Prepared for

Douglas County School District, Nevada

Annual M&V Cost Savings Report Year 5

March 6, 2014 through March 5, 2015

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Cost Savings Report
Year 5

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Douglas County School District, Nevada

Presented by

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Table of Contents

1.0 EXECUTIVE SUMMARY 1
1.1 REPORT PERIOD 1
1.2 CONTRACT YEAR 1
1.3 SUMMARY 1
1.4 SUMMARY OF OPERATIONS 11
1.5 SUMMARY OF GUARANTEED SAVINGS 11
2.0 YEAR 5 DISCUSSION 15
3.0 ENERGY CONSERVATION MEASURE MEASUREMENT AND VERIFICATION PLANS 17
ECM 1: LIGHTING SYSTEM IMPROVEMENTS 17
ECM 2: LIGHTING CONTROLS 23
ECM 3: PRIMARY SITE GYM LIGHTING AND CONTROLS 27
ECM 4: UPGRADE ENERGY MANAGEMENT SYSTEM 33
ECM 5: COMPUTER POWER MANAGEMENT 37
ECM 6: VENDING MACHINE CONTROLS 39
ECM 7: INSTALL NEW TRANSFORMERS 42
ECM 8: INSTALL TRASH COMPACTORS 46
ECM 9: DHS BLDG 500 HVAC RETROFIT 50
ECM 10: EXTERIOR LIGHTING 52
CO 16 FIM 1: FAN COIL REPLACEMENT 60
CO 16 FIM 2: BOILER REPLACEMENT 62
CO 17 FIM 1: FAN COIL REPLACEMENT 64
CO 17 FIM 2: BOILER REPLACEMENT 66
4.0 PERFORMANCE PERIOD OPERATIONS AND MAINTENANCE 68
4.1 WARRANTY TIMEFRAMES 68
4.2 OPERATION AND MAINTENANCE SCOPE 69
A INSPECTION FORMS
B EQUIPMENT WARRANTY INFORMATION
C CERTIFICATES OF ACCEPTANCE
D REVISED CASH FLOW
E UTILITY RATES
F LIGHTING AS BUILT DETAIL

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1.0 Executive Summary

1.1 Report Period

March 6, 2014 through March 5, 2015

1.2 Contract Year

Year Five

1.3 Summary

Douglas County School District contracted with Ameresco, Inc. (Ameresco) to replace inefficient energy infrastructure and improve the efficiency of specific systems district wide. The Performance-Based Contract (PBC) # 06-10-08 was executed on June 26, 2008 and construction began in earnest almost immediately. The construction phase of this program was completed with the final acceptance of all Energy Conservation Measures (ECMs) in August of 2009. The Initial Commissioning Report was delivered in August 2009, and the Final Commissioning Report was completed on March 5, 2010. The start date of the guarantee period is March 6, 2010. Savings that were generated between August 2009 and March 2010 are considered to be Construction Period Savings and Ameresco cannot include the amount as a benefit to the project. The quantity is not reflected in this report and will not be incorporated in any future Annual Measurement and Verification Reports.

Several change orders (COs) were issued during the construction of this project. COs 16 and 17 changed the total savings for the project and were completed in December 2010. The Final Commissioning Report for these COs was accepted on April 19, 2011. The savings results were reported in the Second Annual Guarantee Report, are continued in this Annual Guarantee Report, and will continue until the end of the Guarantee Term.

Table 1.0. Change Order Summary

Change Order	Energy Conservation Measure		
	Removed	Altered	Added
1		ECM 10: Exterior Lighting	
2		ECM 4: EMS	
3		ECM 10: Exterior Lighting	None; but a small addition to the overall scope of work
4		ECM 4: EMS	
5		ECM 4: EMS	

Table 1.0. Change Order Summary

Change Order	Energy Conservation Measure		
	Removed	Altered	Added
6			FIM 1: Replace Fire Alarm Systems
7			FIM 1: Fan Coil Replacement at GLSES FIM 5: Fan Coil Replacement at JVES FIM 6: Fan Coil Cleaning and Control upgrade at PWLMS
8		ECM 4: EMS	FIM 1: HVAC System Upgrades at GWHS
9		ECM 4: EMS	
10			None; but a small addition to the overall scope of work at DHS
11		ECM 10: Exterior Lighting	
12		ECM 1: Lighting System Improvements	
13	None	None	None
8A		ECM 4: EMS	
6A		ECM 4: EMS	
14			None; but a small addition to the overall scope of work at GWHS
7A			None; but a small addition to the overall scope of work at GWHS
15	None	None	None
16			FIM 1: Fan Coil Replacement at PHES and MES FIM 2: Boiler Replacements PHES, MES, SES, PWLMS, and CCMES
17			FIM 1: Fan Coil Replacement at CCMES FIM 2: Boiler Replacement at JVES
18	None	None	None

A summary describing the change orders is listed in Table 1.1. Some of these COs required an updated M&V Matrix. Table 1.2 shows the Final M&V Matrix for PBC 06-10-08 and COs 16 and 17.

Table 1.1. Change Order Description

CO	Date	ECM	Description	Change	No Change
1	09/24/2008	ECM 10 Exterior Lighting Scope Revision	Remove parking lot solar lighting and add parking lot lighting retrofit and rewire. Replace DHS Pedestrian walkway lighting. Add school zone flashers.		Original contract amount of $4,989,758. Projected energy savings or the operational savings. Guaranteed savings.
2	10/29/2008	ECM 4: EMS Scope Revision	Add controls to DHS, GES, CVMS, JVES, MES, PHES, GLSES, ZCES, and GWHS. Remove CCMES from the controls scope of work.		Original contract amount of $4,989,758. Projected energy savings or the operational savings. Guaranteed savings.
3	01/21/2009	ECM-10 Exterior Lighting Scope Revision	Add two light poles to DHS.	Corrected a mistake in the original contract amount of $4,989,758. The actual amount should have been and now is $5,094,739. Used $12,466 of customer managed contingency (CMC); lowering the CMC from $104,981 to $92,515.	Projected energy savings or the operational savings. Guaranteed savings.
		Undefined ECM	Install a new power supply for the intercom at SES. Revise incorrect GMP from $4,989,758 to $5,094,739.		
4	01/21/2009	ECM 4: EMS	Add mechanical and control repair not to exceed $20,000.		Original contract amount of $5,094,739. Used $29,598 of CMC; lowering the CMC from $92,515 to $62,917. Projected energy savings or the operational savings. Guaranteed savings.

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Table 1.1. Change Order Description

CO	Date	ECM	Description	Change	No Change
5	03/26/2009	ECM 4: EMS	Add control valves and flow control devices at SES.		Add to the original contract amount of $5,094,739. This CO transferred $10,000 from CO 4 to this CO. Used $60,775.05 of CMC; lowering the CMC from $62,917 to $2,141.95. Projected energy savings or the operational savings. Guaranteed savings.
6	03/26/2009	FIM 1: Fire Alarm Replacement	Replace fire alarm systems at DHS and GWHS.	Added $986,582 to the original contract amount of $5,094,739 increasing it to $6,081,321.	Projected energy savings or the operational savings. Guaranteed savings.
7	05/21/2009	FIM 1: Fan Coil Replacement at GLSES FIM 5: Fan Coil Replacement at JVES FIM 6: Fan Coil Cleaning and Control Upgrade at PWLMS		Added $902,497 to the revised contract amount of $6,081,321 increasing it to $6,983,818.	
8	05/21/2009	FIM 1: HVAC System Upgrades at GWHS		Added $1,140,289 to the revised contract amount of $6,983,818 increasing it to $8,124,107.	
		ECM 4 EMS	Remove GWHS from the scope of work		
9	05/27/2009	ECM 4 EMS	Remove HVAC device installed at SES reversing CO 5.		Revised contract amount of $8,124,107. This CO transferred $51,067 to CMC; increasing the CMC from $2,141.95 to $53,208.95. Projected energy savings or the operational savings. Guaranteed savings.

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Table 1.1. Change Order Description

CO	Date	ECM	Description	Change	No Change
10	05/27/2009	Undefined ECM	Replace two small gym HVAC units.		Revised contract amount of $8,124,107. This CO transferred $22,425 from CMC; decreasing the CMC from $53.208.95 to $24,566.95.
11	06/23/2009	ECM 10 Exterior Lighting	Replace lighting at fuel island.		Revised contract amount of $8,124,107. This CO transferred $3,455.57 from CMC; decreasing the CMC to $32,590.50.
12	06/23/2009	ECM 1 Lighting System Improvements	Replace MV lighting in DHS Band and Drama.		Revised contract amount of $8,124,107. This CO transferred $8,159.04 from CMC; decreasing the CMC to $24,431.46.
13	10/12/2009	Cost Transfer	Reimbursement for temporary lighting rental.		Revised contract amount of $8,124,107. This CO transferred $4,367.18 from CMC; decreasing the CMC to $20,064.28. Projected energy savings or the operational savings. Guaranteed savings.
8A	10/19/2009	ECM 4 EMS	Replacement of pneumatic controls and upgrade energy management system (EMS) at JVES.		Revised contract amount of $8,124,107. This CO was paid for using $87,610 of existing funds. Projected energy savings or the operational savings. Guaranteed savings.

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Table 1.1. Change Order Description

CO	Date	ECM	Description	Change	No Change
6A	10/20/2009	ECM 4 EMS	Add Wattstopper panels to EMS.		This CO did not change the Revised contract amount of $8,124,107. This CO was paid for using $47,478 of existing funds. Projected energy savings or the operational savings. Guaranteed savings.
14	11/10/2009	Undefined ECM	Add insulation to the west wing at GWHS.		Revised contract amount of $8,124,107. This CO transferred $15,297.28 from CMC; decreasing the CMC to $4,767. Projected energy savings or the operational savings. Guaranteed savings.
7A	11/10/2009	Undefined ECM	Add insulation to the west wing at GWHS.		Revised contract amount of $8,124,107. This CO was paid for using $11,281 of existing funds. Projected energy savings or the operational savings. Guaranteed savings.
15	11/11/2009	Cost Transfer	Compensate for reduced rebate.		Revised contract amount of $8,124,107. This CO transferred $4,767 from CMC; decreasing the CMC to $0. Projected energy savings or the operational savings. Guaranteed savings.

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Table 1.1. Change Order Description

CO	Date	ECM	Description	Change	No Change
16	04/13/2010	FIM 1: Replace Fan Coils at PHES and MES FIM 2: Replace Boilers are PHES, MES, SES, PWLMS and CCMES		Added $2,215,920 to the revised contract amount of $8,124,107 increasing it to $10,340,027. Increased the projected energy savings by $13,262 annually, but made no changes to the operational savings. Changed the annual guaranteed savings from $444,254 to $457,516.	
17	06/16/2010	FIM 1: Replace Fan Coils at CCMES FIM 2: Replace Boilers at JVES		Added $432,309 to the revised contract amount of $10,340,027 increasing it to $10,772,336. Increased the projected energy savings by $1,803 annually, but made no changes to the operational savings. Changed the annual guaranteed savings from $457,516 to $459,319.	
18	03/08/2011	Disposal of Low-Level Radiated Boiler Material		Added $21,545 to the revised contract amount of $10,772,336 increasing it to $10,793,881.	Projected energy savings or the operational savings. Guaranteed savings.

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Table 1.2. Revised M&V Matrix

ECM	IPMVP Option	M&V Requirements		Measurement & Metering	Stipulated Variables	Minimum Performance Period M&V Requirements
		Minimum Baseline	Minimum Post Installation			
ALTERED BY CO 12 ECM-1: Lighting System Improvements	A	Fixture wattages will be from sample measurements. Operating hours will be based on discussions with facility personnel and sample short term metering.	Input power for 10% of retrofitted fixtures will be measures at time of commissioning.	Baseline run hour metering completed. Baseline fixture wattage to be completed prior to construction. Post installation wattages measured prior to acceptance.	Baseline and post-installation (subject to one-time verification) fixture power draw. Operating hours of each usage group. Interactive effects.	Ameresco will visually inspect a sample of lamps to verify the lamp types are as efficient as those proposed in the Financial-Grade Operational Audit (FGOA).
ECM-2: Lighting Controls	A	Baseline parameters based on lighting audit. Short term metering to establish baseline run hours.	Commissioning of system to ensure sensing device is calibrated to perform as designed.	Baseline run hour metering completed.	Fixture power draw (based on ECM-1) and operating hours.	Ameresco will spot check the lighting controls to verify they are still operational.
ECM-3: Gymnasium Lighting and ECM-10: DHS Exterior Lighting	A	Fixture wattages will be from sample measurements. Operating hours will be based on discussions with facility personnel and sample short term metering.	Input power for 10% of retrofitted fixtures will be measures at time of commissioning.	Baseline run hour metering completed. Baseline fixture wattage to be completed prior to construction. Post installation wattages measured prior to acceptance.	Baseline and post-installation (subject to one-time verification) fixture power draw. Operating hours of each usage group. Interactive effects.	Ameresco will visually inspect a sample of lamps to verify the lamp types are as efficient as those proposed in the FGOA.

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Table 1.2. Revised M&V Matrix

ECM	IPMVP Option	M&V Requirements		Measurement & Metering	Stipulated Variables	Minimum Performance Period M&V Requirements
		Minimum Baseline	Minimum Post Installation			
ALTERED BY COs: 2, 4, 5, 6A, 8, 8A, 9 ECM-4: Energy Management Control Systems	B	Baseline parameters are based on short term metering of run hours and space temperatures, power measurements and facility audit.	Commissioning of system to ensure installed system performs as designed. Monitoring of operating hours and space temperatures.	Measurements of temperatures and operating hours completed.	Operating hours and space temperatures due to facility operations. Energy savings based on modeled inputs/outputs approved in the FGOA.	Annual inspection of installed systems to identify ability to maintain persistence of savings. Annual monitoring and reporting of operating hours, set-points, and space temperatures.
ECM-5: Computer Power Management	B	Baseline parameters are based on manufacturer's monitoring of existing computers over a 4-week period.	Inspection to verify installation of the software.	Post retrofit monitoring for a 4-week period to determine savings.	Energy saved after the pre and post measurements are done.	Inspect to verify software is still operating properly and at the original set-points..
ECM-6: Vending Machine Controls	A	Baseline parameters are based on manufacturer's information.	Inspection to verify installation of the controllers.	None.	Energy saved.	Inspect to verify installation.
ECM-7: Energy Efficient Transformers	A	Measured efficiency of 25% of the transformers to be replaced.	Actual efficiency and equipment power loading for 25% of the replaced transformers.	Instantaneous power consumption and no load losses.	Operating hours of the transformers and agreed to loading based on sample measurements.	Annual inspection of installed systems to verify equipment is installed and operating.

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Table 1.2. Revised M&V Matrix

ECM	IPMVP Option	M&V Requirements		Measurement & Metering	Stipulated Variables	Minimum Performance Period M&V Requirements
		Minimum Baseline	Minimum Post Installation			
ECM-8: Trash Management	C	The utility baseline is described in Section 2: Base Year Energy Use above. The baseline is stipulated based on the trash management cost at each facility this measure is implemented at.	All conservation measures will be fully commissioned at start up to confirm proper operation.	The monthly waste management bill will be used to calculate the cost savings as compared to the baseline.	Baseline waste management costs at each facility that this measure is implemented. The stipulated utility rates shown in the FGOA will be used to calculate dollar savings.	One year. After the first year the savings for this measure will be stipulated throughout the remaining term of the agreement.
ECM-9: DHS Bldg 500	No M&V Plan required for this measure	N/A	N/A	N/A	N/A	N/A
ALTERED BY COs: 1, 3, 11 ECM-10: DHS Exterior Lighting	A	Fixture wattages will be from sample measurements. Operating hours will be based on discussions with facility personnel and sample short term metering.	Input power for 10% of retrofitted fixtures will be measures at time of commissioning.	Baseline run hour metering completed. Baseline fixture wattage to be completed prior to construction. Post installation wattages measured prior to acceptance.	Baseline and post-installation (subject to one-time verification) fixture power draw. Operating hours of each usage group. Interactive effects.	Ameresco will visually inspect a sample of lamps to verify the lamp types are as efficient as those proposed in the FGOA.

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Table 1.2. Revised M&V Matrix

ECM	IPMVP Option	M&V Requirements		Measurement & Metering	Stipulated Variables	Minimum Performance Period M&V Requirements
		Minimum Baseline	Minimum Post Installation			
CHANGE ORDER 16 FIM-1: Fan Coil Replacements	Stipulated Savings	Motor efficiencies stipulated based on the AC Motor Efficiency Guide published by Reliant Electric. Operating hours will be based on data loggers installed during the FGOA and occupancy schedules.	Each FCU will be commissioned and the motors will be measured at startup to ensure that the power draw is within specified parameters.	None	Operating hours, motor load, motor efficiency.	Ameresco will visually inspect a sample of the FCUs to confirm proper operation.
CHANGE ORDER 16 FIM-2: Boiler Replacements	Stipulated Savings	Baseline parameters are based on short term metering of run hours, device speed, space temperatures, power measurements, and facility audit.	Commissioning of system to ensure installed system performs as designed.	None. Temperatures and variable speed drives will be accessible through the EMS.	Operating hours and space temperatures due to facility operations. Energy savings based on calculations presented in the FGOA Addendum.	Ameresco will visually inspect the boiler systems to confirm proper operation.
CHANGE ORDER 17 FIM-1: Fan Coil Replacements	Stipulated Savings	Motor efficiencies stipulated based on the AC Motor Efficiency Guide published by Reliant Electric. Operating hours will be based on data loggers installed during the FGOA and occupancy schedules.	Each FCU will be commissioned and the motors will be measured at startup to ensure that the power draw is within specified parameters.	None.	Operating hours, motor load, and motor efficiency.	Ameresco will test a minimum of four of the FCUs to confirm proper operation each year. Schedules, set-points, and trendlogs will be reviewed on the Alerton control system.

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Table 1.2. Revised M&V Matrix

ECM	IPMVP Option	M&V Requirements		Measurement & Metering	Stipulated Variables	Minimum Performance Period M&V Requirements
		Minimum Baseline	Minimum Post Installation			
CHANGE ORDER 17 FIM-2: Boiler Replacements	Stipulated Savings	Baseline parameters are based on short-term metering of run hours, device speed, space temperatures, power measurements, and facility audit.	Commissioning of system to ensure installed system performs as designed.	None. Temperatures and variable frequency drive speeds will be accessible through the Energy Management System.	Operating hours and space temperatures due to facility operations. Energy savings based on calculations presented in the FGOA Addendum.	Ameresco will visually inspect the boiler systems to confirm proper operation.

1.4 Summary of Operations

Ameresco's experience has shown one of the most predominate ways to erode savings in a performance based contract is to deviate from proposed schedules and set-points. It is important to remember that the standards of operation were established as a guide for DCSD to follow when setting up these critical variables.

1.5 Summary of Guaranteed Savings

This M&V report summarizes the performance of the completed ECMs to demonstrate that each ECM is generating the savings that was promised in the FGOA, PBC, and COs. The ECMs that make up this project include:

- Boiler replacements
- Computer power management
- Energy management system upgrades
- Fan coil replacements
- Lighting system improvements and controls
- Transformer replacements
- Trash management
- Other controls

The following summarizes the annual energy cost savings, as determined by the calculations in the FGOA, PBC, and measurements taking during the First Year:

ECM Savings: Year 5	$513,273
Guaranteed Savings: Year 5	$480,301
Difference in Savings [+ Excess / -(Shortfall)]	**+ $32,972**

Tables 1.4 through 1.6 summarize the monthly savings as determined by the FGOA, PBC, COs, measurements taken during the commissioning period, and total costs for each year of the guarantee.

Table 1.4. Demonstrated Savings, Costs, and Simple Paybacks for Year 5 (03/06/2014 – 03/05/2015)

ECM #	ECM Name	Annual kW	Total kWh	Natural Gas (therms)	Energy Savings ($)	O&M Savings ($)	Total Project Savings ($)	Total Project Costs	SPB (years)
1	Lighting System Improvements	574	1,818,632	(16,215)	$ 179,159	$ 19,353	$ 198,512	$ 1,425,558	7.2
2	Lighting Controls		302,008	(3,221)					
3	Upgrade Gym Lighting	35	147,707	(1,853)	$ 11,777	$ 304	$ 12,081	$ 87,048	7.2
4	Upgrade EMS and Recommission		272,225	32,832	$ 68,436		$ 68,436	$ 2,241,029	32.7
5	Computer Power Management	16	642,776		$ 65,373		$ 65,373	$ 111,335	1.7
6	Vending Machine Controls		40,531		$ 3,795		$ 3,795	$ 6,411	1.7
7	New Transformers	57	563,110		$ 53,163		$ 53,163	$ 547,828	10.3
8	Trash Compactors					$ 90,923	$ 90,923	$ 309,736	3.4
9	DHS Bldg 500 HVAC						$ -	$ 148,986	n/a
10	DHS Exterior Lighting	19	58,965		$ 5,947		$ 5,947	$ 360,134	60.6
CO 6	Fire Alarm Replacement							$ 1,006,061	n/a
CO 7	Fan Coil Replacements							$ 920,311	n/a
CO 8	GWHS HVAC							$ 1,478,319	n/a
CO 16-FIM 1	Fan Coil Replacement	1	2,788		$ 390		$ 390	$ 2,357,792	177.7
CO 16-FIM 2	Boiler Replacement		34,405	7,585	$ 12,876		$ 12,876		
CO 17-FIM 1	Fan Coil Replacement		208		$ 19		$ 19	$ 440,955	248.1
CO 17-FIM 2	Boiler Replacement		2,686	1,163	$ 1,758		$ 1,758		
CO 18	Boiler Disposal							$ 21,545	n/a
	TOTALS	**702**	**3,886,041**	**20,291**	**$ 402,693**	**$ 110,580**	**$ 513,273**	**$ 11,463,048**	**22.3**
							TOTAL REBATES	$ (144,910)	
							CREDIT FROM CHANGE IN ECM 4	$ (309,382)	
							CUSTOMER CONTRIBUTIONS	$ (5,892,921)	
							REVISED TOTALS	**$ 513,273**	**$ 5,115,835**	**10.0**

Note: Project cost values were taken from the revised cash flow provided in Appendix H.

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Table 1.5. Energy Conservation Measure Tracking Sheet

Douglas County School District
Guarantee Savings Report Tracking Sheet
Guarantee Year Three: 3-6-2014 through 3-5-2015

Utility Savings

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
ECM 1: Lighting System Improvements ECM 2: Lighting Controls	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930	$ 14,930
ECM 3: Upgrade Gym Lighting	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981	$ 981
ECM 4: Upgrade EMS and Recommission	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703	$ 5,703
ECM 5: Computer Power Management	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448	$ 5,448
ECM 6: Vending Machine Controls	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316	$ 316
ECM 7: New Transformers	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430	$ 4,430
ECM 8: Trash Compactors	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577	$ 7,577
ECM 9: DHS Bldg 500 HVAC Retrofit												
ECM 10: DHS Exterior Lighting	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496	$ 496
CO 16 - FIM 1: Fan Coil Replacement	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33	$ 33
CO 16 - FIM 2: Boiler Replacement	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073	$ 1,073
CO 17 - FIM 1: Fan Coil Replacement	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2	$ 2
CO 17 - FIM 2: Boiler Replacement	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147	$ 147
OPERATIONAL SAVINGS	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638	$ 1,638

TOTAL SAVINGS

Monthly ECM Savings	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**	**$ 42,773**
Cumulative ECM Savings	**$ 42,773**	**$ 85,545**	**$ 128,318**	**$ 171,091**	**$ 213,864**	**$ 256,636**	**$ 299,409**	**$ 342,182**	**$ 384,955**	**$ 427,727**	**$ 470,500**	**$ 513,273**
Cumulative Guarantee Savings	**$ 40,025**	**$ 80,050**	**$ 120,075**	**$ 160,100**	**$ 200,125**	**$ 240,151**	**$ 280,176**	**$ 320,201**	**$ 360,226**	**$ 400,251**	**$ 440,276**	**$ 480,301**
Deviation	**$ 2,748**	**$ 5,495**	**$ 8,243**	**$ 10,991**	**$ 13,738**	**$ 16,486**	**$ 19,234**	**$ 21,981**	**$ 24,729**	**$ 27,476**	**$ 30,224**	**$ 32,972**
Percent of Plan	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**	**107%**

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Table 1.6. Annual Costs for the Energy Services Project

Year	M&V Costs	O&M Costs	Principal Costs	Interest Costs	**Total Cost**
0					$0
1	$36,285	$108,006	$103,000	$208,863	$456,154
2	$29,627	$95,171	$119,000	$204,455	$448,253
3	$32,374	$98,026	$129,000	$199,449	$458,849
4			$283,000	$192,569	$475,569
5	$52,021		$247,000	$181,280	$480,301
6			$316,000	$170,403	$486,403
7			$340,000	$157,137	$497,137
8			$368,000	$142,840	$510,840
9			$398,000	$127,370	$525,370
10	$60,306		$376,000	$111,199	$547,505
11			$470,000	$94,739	$564,739
12			$507,000	$75,005	$582,005
13			$540,000	$53,787	$593,787
14			$582,000	$31,106	$613,106
15	$69,911		$317,000	$6,530	$393,441

Note: The O&M Costs have been changed to reflect the deletion of the American Trash Management service contract at the end of Year 1. DCSD's cost to perform the operation of the trash compactors, if less than the $16,075 O&M services that were provided by American Trash Management would be additional savings to the DCSD.

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2.0 Year 5 Discussion

In accordance with the PBC, there will not be an Annual Guarantee Report for Performance Years 6 through 9. Ameresco will continue to monitor the EMS exception reports and will make the results available in the report for Performance Year 10. After that, there will be only one more annual reports in Performance Period 15.

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3.0 Energy Conservation Measure Measurement and Verification Plans

ECM 1: Lighting System Improvements

ECM Overview

Ameresco replaced the existing lamps with a new 28-watt T8 fluorescent lamp. The new premium efficiency lamps have a mixture of phosphors that allow them to consume less energy while producing the same initial light level. Over the life of the lamp, the 28-watt units maintain light levels better than the 32-watt T8 lamps and the T12 lamps they replaced. Ameresco confirmed the ballasts installed in the schools would support the new lamps; magnetic ballasts were replaced with program start electronic ballasts. New high efficient compact fluorescent lamps or ceramic metal halide lamps replaced interior incandescent lamps in the common areas and interior HID fixture types.

Savings Adjustments

No adjustments were made during this performance period.

M&V Overview

The M&V protocol for this ECM is based on the guidelines of the IPMVP Option A. Option A involves verifying that the measure has the potential to perform and to generate savings. Performance verification techniques include engineering calculations with one-time representative measured values, resulting in measured verification of performance. With the chosen method, hours of operation are agreed to. Post installation fixture wattages were determined from one-time spot measurements of representative fixture types.

Under this measurement plan, Ameresco assumes performance risk for the operation of the new fixtures. We performed equipment measurements to verify that the performance of the installed equipment operates at the levels defined in the FGOA (power output at stated conditions). This was established by measuring 10 percent of fixtures (either individual fixtures or on a given lighting circuit) of the same lamp/ballast combination. The lighting systems performed as proposed. For the site operating hours, Ameresco has no control over the hours of operation of the facility and cannot be reasonably requested to assume the risk for this variable. Therefore, the customer and Ameresco agreed to the run hours for the life of the contract. Table 3.0 shows the stipulated operating hours.

Table 3.0. ECM 1 Stipulated Operating Hours

Location	Annual Hours
Elementary Open Office	1,441
Elementary Staff Lounge	1,441
Elementary Library	2,096
Elementary Hallways	6,440
Elementary Classroom	1,859
Middle School Open Office	1,297
Middle School Staff Lounge	1,309
Middle School Hallways	7,487
Middle School Classroom	6,500
High School Conference Room	1,492
High School Office	2,393
High School Library	1,491
High School Work Room	1,467
High School Classroom	2,325
High School Hallways	6,540

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = LightingSavings - Heat + Cool$$

$$LightingSavings = DemandSavings + EnergySavings$$

$$DemandSavings = BaselineDemand - PostDemand$$

$$EnergySavings = BaselineEnergy - PostEnergy$$

$$BaselineDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times \$/kW \right)$$

$$PostDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{retro} \times \$/kW \right)$$

$$BaselineEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

$$PostEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Retro} \times Hrs_{Retro} \times \left(\$/kWh \right) \right)$$

$$Heat = \sum_{buildings} \frac{\frac{\sum_{fixtures}\left(kW_{Base} \times Hrs_{Base} - kW_{Retro} \times Hrs_{retro}\right)}{12 months} \times Mths_{htg} \times 3{,}413 \, btu/kWh}{BoilerEff \times 1{,}000{,}000 \, btu/mmbtu} \times Util \times \$/mmbtu$$

$$Cool = \sum_{buildings} \frac{\frac{\sum_{fixtures}\left(kW_{Base} \times Hrs_{Base} - kW_{Retro} \times Hrs_{Retro}\right)}{12 months} \times Mths_{cool}}{CoolEff} \times Util \times \$/kWh$$

Where:

kWBase	=	Base fixture kW, as per lighting audit calculation included in the FGOA located in Appendix 3, subject to metering described below
kWRetro	=	Retrofit fixture kW, as per lighting audit calculation included in the FGOA located in Appendix 3, subject to metering described below
HrsBase	=	Baseline fixture operating hours as per lighting audit calculation included in the FGOA, located in Appendix 3
HrsRetro	=	Retrofit fixture operating hours, as per lighting audit calculation included in the FGOA, located in Appendix 3
BoilerEff	=	Average heating system efficiency, as per lighting audit calculation included in the FGOA
CoolEff	=	Average cooling system performance (COP), as per lighting audit calculation included in the FGOA
Util	=	Factor representing the amount of energy transmitted to the space = 50 percent
Mthshtg	=	Number of months the heating penalty will occur, as per lighting audit calculation included in the FGOA
Mthscool	=	Number of months the cooling benefit will occur, as per lighting audit calculation included in the FGOA
$/MMBTU	=	Unit cost of fossil fuel, as per Utility Unit Rates in Appendix I
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a high level of accuracy in the calculation of savings, while limiting the costs of verification.

> Metering Plan

Ameresco measured the fixture input power for a percentage of the installed lamp/ballast combinations. For the post retrofit measurement, the measurement occurred between June 22 and June 26, 2009. The results of these measurements are in the tables found in Appendix F.

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the long-term inspection services provided as a part of this measure.

Measured Savings

The savings for ECM 1 are combined with the savings from ECM 2.

Table 3.1. ECMs 1 and 2 Savings Summary

Savings for Year 5	$179,159

Table 3.2. ECM 1 Demonstrated Savings

Douglas County School District Energy Performance Contract

Lighting Retrofit Savings Verification

ESTIMATED Lighting Savings	DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Bldg Mant	Comp Svcs	Dist Off	Food Svcs	Trans	Veh Mant
Annual Peak kW	103.8	50.1	26.2	69.2	28.3	35.5	66.7	26.5	13.3	8.1	30.2	5.5	1.1	9.8	3.8	2.1	6.5
Annual kWh	291,307	151,958	73,502	345,275	115,977	88,774	156,128	76,000	38,983	20,310	75,567	17,023	2,948	27,655	11,853	6,652	20,249
DEMONSTRATED Lighting Savings																	
Annual Peak kW	125.2	67.5	31.1	71.4	41.2	41.6	67.8	31.3	18.3	18.5	30.3	4.7	1.2	14.1	3.8	2.1	4.1
Annual kWh	326,246	192,421	83,509	383,624	166,373	110,924	159,797	93,095	58,880	59,933	91,841	14,603	3,388	41,789	12,246	6,676	13,290
Savings demonstrated to be within or above 10%?	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES	YES	NO

If any of the above statements is "NO" does the overall project demonstrated savings fall withing 10% or voer the Estimated value for emtire ECM?	YES

STIPULATED Heating Interaction (Therms)	(3,107)	(1,621)	(784)	(3,683)	(1,237)	(947)	(1,665)	(811)	(416)	(217)	(806)	(182)	(31)	(295)	(126)	(71)	(216)

STIPULATED Lighting Control Savings [ECM2]	DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Bldg Mant	Comp Svcs	Dist Off	Food Svcs	Trans	Veh Mant
Annual kWh	44,171	5,519	19,985	62,374	90,034	22,605	11,861	24,812	8,740		5,811		983	1,423	494		3,196
Control related heating interaction (Therms)	(471)	(59)	(213)	(665)	(960)	(241)	(127)	(265)	(93)		(62)		(11)	(15)	(5)		(34)

Total Savings for ECMs 1&2	DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Bldg Mant	Comp Svcs	Dist Off	Food Svcs	Trans	Veh Mant
Annual Peak kW	125.2	67.5	31.1	71.4	41.2	41.6	67.8	31.3	18.3	18.5	30.3	4.7	1.2	14.1	3.8	2.1	4.1
Annual kWh	370,417	197,940	103,494	445,998	256,407	133,529	171,658	117,907	67,620	59,933	97,652	14,603	4,371	43,212	12,740	6,676	16,486
Heating (Therms)	(3,578)	(1,680)	(997)	(4,348)	(2,197)	(1,188)	(1,792)	(1,076)	(509)	(217)	(868)	(182)	(42)	(310)	(131)	(71)	(250)

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Table 3.3. ECMs 1 & 2 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**1 & 2**
Measure Name:	**Lighting Retrofit and Lighting Controls**

ENERGY SAVINGS		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Bldg Mant	Comp Svcs	Dist Off	Food Svcs	Trans	Veh Mant	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity																			
Energy Total	kWh	370,417	197,940	103,494	445,998	256,407	133,529	171,658	117,907	67,620	59,933	97,652	14,603	4,371	43,212	12,740	6,676	16,486	2,120,640
Demand On-Peak, Annual	kW	125.2	67.5	31.1	71.4	41	41.6	67.8	31.3	18.3	18.5	30.3	4.7	1.2	14.1	3.8	2.1	4.1	574
Fossil Fuel																			
Natural Gas (NG)	Therms	-3,578	-1,680	-997	-4,348	-2,197	-1,188	-1,792	-1,076	-509	-217	-868	-182	-42	-310	-131	-71	-250	-19,436

COST SAVINGS		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Bldg Mant	Comp Svcs	Dist Off	Food Svcs	Trans	Veh Mant	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity																			
Energy Total	$	$ 34,681.00	$ 18,532.49	$ 9,689.82	$ 41,757.44	$ 24,006.59	$ 12,501.97	$ 16,071.79	$ 11,039.29	$ 6,331.05	$ 5,611.31	$ 9,142.87	$ 1,856.84	$ 555.81	$ 4,045.81	$ 1,192.80	$ 848.86	$ 2,096.31	$ 199,962
Demand On-Peak, Annual	$	$ 963.44	$ 519.85	$ 239.44	$ 549.15	$ 317.17	$ 319.88	$ 522.18	$ 241.17	$ 141.16	$ 142.27	$ 232.88	$ -	$ -	$ 108.53	$ 29.18	$ -	$ -	$ 4,326.31
Fossil Fuel																			$ -
Natural Gas (NG)	$	$ (4,634.94)	$ (2,073.46)	$ (1,352.53)	$ (4,967.16)	$ (2,823.58)	$ (1,684.35)	$ (2,248.24)	$ (1,448.73)	$ (669.74)	$ (289.96)	$ (1,204.09)	$ (282.17)	$ (280.60)	$ (449.00)	$ (180.39)	$ (170.19)	$ (369.75)	$ (25,129)
																		TOTAL SAVINGS:	**$ 179,159**

ECM 2: Lighting Controls

ECM Overview

Ameresco installed new occupancy sensors in the classrooms, gymnasiums, libraries, restrooms, and administrative areas throughout the District. The Initial site inspections indicated there were few sensors in operation. In addition, Ameresco installed a new daylight harvesting system for the fixtures adjacent to the skylights in the PWLMS multi-purpose room. These controls turn off the lights during periods when ambient light levels are high.

M&V Overview

Under this measurement plan, Ameresco assumes performance risk for the operation of the new fixtures and the operability of the new controls. We performed equipment measurements to verify the performance of the installed equipment operates at the levels defined in the FGOA (power output at stated conditions). This was established by measuring 10 percent of fixtures (either individual fixtures or on a given lighting circuit) of the same lamp/ballast combination at full operating output (Documented above in ECM 1) DCSD agreed to the run-hours for the proposed system at the high and dimming output levels. Ameresco has no control over the hours of operation of the facility and cannot be reasonably requested to assume the risk for this variable. Therefore, the District and Ameresco agreed to these hours for the life of the contract. The following table summarizes the stipulated operating hours.

Table 3.4. ECM 2 Stipulated Operating Hours

Location	Annual Hours
Elementary Open Office	1,441
Elementary Staff Lounge	1,441
Elementary Library	2,096
Elementary Hallways	6,440
Elementary Classroom	1,859
Middle School Open Office	1,297
Middle School Staff Lounge	1,309
Middle School Hallways	7,487
Middle School Classroom	6,500
High School Conference Room	1,492
High School Office	2,393
High School Library	1,491
High School Work Room	1,467
High School Classroom	2,325
High School Hallways	6,540

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Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = LightingSavings - Heat + Cool$$

$$LightingSavings = DemandSavings + EnergySavings$$

$$DemandSavings = BaselineDemand - PostDemand$$

$$EnergySavings = BaselineEnergy - PostEnergy$$

$$BaselineDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times \$/kW \right)$$

$$PostDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{retro} \times \$/kW \right)$$

$$BaselineEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

$$PostEnergy = \sum_{buildings} \sum_{fixtures} \left(\left(kW_{DayRetro} \times Hrs_{DayRetro} + kW_{NightRetro} \times Hrs_{NightRetro} \right) \times \left(\$/kWh \right) \right)$$

$$Heat = \sum_{buildings} \frac{\dfrac{\sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} - \left(kW_{DayRetro} \times Hrs_{Dayretro} + kW_{Nightretro} \times Hrs_{Nightretro} \right) \right)}{12 months} \times Mths_{htg}}{BoilerEff \times 1{,}000{,}000\, btu/mmbtu} \times 3{,}413\, btu/kWh \times Util \times \$/mmbtu$$

$$Cool = \sum_{buildings} \frac{\dfrac{\sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} - \left(kW_{DayRetro} \times Hrs_{Dayretro} + kW_{Nightretro} \times Hrs_{Nightretro} \right) \right)}{12 months} \times Mths_{cool}}{CoolEff} \times Util \times \$/kWh$$

Where:

kWBase	=	Base fixture kW, as per lighting audit calculation included in the FGOA located in Appendix 4, subject to metering described below
kWDayretro	=	Retrofit fixture kW during the Day time, as per lighting audit calculation included in the FGOA located in Appendix 4, subject to metering described below
kWNightretro	=	Retrofit fixture kW During the Night time, as per lighting audit calculation included in the FGOA located in Appendix 4, subject to metering described below

HrsBase	=	Baseline fixture operating hours as per lighting audit calculation included in the FGOA
HrsDayretro	=	Retrofit fixture operating hours during Daylight, as per lighting audit calculation included in the FGOA
HrsNightretro	=	Retrofit fixture Night time operating hours, as per lighting audit calculation included in the FGOA
BoilerEff	=	Average heating system efficiency, as per lighting audit calculation included in the FGOA
CoolEff	=	Average cooling system performance (COP), as per lighting audit calculation included in the FGOA
Util	=	Factor representing the amount of energy transmitted to the space = 50 percent
Mthshtg	=	Number of months the heating penalty will occur, as per lighting audit calculation included in the FGOA
Mthscool	=	Number of months the cooling benefit will occur, as per lighting audit calculation included in the FGOA
$/MMBTU	=	Unit cost of fossil fuel, as per Utility Unit Rates in Appendix I
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a level of confidence in the calculation of savings, while limiting the costs of verification and, therefore, not negating the benefits of implementing the measure.

> Metering Plan

Ameresco measured the fixture input power for 10 percent of the installed lamp/ballast combinations. For the post retrofit measurement, the measurement occurred at the time of commissioning. Please refer to the savings values under ECM 1.

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the long-term inspection services provided as a part of this measure.

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ECM 3: Primary Site Gym Lighting and Controls

ECM Overview

Ameresco replaced the HID fixtures with new, six lamp fixtures. The lamps are 32 watt, 4-foot, fluorescent lamps powered by electronic ballasts. The fixtures were installed on a one-for-one basis.

M&V Overview

The M&V protocol for this ECM is based on the guidelines of the IPMVP Option A. Option A involves verifying that the measure has the potential to perform and to generate savings. Performance verification techniques include engineering calculations with one-time representative measured values, resulting in verification of performance. With this method, hours of operation are determined from one-time pre- and post-construction spot measurements of representative fixture types.

