0%	12.6	2,875	$1,163.82	$855.55	$2,019.36	400 Watt MH, High Bay	22	460	9.6	2,196	$1,542.57	$9,790	$2,200	$1,439	$13,429	$476.79
Warehouse Processing	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	100 Watt MH, High Bay	5	460	2.2	499	$350.58	$2,225	$500	$327	$3,052	$70.12
Warehouse Milvan Processing	51	3	40	7,038	50	95.0%	6.7	1,527	$618.28	$454.51	$1,072.79	400 Watt MH, High Bay	13	460	5.7	1,298	$911.52	$5,785	$1,300	$850	$7,935	$161.27
Building 57S																					
Warehouse																					
Warehouse Area	309	3	40	42,642	90	95.0%	40.5	16,656	$3,746.03	$4,956.82	$8,702.85	400 Watt MH, High Bay	69	460	30.2	12,398	$6,477.85	$30,705	$6,900	$4,513	$42,118	$2,225.00
Building 424																					
Cable and Harness																					
Upholstery Work Shop	72	3	40	9,936	90	95.0%	9.4	3,881	$872.86	$1,154.99	$2,027.85	400 Watt MH, High Bay	16	460	7.0	2,875	$1,502.11	$7,120	$1,600	$1,046	$9,766	$525.74
Upholstery Work Shop	32	3	40	4,416	90	95.0%	4.2	1,725	$387.94	$513.33	$901.27	400 Watt MH, High Bay	8	460	3.5	1,437	$751.05	$3,560	$800	$523	$4,883	$150.21
Rubber Mat Storage Room	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt MH, High Bay	3	460	1.3	539	$281.65	$1,335	$300	$196	$1,831	$56.33
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt MH, High Bay	3	460	1.3	539	$281.65	$1,335	$300	$196	$1,831	$56.33
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt MH, High Bay	3	460	1.3	539	$281.65	$1,335	$300	$196	$1,831	$56.33
TOTALS	3120			334696			317.3	83577	$29,000	$25,000	$54,000		591		239.2	63074	$41,000	$260,000	$59,000	$38,000	$357,000	$13,000

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22-May-95

ECO-11
Industrial Fluorescent to High Pressure Sodium

Existing. Twelve of the buildings at the Letterkenny Army Depot contain approximately 3,120 fluorescent luminaires. The attached data table for ECO-11 lists the areas which currently utilize these luminaires. The total watts for the existing luminaires is 334,696 watts. The luminaires operate between 50 and 90 hours per week and contribute approximately 95% of their connected load to the demand. The annual energy demand, usage, and cost for these fixtures are as follows:

Electric Demand	=	3,808 kW/yr (317.3 kW/mo x 12 mo/yr)
Electric Usage	=	1,002,924 kWh/yr (83,577 kWh/mo x 12 mo/yr)
Electric Cost	=	$54,000 (3,808 kW/yr x $7.706/kW) + (1,002,924 kWh/yr x $.0248/kWh) = $54,217, use $54,000

Proposed. Replace the current lighting system with high pressure sodium light sources. In all areas, a fewer number of fixtures is required. Reference the attached data table for ECO-11. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	2,075 kW/yr (172.9 kW/mo x 12 mo/yr)
Electric Usage	=	547,572 kWh/yr (45,631 kW/mo x 12 mo/yr)
Electric Cost	=	$30,000 (2,075 kW/yr x $7.706/kW) + (547,572 kWh/yr x $.0248/kWh) = $29,570, use $30,000

Implementation Costs. The expected construction cost for implementing the project is expected to be $261,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$190,000
Labor	$ 43,000
Engineering	$ 28,000
Total	**$261,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	1,733 kW/yr (3,808 - 2,075)
Electric Usage	=	455,352 kWh/yr (1,002,924 - 547,572)
Energy Cost	=	$25,000/yr ($54,000 - $30,000) = $24,000, use $25,000
Annual Energy Savings	=	1,554 mmBtu/yr
Energy Usage	=	1,554 mmBtu/yr (455,352 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing fluorescent luminaires with high-pressure sodium, a maintenance savings will result. The annual maintenance savings is noted below:

Data

Fluorescent Lamp Life	=	20,000 hours
HPS Lamp Life	=	24,000 hours
Operation Period Per Year	=	2,600 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes

Fluorescent Lamp Cost	=	$4 each
HPS Lamp Cost	=	$65 each
Total Quantity Fluorescent	=	7,276
Total Quantity HPS	=	434

Calculation

Maintenance (Fluorescent)	=	$1.39 (20 x 1/3 + 4) x 2,600/20,000
Maintenance (HPS)	=	$7.76 (20 x 1/3 + 65) x 2,600/24,000
Annual Recurring Maintenance Savings	=	$6,700 (1.39 x 7,276) - ($7.76 x 434) = $6,746, use $6,700

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 8.83 years with a savings to investment ratio of 1.99.

LIFE CYCLE COST ANALYSIS SUMMARY STUDY: ECO11
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO11
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 233000.	
B. SIOH	$ 12815.	
C. DESIGN COST	$ 28000.	
D. TOTAL COST (1A+1B+1C)	$ 273815.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 273815.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	1554.	$ 11298.	18.17	$ 205277.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 13000.	17.22	$ 223860.
N. TOTAL		1554.	$ 24298.		$ 429137.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ 6700.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ 115374.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4)	$ 115374.
4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$ 30998.
5. SIMPLE PAYBACK PERIOD (1G/4)	8.83 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$ 544511.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= (IF < 1 PROJECT DOES NOT QUALIFY)	1.99
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):	5.97 %

ECO11
Letterkenny Army Depot
Industrial Fluorescent to High Pressure Sodium

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Qty of Luminaires	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Chrome Plate Area (CP)																					
Paper Storage Area	178	2	40	16,376	50	95.0%	15.6	3,554	$1,438.61	$1,057.55	$2,496.15	400 Watt HPS, High Bay	19	460	8.3	1,897	$1,332.22	$8,455	$1,900	$1,243	$11,598	$1,163.94
Building 4																					
Warehouse																					
Warehouse Storage	858	2	40	78,936	50	95.0%	75.0	17,129	$6,934.40	$5,097.62	$12,032.03	400 Watt HPS, High Bay	91	460	39.8	9,084	$6,380.62	$40,495	$9,100	$5,951	$55,546	$5,651.41
Warehouse Packaging	820	2	40	75,440	50	95.0%	71.7	16,370	$6,627.28	$4,871.85	$11,499.14	400 Watt HPS, High Bay	87	460	38.0	8,684	$6,100.15	$38,715	$8,700	$5,690	$53,105	$5,398.99
Warehs. Pac.Radio Active Room	10	2	40	920	50	95.0%	0.9	200	$80.82	$59.41	$140.23	150 Watt HPS, Low Bay	4	173	0.7	150	$105.18	$1,600	$400	$240	$2,240	$35.06
Building 14																					
Warehouse																					
Tritium Installation Room #2	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	70 Watt HPS, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$87.80
Tritium Room	4	3	40	552	50	95.0%	0.5	120	$48.49	$35.65	$84.14	70 Watt HPS, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$59.75
Tritium Installation Room #1	4	4	40	736	50	95.0%	0.7	160	$64.66	$47.53	$112.19	70 Watt HPS, Low Bay	2	80	0.2	35	$24.39	$760	$200	$115	$1,075	$87.80
Tritium Storage Room	4	4	40	736	10	0.0%	0.0	32	$0.00	$9.51	$9.51	70 Watt HPS, Low Bay	2	80	0.0	7	$2.07	$760	$200	$115	$1,075	$7.44
Tritium Final Area	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	250 Watt HPS, Low Bay	6	287	1.6	374	$262.48	$2,490	$600	$371	$3,461	$158.22
Machine Shop Area	37	3	40	5,106	50	95.0%	4.9	1,108	$448.55	$329.74	$778.30	250 Watt HPS, Low Bay	11	287	3.0	685	$481.21	$4,565	$1,100	$680	$6,345	$297.08
Second Floor																					
Small Parts Work Area	47	3	40	6,486	50	95.0%	6.2	1,407	$569.78	$418.86	$988.65	250 Watt HPS, Low Bay	13	287	3.5	810	$568.71	$5,395	$1,300	$803	$7,498	$419.94
Building 33N																					
Warehouse																					
Warehouse	77	2	40	7,084	50	95.0%	6.7	1,537	$622.32	$457.48	$1,079.80	400 Watt HPS, High Bay	9	460	3.9	898	$631.05	$4,005	$900	$589	$5,494	$448.75
Building 34																					
Warehouse																					
Warehouse-Parts Storage Racks	12	2	40	1,104	50	95.0%	1.0	240	$96.98	$71.30	$168.28	150 Watt HPS, Low Bay	4	173	0.7	150	$105.18	$1,600	$400	$240	$2,240	$63.11
Building 42S																					
Warehouse																					
Warehouse South	17	2	40	1564	50	95.0%	1.5	339	$137.39	$101.00	$238.40	150 Watt HPS, High Bay	6	173	1.0	225	$157.76	$2,400	$600	$360	$3,360	$80.63
Warehouse South	124	4	40	22816	50	95.0%	21.7	4,951	$2,004.35	$1,473.44	$3,477.79	400 Watt HPS, High Bay	27	460	11.8	2,695	$1,893.15	$12,015	$2,700	$1,766	$16,481	$1,584.64
Warehouse South	11	3	40	1518	50	95.0%	1.4	329	$133.35	$98.03	$231.39	150 Watt HPS, High Bay	6	173	1.0	225	$157.76	$2,400	$600	$360	$3,360	$73.62
Building 43																					
Warehouse																					
Warehouse	258	2	40	23736	50	95.0%	22.5	5,151	$2,085.17	$1,532.85	$3,618.02	400 Watt HPS, High Bay	28	460	12.2	2,795	$1,963.27	$12,460	$2,800	$1,831	$17,091	$1,654.75
Building 44																					
Warehouse																					
Receiving Area	9	3	40	1,242	50	95.0%	1.2	270	$109.11	$80.21	$189.32	150 Watt HPS, Low Bay	5	173	0.8	187	$131.47	$2,000	$500	$300	$2,800	$57.85
Building 47																					
Warehouse																					
Warehouse - North	20	2	40	1,840	90	95.0%	1.7	719	$161.64	$213.89	$375.53	150 Watt HPS, Low Bay	7	173	1.1	472	$246.44	$2,800	$700	$420	$3,920	$129.09
Building 51																					
Warehouse																					
Warehouse Processing	96	3	40	13,248	50	95.0%	12.6	2,875	$1,163.82	$855.55	$2,019.36	400 Watt HPS, High Bay	16	460	7.0	1,597	$1,121.87	$7,120	$1,600	$1,046	$9,766	$897.49
Warehouse Processing	15	4	40	2,760	50	95.0%	2.6	599	$242.46	$178.24	$420.70	400 Watt HPS, High Bay	4	460	1.7	399	$280.47	$1,780	$400	$262	$2,442	$140.23
Warehouse Milvan Processing	51	3	40	7,038	50	95.0%	6.7	1,527	$618.28	$454.51	$1,072.79	400 Watt HPS, High Bay	9	460	3.9	898	$631.05	$4,005	$900	$589	$5,494	$441.74
Building 57S																					
Warehouse																					
Warehouse Area	309	3	40	42,642	90	95.0%	40.5	16,656	$3,746.03	$4,956.82	$8,702.85	400 Watt HPS, High Bay	50	460	21.9	8,984	$4,694.09	$22,250	$5,000	$3,270	$30,520	$4,008.75
Building 424																					
Cable and Harness																					
Upholstery Work Shop	72	3	40	9,936	90	95.0%	9.4	3,881	$872.86	$1,154.99	$2,027.85	400 Watt HPS, High Bay	12	460	5.2	2,156	$1,126.58	$5,340	$1,200	$785	$7,325	$901.27
Upholstery Work Shop	32	3	40	4,416	90	95.0%	4.2	1,725	$387.94	$513.33	$901.27	400 Watt HPS, High Bay	6	460	2.6	1,078	$563.29	$2,670	$600	$392	$3,662	$337.97
Rubber Mat Storage Room	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt HPS, High Bay	2	460	0.9	359	$187.76	$890	$200	$131	$1,221	$150.21
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt HPS, High Bay	2	460	0.9	359	$187.76	$890	$200	$131	$1,221	$150.21
Work Area	12	3	40	1,656	90	95.0%	1.6	647	$145.48	$192.50	$337.97	400 Watt HPS, High Bay	2	460	0.9	359	$187.76	$890	$200	$131	$1,221	$150.21
TOTALS	3120			334696			317.3	83577	$29,000	$25,000	$54,000		434		172.9	45631	$30,000	$190,000	$43,000	$28,000	$261,000	$25,000

ECO-12
Occupancy Sensors

Existing. Four of the buildings at the Letterkenny Army Depot were determined to utilize occupancy sensors during the site survey. Since during the walk-through the restroom lights were typically found to be off when not in use, they were not selected. Also, the personal offices were found to be lit only when occupied. The attached data table for ECO-12 lists the areas selected for occupancy sensors. The annual electric demand, usage, and cost for the sensors are as follows:

Electric Demand	=	48 kW/yr (4 kW/mo x 12 mo/yr)
Electric Usage	=	37,032 kWh/yr (3,086 kWh/mo x 12 mo/yr)
Electric Cost	=	$1,300 (48 kW/yr x $7.706/kW) + (37,032 kWh/yr x $.0248/kWh) = $1,288, use $1,300

Proposed. Install ceiling mounted occupant sensors in areas noted on the attached data table for ECO-12. In accordance with DOE/EE-0008 Advanced Lighting Guidelines: 1993, the energy savings potential with occupancy sensors is 30 - 75%. Entech estimates a 45% energy savings could be achieved in these areas. The percent of kW in-peak is expected to remain the same; however, the usage should be reduced by 45%. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	48 kW/yr (4 kW/mo x 12 mo/yr)
Electric Usage	=	20,364 kWh/yr (1,697 kWh/mo x 12 mo/yr)

Electric Cost	=	$880/yr (4 kW/yr x $7.706/kW) + (20,364 kWh/yr x $.0248/kWh) = $875, use $880

Implementation Cost. The expected construction cost for implementing the project is expected to be $2,900. The breakdown is noted below and shown on the attached ECO data table.