Ameresco assumes performance risk for the operation of the new fixtures. Equipment measurements were performed to verify the performance of the installed equipment will operate at the levels defined in the FGOA (power output at stated conditions). For the site operating hours, Ameresco has no control over the hours of operation of the facility and cannot be reasonably requested to assume the risk for this variable. Therefore, the District and Ameresco agreed to the run hours for the duration of the performance period. ECM-3 operating hours for the District gymnasiums are stipulated at 3500 hours.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = LightingSavings - Heat + Cool$$

$$LightingSavings = DemandSavings + EnergySavings$$

$$DemandSavings = BaselineDemand - PostDemand$$

$$EnergySavings = BaselineEnergy - PostEnergy$$

$$BaselineDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times \$/kW \right)$$

$$PostDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{retro} \times \$/kW \right)$$

$$BaselineEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

$$PostEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Retro} \times Hrs_{Retro} \times \left(\$/kWh \right) \right)$$

$$Heat = \sum_{buildings} \frac{\frac{\sum_{fixtures}\left(kW_{Base} \times Hrs_{Base} - kW_{Retro} \times Hrs_{retro}\right)}{12 months} \times Mths_{htg} \times 3{,}413 \, btu/kWh}{BoilerEff \times 1{,}000{,}000 \, btu/mmbtu} \times Util \times \$/mmbtu$$

$$Cool = \sum_{buildings} \frac{\frac{\sum_{fixtures}\left(kW_{Base} \times Hrs_{Base} - kW_{Retro} \times Hrs_{Retro}\right)}{12 months} \times Mths_{cool}}{CoolEff} \times Util \times \$/kWh$$

Where:

kWBase	=	Base fixture kW, as per lighting audit calculation included in the FGOA located in Appendix 5, subject to metering described below
kWRetro	=	Retrofit fixture kW, as per lighting audit calculation included in the FGOA located in Appendix 5, subject to metering described below
HrsBase	=	Baseline fixture operating hours as per lighting audit calculation included in the FGOA
HrsRetro	=	Retrofit fixture operating hours, as per lighting audit calculation included in the FGOA
BoilerEff	=	Average heating system efficiency, as per lighting audit calculation included in the FGOA
CoolEff	=	Average cooling system performance (COP), as per lighting audit calculation included in the FGOA
Util	=	Factor representing the amount of energy transmitted to the space = 50 percent
Mthshtg	=	Number of months the heating penalty will occur, as per lighting audit calculation included in the FGOA
Mthscool	=	Number of months the cooling benefit will occur, as per lighting audit calculation included in the FGOA
$/MMBTU	=	Unit cost of fossil fuel, as per Utility Unit Rates in Appendix I
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a high level of accuracy in the calculation of savings, while limiting the costs of verification.

> Metering Plan

Ameresco measured the fixture input power for 10 percent of the installed lamp/ballast combinations. For the post retrofit measurement, the measurement occurred between June 22 and June 26, 2009. The sample fell within 10 percent of the FGOA values therefore the FGOA values of savings will be used for the term of this contract, no change will be made. Details of these measurements are shown in Table 3.5.

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the annual inspection services provided as a part of this measure.

Table 3.5. Gym Lighting Retrofit Details

DOUGLAS COUNTY SCHOOL DISTRICT - GYM RETROFIT SCOPE												
Building	Location	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
CVMS	OLD GYM	250W MERCURY VAPOR	#N/A	12	290	3500	150W METAL HALIDE/ELEC	can kit	12	190	1.2	4200
CVMS	Totals			12					12		1.2	4200
DHS	114 small	250W MERCURY VAPOR	high bay	22	290	3500	6L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	18	165.79	3.4	11885.23
DHS	SMALL	400W METAL HALIDE	high bay	7	455	3500	6L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	8	165.79	1.9	6505.38
DHS	LARGE	400W METAL HALIDE	high bay	24	455	3500	6L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	24	165.79	6.9	24293.64
DHS	Totals			53					50		12.2	42684.25
GWHS	GYM	400W METAL HALIDE	high bay	36	455	3500	6L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	36	165.79	10.4	36440.46
GWHS	Totals			36					36		10.4	36440.46
PWLMS	GYM	250W MERCURY VAPOR	lowbay	44	290	3500	4L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	44	116.1	7.7	26780.6
PWLMS	SMALL	250W MERCURY VAPOR	trof acr 2x2	18	290	3500	4L4' T8 28w/ELEE HI/NEW-with sensors	new T8 hibay cage	18	116.1	3.1	10955.7
PWLMS	Totals			62.0					62.0		10.8	37736.3
				163					163			

Details of any Baseline or Savings Adjustments Made

None.

Measured Savings for this ECM

The savings for ECM 1 are combined with the savings from ECM 2.

Table 3.6. ECM 3 Savings Summary

Savings for Year 5	$11,777

Table 3.7. ECM 3 Saving Measurements

Douglas County School District Energy Performance Contract

Gym Lighting Retrofit Savings Verification

ESTIMATED Lighting Savings	DHS	GWHS	CVMS	PWLMS
Annual Peak kW	13.9	9.5	1.2	10.1
Annual kWh	48,787	33,138	4,200	35,371
DEMONSTRATED Lighting Savings				
Annual Peak kW	12.2	10.4	1.2	10.8
Annual kWh	42,684	36,440	4,200	37,736
Savings demonstrated to be within or above 10%?	**NO**	**YES**	**YES**	**YES**

If any of the above statements is "NO" does the overall project demonstrated savings fall withing 10% or voer the Estimated value for emtire ECM?	**YES**

STIPULATED Heating Interaction (Therms)	(634)	(431)	(323)	(465)

STIPULATED Lighting Control Savings [ECM3]	DHS	GWHS	CVMS	PWLMS
Annual kWh	10,685	7,258	0	8,268

Total Savings for ECM 3	DHS	GWHS	CVMS	PWLMS
Annual Peak kW	13.9	9.5	1.2	10.1
Annual kWh	59,472	40,396	4,200	43,639
Heating (Therms)	(634)	(431)	(323)	(465)

Table 3.8. ECM 3 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**3**
Measure Name:	**Upgrade Gymnasium Lighting**

ENERGY SAVINGS		**DHS**	**GWHS**	**CVMS**	**PWLMS**	**Summary**
Item	Units	Savings	Savings	Savings	Savings	
Electricity						
Energy Total	kWh	59,472	40,396	4,200	43,639	147,707
Demand On-Peak, Annual	kW	13.9	9.5	1.2	10	35
Fossil Fuel						
Natural Gas (NG)	Therms	-634	-431	-323	-465	-1,853

COST SAVINGS		**DHS**	**GWHS**	**CVMS**	**PWLMS**	**Summary**
Item	Units	Savings	Savings	Savings	Savings	
Electricity						
Energy Total	$	$ 5,568.18	$ 3,782.16	$ 393.23	$ 4,085.79	$ 13,829
Demand On-Peak, Annual	$	$ 106.98	$ 73.11	$ 9.24	$ 77.73	$ 267.06
Fossil Fuel						$ -
Natural Gas (NG)	$	$ (821.28)	$ (531.94)	$ (369.00)	$ (597.62)	$ (2,320)
					TOTAL SAVINGS:	**$ 11,777**

ECM 4: Upgrade Energy Management System

ECM Overview

Ameresco upgraded the energy management system (EMS) at all 11 schools. The scope included a new Tridium Niagra AX non-proprietary web-based front-end with graphical displays and quick-view screens on a new front-end work station computer terminal. The front-end communicates with each school's system via a new Tridium Jace controller with network access.

M&V Overview

The M&V protocol for this ECM is based on IPMVP Option B. A model created from information obtained during the FGOA was used to verify project savings.

Under this measure, Ameresco assumes performance risk for the equipment we install. Ameresco guarantees the HVAC equipment meets the design requirements for both the baseline and proposed conditions

As defined in the Commissioning Plan, Ameresco will monitor the EMS control set-points and sequences of operation to verify the system is operating according to the design intent.

For this measure, Ameresco and the DCSD agreed to stipulate the period of occupancy. Hours of usage were estimated based on detailed surveys, observations, customer input, and occupant interviews. These values are stated in FGOA. Since hours of usage are beyond Ameresco's control, the stated values will not be adjusted during the performance period.

The baseline internal loads were established via a site survey. Since future equipment loads are out of Ameresco's control, the loads were stipulated for the performance period. The baseline was documented in the computerized model and was agreed to by both parties.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = Electric + FossilFuel$$

$$Electric = ElecBase - ElecPost$$

$$ElecBase = \sum_{buildings} \left(kW_{Base} \times Hrs_{Base} \times \$/kWh \right)$$

$$ElecPost = \sum_{buildings} \left(kW_{Base} \times Hrs_{Retro} \times \$/kWh \right)$$

$$FossilFuel = FuelBase - FuelPost$$

$$FuelBase = \sum_{buildings} \sum_{Bin} \left(\frac{Load_{occ\,Base} \times Hrs_{occ} + Load_{unocc\,Base} \times Hrs_{unocc}}{Eff \times 1{,}000\, mbtu/mmbtu} \right) \times \$/mmbtu$$

$$FuelPost = \sum_{buildings} \sum_{Bin} \left(\frac{Load_{occ\,Retro} \times Hrs_{occ} + Load_{unocc\,Retro} \times Hrs_{unocc}}{Eff \times 1{,}000\, mbtu/mmbtu} \right) \times \$/mmbtu$$

Where:

kWBase	=	Total fan and pump motor kW under EMS control, as per calculation in FGOA
HrsRetro	=	Retrofit motor operating hours, as per calculation in FGOA
HrsBase	=	Base motor operating hours during reduced operations period, as per calculation in FGOA
LoadOccBase	=	Building load, including infiltration load, (MMBTU/hr) under current conditions during occupied hours, as per calculation in FGOA
LoadUnoccBase	=	Building load, including infiltration load, (MMBTU/hr) under current conditions during unoccupied hours, as per calculation in FGOA
LoadOccretro	=	Building load, including infiltration load, (MMBTU/hr) with reduced setpoint temperature and improved control, as per calculation in FGOA
LoadUnoccretro	=	Building load, including infiltration load, (MMBTU/hr) with night setback and improved control, as per calculation in FGOA
Hrsocc	=	Total bin hours during occupied period, as per calculation in FGOA
Hrsunocc	=	Total bin hours during unoccupied period, as per calculation in FGOA

Eff	=	Average heating system efficiency, as per calculation in FGOA
$/MMBTU	=	Unit cost of fossil fuel, as per Utility Unit Rates in Appendix I
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a high level of accuracy in the calculation of savings, while limiting the costs of verification associated with identifying every minor adjustment that could occur. The monitoring plan allows Ameresco to proactively monitor the facilities and identify variations from expected operating parameters, while allowing the DCSD to retain control and flexibility over its operations.

> Metering Plan

No long-term monitoring is included as part of this measure beyond year 3.

Measured Savings for this ECM

Table 3.9. ECM 4 Savings Summary

Savings for Year 5	$68,436

Table 3.10. ECM 4 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**4**
Measure Name:	**Energy Management Upgrades**

ENERGY SAVINGS		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity													
Energy Total	kWh	162,168	40,910	15,861	762	0	2,702	10,480	12,738	7,354	4,796	14,454	272,225
Demand On-Peak, Annual	kW	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0
Fossil Fuel													
Natural Gas (NG)	Therms	6,650	5,638	1,542	1,840	0	4,726	2,774	2,408	1,960	3,210	2,084	32,832

COST SAVINGS		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	MES	PHES	ZCES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity													
Energy Total	$	$ 15,183.30	$ 3,830.28	$ 1,485.02	$ 71.34	$ -	$ 252.98	$ 981.21	$ 1,192.62	$ 688.53	$ 449.04	$ 1,353.28	$ 25,488
Demand On-Peak, Annual	$	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fossil Fuel													$ -
Natural Gas (NG)	$	$ 8,614.41	$ 6,958.42	$ 2,091.88	$ 2,102.02	$ -	$ 6,700.52	$ 3,480.26	$ 3,242.13	$ 2,578.97	$ 4,289.20	$ 2,890.92	$ 42,949
												TOTAL SAVINGS:	**$ 68,436**

ECM 5: Computer Power Management

ECM Overview

Ameresco implemented a software-based solution to help the DCSD control the energy consumption of the computer systems. The energy audits prepared for each school reported the computer labs in several buildings were in operation 24 hours per day. This software program secure the computers during unoccupied periods.

M&V Overview

The M&V protocol for this measure is based on IPMVP Option B. The savings are determined from short term metering of the computers connected to the network. Prior to construction, the network was surveyed (using a software program) to determine the daily energy consumption. The survey period occurred over a 2-week period. The post construction conditions were metered for a 4-week period to determine the post retrofit power consumption. The stipulated variables based on the metered survey are 212.1 kWh per existing PC/monitor combination and 2500 computers.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = Baseline - PostInstallation$$

$$Baseline = MeasuredUse \times \left(\$/kWh \right)$$

$$PostInstallation = MeasuredUse_{Post} \times \left(\$/kWh \right)$$

Where:

Connected Load	=	Connected electrical load for vending machines, as per calculation in FGOA
HoursBase	=	Baseline average hours without load controllers, as per calculation in FGOA
HoursPost	=	Post retrofit average hours with load controllers, as per calculation in FGOA
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a level of confidence in the calculation of savings, while limiting the costs of verification and, therefore, not negating the benefits of implementing the measure.

> Metering Plan

No long-term monitoring or inspections are included as part of this measure.

Measured Savings for this ECM

Table 3.11. ECM 5 Savings Summary

Savings for Year 5	$65,373

Table 3.12. ECM 5 Saving Details

Douglas County School District Energy Performance Contract			
Energy and Cost Savings Summary			
Measure ID:	**5**		
Measure Name:	**Computer Power Management**		

ENERGY SAVINGS		**District Wide**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	kWh	642,776	642,776
Demand On-Peak, Annual	kW	15.6	16
Fossil Fuel			
Natural Gas (NG)	Therms	0	0

COST SAVINGS		**District Wide**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	$	$ 65,252.62	$ 65,253
Demand On-Peak, Annual	$	$ 120.06	$ 120.06
Fossil Fuel			$ -
Natural Gas (NG)	$	$ -	$ -
		TOTAL SAVINGS:	**$ 65,373**

ECM 6: Vending Machine Controls

ECM Overview

The high schools have several vending machines located throughout the campus; the middle and elementary schools have few to none. Ameresco installed controls on all vending equipment to reduce energy consumption.

M&V Overview

The M&V protocol for this measure is based on IPMVP Option A. The savings is based on a model of the usage associated with this measure due to the low percentage of savings associated with this measure in relation to the overall project savings and the specific costs associated with a more detailed verification approach.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = Baseline - PostInstallation$$

$$Baseline = ConnectedLoad \times Hours_{Base} \times \left(\$/kWh \right)$$

$$PostInstallation = ConnectedLoad \times Hours_{Post} \times \left(\$/kWh \right)$$

Where:

Connected Load	=	Connected electrical load for vending machines, as per calculation in FGOA, Appendix 8
HoursBase	=	Baseline average hours without load controllers, as per calculation in FGOA, Appendix 8
HoursPost	=	Post retrofit average hours with load controllers, as per calculation in FGOA, Appendix 8
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Metering Plan

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the long-term inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.13. ECM 6 Savings Summary

Savings for Year 5	$3,795

Table 3.14. ECM 6 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**6**
Measure Name:	**Vending Machine Controls**

ENERGY SAVINGS		**DHS**	**GWHS**	**CCMES**	**CVMS**	**PWLMS**	**GLSES**	**MES**	**PHES**	**Summary**
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity										
Energy Total	kWh	6,552	11,913	2,383	3,931	8,603	2,383	2,383	2,383	40,531
Demand On-Peak, Annual	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Fossil Fuel										
Natural Gas (NG)	Therms	0	0	0	0	0	0	0	0	0

COST SAVINGS		**DHS**	**GWHS**	**CCMES**	**CVMS**	**PWLMS**	**GLSES**	**MES**	**PHES**	**Summary**
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity										
Energy Total	$	$ 613.44	$ 1,115.38	$ 223.11	$ 368.05	$ 805.47	$ 223.11	$ 223.11	$ 223.11	$ 3,795
Demand On-Peak, Annual	$	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fossil Fuel										$ -
Natural Gas (NG)	$	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
									TOTAL SAVINGS:	**$ 3,795**

ECM 7: Install New Transformers

ECM Overview

Ameresco replaced the existing step-down transformers at the schools with new, energy-efficient transformers. The transformers installed under this measure are dry-type indoor transformers that step-down 480-volt (V) power to 208Y/120V power.

M&V Overview

The M&V protocol for this measure is based on IPMVP Option A. The savings is based on a model of the usage associated with this measure due to the low percentage of savings associated with this measure in relation to the overall project savings and the specific costs associated with a more detailed verification approach.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = DemandSavings + EnergySavings$$

$$DemandSavings = BaselineDemand - PostDemand$$

$$EnergySavings = BaselineEnergy - PostEnergy$$

$$BaselineDemand = \sum_{buildings} \sum_{transformers} \left(kW_{Base} \times \$/kW \right)$$

$$PostDemand = \sum_{buildings} \sum_{transformers} \left(kW_{retro} \times \$/kW \right)$$

$$BaselineEnergy = \sum_{buildings} \sum_{transformers} \left(kW_{Base} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

$$PostEnergy = \sum_{buildings} \sum_{transformers} \left(kW_{Retro} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

Where:

kWBase	=	Base transformer kW, as per ECM-7 calculation included in the FGOA in Appendix 9, subject to metering described below
kWRetro	=	Retrofit transformer kW, as ECM-7 calculation included in the FGOA in Appendix 9, subject to metering described below
HrsBase	=	Baseline transformer operating hours as per ECM-7 calculation included in the FGOA in Appendix 9
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I

$/kWh = Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a level of confidence in the calculation of savings, while limiting the costs of verification and, therefore, not negating the benefits of implementing the measure.

> Metering Plan

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the long-term inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.17. ECM 7 Savings Summary

Savings for Year 5	$53,163

Table 3.18. ECM 7 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	7
Measure Name:	**Energy Star Trasformers**

ENERGY SAVINGS		DHS	CCMES	CVMS	PWLMS	GLSES	JVES	MES	PHES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity										
Energy Total	kWh	204,397	63,570	46,760	91,532	46,599	58,464	25,894	25,894	563,110
Demand On-Peak, Annual	kW	20.6	6.8	5.3	9	4.7	5.7	2.6	2.6	57
Fossil Fuel										
Natural Gas (NG)	Therms	0	0	0	0	0	0	0	0	0

COST SAVINGS		DHS	CCMES	CVMS	PWLMS	GLSES	JVES	MES	PHES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	Savings	Savings	
Electricity										
Energy Total	$	$ 19,137.08	$ 5,951.87	$ 4,378.00	$ 8,569.87	$ 4,362.92	$ 5,473.81	$ 2,424.38	$ 2,424.38	$ 52,722
Demand On-Peak, Annual	$	$ 158.54	$ 52.33	$ 40.79	$ 68.50	$ 36.17	$ 43.87	$ 20.01	$ 20.01	$ 440.22
Fossil Fuel										$ -
Natural Gas (NG)	$	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
									TOTAL SAVINGS:	**$ 53,163**

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ECM 8: Install Trash Compactors

ECM Overview

Ameresco installed trash compactors at several District campuses to reduce the expense paid to the waste management company. American Trash Management monitored the compactors for the first guarantee year; DCSD is responsible for all monitoring activities for the remainder of the performance period.

M&V Overview

The measurement and verification protocol for confirming the waste management savings was based on IPMVP Option C and was to be performed for the first year of the Performance Period. The demonstrated values of the savings are stipulated for the remainder of the period. The values can be referenced in the M&V Matrix found on page 7 of this document and page 97 of the FGOA.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = \sum_{Month} (Baseline - PostInstallation)$$

$$Baseline = Waste_{Base}$$
$$Waste_{Base} = Base_{Billed}$$
$$PostInstallation = Waste_{Post}$$
$$Waste_{Post} = Post_{Billed}$$

Where:

BaseBilled = Baseline waste costs for the facilities affected by this measure only.

PostBilled = Actual post-retrofit waste costs for the facilities affected by this measure only.

> Expected Accuracy

The M&V for this ECM allows for a level of confidence in the calculation of savings, while limiting the costs of verification and, therefore, not negating the benefits of implementing the measure.

> Metering Plan

The projected energy savings anticipated for the first guarantee year were achieved within the twelve months following construction. Savings for subsequent years were considered attainable and stipulated for the term of the agreement. No further savings calculations will be made for this ECM.

Measured Savings for this ECM

Table 3.18. ECM 8 Savings Summary

Savings for Year 5	$90,923

Table 3.19. ECM 8 Savings Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**8**
Measure Name:	**Trash Compactors**

COST SAVINGS		DHS	GWHS	CVMS	PWLMS	GES	ZCES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	Savings	
Trash Costs								
Base Year	$	$ 40,740.00	$ 16,343.00	$ 21,061.80	$ 22,137.00	$ 14,397.12	$ 9,145.00	$ 123,823.92
Current Year	$	$ 9,282.90	$ 3,130.40	$ 7,173.15	$ 5,907.30	$ 4,500.80	$ 2,906.80	$ 32,901.35
Savings								
Trash Cost Savings	$	$ 31,457.10	$ 13,212.60	$ 13,888.65	$ 16,229.70	$ 9,896.32	$ 6,238.20	$ 90,923
							TOTAL SAVINGS:	**$ 90,923**

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ECM 9: DHS Bldg 500 HVAC Retrofit

ECM Overview

Ameresco installed two new, natural gas fired, heating only rooftop units in the same locations occupied by the existing equipment and connected them to the perimeter ductwork. The existing equipment and newly installed heating units are controlled by the existing Alerton system.

M&V Overview

There is no measurement and verification protocol required for this ECM. No accounting of savings.

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ECM 10: Exterior Lighting

ECM Overview

The contractual scope of work included the installation of new solar powered luminaries on new poles. Each fixture would have one 40-watt induction lamp. The original scope of work defined the operation of the fixtures to be eight hours per night. Six hours of operation would occur at dusk and two hour of operation would occur each morning. After further discussions with DCSD, it was determined that the fixtures may need to operate longer hours or non-stop from dawn to dusk. The solar powered systems are not capable of operating the fixtures for this long of a period in the Reno area and changes were necessary.

Change orders were issued and approved to alter the scope of work are discussed in the following subsections.

> CO 1

- The existing poles were re-wired with all new wiring. New conduit was installed where the existing conduit was damaged or where the existing wire could not be removed to allow the new wire to be pulled through.
- The parking lot was cut and patched as necessary to install the new wire and conduit. All in ground junction boxes were removed and eliminated where practical.
- New fixtures with one 40 watt induction lamp per fixture were installed on the existing poles. A demonstration area was installed for approval by DCSD before all of the poles were retrofitted.
- Poles were relocated and eight new poles were installed to help reduce the number of dark spaces in the lot. New poles match the existing poles as closely as possible.
- A 2.4-kW (DC) photovoltaic system was installed on the roof above the weight room at DHS. The system is interconnected with the electric utility service. A sub-meter and educational tools were provided to DCSD so that the system can be used as a learning tool for the students.
- The original scope of work called for select bollards at DHS to be retrofitted. This scope was altered to include the replacement of 85 HPS fixtures with 38 induction decorative fixtures on new poles.
- The original scope of work for this ECM also included the retrofit of School Zone flashers to include a photovoltaic solar component. The solar portion of this item was removed and the existing 150-watt school zone flashers were replaced with conventionally powered LED units.

> CO 3

- Two additional poles were installed to help reduce the number of dark spaces in the lot. New poles match the existing poles as closely as possible.

> CO 11

- Added to the scope of work for this ECM was the retrofit of two mercury vapor lights with five new induction fixtures.

None of these three change orders addressed the difference in savings that would occur for altering the scope of work and the estimated savings of 18 kW and 62,034 kWh is still the target. When the new scope was measured it was found to be within ± 10% of the original estimate, therefore no further action was taken to alter the scope of work to increase savings.

M&V Overview

The M&V protocol for this ECM is based on the guidelines of the IPMVP Option A. Option A involves verifying that the measure has the potential to perform and to generate savings. Performance verification techniques include engineering calculations with one-time representative measured values, resulting in measured verification of performance. With the chosen method, hours of operation are agreed to. Fixture wattages were determined from one-time before and after spot measurements of representative fixture types.

Energy Savings Calculation Methodology

> Savings Algorithm

$$Savings = LightingSavings$$

$$LightingSavings = DemandSavings + EnergySavings$$

$$DemandSavings = BaselineDemand - PostDemand$$

$$EnergySavings = BaselineEnergy - PostEnergy$$

$$BaselineDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times \$/kW \right)$$

$$PostDemand = \sum_{buildings} \sum_{fixtures} \left(kW_{retro} \times \$/kW \right)$$

$$BaselineEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Base} \times Hrs_{Base} \times \left(\$/kWh \right) \right)$$

$$PostEnergy = \sum_{buildings} \sum_{fixtures} \left(kW_{Retro} \times Hrs_{Retro} \times \left(\$/kWh \right) \right)$$

Where:

kWBase	=	Base fixture kW, as per lighting audit calculation included in the FGOA in Appendix 12, subject to metering described below
kWRetro	=	Retrofit fixture kW, as per lighting audit calculation included in the FGOA in Appendix 12, subject to metering described below
HrsBase	=	Baseline fixture operating hours as per lighting audit calculation included in the FGOA in Appendix 12
HrsRetro	=	Retrofit fixture operating hours, as per lighting audit calculation included in the FGOA in Appendix 12
$/kW	=	Unit cost of electric demand, as per Utility Unit Rates in Appendix I
$/kWh	=	Unit cost of electric energy, as per Utility Unit Rates in Appendix I

> Expected Accuracy

The M&V for this ECM allows for a high level of accuracy in the calculation of savings, while limiting the costs of verification.

> Metering Plan

Ameresco measured the fixture input power for 10 percent of the installed lamp/ballast combinations. For the post retrofit measurement, the measurement occurred at the time of commissioning, and the total sample values were within 10 percent of the FGOA values therefore no change to the savings calculations were made.

No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the long-term inspection services provided as a part of this measure.

Table 3.20. ECM 10 Measurement Details

Building	Location	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	Walk Way Areas	70W HI PRESSURE SODIUM	bollard	85	90	3,650	85W INDUCTION LAMP & BALLAST	new acorn fixt w/ pole	38	87	4.3	15,856
DHS	Parking Lot	400W METAL HALIDE	exterior pole mt	22	455	3,650	40W INDUCTION LAMP & BALLAST	pv pole iduction cut off roadway	29	43	8.8	31,985
DHS	Parking Lot	400W METAL HALIDE	exterior pole mt	4	455	3650	40W INDUCTION LAMP & BALLAST	pv pole iduction cut off roadway	7	43	1.5	5,544
DHS	DHS School Zone Flash	150W INC TRAFFIC	exterior pole mt	2	150	474	AMBER LED SYSTEM BALL	12" LED Yellow Ball	2	32	0.2	112
DHS				**113**					**76.0**		**14.9**	**53,496**
ZCES	ZCES School Zone Flas	150W INC TRAFFIC	exterior pole mt	4	150	2,328	20 WATT LED/NEW	12" LED Yellow Ball	4	32	*0.3*	*95*
ZCES				**4**					**4**		**0**	**95**
JVES	JVES School Zone Flas	150W INC TRAFFIC	exterior pole mt	2	150	316	AMBER LED SYSTEM BALL	12" LED Yellow Ball	2	32	*0.3*	*142*
JVES				**2**					**2**		**0**	**142**
CVMS	CVMS School Zone Flas	150W INC TRAFFIC	exterior pole mt	2	150	474	AMBER LED SYSTEM BALL	12" LED Yellow Ball	2	32	*0.3*	*95*
CVMS				**2**					**2**		**0**	**95**
PHES	PHES School Zone Flas	150W INC TRAFFIC	exterior pole mt	2	150	316	AMBER LED SYSTEM BALL	12" LED Yellow Ball	2	32	*0.3*	*142*
PHES				**2**					**2**		**0**	**142**
GES	GES Pedestrian Flasher	150W INC TRAFFIC	vertical mast	1	150	8760	AMBER LED SYSTEM BALL	12" LED Yellow Ball	1	32	*0.2*	*1,314*
GES				**1**					**1**		**0**	**1,314**

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Measured Savings for this ECM

Table 3.21. ECM 10 Savings Summary

Savings for Year 5	$5,947

Table 3.22. ECM 10 Measurement Information

ESTIMATED Exterior Lighting Savings	DHS[2]
Annual Peak kW	18.0
Annual kWh	62,034
DEMONSTRATED Exterior Lighting Savings	
Annual Peak kW[1]	18.6
Annual kWh[1]	58,965
Savings demonstrated to be within or above 10%?	**YES**

Total Savings for ECM 10	DHS2
Annual Peak kW	18.0
Annual kWh	62,034

Notes: 1) These values include a 2.4 kW solar aray as part of this ECM due to Scope changes.
2) This includes a small number of fixtures located at ZCES, JVES, CVMS, PHES and GES

Table 3.23. ECM 10 Solar Photovoltaic Measurement Information

PVWatts

AC Energy & Cost Savings

Cautions for Interpreting the Results

Station Identification	
City:	Reno
State:	Nevada
Latitude:	39.50° N
Longitude:	119.78° W
Elevation:	1341 m
PV System Specifications	
DC Rating:	2.4 kW
DC to AC Derate Factor:	0.770
AC Rating:	1.8 kW
Array Type:	Fixed Tilt
Array Tilt:	39.5°
Array Azimuth:	180.0°
Energy Specifications	
Cost of Electricity:	9.7 ¢/kWh

Results			
Month	Solar Radiation (kWh/m²/day)	AC Energy (kWh)	Energy Value ($)
1	3.94	222	21.53
2	4.91	248	24.06
3	5.87	320	31.04
4	6.62	347	33.66
5	6.39	335	32.49
6	6.80	335	32.49
7	7.19	352	34.14
8	7.25	361	35.02
9	7.37	360	34.92
10	6.07	322	31.23
11	4.78	252	24.44
12	4.04	227	22.02
Year	5.94	3681	357.06

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Table 3.24. ECM 10 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**10**
Measure Name:	**Exterior Lighting Retrofit**

ENERGY SAVINGS		**DHS**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	kWh	62,034	62,034
Demand On-Peak, Annual	kW	18.0	18
Fossil Fuel			
Natural Gas (NG)	Therms		

COST SAVINGS		**DHS**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	$	$ 5,808.06	$ 5,808
Demand On-Peak, Annual	$	$ 138.53	$ 138.53
Fossil Fuel			$ -
Natural Gas (NG)	$	$ -	$ -
		TOTAL SAVINGS:	**$ 5,947**

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CO 16
FIM 1: Fan Coil Replacement

ECM Overview

Ameresco replaced 40 FCUs at Pinion Hills Elementary School and 31 FCUs at Minden Elementary School. The existing units had reached the end of their useful life. Cleaning the coils and repairing the fans would have been as expensive as the replacement costs and it would not have extended the life of the units. New control valves and direct digital controls were installed and connected to the EMS.

M&V Overview

A thorough, two-day inspection was performed to confirm the energy management system (EMS) was controlling the new fan coil units (FCU) according to the system design. Every control point assigned in the building automation system was tested for proper communication. All sensors were evaluated for accuracy using calibrated testing equipment and adjusted when necessary. Control valves were opened and closed to verify response and range of operation. Any issues with controllers, components and wiring not replaced by the measure were identified and corrected. The system software was tested to confirm the control points are responding and reporting to the front end.

Each FCU motor was measured to confirm power consumption was within specified limits. The results of these measurements can be found in Appendix B of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

Once the hardware and software commissioning was completed, a review of the sequence of operation was performed to authenticate the control procedures. Once the sequence was tested, the system became operational. The documents associated with this process have been included in Appendix C of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

> Metering Plan

The savings for this ECM are stipulated for the duration of the performance period. No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the annual inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.25. CO16 FIM 1 Savings Summary

Savings for Year 5	$390

Table 3.26. CO 16 FIM 1 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**CO 16 - FIM 1**
Measure Name:	**Fan Coil Replacement**

ENERGY SAVINGS		**MES**	**PHES**	**Summary**
Item	Units	Savings	Savings	
Electricity				
Energy Total	kWh	1,255	1,533	2,788
Demand On-Peak, Annual	kW	7.2	9.6	17
Fossil Fuel				
Natural Gas (NG)	Therms	0	0	0

COST SAVINGS		**MES**	**PHES**	**Summary**
Item	Units	Savings	Savings	
Electricity				
Energy Total	$	$ 117.50	$ 143.53	$ 261
Demand On-Peak, Annual	$	$ 55	$ 74	$ 129
Fossil Fuel				$ -
Natural Gas (NG)	$	$ -	$ -	$ -
			TOTAL SAVINGS:	**$ 390**

CO 16
FIM 2: Boiler Replacement

ECM Overview

Ameresco replaced the boilers at PHES, MES, SES, PWLMS, and CCMES. The existing units were nearing the end of their useful life. The new boilers with copper finned heat exchangers are much more efficient than the old boilers. The new boilers are controlled through the energy management system

M&V Overview

A thorough, two-day inspection was performed to confirm the energy management system (EMS) was controlling the new boilers according to the system design. Every control point assignment in the building automation system was tested for proper communication. All sensors were evaluated for accuracy using calibrated testing equipment and adjusted when necessary. Control valves were opened and closed to verify response and range of operation. Any issues with controllers, components and wiring not replaced by the measure were identified and corrected. The system software was tested to confirm the control points are responding and reporting to the front end.

Once the hardware and software commissioning was completed, a review of the sequence of operation was performed to authenticate the control procedures. Once the sequence was tested, the system became operational. The documents associated with this process have been included in Appendix C of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

The boiler combustion test results can be found in Appendix D of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

> Metering Plan

The savings for this ECM are stipulated for the term of the project. No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the annual inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.27. CO16 FIM 2 Savings Summary

Savings for Year 5	$12,876

Table 3.28. CO 16 FIM 2 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**CO 16 - FIM 2**
Measure Name:	**Bolier Replacement**

ENERGY SAVINGS		PWLMS	CCMES	MES	PHES	SES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	
Electricity							
Energy Total	kWh	0	-4,759	19,582	19,582	0	34,405
Demand On-Peak, Annual	kW	0.0	0.0	0.0	0.0	0.0	0
Fossil Fuel							
Natural Gas (NG)	Therms	2,420	1,134	1,326	1,085	1,620	7,585

COST SAVINGS		PWLMS	CCMES	MES	PHES	SES	Summary
Item	Units	Savings	Savings	Savings	Savings	Savings	
Electricity							
Energy Total	$	$ -	$ (445.57)	$ 1,833.40	$ 1,833.40	$ -	$ 3,221
Demand On-Peak, Annual	$	$ -	$ -	$ -	$ -	$ -	$ -
Fossil Fuel							$ -
Natural Gas (NG)	$	$ 3,134.87	$ 1,399.58	$ 1,798.85	$ 1,239.50	$ 2,082.02	$ 9,655
						TOTAL SAVINGS:	**$ 12,876**

CO 17
FIM 1: Fan Coil Replacement

ECM Overview

Ameresco replaced seven FCUs at C.C. Meneley Elementary School. The existing units had reached the end of their useful life. Attempting to clean the coils and repair the fans would have been almost as expensive as the replacement costs and it would not have extended the life of the units. New control valves and direct digital controls were installed and connected to the EMS.

M&V Overview

A thorough, two-day inspection was performed to confirm the energy management system (EMS) was controlling the new fan coil units (FCU) according to the system design. Every control point assignment in the building automation system was tested for proper communication. All sensors were evaluated for accuracy using calibrated testing equipment and adjusted when necessary. Control valves were opened and closed to verify response and range of operation. Any issues with controllers, components and wiring not replaced by the measure were identified and corrected. The system software was tested to confirm the control points are responding and reporting to the front end.

Each FCU motor was measured to confirm power consumption was within specified limits. The results of these measurements can be found in Appendix B of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

Once the hardware and software commissioning was completed, a review of the sequence of operation was performed to authenticate the control procedures. Once the sequence was tested, the system became operational. The documents associated with this process have been included in Appendix C of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

> Metering Plan

The savings for this ECM are stipulated for the term of the project. No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the a annual inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.29. CO17 FIM 1 Savings Summary

Savings for Year 5	$19

Table 3.30. CO 17 FIM 1 Saving Details

Douglas County School District Energy Performance Contract	
Energy and Cost Savings Summary	
Measure ID:	**CO 17 - FIM 1**
Measure Name:	**Fan Coil Replacement**

ENERGY SAVINGS		**CCMES**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	kWh	208	208
Demand On-Peak, Annual	kW	0.0	0
Fossil Fuel			
Natural Gas (NG)	Therms	0	0

COST SAVINGS		**CCMES**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	$	$ 19.47	$ 19
Demand On-Peak, Annual	$	$ -	$ -
Fossil Fuel			$ -
Natural Gas (NG)	$	$ -	$ -
		TOTAL SAVINGS:	**$ 19**

CO 17
FIM 2: Boiler Replacement

ECM Overview

Ameresco replaced the boilers at JVES. The existing units were nearing the end of their useful life. The new boilers, with copper finned heat exchangers, are more efficient than the existing equipment. The existing hot water pumps were removed and a new primary/secondary heating hot water pumping system was installed. Two new primary and two new secondary pumps were installed with a new variable speed drive on each of the secondary pump motors. The secondary pumps are controlled via a new heating hot water differential pressure sensor. The sensor maintains a differential pressure between the supply and return lines.. Two of the three existing three-way heating hot water valves were replaced with two-way valves. One existing three-way valve remained in place.

M&V Overview

An extensive point-by-point inspection was performed over two days to confirm the Energy Management Control System was performing as intended and regulating the boilers and pumps as proposed. Every control point assigned in the building automation system was tested for proper communication. All sensors were evaluated for accuracy using calibrated testing equipment and adjusted when necessary. Control valves were opened and closed to verify response and range of operation. Any issues with controllers, components and wiring not replaced by the measure were identified and corrected. The system software was tested to confirm the control points are responding and reporting to the front end.

Once the hardware and software commissioning was completed, a review of the sequence of operation was performed to authenticate the control procedures. Once the sequence was tested, the system became operational. The documents associated with this process have been included in Appendix C of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

The boiler combustion test results can be found in Appendix D of the DCSD CO 16 and 17 Final Commissioning Report dated April 19, 2011.

> Metering Plan

The savings for this ECM are stipulated for the duration of the performance period. No long-term monitoring is included as part of this measure. Please refer to the ECM Inspection Plan for details on the annual inspection services provided as a part of this measure.

Measured Savings for this ECM

Table 3.31. CO17 FIM 2 Savings Summary

Savings for Year 5	$1,758

Table 3.32. CO 17 FIM 2 Saving Details

Douglas County School District Energy Performance Contract			
Energy and Cost Savings Summary			
Measure ID:	**CO 17 - FIM 2**		
Measure Name:	**Boiler Replacement**		
ENERGY SAVINGS		**JVES**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	kWh	2,686	2,686
Demand On-Peak, Annual	kW	0.0	0
Fossil Fuel			
Natural Gas (NG)	Therms	1,163	1,163

COST SAVINGS		**JVES**	**Summary**
Item	Units	Savings	
Electricity			
Energy Total	$	$ 251.48	$ 251
Demand On-Peak, Annual	$	$ -	$ -
Fossil Fuel			$ -
Natural Gas (NG)	$	$ 1,506.55	$ 1,507
		TOTAL SAVINGS:	**$ 1,758**

4.0 Performance Period Operations and Maintenance

Commissioning activities during the contract period coincide with annual M&V on-site activities and vary by measure. In general, on-site activities include interviews with on-site maintenance personnel responsible for the equipment, reviews of maintenance records, and a visual inspection of the equipment. Most of the ECMs are inspected annually during the performance period (Post construction through the end of the performance period as established in the FGOA and the PBC) with the results provided in this section.

4.1 Warranty Timeframes

Table 4.0 lists the warranty end dates for each ECM.

Table 4.0. ECM Warranty Dates

ECM	Description	Acceptance Date	Warranty End Date
1	Lighting Retrofit	07/01/09	Please See Appendix G for Details
2	Lighting Controls	07/01/09	
3	Gym Lighting	05/01/09	
4	Upgrade EMS	07/01/09	06/30/10
5	Computer Power Management	12/31/08	12/30/09
6	Vending Misers	9/22/08	09/21/13
7	New Transformers	12/10/08	12/09/33
8	Trash Compactors	10/09/08	Parts: 10/08/10 Structure: 10/08/11
9	DHS Bldg 500 HVAC Retrofit	12/22/08	12/21/09
10	Exterior Lighting	04/16/09	Please See Appendix G
CO 16 FIM 1	Replace FCUs at PHES and MES	08/16/10	10/01/11
CO 16 FIM 2	Replace Boilers at PHES, MES, SES, PWLMS, and CCMES	09/10/10	11/15/11
CO 17 FIM 1	Replace FCUs at CCMES	09/20/10	09/19/11
CO 17 FIM 2	Replace Boilers at JVES	09/10/10	09/09/11

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4.2 Operation and Maintenance Scope

The following work is a detailed description of Ameresco's maintenance and operation obligations under this contract. Any additional work requested, beyond the scope identified below, can be performed on a time and material basis as directed by the DCSD, subject to the mark-ups identified in the contract.