Material	$2,100
Labor	$ 800
Engineering	$ 0
Total	**$2,900**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	0 kW/yr (48 - 48)
Electric Usage	=	16,668 kWh/yr (37,032 - 20,364)
Energy Cost	=	$410/yr ($1,300 - $880) = $420, use $410
Annual Energy Savings	=	56.9 mmBtu/yr
Energy Usage	=	56.9 mmBtu/yr (16,668 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By adding occupancy sensors, the existing lamps will be lit less and therefore not be replaced as often. The annual maintenance savings is noted below:

Data

Fluorescent Lamp Life	=	20,000 hours
Operation Period Per Year	=	8,760 hours
Operation Period Per Year w/Sensor	=	4,818 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Fluorescent Lamp Cost	=	$4 each
Total Quantity Lamps	=	92

Calculation

Maintenance (Fluorescent)	=	$4.67 (20 x 1/3 + 4) x 8,760/20,000
Maintenance (w/sensor)	=	$2.57 (20 x 1/3 + 4) x 4,818/20,000
Annual Recurring Maintenance Savings	=	$200 (4.67 - 2.57) x 92 = $193, use $200

The estimated life of the sensors by the manufacturers is 10 to 15 years. Assuming 12.5-year life, the sensors will require replacement once during the 25-year life cycle. The cost of replacement is shown below assuming a 4% annual escalation rate:

One time replace cost	=	2,900 (1+.04) ^12.5 = $4,730, use $4,700

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 7.19 years with a savings to investment ratio of 2.45.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO12

ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080

INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1

PROJECT NO. & TITLE: 4130.01 EEAP

FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO12

ANALYSIS DATE: 03-27-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 2900.		
B. SIOH	$ 160.		
C. DESIGN COST	$ 0.		
D. TOTAL COST (1A+1B+1C)	$ 3060.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 3060.

2. ENERGY SAVINGS (+) / COST (-)

DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	57.	$ 414.	18.17	$ 7516.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 0.	17.22	$ 0.
N. TOTAL		57.	$ 414.		$ 7516.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) $ 200.

(1) DISCOUNT FACTOR (TABLE A) 17.22

(2) DISCOUNTED SAVING/COST (3A X 3A1) $ 3444.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
1. REPLACEMENT	$ -4700.	10	.74	-3478.
d. TOTAL	$ -4700.			-3478.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ -34.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 426.

5. SIMPLE PAYBACK PERIOD (1G/4) 7.19 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 7482.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= 2.45
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): 6.85 %

ECO-12
Letterkenny Army Depot
Occupancy Sensors

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 417																				
Personnel Barracks																				
Mens Room/Shower	4	2	40	368	168	95.0%	0.3	268	$32.33	$79.85	$112.18	2 - Occupancy Sensors	0.3	148	$76.25	$200	$80	$0	$280	$35.93
Womens Room	4	2	40	368	168	95.0%	0.3	268	$32.33	$79.85	$112.18	2 - Occupancy Sensors	0.3	148	$76.25	$200	$80	$0	$280	$35.93
Building 418																				
Personnel Barracks																				
Mens Room/Shower	4	2	40	368	168	95.0%	0.3	268	$32.33	$79.85	$112.18	2 - Occupancy Sensors	0.3	148	$76.25	$200	$80	$0	$280	$35.93
Womens Room	4	2	40	368	168	95.0%	0.3	268	$32.33	$79.85	$112.18	2 - Occupancy Sensors	0.3	148	$76.25	$200	$80	$0	$280	$35.93
Building 536																				
Bath House																				
Mens Locker Area	7	2	40	644	168	95.0%	0.6	470	$56.57	$139.74	$196.31	5 - Occupancy Sensors	0.6	258	$133.43	$500	$200	$0	$700	$62.88
Womens Locker Area	3	2	40	276	168	95.0%	0.3	201	$24.25	$59.89	$84.13	2 - Occupancy Sensors	0.3	111	$57.18	$200	$80	$0	$280	$26.95
Building 639																				
Physical Fitness Center																				
Mens Locker Room	4	4	40	736	168	95.0%	0.7	537	$64.66	$159.70	$224.36	2 - Occupancy Sensors	0.7	295	$152.49	$200	$80	$0	$280	$71.87
Mens Rear Locker Room	1	4	40	184	168	95.0%	0.2	134	$16.16	$39.93	$56.09	1 - Occupancy Sensors	0.2	74	$38.12	$100	$40	$0	$140	$17.97
Womens Rear Locker Room	1	4	40	184	168	95.0%	0.2	134	$16.16	$39.93	$56.09	1 - Occupancy Sensors	0.2	74	$38.12	$100	$40	$0	$140	$17.97
Womens Locker Room	4	4	40	736	168	95.0%	0.7	537	$64.66	$159.70	$224.36	2 - Occupancy Sensors	0.7	295	$152.49	$200	$80	$0	$280	$71.87
TOTALS	36			4232			4.0	3086	$370	$920	$1,300		4.0	1697	$880	$2,100	$800	$0	$2,900	$410

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22-May-95

ECO-13
Mercury Vapor to Metal Halide

Existing. Ten of the buildings at the Letterkenny Army Depot contain approximately 924 Mercury Vapor luminaires. The luminaires are typically used for illuminating warehouse storage areas. The attached data table for ECO-13 lists the areas which currently utilize these luminaires. The current light levels in most of the areas noted are below the IES recommended levels. The low light levels could be attributed to the mercury vapor lamp lumen output vs. time. The mercury vapor lamps lumen output decreases 50% by the initial output at the average rated life point. The annual electric demand, usage, and cost of these luminaires are as follows:

Electric Demand	=	2,141 kW/yr (178.4 kW/mo x 12 mo/yr)
Electric Usage	=	515,016 kWh/yr (42,918 kWh/mo x 12 mo/yr)
Electric Cost	=	$29,000 (2,141 kW/yr x $7.706/kW) + (515,016 kWh/yr x $.0248/kWh) = $29,269, use $29,000

Proposed. Replace the existing high and low bay luminaires with an equal number of metal halide luminaires in the areas noted on the attached data sheet for ECO-13. The new luminaires will increase the existing light levels by 15 - 20%. The average life expectancy of the metal halide lamps are less than that of the mercury vapor; however, the metal halide lamp will produce a more consistent lumen output over the life of the lamp. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	1,200 kW/yr (100 kW/mo x 12 mo/yr)
Electric Usage	=	300,000 kWh/yr (25,000 kWh/mo x 12 mo/yr)
Electric Cost	=	$17,000 (1,200 kW/yr x $7.706/kW) + (300,000 kWh/yr x $.0248/kWh) = $16,687, use $17,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $508,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$361,000
Labor	$ 92,000
Engineering	$ 54,000
Total	**$507,000, use $508,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	941 kW/yr (2,141 - 1,200)
Electric Usage	=	215,016 kWh/yr (515,016 - 300,000)
Energy Cost	=	$12,000/yr ($29,000 - $17,000)
Annual Energy Savings	=	733.8 mmBtu/yr
Energy Usage	=	733.8 mmBtu/yr (215,016 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing mercury vapor luminaires with metal halide luminaires, no maintenance savings is expected because the recommended replacement time of the mercury vapor lamps is the same as the life expectancy of the metal halide lamps.

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations and construction supervision, in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 42.44 years with a savings to investment ratio of .42.

LIFE CYCLE COST ANALYSIS SUMMARY STUDY: ECO13
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO13
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 453000.	
B. SIOH	$ 24915.	
C. DESIGN COST	$ 54000.	
D. TOTAL COST (1A+1B+1C)	$ 531915.	
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.	
F. PUBLIC UTILITY COMPANY REBATE	$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)		$ 531915.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	734.	$ 5335.	18.17	$ 96932.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 7200.	17.22	$ 123984.
N. TOTAL		734.	$ 12535.		$ 220916.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) $ 0.
(1) DISCOUNT FACTOR (TABLE A) 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) $ 0.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 0.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 12535.

5. SIMPLE PAYBACK PERIOD (1G/4) 42.44 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 220916.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= .42
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): -.46 %

ECO-13
Letterkenny Army Depot
Mercury Vapor to Metal Halide

	Existing											*Proposed*				*Implementation*				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building TS20-1																				
Warehouse																				
Warehouse Receiving	4	1	175	805	50	95%	0.8	175	$70.72	$51.99	$122.70	100 Watt MH, Low Bay	115	0.4	100	$70.12	$1,560	$400	$235	$2,195	$52.59
Warehouse Storage	4	1	175	805	50	95%	0.8	175	$70.72	$51.99	$122.70	100 Watt MH, Low Bay	115	0.4	100	$70.12	$1,560	$400	$235	$2,195	$52.59
Building 31																				
Warehouse																				
Warehouse	152	1	175	30590	50	95%	29.1	6638	$2,687.28	$1,975.48	$4,662.76	100 Watt MH, Low Bay	115	16.6	3,793	$2,664.43	$59,280	$15,200	$8,938	$83,418	$1,998.33
Building 32																				
Warehouse																				
Warehouse	137	1	175	27571	50	95%	26.2	5983	$2,422.09	$1,780.53	$4,202.62	100 Watt MH, Low Bay	115	15.0	3,419	$2,401.50	$53,430	$13,700	$8,056	$75,186	$1,801.12
Warehouse	5	1	175	1006.3	50	95%	1.0	218	$88.40	$64.98	$153.38	100 Watt MH, High Bay	115	0.5	125	$87.65	$1,950	$500	$294	$2,744	$65.73
Building 34																				
Warehouse																				
Warehouse	271	1	175	$4539	50	95%	51.8	11835	$4,791.14	$3,522.07	$8,313.21	100 Watt MH, Low Bay	115	29.6	6,763	$4,750.41	$105,690	$27,100	$15,935	$148,725	$3,562.80
Building 41																				
Warehouse																				
Warehouse - Low Bay	165	1	175	33206	50	95%	31.5	7206	$2,917.12	$2,144.43	$5,061.55	100 Watt MH, Low Bay	115	18.0	4,118	$2,892.31	$64,350	$16,500	$9,702	$90,552	$2,169.24
Building 42S																				
Warehouse																				
Warehouse South	15	1	175	3018.8	50	95%	2.9	655	$265.19	$194.95	$460.14	100 Watt MH, High Bay	115	1.6	374	$262.94	$5,850	$1,500	$882	$8,232	$197.20
Building 44																				
Warehouse																				
Warehouse	149	1	175	29986	50	95%	28.5	6507	$2,634.24	$1,936.49	$4,570.73	100 Watt MH, Low Bay	115	16.3	3,718	$2,611.85	$58,110	$14,900	$8,761	$81,771	$1,958.89
Building 47																				
Warehouse																				
Warehouse - North	1	1	175	201.25	90	95%	0.2	79	$17.68	$23.39	$41.07	100 Watt MH, High Bay	115	0.1	45	$23.47	$390	$100	$59	$549	$17.60
Warehouse - North	13	1	175	2616.3	90	95%	2.5	1022	$229.83	$304.12	$533.95	100 Watt MH, Low Bay	115	1.4	584	$305.12	$5,070	$1,300	$764	$7,134	$228.84
Building 320																				
Maintenance																				
Maintenance Area	7	1	400	3220	168	95%	3.1	2348	$282.87	$698.70	$981.57	250 Watt MH, High Bay	288	1.9	1,467	$613.48	$3,115	$700	$458	$4,273	$368.09
Building 424																				
Cable & Harness																				
Carpentry Work Shop	1	1	175	201.25	90	95%	0.2	79	$17.68	$23.39	$41.07	100 Watt MH, Low Bay	115	0.1	45	$23.47	$390	$100	$59	$549	$17.60
TOTALS	924			187766			178.4	42918	$16,000	$13,000	$29,000			100.0	25000	$17,000	$361,000	$92,000	$54,000	$508,000	$12,000

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22-May-95

ECO-14
Mercury Vapor to High Pressure Sodium

Existing. Ten of the buildings at the Letterkenny Army Depot contain approximately 924 Mercury Vapor luminaires. The luminaires are typically used for illuminating warehouse storage areas. The attached data table for ECO-14 lists the areas which currently utilize these luminaires. The current light levels in most of the areas noted are below the IES recommended levels. The low light levels could be attributed to the mercury vapor lamp lumen output vs. time. The mercury vapor lamps lumen output decreases by 50% of the initial output at the average rated life point. The annual electric demand, usage, and cost of these luminaires are as follows:

Electric Demand	=	2,141 kW/yr (178.4 kW/mo x 12 mo/yr)
Electric Usage	=	515,016 kWh/yr (42,918 kWh/mo x 12 mo/yr)
Electric Cost	=	$29,000 (2,141 kW/yr x $7.706/kW) + (515,016 kWh/yr x $.0248/kWh) = $29,269, use $29,000

Proposed. Replace the existing high and low bay luminaires with an equal number of high pressure sodium luminaires in the areas noted on the attached data sheet for ECO-14. The new luminaires will increase the existing light levels by 30 - 60%. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	1,200 kW/yr (100 kW/mo x 12 mo/yr)
Electric Usage	=	300,000 kWh/yr (25,000 kWh/mo x 12 mo/yr)
Electric Cost	=	$17,000 (1,200 kW/yr x $7.706/kW) + (300,000 kWh/yr x $.0248/kWh) = $16,687, use $17,000

Implementation Cost. The expected construction cost for implementing the project is expected to be $518,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$370,000
Labor	$ 92,000
Engineering	$ 55,000
Total	**$517,000, use $518,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	941 kW/yr (2,141 - 1,200)
Electric Usage	=	215,016 kWh/yr (515,016 - 300,000)
Energy Cost	=	$12,000/yr (29,000 - 17,000)
Annual Energy Savings	=	733.8 mmBtu/yr
Energy Usage	=	733.8 mmBtu/yr (215,016 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing mercury vapor luminaires with high-pressure sodium luminaires, no maintenance savings is expected because the life of each lamp is 24,000 hours.