ECM-1: Lighting System Improvements

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating except:

- Two 13-watt CFLs that were on the exterior of building 604/605 have been replaced with newer units.
- Classroom 602/603 has been removed.
- Five 15-watt CFLs were not located in the Teacher's Lounge of Carson Valley Middle School.
- Four 1L2' T8 vanity fixtures were removed in the Gardnerville Elementary School remodel.

The inspection forms for this ECM can be found in Appendix A.

> System Operation

Not applicable for this measure.

ECM 2: Lighting Control Measure

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating except:

- Several sensors at GES and CCMES have been removed due to repurposing some areas in each school.

The inspection forms for this ECM can be found in Appendix A.

> System Operation

Not applicable for this measure.

ECM 3: Gymnasium Lighting Measure

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

> System Operation

Not applicable for this measure.

ECM 4: Upgrade Energy Management System

> Inspection Results

No inspection conducted. Original inspections for years 1 through 3 were in conjunction with the maintenance of the system.

> System Operation

Not applicable for this measure.

> Preventive Maintenance

The Preventative Maintenance agreement between DCSD and BCS concluded in November 2013. It was suggested that DCSD contact BCS and initiate a discussion to determine if continued EMS maintenance would be of a benefit to DCSD.

ECM 5: Computer Power Management

> System Operation

Not applicable for this measure.

ECM 6: Vending Machine Controls

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating except one soda machine in the food lab at Pau-Wa-Lu Middle School in not working and a snack machine has been removed from the same site. The inspection forms for this ECM can be found in Appendix A.

ECM 7: Energy Efficient Transformers

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating as intended and cool to the touch. The inspection forms for this ECM can be found in Appendix A.

ECM 8: Trash Management

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

> Preventive Maintenance

The original intent was to retain American Trash Management to perform preventative maintenance and operate the system. Operating the system involved remote monitoring of the weight of trash and calling the waste hauler when trash removal was required. At the beginning of Year 2, DCSD decided to cancel the Operations and Maintenance contract with American Trash Management and self-perform these tasks. DCSD has been made aware of the critical nature of operating the trash compactors and the basis of savings for the ECM. During the inspections during Year 3, it was noted that DCSD has been maintaining and operating the trash compactors in a professional fashion, preserving the ability of the units to generate savings.

ECM 9: DHS Bldg 500 HVAC Retrofit

> System Operation

Not applicable for this measure.

ECM 10: Exterior Lighting

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating as intended. During the inspection it was noted that the conduit running to the Solar PV array on the roof of Douglas High School has separated at one of the connectors and should be repaired. The PV panels are generally free of debris but should be cleaned to enhance the unit's ability to generate electricity. The inspection forms for this ECM can be found in Appendix A.

CO 16 FIM 1: Fan Coil Replacement

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems inspected were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

CO 16 FIM 2: Boiler Replacement

> Inspection Results

This ECM was inspected between February 24 and 26, 2015. All systems were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

CO 17 FIM 1: Fan Coil Replacement

> Inspection Results

This ECM was inspected between February 19 and 20, 2013. All systems were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

CO 17 FIM 2: Boiler Replacement

> Inspection Results

This ECM was inspected between February 19 and 20, 2013. All systems were found to be intact and operating as intended. The inspection forms for this ECM can be found in Appendix A.

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A Inspection Forms

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Project Name: DCSD
Project #: 03117

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Table of Contents

for The Douglas County School District

General M&V Inspection Instructions
Site Specific M&V Inspection Instructions
ECM 1: Lighting System Improvements
ECM 2: Lighting Controls
ECM 3: Gym Lighting
ECM 4: EMS
ECM 5: Computer Power Management
ECM 6: Vending Machine Controls
ECM 7: Energy Efficient Transformers
ECM 8: Trash Management
ECM 10: DHS Exterior Lighting
CO 16 - FIM 1: Fan Coil Replacements
CO 16 - FIM 2: Boiler Replacements
CO 17 - FIM 1: Fan Coil Replacements
CO 17 - FIM 2: Boiler Replacements

Douglas County School District

Englewood, Colorado

GENERAL PROJECT MEASUREMENT & VERIFICATION INSTRUCTIONS

The Measurement and Verification (M&V) Plan requires that specific M&V activities be performed, on the thirteen Energy Conservation Measures (ECMs) associated with this project. This document contains the M&V worksheets for eleven of these ECMs, which must be filled out, in order to fulfill the M&V inspection requirements. The table on the following page provides an overview of the eleven ECMs involved in this inspection with a brief explanation of what M&V activities are required for each.

The Ameresco Operations Manager will gathering the M&V information, for each ECM, during each Performance Period. An owner representative will be given the option to witness the gathering of this M&V information. Each of the blank M&V worksheets, provided in this document, must be signed by the Owner Representative and the Ameresco Operations Manager.

A

ECM 1: Lighting System Improvements DOUG 775-230-6240

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#1

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	CCMES	ART HALL	2L2' T8/EL LO	YES	
2	CCMES	ART HALL	2L2' T8/EL LO		
3	CCMES	ART HALL	2L2' T8/EL LO		
4	CCMES	ART HALL	2L2' T8/EL LO		
5	CCMES	ART HALL	2L2' T8/EL LO		
6	CCMES	ART HALL	2L2' T8/EL LO		
7	CCMES	ART HALL	2L2' T8/EL LO		
8	CCMES	ART HALL	2L2' T8/EL LO		
9	CCMES	ART HALL	2L2' T8/EL LO		
10	CCMES	ART HALL	2L2' T8/EL LO		
11	CCMES	ART HALL	2L2' T8/EL LO		

Owner's Representative [Print Name]: Becky Rugger **Signature:** **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-24-15

ECM 1: Lighting System Improvements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

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	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	Carson Valley Middle	13	4L4' T8 28w	YES / YES	TANDOM W 4L4' T8 28W
2	Carson Valley Middle	13	4L4' T8 28w		
3	Carson Valley Middle	13	4L4' T8 28w		
4	Carson Valley Middle	13	4L4' T8 28w		
5	Carson Valley Middle	13	4L4' T8 28w		
6	Carson Valley Middle	13	4L4' T8 28w		
7	Carson Valley Middle	13	4L4' T8 28w		
8	Carson Valley Middle	13	4L4' T8 28w		
9	Carson Valley Middle	13	4L4' T8 28w		
10	Carson Valley Middle	13	4L4' T8 28w		
11	Carson Valley Middle	13	4L4' T8 28w		

Owner's Representative [Print Name]: Charles Lang **Signature:** Charles Lang **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

A

ECM 1: Lighting System Improvements DAVE - 559-975-5568

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#4

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	Carson Valley Middle	22	1L4' T8 32w	YES / YES	
2	Carson Valley Middle	22	1L4' T8 32w		
3	Carson Valley Middle	22	1L4' T8 32w		
4	Carson Valley Middle	22	1L4' T8 32w		
5	Carson Valley Middle	22	1L4' T8 32w		
6	Carson Valley Middle	22	1L4' T8 32w		
7	Carson Valley Middle	22	1L4' T8 32w		
8	Carson Valley Middle	22	1L4' T8 32w		
9	Carson Valley Middle	22	1L4' T8 32w		
10	Carson Valley Middle	22	1L4' T8 32w		
11	Carson Valley Middle	22	1L4' T8 32w		

Owner's Representative [Print Name]: Charles Lang **Signature:** **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-24-15

ECM 1: Lighting System Improvements

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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	DHS	116	1L4' T8 28w	YES / YES	GIRLS LOCKER ROOM
2	DHS	116	1L4' T8 28w		
3	DHS	116	1L4' T8 28w		
4	DHS	116	1L4' T8 28w		
5	DHS	116	1L4' T8 28w		
6	DHS	116	1L4' T8 28w		
7	DHS	116	1L4' T8 28w		
8	DHS	116	1L4' T8 28w		
9	DHS	116	1L4' T8 28w		
10	DHS	116	1L4' T8 28w		
11	DHS	116	1L4' T8 28w		

Owner's Representative [Print Name]: JASON BERRY **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

B

ECM 1: Lighting System Improvements JASON - 775-901-2260

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#5

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	DHS	REMOVED ~~602~~ 613	13W COMPACT	YES / YES	PORTABLES)
2	DHS	REMOVED ~~603~~ 614	13W COMPACT	YES / YES	
3	DHS	604	13W COMPACT	YES →	NEW LED FXTR
4	DHS	605	13W COMPACT	YES →	NEW LED FXTR
5	DHS	606	13W COMPACT	YES / YES	
6	DHS	607	13W COMPACT	↓ ↓	
7	DHS	608	13W COMPACT		
8	DHS	609	13W COMPACT		
9	DHS	610	13W COMPACT	YES / YES	

Owner's Representative [Print Name]: JASON BERRY **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-25-15

ECM 1: Lighting System Improvements

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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	GES	39	2L4' T8 32w	YES / YES	
2	GES	39	2L4' T8 32w		
3	GES	39	2L4' T8 32w		
4	GES	39	2L4' T8 32w		
5	GES	39	2L4' T8 32w		
6	GES	39	2L4' T8 32w		
7	GES	39	2L4' T8 32w		
8	GES	39	2L4' T8 32w		
9	GES	39	2L4' T8 32w		
10	GES	39	2L4' T8 32w		

Owner's Representative [Print Name]: Nick Gitthens **Signature:** Nick Gitthens **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [illegible] **Date:** 2-24-15

A

ECM 1: Lighting System Improvements NICK 775-720-6385

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#2

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	GES	RR	1L2' T8 vanity	YES / YES	R214B
2	GES	RR	1L2' T8 vanity	YES / YES	R 214A
3	GES	RR	1L2' T8 vanity	NO / NO	REMOVED FROM FACILITY
4	GES	RR	1L2' T8 vanity	NO / NO	" "
5	GES	RR	~~1L2' T8 vanity~~	YES / YES	OVERHEAD 12" ROUND OLD BLD
6	GES	RR	~~1L2' T8 vanity~~	YES / YES	" " " "

Owner's Representative [Print Name]: Nick Gitthens **Signature:** [signature] **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 1: Lighting System Improvements

AMERESCO
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Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	JVES	CAFETORIUM	6L4' T8 28w	YES / YES	
2	JVES	CAFETORIUM	6L4' T8 28w		
3	JVES	CAFETORIUM	6L4' T8 28w		
4	JVES	CAFETORIUM	6L4' T8 28w		
5	JVES	CAFETORIUM	6L4' T8 28w		
6	JVES	CAFETORIUM	6L4' T8 28w		
7	JVES	CAFETORIUM	6L4' T8 28w		
8	JVES	CAFETORIUM	6L4' T8 28w		
9	JVES	CAFETORIUM	6L4' T8 28w		
10	JVES	CAFETORIUM	6L4' T8 28w		

Owner's Representative [Print Name]: Charlie Lang **Signature:** [signature] **Date:** 2-25-15.

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-25-15

C

ECM 1: Lighting System Improvements RANDY - 775-267-3267

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L#

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	JVES	K HALL	2L4' T8 U 30w	YES / YES	
2	JVES	K HALL	2L4' T8 U 30w		
3	JVES	K HALL	2L4' T8 U 30w		
4	JVES	K HALL	2L4' T8 U 30w		
5	JVES	K HALL	2L4' T8 U 30w		
6	JVES	K HALL	2L4' T8 U 30w		
7	JVES	K HALL	2L4' T8 U 30w		
8	JVES	K HALL	2L4' T8 U 30w		
9	JVES	K HALL	2L4' T8 U 30w		
10	JVES	K HALL	2L4' T8 U 30w		
11	JVES	K HALL	2L4' T8 U 30w		

Owner's Representative [Print Name]: Charlie Lang **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN **Signature:** [signature] **Date:** 2-25-15

B

ECM 1: Lighting System Improvements SCOTT - 775-790-1538

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8#

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	MES	ADMIN	2L4' T8 28w	YES / YES	(OTHERS TURNED OFF)
2	MES	ADMIN	2L4' T8 28w		
3	MES	ADMIN	2L4' T8 28w		
4	MES	ADMIN	2L4' T8 28w		
5	MES	ADMIN	2L4' T8 28w		
6	MES	ADMIN	2L4' T8 28w		
7	MES	ADMIN	2L4' T8 28w		
8	MES	ADMIN	2L4' T8 28w		
9	MES	ADMIN	2L4' T8 28w		
10	MES	ADMIN	2L4' T8 28w		
11	MES	ADMIN	2L4' T8 28w		

Owner's Representative [Print Name]: Charles Lang **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN **Signature:** [signature] **Date:** 2-25-15

B

ECM 1: Lighting System Improvements DARLENE -775-901-3618

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#7

Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	PHES	A7	3L4' T8 28w	YES / YES	(NON REFLECTOR)
2	PHES	A7	3L4' T8 28w		
3	PHES	A7	3L4' T8 28w		
4	PHES	A7	3L4' T8 28w		
5	PHES	A7	3L4' T8 28w		
6	PHES	A7	3L4' T8 28w		
7	PHES	A7	3L4' T8 28w		
8	PHES	A7	3L4' T8 28w		
9	PHES	A7	3L4' T8 28w		
10	PHES	A7	3L4' T8 28w		
11	PHES	A7	3L4' T8 28w		

Owner's Representative [Print Name]: Charles Lang **Signature:** [signature] **Date:** 2-23-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-25-15

ECM 1: Lighting System Improvements

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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	PWLMS	EXITS	3 WATT LED	YES	
2	PWLMS	EXITS	3 WATT LED		
3	PWLMS	EXITS	3 WATT LED		
4	PWLMS	EXITS	3 WATT LED		
5	PWLMS	EXITS	3 WATT LED		
6	PWLMS	EXITS	3 WATT LED		
7	PWLMS	EXITS	3 WATT LED		
8	PWLMS	EXITS	3 WATT LED		
9	PWLMS	EXITS	3 WATT LED		
10	PWLMS	EXITS	3 WATT LED		
11	PWLMS	EXITS	3 WATT LED		

Owner's Representative [Print Name]: Tray Owen **Signature:** [signature] **Date:** 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 1: Lighting System Improvements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

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	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	PWLMS	HALL	26W COMPACT	YES / YES	
2	PWLMS	HALL	26W COMPACT		
3	PWLMS	HALL	26W COMPACT		
4	PWLMS	HALL	26W COMPACT		
5	PWLMS	HALL	26W COMPACT		
6	PWLMS	HALL	26W COMPACT		
7	PWLMS	HALL	26W COMPACT		
8	PWLMS	HALL	26W COMPACT		
9	PWLMS	HALL	26W COMPACT		

Owner's Representative [Print Name]: Troy Owen **Signature:** [signature] **Date:** 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

A

ECM 1: Lighting System Improvements TROY - 775 - 781 - 0329

#10

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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	PWLMS	MULTI PURPOSE ROOM	150W MH	YES	
2	PWLMS	MULTI PURPOSE ROOM	150W MH		
3	PWLMS	MULTI PURPOSE ROOM	150W MH		
4	PWLMS	MULTI PURPOSE ROOM	150W MH		
5	PWLMS	MULTI PURPOSE ROOM	150W MH		
6	PWLMS	MULTI PURPOSE ROOM	150W MH		
7	PWLMS	MULTI PURPOSE ROOM	150W MH		
8	PWLMS	MULTI PURPOSE ROOM	150W MH		
9	PWLMS	MULTI PURPOSE ROOM	150W MH		
10	PWLMS	MULTI PURPOSE ROOM	150W MH		

Owner's Representative [Print Name]: Troy Owen **Signature:** [signature] **Date:** 2/24/15

Ameresco Operations Manager: ROBERT NEUMAN **Signature:** [signature] **Date:** 2-24-15

ECM 1: Lighting System Improvements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

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	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	ZCES	HALL	2x 13W CFL	YES/YES	EAST HALL
2	ZCES	HALL	2x 13W CFL		
3	ZCES	HALL	2x 13W CFL		
4	ZCES	HALL	2x 13W CFL		
5	ZCES	HALL	2x 13W CFL		
6	ZCES	HALL	2x 13W CFL		
7	ZCES	HALL	2x 13W CFL		
8	ZCES	HALL	2x 13W CFL		N/W HALL
9	ZCES	HALL	2x 13W CFL		
10	ZCES	HALL	2x 13W CFL		

Owner's Representative [Print Name]: Eric Pacheco **Signature:** [signature] **Date:** 2/26/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-26-15

D

ECM 1: Lighting System Improvements ERIC - 530-721-0039

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#9

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	ZCES	RR	20W COMPACT	YES / YES	~~2x~~ WOMENS RR (ADULT) UPPER
2	ZCES	RR	20W COMPACT	YES / YES	~~2x~~ BOYS RR "
3	ZCES	RR	20W COMPACT	YES / YES	
4	ZCES	RR	20W COMPACT	YES / YES	
5	ZCES	Paper CLOSET	20W COMPACT	YES / YES	RM 23B
6	ZCES	Paper CLOSET	20W COMPACT	NO	RM CHANGE 2x NEW 2L4' T8 28W

Owner's Representative [Print Name]: Eric Pacheco **Signature:** [signature] **Date:** 2/26/15

Ameresco Operations Manager: Steven D. Croxton CEM, CBCP **Signature:** [signature] **Date:** 2-26-15
ROBERT NEWMAN

D

ECM 1: Lighting System Improvements ROMIRO - 775-901-1760

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#11

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture Type	Unit in Place and Operational? [Y or N]	Reading in EMS
1	GWHS	SHOP	18W COMPACT	YES / YES	OUTDOOR CANOPY / AUTO SHOP
2	GWHS	SHOP	18W COMPACT		
3	GWHS	SHOP	18W COMPACT		
4	GWHS	SHOP	18W COMPACT		
5	GWHS	SHOP	18W COMPACT		
6	GWHS	SHOP	18W COMPACT		
7	GWHS	SHOP	18W COMPACT		
8	GWHS	SHOP	18W COMPACT		
9	GWHS	SHOP	18W COMPACT		

Owner's Representative [Print Name]: Charles Lang **Signature:** **Date:** 2-26-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-26-15

Douglas County School District

ECM 2: Lighting Controls

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

Statistical Sampling Criteria	
Precision	20%
Confidence	80%
Population Size, N	Sample Size, n
4	3
8	5
12	6
16	7
20	8
30	9
40	9
50	10
60	10
70	10
80	10
90	10
100	10
200	11
300	11
400	11
500	11
> 500	11

ECM 2: Lighting Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

	Facility	Location	Control Type	Unit in Place and Operational? [Y or N]	Notes
1	GES	20	Fixture	YES / YES	MULTI PURPOSE
2	GES	20	Fixture	YES / YES	NEW RM # 304
3	GES	20	Fixture		
4	GES	20	Fixture		
5	GES	20	Fixture		
6	GES	20	Fixture		
7	GES	20	Fixture		
8	GES	20	Fixture		
9	GES	20	Fixture		
10	GES	20	Fixture		

Owner's Representative [Print Name]: Nick Gatthens **Signature:** Nick Gatthens **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [illegible] **Date:** 2-24-15

ECM 2: Lighting Controls

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

	Facility	Location	Control Type	Unit in Place and Operational? [Y or N]	Notes
1	GES	1	Fixture-Photo	NO / NO →	ROOM CHANGE w/ CEILING DT (222)
2	GES	3	Fixture-Photo	YES / YES	NEW RM # 210
3	GES	5	Fixture-Photo	YES / YES	NEW RM # 212
4	GES	20	Fixture-Photo	YES WALL DT	#304 } ROOM CHANGE
5	GES	20	Fixture-Photo	" "	#304 }
6	GES	21	Fixture-Photo	YES / WALL DT	RM 302
7	GES	22	Fixture-Photo	YES / WALL MT DT	RM # 380 COMPUTER LAB
8	GES	35	Fixture-Photo	YES / WALL MT DT	OLD BLD } STORAGE
9	GES	36	Fixture-Photo	YES WALL MT DT	OLD BLD
10	GES	40	Fixture-Photo	YES WALL MT DT	" "

Owner's Representative [Print Name]: Nick Gitthens **Signature:** Nick Gitthens **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 2: Lighting Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

	Facility	Location	Control Type	Unit in Place and Operational? [Y or N]	Notes
1	CCMES	MEN	WALL	YES / YES	
2	CCMES	KITCHEN	WALL	YES / YES	
3	CCMES	M&L.	WALL	YES / YES	
4	CCMES	NURSE	WALL	NO —	NONE FOUND
5	CCMES	STAFF	WALL	YES / YES	WOMEN'S REST ROOM
6	CCMES	PRACTICE ROOM	WALL	YES	NOT USED / STORAGE
7	CCMES	PRACTICE ROOM	WALL	YES	
8	CCMES	PRACTICE ROOM	WALL	YES	
9	CCMES	PRACTICE ROOM	WALL	YES	
10	CCMES	EARLY CHILDHOOD	WALL	NO / IN ROOM	ROOM CHANGE / STILL IN OPERATION @ SMALL ROOMS (3)

Owner's Representative [Print Name]: Becky Rugger **Signature:** [signature] **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 2: Lighting Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

	Facility	Location	Control Type	Unit in Place and Operational? [Y or N]	Notes
1	CCMES	CONFERENCE	WALLDT	NO / NO	ROOM CHANGE TO V.P.
2	CCMES	ESL	WALLDT	NO / NO	ROOM CHANGE TO P.E. STORAGE
3	CCMES	GT-STILES	WALLDT	YES / YES	BOOK CASE IN FRONT
4	JVES	CONFERENCE	WALLDT		
5	JVES	SPEECH	WALLDT		
6	JVES	GT-STILES	WALLDT		

Owner's Representative [Print Name]: Becky Ruggan **Signature:** [signature] **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 2: Lighting Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117

Annual inspection of a sample of installed systems to verify proper operation and calibrate as needed.

	Facility	Location	Control Type	Unit in Place and Operational? [Y or N]	Notes
1	CCMES	CONFERENCE	WALLDT		
2	CCMES	ESL	WALLDT		
3	CCMES	GT-STILES	WALLDT		
4	JVES	CONFERENCE	WALLDT	YES / YES	RM CHANGE TO VICE PRINCIPLE
5	JVES	SPEECH	WALLDT	YES / YES	CEILING DT
6	JVES	GT-STILES	WALLDT	YEY / YES	CEILING DT / (O'DONNELL)

Owner's Representative [Print Name]: Charlie Lang **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN **Signature:** [signature] **Date:** 2-25-15

Douglas County School District

ECM 3: Gym Lighting

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

ECM 3: Gym Lighting

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Location	Fixture Type	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	CVMS Old Gym	150W MH	YES	YES	
2	CVMS Old Gym	150W MH			
3	CVMS Old Gym	150W MH			
4	CVMS Old Gym	150W MH			
5	CVMS Old Gym	150W MH			
6	CVMS Old Gym	150W MH			

Owner's Representative [Print Name]: Charles Lang **Signature:** **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-24-15

ECM 3: Gym Lighting

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

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	Facility	Fixture Type	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS Large Gym	6L4' T8 28w/ELEE HI	YES	YES	
2	DHS Large Gym	6L4' T8 28w/ELEE HI			
3	DHS Large Gym	6L4' T8 28w/ELEE HI			
4	DHS Large Gym	6L4' T8 28w/ELEE HI			
5	DHS Large Gym	6L4' T8 28w/ELEE HI			
6	DHS Large Gym	6L4' T8 28w/ELEE HI			
7	DHS Large Gym	6L4' T8 28w/ELEE HI			
8	DHS Large Gym	6L4' T8 28w/ELEE HI			
9	DHS Large Gym	6L4' T8 28w/ELEE HI			
10	DHS Large Gym	6L4' T8 28w/ELEE HI			

Owner's Representative [Print Name]: JASON BERRY **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

ECM 3: Gym Lighting

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Fixture Type	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	PWLMS Gym	4L4' T8 28w/ELEE HI	YES	YES	
2	PWLMS Gym	4L4' T8 28w/ELEE HI			
3	PWLMS Gym	4L4' T8 28w/ELEE HI			
4	PWLMS Gym	4L4' T8 28w/ELEE HI			
5	PWLMS Gym	4L4' T8 28w/ELEE HI			
6	PWLMS Gym	4L4' T8 28w/ELEE HI			
7	PWLMS Gym	4L4' T8 28w/ELEE HI			
8	PWLMS Gym	4L4' T8 28w/ELEE HI			
9	PWLMS Gym	4L4' T8 28w/ELEE HI			
10	PWLMS Gym	4L4' T8 28w/ELEE HI			

Owner's Representative [Print Name]: Troy Owen **Signature:** [illegible] **Date:** 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [illegible] **Date:** 2-24-15

Douglas County School District

ECM 6: Vending Machine Controls

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

ECM 6: Vending Machine Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	CCMES	Soda Machine	YES	YES	
2	CCMES	Snack Machine	YES	YES	
3	PWLMS	Soda Machine			
4	PWLMS	Soda Machine			
5	PWLMS	Soda Machine			
6	PWLMS	Soda Machine			
7	PWLMS	Snack Machine			

Owner's Representative [Print Name]: Becky Ruggu **Signature:** [signature] **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 6: Vending Machine Controls

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	CCMES	Soda Machine			
2	CCMES	Snack Machine			
3	PWLMS	Soda Machine	YES	YES	TEACHER LOUNGE
4	PWLMS	Soda Machine	YES	NO	FOOD LAB
5	PWLMS	Soda Machine	YES	YES	QUAD AREA (ENCLOSED)
6	PWLMS	Soda Machine	YES	YES	" " "
7	PWLMS	Snack Machine	NO	NO	REMOVED FROM CAMPUS

Owner's Representative [Print Name]: Troy Owen **Signature:** [signature] **Date:** 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

Douglas County School District

ECM 7: Energy Efficient Transformers

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

ECM 7: Energy Efficient Transformers

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Size (kVA)	Unit in Place and Operational? [Y or N]	Notes
1	Douglas HS - Main Elec Room	Energy Efficiency Transformers	150 ~~15~~	YES/YES	CHANGED TO 150 DUE TO NEW CONST
2	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	15 30	YES/YES	500 BLD MAIN ELECT
3	Paw-Wa-Lu Elem - Upstairs Gym Mech R	Energy Efficiency Transformers	30		
4	Douglas HS - Weight Room	Energy Efficiency Transformers	37.5	YES/YES	
5	Douglas HS - Drama	Energy Efficiency Transformers	45	YES/YES	
6	Douglas HS - Auto Shop	Energy Efficiency Transformers	~~50~~	NOT ONSITE	NEW AREA & TRANS (3) @ WELDING SHOP
7	Jacks Valley Elem - Boiler Room	Energy Efficiency Transformers	30 75	YES/YES	IN PRINT SHOP
8	Pinon Hills Elem - Main Elec Room	Energy Efficiency Transformers	75		
9	Pinon Hills Elem - A-Wing - Custodial Elec	Energy Efficiency Transformers	75		
10	Minden Elem - Main Elec Room	Energy Efficiency Transformers	75		
11	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	112.5		
12	Jacks Valley Elem - Mr. Turner's Room	Energy Efficiency Transformers	112.5		
13	Douglas HS - Auto Shop	Energy Efficiency Transformers	112.5 ~~150~~	YES/YES	
14	Scarselli Elem - Main Elec Room	Energy Efficiency Transformers	300		

Owner's Representative [Print Name]: JASON BERRY Signature: Date: 2-25-15

Ameresco Operations Manager: ROBERT KEWAN Signature: Date: 2-25-15

ECM 7: Energy Efficient Transformers

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Size (kVA)	Unit in Place and Operational? [Y or N]	Notes
1	Douglas HS - Main Elec Room	Energy Efficiency Transformers	15		
2	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	30	YES / YES	
3	Paw-Wa-Lu Elem - Upstairs Gym Mech R	Energy Efficiency Transformers	30		
4	Douglas HS - Weight Room	Energy Efficiency Transformers	37.5		
5	Douglas HS - Drama	Energy Efficiency Transformers	45		
6	Douglas HS - Auto Shop	Energy Efficiency Transformers	50		
7	Jacks Valley Elem - Boiler Room	Energy Efficiency Transformers	75	YES / YES	
8	Pinon Hills Elem - Main Elec Room	Energy Efficiency Transformers	75		
9	Pinon Hills Elem - A-Wing - Custodial Elec	Energy Efficiency Transformers	75		
10	Minden Elem - Main Elec Room	Energy Efficiency Transformers	75		
11	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	112.5	YES / YES	
12	Jacks Valley Elem - Mr. Turner's Room	Energy Efficiency Transformers	112.5	YES / YES	MRS GIBBS RM
13	Douglas HS - Auto Shop	Energy Efficiency Transformers	150		
14	Scarselli Elem - Main Elec Room	Energy Efficiency Transformers	300		

Owner's Representative [Print Name]: Charlie Lang Signature: [signature] Date: 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN Signature: [signature] Date: 2-25-15

ECM 7: Energy Efficient Transformers

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Size (kVA)	Unit in Place and Operational? [Y or N]	Notes
1	Douglas HS - Main Elec Room	Energy Efficiency Transformers	15		
2	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	30		
3	Paw-Wa-Lu Elem - Upstairs Gym Mech R	Energy Efficiency Transformers	30	YES / YES	
4	Douglas HS - Weight Room	Energy Efficiency Transformers	37.5		
5	Douglas HS - Drama	Energy Efficiency Transformers	45		
6	Douglas HS - Auto Shop	Energy Efficiency Transformers	50		
7	Jacks Valley Elem - Boiler Room	Energy Efficiency Transformers	75		
8	Pinon Hills Elem - Main Elec Room	Energy Efficiency Transformers	75		
9	Pinon Hills Elem - A-Wing - Custodial Elec	Energy Efficiency Transformers	75		
10	Minden Elem - Main Elec Room	Energy Efficiency Transformers	75		
11	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	112.5		
12	Jacks Valley Elem - Mr. Turner's Room	Energy Efficiency Transformers	112.5		
13	Douglas HS - Auto Shop	Energy Efficiency Transformers	150		
14	Scarselli Elem - Main Elec Room	Energy Efficiency Transformers	300		

Owner's Representative [Print Name]: Tray [illegible] Signature: [illegible] Date: 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN Signature: [illegible] Date: 2-24-15

ECM 7: Energy Efficient Transformers

AMERESCO
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Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Size (kVA)	Unit in Place and Operational? [Y or N]	Notes
1	Douglas HS - Main Elec Room	Energy Efficiency Transformers	15		
2	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	30		
3	Paw-Wa-Lu Elem - Upstairs Gym Mech R	Energy Efficiency Transformers	30		
4	Douglas HS - Weight Room	Energy Efficiency Transformers	37.5		
5	Douglas HS - Drama	Energy Efficiency Transformers	45		
6	Douglas HS - Auto Shop	Energy Efficiency Transformers	50		
7	Jacks Valley Elem - Boiler Room	Energy Efficiency Transformers	75		
8	Pinon Hills Elem - Main Elec Room	Energy Efficiency Transformers	75		
9	Pinon Hills Elem - A-Wing - Custodial Elec	Energy Efficiency Transformers	75		
10	Minden Elem - Main Elec Room	Energy Efficiency Transformers	75		
11	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	112.5		
12	Jacks Valley Elem - Mr. Turner's Room	Energy Efficiency Transformers	112.5		
13	Douglas HS - Auto Shop	Energy Efficiency Transformers	150		
14	Scarselli Elem - Main Elec Room	Energy Efficiency Transformers	300	YES / YES	

Owner's Representative [Print Name]: Tim Grove Signature: Tim V. Grove Date: 2/24/2015

Ameresco Operations Manager: ROBERT NEWMAN Signature: [illegible] Date: 2-24-15

ECM 7: Energy Efficient Transformers

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Equipment Description	Size (kVA)	Unit in Place and Operational? [Y or N]	Notes
1	Douglas HS - Main Elec Room	Energy Efficiency Transformers	15		
2	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	30		
3	Paw-Wa-Lu Elem - Upstairs Gym Mech R	Energy Efficiency Transformers	30		
4	Douglas HS - Weight Room	Energy Efficiency Transformers	37.5		
5	Douglas HS - Drama	Energy Efficiency Transformers	45		
6	Douglas HS - Auto Shop	Energy Efficiency Transformers	50		
7	Jacks Valley Elem - Boiler Room	Energy Efficiency Transformers	75		
8	Pinon Hills Elem - Main Elec Room	Energy Efficiency Transformers	75	YES/YES	
9	Pinon Hills Elem - A-Wing - Custodial Elec	Energy Efficiency Transformers	75	YES/YES	
10	Minden Elem - Main Elec Room	Energy Efficiency Transformers	75		
11	Jacks Valley Elem - PE Storage	Energy Efficiency Transformers	112.5		
12	Jacks Valley Elem - Mr. Turner's Room	Energy Efficiency Transformers	112.5		
13	Douglas HS - Auto Shop	Energy Efficiency Transformers	150		
14	Scarselli Elem - Main Elec Room	Energy Efficiency Transformers	300		

Owner's Representative [Print Name]: Charles Lang Signature: Date: 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN Signature: Date: 2-25-15

Douglas County School District

ECM 8: Trash Management

M&V Instructions

Annual inspection of installed systems to verify proper operation

ECM 8: Trash Management

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to verify proper operation

	Facility	Equipment Description	Unit in Place ? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS	Trash Compactor	YES	YES	RELOCATED TO NEW AREA DUE TO CONST
2	GWHS	Trash Compactor			
3	CVMS	Trash Compactor			
4	PWLMS	Trash Compactor			
5	GES	Trash Compactor			
6	ZCES	Trash Compactor			

Owner's Representative [Print Name]: JASON BERRY **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

ECM 8: Trash Management

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to verify proper operation

	Facility	Equipment Description	Unit in Place ? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS	Trash Compactor			
2	GWHS	Trash Compactor			
3	CVMS	Trash Compactor			
4	PWLMS	Trash Compactor			
5	GES	Trash Compactor			
6	ZCES	Trash Compactor			

Owner's Representative [Print Name]: Charlie Lang **Signature:** **Date:** 2-26-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-26-15

ECM 8: Trash Management

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to verify proper operation

	Facility	Equipment Description	Unit in Place ? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS	Trash Compactor			
2	GWHS	Trash Compactor			
3	CVMS	Trash Compactor	YES	YES	
4	PWLMS	Trash Compactor			
5	GES	Trash Compactor			
6	ZCES	Trash Compactor			

Owner's Representative [Print Name]: Charles Lang **Signature:** **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-24-15

ECM 8: Trash Management

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to verify proper operation

AMERESCO
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	Facility	Equipment Description	Unit in Place ? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS	Trash Compactor			
2	GWHS	Trash Compactor			
3	CVMS	Trash Compactor			
4	PWLMS	Trash Compactor	YES	YES	NONE TO REPORT
5	GES	Trash Compactor			
6	ZCES	Trash Compactor			

Owner's Representative [Print Name]: Troy Owen **Signature:** [signature] **Date:** 2/24/15

Ameresco Operations Manager: Robert Neuman **Signature:** [signature] **Date:** 2-24-15

ECM 8: Trash Management

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to verify proper operation

AMERESCO
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	Facility	Equipment Description	Unit in Place ? [Y or N]	Unit Operational? [Y or N]	Notes
1	DHS	Trash Compactor			
2	GWHS	Trash Compactor			
3	CVMS	Trash Compactor			
4	PWLMS	Trash Compactor			
5	GES	Trash Compactor			
6	ZCES	Trash Compactor			

Owner's Representative [Print Name]: Eric Pacheco **Signature:** [signature] **Date:** 2/26/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-26-15

Douglas County School District

ECM 10: DHS Exterior Lighting

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	JVES	School Zone Flasher	12" LED Yellow Ball		
2	JVES	School Zone Flasher	12" LED Yellow Ball		
3	CVMS	School Zone Flasher	12" LED Yellow Ball		
4	CVMS	School Zone Flasher	12" LED Yellow Ball	YES / YES	
5	DHS	School Zone Flasher	12" LED Yellow Ball	YES / YES	

Owner's Representative [Print Name]: Charles Lang **Signature:** [signature] **Date:** 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-24-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: **Douglas County School District**
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	JVES	School Zone Flasher	12" LED Yellow Ball		
2	JVES	School Zone Flasher	12" LED Yellow Ball		
3	CVMS	School Zone Flasher	12" LED Yellow Ball		
4	CVMS	School Zone Flasher	12" LED Yellow Ball		
5	DHS	School Zone Flasher	12" LED Yellow Ball		

Owner's Representative [Print Name]: Charlie Lang **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	JVES	School Zone Flasher	12" LED Yellow Ball		
2	JVES	School Zone Flasher	12" LED Yellow Ball		
3	CVMS	School Zone Flasher	12" LED Yellow Ball		
4	CVMS	School Zone Flasher	12" LED Yellow Ball		
5	DHS	School Zone Flasher	12" LED Yellow Ball		

Owner's Representative [Print Name]: JASON BERRY **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	DHS	Parking Lot	40W INDUCT	YES / YES	
2	DHS	Parking Lot	40W INDUCT		
3	DHS	Parking Lot	40W INDUCT		
4	DHS	Parking Lot	40W INDUCT		
5	DHS	Parking Lot	40W INDUCT		
6	DHS	Parking Lot	40W INDUCT		
7	DHS	Parking Lot	40W INDUCT		
8	DHS	Parking Lot	40W INDUCT		
9	DHS	Parking Lot	40W INDUCT		

Owner's Representative [Print Name]: JASON BERRY **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-25-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	DHS	Roof	PV Array	YES / YES	

Owner's Representative [Print Name]: JASON BERRY **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT HEWMAN **Signature:** [signature] **Date:** 2-25-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: **Douglas County School District**
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	ZCES	School Zone Flasher	12" LED Yellow Ball		
2	ZCES	School Zone Flasher	12" LED Yellow Ball		
3	ZCES	School Zone Flasher	12" LED Yellow Ball		

Owner's Representative [Print Name]: Eric Pacheco **Signature:** [signature] **Date:** 2/26/15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-26-15

ECM 10: DHS Exterior Lighting

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Location	Fixture	Unit in Place and Operational? [Y or N]	Notes
1	DHS	Exterior Walkways	85W INDUCT	YES / YES	
2	DHS	Exterior Walkways	85W INDUCT		
3	DHS	Exterior Walkways	85W INDUCT		
4	DHS	Exterior Walkways	85W INDUCT		
5	DHS	Exterior Walkways	85W INDUCT		
6	DHS	Exterior Walkways	85W INDUCT		
7	DHS	Exterior Walkways	85W INDUCT		
8	DHS	Exterior Walkways	85W INDUCT		
9	DHS	Exterior Walkways	85W INDUCT		

Owner's Representative [Print Name]: JASON BELBY **Signature:** **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** **Date:** 2-25-15

Douglas County School District

CO 16 - FIM 1: Fan Coil Replacements

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

CO 16 - FIM 1: Fan Coil Replacements

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Unit Number	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes

CO 16 - FIM 1: Fan Coil Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Unit Number	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	Minden ES	FC1	YES	YES	@ ADMIN / MAIN ELECT ROOM
2	Minden ES	FC2			
3	Minden ES	FC49			
4	Minden ES	FC4			
5	Minden ES	FC5			
6	Minden ES	FC3			
7	Minden ES	FC7			
8	Minden ES	FC6			
9	Minden ES	FC19	YES	YES	LIBRARY RESOURCE
10	Minden ES	FC20	YES	YES	

Owner's Representative [Print Name]: Charles Lang **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN **Signature:** [signature] **Date:** 2-25-15

CO 16 - FIM 1: Fan Coil Replacements

AMERESCO
Green • Clean • Sustainable

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

	Facility	Unit Number	Unit in Place? [Y or N]	Unit Operational? [Y or N]	Notes
1	Pinon Hills ES	FC-2	YES	YES	ABOVE MAIN OFFICE AREA
2	Pinon Hills ES	FC1			& MAIN ELECT ROOM
3	Pinon Hills ES	FC3			
4	Pinon Hills ES	FC7			
5	Pinon Hills ES	FC6			
6	Pinon Hills ES	FC5			
7	Pinon Hills ES	FC49			
8	Pinon Hills ES	FC4			
9	Pinon Hills ES	FC19	YES	YES	ABOVE RESOURCE CENTER
10	Pinon Hills ES	FC20	YES	YES	

Owner's Representative [Print Name]: Charles Lang **Signature:** [signature] **Date:** 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN **Signature:** [signature] **Date:** 2-25-15

Douglas County School District

CO 16 - FIM 2: Boiler Replacements

M&V Instructions

Annual inspection of installed systems to identify ability to maintain persistence of savings

CO 16 - FIM 2: Boiler Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
Green • Clean • Sustainable

Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	CC Meneley ES	Boiler 1	1	YES	YES	LEAD / LAG
2	CC Meneley ES	Boiler 2	1	YES	YES	" "
3	CC Meneley ES	Primary Pump 1	1	YES	YES	
4	CC Meneley ES	Primary Pump 2	1	YES	YES	
5	CC Meneley ES	Secondary Pump 1	1	YES	YES	
6	CC Meneley ES	Secondary Pump 2	1	YES	YES	
7	CC Meneley ES	VFD on SP-1	1	YES	YES	
8	CC Meneley ES	VFD on SP-2	1	YES	YES	

Owner Representative (Print Name): Becky Rugar Signature: B Rugar Date: 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN Signature: [signature] Date: 2-24-15