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations and construction supervision, costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 42.93 years with a savings to investment ratio of .41.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO14
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO14
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 462000.		
B. SIOH	$ 25410.		
C. DESIGN COST	$ 55000.		
D. TOTAL COST (1A+1B+1C)	$ 542410.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.		
F. PUBLIC UTILITY COMPANY REBATE	$ 0.		
G. TOTAL INVESTMENT (1D - 1E - 1F)		$	542410.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	734.	$ 5335.	18.17	$ 96932.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 7300.	17.22	$ 125706.
N. TOTAL		734.	$ 12635.		$ 222638.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-) — $ 0.
(1) DISCOUNT FACTOR (TABLE A) — 17.22
(2) DISCOUNTED SAVING/COST (3A X 3A1) — $ 0.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ 0.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 12635.

5. SIMPLE PAYBACK PERIOD (1G/4) — 42.93 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) — $ 222638.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= — .41
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): — -.51 %

ECO-14
Letterkenny Army Depot
Mercury Vapor to High Pressure Sodium

	Existing											Proposed				Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building TS20-1																				
Warehouse																				
Warehouse Receiving	4	1	175	805	50	95%	0.8	175	$70.72	$51.99	$122.70	100 Watt HPS, Low Bay	115	0.4	100	$70.12	$1,600	$400	$240	$2,240	$52.59
Warehouse Storage	4	1	175	805	50	95%	0.8	175	$70.72	$51.99	$122.70	100 Watt HPS, Low Bay	115	0.4	100	$70.12	$1,600	$400	$240	$2,240	$52.59
Building 31																				
Warehouse																				
Warehouse	152	1	175	30590	50	95%	29.1	6638	$2,687.28	$1,975.48	$4,662.76	100 Watt HPS, Low Bay	115	16.6	3,793	$2,664.43	$60,800	$15,200	$9,120	$85,120	$1,998.33
Building 32																				
Warehouse																				
Warehouse	137	1	175	27571	50	95%	26.2	5983	$2,422.09	$1,780.53	$4,202.62	100 Watt HPS, Low Bay	115	15.0	3,419	$2,401.50	$54,800	$13,700	$8,220	$76,720	$1,801.12
Warehouse	5	1	175	1006.3	50	95%	1.0	218	$88.40	$64.98	$153.38	100 Watt HPS, High Bay	115	0.5	125	$87.65	$2,000	$500	$300	$2,800	$65.73
Building 34																				
Warehouse																				
Warehouse	271	1	175	54539	50	95%	51.8	11835	$4,791.14	$3,522.07	$8,313.21	100 Watt HPS, Low Bay	115	29.6	6,763	$4,750.41	$108,400	$27,100	$16,260	$151,760	$3,562.80
Building 41																				
Warehouse																				
Warehouse - Low Bay	165	1	175	33206	50	95%	31.5	7206	$2,917.12	$2,144.43	$5,061.55	100 Watt HPS, Low Bay	115	18.0	4,118	$2,892.31	$66,000	$16,500	$9,900	$92,400	$2,169.24
Building 42S																				
Warehouse																				
Warehouse South	15	1	175	3018.8	50	95%	2.9	655	$265.19	$194.95	$460.14	100 Watt HPS, High Bay	115	1.6	374	$262.94	$6,000	$1,500	$900	$8,400	$197.20
Building 44																				
Warehouse																				
Warehouse	149	1	175	29986	50	95%	28.5	6507	$2,634.24	$1,936.49	$4,570.73	100 Watt HPS, Low Bay	115	16.3	3,718	$2,611.85	$59,600	$14,900	$8,940	$83,440	$1,958.89
Building 47																				
Warehouse																				
Warehouse - North	1	1	175	201.25	90	95%	0.2	79	$17.68	$23.39	$41.07	100 Watt HPS, High Bay	115	0.1	45	$23.47	$400	$100	$60	$560	$17.60
Warehouse - North	13	1	175	2616.3	90	95%	2.5	1022	$229.83	$304.12	$533.95	100 Watt HPS, Low Bay	115	1.4	584	$305.12	$5,200	$1,300	$780	$7,280	$228.84
Building 320																				
Maintenance																				
Maintenance Area	7	1	400	3220	168	95%	3.1	2348	$282.87	$698.70	$981.57	250 Watt HPS, High Bay	288	1.9	1,467	$613.48	$3,185	$700	$466	$4,351	$368.09
Building 424																				
Cable & Harness																				
Carpentry Work Shop	1	1	175	201.25	90	95%	0.2	79	$17.68	$23.39	$41.07	100 Watt HPS, Low Bay	115	0.1	45	$23.47	$400	$100	$60	$560	$17.60
TOTALS	924			187766			178.4	42918	$16,000	$13,000	$29,000			100.0	25000	$17,000	$370,000	$92,000	$55,000	$518,000	$12,000

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22-May-95

ECO-15
Building Exterior Lighting

Existing. Eleven of the buildings at the Letterkenny Army depot contain 74 building mounted incandescent luminaires. The attached data table for ECO-15 lists the areas which currently utilize these luminaires. The eleven buildings selected were found to have their exterior lights on during the site survey. Since the lights only operate at night, there is no on-peak demand cost. Mostly all the Depot buildings had some building mounted exterior lighting; however, most was found not to be in current use. The annual electric demand, usage, and cost for these luminaires are as follows:

Electric Demand	=	0 kW/yr (0 kW/mo x 12 mo/yr)
Electric Usage	=	43,764 kWh/yr (3,647 kWh/mo x 12 mo/yr)
Electric Cost	=	$1,100 (0 kW/yr x $7.706/kW) + (43,764 kWh/yr x $.0248/kWh) = $1,085, use $1,100

Proposed. Remove the existing incandescent luminaires and install high pressure sodium wall pack units with photocell control. Refer to the attached data table for ECO-15. The quantity of wall pack units was determined based on matching the existing lumen output of the existing luminaires along with observations made during the site survey. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	0 kW/yr (0 kW/mo x 12 mo/yr)

Electric Usage	=	13,752 kWh/yr (1,146 kW/mo x 12 mo/yr)
Electric Cost	=	$340 (0 kW/yr x $7.706/kW) + (13,752 kWh/yr x $.0248/kWh) = $341, use $340

Implementation Cost. The expected construction cost for implementing the project is expected to be $7,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$5,000
Labor	$2,000
Engineering	$ 0
Total	**$7,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	0 kW/yr
Electric Usage	=	30,012 kWh/yr (43,764 - 13,752)
Energy Cost	=	$740/yr ($1,100 - $340)
Annual Energy Savings	=	102.4 mmBtu/yr
Energy Usage	=	102.4 mmBtu/yr (30,012 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By retrofitting the existing incandescent exterior lighting with high-pressure sodium wall packs, a maintenance savings will result. The annual maintenance savings is noted below:

Data

Incandescent Lamp Life	=	750 hours
HPS Lamp Life	=	24,000 hours
Operation Period Per Year	=	4,160 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
Incandescent Lamp Cost	=	$1 each
HPS Lamp Cost	=	$55 each
Total Quantity Inc Lamps	=	74
Total Quantity HPS Lamps	=	40

Calculation

Maintenance (Incandescent)	=	$42.52 (20 x 1/3 + 1) x (4,160/750)
Maintenance (HPS)	=	$10.69 (20 x 1/3 + 55) x (4,160/24,000)
Annual Recurring Maintenance Savings	=	$2,700 (42.52 x 74) - (10.69 x 40) = $2,719, use $2,700

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 2.14 years with a savings to investment ratio of 8.13.