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CO 16 - FIM 2: Boiler Replacements TIM - 775-450-8626

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
Green • Clean • Sustainable

Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	GL Scarselli ES	Boiler 1	1	YES	YES	LEAD / LAG (THERMAL SOLUTIONS)
2	GL Scarselli ES	Boiler 2	1	YES	YES	
3	GL Scarselli ES	Primary Pump 1	1	YES	YES	
4	GL Scarselli ES	Primary Pump 2	1	YES	YES	

Owner Representative (Print Name): Tim Grove Signature: Tim P. Grove Date: 2/24/2015

Ameresco Operations Manager: ROBERT NEWMAN Signature: [illegible] Date: 2-24-15

CO 16 - FIM 2: Boiler Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
Green • Clean • Sustainable

Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	Minden ES	Boiler 1	1	YES	YES	LEAD / LAG
2	Minden ES	Boiler 2	1	↓	↓	
7	Minden ES	VFD on PP-1	1	↓	↓	
8	Minden ES	VFD on PP-2	1	↓	↓	

Owner Representative (Print Name): Charles Lung Signature: Date: 2-25-15

Ameresco Operations Manager: ROBERT NEWMAN Signature: Date: 2-25-15

CO 16 - FIM 2: Boiler Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
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Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	Pau-Wau-Lu MS	Boiler 1	1	YES	YES	LEAD / LAG
2	Pau-Wau-Lu MS	Boiler 2	1	YES	YES	

Owner Representative (Print Name): Troy Owen Signature: Date: 2/24/15

Ameresco Operations Manager: ROBERT NEWMAN Signature: Date: 2-24-15

CO 16 - FIM 2: Boiler Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
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Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	Pinon Hills ES	Boiler 1	1	YES	YES	LEAD / LAG
2	Pinon Hills ES	Boiler 2	1	YES		
7	Pinon Hills ES	VFD on PP-1	1	YES		
8	Pinon Hills ES	VFD on PP-2	1	YES		

Owner Representative (Print Name): Charles Lang Signature: Date: 2-25-15

Ameresco Operations Manager: ROBERT NEUMANN Signature: Date: 2-25-15

Douglas County School District

CO 17 - FIM 1: Fan Coil Replacements

M&V Instructions

Annual inspection of a sample of installed systems to verify proper operation

CO 17 - FIM 1: Fan Coil Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of a sample of installed systems to verify proper operation

AMERESCO
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Item	Building	Location	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	CCMES	FC-1	1	YES	YES	
2	CCMES	FC-2	1			
3	CCMES	FC-3	1			
4	CCMES	FC-4	1			
5	CCMES	FC-5	1			
6	CCMES	FC-6	1			
7	CCMES	FC-7	1			

Owner Representative (Print Name): Becky Reggio Signature: [signature] Date: 2-24-15

Ameresco Operations Manager: ROBERT NEWMAN Signature: [signature] Date: 2-24-15

Douglas County School District

CO 17 - FIM 2: Boiler Replacements

M&V Instructions

Annual inspection of installed systems to identify ability to maintain persistence of savings

CO 17 - FIM 2: Boiler Replacements

Project Name: Douglas County School District
Project #: 03117
Annual inspection of installed systems to identify ability to maintain persistence of savings

AMERESCO
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Item	Building	Unit	Qty	Unit in Place? [Yes or No]	Unit Operational? [Yes or No]	Notes
1	Jacks Valley ES	Boiler 1	1	YES	YES	LEAD / LAG
2	Jacks Valley ES	Boiler 2	1	YES		
3	Jacks Valley ES	Primary Pump 1	1	YES		
4	Jacks Valley ES	Primary Pump 2	1	YES		
5	Jacks Valley ES	Secondary Pump 1	1	YES		
6	Jacks Valley ES	Secondary Pump 2	1	YES		
7	Jacks Valley ES	VFD on SP-1	1	YES		
8	Jacks Valley ES	VFD on SP-2	1	YES		

Owner Representative (Print Name): Charlie Lang Signature: Date: 2-25-15

Ameresco Operations Manager: ROBERT NEUMAN Signature: Date: 2-25-15

B Equipment Warranty Information

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AMERESCO/DOUGLAS COUNTY SCHOOLS
MATERIALS

QUANTITY	MFG	MODEL#	DESCRIPTION	WARRANTY	WARRANTY START DATE	CONTACT NAME	CONTACT NUMBER	CONTACT EMAIL
Lighting Materials								
20	PHILIPS	EL/MTD 13W	13W/COMPACT	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
12	PHILIPS	EL/MTD 18W	18W/COMPACT	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
27	PHILIPS	EL/MTD 23W	23W/COMPACT	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
60	PHILIPS	FB32T8/ADV/6/XEW	32W/U BEND LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
25	PHILIPS	F17T8/TL/841/PLUS/ALTO	17W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
8	PHILIPS	F25T8/TL/841/PLUS/ALTO	25W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2000	PHILIPS	F32T8/ADV841/EW/ALTO	28W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
378	PHILIPS	FB32T8/ADV/6/XEW	25W/U BEND LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
467	PHILIPS	F17/T8/TL/841/PLUS/ALTO	17W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
15890	PHILIPS	F32T8/ADV841/EW/ALTO	28W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
1020	PHILIPS	F32T8/TL841/ALTO	32W/T8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
17	PHILIPS	MHC100/U/M/4K	100W MH LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
66	PHILIPS	CDM150/U/PS/4K	150W MH LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
172	PHILIPS	F25T8/TL/841/ALTO	PHILIPS LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
4	PHILIPS	PLC-26W/41-4P	CFL FOR DELRAY	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
68	PHILIPS	PLT-32W/841/4P	CFL FOR DELRAY	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
16	PHILIPS	PLT-42W/41/4P	CFL FOR DELRAY	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
22	PHILIPS	PLT-26W/35/4P	CFL FOR DELRAY	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2	PHILIPS	PLC-13W/35/4P	CFL FOR DELRAY	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
6	PHILIPS	EL/MTD 13W	13W CFL TWISTER	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
18	PHILIPS	EL/MTD 18W	18W CFL TWISTER	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
4	PHILIPS	15639-8	32W CFL TWISTER	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
14	PHILIPS	ELA PAR 38-23W	23W PAR 38 FLD	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
60	PHILIPS	F17/T8/TL841/PLUS	17W LINEAR	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
4000	PHILIPS	F32T8/ADV841/EW ALTO	28W LINEAR	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
675	PHILIPS	F32T8/ADV841/EW	28W T-8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
100	PHILIPS	F32T8/TL841/ALTO	32W T-8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
29	PHILIPS	F17/T8/TL/841/PLUS	17W-T-8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2	PHILIPS	MHC100/U/M/4K	100W METAL HALIDE LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
16	PHILIPS	F17/T8/TL/841/PLUS	17W T-8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
500	PHILIPS	F32T8/ADV841/EW	28W T-8 LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
5	PHILIPS	MHC50/U/MP/3K ALTO	50W MH LAMP	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
23	PHILIPS	EL/A-PAR38-23	COMPACT FLU PAR	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2	DURAGUARD	CV14024	CFL CANOPY	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
7	DURAGUARD	FL11006	100W FLOOD	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
7	DURAGUARD	WP10030	70W WALLPACK	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
2	DURAGUARD	WP10042	100W WALLPACK	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
3	DURAGUARD	WP10070	175W WALLPACK	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
48	DURAGUARD	D-50-DPS-12X12-MT	50W FIXTURE	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
16	DURAGUARD	D-50-DPS-12X12-MT-QRS	50W FIXTURE QRS	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
2	DURAGUARD	CV14024	13W CANOPY	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
1	DURAGUARD	WP10030	50W WALL PACK	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
7	DURAGUARD	D50HPS12X12 120/277	50W CANOPY	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
24	DURAGUARD	D13PLSWP 120/277	13W WALL PACK	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com
24	DURAGUARD	D-13-PL-5X8-120V	13W VANDALPROOF FIX	1 Year Lamp/ 2Years ballast; 3 Years on	7/1/2009	Ken Garver	800-736-7991	kg3@duraguard.com

41	TECHBRITE	R894T8XMRXX0000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
421	TECHBRITE	R4212T8XMRXX000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
93	TECHBRITE	R2212T8XMRXX000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
302	TECHBRITE	R491T8XMRXX0000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
225	TECHBRITE	R141T8XMRXX0000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
100	TECHBRITE	R894T8XMRXX0000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
995	TECHBRITE	R4212T8XMRXX000	REFLECTOR	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
10	TECHBRITE	R2212T8XMRXX000	2X2 REFLEC. KIT	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
568	TECHBRITE	R4212T8XMRXX000	2X4 REFLEC. KIT	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
200	TECHBRITE	N/A	SPECIAL UNSHUNTED SOCKET	1 Year	7/1/2009	Abbey Sullivan	800-246-9977	asullivan@knowltonmfg.com
8	ADVANCE	IMH100ALFM	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
125	ADVANCE	IOP2P32HLSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
36	ADVANCE	IOP4P32HL90CG35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
20	ADVANCE	IOP1P32HLSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
195	ADVANCE	IOP1S32SC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
110	ADVANCE	IOP1S32LWSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
12	ADVANCE	REZ2S32SC	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
305	ADVANCE	IOP2S32SC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2000	ADVANCE	IOP2S32LWSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
200	ADVANCE	IOP2P32HLSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
200	ADVANCE	IOP1S32SC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
200	ADVANCE	IOP1S32LWSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
370	ADVANCE	IOP2S32SC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
2209	ADVANCE	IOP2S32LWSC35M	BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
66	ADVANCE	IMH150HLFM	150W BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
585	ADVANCE	IOP2S32SC35M	2L NPF BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
280	ADVANCE	IOP2S32LWSC35M	2L LPF BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
570	ADVANCE	IOP3S32SC35M	3L NPF BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
120	ADVANCE	IOP4S32LWSC35M	4L BALLAST LPF	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
40	ADVANCE	IOP4S32SC35M	4L BALLAST NPF	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
70	ADVANCE	IOP2S32LWSC35M	2 LAMP LW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
30	ADVANCE	IOP2S32LWSC35M	2 LAMP LW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP2S32SC35M	2 LAMP NW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP3S32SC35M	3 LAMP NW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP4S32LWSC35M	4 LAMP LW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP4S32SC35M	4 LAMP NW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
40	ADVANCE	IOP2S32LWSC35M	2 LAMP LW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
40	ADVANCE	IOP2S32SC35M	2 LAMP NW BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP2P32HLSC35M	2 LAMP HPF BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com
10	ADVANCE	IOP1P32HLSC35M	1 LAMP HPF BALLAST	5 Years + 60 days	7/1/2009	Pat Becker	818-519-8382	pat.becker@philips.com

8	WATTSTOPPER	B277E-P	POWER PACK	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
12	WATTSTOPPER	DW-100-W	OCCUPANCY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
24	WATTSTOPPER	LS-101	OCCUPANCY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
69	WATTSTOPPER	WS-200-W	OCCUPANCY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
742	WATTSTOPPER	B277E-P	POWER PACK	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
643	WATTSTOPPER	DT-205	OCCUPANCY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FS505C	W/FINELITE FIX	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FD301	W/FINELITE FIX	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
2	WATTSTOPPER	FSPP	W/FINELITE FIX	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301	W/FINELITE FIX	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301	W/FINELITE FIX	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
50	WATTSTOPPER	DT-305	OCCUPANCY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
80	WATTSTOPPER	B120E-P	120 VOLT POWER PACK	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FS505C	WATTSTOPPER SENSOR IN FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FD301	WATTSTOPPER SENSOR IN FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
2	WATTSTOPPER	FSPP	WATTSTOPPER SENSOR IN FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301	WATTSTOPPER SENSOR IN FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301	WATTSTOPPER SENSOR SETUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
15	WATTSTOPPER	WS-200-W	ADDITIONAL WALL SENSORS	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
151	WATTSTOPPER	WC-1	GYM FIXTURE WIRE GUARDS	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
9	WATTSTOPPER	HCLK8SS	CLOCK	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
7	WATTSTOPPER	SWSP	MODIFIED MOTHERBOARD	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
5	WATTSTOPPER	LP8S-4-G1	4 CIRCUIT PEANUT PANEL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
3	WATTSTOPPER	LP8S-8-G1	8 CIRCUIT PEANUT PANEL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LI24S-12-G1A	12 CIRCUIT PANEL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LI24S-24-G1A	24 CIRCUIT PANEL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
60	WATTSTOPPER	UT-305-3	HALLWAY SENSORS	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FS505C	FINELITE MOCKUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
2	WATTSTOPPER	FD301	FINELITE MOCKUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	FSPP	FINELITE MOCKUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301P	FINELITE MOCKUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LSR301S	FINELITE MOCKUP	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
5	WATTSTOPPER	FS505C	SENSORS FOR FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
5	WATTSTOPPER	FD301	SENSORS FOR FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
10	WATTSTOPPER	FSPP	SENSORS FOR FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
5	WATTSTOPPER	LSR301P	SENSORS FOR FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
5	WATTSTOPPER	LSR301S	SENSORS FOR FINELITE	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
50	WATTSTOPPER	B120E-P	WATTSTOPPER POWER PACK	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	LI24S-24-G1A	WATTSTOPPER 24C PANEL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
1	WATTSTOPPER	HCLK8SS	WATTSTOPPER CLOCK	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
4	WATTSTOPPER	LC8S-8-G1	WATTSTOPPER PEANUT PNL	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
3	WATTSTOPPER	HCLK8SS	WATTSTOPPER CLOCK	1 Year	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
13	WATTSTOPPER	WS-200-W	SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
55	WATTSTOPPER	UT-305-3	HALLWAY SENSOR	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
25	WATTSTOPPER	B12E-P	120V POWER PACK	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com
107	WATTSTOPPER	WC-1	SENSOR WIREGUARD	5 Years	7/1/2009	Kelly Brambila	408-486-7528	kelly.brambila@wattstopper.com

197	TCP	20745D	EXIT LIGHT	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
5	TCP	207WG	WIRE GUARD	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
89	TCP	EL4SA632PRSELFWGHBL3	6 LAMP GYM FIXT	1 Year Fixture; 5 Year + 90 days lamp and ballast	5/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
62	TCP	EL4SA432PRSELFWGHBL3	4 LAMP GYM FIXT	1 Year Fixture; 5 Year + 90 days lamp and ballast	5/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
9	TCP	GP4WA132UNIL	1 LAMP VANITY	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
24	TCP	GP4WA232UNIL	2 LAMP VANITY	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
40	TCP	EL4SA432PRSELHBL3 4L HIGH BAY		1 Year Fixture; 5 Year + 90 days lamp and ballast	5/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
40	TCP	EL4SA632PRSELHBL3 6L HIGH BAY		1 Year Fixture; 5 Year + 90 days lamp and ballast	5/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
28	TCP	EL4SA632PRSFWG	6L HIGH BAY WG/ NO LENS	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
25	TCP	EL4SA632PRSELFWGHBL3		1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
8	TCP	WH4 132 PRS	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
60	TCP	WH4 232 PRS	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
43	TCP	IS8 4 32 UNI N	INDUSTRIAL FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
80	TCP	22745	LED EXIT	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
12	TCP	20784	EXIT COMBO	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
12	TCP	22745	LED EXIT LIGHT	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
6	TCP	20785	LED EXIT LIGHT COMBO	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
10	TCP	EB-100	EMERGENCY BALLAST	1 Year	7/1/2009	Joe Steger	800-324-1496	jsteger@tcpi.com
4	NILAND	CL-17-TF35-10	DEC. POLE	5 Year	7/1/2009	LUIS GOMEZ	800-648-9013	lgomez@nilandco.com
4	NILAND	ANCHOR BOLTS AND HARDWARE		5 Year	7/1/2009	LUIS GOMEZ	800-648-9013	lgomez@nilandco.com
52	NILAND	CL-17-TF35-10	DEC. POLE	5 Year	7/1/2009	LUIS GOMEZ	800-648-9013	lgomez@nilandco.com
52	NILAND	ANCHOR BOLTS AND HARDWARE		5 Year	7/1/2009	LUIS GOMEZ	800-648-9013	lgomez@nilandco.com
1	FINELITE	SX10 FINELITE MOCKUP	MOCKUP FIXTURE	5 Year	7/1/2009	Melinda Barkus	510-441-1100	mbarkus@finelite.com
1	FINELITE	SX10 FIXTURE MOCK UP	MOCKUP FIXTURE	5 Year	7/1/2009	Melinda Barkus	510-441-1100	mbarkus@finelite.com
1	FINELITE	SX10-ID-WCB-CCO-20	FINELITE MOCKUP (NO SENS)	5 Year	7/1/2009	Melinda Barkus	510-441-1100	mbarkus@finelite.com
5	FINELITE	SX10-ID-WCB-CCO-20 3T8-SL835-EP-277		5 Year	7/1/2009	Melinda Barkus	510-441-1100	mbarkus@finelite.com
		EP-277-SC-FA50-OSRD1M10-.875-FE-SW		5 Year	7/1/2009	Melinda Barkus	510-441-1100	mbarkus@finelite.com
14	LITHONIA	TS132MVOLTGEB1OIS	TANDEM FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Scott Domini	775-329-3411	sdomini.nvlighting@lighting.net
2	DELRAY	RH6226-A30-2E	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
34	DELRAY	RH8232-A40-2E	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
8	DELRAY	RH9242-A40-2E	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
35	DELRAY	RMH6020-A30-2	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
14	DELRAY	RMH6039-A30-2	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
25	DELRAY	RMH9039-A30-2	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
8	DELRAY	RMH9100-A30-2	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
22	DELRAY	RV7-5126-A30-1E	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
2	DELRAY	RV7113-A30-1	DELRAY FIXTURE	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com
26	DELRAY	TH9200A	RETROFIT TRIM	1 Year	7/1/2009	Adam Lamar	818-767-3793	adamlamar@delraylighting.com

6	DIVINE	DL-4810N-WH-232EH-CP	DIVINE MOCK-UP	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
14	DIVINE	DL-0006-WH-S13-41-PJ	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
31	DIVINE	DL-0011-WH-DE13Q-41-WD	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
5	DIVINE	DL-0011-WH-SE13Q-41-WD	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
4	DIVINE	DL-0014-WH-DE18Q-41-WD	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
20	DIVINE	DL-0S12-BL-SE18Q-41-WP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
9	DIVINE	DL-4805-WH-117EP-WA	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
136	DIVINE	DL-4805-WH-132EP-WA	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
2	DIVINE	DL-4805-WH-217EP-WA	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
631	DIVINE	DL-4810N-WH-132EP-CP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
10	DIVINE	DL-4810N-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
80	DIVINE	DL-4810N-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
6	DIVINE	DL-4810N-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
1	DIVINE	DL-4810-WH-217EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
2	DIVINE	DL-4810-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
16	DIVINE	DL-4810-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
4	DIVINE	DL-4824-WH-232EP-CP	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
1	DIVINE	DLS1010-0-BL--SE13Q-41-WA	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
2	DIVINE	DL-VPCM-SA-SE13Q-41-CG	DIVINE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
22	DIVINE	DL4805WH132EPWA	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
386	DIVINE	DL4810NWH132EPCP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
68	DIVINE	DL4810NWH132EPCP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
176	DIVINE	DL4810NWH132EPCP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
94	DIVINE	DL9610NWH432EPCP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
82	DIVINE	DL-9610N-WH-432EP-CP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
4	DIVINE	DL9610NWH832EPCP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
11	DIVINE	DL-0011-DE13Q-41	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
24	DIVINE	DL-4805-WH-132EP-WA	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
45	DIVINE	DL-4810N-WH-132EP-CP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
11	DIVINE	DL-9610N-WH-432-EP-CP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
79	DIVINE	DL-4810N-WH-132EP-CP	FIXTURE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Mike Krest	936-494-3900	mikek@divinelighting.net
54	EPA	10101	2L FIX/W4L BALLAST	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
54	EPA	10237	2L SATELLITE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
2	EPA	10103	1L FIX/W2L BALLAST	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
2	EPA	10156	1L FIX/W4L BALLAST	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
35	EPA	10158	1L FIX/W3L BALLAST	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
78	EPA	10235	1L SATELLITE	1 Year Fixture; 5 Year + 90 days lamp and ballast	7/1/2009	Aaron Wood	888-302-8920	aaron_wood@envirobrite.net
32	GELCORE	DR6-YTFB-17A	12" YELLOW BALL LED	50000 hours	7/1/2009	Customer Service	888-694-3533	signals@lumination.com
8	AITI	LC-S108-SB-40-277	40 WATT SHOE BOX FIXTURE	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
8	AITI	FLEM 12	MOUNTING ARM	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
58	AITI	LC-P-605-80-277	ACORN FIXTURE	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
58	AITI	LL	LIGHT LID	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
58	AITI	CUSTOM PAINT	PAINT	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
8	AITI	LC-S108-SB-120-277	120 WATT SHOE BOX FIXTURE	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
28	AITI	LC-S108-SB-120/277	DHS SHOEBOX	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
28	AITI	FLEM10	DHS MOUNT ARM	10 Years	7/1/2009	Jennifer Perez	866-611-2484	jenniferp@americaninduction.com
5	AMERICAN	RTS-28-66-11-AB-PCXX	PARKING LOT POLE	1 Year	7/1/2009	Ben Mosqueda	866-474-7200	benm@alppoles.com
6	AMERICAN	AB-100-40 (SET OF 4)	EXTRA BOLTS SETS	1 Year	7/1/2009	Ben Mosqueda	866-474-7200	benm@alppoles.com

42	METROLITE	M150MHS-UX-US-C-AD-NC	150 WATT BALLAST	1 Year	7/1/2009	Kelly Corcoran	615-261-8803	kellyc@metrolight.com
6	METROLITE	M100MHS-UX-US-C-AD-NC	100 WATT BALLAST	1 Year	7/1/2009	Kelly Corcoran	615-261-8803	kellyc@metrolight.com
42	VENTURE	MH150W/U/ED28/PS/740	150 WATT LAMP	1 Year	7/1/2009	Ted Ohlin	800-965-2677	ted_ohlin@hidirect.com
6	VENTURE	MH100W/U/PS	100 WATT LAMP	1 Year	7/1/2009	Ted Ohlin	800-965-2677	ted_ohlin@hidirect.com
5	METAL SOLUTIONS	CUSTOM	DHS POLES	1 Year	7/1/2009	Butch McKenzie	775-883-5086	bmckenzie@wedcoinc.com
61	MALCOLITE	T8-48	T-8 LAMP TUBEGUARD	1 Year	7/1/2009	Customer Service	800-622-6269	sales@malcolite.com
4	TRIPP PLASTICS	N/A	46 3/16 X 21 3/4 CUSTOM ACRYLIC LENS	1 Year	7/1/2009	Butch McKenzie	775-883-5086	bmckenzie@wedcoinc.com
4	TRIPP PLASTICS	N/A	46 1/2 X 21 5/8 CUSTOM ACRYLIC LENS	1 Year	7/1/2009	Butch McKenzie	775-883-5086	bmckenzie@wedcoinc.com
30	EIKO	F31T8/841/U	UBEND 1 5/8" OPENING	1 Year	7/1/2009	Butch McKenzie	775-883-5086	bmckenzie@wedcoinc.com
5	UNIVERSAL	M50MLTC3M-500K	50W MH BALLAST	2 Years	7/1/2009	TECH SUPPORT	1-800-BALLAST	tes@unvit.com
Trash Compactors								
1	American Trash Management	M-RJ-250SC-10	10 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
1	American Trash Management	M-RJ-250SC-10	10 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
1	American Trash Management	M-RJ-250SC-10	10 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
1	American Trash Management	M-RJ-250SC-10	10 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
1	American Trash Management	M-RJ-250SC-15	15 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
1	American Trash Management	M-RJ-250SC-15	15 yard Trash Compactor	2 Years Parts, 3 Years structural failure	10/9/2008	Steve Seltzer	415-292-5402	sseltzer@trashmanage.com
Transformers								
5	Power Smiths	Esaver E3L-30-480-208	30 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	800-747-9627	info@powersmiths.com
1	Power Smiths	Esaver E3L-45-480-208	45 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
12	Power Smiths	Esaver E3L-75-480-208	75 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
4	Power Smiths	Esaver E3L-112.5-480-208	112.5 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-112.5-480-208-N3	Nema 3 112.5 Kva Tranformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
2	Power Smiths	Esaver E3L-15-480-208	15 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
2	Power Smiths	Esaver E3L-30-480-208	30 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
6	Power Smiths	Esaver E3L-45-480-208	45 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-50-480-208	50 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
9	Power Smiths	Esaver E3L-75-480-208	75 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-75-480-208-3R	75 Kva Transformer - NEMA 3	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
3	Power Smiths	Esaver E3L-112.5-480-208	112.5 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-15-480-208 - 1 PHASE	15 Kva Transformer - SINGLE PHASE	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-37.5-480-208 - 1 PHASE	37.5 Kva Transformer - SINGLE PHASE	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
1	Power Smiths	Esaver E3L-300-480-208	300 Kva Transformer	25 Years Pro-rated	12/10/2008	Tim VanHorn	770-315-8067	info@powersmiths.com
Vending Misers								
21	USA Technologies	VM-170	Vending Miser	5 Years	9/22/2008	Chris Keithley	303-468-9054	ckeithley@usatech.com
2	USA Technologies	SM-170	Snack Miser	5 Years	9/22/2008	Chris Keithley	303-468-9054	ckeithley@usatech.com

EMS Controls								
23	Alerton	VLC-1188	Bactalk DDC Controller	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
12	Alerton	VLC-853	Bactalk DDC Controller	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
57	Alerton	TS-1050BT	Bactalk Microtouch	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
377	Alerton	TS-1103-WA-10-AA	10K Stainless wall plate w/ PB Overide	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
9	Alerton	TS-3200-PD-10-AA	10K Outside Air Sensor	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
110	Mamac	TE-701-A-12-B	Temperature Sensor	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
250	Alerton	VLC-550	Backtalk DDC Controller W/AZ0014	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
144	Alerton	VLC-550	Backtalk DDC Controller W/4Z0000 program	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
26	Alerton	VLC-550	Backtalk DDC Controller Blank	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
9	Alerton	JACE 600	Jace 600	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
1	Alerton	S-AX	S-AX Controller	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
1	Alerton	LON	LON Controller	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
9	Alerton	BCM-PWS	Power Supply Module	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
9	Alerton	MCM-ETH	Ethernet Module	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
4	Belimo	F6125	Butterfly Valve	1 Year	7/1/2009	Tom Holbert	775-826-8998	tom@bcsnv.com
PV Array								
16	BP Solar	SX175B	175 watt solar electric panel	5 Years, Power Output 25 Years	4/16/2009	Jeff Curtis	972-377-7341	jcurtis@ameresco.com
1	Solectria	PVI 3000	3000 watt grid tie inverter	10 years	4/16/2009	Jeff Curtis	972-377-7341	jcurtis@ameresco.com
1	Solectria	PVI 3000-IPA	Integrated Panel Assembly	1 Year	4/16/2009	Jeff Curtis	972-377-7341	jcurtis@ameresco.com
8	Uni-Rac	UNI-310350-037	Uni-Rac 2- Bay rapid rac frame	1 Year	4/16/2009	Jeff Curtis	972-377-7341	jcurtis@ameresco.com
8	Uni-Rac	UNI-310360-037	Uni-Rac 1- Bay rapid rac frame	1 Year	4/16/2009	Jeff Curtis	972-377-7341	jcurtis@ameresco.com
1	SolRen View	SRV-ID-RES	Inverter Direct Monitoring		4/16/2009	Brad Sherman	978-683-9700	brad@solren.com
Bldg 500 Heating Equipment								
2	Greenheck	IGX	Rooftop heating units	1 Year	12/22/2008	R.L. Reddy	775-322-9434	reddy@rhpinc.net

TOTAL MATERIALS ON-SITE

Guarantee

RHP MECHANICAL SYSTEMS shall unconditionally guarantee the workmanship and materials of the entire contract to be and remain free of defects in workmanship and material for a period of one (1) year from **October 1,2010** and expires on **October 1,2011**.

We hereby guarantee that all work installed at the ***Douglas County School District, Phase 4, Install New Fan Coils,*** located at***, Pinion Hills, Minden, CC Meneley; Minden, Nevada*** has been done in accordance with the plans and specifications and that the work as installed will fulfill the requirements of the 1-year guarantee. We agree to repair and replace any or all of our work, together with any other adjacent work which may be displaced in so doing, that may prove to be defective in its workmanship or material within a period of one (1) year from the date October 1,2010 and expires on October 1,2011, on the above named project, without any expense whatsoever to the Owner; ordinary wear and tear and unusual abuse or neglect excepted.
The guarantee does not extend to maintenance items.

The owner needs to follow the guidelines listed below:

- Operate the equipment according to the manufacturer's instructions.
- Periodic inspection and replacement of all system filters and have routine maintenance performed as per manufacturer's recommendations.
- Inspect and reset circuit breakers and/or control panels prior to service call as instructed verbally.
- Correct any obstructions, which may inhibit return air, combustion air or supply air to or from the mechanical systems.
- Notify RHP Mechanical Systems of any unusual conditions in the mechanical system.

By: _____
Michael Scolari

Title: Secretary/Treasurer

Date: November 23,2010

(775) 322-9434 Phone • (775) 322-9228 Fax
1008 E. 4th Street / P.O. Box 2957 • Reno, NV 89505 • www.rhpinc.net
dba Ray Heating Products, Inc.• NV License #3714, 3714A (Unlimited) ; CA # 469919

Guarantee

RHP MECHANICAL SYSTEMS shall unconditionally guarantee the workmanship and materials of the entire contract to be and remain free of defects in workmanship and material for a period of one (1) year from **November 15,2010** and expires on **November 15,2011**.

We hereby guarantee that all work installed at the ***Douglas County School District, Phase 4, Install New Thermal Solution Boilers,*** located at ***Scarselli, Pau Wau-Lu, Pinion Hills, Minden, CC Meneley and Jacks Valley Schools; Douglas County, Nevada*** has been done in accordance with the plans and specifications and that the work as installed will fulfill the requirements of the 1-year guarantee. We agree to repair and replace any or all of our work, together with any other adjacent work which may be displaced in so doing, that may prove to be defective in its workmanship or material within a period of one (1) year from the date November 15,2010 and expires on November 15,2011, on the above named project, without any expense whatsoever to the Owner; ordinary wear and tear and unusual abuse or neglect excepted.
The guarantee does not extend to maintenance items.

The owner needs to follow the guidelines listed below:

- Operate the equipment according to the manufacturer's instructions.
- Periodic inspection and replacement of all system filters and have routine maintenance performed as per manufacturer's recommendations.
- Inspect and reset circuit breakers and/or control panels prior to service call as instructed verbally.
- Correct any obstructions, which may inhibit return air, combustion air or supply air to or from the mechanical systems.
- Notify RHP Mechanical Systems of any unusual conditions in the mechanical system.

By: _____
Michael Scolari

Title: Secretary/Treasurer

Date: November 23,2010

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dba Ray Heating Products, Inc.• NV License #3714, 3714A (Unlimited) ; CA # 469919

C Certificates of Acceptance

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AMERESCO

CERTIFICATE OF ACCEPTANCE

Project: PERFORMANCE-BASED CONTRACT Energy Guarantee Project RFP/CONTRACT # 06-10-08	Owner: Douglas County School District 1638 Mono Ave Minden, NV 89423

Copies To:

[X] Customer [X] Construction Manager [X] Engineer [X] Other ____ Project File

Project and/or designated portion(s) thereof covered by this certificate:

ECM 1 - Lighting Sysytem Improvements
ECM 2 - Install Lighting Controls
ECM 3 - Upgrade Gymnasium Lighting
ECM 4 - Upgrade Energy Management System
ECM 6 - Install Vending Machine Controls
ECM 7 - Install New Energy Star Transformers
ECM 8 - Install Trash Compactors
ECM 9 - DHS Bldg 500 HVAC Retrofit
ECM 10 - Upgrade DHS Exterior Lighting

Items Furnished to the Owner with this Certificate of Completion: None

[ ] Items to be completed or corrected, prepared by *Ameresco* and verified by the owner or his representative: None

The failure to include any items on such list does not alter the responsibility of *Ameresco* to complete all work in accordance with contract documents.

Ameresco will complete or correct the work on the list of items appended hereto within _____ days from the date of completion.

Ameresco	Title	Signature	Date
Steven J Podhurst	Project Manager	Steven J Podhurst	3/3/2010

The Owner accepts the work or designated portion thereof as complete and will assume full possession thereof

at 3:55 pm (Time) on 3/10/10 (Date)

Owner's Representative	Title	Signature	Date
Holly Luna	Chief Financial Officer DCSD		3/10/10

AMERESCO
Green • Clean • Sustainable

CERTIFICATE OF ACCEPTANCE

Project:	PERFORMANCE BASED CONTRACT Energy Guarantee Project RFP/CONTRACT # 6-10-08 Change Order 16	Owner:	Douglas County School District 1638 Mono Ave. Minden, NV 89423

Copies To:

[X] Customer [ ] Construction Manager [X] Celtic Engineering [X] Other ____ Project File

Project and/or designated portion(s) thereof covered by this certificate:

CO 16 - FIM 1: Fan Coil Replacements - Pinon Hills ES and Minden ES

CO 16 - FIM 2: Boiler Replacements - Pinon Hills ES, Minden ES, Scarscelli ES, Pau Wa Lu MS, Meneley ES

Items Furnished to the Owner with this Certificate of Completion: None

Items to be completed or corrected, prepared by *Ameresco* and verified by the owner or his representative: None

The failure to include any items on such list does not alter the responsibility of *Ameresco* to complete all work in accordance with contract documents.

Ameresco will complete or correct the work on the list of items appended hereto within _____ days from the date of completion.

Owner or owner's representative acknowledges the following with initials:

_____ Initials *Ameresco* does not warranty against system malfunction caused by improper use, misuse by the Customer

Additional Notes:

Ameresco	Title	Signature	Date
James Reedy	Project Manager	James Reedy	4/19/2011

The Owner accepts the work or designated portion thereof as complete and will assume full possession thereof

at 9:00 AM (Time) on April 19, 2011 (Date)

Owner's Representative	Title	Signature	Date
Holly Luna	Chief Financial Officer		4/25/11

AMERESCO
Green • Clean • Sustainable

CERTIFICATE OF ACCEPTANCE

Project:	PERFORMANCE BASED CONTRACT Energy Guarantee Project RFP/CONTRACT # 6-10-08 Change Order 17	Owner:	Douglas County School District 1638 Mono Ave. Minden, NV 89423

Copies To:

[X] Customer [ ] Construction Manager [X] Celtic Engineering [X] Other ____ Project File

Project and/or designated portion(s) thereof covered by this certificate:

CO 17 - FIM 1: Fan Coil Replacements - CC Meneley ES
CO 17 - FIM 2: Boiler Replacements - Jacks Valley ES

Items Furnished to the Owner with this Certificate of Completion: None

Items to be completed or corrected, prepared by *Ameresco* and verified by the owner or his representative: None

The failure to include any items on such list does not alter the responsibility of *Ameresco* to complete all work in accordance with contract documents.

Ameresco will complete or correct the work on the list of items appended hereto within _____ days from the date of completion.

Owner or owner's representative acknowledges the following with initials:

_____ *Ameresco* does not warranty against system malfunction caused by improper use, misuse by the Customer
Initials

Additional Notes:

Ameresco	Title	Signature	Date
James Reedy	Project Manager		4/19/2011

The Owner accepts the work or designated portion thereof as complete and will assume full possession thereof

at 9 am (Time) on April 19, 2011 (Date)

Owner's Representative	Title	Signature	Date
Holly Luna	Chief Financial Officier		4/25/11

D Revised Cash Flow

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Project Pro-Forma
Douglas County Schools - Change Order #17 - Boiler Replacements at JVES and Fan Coil Replacements at CCMES

Initial Project Costs:		
Base Project Cost	$	5,238,065
Change Order #6 Cost	$	1,006,061
Change Order #7 Cost	$	920,311
Change Order #8 Cost	$	1,478,319
Change Order #16 Implementation Cost	$	2,357,792
Change Order #17 Implementation Cost	$	424,564
Change Order #17 Performance and Payment Bond	$	6,745
Change Order #17 Permits	$	1,000
Change Order #17 Third Party Consultant Fee	$	8,646
Subtotal of Project Costs	**$**	**11,441,503**
Base Project Rebates	$	(143,065)
Change Order #6 Rebates	$	-
Change Order #7 Rebates	$	-
Change Order #8 Rebates	$	(1,135)
Change Order #16 Rebates	$	-
Change Order #17 Rebates	$	-
Base Project Customer Contribution	$	-
Change Order #6 Customer Contribution	$	(1,006,061)
Change Order #7 Customer Contribution	$	(920,311)
ECM 4 at GWHS Credit from Base Project	$	(309,382)
Change Order #8 Customer Contribution	$	(1,167,802)
Change Order #16 Customer Contribution	$	(2,357,792)
Change Order #17 Customer Contribution	$	(440,955)
Net Project Costs	**$**	**5,095,000**
Construction Period Interest		$0
Total Amount Financed	**$**	**5,095,000**

Financial Assumptions	
Term of Project {yrs}	15.0 yrs
Term of Financing {yrs}	15.0 yrs
Estimated Financing Rate	4.12%
Payments per year (frequency)	2
Discount Rate	4.12%
Energy escalation rate {annual} Electric: 2.6% Natural Gas: 2.4%	
M&V Cost escalation rate {annual}	3.00%
O&M Cost escalation rate {annual}	3.00%

AMERESCO

Pro-forma	Year																	
	Construction Period FY'09	Year 1 FY '10	Year 2 FY '11	Year 3 FY '12	Year 4 FY '13	Year 5 FY '14	Year 6 FY '15	Year 7 FY '16	Year 8 FY '17	Year 9 FY '18	Year 10 FY '19	Year 11 FY '20	Year 12 FY '21	Year 13 FY '22	Year 14 FY '23	Year 15 FY '24	Totals
Savings																	
Base Project Energy Savings	$ 167,362	$ 359,935	$ 366,679	$ 373,575	$ 373,575	$ 373,726	$ 377,174	$ 384,373	$ 395,171	$ 405,969	$ 423,966	$ 438,060	$ 451,850	$ 459,352	$ 473,750	$ 488,451	$ 6,312,966
Change Order #6 Energy Savings	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #7 Energy Savings		$ 4,775	$ 4,918	$ 5,066	$ 5,218	$ 5,374	$ 5,536	$ 5,702	$ 5,873	$ 6,049	$ 6,230	$ 6,417	$ 6,610	$ 6,808	$ 7,012	$ 7,222	$ 88,810
Change Order #8 Energy Savings		$ 8,434	$ 8,687	$ 8,948	$ 9,216	$ 9,493	$ 9,777	$ 10,071	$ 10,373	$ 10,684	$ 11,004	$ 11,335	$ 11,675	$ 12,025	$ 12,386	$ 12,757	$ 156,863
Change Order #16 Energy Savings		$ -	$ 13,660	$ 14,070	$ 14,492	$ 14,926	$ 15,374	$ 15,836	$ 16,311	$ 16,800	$ 17,304	$ 17,823	$ 18,358	$ 18,908	$ 19,476	$ 20,060	$ 233,397
Change Order #17 Energy Savings		$ -	$ 1,857	$ 1,913	$ 1,970	$ 2,029	$ 2,090	$ 2,153	$ 2,217	$ 2,284	$ 2,353	$ 2,423	$ 2,496	$ 2,571	$ 2,648	$ 2,727	$ 31,731
Base Project Operational Cost Savings		$ 102,848	$ 105,933	$ 109,111	$ 112,385	$ 115,756	$ 119,229	$ 122,806	$ 126,490	$ 130,285	$ 134,193	$ 138,219	$ 142,365	$ 146,636	$ 151,035	$ 155,567	$ 1,912,857
Change Order #6 Operational Cost Savings		$ 4,091	$ 4,214	$ 4,340	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 12,645
Change Order #7 Operational Cost Savings		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #8 Operational Cost Savings		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #16 Operational Cost Savings		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #17 Operational Cost Savings		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL ANNUAL SAVINGS	$ 167,362	$ 480,083	$ 505,948	$ 517,022	$ 516,855	$ 521,305	$ 529,180	$ 540,939	$ 556,434	$ 572,070	$ 595,049	$ 614,276	$ 633,354	$ 646,301	$ 666,306	$ 686,783	$ 8,749,269
Costs																	
Base Project Monitoring and Verification		$ 36,285	$ 29,627	$ 32,374	$ -	$ 52,021	$ -	$ -	$ -	$ -	$ 60,306	$ -	$ -	$ -	$ -	$ 69,911	$ 280,523
Base Project Operations & Maintenenance		$ 108,006	$ 111,246	$ 114,583	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 333,835
Change Order #6 Monitoring and Verification		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #6 Operations & Maintenance		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #7 Monitoring and Verification		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #7 Operations & Maintenance		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #8 Monitoring and Verification		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #8 Operations & Maintenance		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #16 Monitoring and Verification		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #16 Operations & Maintenance		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Change Order #17 Operations & Maintenance		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
TOTAL ONGOING COSTS		$ 144,290	$ 140,873	$ 146,957	$ -	$ 52,021	$ -	$ -	$ -	$ -	$ 60,306	$ -	$ -	$ -	$ -	$ 69,911	$ 614,359
Payments																	
Principal Payment		$ 103,000	$ 119,000	$ 129,000	$ 283,000	$ 247,000	$ 316,000	$ 340,000	$ 368,000	$ 398,000	$ 376,000	$ 470,000	$ 507,000	$ 540,000	$ 582,000	$ 317,000	$ 5,095,000
Interest Payment	$ 104,957	$ 208,863	$ 204,455	$ 199,449	$ 192,569	$ 181,280	$ 170,403	$ 157,137	$ 142,840	$ 127,370	$ 111,199	$ 94,739	$ 75,005	$ 53,787	$ 31,106	$ 6,530	$ 2,061,689
TOTAL LEASE PAYMENT	$ 104,957	$ 311,863	$ 323,455	$ 328,449	$ 475,569	$ 428,280	$ 486,403	$ 497,137	$ 510,840	$ 525,370	$ 487,199	$ 564,739	$ 582,005	$ 593,787	$ 613,106	$ 323,530	$ 7,156,689
NET CASH FLOW	**$ 62,405**	**$ 23,929**	**$ 41,620**	**$ 41,615**	**$ 41,286**	**$ 41,004**	**$ 42,777**	**$ 43,802**	**$ 45,594**	**$ 46,700**	**$ 47,545**	**$ 49,537**	**$ 51,349**	**$ 52,514**	**$ 53,200**	**$ 293,342**	**$ 978,221**
CUMULATIVE CASH FLOW	**$ 62,405**	**$ 86,334**	**$ 127,955**	**$ 169,570**	**$ 210,856**	**$ 251,860**	**$ 294,638**	**$ 338,440**	**$ 384,034**	**$ 430,734**	**$ 478,279**	**$ 527,816**	**$ 579,165**	**$ 631,679**	**$ 684,879**	**$ 978,221**	

Notes:

1 Payments assumed to begin six months after construction completion. Payments will be due December and June. Actual payment due dates will be determined by the lending institution.
2 Operational Cost Savings are stipulated
3 No energy savings are expected from Change Order #16 in FY 2010 because the work will be in construction at that time.

E Utility Rates

Reference		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	PHES	MES	ZCES	ding Maintena	Computer Services	District Office	Food Services	Transportation	Vehicle Maintenance	AVG
2007 $/kWh		$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.1259	$0.1259	$0.0927	$0.0927	$0.1259	$0.1259	$0.10
Year	1	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.1246	$0.1246	$0.0918	$0.0918	$0.1246	$0.1246	$0.10
	2	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.0918	$0.1246	$0.1246	$0.0918	$0.0918	$0.1246	$0.1246	$0.10
	3	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.1259	$0.1259	$0.0927	$0.0927	$0.1259	$0.1259	$0.10
	4	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.0927	$0.1259	$0.1259	$0.0927	$0.0927	$0.1259	$0.1259	$0.10
	5	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.0936	$0.1272	$0.1272	$0.0936	$0.0936	$0.1272	$0.1272	$0.10
	6	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.0964	$0.1309	$0.1309	$0.0964	$0.0964	$0.1309	$0.1309	$0.10
	7	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.0983	$0.1335	$0.1335	$0.0983	$0.0983	$0.1335	$0.1335	$0.11
	8	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1001	$0.1360	$0.1360	$0.1001	$0.1001	$0.1360	$0.1360	$0.11
	9	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1020	$0.1385	$0.1385	$0.1020	$0.1020	$0.1385	$0.1385	$0.11
	10	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1038	$0.1410	$0.1410	$0.1038	$0.1038	$0.1410	$0.1410	$0.11
	11	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1075	$0.1460	$0.1460	$0.1075	$0.1075	$0.1460	$0.1460	$0.12
	12	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1112	$0.1511	$0.1511	$0.1112	$0.1112	$0.1511	$0.1511	$0.12
	13	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1159	$0.1574	$0.1574	$0.1159	$0.1159	$0.1574	$0.1574	$0.13
	14	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1196	$0.1624	$0.1624	$0.1196	$0.1196	$0.1624	$0.1624	$0.13
	15	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1233	$0.1674	$0.1674	$0.1233	$0.1233	$0.1674	$0.1674	$0.13

Reference		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	PHES	MES	ZCES	ding Maintena	Computer Services	District Office	Food Services	Transportation	Vehicle Maintenance	AVG
2007 $/kW		7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	-	-	7.62	7.62	-	-	7.62
Year	1	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54			7.54	7.54			7.54
	2	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54	7.54			7.54	7.54			7.54
	3	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62			7.62	7.62			7.62
	4	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62	7.62			7.62	7.62			7.62
	5	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70			7.70	7.70			7.70
	6	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92	7.92			7.92	7.92			7.92
	7	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08			8.08	8.08			8.08
	8	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23			8.23	8.23			8.23
	9	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38	8.38			8.38	8.38			8.38
	10	8.53	8.53	8.53	8.53	8.53	8.53	8.53	8.53	8.53	8.53	8.53			8.53	8.53			8.53
	11	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84	8.84			8.84	8.84			8.84
	12	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14	9.14			9.14	9.14			9.14
	13	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53	9.53			9.53	9.53			9.53
	14	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83	9.83			9.83	9.83			9.83
	15	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13	10.13			10.13	10.13			10.13

Reference		DHS	GWHS	CCMES	CVMS	PWLMS	GES	GLSES	JVES	PHES	MES	ZCES	ding Maintena	Computer Services	District Office	Food Services	Transportation	Vehicle Maintenance	AVG
2007 $/therm		$1.27	$1.21	$1.33	$1.12	$1.26	$1.39	$1.23	$1.32	$1.29	$1.31	$1.36	$1.52	$6.55	$1.42	$1.35	$2.35	$1.45	$1.69
Year	1	$1.270	$1.210	$1.330	$1.120	$1.260	$1.390	$1.230	$1.320	$1.290	$1.310	$1.360	$1.520	$6.550	$1.420	$1.350	$2.350	$1.450	$1.69
	2	$1.257	$1.198	$1.317	$1.109	$1.247	$1.376	$1.218	$1.307	$1.277	$1.297	$1.346	$1.505	$6.485	$1.406	$1.337	$2.327	$1.436	$1.67
	3	$1.257	$1.198	$1.317	$1.109	$1.247	$1.376	$1.218	$1.307	$1.277	$1.297	$1.346	$1.505	$6.485	$1.406	$1.337	$2.327	$1.436	$1.67
	4	$1.270	$1.210	$1.330	$1.120	$1.260	$1.390	$1.230	$1.320	$1.290	$1.310	$1.360	$1.520	$6.550	$1.420	$1.350	$2.350	$1.450	$1.69
	5	$1.295	$1.234	$1.357	$1.142	$1.285	$1.418	$1.255	$1.346	$1.316	$1.336	$1.387	$1.550	$6.681	$1.448	$1.377	$2.397	$1.479	$1.72
	6	$1.334	$1.271	$1.397	$1.176	$1.323	$1.460	$1.292	$1.386	$1.355	$1.376	$1.428	$1.596	$6.878	$1.491	$1.418	$2.468	$1.523	$1.77
	7	$1.359	$1.295	$1.423	$1.198	$1.348	$1.487	$1.316	$1.412	$1.380	$1.402	$1.455	$1.626	$7.009	$1.519	$1.445	$2.515	$1.552	$1.81
	8	$1.346	$1.283	$1.410	$1.187	$1.336	$1.473	$1.304	$1.399	$1.367	$1.389	$1.442	$1.611	$6.943	$1.505	$1.431	$2.491	$1.537	$1.79
	9	$1.346	$1.283	$1.410	$1.187	$1.336	$1.473	$1.304	$1.399	$1.367	$1.389	$1.442	$1.611	$6.943	$1.505	$1.431	$2.491	$1.537	$1.79
	10	$1.372	$1.307	$1.436	$1.210	$1.361	$1.501	$1.328	$1.426	$1.393	$1.415	$1.469	$1.642	$7.074	$1.534	$1.458	$2.538	$1.566	$1.83
	11	$1.435	$1.367	$1.503	$1.266	$1.424	$1.571	$1.390	$1.492	$1.458	$1.480	$1.537	$1.718	$7.402	$1.605	$1.526	$2.656	$1.639	$1.91
	12	$1.511	$1.440	$1.583	$1.333	$1.499	$1.654	$1.464	$1.571	$1.535	$1.559	$1.618	$1.809	$7.795	$1.690	$1.607	$2.797	$1.726	$2.01
	13	$1.562	$1.488	$1.636	$1.378	$1.550	$1.710	$1.513	$1.624	$1.587	$1.611	$1.673	$1.870	$8.057	$1.747	$1.661	$2.891	$1.784	$2.08
	14	$1.626	$1.549	$1.702	$1.434	$1.613	$1.779	$1.574	$1.690	$1.651	$1.677	$1.741	$1.946	$8.384	$1.818	$1.728	$3.008	$1.856	$2.16
	15	$1.689	$1.609	$1.769	$1.490	$1.676	$1.849	$1.636	$1.756	$1.716	$1.742	$1.809	$2.022	$8.712	$1.889	$1.796	$3.126	$1.929	$2.25

Page content is subject to Confidentiality Restrictions.

F Lighting As Built Detail

KEY:

Line Items listed in RED as changes from the proposed scope to the As Built condition.

Line Items highlighted in BLUE are changed savings items resulting from the Annual Inspection.

Line Items that are ~~STRUCK THROUGH AND HIGHLIGHTED IN GREEN~~ indicate items that were removed from the savings calculations.

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DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
Bldg Services	WOOD SHOP	2L4' T12 EE/EEMAG	industrial	18	70	3,120	1L4' T8 28w/ELEE HI/STRIP RFL KIT	rlrb strip rfl kit	18	28.0	0.76	2,359
Bldg Services	BAY	2L4' T12 EE/EEMAG	industrial	20	70	3,120	1L4' T8 28w/ELEE HI/STRIP RFL KIT	rlrb strip rfl kit	20	28.0	0.84	2,621
Bldg Services	HaLL	2L4' T12 EE/EEMAG	wrap wide	2	70	3,120	1L4' T8 28w/ELEE/NEW	new wrap wide	2	28.0	0.08	262
Bldg Services	FRONT OFFICE	2L4' T12 EE/EEMAG	wrap wide	6	70	3,120	1L4' T8 28w/ELEE/NEW	new wrap wide	6	28.0	0.25	786
Bldg Services	WORK AREA	4L4' T12 EE/EEMAG-8'	wrap	3	140	3,120	1L4' T8 28w/ELEE/NEW	new wrap	6	28.0	0.25	786
Bldg Services	HVAC	4L4' T12 EE/EEMAG	trof acr	2	140	3,120	1L4' T8 28w/ELEE/NEW strip	new strip	2	28.0	0.22	699
Bldg Services	PLUMBING	100W INCANDESCENT	can eyeball rec	4	100	3,120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.34	1,073
Bldg Services	STORAGE	2L4' T12 EE/EEMAG	wrap	2	70	3,120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	262
Bldg Services	BACK OFFICE	2L4' T12 EE/EEMAG	wrap	4	70	3,120	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	524
Bldg Services	LOUNGE	2L4' T12 EE/EEMAG	wrap	4	70	3,120	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	524
Bldg Services	COMPUTOR ROOM	2L4' T12 EE/EEMAG	wrap	6	70	3,120	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.25	786
Bldg Services	ELECTRICAL ROOM	2L4' T12 EE/EEMAG	strip cage	1	70	3,120	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit	1	28.0	0.04	131
Bldg Services	ELEC	2L4' T12 EE/EEMAG	strip	2	70	3,120	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	2	28.0	0.08	262
Bldg Services	STO	2L4' T12 EE/EEMAG	wrap	2	70	3,120	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	2	28.0	0.08	262
Bldg Services	RESTROOMS	1L4' T12 EE/EEMAG	vanity	4	40	3,120	1L4' T8/EL LO	dlrb	4	23.2	0.07	210
Bldg Services	COMPUTOR ROOM	100W INCANDESCENT	can eyeball rec	2	100	3,120	20W COMPACT SI	screw in	2	20.0	0.16	499
Bldg Services	LOFT	2L4' T12 EE/EEMAG	industrial	8	70	3,120	2L4' T8 28w/ELEE LO/NEW wrap	new wrap	8	36.6	0.27	834
Bldg Services	LOFT	2L4' T12 EE/EEMAG-8'	strip cage	8	70	3,120	2L4' T8 28w/ELEE LO-8'	rlrb	8	36.6	0.27	834
~~Bldg Services~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~6~~	~~40~~	~~3,120~~	~~3 WATT LED/NEW EXIT BATTERY~~	already LED	0		0.00	0
Bldg Services	WORK AREA	2L8' T12 STD/STD	eggcrate	5	173	3,120	4L4' T8 28w/ELEE LO/NEW-8'	new wrap	5	116.1	0.28	887
Bldg Services	**Totals**			**109**					**104**		**4.68**	**14,603**
Carson Valley Middle	SHOWER	100W INCANDESCENT	can rec	1	100	2096	13W COMPACT SI	screw in	1	13.0	0.09	182
Carson Valley Middle	WOMEN-MEN	60W INCANDESCENT	square recessed	1	60	3650	15W COMPACT SI	screw in	2	15.0	0.03	110
Carson Valley Middle	TEACHER LOUNGE	60W INCANDESCENT	square recessed	2	60	3650	15W COMPACT SI	screw in	5	15.0	0.05	164
Carson Valley Middle	FILE ROOM RR	60W INCANDESCENT	REC	1	60	1441	18W SCREW IN	Screw in	1	18.0	0.04	61
Carson Valley Middle	COACH OFFICE	2L4' T8/EL	vanity	2	60	6500	1L4' T8 28w/ELEE	rlrb	2	28.0	0.06	416
Carson Valley Middle	CUSTODIAN	1L4' T12 EE/EEMAG	wrap	1	40	1441	1L4' T8 28w/ELEE LO	rlrb	1	28.0	0.01	17
Carson Valley Middle	ELECTRICAL ROOM	1L4' T12 EE/EEMAG	STRIP	2	40	1441	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	35
Carson Valley Middle	kitchen attic	1L4' T12 EE/EEMAG	STRIP	2	40	1441	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	35
Carson Valley Middle	102 stor.	1L4' T12 EE/EEMAG	wrap	4	40	1441	1L4' T8 28w/ELEE LO	rlrb	4	28.0	0.05	69
Carson Valley Middle	BOYS	1L4' T12 EE/EEMAG	strip cage	30	40	3650	1L4' T8 28w/ELEE LO	rlrb	30	28.0	0.36	1,314
Carson Valley Middle	B	1L4' T12 EE/EEMAG	wrap	35	40	3650	1L4' T8 28w/ELEE LO	rlrb	37	28.0	0.36	1,329
Carson Valley Middle	WOMEN	2L4' T12 EE/EEMAG	vanity	4	70	3650	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	4	28.0	0.17	613
Carson Valley Middle	MEN	2L4' T12 EE/EEMAG	vanity	4	70	3650	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	4	28.0	0.17	613
Carson Valley Middle	WOMENS	2L4' T12 EE/EEMAG-8'	vanity	3	70	3650	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.04	153
Carson Valley Middle	TEACHER LOUNGE	2L4' T12 EE/EEMAG	wrap pend	12	70	3650	1L4' T8 28w/ELEE/NEW	new wrap pend	12	28.0	0.50	1,840
Carson Valley Middle	MP	2L4' T12 EE/EEMAG	wrap pend	12	70	3650	1L4' T8 28w/ELEE/NEW	new wrap pend	12	28.0	0.50	1,840
Carson Valley Middle	24	2L4' T12 EE/EEMAG	wrap pend	16	70	6500	1L4' T8 28w/ELEE/NEW	new wrap pend	16	28.0	0.67	4,368
Carson Valley Middle	WEIGHT ROOM	2L4' T8/EL	wrap pend	18	60	6500	1L4' T8 28w/ELEE/NEW	new wrap pend	18	28.0	0.58	3,744
Carson Valley Middle	GIRLS	2L4' T8/EL	wrap pend	18	60	3650	1L4' T8 28w/ELEE/NEW	new wrap pend	18	28.0	0.58	2,102
Carson Valley Middle	STORAGE	2L4' T12 EE/EEMAG	vapor tight	2	70	1441	1L4' T8 28w/ELEE/NEW vaportight	new vaportight	2	28.0	0.08	121
Carson Valley Middle	SHOWER	2L4' T12 EE/EEMAG	vapor tight	8	70	3650	1L4' T8 28w/ELEE/NEW vaportight	new vaportight	8	28.0	0.34	1,226
Carson Valley Middle	GIRLS	2L4' T8/EL	wrap wall mt.	6	60	3650	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.19	701

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
Carson Valley Middle	B	2L4' T12 EE/EEMAG	wrap	1	70	2096	1L4' T8 32w/EL/NEW	new wrap	1	23.2	0.05	98
Carson Valley Middle	IT CLOSET	2L4' T12 EE/EEMAG	wrap	1	70	1441	1L4' T8 32w/EL/NEW	new wrap	1	23.2	0.05	67
Carson Valley Middle	ELEC	2L4' T12 EE/EEMAG	wrap	2	70	1441	1L4' T8 32w/EL/NEW	new wrap	3	23.2	0.07	101
Carson Valley Middle	102	2L4' T12 EE/EEMAG	wrap	2	70	6500	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.09	608
Carson Valley Middle	NURSE	2L4' T12 EE/EEMAG	wrap	3	70	3650	1L4' T8 32w/EL/NEW	new wrap	3	23.2	0.14	513
Carson Valley Middle	WOMEN-MEN	2L4' T12 EE/EEMAG	strip	3	70	3650	1L4' T8 32w/EL/NEW	new wrap	7	23.2	0.05	174
Carson Valley Middle	stairs	2L4' T12 EE/EEMAG	wrap	3	70	3650	1L4' T8 32w/EL/NEW	new wrap	3	23.2	0.14	513
Carson Valley Middle	WADELTON	2L4' T12 EE/EEMAG	wrap	4	70	6500	1L4' T8 32w/EL/NEW	new wrap	4	23.2	0.19	1,217
Carson Valley Middle	12 CLOSETS	2L4' T12 EE/EEMAG	wrap	4	70	1441	1L4' T8 32w/EL/NEW	new wrap	4	23.2	0.19	270
Carson Valley Middle	MEN	2L4' T12 EE/EEMAG	wrap	5	70	3650	1L4' T8 32w/EL/NEW	new wrap	5	23.2	0.23	854
Carson Valley Middle	WOMEN	2L4' T12 EE/EEMAG	wrap	7	70	3650	1L4' T8 32w/EL/NEW	new wrap	7	23.2	0.33	1,196
Carson Valley Middle	MEN	2L4' T12 EE/EEMAG	wrap	7	70	3650	1L4' T8 32w/EL/NEW	new wrap	7	23.2	0.33	1,196
Carson Valley Middle	20	2L4' T12 EE/EEMAG	wrap	8	70	6500	1L4' T8 32w/EL/NEW	new wrap	8	23.2	0.37	2,434
Carson Valley Middle	23	2L4' T12 EE/EEMAG	wrap	24	70	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	1.12	7,302
Carson Valley Middle	22	2L4' T12 EE/EEMAG	wrap	24	70	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	1.12	7,302
Carson Valley Middle	26	2L4' T12 EE/EEMAG	wrap	24	70	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	1.12	7,302
Carson Valley Middle	21	2L4' T12 EE/EEMAG	wrap	24	70	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	1.12	7,302
Carson Valley Middle	27	2L4' T12 EE/EEMAG	wrap	24	70	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	1.12	7,302
Carson Valley Middle	25	2L4' T12 EE/EEMAG	wrap	28	70	6500	1L4' T8 32w/EL/NEW	new wrap	28	23.2	1.31	8,519
Carson Valley Middle	COACH	2L4' T8/EL	wrap	1	60	6500	1L4' T8 32w/EL/NEW	new wrap	1	23.2	0.04	239
Carson Valley Middle	13	2L4' T8/EL	wrap	1	60	6500	1L4' T8 32w/EL/NEW	new wrap	1	23.2	0.04	239
Carson Valley Middle	stairs	2L4' T8/EL	wrap	2	60	3650	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.07	269
Carson Valley Middle	GYM	2L4' T8/EL	wrap	2	60	6500	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.07	478
Carson Valley Middle	BALL STORAGE	2L4' T8/EL	wrap	2	60	1441	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.07	106
Carson Valley Middle	RESTROOMS	2L4' T8/EL	wrap	2	60	3650	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.07	269
Carson Valley Middle	MECH GYM	2L4' T8/EL	wrap	3	60	3650	1L4' T8 32w/EL/NEW	new wrap	3	23.2	0.11	403
Carson Valley Middle	BOYS	2L4' T8/EL	wrap	3	60	3650	1L4' T8 32w/EL/NEW	new wrap	3	23.2	0.11	403
Carson Valley Middle	BOYS	2L4' T8/EL	wrap	5	60	3650	1L4' T8 32w/EL/NEW	new wrap	5	23.2	0.18	672
Carson Valley Middle	GIRLS	2L4' T8/EL	wrap	5	60	3650	1L4' T8 32w/EL/NEW	new wrap	5	23.2	0.18	672
Carson Valley Middle	102	2L4' T8/EL	wrap	9	60	6500	1L4' T8 32w/EL/NEW	new wrap	9	23.2	0.33	2,153
Carson Valley Middle	COACH	2L4' T8/EL	wrap	9	60	6500	1L4' T8 32w/EL/NEW	new wrap	9	23.2	0.33	2,153
Carson Valley Middle	B & G	2L4' T8/EL	wrap	9	60	3650	1L4' T8 32w/EL/NEW	new wrap	2	23.2	0.49	1,802
Carson Valley Middle	CLASSROOM	2L4' T8/EL	wrap	12	60	6500	1L4' T8 32w/EL/NEW	new wrap	8	23.2	0.53	3,474
Carson Valley Middle	BOYS	2L4' T8/EL	wrap	14	60	3650	1L4' T8 32w/EL/NEW	new wrap	14	23.2	0.52	1,881
Carson Valley Middle	A	2L4' T8/EL	wrap	16	60	6500	1L4' T8 32w/EL/NEW	new wrap	17	23.2	0.57	3,677
Carson Valley Middle	6	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	7	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	8	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	9	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	10	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	11	2L4' T8/EL	wrap	24	60	6500	1L4' T8 32w/EL/NEW	new wrap	24	23.2	0.88	5,742
Carson Valley Middle	MARTIN	4L4' T8/EL-8'	wrap	4	112	6500	1L4' T8 32w/EL/NEW	new wrap	12	23.2	0.17	1,103
Carson Valley Middle	16A	2L4' T12 EE/EEMAG	strip cage	3	70	6500	1L4' T8 32w/EL/STRIP KIT	rlrb strip kit	3	23.2	0.14	913
Carson Valley Middle	LIBHC	2L4' T12 EE/EEMAG	cove	60	70	2096	1L4' T8 32w/EL/STRIP KIT	rlrb strip kit	60	23.2	2.81	5,886
Carson Valley Middle	JANITOR	100W INCANDESCENT	keyless	1	100	1441	26W COMPACT SI	screw in	1	26.0	0.07	107
Carson Valley Middle	DRINKING FOUNTAIN	100W INCANDESCENT	can rec	1	100	3650	26W COMPACT SI	screw in	1	26.0	0.07	270
Carson Valley Middle	STAFF	100W INCANDESCENT	can rec	11	100	3650	26W COMPACT SI	screw in	2	26.0	1.05	3,825
Carson Valley Middle	JANITOR	150W INCANDESCENT	can rec	1	150	1441	26W COMPACT SI	screw in	1	26.0	0.12	179
Carson Valley Middle	KIT OFFICE	150W INCANDESCENT	can rec	1	150	3650	26W COMPACT SI	screw in	1	26.0	0.12	453

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
Carson Valley Middle	KIT CANOPY	150W METAL HALIDE Linear	can rec	4	172	3650	2L 32w CFL/CAN KIT	2x32cf/ck	4	64.0	0.43	1,577
Carson Valley Middle	60 - MUSIC	150W METAL HALIDE Linear	can rec	30	172	6500	2L 32w CFL/CAN KIT	2x32cf/ck	30	64.0	3.24	21,060
Carson Valley Middle	WOMENS	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	3650	2L2' T8/EL HI/RFL	rlrb rfl	2	39.9	0.06	220
Carson Valley Middle	MEN	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	3650	2L2' T8/EL HI/RFL	rlrb rfl	2	39.9	0.06	220
Carson Valley Middle	61-60	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	6500	2L2' T8/EL HI/RFL	rlrb rfl	3	39.9	0.09	588
Carson Valley Middle	INSTRUMENT STO & HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	16	70	6500	2L2' T8/EL HI/RFL	rlrb rfl	16	39.9	0.48	3,134
Carson Valley Middle	LIBHC	2L4' T12 U EE/EEMAG	trof acr 2x2	70	70	6500	2L2' T8/EL HI/RFL	rlrb rfl	75	39.9	1.91	12,418
Carson Valley Middle	63	2L3' T12 EE/STD	trof acr 1' wide	4	73	6500	2L3' T8/ELEE LO	RLRB	4	47.0	0.10	676
Carson Valley Middle	JANITOR	2L4' T12 EE/EEMAG-8'	strip	1	70	1441	2L4' T8 28w/ELEE	rlrb	1	36.6	0.03	48
Carson Valley Middle	FILE ROOM	#N/A	wrap	4	70	1441	2L4' T8 28w/ELEE	rlrb	4	36.6	0.13	193
Carson Valley Middle	101	4L4' T12 EE/EEMAG-8'	wrap	1	140	6500	2L4' T8 28w/ELEE HI/NEW-8'	new wrap	1	36.6	0.10	672
Carson Valley Middle	CUSTODIAN	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	1441	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	48
Carson Valley Middle	GIRLS LOCKER	2L4' T12 EE/EEMAG	trof acr	1	70	3650	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	122
Carson Valley Middle	E ENTRANCE	2L4' T12 EE/EEMAG	trof acr	2	70	3650	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	244
Carson Valley Middle	MECHANICAL	2L4' T12 EE/EEMAG	STRIP	2	70	1441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
Carson Valley Middle	KITCHEN	2L4' T12 EE/EEMAG	trof acr 1' wide	4	70	3500	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	468
Carson Valley Middle	KITCHEN HOOD	2L4' T12 EE/EEMAG	trof acr 1' wide	4	70	3500	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	468
Carson Valley Middle	stairs	2L4' T12 EE/EEMAG	wrap	4	70	3650	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	488
Carson Valley Middle	63	2L4' T12 EE/EEMAG	trof acr 1' wide	16	70	6500	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	3,476
Carson Valley Middle	40	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	42	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	44	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	46	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	48	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	50	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	51	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	49	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	47	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	45	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	43	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	41	2L4' T12 EE/EEMAG	trof acr	20	70	6500	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	4,345
Carson Valley Middle	LIBLC	2L4' T12 EE/EEMAG	trof acr 1' wide	40	70	2096	2L4' T8 28w/ELEE LO	rlrb	40	36.6	1.34	2,802
Carson Valley Middle	STORAGE	3L4' T12 EE/EEMAG	trof acr	4	110	1441	2L4' T8 28w/ELEE LO	dlrb	4	36.6	0.29	423
Carson Valley Middle	MEDIA	3L4' T12 EE/EEMAG	trof acr	8	110	3650	2L4' T8 28w/ELEE LO	dlrb	8	36.6	0.59	2,144
Carson Valley Middle	WORKROOM	3L4' T12 EE/EEMAG	trof acr	8	110	3650	2L4' T8 28w/ELEE LO	dlrb	8	36.6	0.59	2,144
Carson Valley Middle	CUSTODIAL	4L4' T12 EE/EEMAG-8'	wrap	1	140	1441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
Carson Valley Middle	OFFICE	4L4' T12 EE/EEMAG	eggcrate	5	140	3650	2L4' T8 28w/ELEE LO/NEW	new wrap pend	5	36.6	0.52	1,887
Carson Valley Middle	OFFICE	4L4' T12 EE/EEMAG	eggcrate	5	140	3650	2L4' T8 28w/ELEE LO/NEW	new wrap pend	2	36.6	0.63	2,288
Carson Valley Middle	CUSTODIAL ROOM IN B	4L4' T12 EE/EEMAG	trof acr	2	140	1441	2L4' T8 28w/ELEE rfl	rlrb rfl	1	36.6	0.24	351
Carson Valley Middle	32	4L4' T12 EE/EEMAG-8'	strip	6	140	6500	2L4' T8 28w/ELEE/	rlrb	12	36.6	0.40	2,607
Carson Valley Middle	STORAGE	4L4' T12 EE/EEMAG	trof acr	6	140	1441	2L4' T8 28w/ELEE/Delamp	rlrb delamp	6	36.6	0.62	894
Carson Valley Middle	shop	4L4' T12 EE/EEMAG	trof acr	6	140	3650	2L4' T8 28w/ELEE/Delamp	rlrb delamp	6	36.6	0.62	2,265
Carson Valley Middle	C	4L4' T12 EE/EEMAG	trof acr	16	140	6500	2L4' T8 28w/ELEE/Delamp	dlrb	16	36.6	1.65	10,756
Carson Valley Middle	KITCHEN	4L4' T12 EE/EEMAG	box acrylic	1	140	3500	2L4' T8 28w/ELEE/NEW	new wrap	1	36.6	0.10	362
Carson Valley Middle	VASEY	4L4' T12 EE/EEMAG	wrap	2	140	6500	2L4' T8 28w/ELEE/NEW	new wrap wide	2	36.6	0.21	1,344
Carson Valley Middle	TEACHER LOUNGE	4L4' T12 EE/EEMAG	wrap wide	4	140	3650	2L4' T8 28w/ELEE/NEW	new wrap wide	4	36.6	0.41	1,510
Carson Valley Middle	NURSE	4L4' T12 EE/EEMAG	wrap wide	6	140	3650	2L4' T8 28w/ELEE/NEW	new wrap wide	6	36.6	0.62	2,265

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
Carson Valley Middle	STO	4L4' T8/EL	wrap wide	2	112	1441	2L4' T8 28w/ELEE/NEW	new wrap wide	2	36.6	0.15	217
Carson Valley Middle	101	2L4' T12 EE/EEMAG-8'	wrap	2	70	6500	2L4' T8 28w/ELEE/NEW-8'	new wrap	2	36.6	0.07	434
Carson Valley Middle	FILE ROOM	2L8' T12 STD/STD	eggcrate	4	173	1441	2L4' T8 28w/ELEE/NEW-8'	new wrap	4	36.6	0.55	786
Carson Valley Middle	PRACTICE ROOM	3L4' T12 EE/EEMAG	trof acr	1	110	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.07	477
Carson Valley Middle	PRACTICE ROOM	3L4' T12 EE/EEMAG	trof acr	1	110	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.07	477
Carson Valley Middle	DRY GOODS	3L4' T12 EE/EEMAG	trof acr	1	110	1441	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.07	106
Carson Valley Middle	WALLS	3L4' T12 EE/EEMAG	trof acr	2	110	1441	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.15	212
Carson Valley Middle	KITCHEN	3L4' T12 EE/EEMAG	trof acr	11	110	3500	2L4' T8 28w/ELEE/RFL	rlrb rfl	12	36.6	0.77	2,699
Carson Valley Middle	61	3L4' T12 EE/EEMAG	trof acr	12	110	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	12	36.6	0.88	5,727
Carson Valley Middle	BEEN	3L4' T8/EL	trof acr	2	88	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.10	668
Carson Valley Middle	WALTON	3L4' T8/EL	trof acr	2	88	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.10	668
Carson Valley Middle	OFFICE 3	3L4' T8/EL	trof acr	2	88	3650	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.10	375
Carson Valley Middle	BINGHAM	3L4' T8/EL	trof parabolic	2	88	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.10	668
Carson Valley Middle	TEACHERS LOUNGE	3L4' T8/EL	trof acr	3	88	3650	2L4' T8 28w/ELEE/RFL	rlrb rfl	3	36.6	0.15	563
Carson Valley Middle	REGISTRAR	3L4' T8/EL	trof parabolic	5	88	3650	2L4' T8 28w/ELEE/RFL	rlrb rfl	5	36.6	0.26	938
Carson Valley Middle	POPE	3L4' T8/EL	trof parabolic	7	88	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	7	36.6	0.36	2,340
Carson Valley Middle	MAIN OFFICE	3L4' T8/EL	trof acr	12	88	3650	2L4' T8 28w/ELEE/RFL	rlrb rfl	12	36.6	0.62	2,252
Carson Valley Middle	34	4L4' T12 EE/EEMAG	trof acr	6	140	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	6	36.6	0.62	4,033
Carson Valley Middle	30	4L4' T12 EE/EEMAG	trof acr	6	140	6500	2L4' T8 28w/ELEE/RFL	rlrb rfl	6	36.6	0.62	4,033
Carson Valley Middle	STO	2L8' T8/EL	strip cage	9	109	1441	2L4' T8 28w/ELEE/STRIP KIT-8'	rlrb strip kit	9	36.6	0.65	939
Carson Valley Middle	SCULLY	4L4' T12 EE/EEMAG-8'	strip	2	140	6500	2L4' T8 28w/ELEE/STRIP KIT-8'	rlrb strip kit	2	36.6	0.21	1,344
Carson Valley Middle	NURSE	2x 60W INCANDESCENTS	drum	1	120	3650	2x 13W COMPACT/NEW	new drum	1	26.0	0.09	343
Carson Valley Middle	COACH	2x 60W INCANDESCENTS	drum	3	120	3650	2x 13W COMPACT/NEW	new drum	2	26.0	0.31	1,124
Carson Valley Middle	CANOPY B-A	2x 60W INCANDESCENTS	square recessed	4	120	3650	2x18W COMPACT/NEW	new drum	4	36.0	0.34	1,226
Carson Valley Middle	C	2x 20 INCANDESCENTS	wallpack	1	40	2096	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	78
Carson Valley Middle	63	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	KITCHEN	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	24	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	stairs	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	girls	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	E ENTRANCE	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
Carson Valley Middle	C	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
Carson Valley Middle	LIBHC	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
Carson Valley Middle	61-60	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
Carson Valley Middle	A	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
Carson Valley Middle	MULTI PURPOSE	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
Carson Valley Middle	BOYS	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
Carson Valley Middle	B	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.15	1,323
Carson Valley Middle	EXIT	2x 20 INCANDESCENTS	exit sign cage	5	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat cage	5	3.0	0.19	1,621
Carson Valley Middle	WEIGHT ROOM	2x 20 INCANDESCENTS	exit sign battery	5	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.19	1,699
Carson Valley Middle	28-31	2x 20 INCANDESCENTS	exit sign battery	6	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	6	3.0	0.22	1,945
Carson Valley Middle	SCULLY	4L4' T12 EE/EEMAG-8'	wrap	2	140	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap	2	116.1	0.05	310
Carson Valley Middle	29	4L4' T12 EE/EEMAG-8'	wrap	9	140	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap	9	116.1	0.21	1,396
Carson Valley Middle	28	4L4' T12 EE/EEMAG-8'	wrap	9	140	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap	9	116.1	0.21	1,396
Carson Valley Middle	1	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	2	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	3	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	4	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	5	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	12	6L4' T8/EL-8'	wrap wide	8	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	8	116.1	0.45	2,905
Carson Valley Middle	13	6L4' T8/EL-8'	wrap wide	15	172	6500	4L4' T8 28w/ELEE HI/NEW-8'	new wrap wide	15	116.1	0.84	5,447
Carson Valley Middle	A	4L4' T8/EL-8'	wrap	16	112	6500	4L4' T8 28w/ELEE relamp	relamp	16	116.1	-0.07	-430
Carson Valley Middle	30	400W METAL HALIDE Linear	lowbay	6	430	6500	6L4' T8 28w/ELEE HI/NEW	new T8 hibay cage	6	165.8	1.59	10,304
Carson Valley Middle	MULTI PURPOSE	400W METAL HALIDE Linear	high bay	16	430	6500	6L4' T8 28w/ELEE HI/NEW	new T8 hibay cage	16	165.8	4.23	27,478