LIFE CYCLE COST ANALYSIS SUMMARY — STUDY: ECO15
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) — LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO15
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 7000.		
B. SIOH	$ 385.		
C. DESIGN COST	$ 0.		
D. TOTAL COST (1A+1B+1C)	$ 7385.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT	$ 0.		
F. PUBLIC UTILITY COMPANY REBATE	$ 0.		
G. TOTAL INVESTMENT (1D - 1E - 1F)		$	7385.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	102.	$ 744.	18.17	$ 13527.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 0.	17.22	$ 0.
N. TOTAL		102.	$ 744.		$ 13527.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)			$ 2700.
(1) DISCOUNT FACTOR (TABLE A)		17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)			$ 46494.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-)(4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4)	$	46494.
4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE))	$	3444.
5. SIMPLE PAYBACK PERIOD (1G/4)		2.14 YEARS
6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C)	$	60021.
7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)=		8.13
(IF < 1 PROJECT DOES NOT QUALIFY)		
8. ADJUSTED INTERNAL RATE OF RETURN (AIRR):		12.11 %

ECO-15
Letterkenny Army Depot
Building Exterior Lighting

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 1																					
Building Mounted Exterior Ltgs																					
Exterior	8	1	100	800	80	0%	0.0	278													
Exterior	5	1	100	500	80	0%	0.0	174													
Exterior	1	1	200	200	80	0%	0.0	69													
Exterior	2	1	100	200	80	0%	0.0	69													
Exterior	1	1	100	100	80	0%	0.0	35													
Total building				*1800*	*80*	*0%*	*0.0*	*625*	$0.00	$185.99	$185.99	8 - 70 Watt HPS wall packs to cover Bldg	80.5	0.0	224	$66.54	$1,000	$400	$0	$1,400	$119.45
Building 3																					
Building Mounted Exterior Ltgs																					
Exterior	4	1	100	400	80	0%	0.0	139	$0.00	$41.33	$41.33	2 - 70 Watt HPS wall packs to cover Bldg	80.5	0.0	56	$16.64	$250	$100	$0	$350	$24.70
Building 4																					
Building Mounted Exterior Ltgs																					
East	5	1	300	1500	80	0%	0.0	521													
South	2	1	300	600	80	0%	0.0	208													
West	1	1	300	300	80	0%	0.0	104													
West	1	1	300	300	80	0%	0.0	104													
North	1	1	300	300	80	0%	0.0	104													
Total building				*3000*	*80*	*0%*	*0.0*	*1042*	$0.00	$309.98	$309.98	10 - 70 Watt HPS wall packs to cover Bldg	80.5	0.0	279	$83.18	$1,250	$500	$0	$1,750	$226.80
Building 10																					
Building Mounted Exterior Ltgs																					
Exterior	8	1	75	600	80	0%	0.0	208													
Exterior	1	1	75	75	80	0%	0.0	26													
Exterior	1	1	175	175	80	0%	0.0	61													
Exterior	8	1	75	600	80	0%	0.0	208													
Total building				*1450*	*80*	*0%*	*0.0*	*503*	$0.00	$149.82	$149.82	6 - 70 Watt HPS wall packs to cover Bldg	80.5	0.0	168	$49.91	$750	$300	$0	$1,050	$99.92
Building 42S																					
Building Mounted Exterior Ltgs																					
Main Door Entance	1	1	1000	1000	80	0%	0.0	347	$0.00	$103.33	$103.33	1 - 250 Watt HPS wall pack	287.5	0.0	100	$29.71	$200	$75	$0	$275	$73.62
Building 349																					
Building Mounted Exterior Ltgs																					
Exterior	4	1	150	600	80	0%	0.0	208													
Exterior	1	1	75	75	80	0%	0.0	26													
Substation	2	1	300	600	80	0%	0.0	208													
Total building				*1275*	*80*	*0%*	*0.0*	*443*	$0.00	$131.74	$131.74	3 - 100 Watt HPS wall packs to cover Bldg	115	0.0	120	$35.65	$375	$150	$0	$525	$96.09
Building 412																					
Building Mounted Exterior Ltgs																					
Exterior	2	1	75	150	80	0%	0.0	52	$0.00	$15.48	$15.48	1 - 50 Watt HPS wall pack	57.5	0.0	20	$5.94	$115	$50	$0	$165	$9.53
Building 529																					
Building Mounted Exterior Ltgs																					
Exterior	2	1	200	400	80	0%	0.0	139	$0.00	$41.33	$41.33	2 - 50 Watt HPS wall pack	57.5	0.0	40	$11.88	$230	$100	$0	$330	$29.45
Building 619																					
Building Mounted Exterior Ltgs																					
Exterior	1	1	67	67	80	0%	0.0	23													
Exterior	1	1	60	69	80	0%	0.0	13													
Total building				*136*	*80*	*0%*	*0.0*	*36*	$0.00	$10.80	$10.80	1 - 50 Watt HPS wall pack	57.5	0.0	20	$5.94	$115	$50	$0	$165	$4.86
Building 639																					
Building Mounted Exterior Ltgs																					
Exterior	3	1	75	225	80	0%	0.0	78													
Exterior	4	1	75	300	80	0%	0.0	104													
Total building				*525*	*80*	*0%*	*0.0*	*182*	$0.00	$54.25	$54.25	3 - 50 Watt HPS wall pack	57.5	0.0	60	$17.82	$345	$150	$0	$495	$36.42

ECO-15
Letterkenny Army Depot
Building Exterior Lighting

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On Peak	Demand Kw On Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Building 645																					
Building Mounted Exterior Ltgs																					
Exterior	4	1	100	400	80	0%	0.0	139	$0.00	$41.33	$41.33	3 - 50 Watt HPS wall pack	57.5	0.0	60	$17.82	$345	$150	$0	$495	$23.51
TOTALS	74			10536			0.0	3647	$0	$1,100	$1,100			0.0	1146	$340	$5,000	$2,000	$0	$7,000	$740