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	**Room**	**Existing Description**	**Existing Style**	**Existing Qty**	**Existing Watts**	**Hours**	**Retro Description**	**Retro Style**	**Retro Qty**	**Retro Watts**	**Saved kW**	**Saved kWh**
Carson Valley Middle	C	100W MERCURY VAPOR	square recessed	8	120	2096	can kit	2x42cf/ck	8	84.0	0.29	604
Carson Valley Middle	**Totals**			**1506**					**1513**		**71.35**	**383,624**
CCMES	PORTABLE	60W INCANDESCENT	jar	2	60	1859	13W COMPACT/NEW	new wallpack	2	13.0	0.09	175
CCMES	NURSE SHOWER	100W INCANDESCENT	REC	1	100	1200	18W SCREW IN	Screw in	1	18.0	0.08	98
CCMES	NURSE	1L4' T12 EE/EEMAG	strip	1	40	4112	1L4' T8 28w/ELEE LO	rlrb	2	28.0	-0.02	-66
CCMES	GYM	1L4' T12 EE/EEMAG	strip	1	40	1200	1L4' T8 28w/ELEE LO	rlrb	1	28.0	0.01	14
CCMES	UTILITY	1L4' T12 EE/EEMAG	strip	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
CCMES	CUSTODIAN	1L4' T12 EE/EEMAG	strip	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
CCMES	EARLY CHILDHOOD	1L4' T12 EE/EEMAG	strip	3	40	3500	1L4' T8 28w/ELEE LO	rlrb	3	28.0	0.04	126
CCMES	KITCHEN	1L4' T12 EE/EEMAG	strip	5	40	4112	1L4' T8 28w/ELEE LO	rlrb	4	28.0	0.09	362
CCMES	BOILER	1L4' T12 EE/EEMAG	strip	8	40	1200	1L4' T8 28w/ELEE LO	rlrb	13	28.0	-0.04	-53
CCMES	KB	1L4' T8/EL	strip	3	30	1200	1L4' T8 28w/ELEE LO	rlrb	3	28.0	0.01	7
CCMES	KITCHEN	2L4' T12 EE/EEMAG	wrap	2	70	4112	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	345
CCMES	MEN	1L4' T12 EE/EEMAG	vanity	1	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.01	49
CCMES	NURSE	1L4' T12 EE/EEMAG	vanity	1	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.01	49
CCMES	WOMEN	1L4' T12 EE/EEMAG	vanity	2	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
CCMES	KITCHEN	1L4' T12 EE/EEMAG	vanity	2	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
CCMES	M&L	1L4' T12 EE/EEMAG	vanity	2	40	1200	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	29
CCMES	M & W	1L4' T12 EE/EEMAG	vanity	2	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
CCMES	EARLY CHILDHOOD	1L4' T12 EE/EEMAG	vanity	2	40	1859	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	45
CCMES	KB	1L4' T12 EE/EEMAG	vanity	2	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
CCMES	STAFF	1L4' T12 EE/EEMAG	vanity	3	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.06	263
CCMES	GIRLS	1L4' T12 EE/EEMAG	vanity	6	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.07	296
CCMES	GIRLS	1L4' T12 EE/EEMAG	vanity	6	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.07	296
CCMES	GYM	1L4' T12 EE/EEMAG	vanity	7	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	7	28.0	0.08	345
CCMES	BOYS	1L4' T12 EE/EEMAG	vanity	8	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	9	28.0	0.07	280
CCMES	BOYS	1L4' T12 EE/EEMAG	vanity	8	40	4112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	9	28.0	0.07	280
CCMES	MAINT	2L4' T12 EE/EEMAG	wrap wide	5	70	1200	1L4' T8 28w/ELEE/NEW	new wrap wide	5	28.0	0.21	252
CCMES	STAFF WKRM	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	4112	2L2' T8/EL HI/RFL	rlrb rfl	1	39.9	0.03	124
CCMES	STAFF	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	4112	2L2' T8/EL HI/RFL	rlrb rfl	2	39.9	0.06	248
CCMES	ADMIN	2L2' T12 STD/STD	trof acr 2x2	1	56	4112	2L2' T8/EL LO	rlrb	2	39.9	-0.02	-98
CCMES	NURSE HALL	2L2' T12 STD/STD	trof acr 2x2	1	56	4112	2L2' T8/EL LO	rlrb	1	39.9	0.02	66
CCMES	NURSE	2L2' T12 STD/STD	trof acr 2x2	3	56	4112	2L2' T8/EL LO	rlrb	3	39.9	0.05	199
CCMES	OFFICE 1	2L2' T12 STD/STD	trof acr 2x2	4	56	4112	2L2' T8/EL LO	rlrb	4	39.9	0.06	265
CCMES	11-12 HALL	2L2' T12 STD/STD	trof acr 2x2	8	56	3500	2L2' T8/EL LO	rlrb	8	39.9	0.13	452
CCMES	13-18 HALL	2L2' T12 STD/STD	trof acr 2x2	9	56	3500	2L2' T8/EL LO	rlrb	9	39.9	0.15	508
CCMES	ART HALL	2L2' T12 STD/STD	trof acr 2x2	11	56	3500	2L2' T8/EL LO	rlrb	11	39.9	0.18	621
CCMES	ENTRANCE	2L2' T12 STD/STD	trof acr 2x2	12	56	3500	2L2' T8/EL LO	rlrb	14	39.9	0.11	399
CCMES	KITCHEN HALL	2L2' T12 STD/STD	trof acr 2x2	14	56	3500	2L2' T8/EL LO	rlrb	14	39.9	0.23	791
CCMES	19-26 HALL	2L2' T12 STD/STD	trof acr 2x2	16	56	3500	2L2' T8/EL LO	rlrb	16	39.9	0.26	904
CCMES	K-10 HALL	2L2' T12 STD/STD	trof acr 2x2	34	56	3500	2L2' T8/EL LO	rlrb	34	39.9	0.55	1,921
~~CCMES~~	~~HALLS~~	~~2L2' T12 STD/STD~~	~~trof acr 2x2~~	~~92~~	~~56~~	~~3500~~	~~2L2' T8/EL LO~~	~~rlrb~~	0		0.00	0
CCMES	OFFICE 1	2L4' T12 EE/EEMAG	trof acr	1	70	4112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
CCMES	STAFF	2L4' T12 EE/EEMAG	WRAP	1	70	4112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
CCMES	PRACTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
CCMES	PRACTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
CCMES	PRACTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
CCMES	CONFERENCE	2L4' T12 EE/EEMAG	trof acr	2	70	1200	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	80
CCMES	PHONE ROOM	2L4' T12 EE/EEMAG	wrap	2	70	1200	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	80
CCMES	LIBRARIAN	2L4' T12 EE/EEMAG	trof acr	2	70	4112	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	275
CCMES	KITCHEN HOOD	2L4' T12 EE/EEMAG	trof acr	2	70	4112	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	275
CCMES	SPEECH	2L4' T12 EE/EEMAG	trof acr	2	70	4112	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	275
CCMES	NURSE	2L4' T12 EE/EEMAG	trof acr	2	70	4112	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	275
CCMES	PRACTICE ROOM	2L4' T12 EE/EEMAG	trof acr	2	70	1200	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	80
CCMES	STORE ROOM	2L4' T12 EE/EEMAG	TROF ACR	3	70	1200	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	120
CCMES	ADMIN	2L4' T12 EE/EEMAG	trof acr	4	70	4112	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.17	700
CCMES	AV ROOM	2L4' T12 EE/EEMAG	trof acr	4	70	1200	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	160
CCMES	GT-STILES	2L4' T12 EE/EEMAG	trof acr	4	70	4112	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	550
CCMES	COUNSELOR	2L4' T12 EE/EEMAG	trof acr	6	70	4112	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.27	1,125
CCMES	READING	2L4' T12 EE/EEMAG	trof acr	6	70	4112	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	825
CCMES	STAFF WKRM	2L4' T12 EE/EEMAG	trof acr	6	70	4112	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	825
CCMES	ADMIN	2L4' T12 EE/EEMAG	trof acr	8	70	4112	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	1,099
CCMES	STAFF	2L4' T12 EE/EEMAG	trof acr	8	70	4112	2L4' T8 28w/ELEE LO	rlrb	7	36.6	0.30	1,250
CCMES	15	2L4' T12 EE/EEMAG	trof acr	10	70	1859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
CCMES	16	2L4' T12 EE/EEMAG	trof acr	10	70	1859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
CCMES	17	2L4' T12 EE/EEMAG	trof acr	10	70	1859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
CCMES	18	2L4' T12 EE/EEMAG	trof acr	10	70	1859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
CCMES	19	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	21	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	23	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	25	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	26	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	24	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	22	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	20	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	14	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	13	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	11	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	12	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	9	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	7	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	5	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	3	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	1	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	EARLY CHILDHOOD	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	KB	2L4' T12 EE/EEMAG	trof acr	16	70	1200	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	642
CCMES	2	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	4	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	6	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	10	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
CCMES	8	2L4' T12 EE/EEMAG	trof acr	16	70	1859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
CCMES	LIBRARY	2L4' T12 EE/EEMAG	trof acr	20	70	4112	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	2,749
CCMES	PORTABLE	2L4' T12 EE/EEMAG	trof acr	20	70	1859	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,243
CCMES	PORTABLE	2L4' T12 EE/EEMAG	trof acr	20	70	1859	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,243
CCMES	ART/MUSIC	2L4' T12 EE/EEMAG	trof acr	24	70	1859	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,491
CCMES	KITCHEN	2L4' T12 EE/EEMAG	vapor tight	16	70	4112	2L4' T8 28w/ELEE LO/NEW	new vaportight	17	36.6	0.50	2,049
CCMES	PORTABLE RR	4L4' T12 EE/EEMAG	trof acr	1	140	4112	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.10	425
CCMES	ESL	4L4' T12 EE/EEMAG	trof acr	3	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	5	36.6	0.24	441
CCMES	PORTABLE	4L4' T12 EE/EEMAG	trof acr	8	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	8	36.6	0.83	1,538
CCMES	PORTABLE	4L4' T12 EE/EEMAG	trof acr	8	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	8	36.6	0.83	1,538
CCMES	ESL	4L4' T12 EE/EEMAG	trof acr	1	140	1859	2L4' T8 28w/ELEE-LO/RFL	rlrb rfl	1	36.6	0.10	192
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
CCMES	EXIT	2x 20 INCANDESCENTS	exit sign battery	6	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.24	2,076
~~CCMES~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~10~~	~~40~~	~~8760~~	~~3 WATT LED/NEW EXIT BATTERY~~	~~new exit bat~~	0		0.00	0
CCMES	STORE ROOM	200W INCANDESCENT	JB	4	200	1441	32 WATT SCREW IN	screw in	4	32.0	0.67	968
CCMES	CAFETORIUM	250W METAL HALIDE	high bay	24	295	3500	4L4' T8 28w/ELEE HI/NEW	new T8 hibay lens	24	116.1	4.29	15,024
CCMES	**Totals**			**977**					**878**		**31.11**	**83,509**
Computer Services	CLOSET	2x 60W INCANDESCENTS	drum	2	120	1,200	13W COMPACT	screw in	2	13.0	0.21	257
Computer Services	WaLL	60W INCANDESCENT	wallpack	2	60	3,120	13W COMPACT/NEW	new wallpack	2	13.0	0.09	293
Computer Services	CENTER	2L4' T12 EE/EEMAG	trof acr	2	70	3,120	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	209
Computer Services	RR	2L4' T12 EE/EEMAG	trof acr	2	70	3,120	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	209
Computer Services	RT SIDE	2L4' T12 EE/EEMAG	trof acr	8	70	3,120	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	834
Computer Services	LEFT SIDE	2L4' T12 EE/EEMAG	trof acr	13	70	3,120	2L4' T8 28w/ELEE LO	rlrb	13	36.6	0.43	1,356
Computer Services	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	3,120	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	231
Computer Services	**Totals**			**31**					**31**		**1.22**	**3,388**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	508	60W INCANDESCENT	can rec	2	60	2325	13W COMPACT SI	SCREW IN	2	13.0	0.09	219
~~DHS~~	~~STaFF~~	~~60W INCANDESCENT~~	~~drum~~	~~1~~	~~60~~	~~2393~~	~~13W COMPACT/NEW~~	~~new drum~~	0		0.00	0
DHS	STaFF	60W INCANDESCENT	drum	1	60	2393	13W COMPACT/NEW	new drum	1	13.0	0.05	112
DHS	602	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	603	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	604	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	605	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	606	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	607	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	608	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	609	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	610	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	611	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	612	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	613	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
DHS	614	60W INCANDESCENT	jar	1	60	2325	13W COMPACT/NEW	new wallpack	1	13.0	0.05	109
~~DHS~~	~~615~~	~~60W INCANDESCENT~~	~~jar~~	~~1~~	~~60~~	~~2325~~	~~13W COMPACT/NEW~~	~~new jar~~	0		0.00	0
DHS	HOOD	150W INCANDESCENT	jar cage	4	150	2393	15W COMPACT SI	screw in	4	15.0	0.54	1,292
DHS	HOOD	150W INCANDESCENT	jar cage	8	150	2325	15W COMPACT SI	screw in	8	15.0	1.08	2,511
DHS	CUSTODIaN RM	2L4' T12 EE/EEMAG	wrap	2	70	1467	15W COMPACT SI	screw in	2	15.0	0.11	161
DHS	RR	2L3' T8/EL	vanity	2	47	2325	1L3' T8 28w/ELEE LO/vanity	rlrb	2	24.0	0.05	107
DHS	RR	1L4' T12 EE/EEMAG	wrap	2	40	4112	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	28.0	0.02	99
DHS	JaNITOR	1L4' T8/EL	strip	1	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	28.0	0.00	3
DHS	STO	1L4' T8/EL	strip	1	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	28.0	0.00	3
DHS	CLO	1L4' T8/EL	strip cage	1	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	28.0	0.00	3
DHS	CLO	1L4' T8/EL	wrap	1	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	28.0	0.00	3
DHS	Custodian	1L4' T8/EL	strip	1	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	28.0	0.00	3
DHS	CUSTODIAN	1L4' T8/EL	strip	2	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	28.0	0.00	6
DHS	STORaGE	1L4' T8/EL	strip	2	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	28.0	0.00	6
DHS	ENTRY CLO	1L4' T8/EL	wrap	3	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	28.0	0.01	9
DHS	CLO	1L4' T8/EL	wrap	5	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	28.0	0.01	15
DHS	MECH	1L4' T8/EL	strip	7	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	28.0	-0.01	-21
DHS	STO	1L4' T8/EL	strip cage	7	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	28.0	0.01	21
DHS	101 stage	1L4' T8/EL	strip	12	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	12	28.0	0.02	35
DHS	loft	1L4' T8/EL	strip	14	30	1467	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	28.0	0.03	41
DHS	storagE	2L4' T12 EE/EEMAG	industrial	1	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	62
DHS	508	2L4' T12 EE/EEMAG	industrial	1	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	98
DHS	STO	2L4' T12 EE/EEMAG	industrial	1	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	62
DHS	STO	2L4' T12 EE/EEMAG	industrial	1	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	62
DHS	JaN	2L4' T12 EE/EEMAG	industrial	1	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	62

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	CUSTODIAN	2L4' T12 EE/EEMAG	industrial	2	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	2	28.0	0.08	123
DHS	109 office	2L4' T12 EE/EEMAG	industrial	2	70	2393	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	2	28.0	0.08	201
DHS	FOOTBALL STORAGE	2L4' T12 EE/EEMAG	industrial	2	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	2	28.0	0.08	123
DHS	Student Store	2L4' T12 EE/EEMAG	industrial	3	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	3	28.0	0.13	185
DHS	STO	2L4' T12 EE/EEMAG	industrial	3	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	3	28.0	0.13	185
DHS	STO	2L4' T12 EE/EEMAG	industrial	3	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	3	28.0	0.13	185
DHS	STO	2L4' T12 EE/EEMAG	industrial	3	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	3	28.0	0.13	185
DHS	508 storage	2L4' T12 EE/EEMAG	industrial	4	70	1467	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	4	28.0	0.17	246
DHS	509	2L4' T12 EE/EEMAG	industrial	4	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	4	28.0	0.17	391
DHS	DRaPER	2L4' T12 EE/EEMAG	industrial	4	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	4	28.0	0.17	391
DHS	117	2L4' T12 EE/EEMAG	industrial	5	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	5	28.0	0.21	488
DHS	501	2L4' T12 EE/EEMAG	industrial	7	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	10	28.0	0.21	488
DHS	508 loft	2L4' T12 EE/EEMAG	industrial	9	70	2325	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	9	28.0	0.38	879
DHS	506/507	2L4' T12 EE/EEMAG	wrap	1	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	1	28.0	0.04	98
DHS	RR	2L4' T12 EE/EEMAG	wrap	1	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	1	28.0	0.04	98
DHS	508	2L4' T12 EE/EEMAG	wrap	2	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	195
DHS	227	2L4' T12 EE/EEMAG	wrap	3	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	5	28.0	0.07	163
DHS	MENS	2L4' T12 EE/EEMAG	wrap	5	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	5	28.0	0.21	488
DHS	WOMENS	2L4' T12 EE/EEMAG	wrap	5	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	5	28.0	0.21	488
DHS	226	2L4' T12 EE/EEMAG	wrap	5	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	5	28.0	0.21	488
DHS	117	2L4' T12 EE/EEMAG	wrap	34	70	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	36	28.0	1.37	3,190
DHS	LOCKER	2L4' T8/EL	wrap	1	60	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	1	28.0	0.03	74
DHS	116	2L4' T8/EL	wrap	2	60	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.06	149
DHS	116	2L4' T8/EL	wrap	31	60	2325	1L4' T8 28w/ELEE LO/NEW	new wrap	32	28.0	0.96	2,241
DHS	117	2L4' T12 EE/EEMAG	vanity	2	70	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.08	195
DHS	117	2L4' T12 EE/EEMAG	vanity	6	70	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.25	586
DHS	WOMEN	2L4' T8/EL	vanity	1	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.03	74
DHS	116	2L4' T8/EL	vanity	1	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.03	74
DHS	MEN	2L4' T8/EL	vanity	2	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.06	149
DHS	LOCKER	2L4' T8/EL	vanity	2	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.06	149
DHS	WOMENS	2L4' T8/EL	vanity	7	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	7	28.0	0.22	521
DHS	MENS	2L4' T8/EL	vanity	7	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	7	28.0	0.22	521
DHS	MENS	2L4' T8/EL	vanity	9	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	9	28.0	0.29	670
DHS	WOMEN	2L4' T8/EL	vanity	9	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	8	28.0	0.32	735
DHS	116	2L4' T8/EL	vanity	12	60	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	12	28.0	0.38	893
DHS	COMMONS	2L4' T12 EE/EEMAG	cove	38	70	6540	1L4' T8 28w/ELEE LO/STRIP KIT	rlrb strip kit	45	28.0	1.40	9,156
DHS	KIT	2L4' T12 EE/EEMAG	box acr 1' wide	20	70	2325	1L4' T8 28w/ELEE/RFL	rlrb rfl	20	28.0	0.84	1,953
DHS	229	2L4' T8/EL	trof acr 1' wide	3	60	2325	1L4' T8 28w/ELEE/RFL	rlrb rfl	3	28.0	0.10	223
DHS	230	2L4' T8/EL	trof acr 1' wide	6	60	2325	1L4' T8 28w/ELEE/RFL	rlrb rfl	6	28.0	0.19	446
DHS	116	2L4' T8/EL	trof acr 1' wide	6	60	2325	1L4' T8 28w/ELEE/RFL	rlrb rfl	6	28.0	0.19	446
DHS	dressing room	2L2' T12 EE/EEMAG	trof acr	14	85	2325	2L2' T8 28w/ELEE LO	rlrb	14	39.9	0.63	1,469

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	uniform storage	2L4' T12/EEMAG	industrial	3	94	1467	2L4' T8 28w/ELEC	rlrb	3	36.6	0.17	253
DHS	O	2L4' T8/EL	trof acr	1	60	1467	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	34
DHS	O	2L4' T8/EL	trof acr	2	60	1467	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	69
DHS	STORaGE	2L4' T8/EL	trof acr	2	60	1467	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	69
DHS	STO	2L4' T8/EL	trof acr	3	60	1467	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	103
DHS	101 entry	2L4' T8/EL	trof acr	3	60	6540	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	460
DHS	O	2L4' T8/EL	trof acr	4	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	36.6	0.09	218
DHS	O	2L4' T8/EL	trof acr	4	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	36.6	0.06	133
DHS	ELECTRICAL ROOM	2L4' T8/EL	trof acr	4	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	36.6	0.09	218
DHS	102 entry	2L4' T8/EL	trof acr	5	60	6540	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	36.6	0.12	766
DHS	BLD200 RR'S	2L4' T8/EL	wrap	8	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	436
DHS	HaLL	2L4' T8/EL	1' trof acr	8	60	6540	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	1,225
DHS	restrooms	2L4' T8/EL	trof acr	13	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	36.6	0.30	708
DHS	HaLL	2L4' T8/EL	trof acr	19	60	6540	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	25	36.6	0.23	1,475
DHS	BLD200	2L4' T8/EL	trof acr	21	60	6540	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	21	36.6	0.49	3,217
DHS	103	3L4' T12 EE/EEMAG	trof acr	15	110	2325	2L4' T8 28w/ELEC/RELAMP ONLY	delamp	16	36.6	1.06	2,476
DHS	STORaGE	3L4' T8/EL	trof acr	1	88	1467	2L4' T8 28w/ELEC/RELAMP ONLY	delamp	1	36.6	0.05	75
DHS	dressing room	3L4' T8/EL	trof acr	4	88	2325	2L4' T8 28w/ELEC/RELAMP ONLY	delamp	4	36.6	0.21	478
DHS	PRACTICE ROOM	3L4' T8/EL	trof acr	5	88	2325	2L4' T8 28w/ELEC/RELAMP ONLY	delamp	5	36.6	0.26	598
DHS	INSTRUMENT STO & HALL	3L4' T8/EL	trof acr	7	88	2325	2L4' T8 28w/ELEC/RELAMP ONLY	delamp	7	36.6	0.36	837
DHS	114 storage	2L4' F48 T12 HO STD/STD	trof acr 1' wide	9	145	1467	2L4' T8 28w/ELEE	rlrb rfl	9	36.6	0.98	1,432
DHS	114 storage ROOMS	2L4' T12 EE/EE	WRAP	10	240	1467	2L4' T8 28w/ELEE LO	rlrb	10	36.6	2.03	2,984
DHS	JaNITOR	2L4' T12 EE/EEMAG	strip	1	70	1467	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	49
DHS	509	2L4' T12 EE/EEMAG	wrap	1	70	2325	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	78
DHS	CUTODIaN	2L4' T12 EE/EEMAG	wrap	1	70	1467	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	49
DHS	109	2L4' T12 EE/EEMAG	wrap	1	70	2325	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	78
DHS	HaLL	2L4' T12 EE/EEMAG	trof acr	1	70	6540	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	219
DHS	HaLL	2L4' T12 EE/EEMAG	wrap wide	1	70	6540	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	219
DHS	110	2L4' T12 EE/EEMAG	trof acr	1	70	2325	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	78
DHS	110	2L4' T12 EE/EEMAG	wrap wide	1	70	2325	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	78
DHS	117	2L4' T12 EE/EEMAG	trof acr	1	70	2325	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	78
DHS	MENS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	MENS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	WOMEN	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.03	70
DHS	WOMEN	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	ATTIC	2L4' T12 EE/EEMAG	strip	2	70	1467	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	98
DHS	506/507	2L4' T12 EE/EEMAG	trof acr	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	506/507	2L4' T12 EE/EEMAG	box acrylic	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	GIRLS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	BOYS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	510	2L4' T12 EE/EEMAG	trof acr	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	FaC MENS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	FaC WOMEN	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	501	2L4' T12 EE/EEMAG	box acrylic	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	IT	2L4' T12 EE/EEMAG	trof acr	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	MQRTIN	2L4' T12 EE/EEMAG	trof acr	2	70	2393	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	160
DHS	NURSE	2L4' T12 EE/EEMAG	wrap	2	70	2393	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	160
DHS	103 office	2L4' T12 EE/EEMAG	trof acr	2	70	2393	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	160
DHS	WOMaNS	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	MEN	2L4' T12 EE/EEMAG	wrap	2	70	2325	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	155
DHS	506/507	2L4' T12 EE/EEMAG	trof acr	3	70	2325	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	233
DHS	ATTIC	2L4' T12 EE/EEMAG	STRIP	3	70	1467	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	147
DHS	210	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	208	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	216	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	218	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	224a	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	500	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	500	2L4' T12 EE/EEMAG	trof acr	4	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	311
DHS	CONF	2L4' T12 EE/EEMAG	trof acr	4	70	2393	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	320
DHS	TROPHY CaSE	2L4' T12 EE/EEMAG	wrap	4	70	6540	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	874
DHS	haLL	2L4' T12 EE/EEMAG	trof acr	4	70	6540	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	874
DHS	NURSE	2L4' T12 EE/EEMAG	trof acr	5	70	2393	2L4' T8 28w/ELEE LO	rlrb	5	36.6	0.17	400
DHS	109	2L4' T12 EE/EEMAG	industrial	5	70	2325	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.20	474
DHS	MaINT	2L4' T12 EE/EEMAG	trof acr	6	70	1467	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	294
DHS	504	2L4' T12 EE/EEMAG	trof acr	6	70	2325	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.13	296
DHS	HaLL	2L4' T12 EE/EEMAG	trof acr	7	70	2325	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.20	459
DHS	TIGER CaGE	2L4' T12 EE/EEMAG	trof acr	8	70	2325	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	622
DHS	SERVINTG	2L4' T12 EE/EEMAG	trof acr	8	70	2325	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	622
DHS	212	2L4' T12 EE/EEMAG	trof acr	10	70	2325	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	777
DHS	214	2L4' T12 EE/EEMAG	trof acr	10	70	2325	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	777
DHS	118	2L4' T12 EE/EEMAG	trof acr	10	70	2325	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	777
DHS	506/507	2L4' T12 EE/EEMAG	box acrylic	12	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.40	933
DHS	501	2L4' T12 EE/EEMAG	box acrylic	12	70	6540	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.40	2,623
DHS	ENTRY	2L4' T12 EE/EEMAG	trof acr	12	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.40	933
DHS	111	2L4' T12 EE/EEMAG	trof acr	12	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.40	933
DHS	201	2L4' T12 EE/EEMAG	trof acr	15	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	1,166
DHS	505	2L4' T12 EE/EEMAG	trof acr	15	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	1,166
DHS	502	2L4' T12 EE/EEMAG	trof acr	15	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	1,166
DHS	503	2L4' T12 EE/EEMAG	trof acr	15	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	1,166
DHS	HaLL	2L4' T12 EE/EEMAG	trof acr	15	70	6540	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	3,279
DHS	223	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	221	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	219	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	217	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	215	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	213	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	211	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	209	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	207	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	205	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	1,243
DHS	203	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.57	1,328
DHS	504	2L4' T12 EE/EEMAG	trof acr	16	70	2325	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.57	1,328
DHS	202	2L4' T12 EE/EEMAG	trof acr	18	70	2325	2L4' T8 28w/ELEE LO	rlrb	18	36.6	0.60	1,399
DHS	206	2L4' T12 EE/EEMAG	trof acr	18	70	2325	2L4' T8 28w/ELEE LO	rlrb	18	36.6	0.60	1,399
DHS	OO	2L4' T12 EE/EEMAG	trof acr	18	70	2325	2L4' T8 28w/ELEE LO	rlrb	18	36.6	0.60	1,399
DHS	225	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	19	36.6	0.71	1,639
DHS	602	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,554
DHS	603	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,554

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	604	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,554
DHS	605	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,554
DHS	606	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	607	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	608	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	609	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	610	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	611	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	612	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	613	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.96	2,235
DHS	614	2L4' T12 EE/EEMAG	trof acr	20	70	2325	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,554
~~DHS~~	~~615~~	~~2L4' T12 EE/EEMAG~~	~~trof acr~~	~~20~~	~~70~~	~~2325~~	~~2L4' T8 28w/ELEE LO~~	~~rlrb~~	0		0.00	0
DHS	100	2L4' T12 EE/EEMAG	trof acr	23	70	2325	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.73	1,702
DHS	204	2L4' T12 EE/EEMAG	trof acr	24	70	2325	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,865
DHS	220	2L4' T12 EE/EEMAG	trof acr	24	70	2325	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,865
DHS	222	2L4' T12 EE/EEMAG	trof acr	24	70	2325	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,865
DHS	601	2L4' T12 EE/EEMAG	wrap	24	70	2325	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,865
DHS	226	2L4' T12 EE/EEMAG	trof acr	28	70	2325	2L4' T8 28w/ELEE LO	rlrb	28	36.6	0.94	2,176
DHS	228	2L4' T12 EE/EEMAG	trof acr	28	70	2325	2L4' T8 28w/ELEE LO	rlrb	28	36.6	0.94	2,176
DHS	HaLL	2L4' T12 EE/EEMAG	trof acr	29	70	6540	2L4' T8 28w/ELEE LO	rlrb	29	36.6	0.97	6,339
DHS	224	2L4' T12 EE/EEMAG	trof acr	30	70	2325	2L4' T8 28w/ELEE LO	rlrb	30	36.6	1.00	2,331
DHS	227	2L4' T12 EE/EEMAG	trof acr	31	70	2325	2L4' T8 28w/ELEE LO	rlrb	31	36.6	1.04	2,409
DHS	BLD200	2L4' T12 EE/EEMAG	trof acr	40	70	2325	2L4' T8 28w/ELEE LO	rlrb	39	36.6	1.37	3,193
DHS	110	4L4' T12 EE/EEMAG	wrap wide	3	140	2325	2L4' T8 28w/ELEE LO	dlrb	3	36.6	0.31	721
DHS	SMaLL	2L4' T12 EE/EEMAG	vapor tight	2	70	1467	2L4' T8 28w/ELEE LO/NEW	new vaportight wall	2	36.6	0.07	98
DHS	117	2L4' T12 EE/EEMAG	vapor tight	4	70	2325	2L4' T8 28w/ELEE LO/NEW	new vaportight	3	36.6	0.17	396
DHS	LaRGE	2L4' T12 EE/EEMAG	vapor tight	4	70	2325	2L4' T8 28w/ELEE LO/NEW	new vaportight wall	4	36.6	0.13	311
DHS	IT	3L4' T12 EE/EEMAG	trof acr	1	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	1	36.6	0.07	171
DHS	JOHN	3L4' T12 EE/EEMAG	trof acr	2	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.15	341
DHS	WORD	3L4' T12 EE/EEMAG	trof acr	4	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.29	683
DHS	OO	3L4' T12 EE/EEMAG	trof acr	5	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	5	36.6	0.37	854
DHS	510	3L4' T12 EE/EEMAG	trof acr	30	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	30	36.6	2.20	5,121
DHS	511	3L4' T12 EE/EEMAG	trof acr	30	110	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	30	36.6	2.20	5,121
DHS	229	3L4' T8/EL	trof acr	1	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	1	36.6	0.05	120
DHS	231	3L4' T8/EL	trof acr	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	302	3L4' T8/EL	trof parabolic	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	BECKY	3L4' T8/EL	trof acr	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	OZOLINS	3L4' T8/EL	trof acr	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	ROBINSON	3L4' T8/EL	trof acr	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	CaUGHLaN	3L4' T8/EL	trof acr	2	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	239
DHS	101 office	3L4' T8/EL	trof acr	2	88	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.10	246
DHS	STO	3L4' T8/EL	trof acr	3	88	1467	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	3	36.6	0.15	226
DHS	O	3L4' T8/EL	trof acr	4	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.21	478
DHS	301	3L4' T8/EL	trof parabolic	4	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.21	478
DHS	OVaRD	3L4' T8/EL	trof acr	4	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.21	478
DHS	SLIDE LaB	3L4' T8/EL	trof parabolic	6	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	6	36.6	0.31	717
DHS	OO	3L4' T8/EL	trof acr	6	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	6	36.6	0.31	717
DHS	STaFF	3L4' T8/EL	trof acr	10	88	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	11	36.6	0.48	1,143
DHS	102 office	3L4' T8/EL	trof acr	10	88	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	10	36.6	0.51	1,231
DHS	416	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	414	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	412	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	410	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	408	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	406	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	404	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	401	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	403	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	405	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	407	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	409	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	411	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	413	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	415	3L4' T8/EL	trof acr	14	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	14	36.6	0.72	1,674
DHS	402	3L4' T8/EL	trof acr	16	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	19	36.6	0.71	1,658
DHS	230	3L4' T8/EL	trof acr	20	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	22	36.6	0.96	2,221
DHS	106	3L4' T8/EL	trof acr	20	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	20	36.6	1.03	2,391
DHS	301	3L4' T8/EL	trof parabolic	21	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	21	36.6	1.08	2,511
DHS	231	3L4' T8/EL	trof acr	23	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	23	36.6	1.18	2,750
DHS	302	3L4' T8/EL	trof parabolic	23	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	23	36.6	1.18	2,750
DHS	229	3L4' T8/EL	trof acr	28	88	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	28	36.6	1.44	3,348
DHS	CUSTODIAN	4L4' T12 EE/EEMAG	trof acr	1	140	1467	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	1	36.6	0.10	152
DHS	228	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	227	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	KIT	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	MORGaN	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	O	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	109 office	4L4' T12 EE/EEMAG	trof acr	2	140	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	495
DHS	113	4L4' T12 EE/EEMAG	trof acr	2	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	2	36.6	0.21	481
DHS	SECURITY	4L4' T12 EE/EEMAG	trof acr	3	140	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	3	36.6	0.31	742
DHS	PRIN	4L4' T12 EE/EEMAG	trof acr	4	140	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.41	990
DHS	V PRI9N	4L4' T12 EE/EEMAG	trof acr	4	140	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	4	36.6	0.41	990
DHS	PRINC	4L4' T12 EE/EEMAG	trof acr	5	140	2393	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	5	36.6	0.52	1,237
DHS	508	4L4' T12 EE/EEMAG	trof acr	6	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	6	36.6	0.62	1,443
DHS	OP	4L4' T12 EE/EEMAG	trof acr	8	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	7	36.6	0.86	2,009
DHS	117	4L4' T12 EE/EEMAG	trof acr	9	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	9	36.6	0.93	2,164
DHS	108	4L4' T12 EE/EEMAG	trof acr	11	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	11	36.6	1.14	2,645
DHS	506/507	4L4' T12 EE/EEMAG	trof acr	12	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	12	36.6	1.24	2,886
DHS	112	4L4' T12 EE/EEMAG	trof acr	12	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	12	36.6	1.24	2,886
DHS	BLD200	4L4' T12 EE/EEMAG	trof acr	14	140	6540	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	15	36.6	1.41	9,230
DHS	106A	4L4' T12 EE/EEMAG	trof acr	14	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	15	36.6	1.41	3,281
DHS	113	4L4' T12 EE/EEMAG	trof acr	18	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	18	36.6	1.86	4,328
DHS	107	4L4' T12 EE/EEMAG	trof acr	20	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	20	36.6	2.07	4,809
DHS	110	4L4' T12 EE/EEMAG	trof acr	24	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	24	36.6	2.48	5,771
DHS	105	4L4' T12 EE/EEMAG	trof acr	33	140	2325	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	33	36.6	3.41	7,935
DHS	STO	2L4' T12 EE/EEMAG-8'	industrial	1	70	1467	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	1	36.6	0.03	49
DHS	MECH	2L4' T12 EE/EEMAG-8'	industrial	1	70	1467	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	1	36.6	0.03	49

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	ELECTRICAL ROOM	2L4' T12 EE/EEMAG-8'	industrial	2	70	1467	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	2	36.6	0.07	98
DHS	109	2L4' T12 EE/EEMAG-8'	industrial	19	70	2325	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	20	36.6	0.60	1,391
DHS	508 loft	2L8' T12 EE/EEMAG-8'	industrial	4	123	2325	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	4	36.6	0.35	804
DHS	509	2L8' T12 EE/EEMAG-8' HO	industrial	16	123	2325	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	16	36.6	1.38	3,215
DHS	501	2L8' T12 EE/EEMAG-8' HO	industrial	31	123	2325	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	32	36.6	2.64	6,144
DHS	CLO	3L4' T12 EE/EEMAG	trof acr	1	110	1467	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.07	108
DHS	BLD200 hall	2L4' T12 U EE/EEMAG	trof acr	1	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	243
DHS	BECKY	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	86
DHS	103	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	86
DHS	106	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	86
DHS	222	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.07	173
DHS	510	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.07	173
DHS	CONF	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	2393	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.07	178
DHS	HaLL	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.07	487
DHS	haLL	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	3	32.8	0.11	730
DHS	haLL	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	3	32.8	0.11	730
DHS	118	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	3	32.8	0.11	259
DHS	501	2L4' T12 U EE/EEMAG	box acr 2x2	4	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	4	32.8	0.15	346
DHS	HaLL	2L4' T12 U EE/EEMAG	trof acr 2x2	4	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.25	1,617
DHS	IT	2L4' T12 U EE/EEMAG	trof acr 2x2	5	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.32	737
DHS	OO	2L4' T12 U EE/EEMAG	trof acr 2x2	6	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	6	32.8	0.22	519
DHS	511	2L4' T12 U EE/EEMAG	trof acr 2x2	10	70	2325	2L4' T8 U 30w/ELEE LO	rlrb	10	32.8	0.37	865
DHS	IT	2L2' T8/EL	trof acr 2x2	1	37	2325	2LFB31W RELAMP	relamp	1	31.0	0.01	14
DHS	231	2L2' T8/EL	trof acr 2x2	2	37	2325	2LFB31W RELAMP	relamp	2	31.0	0.01	28
DHS	OO	2L2' T8/EL	trof acr 2x2	2	37	2393	2LFB31W RELAMP	relamp	2	31.0	0.01	29
DHS	229	2L2' T8/EL	trof acr 2x2	3	37	2325	2LFB31W RELAMP	relamp	3	31.0	0.02	42
DHS	230	2L2' T8/EL	trof acr 2x2	4	37	2325	2LFB31W RELAMP	relamp	4	31.0	0.02	56
DHS	STaFF	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	STaFF	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	MEN	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	WOMEN	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	RR	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	MEN	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	JaN	2x 60W INCANDESCENTS	vanity	1	120	2325	2x13W COMPACT SI MINI	screw in mini	1	26.0	0.09	219
DHS	509	2x 20 INCANDESCENTS	exit sign battery	1	40	2325	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	86
DHS	602	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	603	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	604	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	605	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	HaLL	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	103	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	106A	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	107	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	110	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.03	272

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
DHS	112	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
DHS	113	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.03	298
DHS	506/507	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	508	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.07	596
DHS	501	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	601	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	OO	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	STO	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	109	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
DHS	BLD200	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
DHS	HaLL	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
DHS	117	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
DHS	511	2x 9W COMPACT HARDWIRE	exit sign battery	1	22	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.02	166
DHS	HaLL	2x 9W COMPACT HARDWIRE	exit sign battery	5	22	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.10	885
DHS	COMMONS	175W METAL HALIDE	can rec	24	205	3500	39W METAL HALIDE	can kit	25	44.0	3.82	13,370
DHS	ENTRY	3L3' T8/EL	strip	8	68	6540	3L3' T8 28w/ELEC/RELAMP ONLY	relamp	8	68.0	0.00	0
DHS	HaLL	3L3' T8/EL	trof acr	23	68	6540	3L3' T8 28w/ELEC/RELAMP ONLY	relamp	33	68.0	-0.68	-4,447
DHS	ENTRY	3L4' T8/EL	strip	14	88	6540	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	9	76.0	0.55	3,584
DHS	LIB	3L4' T8/EL	trof parabolic	24	88	2325	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	24	76.0	0.29	670
DHS	HaLL	3L4' T8/EL	strip	34	88	6540	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	44	76.0	-0.35	-2,302
DHS	LIB	3L4' T8/EL	trof parabolic	57	88	2325	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	57	76.0	0.68	1,590
DHS	508	2L8' T12 EE/EEMAG-8' HO	industrial	15	123	2325	4L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	15	116.1	0.10	239
DHS	114	250W MERCURY VAPOR	high bay	9	290	2325	6L4' T8 28w/ELEE HI/NEW	new T8 hibay cage	7	165.8	1.45	3,370
DHS	**Totals**			**2791**					**2746**		**125.18**	**326,246**
District Office	RECEPTION	2x 60W INCANDESCENTS	drum decorative	5	120	3120	15W COMPACT SI	screw in	5	15.0	0.53	1,638
District Office	LaDIES	1L2' T12 EE/EEMAG	vanity	1	40		1L2' T8 28w/ELEE LO	rlrb	2	26.0	-0.01	0
District Office	MEN	2L4' T12 EE/EEMAG	vanity	1	70		1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.04	0
District Office	LOUNGE	4L4' T12 EE/EEMAG	wrap wide	2	140	3120	1L4' T8 28w/ELEE/NEW	new wrap wide	2	28.0	0.22	699
District Office	LOUNGE	2L4' T12 EE/EEMAG	wrap	1	70		1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	0
District Office	PHONE ROOM	2L4' T12 EE/EEMAG	wrap	1	70	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	50
District Office	BUSINESS SERVICES	2L4' T12 EE/EEMAG	wrap	1	70	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	50
District Office	EDUCaTION SERVICES	2L4' T12 EE/EEMAG	wrap	1	70	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	50
District Office	FILE ROOM	2L4' T12 EE/EEMAG	wrap	1	70	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	50
District Office	FILE ROOM	2L4' T8 EE/EEMAG	wrap	1	63	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	42
District Office	CONTRaCTOR ROOM	2L4' T8 EE/EEMAG	wrap	1	63	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	109
District Office	HaLL	2L4' T8 EE/EEMAG	wrap	5	63	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	5	28.0	0.18	546
District Office	CONTRaCTOR ROOM	4L4' T8 EE/EEMAG-8'	wrap	4	234	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	8	28.0	0.71	2,221
District Office	MEN	2L2' T12 STD/STD	trof acr 1' wide	3	56		2L2' T8/EL LO	rlrb	3	39.9	0.05	0
District Office	LaDIES	2L2' T12 STD/STD	trof acr 1' wide	3	56		2L2' T8/EL LO	rlrb	3	39.9	0.05	0
District Office	FILE 2	3L4' T8 EE/EEMAG	wrap wide	1	177	1200	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	1	36.6	0.14	169
District Office	BUSINESS SERVICES	4L4' T8 EE/EEMAG	wrap wide	1	234	1200	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	1	36.6	0.20	237
District Office	FILE 2	4L4' T8 EE/EEMAG	wrap wide	1	234	1200	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	1	36.6	0.20	237
District Office	PHONE ROOM	4L4' T8 EE/EEMAG	wrap wide	2	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	2	36.6	0.39	1,232
District Office	BUSINESS SERVICES	4L4' T8 EE/EEMAG	wrap wide pend	2	234	1200	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	2	36.6	0.39	474
District Office	FILE ROOM	4L4' T8 EE/EEMAG	wrap wide	2	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	2	36.6	0.39	1,232
District Office	COPY ROOM	4L4' T8 EE/EEMAG	wrap wide	2	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	2	36.6	0.39	1,232
District Office	EDUCaTIONaL SERVICES	4L4' T8 EE/EEMAG	wrap wide	2	234	1200	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	2	36.6	0.39	474
District Office	RECEPTION	4L4' T8 EE/EEMAG	wrap wide	4	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	4	36.6	0.79	2,464
District Office	CUBICLE aREa	4L4' T8 EE/EEMAG	wrap wide	12	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	12	36.6	2.37	7,392
District Office	CONFERENCE ROOM	4L4' T8 EE/EEMAG	wrap wide	12	234	3120	2L4' T8 28w/ELEE LO	dlrb NEW SOCKETS	12	36.6	2.37	7,392
District Office	FILE ROOM	4L4' T8 EE/EEMAG-8'	wrap	3	234	3120	2L4' T8 28w/ELEE/NEW-8'	new wrap	4	36.6	0.56	1,734
District Office	EXITS	2x 20 INCANDESCENTS	exit sign battery	6	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	6	3.0	0.22	1,945
District Office	BUSINESS SERVICES	4L4' T8 EE/EEMAG	wrap wide pend	8	234	3120	3L4' T8 28w/ELEE/NEW-8'	new direct/indirect	10	76.0	1.11	3,469
District Office	HUMaN RESOURCES	4L4' T8 EE/EEMAG	wrap wide pend	8	234	3120	4L4' T8 28w/ELEE/NEW-8'	new direct/indirect	10	116.1	0.71	2,217