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22-May-95

ECO-16
Roadway and Parking Area Lighting

Existing. Presently there are 130 pole-mounted luminaires throughout the base which utilize mercury vapor lamps to provide area illumination. A wide variety of lamps and luminaires are employed. Typically, Army luminaires #402, #403, #505, and #507 used. These luminaires contain lamps rated from 175 watts through 1,000 watts. During site investigations, it was noted that the luminaires operate approximately 80 hours each week and only at night. Operation of the luminaires is accomplished through the use of photocells. Because the luminaires operate when most of the base is shut down, they do not contribute to billing demand. The annual electric demand, usage, and cost for these luminaires are as follows:

Electric Demand	=	0 kW/yr (0 kW/mo x 12 mo/yr)
Electric Usage	=	175,848 kWh/yr (14,654 kWh/mo x 12 mo/yr)
Electric Cost	=	$4,400 (0 kW/yr x $7.706/kW) + (175,848 kWh/yr x $.0248/kWh) = $4,361, use $4,400

Proposed. Remove and replace all 130 mercury vapor luminaires with high-pressure sodium luminaires of equivalent light output. Table 1, on the following page, shows mean lumen output of comparable lamps. This guideline is used for selecting replacements.

Table 1
Lumen Output Comparison

MV		HPS	
Watts	Lumens	Watts	Lumens
175 w	7,200	100 w	8,550
250 w	12,100	150 w	14,400
400 w	17,500	200 w	19,800
1,000 w	40,000	400 w	45,000

The HPS lamps will provide approximately a 10 to 20 percent increase in general light output. Generally both mercury vapor and high pressure sodium lamps last for more than 24,000 hours of operation. However, mercury vapor lamps tend to loose their potential lumen output more rapidly than high pressure sodium lamps. The new luminaires will match existing physical appearance as well as be controlled by photocells. Current wood and metal poles will not be replaced. Reference the attached data table for ECO-16 for the location of the luminaires. The annual electric demand, usage, and cost of the proposed ECO is noted below:

Electric Demand	=	0 kW/yr (0 kW/mo x 12 mo/yr)
Electric Usage	=	99,600 kWh/yr (8,300 kW/mo x 12 mo/yr)
Electric Cost	=	$2,500 (0 kW/yr x $7.706/kW) + (99,600 kWh/yr x $.0248/kWh) = $2,470, use $2,500

Implementation Cost. The expected construction cost for implementing the project is expected to be $51,000. The breakdown is noted below and shown on the attached ECO data table.

Material	$38,000
Labor	$ 7,800
Engineering	$ 5,500
Total	**$51,300, use $51,000**

Energy Savings. The annual electric demand, usage, and cost savings resulting from the implementation of this project is noted below:

Electric Demand	=	0 kW/yr (0 - 0)
Electric Usage	=	76,248 kWh/yr (175,848 - 99,600)
Energy Cost	=	$1,900/yr ($4,400 - $2,500)
Annual Cost Savings	=	260 mmBtu/yr
Energy Usage	=	260 mmBtu/yr (76,248 kWh/yr x 3,413 Btu/kWh) ÷ 1,000,000 Btu/mmBtu

Maintenance Savings. By replacing the existing mercury vapor luminaires with high pressure sodium lamped luminaires, a maintenance increase will result due to the increased lamp cost for HPS and the fact that the replacement lamps do not last any longer. The annual maintenance savings is noted below.

Data

MV Lamp Life	=	24,000 hours
HPS Lamp Life	=	24,000 hours
Operation Period Per Year	=	4,160 hours
Maintenance Labor Rate	=	$20/hour
Estimated Replacement Time	=	20 minutes
MV Lamp Cost	=	$45 each
HPS Lamp Cost	=	$60 each
Total Quantity	=	130

Calculation

Maintenance (MV Lamp)	=	$18.86 (20 x 1/3 + 45) x 8,760/24,000
Maintenance (HPS Lamp)	=	$24.33 (20 x 1/3 + 60) x 8,760/24,000
Annual Recurring Maintenance Savings	=	-$700 (18.86 - 24.33) x 130 = -$711, use -$700

Discussion. A life cycle cost for this ECO was prepared and can be found on the following page. The life cycle cost summary includes energy cost escalations, construction supervision, and annual recurring maintenance costs in addition to construction cost and engineering services. The life cycle was analyzed for a 25-year life resulting in a simple pay back of 45.22 years with a savings to investment ratio of .41.

LIFE CYCLE COST ANALYSIS SUMMARY STUDY: ECO16
ENERGY CONSERVATION INVESTMENT PROGRAM (ECIP) LCCID 1.080
INSTALLATION & LOCATION: LETTERKENNY ARREGION NOS. 3 CENSUS: 1
PROJECT NO. & TITLE: 4130.01 EEAP
FISCAL YEAR 1995 DISCRETE PORTION NAME: ECO16
ANALYSIS DATE: 04-19-95 ECONOMIC LIFE 25 YEARS PREPARED BY: DJB

1. INVESTMENT

A. CONSTRUCTION COST	$ 45800.		
B. SIOH	$ 2519.		
C. DESIGN COST	$ 5500.		
D. TOTAL COST (1A+1B+1C)	$ 53819.		
E. SALVAGE VALUE OF EXISTING EQUIPMENT		$ 0.	
F. PUBLIC UTILITY COMPANY REBATE		$ 0.	
G. TOTAL INVESTMENT (1D - 1E - 1F)			$ 53819.

2. ENERGY SAVINGS (+) / COST (-)
DATE OF NISTIR 85-3273-X USED FOR DISCOUNT FACTORS OCT 1993

FUEL	UNIT COST $/MBTU(1)	SAVINGS MBTU/YR(2)	ANNUAL $ SAVINGS(3)	DISCOUNT FACTOR(4)	DISCOUNTED SAVINGS(5)
A. ELECT	$ 7.27	260.	$ 1890.	18.17	$ 34345.
B. DIST	$ .00	0.	$ 0.	20.83	$ 0.
C. RESID	$ .00	0.	$ 0.	23.76	$ 0.
D. NAT G	$ .00	0.	$ 0.	22.78	$ 0.
E. COAL	$ .00	0.	$ 0.	20.78	$ 0.
F. LPG	$ .00	0.	$ 0.	18.87	$ 0.
M. DEMAND SAVINGS			$ 0.	17.22	$ 0.
N. TOTAL		260.	$ 1890.		$ 34345.

3. NON ENERGY SAVINGS(+) / COST(-)

A. ANNUAL RECURRING (+/-)		$ -700.
(1) DISCOUNT FACTOR (TABLE A)	17.22	
(2) DISCOUNTED SAVING/COST (3A X 3A1)		$ -12054.

B. NON RECURRING SAVINGS(+) / COSTS(-)

ITEM	SAVINGS(+) COST(-) (1)	YR OC (2)	DISCNT FACTR (3)	DISCOUNTED SAVINGS(+)/ COST(-) (4)
d. TOTAL	$ 0.			0.