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
District Office	SUPERINTENDENT	4L4' T8 EE/EEMAG	wrap wide pend	8	234	3120	4L4' T8 28w/ELEE/NEW-8'	new direct/indirect	10	116.1	0.71	2,217
District Office	EDUCaTION SERVICES	4L4' T8 EE/EEMAG	wrap wide pend	8	234	3120	4L4' T8 28w/ELEE/NEW-8'	new direct/indirect	10	116.1	0.71	2,217
District Office	**Totals**			**113**					**127**		**14.10**	**41,789**
Food Services Whse	OFF 2	2L4' T12 EE/EEMAG	wrap	1	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	131
Food Services Whse	ENTRANCES	2L4' T12 EE/EEMAG	industrial	2	70	3120	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	2	28.0	0.08	262
Food Services Whse	WaREHOUSE	2L4' T12 EE/EEMAG	industrial	36	70	3120	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	47	28.0	1.20	3,756
Food Services Whse	FREEZER LOFT	2L4' T8 EL	strip cage	9	63	3120	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	7	28.0	0.37	1,158
Food Services Whse	STW	1L4' T12 EE/EEMAG	vanity	1	40	3120	1L4' T8/EL LO	rlrb	2	23.2	-0.01	-20
Food Services Whse	RR	1L4' T12 EE/EEMAG	vanity	2	40	3120	1L4' T8/EL LO	rlrb	2	23.2	0.03	105
Food Services Whse	FREEZER	2L4' T12 EE/EEMAG	freezer light	8	70	3120	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	834
Food Services Whse	HaLL	4L4' T12 EE/EEMAG	box acrylic	2	140	3120	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	645
Food Services Whse	BREaK ROOM	4L4' T12 EE/EEMAG	box acrylic	2	140	3120	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	645
Food Services Whse	OFFICE	4L4' T12 EE/EEMAG	box acrylic	4	140	3120	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.41	1,291
Food Services Whse	STO	4L4' T12 EE/EEMAG	box acrylic	4	140	3120	2L4' T8 28w/ELEE/RFL	rlrb rfl	5	36.6	0.38	1,177
Food Services Whse	OFF 1	4L4' T12 EE/EEMAG	box acrylic	5	140	3120	2L4' T8 28w/ELEE/RFL	rlrb rfl	5	36.6	0.52	1,613
Food Services Whse	EXITS	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
Food Services Whse	**Totals**			**78**					**89**		**3.79**	**12,246**
GES	OUT	175W MERCURY VAPOR	flood	5	205	6440	100W METAL HALIDE CWA/NEW	new flood	5	128.0	0.39	2,479
GES	CLO	60W INCANDESCENT	drum	1	60	1441	13W COMPACT/NEW	new drum	1	13.0	0.05	68
GES	RR	60W INCANDESCENT	drum	1	60	6440	13W COMPACT/NEW	new drum	1	13.0	0.05	303
GES	PORT	60W INCANDESCENT	wallpack	2	60	1859	13W COMPACT/NEW	new wallpack	3	13.0	0.08	151
GES	CUSTODIaN	60W INCANDESCENT	keyless	1	60	1441	15W COMPACT SI	screw in	1	15.0	0.05	65
GES	KIT	1L4' T12 EE/EEMAG	vanity	1	40	1441	1L2' T8/EL LO/NEW vanity	new vanity	1	26.0	0.01	20
GES	RR	60W INCANDESCENT	vanity	1	60	6440	1L2' T8/EL LO/NEW vanity	new vanity	1	26.0	0.03	219
GES	RR	60W INCANDESCENT	vanity	2	60	6440	1L2' T8/EL LO/NEW vanity	new vanity	2	26.0	0.07	438
GES	MEN & LaDIES	60W INCANDESCENT	vanity	2	60	6440	1L2' T8/EL LO/NEW vanity	new vanity	2	26.0	0.07	438
GES	RR	1L4' T12 EE/EEMAG	wrap	1	40	6440	1L4' T8 28w/ELEC/ LO	rlrb	1	28.0	0.01	77
GES	3	1L4' T12 EE/EEMAG	wrap	20	40	1859	1L4' T8 28w/ELEC/ LO	rlrb	20	28.0	0.24	446
GES	2	1L4' T12 EE/EEMAG	wrap	29	40	1859	1L4' T8 28w/ELEC/ LO	rlrb	29	28.0	0.35	647
GES	28	1L4' T12 EE/EEMAG	wrap	2	40	6440	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	155
GES	14	1L4' T12 EE/EEMAG	strip cage	6	40	1859	1L4' T8 28w/ELEE LO	rlrb	7	28.0	0.04	82
GES	Back hall	2L4' T12 EE/EEMAG	strip	2	70	6440	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.08	541
GES	O	2L4' T12 EE/EEMAG	strip	1	70	1859	1L4' T8 28w/ELEE NEW	new wrap	1	28.0	0.04	78
GES	CUSTODIaN	2L4' T12 EE/EEMAG	wrap	1	70	1441	1L4' T8 28w/ELEE/NEW	new wrap wide	1	28.0	0.04	61
GES	BOYS	2L4' T12 EE/EEMAG	wrap	2	70	6440	1L4' T8 28w/ELEE/NEW	new wrap	2	28.0	0.08	541
GES	GIRLS	2L4' T12 EE/EEMAG	wrap	2	70	6440	1L4' T8 28w/ELEE/NEW	new wrap	2	28.0	0.08	541
GES	BOYS	2L4' T12 EE/EEMAG	wrap	5	70	6440	1L4' T8 28w/ELEE/NEW	new wrap wide	5	28.0	0.21	1,352
GES	GIRLS	2L4' T12 EE/EEMAG	wrap	5	70	6440	1L4' T8 28w/ELEE/NEW	new wrap wide	4	28.0	0.24	1,533
GES	B & G	2L4' T12 EE/EEMAG	wrap	10	70	6440	1L4' T8 28w/ELEE/NEW	new wrap	10	28.0	0.42	2,705
GES	23 RR	2L4' T8/EL	wrap	1	60	6440	1L4' T8 28w/ELEE/NEW	new wrap	1	28.0	0.03	206
GES	24 RR	2L4' T8/EL	wrap	1	60	6440	1L4' T8 28w/ELEE/NEW	new wrap	1	28.0	0.03	206
GES	23 stor	2L4' T8/EL	wrap	2	60	1441	1L4' T8 28w/ELEE/NEW	new wrap	2	28.0	0.06	92
GES	24	2L4' T8/EL	wrap	2	60	1859	1L4' T8 28w/ELEE/NEW	new wrap	2	28.0	0.06	119
GES	24	2L4' T8/EL	wrap	3	60	1859	1L4' T8 28w/ELEE/NEW	new wrap	3	28.0	0.10	178
GES	Custodian	2L4' T12 EE/EEMAG	wrap	1	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	61
GES	28	2L4' T12 EE/EEMAG	wrap	1	70	1859	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	78
GES	CONF	2L4' T12 EE/EEMAG	wrap	2	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	121
GES	STO	2L4' T12 EE/EEMAG	wrap	2	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	121
GES	O	2L4' T12 EE/EEMAG	wrap	2	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	121
GES	4	2L4' T12 EE/EEMAG	wrap	3	70	1859	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	234
GES	OO	2L4' T12 EE/EEMAG	wrap	4	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	242
GES	STO	2L4' T12 EE/EEMAG	wrap	4	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	242

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GES	COPY	2L4' T12 EE/EEMAG	wrap	6	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.25	363
GES	27	2L4' T12 EE/EEMAG	wrap	12	70	1859	1L4' T8 28w/ELEE/NEW wrap	new wrap	12	28.0	0.50	937
GES	STORaGE	2L4' T8/EL	wrap	3	60	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.10	138
GES	STORaGE	2L4' T8/EL	wrap	5	60	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	5	28.0	0.16	231
GES	STORaGE	2L4' T8/EL	wrap	9	60	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.43	617
GES	KIT	2L4' T12 EE/EEMAG	box acr 1' wide	2	70	1441	1L4' T8 28w/ELEE/RFL	rlrb rfl	2	28.0	0.08	121
GES	B & G	2L4' T8/EL	trof acr 1' wide	10	60	6440	1L4' T8 28w/ELEE/RFL	rlrb rfl	10	28.0	0.32	2,061
GES	Attic	2L4' T8/EL	strip cage	16	60	1441	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit	16	28.0	0.51	738
GES	BOYS	2L4' T12 EE/EEMAG	wrap	3	70	6440	1L4' T8 32w/ELEE/NEW	new wrap	3	23.2	0.14	904
GES	GIRLS	2L4' T12 EE/EEMAG	wrap	4	70	6440	1L4' T8 32w/ELEE/NEW	new wrap	4	23.2	0.19	1,206
GES	CUST	2L4' T12 EE/EEMAG	wrap	2	70	1441	1L4' T8 32w/ELEE/NEW wrap	new wrap	2	23.2	0.09	135
GES	BLDG 1	2L4' T12 EE/EEMAG	wrap	10	70	6440	1L4' T8 32w/ELEE/NEW wrap	new wrap	10	23.2	0.47	3,014
GES	LaDIES	100W INCANDESCENT	keyless	1	100	1441	20W COMPACT SI	screw in	1	20.0	0.08	115
GES	LaDIES	100W INCANDESCENT	vanity	1	100	1441	20W COMPACT SI	screw in	1	20.0	0.08	115
GES	HOOD	150W INCANDESCENT	jar cage	2	150	6440	28w COMPACT/NEW	new jar	2	28.0	0.24	1,571
GES	20	2L4' T12 EE/EEMAG	wrap	6	70	1859	2L4' T8 28w/EL LO tandem	RLRB	6	38.1	0.19	356
GES	20	2L4' T12 EE/EEMAG	wrap	12	70	1859	2L4' T8 28w/EL LO tandem	RLRB	12	38.1	0.38	712
GES	21	2L4' T12 EE/EEMAG	wrap	12	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.15	287
GES	3	2L4' T12 EE/EEMAG	wrap	12	70	1859	2L4' T8 28w/EL LO tandem	RLRB	12	38.1	0.38	712
GES	17	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	18	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	19	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	2	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	5	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	13	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	14	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	15	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	16	2L4' T12 EE/EEMAG	wrap	18	70	1859	2L4' T8 28w/EL LO tandem	RLRB	18	38.1	0.57	1,068
GES	1	2L4' T12 EE/EEMAG	wrap	24	70	1859	2L4' T8 28w/EL LO tandem	RLRB	24	38.1	0.77	1,424
GES	33 storage	2L4' T12 EE/EEMAG	wrap	1	70	1441	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	48
GES	STORaGE	2L4' T12 EE/EEMAG	strip	6	70	1441	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	289
GES	37	2L4' T12 EE/EEMAG	trof acr	7	70	1859	2L4' T8 28w/ELEE LO	rlrb	7	36.6	0.23	435
GES	32	2L4' T12 EE/EEMAG	trof acr	7	70	1859	2L4' T8 28w/ELEE LO	rlrb	7	36.6	0.23	435
GES	KIT	2L4' T12 EE/EEMAG	box acrylic	11	70	1441	2L4' T8 28w/ELEE LO	rlrb	12	36.6	0.33	477
GES	PRIN	4L4' T12 EE/EEMAG	wrap	4	140	1441	2L4' T8 28w/ELEE/NEW	new wrap	4	36.6	0.41	596
GES	21	4L4' T12 EE/EEMAG	wrap	6	140	1859	2L4' T8 28w/ELEE/NEW	new wrap	6	36.6	0.62	1,154
GES	LIB	3L4' T8/EL	trof acr	4	88	2096	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.21	431
GES	LIB	3L4' T8/EL	trof acr	4	88	2096	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.21	431
GES	LIB	3L4' T8/EL	trof acr	4	88	2096	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.21	431
GES	6	3L4' T8/EL	trof acr	8	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	8	36.6	0.41	765
GES	7	3L4' T8/EL	trof acr	8	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	8	36.6	0.41	765
GES	25	3L4' T8/EL	trof acr	12	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	12	36.6	0.62	1,147
GES	3	3L4' T8/EL	trof acr	13	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	13	36.6	0.67	1,243
GES	8	3L4' T8/EL	trof acr	16	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	16	36.6	0.82	1,530
GES	9	3L4' T8/EL	trof acr	16	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	16	36.6	0.82	1,530
GES	12	3L4' T8/EL	trof acr	16	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	16	36.6	0.82	1,530
GES	3	3L4' T8/EL	trof acr	18	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	22	36.6	0.78	1,449

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GES	10	3L4' T8/EL	trof acr	20	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	20	36.6	1.03	1,912
GES	11	3L4' T8/EL	trof acr	20	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	20	36.6	1.03	1,912
GES	24	3L4' T8/EL	trof acr	21	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	21	36.6	1.08	2,008
GES	23	3L4' T8/EL	trof acr	22	88	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	22	36.6	1.13	2,103
GES	PORTM	4L4' T12 EE/EEMAG	trof acr	2	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	385
GES	PORT	4L4' T12 EE/EEMAG	trof acr	3	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	3	36.6	0.31	577
GES	PORT	4L4' T12 EE/EEMAG	trof acr	18	140	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	18	36.6	1.86	3,461
GES	PORT	4L4' T8/EL	trof acr	1	112	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	1	36.6	0.08	140
GES	PORT	4L4' T8/EL	trof acr	2	112	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.15	280
GES	PORT	4L4' T8/EL	trof acr	12	112	1859	2L4' T8 28w/ELEE/RFL	rlrb rfl	12	36.6	0.91	1,683
GES	BLDG 1	4L4' T12 EE/EEMAG	wide wrap	2	140	6440	2L4' T8 32w/EL tandem	DLRB	2	60.0	0.16	1,030
GES	BLDG 1	4L4' T12 EE/EEMAG	wide wrap	2	140	6440	2L4' T8 32w/EL tandem	DLRB	2	60.0	0.16	1,030
GES	40	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	38	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	35	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	34	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	33	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	31	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	30	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	29	4L4' T12 EE/EEMAG	wrap	8	140	1859	2L4' T8 32w/EL tandem	DLRB	8	60.0	0.64	1,190
GES	39	4L4' T12 EE/EEMAG	wrap	10	140	1859	2L4' T8 32w/EL tandem	DLRB	10	60.0	0.80	1,487
GES	25D	3L4' T12 EE/EEMAG	trof acr	3	110	1859	2L4' T8 32w/ELEE/RFL	rlrb rfl	3	60.0	0.15	279
GES	MEN	2x 100W INCANDESCENTS	drum	1	200	6440	2x 13W COMPACT/NEW	new drum	1	26.0	0.17	1,121
GES	O	2x 60W INCANDESCENTS	drum	1	120	1441	2x 13W COMPACT/NEW	new drum	2	26.0	0.07	98
GES	BOYS	2x 60W INCANDESCENTS	drum	1	120	6440	2x 13W COMPACT/NEW	new drum	1	26.0	0.09	605
GES	GIRLS	2x 60W INCANDESCENTS	drum	1	120	6440	2x 13W COMPACT/NEW	new drum	1	26.0	0.09	605
GES	BOYS	2x 60W INCANDESCENTS	drum	1	120	6440	2x 13W COMPACT/NEW	new drum	1	26.0	0.09	605
GES	GIRLS	2x 60W INCANDESCENTS	drum	1	120	6440	2x 13W COMPACT/NEW	new drum	2	26.0	0.07	438
GES	MEN & LaDIES	2x 60W INCANDESCENTS	drum	2	120	6440	2x 13W COMPACT/NEW	new drum	2	26.0	0.19	1,211
GES	B & G	2x 60W INCANDESCENTS	drum	2	120	6440	2x 13W COMPACT/NEW	new drum	2	26.0	0.19	1,211
GES	3	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
GES	2	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GES	PORT	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
GES	MP	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
GES	25	3L4' T8/EL	indirect	34	88	1859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	34	76.0	0.41	758
GES	mp	2L4' T12 EE/EEMAG	wrap	65	70	6440	4L4' T8 28w/ELEE HI/NEW	new T8 hibay cage	16	116.1	2.69	17,335
GES	22	2L4' T12 EE/EEMAG	wrap	12	70	1859	4L4' T8 28w/ELEE LO/NEW wrap-8'	new wrap	9	116.1	-0.21	-382
GES	28	4L4' T12 EE/EEMAG	wrap	4	140	1859	4L4' T8 28w/ELEE/new 8'	new 8' wrap	2	116.1	0.33	609
GES	36	2L8' T12 HO EE/EEMAG	wrap	4	207	1859	4L4' T8 32w/ELEE LO/NEW wrap-8'	new wrap	4	120.0	0.35	647
GES	**Totals**			**946**					**901**		**41.56**	**110,924**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GLSES	OVERHEAD C	60W INCANDESCENT	keyless	1	60	1,200	18W COMPACT/NEW	SCREW IN	1	18.0	0.04	50
GLSES	OVERHEAD B	60W INCANDESCENT	keyless	1	60	1,200	18W COMPACT/NEW	SCREW IN	1	18.0	0.04	50
GLSES	OVERHEAD A	60W INCANDESCENT	keyless	1	60	1,200	18W COMPACT/NEW	SCREW IN	1	18.0	0.04	50
GLSES	OVERHEAD C	2L4' T12 EE/EEMAG	wrap	8	70	4,112	1L4' T8 28w/ELEE LO/NEW	new wrap	10	28.0	0.28	1,151
GLSES	OVERHEAD B	2L4' T12 EE/EEMAG	wrap	8	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	10	28.0	0.28	336
GLSES	OVERHEAD A	2L4' T12 EE/EEMAG	wrap	8	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	10	28.0	0.28	336
GLSES	STAGE storage	2L4' T12 EE/EEMAG	cage	3	70	1,441	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	182
GLSES	EQUIPMENT ROOM	2L4' T12 EE/EEMAG	wrap	3	70	1,441	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	182
GLSES	BOILER ROOM	2L4' T12 EE/EEMAG	wrap	3	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.10	403
GLSES	MECH ROOM	2L4' T12 EE/EEMAG	wrap	5	70	1,441	1L4' T8 28w/ELEE/NEW wrap	new wrap	5	28.0	0.21	303
GLSES	IKITCHEN	2L4' T12 EE/EEMAG	trof acr 1' wide	14	70	1,441	1L4' T8 28w/ELEE/RFL	rlrb rfl	14	28.0	0.59	847
GLSES	STAGE	2L4' T12 EE/EEMAG	trof acr 1' wide	14	70	3,500	1L4' T8 28w/ELEE/RFL	rlrb rfl	14	28.0	0.59	2,058
GLSES	SMALL FILE	2L4' T12 EE/EEMAG	strip cage	1	70	1,200	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	1	28.0	0.04	50
GLSES	CUSTODIAN	2L4' T12 EE/EEMAG	strip cage	2	70	1,200	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	2	28.0	0.08	101
GLSES	LIBRARY	2L4' T12 EE/EEMAG	strip cage	3	70	4,112	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	3	28.0	0.13	518
GLSES	STORAGE	2L4' T12 EE/EEMAG	strip cage	4	70	1,441	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	1	28.0	0.25	363
GLSES	CUSTODIAN	2L4' T12 EE/EEMAG	strip cage	4	70	1,441	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	4	28.0	0.17	242
GLSES	ELECTRICAL ROOM	2L4' T12 EE/EEMAG	strip cage	5	70	1,200	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	5	28.0	0.21	252
GLSES	STORAGE	2L4' T12 EE/EEMAG	strip cage	12	70	1,200	1L4' T8 28w/ELEE/STRIP KIT	rlrb strip kit tube gua	12	28.0	0.50	605
GLSES	EQUIPMENT ROOM	2L4' T12 EE/EEMAG	wrap	5	70	1,200	1L4' T8 32w/EL/NEW	new wrap chain	5	23.2	0.23	281
GLSES	EQUIPMENT ROOM	2L4' T12 EE/EEMAG	wrap	5	70	1,200	1L4' T8 32w/EL/NEW	new wrap chain	5	23.2	0.23	281
GLSES	BOILER ROOM	2L4' T12 EE/EEMAG	strip cage	15	70	1,200	1L4' T8 32w/EL/NEW	new wrap chain	16	23.2	0.68	815
GLSES	ENTRIES	100W MERCURY VAPOR	can rec	35	120	3650	23W METAL HALIDE	can kit	35	23.0	3.40	12,392
GLSES	MULTI PURPOSE ROOM	4L4' T12 EE/EEMAG	trof acr	64	140	3,500	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	64	36.6	6.62	23,167
GLSES	COMPUTER/FILE	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	6,440	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	215
GLSES	HALL	2L4' T12 EE/EEMAG	trof acr	1	70	4,112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
GLSES	NURSE	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	1,200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
GLSES	KITCHEN	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	4,112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
GLSES	K1	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	4,112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
GLSES	K2	2L4' T12 EE/EEMAG	trof acr 1' wide	1	70	4,112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	137
GLSES	TIME OUT	2L4' T12 EE/EEMAG	trof acr 1' wide	2	70	1,200	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	80
GLSES	KITCHEN	2L4' T12 EE/EEMAG	trof acr 1' wide	2	70	1,441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
GLSES	LIBRARY	2L4' T12 EE/EEMAG	trof acr	2	70	1,441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
GLSES	WILLIS	2L4' T12 EE/EEMAG	trof acr	3	70	1,441	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	144
GLSES	MEN	2L4' T12 EE/EEMAG	trof acr 1' wide	3	70	1,200	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	120
GLSES	WOMEN	2L4' T12 EE/EEMAG	trof acr 1' wide	3	70	1,200	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	120
GLSES	LIB WORKROOOM	2L4' T12 EE/EEMAG	trof acr 1' wide	3	70	1,200	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.10	120
GLSES	SWAIN	2L4' T12 EE/EEMAG	trof acr	4	70	1,200	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	160
GLSES	MOORE	2L4' T12 EE/EEMAG	trof acr	4	70	4,112	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	550
GLSES	BOYS	2L4' T12 EE/EEMAG	trof acr 1' wide	4	70	4,112	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	550
GLSES	GIRLS	2L4' T12 EE/EEMAG	trof acr 1' wide	4	70	1,200	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	160
GLSES	DRY GOODS	2L4' T12 EE/EEMAG	trof acr 1' wide	4	70	1,200	2L4' T8 28w/ELEE LO	rlrb	3	36.6	0.17	204
GLSES	NURSE	2L4' T12 EE/EEMAG	trof acr	5	70	1,200	2L4' T8 28w/ELEE LO	rlrb	5	36.6	0.17	201
GLSES	LIB HALL	2L4' T12 EE/EEMAG	trof acr	5	70	6440	2L4' T8 28w/ELEE LO	rlrb	5	36.6	0.17	1,076
GLSES	A8	2L4' T12 EE/EEMAG	trof acr	5	70	4112	2L4' T8 28w/ELEE LO	rlrb	5	36.6	0.17	687
GLSES	BOYS & GIRLS	2L4' T12 EE/EEMAG	trof acr 1' wide	6	70	4,112	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	825

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GLSES	BOYS & GIRLS	2L4' T12 EE/EEMAG	trof acr 1' wide	6	70	4,112	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	825
GLSES	BOYS & GIRLS	2L4' T12 EE/EEMAG	trof acr 1' wide	6	70	4,112	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	825
GLSES	FACULTY RESTROOMS	2L4' T12 EE/EEMAG	trof acr 1' wide	8	70	1,200	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	321
GLSES	ADMIN	2L4' T12 EE/EEMAG	trof acr	13	70	1,441	2L4' T8 28w/ELEE LO	rlrb	13	36.6	0.43	626
GLSES	LITERACY LIBRARY	2L4' T12 EE/EEMAG	trof acr	14	70	2,096	2L4' T8 28w/ELEE LO	rlrb	14	36.6	0.47	981
GLSES	C HALL	2L4' T12 EE/EEMAG	trof acr	15	70	6,440	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	3,229
GLSES	B HALL	2L4' T12 EE/EEMAG	trof acr	15	70	6,440	2L4' T8 28w/ELEE LO	rlrb	15	36.6	0.50	3,229
GLSES	FINE ARTS	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
GLSES	A HALL	2L4' T12 EE/EEMAG	trof acr	16	70	6,440	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	3,444
GLSES	KA HALL	2L4' T12 EE/EEMAG	trof acr	18	70	6,440	2L4' T8 28w/ELEE LO	rlrb	18	36.6	0.60	3,874
~~GLSES~~	~~HALLS~~	~~2L4' T12 EE/EEMAG~~	~~trof acr~~	~~51~~	~~70~~	~~6,440~~	~~2L4' T8 28w/ELEE LO~~	~~rlrb~~	0		0.00	0
GLSES	A8	4L4' T12 EE/EEMAG	trof acr	2	140	1,441	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	2	36.6	0.21	298
GLSES	R1	4L4' T12 EE/EEMAG	trof acr	6	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	6	36.6	0.62	1,154
GLSES	A11	4L4' T12 EE/EEMAG	trof acr	6	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	6	36.6	0.62	1,154
GLSES	A10	4L4' T12 EE/EEMAG	trof acr	6	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	6	36.6	0.62	1,154
GLSES	C10	4L4' T12 EE/EEMAG	trof acr	6	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	6	36.6	0.62	1,154
GLSES	C8	4L4' T12 EE/EEMAG	trof acr	7	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	7	36.6	0.72	1,346
GLSES	B8	4L4' T12 EE/EEMAG	trof acr	7	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	7	36.6	0.72	1,346
GLSES	A9	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	11	36.6	1.14	2,115
GLSES	A5	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	0.99	1,843
GLSES	C9	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	11	36.6	1.14	2,115
GLSES	C5	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	0.99	1,843
GLSES	B9	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	11	36.6	1.14	2,115
GLSES	B5	4L4' T12 EE/EEMAG	trof acr	11	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	0.99	1,843
GLSES	K1	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	K2	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A7	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A6	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A4	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A3	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A2	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	A1	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C7	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C6	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C4	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C3	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C2	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	C1	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	B7	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	B6	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	B4	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	B3	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GLSES	B2	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	B1	4L4' T12 EE/EEMAG	trof acr	15	140	1,859	2L4' T8 28w/ELEE LO/RFL	rlrb RFL	15	36.6	1.55	2,884
GLSES	OVERHEAD C	4L4' T12 EE/EEMAG-8'	strip	2	140	1,200	2L4' T8 28w/ELEE/IND KIT-8'	rlrb strip rfl kit	2	36.6	0.21	248
GLSES	OVERHEAD B	4L4' T12 EE/EEMAG-8'	strip	2	140	1,200	2L4' T8 28w/ELEE/IND KIT-8'	rlrb strip rfl kit	2	36.6	0.21	248
GLSES	OVERHEAD A	4L4' T12 EE/EEMAG-8'	strip	2	140	1,200	2L4' T8 28w/ELEE/IND KIT-8'	rlrb strip rfl kit	2	36.6	0.21	248
GLSES	WORKROOM	4L4' T12 EE/EEMAG	trof acr	2	140	1,441	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	298
GLSES	TEACHER LOUNGE	4L4' T12 EE/EEMAG	trof acr	4	140	1,859	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.41	769
GLSES	LIBRARY	4L4' T12 EE/EEMAG	trof acr	26	140	2,096	2L4' T8 28w/ELEE/RFL	rlrb rfl	26	36.6	2.69	5,636
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
GLSES	EXIT	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
~~GLSES~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~17~~	~~40~~	~~8760~~	~~3 WATT LED/NEW EXIT BATTERY~~	~~new exit bat~~	0		0.00	0
~~GLSES~~	~~POLE~~	~~400W MERCURY VAPOR~~	~~exterior pole mt~~	~~5~~	~~455~~	~~3650~~	~~NEW~~	~~NEW~~	0		0.00	0
GLSES	**Totals**			**951**					**894**		**67.85**	**159,797**
GWHS	GIRLS	60W INCANDESCENT	jar	4	60	2325	13W COMPACT SI MINI	screw in mini	4	13.0	0.19	437
GWHS	GIRLS	60W INCANDESCENT	jar	5	60	2325	13W COMPACT SI MINI	screw in mini	5	13.0	0.24	546
GWHS	SHOP	250W MERCURY VAPOR	wallpack	3	290	3,650	175W METAL HALIDE CWA/NEW	new wallpack	3	208.0	0.25	898
GWHS	EXIT	100W INCANDESCENT	square recessed	1	100	6,540	18W COMPACT/NEW	new square	1	18.0	0.08	536
GWHS	SHOP	100W MERCURY VAPOR	square recessed	10	120	3,650	18W COMPACT/NEW	new square	10	18.0	1.02	3,723
GWHS	SECURITY	2x 60W INCANDESCENTS	vanity	1	120	2393	1L2' T8/EL LO/NEW vanity	new vanity	1	26.0	0.09	225
GWHS	RR	2x 60W INCANDESCENTS	vanity	1	120	2325	1L2' T8/EL LO/NEW vanity	new vanity	1	26.0	0.09	219
GWHS	ART rm closet	1L3' T12 EE/EEMAG	strip	1	38	2325	1L3' T8 28w/ELEE LO	rlrb	1	24.0	0.01	33
GWHS	LIBRARY	1L4' T8/EL	box acr 1' wide	4	30	1491	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	28.0	0.01	12
GWHS	WEIGHT ROOM stor.	1L4' T12 EE/EEMAG	strip	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
GWHS	FURNACE	1L4' T12 EE/EEMAG	strip	4	40	1200	1L4' T8 28w/ELEE LO	rlrb	4	28.0	0.05	58
GWHS	ATTIC	1L4' T12 EE/EEMAG	strip	6	40	1200	1L4' T8 28w/ELEE LO	rlrb	6	28.0	0.07	86
GWHS	Hall	1L4' T12 EE/EEMAG	strip	31	40	6540	1L4' T8 28w/ELEE LO	rlrb	31	28.0	0.37	2,433
GWHS	COMMONS	2L4' T12 EE/EEMAG	cove	28	70	2,450	1L4' T8 28w/ELEE LO/NEW STRIP	new strip	28	28.0	1.18	2,881
GWHS	RR	2x 60W INCANDESCENTS	vanity	1	120	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.09	214
GWHS	KIT	2x 60W INCANDESCENTS	vanity	1	120	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.09	214
GWHS	BOYS LOCKER rr	2x 60W INCANDESCENTS	vanity	2	120	2325	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.18	428
GWHS	8 stor.	2L4' T12 EE/EEMAG	wrap	1	70	1200	1L4' T8 28w/ELEE/NEW strip	new strip	1	28.0	0.04	50
GWHS	BAND RM stor.	2L4' T12 EE/EEMAG	strip	2	70	1200	1L4' T8 28w/ELEE/NEW strip	new strip	2	28.0	0.08	101
GWHS	MECH RM	2L4' T12 EE/EEMAG	wrap	3	70	1,200	1L4' T8 28w/ELEE/NEW strip	new strip	3	28.0	0.13	151
GWHS	TROPHY CASE	1L4' T12 EE/EEMAG	strip wall mt.	4	40	6540	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.05	314
~~GWHS~~	~~13~~	~~2L4' T12 EE/EEMAG~~	~~wrap~~	~~0~~	~~70~~	~~2325~~	~~1L4' T8 28w/ELEE/NEW wrap~~	~~new wrap~~	0		0.00	0
GWHS	KITCHEN	2L4' T12 EE/EEMAG	wrap	1	70	2,393	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	101
GWHS	KIT	2L4' T12 EE/EEMAG	wrap	1	70	1,200	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	50
GWHS	MEN	2L4' T12 EE/EEMAG	wrap	1	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	173
GWHS	TRANSPOTATION OFFICE	2L4' T12 EE/EEMAG	wrap	1	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	173
GWHS	GIRLS	2L4' T12 EE/EEMAG	wrap	1	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	173
GWHS	BOYS	2L4' T12 EE/EEMAG	wrap	1	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	173
GWHS	STW 3	2L4' T12 EE/EEMAG	strip wall mt.	1	70	6540	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	275
GWHS	OFFICE	2L4' T12 EE/EEMAG	wrap	1	70	2393	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	101
GWHS	STW2	2L4' T12 EE/EEMAG	wrap	1	70	6540	1L4' T8 28w/ELEE/NEW wrap	new wrap	1	28.0	0.04	275
GWHS	WEIGHT ROOM stor.	2L4' T12 EE/EEMAG	wrap	2	70	1200	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	101
GWHS	TRANSPOTATION OFFICE	2L4' T12 EE/EEMAG	wrap	2	70	2,393	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	201
GWHS	RR	2L4' T12 EE/EEMAG	wrap	2	70	1,200	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	101
GWHS	BOYS	2L4' T12 EE/EEMAG	wrap	3	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	518

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GWHS	NURSE	2L4' T12 EE/EEMAG	wrap	3	70	2,393	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	302
GWHS	STUDENT STORE	2L4' T12 EE/EEMAG	wrap	3	70	1,441	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	182
GWHS	GIRLS	2L4' T12 EE/EEMAG	wrap	3	70	4,112	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	518
GWHS	13	2L4' T12 EE/EEMAG	wrap	3	70	6,540	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	824
GWHS	BOYS LOCKER office	2L4' T12 EE/EEMAG	wrap	4	70	4112	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	691
GWHS	Storage	2L4' T12 EE/EEMAG	wrap	4	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	242
GWHS	GYM entrances	2L4' T12 EE/EEMAG	wrap	6	70	6540	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.25	1,648
GWHS	TRANSPOTATION OFFICE	2L4' T12 EE/EEMAG	wrap	6	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.25	363
GWHS	GIRLS	2L4' T12 EE/EEMAG	wrap	6	70	4112	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.25	1,036
GWHS	CUSTODIAL STO	2L4' T12 EE/EEMAG	vapor tight	8	70	1441	1L4' T8 28w/ELEE/NEW wrap	new wrap	8	28.0	0.34	484
GWHS	GIRLS	2L4' T12 EE/EEMAG	wrap	8	70	4112	1L4' T8 28w/ELEE/NEW wrap	new wrap	8	28.0	0.34	1,382
GWHS	BOYS LOCKER	2L4' T12 EE/EEMAG	wrap	16	70	1,200	1L4' T8 28w/ELEE/NEW wrap	new wrap	16	28.0	0.67	806
GWHS	ART rm	2L4' T12 EE/EEMAG	wrap	22	70	1,200	1L4' T8 28w/ELEE/NEW wrap	new wrap	22	28.0	0.92	1,109
GWHS	9	2L4' T12 EE/EEMAG	wrap	24	70	2,325	1L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	24	28.0	1.01	2,344
GWHS	10	2L4' T12 EE/EEMAG	wrap	24	70	2,325	1L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	24	28.0	1.01	2,344
GWHS	12	2L4' T12 EE/EEMAG	wrap	24	70	2,325	1L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	24	28.0	1.01	2,344
GWHS	13	2L4' T12 EE/EEMAG	wrap	24	70	2,325	1L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	24	28.0	1.01	2,344
GWHS	COPY ROOM	2L4' T8/EL	wrap	2	60	1491	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.06	95
GWHS	MEN	2L4' T8/EL	wrap	2	60	2325	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.06	149
GWHS	WOMEN	2L4' T8/EL	wrap	2	60	2325	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.06	149
GWHS	13	2L4' T8/EL	wrap	2	60	2325	1L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	2	28.0	0.06	149
GWHS	WEIGHT ROOM stor.	2L4' T8/EL	wrap	2	60	1491	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.06	95
GWHS	ESL	2L4' T8/EL	wrap	3	60	2325	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.10	223
GWHS	BUS BARN	2L4' T8/EL	wrap	7	60	1491	1L4' T8 28w/ELEE/NEW wrap	new wrap	7	28.0	0.22	334
GWHS	OFFICE	4L4' T12 EE/EEMAG	wrap	2	140	2393	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.22	536
GWHS	BOYS	4L4' T12 EE/EEMAG 8'	wrap	1	140	2325	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	195
GWHS	CUSTODIaL	4L4' T12 EE/EEMAG-8'	strip	1	140	1491	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	125
GWHS	GIRLS	4L4' T8/EL-8'	wrap	1	112	2325	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.06	130
GWHS	W ENTRANCE	4L4' T8/EL-8'	wrap	3	112	6540	1L4' T8 28w/ELEE/NEW wrap	new wrap	6	28.0	0.17	1,099
GWHS	WASH AREA	2L4' T12 EE/EEMAG	box acr 1' wide	4	70	1441	1L4' T8 28w/ELEE/RFL	rlrb rfl	4	28.0	0.17	242
GWHS	KITCHEN	2L4' T12 EE/EEMAG	box acr 1' wide	13	70	1,441	1L4' T8 28w/ELEE/RFL	rlrb rfl	13	28.0	0.55	787
GWHS	DARK ROOM	2L4' T12 EE/EEMAG	strip	1	70	1200	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	1	28.0	0.04	50
GWHS	MECH RM	2L4' T12 EE/EEMAG	strip	3	70	1200	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	3	28.0	0.13	151
GWHS	LOFT air handler rm	2L4' T12 EE/EEMAG	strip	10	70	1441	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	10	28.0	0.42	605
GWHS	LOFT	2L4' T12 EE/EEMAG	strip	18	70	4,112	1L4' T8 28w/ELEE/STRIP RFL KIT	rlrb strip rfl kit	18	28.0	0.76	3,109
GWHS	COMMONS	150W INCANDESCENT	can surf mt.	14	150	2,450	23 WATT PAR SCREW IN	screw in par	14	23.0	1.78	4,356
GWHS	RR	2L4' T8/EL	vanity	1	60	2325	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	54
GWHS	CUSTODIAL	2L4' T8/EL	wrap	2	60	1491	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	70
GWHS	LIBRARY	2L4' T8/EL	box acr 1' wide	12	60	1491	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	12	36.6	0.28	419
GWHS	COMMONS	2L4' F48 T12 HO STD/STD	trof acr 1' wide	14	145	2,450	2L4' T8 28w/ELEE HI	rlrb socket bar	14	36.6	1.52	3,719
GWHS	COMMONS	2L4' F48 T12 HO STD/STD	trof acr 1' wide	14	145	2,450	2L4' T8 28w/ELEE HI	rlrb socket bar	14	36.6	1.52	3,719
GWHS	COMMONS	2L4' F48 T12 HO STD/STD	trof acr 1' wide	14	145	2,450	2L4' T8 28w/ELEE HI	rlrb socket bar	14	36.6	1.52	3,719
GWHS	COMMONS	2L4' F48 T12 HO STD/STD	trof acr 1' wide	14	145	2,450	2L4' T8 28w/ELEE HI	rlrb socket bar	14	36.6	1.52	3,719
GWHS	COMMONS	2L4' F48 T12 HO STD/STD	trof acr 1' wide	14	145	2,450	2L4' T8 28w/ELEE HI	rlrb socket bar	14	36.6	1.52	3,719
GWHS	ATTIC	2L4' T12 EE/EEMAG	strip	1	70	1200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
GWHS	STW1	2L4' T12 EE/EEMAG	trof acr	1	70	6540	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	219
GWHS	BAND RM office	2L4' T12 EE/EEMAG	trof acr	4	70	4112	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	550
GWHS	air handler rm	2L4' T12 EE/EEMAG	strip	11	70	1441	2L4' T8 28w/ELEE LO	rlrb	11	36.6	0.37	530
GWHS	BAND RM entrance	4L4' T12 EE/EEMAG	trof acr	1	140	6540	2L4' T8 28w/ELEE LO	rlrb rfl	1	36.6	0.10	676
GWHS	HALLS	4L4' T12 EE/EEMAG	trof acr	2	140	6540	2L4' T8 28w/ELEE LO	rlrb rfl	2	36.6	0.21	1,353
GWHS	ASST PRINCIPAL	4L4' T12 EE/EEMAG	trof acr	4	140	2393	2L4' T8 28w/ELEE LO	rlrb rfl	4	36.6	0.41	990
GWHS	SHANNON	4L4' T12 EE/EEMAG	trof acr	6	140	2325	2L4' T8 28w/ELEE LO	rlrb rfl	6	36.6	0.62	1,443
GWHS	BAND RM	4L4' T12 EE/EEMAG	trof acr	15	140	2325	2L4' T8 28w/ELEE LO	rlrb rfl	15	36.6	1.55	3,607
GWHS	CUSTODIAL	2L4' T12 EE/EEMAG-8'	strip	1	70	1,200	2L4' T8 28w/ELEE LO-8'	rlrb	1	36.6	0.03	40