C. TOTAL NON ENERGY DISCOUNTED SAVINGS(+)/COST(-)(3A2+3Bd4) $ -12054.

4. FIRST YEAR DOLLAR SAVINGS 2N3+3A+(3Bd1/(YRS ECONOMIC LIFE)) $ 1190.

5. SIMPLE PAYBACK PERIOD (1G/4) 45.22 YEARS

6. TOTAL NET DISCOUNTED SAVINGS (2N5+3C) $ 22291.

7. SAVINGS TO INVESTMENT RATIO (SIR)=(6 / 1G)= .41
(IF < 1 PROJECT DOES NOT QUALIFY)

8. ADJUSTED INTERNAL RATE OF RETURN (AIRR): -.47 %

ECO-16
Letterkenny Army Depot
Roadway and Parking Area Lighting

	Existing											Proposed					Implementation				
Room	NO. Of Luminaires	Lamps Per Luminaire	Watts Per Lamp	Total Watts	Hours Per Week	Percent Of Kw On-Peak	Demand Kw On-Peak	Usage Kwh Per Month	Annual Demand (Kw)	Annual Usage (Kwh)	Annual Cost $	New Luminaire Description	Watts Per Luminaire	Proposed Demand (Kw)	Proposed Kwh Per Month	Annual Cost $	Mat. Cost $	Labor Cost $	Eng Cost $	Total Cost $	Energy Savings $
Road/Parking Area Lighting																					
Texas Avenue	2	1	250	575	80	0%	0.0	200	$0.00	$59	$59	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	120	$35.65	$640	$120	$91	$851	$24
Kansas Avenue	4	1	250	1,150	80	0%	0.0	399	$0.00	$119	$119	150w HPS Floodlight	173	0.0	240	$71.30	$880	$240	$134	$1,254	$48
Arkansas Avenue	1	1	175	201	80	0%	0.0	70	$0.00	$21	$21	100w HPS Roadway Luminaire, wood pole mt.	115	0.0	40	$11.88	$300	$60	$43	$403	$9
Arkansas Avenue	5	1	250	1,438	80	0%	0.0	499	$0.00	$149	$149	150w HPS Floodlight	173	0.0	299	$89.12	$1,100	$300	$168	$1,568	$59
Building #57 South Parking	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Floodlight	173	0.0	180	$53.47	$660	$180	$101	$941	$36
Oregon Avenue	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Washington Avenue	6	1	250	1,725	80	0%	0.0	599	$0.00	$178	$178	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	359	$106.94	$1,920	$360	$274	$2,554	$71
Building #1398	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, wood pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #51 South	1	1	1000	1,150	80	0%	0.0	399	$0.00	$119	$119	400w HPS Floodlight	460	0.0	160	$47.53	$260	$60	$38	$358	$71
Overcash Drive	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Floodlight	173	0.0	60	$17.82	$220	$60	$34	$314	$12
Overcash Drive	21	1	250	6,038	80	0%	0.0	2096	$0.00	$624	$624	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	1,258	$374.30	$6,720	$1,260	$958	$8,938	$250
Credit Union	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Floodlight	173	0.0	60	$17.82	$220	$60	$34	$314	$12
Building #320 South	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Floodlight	173	0.0	60	$17.82	$220	$60	$34	$314	$12
Building #330 South Dock #2	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Floodlight	173	0.0	60	$17.82	$220	$60	$34	$314	$12
Building #1399	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, wood pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Coffey Avenue	5	1	250	1,438	80	0%	0.0	499	$0.00	$149	$149	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	299	$89.12	$1,600	$300	$228	$2,128	$59
Building #500	1	1	400	460	80	0%	0.0	160	$0.00	$48	$48	200w HPS Floodlight	230	0.0	80	$23.77	$240	$60	$36	$336	$24
Access Road to Golf Club	2	1	250	575	80	0%	0.0	200	$0.00	$59	$59	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	120	$35.65	$640	$120	$91	$851	$24
Wisconson Avenue	4	1	250	1,150	80	0%	0.0	399	$0.00	$119	$119	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	240	$71.30	$1,280	$240	$182	$1,702	$48
Building #663 West	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #696	1	1	1000	1,150	80	0%	0.0	399	$0.00	$119	$119	400w HPS Floodlight	460	0.0	160	$47.53	$260	$60	$38	$358	$71
Building #691	1	1	400	460	80	0%	0.0	160	$0.00	$48	$48	200w HPS Floodlight	230	0.0	80	$23.77	$240	$60	$36	$336	$24
Storage Pad Hazardous Material	1	1	1000	1,150	80	0%	0.0	399	$0.00	$119	$119	400w HPS Floodlight	460	0.0	160	$47.53	$260	$60	$38	$358	$71
Building #3 Parking Lot	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
New Jersey Avenue	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Building #37 Parking Lot	2	1	250	575	80	0%	0.0	200	$0.00	$59	$59	150w HPS Floodlight	173	0.0	120	$35.65	$440	$120	$67	$627	$24
Building #426	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #424	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #433	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Carbaugh Avenue	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Building #37 Parking Lot	1	1	175	201	80	0%	0.0	70	$0.00	$21	$21	100w HPS Roadway Luminaire, wood pole mt.	115	0.0	40	$11.88	$300	$60	$43	$403	$9
California Avenue	9	1	250	2,588	80	0%	0.0	898	$0.00	$267	$267	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	539	$160.41	$2,880	$540	$410	$3,830	$107
Michigan Avenue	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Building #663 West	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Floodlight	173	0.0	60	$17.82	$220	$60	$34	$314	$12
Building #616	2	1	250	575	80	0%	0.0	200	$0.00	$59	$59	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	120	$35.65	$640	$120	$91	$851	$24
Building #619	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, wood pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #619	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #3238	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #3245	3	1	175	604	80	0%	0.0	210	$0.00	$62	$62	100w HPS Roadway Luminaire, wood pole mt.	115	0.0	120	$35.65	$900	$180	$130	$1,210	$27
Gate #17	1	1	175	201	80	0%	0.0	70	$0.00	$21	$21	100w HPS Roadway Luminaire, wood pole mt.	115	0.0	40	$11.88	$300	$60	$43	$403	$9
Kenny Gardens	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Pennsylvania Avenue	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #365	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, wood pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #360	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Roadway Luminaire, wood pole mt.	173	0.0	180	$53.47	$960	$180	$137	$1,277	$36
Ammo Packing Area	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
Building #349	3	1	250	863	80	0%	0.0	299	$0.00	$89	$89	150w HPS Floodlight	173	0.0	180	$53.47	$660	$180	$101	$941	$36
Building #370	14	1	400	6,440	80	0%	0.0	2236	$0.00	$665	$665	200w HPS Floodlight	230	0.0	1,118	$332.71	$3,360	$840	$504	$4,704	$333
Building #1398	1	1	250	288	80	0%	0.0	100	$0.00	$30	$30	150w HPS Roadway Luminaire, metal pole mt.	173	0.0	60	$17.82	$320	$60	$46	$426	$12
TOTALS	130			42,205			0.0	14654	$0	$4,400	$4,400			0.0	8300	$2,500	$38,000	$7,800	$5,500	$51,000	$1,900

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22-May-95