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GWHS	COMPRESSOR ROOM	4L4' T12 EE/EEMAG-8'	strip	2	140	1491	2L4' T8 28w/ELEE/IND KIT-8'	rlrb strip rfl kit	2	36.6	0.21	308
GWHS	PARTS ROOM	4L4' T12 EE/EEMAG-8'	strip	2	140	1491	2L4' T8 28w/ELEE/IND KIT-8'	rlrb strip rfl kit	2	36.6	0.21	308
GWHS	11	3L4' T8/EL	wrap wide	2	88	2325	2L4' T8 28w/ELEE/NEW	new wrap wide	2	36.6	0.10	239
GWHS	11	3L4' T8/EL	wrap wide	4	88	2325	2L4' T8 28w/ELEE/NEW	new wrap wide	4	36.6	0.21	478
GWHS	11	3L4' T8/EL	wrap wide	4	88	2325	2L4' T8 28w/ELEE/NEW	new wrap wide	4	36.6	0.21	478
GWHS	6A	4L8' T12 STD/STD	eggcrate	3	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	6	36.6	0.82	1,903
GWHS	6B	4L8' T12 STD/STD	eggcrate	3	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	6	36.6	0.82	1,903
GWHS	7	4L8' T12 STD/STD	eggcrate	6	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	12	36.6	1.64	3,806
GWHS	3	4L8' T12 STD/STD	eggcrate	8	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	16	36.6	2.18	5,075
GWHS	4	4L8' T12 STD/STD	eggcrate	8	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	16	36.6	2.18	5,075
GWHS	5	4L8' T12 STD/STD	eggcrate	8	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	16	36.6	2.18	5,075
GWHS	8	4L8' T12 STD/STD	eggcrate	8	346	2325	2L4' T8 28w/ELEE/NEW wrap	new direct/indirect d	16	36.6	2.18	5,075
GWHS	SHOP	4L4' T12 EE/EEMAG-8'	wrap	2	140	1491	2L4' T8 28w/ELEE/NEW-8'	new wrap	2	36.6	0.21	308
GWHS	HALL2	3L4' T12 EE/EEMAG	trof acr	2	110	6540	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.15	960
GWHS	OFFICE	3L4' T12 EE/EEMAG	trof acr	3	110	2393	2L4' T8 28w/ELEE/RFL	rlrb rfl	3	36.6	0.22	527
GWHS	MAIN ENTRANCE	4L4' T12 EE/EEMAG	trof acr	2	140	6540	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	1,353
GWHS	SUPPLY ROOM	4L4' T12 EE/EEMAG	trof acr	2	140	2393	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	495
GWHS	STW1	4L4' T12 EE/EEMAG	trof acr	2	140	6540	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	1,353
GWHS	STO	4L4' T12 EE/EEMAG	trof acr	2	140	1491	2L4' T8 28w/ELEE/RFL	rlrb rfl	2	36.6	0.21	308
GWHS	TEACHER LOUNGE	4L4' T12 EE/EEMAG	trof acr	4	140	2393	2L4' T8 28w/ELEE/RFL	rlrb rfl	4	36.6	0.41	990
GWHS	VENDING	4L4' T12 EE/EEMAG	trof acr	5	140	6540	2L4' T8 28w/ELEE/RFL	rlrb rfl	5	36.6	0.52	3,382
GWHS	Drama Stage	4L4' T12 EE/EEMAG	trof acr	6	140	2325	2L4' T8 28w/ELEE/RFL	rlrb rfl	6	36.6	0.62	1,443
GWHS	Drama	4L4' T12 EE/EEMAG	trof acr	10	140	2325	2L4' T8 28w/ELEE/RFL	rlrb rfl	10	36.6	1.03	2,405
GWHS	15	4L4' T12 EE/EEMAG	trof acr	11	140	2325	2L4' T8 28w/ELEE/RFL	rlrb rfl	11	36.6	1.14	2,645
GWHS	11	4L4' T8/EL	trof acr	22	112	2325	2L4' T8 28w/ELEE/RFL	rlrb rfl	22	36.6	1.66	3,858
GWHS	ATTIC	2L4' T12 EE/EEMAG	strip	4	70	1441	2L4' T8 28w/RELAMP	relamp	4	36.6	0.13	193
GWHS	BELTRAN	2L4' T12 EE/EEMAG	trof acr	4	70	2393	2L4' T8 32w/EL DIM	RLRB	4	60.0	0.04	96
GWHS	MAIN OFFICE	4L4' T12 EE/EEMAG	trof acr	8	140	2393	2L4' T8 32w/EL DIM/RFL	rlrb rfl	8	60.0	0.64	1,532
GWHS	PHONE ROOM	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	1,200	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	45
GWHS	VENDING	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	6,540	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	243
GWHS	HALLS	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	4	32.8	0.01	58
GWHS	STW 3	2x 75W INCANDESCENTS	drum	1	150	6540	2x 13W COMPACT/NEW	new drum	1	26.0	0.12	811
GWHS	GIRLS	2x 75W INCANDESCENTS	drum	1	150	2325	2x 13W COMPACT/NEW	new drum	1	26.0	0.12	288
GWHS	STW 1	2x 75W INCANDESCENTS	drum	2	150	6540	2x 13W COMPACT/NEW	new drum	3	26.0	0.22	1,452
GWHS	RR	2x 75W INCANDESCENTS	drum	2	150	2325	2x 13W COMPACT/NEW	new drum	2	26.0	0.25	577
GWHS	STW2	2x 75W INCANDESCENTS	drum	2	150	6540	2x 13W COMPACT/NEW	new drum	2	26.0	0.25	1,622
GWHS	BAND RM stor./practice	2x 75W INCANDESCENTS	drum	4	150	2325	2x 13W COMPACT/NEW	new drum	4	26.0	0.50	1,153
GWHS	MEN	150W INCANDESCENT	can rec	1	150	4,112	2x 26W COMPACT EL HW/KIT	can kit	1	52.0	0.10	403
GWHS	WOMEN	150W INCANDESCENT	can rec	1	150	4,112	2x 26W COMPACT EL HW/KIT	can kit	1	52.0	0.10	403
GWHS	BOYS LOCKER	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATT/emerge	new	2	3.0	0.07	648
GWHS	15	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATT/emerge	new	2	3.0	0.07	648
GWHS	WEIGHT ROOM	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
GWHS	Drama	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
GWHS	EXIT	2x 20 INCANDESCENTS	exit sign battery	10	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	10	3.0	0.37	3,241
GWHS	LIB STO server rm	3L4' T8/EL	trof parabolic	1	88	2325	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	76.0	0.01	28
GWHS	LIB	3L4' T8/EL	trof parabolic	3	88	1491	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	76.0	0.04	54
GWHS	LIB STO	3L4' T8/EL	trof parabolic	5	88	1491	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	76.0	0.06	89
GWHS	AV ROOM	3L4' T8/EL	trof parabolic	6	88	2325	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	167
GWHS	19	3L4' T8/EL	trof parabolic	15	88	2325	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	15	76.0	0.18	419
GWHS	LIBRARY	3L4' T8/EL	indirect/direct	29	88	1491	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	29	76.0	0.35	519
GWHS	WELDING	2L8' T12 HO STD/EEMAG	industrial	6	237	2325	4L4' T8 28w/ELEE HI/IND new-8'	new 8' indust.	6	116.1	0.73	1,686
GWHS	SHOP	2L8' T12 HO STD/EEMAG	industrial	37	237	2325	4L4' T8 28w/ELEE HI/IND new-8'	new 8' indust.	37	116.1	4.47	10,397
GWHS	CUSTODIAL;	2L8' T12 STD/STD	eggcrate	1	173	1491	4L4' T8 28w/ELEE/NEW-8'	new wrap	1	116.1	0.06	85
GWHS	STUDENT SERV	4L8' T12 STD/STD	wrap	2	346	2393	4L4' T8 28w/ELEE/NEW-8'	new wrap	2	116.1	0.46	1,100
GWHS	Hall	4L8' T12 STD/STD	wrap	2	346	6540	4L4' T8 28w/ELEE/NEW-8'	new wrap	2	116.1	0.46	3,007
GWHS	STUDENT SERV	4L8' T12 STD/STD	eggcrate	6	346	2393	4L4' T8 28w/ELEE/NEW-8'	new wrap	6	116.1	1.38	3,300
GWHS	Hall	4L8' T12 STD/STD	wrap	15	346	6540	4L4' T8 28w/ELEE/NEW-8'	new wrap	15	116.1	3.45	22,549
GWHS	STUDENT SERV	4L8' T8/EL	wrap	1	900	2393	4L4' T8 28w/ELEE/NEW-8'	new wrap	1	116.1	0.78	1,876
GWHS	COUNSELOR	4L8' T8/EL	wrap	1	900	2393	4L4' T8 28w/ELEE/NEW-8'	new wrap	1	116.1	0.78	1,876
GWHS	WEIGHT ROOM	400W METAL HALIDE	lowbay	6	455	2325	6L4' T8 28w/ELEE HI/NEW	new T8 hibay cage	6	165.8	1.74	4,034
GWHS	**Totals**			**864**					**917**		**67.55**	**192,421**
JVES	NURSE	1L4' T12 EE/EEMAG	vanity	1	40	4,112	1L4' T8 28w/ELEE LO	rlrb	1	28.0	0.01	49
JVES	NURSE	1L4' T12 EE/EEMAG	strip	1	40	4,112	1L4' T8 28w/ELEE LO	rlrb	1	28.0	0.01	49
JVES	GYM	1L4' T12 EE/EEMAG	strip	1	40	1,441	1L4' T8 28w/ELEE LO	rlrb	1	28.0	0.01	17
JVES	PHONE ROOM	1L4' T12 EE/EEMAG	strip cage	2	40	4,112	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	99
JVES	UTILITY	1L4' T12 EE/EEMAG	strip	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
JVES	MR, STEEL	1L4' T12 EE/EEMAG	strip	2	40	1,200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
JVES	STORE ROOM	1L4' T12 EE/EEMAG	strip	3	40	1,200	1L4' T8 28w/ELEE LO	rlrb	3	28.0	0.04	43
JVES	33	1L4' T12 EE/EEMAG	strip	3	40	4,112	1L4' T8 28w/ELEE LO	rlrb	3	28.0	0.04	148
JVES	KITCHEN	1L4' T12 EE/EEMAG	strip	5	40	1,200	1L4' T8 28w/ELEE LO	rlrb	6	28.0	0.03	38
JVES	BOILER	1L4' T12 EE/EEMAG	strip	8	40	4,112	1L4' T8 28w/ELEE LO	rlrb	13	28.0	-0.04	-181
JVES	34	1L4' T8/EL	trof acr	3	30	1,200	1L4' T8 28w/ELEE LO	rlrb	3	28.0	0.01	7
JVES	KITCHEN	2L4' T12 EE/EEMAG	wrap	2	70	1,492	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	125

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
JVES	MEN	1L4' T12 EE/EEMAG	vanity	1	40	1,200	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.01	14
JVES	NURSE	1L4' T12 EE/EEMAG	vanity	1	40	1,200	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	1	28.0	0.01	14
JVES	WOMEN	1L4' T12 EE/EEMAG	vanity	2	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
JVES	KITCHEN	1L4' T12 EE/EEMAG	vanity	2	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
JVES	M&L	1L4' T12 EE/EEMAG	vanity	2	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
JVES	M & W	1L4' T12 EE/EEMAG	vanity	2	40	1,441	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	35
JVES	33	1L4' T12 EE/EEMAG	vanity	2	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
JVES	34	1L4' T12 EE/EEMAG	vanity	2	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	2	28.0	0.02	99
JVES	STaFF	1L4' T12 EE/EEMAG	vanity	3	40	1,200	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	3	28.0	0.04	43
JVES	GIRLS	1L4' T12 EE/EEMAG	vanity	6	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.07	296
JVES	GIRLS	1L4' T12 EE/EEMAG	vanity	6	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	6	28.0	0.07	296
JVES	GYM	1L4' T12 EE/EEMAG	vanity	7	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	7	28.0	0.08	345
JVES	BOYS	1L4' T12 EE/EEMAG	vanity	8	40	1,200	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	9	28.0	0.07	82
JVES	BOYS	1L4' T12 EE/EEMAG	vanity	8	40	4,112	1L4' T8 28w/ELEE LO/NEW vanity	new vanity	9	28.0	0.07	280
JVES	MaINT	2L4' T12 EE/EEMAG	wrap wide	5	70	1,859	1L4' T8 28w/ELEE/NEW	new wrap wide	5	28.0	0.21	390
JVES	GILMaRTIN	2L4' T12 EE/EEMAG	trof acr	1	70	1,441	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	48
JVES	PRaCTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1,200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
JVES	PRaCTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1,200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
JVES	PRaCTICE ROOM	2L4' T12 EE/EEMAG	trof acr	1	70	1,200	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.03	40
JVES	CONFERENCE	2L4' T12 EE/EEMAG	trof acr	2	70	1,441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
JVES	LIBRaRIaN	2L4' T12 EE/EEMAG	trof acr	2	70	1,859	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	124
JVES	VaN DERWaL	2L4' T12 EE/EEMAG	trof acr	2	70	1,441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
JVES	NURSE	2L4' T12 EE/EEMAG	trof acr	2	70	1,441	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	96
JVES	STORaGE-1	2L4' T12 EE/EEMAG	trof acr	2	70	1,200	2L4' T8 28w/ELEE LO	rlrb	2	36.6	0.07	80
JVES	aDMIN	2L4' T12 EE/EEMAG	trof acr	4	70	1,859	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	249
JVES	aV ROOM	2L4' T12 EE/EEMAG	trof acr	4	70	1,441	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	193
JVES	GT-STILES	2L4' T12 EE/EEMAG	trof acr	4	70	2,096	2L4' T8 28w/ELEE LO	rlrb	4	36.6	0.13	280
JVES	VOLUNTEER WKRM	2L4' T12 EE/EEMAG	trof acr	6	70	1,200	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	241
JVES	COUNSELOR	2L4' T12 EE/EEMAG	trof acr	6	70	1,441	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	289
JVES	STaFF WKRM	2L4' T12 EE/EEMAG	trof acr	6	70	1,441	2L4' T8 28w/ELEE LO	rlrb	6	36.6	0.20	289
JVES	aDMIN	2L4' T12 EE/EEMAG	trof acr	8	70	1,441	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	385
JVES	STaFF	2L4' T12 EE/EEMAG	trof acr	8	70	1,441	2L4' T8 28w/ELEE LO	rlrb	8	36.6	0.27	385
JVES	15	2L4' T12 EE/EEMAG	trof acr	10	70	1,441	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	482
JVES	16	2L4' T12 EE/EEMAG	trof acr	10	70	1,859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
JVES	17	2L4' T12 EE/EEMAG	trof acr	10	70	1,859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
JVES	18	2L4' T12 EE/EEMAG	trof acr	10	70	1,859	2L4' T8 28w/ELEE LO	rlrb	10	36.6	0.33	621
JVES	19	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	21	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
JVES	23	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	25	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	26	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	24	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	22	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	20	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	14	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	13	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	11	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	12	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	9	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	7	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	5	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	3	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	1	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	33	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	34	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	2	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	4	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	6	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	10	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	8	2L4' T12 EE/EEMAG	trof acr	16	70	1,859	2L4' T8 28w/ELEE LO	rlrb	16	36.6	0.53	994
JVES	LIBRaRY	2L4' T12 EE/EEMAG	trof acr	20	70	1,859	2L4' T8 28w/ELEE LO	rlrb	20	36.6	0.67	1,243
JVES	28	2L4' T12 EE/EEMAG	trof acr	24	70	2,096	2L4' T8 28w/ELEE LO	rlrb	24	36.6	0.80	1,681
JVES	KITCHEN	2L4' T12 EE/EEMAG	vapor tight	16	70	1,859	2L4' T8 28w/ELEE LO/NEW	new vaportight	16	36.6	0.53	994
JVES	SPEECH	4L4' T8/EL	trof acr	3	112	2096	2L4' T8 28w/ELEE/RFL	rlrb rfl	3	36.6	0.23	474
JVES	aDMIN	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	1,441	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.00	6
JVES	NURSE HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	1	70	1,441	2L4' T8 U 30w/ELEE LO	rlrb	1	32.8	0.04	54
JVES	NURSE	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	1,441	2L4' T8 U 30w/ELEE LO	rlrb	3	32.8	0.11	161
JVES	GILMaRTIN	2L4' T12 U EE/EEMAG	trof acr 2x2	4	70	1,441	2L4' T8 U 30w/ELEE LO	rlrb	4	32.8	0.15	214
JVES	11-12 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	8	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	8	32.8	0.30	1,946
JVES	7-10 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	8	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	8	32.8	0.30	1,946
JVES	13-18 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	10	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	10	32.8	0.37	2,433
JVES	28 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	11	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	11	32.8	0.41	2,676
JVES	ENTRaNCE	2L4' T12 U EE/EEMAG	trof acr 2x2	12	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	12	32.8	0.45	2,919
JVES	K HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	14	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	14	32.8	0.52	3,406
JVES	19-26 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	16	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	16	32.8	0.60	3,893
JVES	1-6 HALL	2L4' T12 U EE/EEMAG	trof acr 2x2	26	70	6540	2L4' T8 U 30w/ELEE LO	rlrb	26	32.8	0.97	6,325
~~JVES~~	~~HaLLS~~	~~2L4' T12 U EE/EEMAG~~	~~trof acr 2x2~~	~~92~~	~~70~~	~~6540~~	~~2L4' T8 U 30w/ELEE LO~~	~~rlrb~~	0		0.00	0
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
JVES	EXIT	2x 20 INCANDESCENTS	exit sign battery	6	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	5	3.0	0.23	1,971
~~JVES~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~10~~	~~40~~	~~8760~~	~~3 WATT LED/NEW EXIT BATTERY~~	~~new exit bat~~	0		0.00	0
JVES	CaFETORIUM	400W METAL HALIDE	high bay	24	455	3500	6L4' T8 28w/ELEE HI/NEW	new T8 hibay lens	24	165.8	6.94	24,294
JVES	**Totals**			**897**					**803**		**31.34**	**93,095**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
MES	STORAGE	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	STORAGE	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	CUSTODIANS ROOM	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	KITCHEN	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	96
MES	STAGE	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	STAGE	2L4' T8/EL	wrap	1	60	3,650	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	85
MES	STAGE	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	IT CLOSET	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	CLOSET	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	STO	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
MES	STO	2L4' T8/EL	wrap	1	60	3,650	2L4' T8 28w/ELEC	RLRB	2	36.6	-0.01	-48
MES	RESTROOM	2L4' T8/EL	trof acr	2	60	4,112	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	193
MES	KITCHEN	2L4' T8/EL	trof acr	2	60	2,393	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	112
MES	DRY GOODS	2L4' T8/EL	wrap	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
MES	ACTIVITY ROOM	2L4' T8/EL	trof acr	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
MES	LIBRARY	2L4' T8/EL	trof acr	2	60	2,393	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	112
MES	STORAGE	2L4' T8/EL	wrap	2	60	1,200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.01	12
MES	C3	2L4' T8/EL	trof parabolic	2	60	4,112	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	193
MES	RR HALL	2L4' T8/EL	trof acr	2	60	6,440	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	302
MES	LOUNGE	2L4' T8/EL	trof acr	3	60	1,441	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	101
MES	NURSE	2L4' T8/EL	trof acr	3	60	2,393	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	168
MES	M & W	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
MES	M & W	2L4' T8/EL	trof acr	3	60	1,200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	84
MES	LIBRARY	2L4' T8/EL	wrap	3	60	1,200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	84
MES	STORAGE	2L4' T8/EL	wrap	3	60	4,112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
MES	B&G	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
MES	B&G	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
MES	M & W FACULTY	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC	RLRB	6	36.6	-0.04	-162
MES	LIB WORKROOM	2L4' T8/EL	trof acr	4	60	2,393	2L4' T8 28w/ELEC	RLRB	4	36.6	0.09	224
MES	LITERACY LIBRARY	2L4' T8/EL	wrap	4	60	1,491	2L4' T8 28w/ELEC	RLRB	3	36.6	0.13	194
MES	PLANT ENGINEER	2L4' T8/EL	wrap	4	60	2,393	2L4' T8 28w/ELEC	RLRB	3	36.6	0.13	312
MES	CUSTODIAL ROOM	2L4' T8/EL	wrap	4	60	3,036	2L4' T8 28w/ELEC	RLRB	1	36.6	0.20	618
MES	OFFICE HALL	2L4' T8/EL	trof acr	5	60	6,440	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	754
MES	B & G	2L4' T8/EL	trof acr	5	60	4,112	2L4' T8 28w/ELEC	RLRB	4	36.6	0.15	632
MES	B & G	2L4' T8/EL	trof acr	5	60	4,112	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	482
MES	STAGE RAMP	2L4' T8/EL	wrap	5	60	6,440	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	754
MES	LIBRARY HALL	2L4' T8/EL	trof acr	7	60	6,440	2L4' T8 28w/ELEC	RLRB	7	36.6	0.16	1,056
MES	STAGE	2L4' T8/EL	wrap pend	12	60	1,200	2L4' T8 28w/ELEC	RLRB	12	36.6	0.28	337
MES	BOILER ROOM	2L4' T8/EL	wrap	12	60	3,650	2L4' T8 28w/ELEC	RLRB	12	36.6	0.28	1,026
MES	KITCHEN	2L4' T8/EL	trof acr	13	60	1,441	2L4' T8 28w/ELEC	RLRB	13	36.6	0.30	439
MES	C HALL	2L4' T8/EL	trof acr	13	60	6,440	2L4' T8 28w/ELEC	RLRB	13	36.6	0.30	1,961
MES	ADMIN	2L4' T8/EL	trof acr	16	60	1,441	2L4' T8 28w/ELEC	RLRB	16	36.6	0.37	540
MES	FINE ARTS ROOM	2L4' T8/EL	trof acr	16	60	1,859	2L4' T8 28w/ELEC	RLRB	16	36.6	0.37	697
MES	A HALL	2L4' T8/EL	trof acr	17	60	6,440	2L4' T8 28w/ELEC	RLRB	17	36.6	0.40	2,564
MES	KA HALL	2L4' T8/EL	trof acr	25	60	6,440	2L4' T8 28w/ELEC	RLRB	25	36.6	0.59	3,771
MES	B HALL	2L4' T8/EL	trof acr	25	60	6,440	2L4' T8 28w/ELEC	RLRB	25	36.6	0.59	3,771
MES	B&G	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	289
MES	B&G	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	289
MES	B10	2L4' T8/EL	wrap	7	60	1,859	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	36.6	0.16	305
~~MES~~	~~HALLS~~	~~2L4' T8/EL~~	~~trof acr~~	~~87~~	~~60~~	~~6,440~~	~~2L4' T8 28w/ELEC/RELAMP ONLY~~	~~relamp~~	0		0.00	0
MES	LIBRARY	4L4' T8/EL	trof acr	36	112	1491	2L4' T8 28w/ELEE/RFL	rlrb rfl	29	36.6	2.97	4,430
MES	MULTI PURPOSE ROOM	4L4' T8/EL	trof acr	60	112	3500	2L4' T8 28w/ELEE/RFL	rlrb rfl	60	36.6	4.53	15,839
~~MES~~	~~MECHANICAL ROOM~~	~~4L4' T8/EL 8'~~	~~wrap~~	~~5~~	~~112~~	~~1200~~	~~2L4' T8 28w/ELEE/RFL~~	~~rlrb rfl~~	0		0.00	0

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
MES	SUPPLY ROOM	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	KITCHEN	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	FINE ARTS ROOM	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	STAGE	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	K1	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	K2	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	K3	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	A HALL	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	B HALL	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
MES	ADMIN	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
MES	OFFICE HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
MES	KA HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
MES	LIBRARY HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
MES	C HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
MES	MULTI PURPOSE ROOM	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
~~MES~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~19~~	~~40~~	~~8760~~	~~3 WATT LED/NEW EXIT BATTERY~~	~~new exit bat~~	0		0.00	0
MES	CONFERENCE ROON	3L4' T8/EL	trof parabolic	2	88	3,650	3L4' T8 28w/ELEC	RLRB	2	76.0	0.02	88
MES	WORKROOM	3L4' T8/EL	trof parabolic	2	88	1,492	3L4' T8 28w/ELEC	RLRB	2	76.0	0.02	36
MES	PRINCIPAL	3L4' T8/EL	trof parabolic	4	88	2,393	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	115
MES	C3	3L4' T8/EL	trof parabolic	4	88	1,859	3L4' T8 28w/ELEC	RLRB	6	76.0	-0.10	-193
MES	A9	3L4' T8/EL	trof parabolic	4	88	1,859	3L4' T8 28w/ELEC	RLRB	7	76.0	-0.18	-335
MES	STAFF LOUNGE	3L4' T8/EL	trof parabolic	4	88	1,441	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	69
MES	COUNSELOR	3L4' T8/EL	trof parabolic	4	88	2,393	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	115
MES	C2	3L4' T8/EL	trof parabolic	6	88	1,859	3L4' T8 28w/ELEC	RLRB	6	76.0	0.07	134
MES	B12	3L4' T8/EL	trof parabolic	6	88	1,859	3L4' T8 28w/ELEC	RLRB	6	76.0	0.07	134
MES	A1	3L4' T8/EL	trof parabolic	11	88	1,859	3L4' T8 28w/ELEC	RLRB	11	76.0	0.13	245
MES	A4	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
MES	A8	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
MES	A5	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
MES	K1	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
MES	A3	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
MES	A2	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
MES	A7	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
MES	A6	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
MES	C1	3L4' T8/EL	trof parabolic	16	88	1,859	3L4' T8 28w/ELEC	RLRB	16	76.0	0.19	357
MES	B1	3L4' T8/EL	trof parabolic	16	88	1,859	3L4' T8 28w/ELEC	RLRB	16	76.0	0.19	357
MES	K2	3L4' T8/EL	trof parabolic	18	88	1,859	3L4' T8 28w/ELEC	RLRB	18	76.0	0.22	402
MES	K3	3L4' T8/EL	trof parabolic	18	88	1,859	3L4' T8 28w/ELEC	RLRB	18	76.0	0.22	402
MES	B9	3L4' T8/EL	wrap	6	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	134
MES	B4	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	76.0	0.16	290
MES	B1	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	11	76.0	0.31	573
MES	B8	3L4' T8/EL	trof parabolic	13	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	76.0	0.16	290
MES	B3	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	312
MES	B2	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	312
MES	B7	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	312
MES	B6	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	312
MES	B5	3L4' T8/EL	trof parabolic	14	88	1,859	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	76.0	0.24	454
MES	SUPPLY ROOM	4L4' T8/EL-8'	wrap	3	112	1200	4L4' T8 28w/ELEC 8' fixt.	RLRB	3	116.1	-0.01	-15
MES	ELECTRICAL ROOM	4L4' T8/EL-8'	wrap	3	112	1200	4L4' T8 28w/ELEC 8' fixt.	RLRB	3	116.1	-0.01	-15
MES	**Totals**			**834**					**717**		**18.34**	**58,880**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
PHES	STORAGE	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	STORAGE	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	CUSTODIANS ROOM	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	KITCHEN RR	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	96
PHES	STAGE	2L4' T8/EL	wrap	1	60	1,200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	STAGE	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	STAGE	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	IT CLOSET	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	CLOSET	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	STO	2L4' T8/EL	wrap	1	60	3650	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	85
PHES	STO	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.02	28
PHES	RESTROOM	2L4' T8/EL	trof acr	2	60	4,112	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	193
PHES	KITCHEN	2L4' T8/EL	trof acr	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
PHES	DRY GOODS	2L4' T8/EL	wrap	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
PHES	ACTIVITY ROOM	2L4' T8/EL	trof acr	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
PHES	LIBRARY	2L4' T8/EL	trof acr	2	60	1,200	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	56
PHES	STORAGE	2L4' T8/EL	wrap	2	60	1,200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.01	12
PHES	C3	2L4' T8/EL	trof parabolic	2	60	4,112	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	193
PHES	RR HALL	2L4' T8/EL	trof acr	2	60	6,440	2L4' T8 28w/ELEC	RLRB	2	36.6	0.05	302
PHES	LOUNGE	2L4' T8/EL	trof acr	3	60	1,441	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	101
PHES	NURSE	2L4' T8/EL	trof acr	3	60	1,200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	84
PHES	M & W	2L4' T8/EL	trof acr	3	60	4,112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	M & W	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	LIBRARY	2L4' T8/EL	wrap	3	60	1200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	84
PHES	STORAGE	2L4' T8/EL	wrap	3	60	1200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	84
PHES	B&G	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	B&G	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	B&G	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	B&G	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	3	36.6	0.07	289
PHES	M & W FACULTY	2L4' T8/EL	trof acr	3	60	4112	2L4' T8 28w/ELEC	RLRB	6	36.6	-0.04	-162
PHES	LIB WORKROOM	2L4' T8/EL	trof acr	4	60	1200	2L4' T8 28w/ELEC	RLRB	4	36.6	0.09	112
PHES	LITERACY LIBRARY	2L4' T8/EL	wrap	4	60	2096	2L4' T8 28w/ELEC	RLRB	3	36.6	0.13	273
PHES	PLANT ENGINEER	2L4' T8/EL	wrap	4	60	1200	2L4' T8 28w/ELEC	RLRB	3	36.6	0.13	156
PHES	CUSTODIAL ROOM	2L4' T8/EL	wrap	4	60	1200	2L4' T8 28w/ELEC	RLRB	1	36.6	0.20	244
PHES	OFFICE HALL	2L4' T8/EL	trof acr	5	60	6440	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	754
PHES	B & G	2L4' T8/EL	trof acr	5	60	4112	2L4' T8 28w/ELEC	RLRB	4	36.6	0.15	632
PHES	B & G	2L4' T8/EL	trof acr	5	60	4112	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	482
PHES	STAGE RAMP	2L4' T8/EL	wrap	5	60	1200	2L4' T8 28w/ELEC	RLRB	5	36.6	0.12	141
PHES	LIBRARY HALL	2L4' T8/EL	trof acr	7	60	6440	2L4' T8 28w/ELEC	RLRB	7	36.6	0.16	1,056
PHES	STORAGE	2L4' T8/EL	wrap	7	60	3500	2L4' T8 28w/ELEC	RLRB	3	36.6	0.31	1,086
PHES	STAGE	2L4' T8/EL	wrap pend	12	60	3650	2L4' T8 28w/ELEC	RLRB	12	36.6	0.28	1,026
PHES	BOILER ROOM	2L4' T8/EL	wrap	12	60	1441	2L4' T8 28w/ELEC	RLRB	12	36.6	0.28	405
PHES	KITCHEN	2L4' T8/EL	trof acr	13	60	1441	2L4' T8 28w/ELEC	RLRB	13	36.6	0.30	439
PHES	C HALL	2L4' T8/EL	trof acr	13	60	6440	2L4' T8 28w/ELEC	RLRB	13	36.6	0.30	1,961
PHES	ADMIN	2L4' T8/EL	trof acr	16	60	1200	2L4' T8 28w/ELEC	RLRB	16	36.6	0.37	450
PHES	FINE ARTS ROOM	2L4' T8/EL	trof acr	16	60	1200	2L4' T8 28w/ELEC	RLRB	16	36.6	0.37	450
PHES	B HALL	2L4' T8/EL	trof acr	17	60	6440	2L4' T8 28w/ELEC	RLRB	17	36.6	0.40	2,564
PHES	KA HALL	2L4' T8/EL	trof acr	25	60	6440	2L4' T8 28w/ELEC	RLRB	25	36.6	0.59	3,771
PHES	A HALL	2L4' T8/EL	trof acr	25	60	6440	2L4' T8 28w/ELEC	RLRB	25	36.6	0.59	3,771
~~PHES~~	~~HALLS~~	~~2L4' T8/EL~~	~~trof acr~~	~~87~~	~~60~~	~~6440~~	~~2L4' T8 28w/ELEC/RELAMP ONLY~~	~~relamp~~	0		0.00	0

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
PHES	LIBRARY	4L4' T8/EL	trof acr	36	112	2096	2L4' T8 28w/ELEE/RFL	rlrb rfl	29	36.6	2.97	6,228
PHES	MULTI PURPOSE ROOM	4L4' T8/EL	trof acr	60	112	3500	2L4' T8 28w/ELEE/RFL	rlrb rfl	60	36.6	4.53	15,839
~~PHES~~	~~MECHANICAL ROOM~~	~~4L4' T8/EL-8'~~	~~wrap~~	~~2~~	~~112~~	~~1200~~	~~2L4' T8 28w/ELEE/RFL~~	~~rlrb rfl~~	0		0.00	0
PHES	ADMIN	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	SUPPLY ROOM	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	KITCHEN	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	FINE ARTS ROOM	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	STAGE	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	K1	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	K2	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	K3	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	LIBRARY	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	B HALL	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PHES	OFFICE HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PHES	KA HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PHES	LIBRARY HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PHES	C HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PHES	A HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PHES	MULTI PURPOSE ROOM	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
~~PHES~~	~~EXIT~~	~~2x 20 INCANDESCENTS~~	~~exit sign battery~~	~~19~~	~~40~~	~~8760~~	~~3 WATT LED/NEW EXIT BATTERY~~	~~new exit bat~~	0		0.00	0
PHES	CONFERENCE ROON	3L4' T8/EL	trof parabolic	2	88	1492	3L4' T8 28w/ELEC	RLRB	2	76.0	0.02	36
PHES	WORKROOM	3L4' T8/EL	trof parabolic	2	88	1441	3L4' T8 28w/ELEC	RLRB	2	76.0	0.02	35
PHES	PRINCIPAL	3L4' T8/EL	trof parabolic	4	88	1441	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	69
PHES	C3	3L4' T8/EL	trof parabolic	4	88	1859	3L4' T8 28w/ELEC	RLRB	6	76.0	-0.10	-193
PHES	B6	3L4' T8/EL	wrap	4	88	1859	3L4' T8 28w/ELEC	RLRB	7	76.0	-0.18	-335
PHES	STAFF LOUNGE	3L4' T8/EL	trof parabolic	4	88	1441	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	69
PHES	COUNSELOR	3L4' T8/EL	trof parabolic	4	88	1441	3L4' T8 28w/ELEC	RLRB	4	76.0	0.05	69
PHES	C2	3L4' T8/EL	trof parabolic	6	88	1859	3L4' T8 28w/ELEC	RLRB	6	76.0	0.07	134
PHES	A6	3L4' T8/EL	wrap	6	88	1859	3L4' T8 28w/ELEC	RLRB	7	76.0	0.00	-7
PHES	READING RESOURCE	3L4' T8/EL	trof parabolic	6	88	1859	3L4' T8 28w/ELEC	RLRB	6	76.0	0.07	134
PHES	B5	3L4' T8/EL	trof parabolic	11	88	1859	3L4' T8 28w/ELEC	RLRB	11	76.0	0.13	245
PHES	B9	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
PHES	B4	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
PHES	B1	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
PHES	A9	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
PHES	A5	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	11	76.0	0.31	573
PHES	A4	3L4' T8/EL	trof parabolic	13	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.16	290
PHES	K1	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	B8	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	B7	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	B3	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	B2	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	A8	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	A7	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	A3	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	A2	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	14	76.0	0.17	312
PHES	A1	3L4' T8/EL	trof parabolic	14	88	1859	3L4' T8 28w/ELEC	RLRB	13	76.0	0.24	454
PHES	C1	3L4' T8/EL	trof parabolic	16	88	1859	3L4' T8 28w/ELEC	RLRB	16	76.0	0.19	357
PHES	COMPUTER LaB	3L4' T8/EL	trof parabolic	16	88	1859	3L4' T8 28w/ELEC	RLRB	16	76.0	0.19	357
PHES	K2	3L4' T8/EL	trof parabolic	18	88	1859	3L4' T8 28w/ELEC	RLRB	18	76.0	0.22	402
PHES	K3	3L4' T8/EL	trof parabolic	18	88	1859	3L4' T8 28w/ELEC	RLRB	18	76.0	0.22	402
PHES	SUPPLY ROOM	4L4' T8/EL-8'	wrap	3	112	1200	4L4' T8 28w/ELEC 8' fixt.	RLRB	3	116.1	-0.01	-15
PHES	ELECTRICAL ROOM	4L4' T8/EL-8'	wrap	3	112	1200	4L4' T8 28w/ELEC 8' fixt.	RLRB	3	116.1	-0.01	-15
PHES	**Totals**			**832**					**714**		**18.49**	**59,933**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
PWLMS	WaLL	250W MERCURY VAPOR	wallpack	2	290	3,650	100W METAL HALIDE CWA	rlrb	2	128.0	0.32	1,183
PWLMS	POLE	250W MERCURY VAPOR	exterior pole mt	2	290	3,650	150W METAL HALIDE CWA	rlrb	2	190.0	0.20	730
PWLMS	POLE	250W MERCURY VAPOR	exterior pole mt	20	290	3,650	150W METAL HALIDE CWA	rlrb	20	190.0	2.00	7,300
PWLMS	MULTI PURPOSE ROOM	250W MERCURY VAPOR	trof acr 2x2	42	290	3,500	150W METAL HALIDE CWA	rlrb	42	190.0	4.20	14,700
PWLMS	D3	60W INCANDESCENT	keyless	1	60	1200	15W COMPACT SI	screw in	1	15.0	0.05	54
~~PWLMS~~	~~MECH~~	~~60W INCANDESCENT~~	~~keyless~~	~~5~~	~~60~~	~~1200~~	~~15W COMPACT SI~~	~~screw in~~	0		0.00	0
PWLMS	C6 closet	100W INCANDESCENT	jb	1	100	1297	18w screw in	relamp	1	18.0	0.08	106
PWLMS	C	1L3' T8/EL	COVE WALL	15	24	7,487	1L3' T8 28w/ELEC/RELAMP ONLY	relamp	18	24.0	-0.07	-539
PWLMS	D	1L3' T8/EL	COVE WALL	15	24	7,487	1L3' T8 28w/ELEC/RELAMP ONLY	relamp	18	24.0	-0.07	-539
PWLMS	E	1L3' T8/EL	COVE WALL	15	24	7,487	1L3' T8 28w/ELEC/RELAMP ONLY	relamp	18	24.0	-0.07	-539
PWLMS	LIB	1L4' T8/EL	box para	4	30	2096	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	28.0	0.01	17
PWLMS	C	1L4' T8/EL	COVE WALL	32	30	7,487	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	30	28.0	0.12	898
PWLMS	D	1L4' T8/EL	COVE WALL	32	30	7,487	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	30	28.0	0.12	898
PWLMS	E	1L4' T8/EL	COVE WALL	32	30	7,487	1L4' T8 28w/ELEC/RELAMP ONLY	relamp	30	28.0	0.12	898
PWLMS	Trophy case	100W INCANDESCENT	can rec	3	100	7,487	26W COMPACT EL HW/KIT	can kit	3	26.0	0.22	1,662
PWLMS	LIB	100W INCANDESCENT	can rec	4	100	2,096	26W COMPACT EL HW/KIT	can kit	4	26.0	0.30	620
PWLMS	HaLL	100W INCANDESCENT	can eyeball rec	5	100	7,487	26W COMPACT EL HW/KIT	can kit	5	26.0	0.37	2,770
PWLMS	HaLL	100W INCANDESCENT	can rec	10	100	7,487	26W COMPACT EL HW/KIT	can kit	10	26.0	0.74	5,540
PWLMS	G6	2L2' T8 EL	trof para 2x2	31	64	6,500	2L2' T8/EL RELAMP	relamp	32	39.9	0.71	4,605
PWLMS	C hall Elect. Rm.	2L4' T8/EL	trof acr	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	C hall IT rm.	2L4' T8/EL	trof acr	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	D hall Cust.	2L4' T8/EL	trof acr	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	E hall Elect. Rm.	2L4' T8/EL	trof acr	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	E hall CUST. rm.	2L4' T8/EL	trof acr	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	GIRLS	2L4' T8/EL	vapor tight	1	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	GIRLS	2L4' T8/EL	wrap	1	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	F7	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	F7	2L4' T8/EL	wrap	1	60	7,487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	175
PWLMS	F5	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	F5	2L4' T8/EL	strip cage	1	60	7,487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	175
PWLMS	BOYS	2L4' T8/EL	wrap	1	60	7,487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	175
PWLMS	G CUST.	2L4' T8/EL	trof acr	1	60	1,200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
PWLMS	WOMEN a	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	MEN a	2L4' T8/EL	wrap	1	60	4,112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
PWLMS	OFFICE	2L4' T8/EL	trof acr	1	60	2393	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	56
PWLMS	F7	2L4' T8/EL	wrap wide	2	60	1297	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	61
PWLMS	PROJECTOR	2L4' T8/EL	wrap	2	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.01	12
PWLMS	M & W	2L4' T8/EL	wrap	2	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	193
PWLMS	a3	2L4' T8/EL	wrap	2	60	6500	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	304
PWLMS	F	2L4' T8/EL	trof acr	3	60	7187	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	505
PWLMS	FOOD STORAGE	2L4' T8/EL	trof acr	3	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	84
PWLMS	a13	2L4' T8/EL	trof acr	3	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	84
PWLMS	STORAGE	2L4' T8/EL	trof acr	3	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	84
PWLMS	G4	2L4' T8/EL	trof acr	4	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	36.6	0.09	112
PWLMS	LIB	2L4' T8/EL	wrap wall mt.	4	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	36.6	0.09	385
PWLMS	M&W	2L4' T8/EL	wrap	4	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	36.6	0.09	385
PWLMS	C11	2L4' T8/EL	trof acr	6	60	6500	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	36.6	0.14	913
PWLMS	D11	2L4' T8/EL	trof acr	6	60	6500	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	36.6	0.14	913
PWLMS	BOYS E	2L4' T8/EL	wrap	6	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	36.6	0.10	427
PWLMS	G HALL	2L4' T8/EL	trof acr	7	60	7187	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	36.6	0.20	1,441
PWLMS	BOYS	2L4' T8/EL	wrap	8	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	36.6	0.22	921
PWLMS	GIRLS	2L4' T8/EL	wrap	8	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	771

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
PWLMS	GIRLS	2L4' T8/EL	wrap	8	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	771
PWLMS	BOYS a	2L4' T8/EL	wrap	8	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	771
PWLMS	GIRLS a	2L4' T8/EL	wrap	8	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	8	36.6	0.19	771
PWLMS	BOYS	2L4' T8/EL	strip cage	9	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	36.6	0.03	115
PWLMS	COUNSELOR HALL	2L4' T8/EL	trof acr	10	60	7187	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	10	36.6	0.23	1,683
PWLMS	a3	2L4' T8/EL	trof acr	11	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.62	748
PWLMS	MAIN ENTRY	2L4' T8/EL	trof acr	11	60	7487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	11	36.6	0.26	1,929
PWLMS	B2	2L4' T8/EL	trof parabolic	11	60	6500	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	11	36.6	0.26	1,675
PWLMS	GIRLSD	2L4' T8/EL	wrap	12	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	12	36.6	0.28	1,156
PWLMS	GIRLS	2L4' T8/EL	wrap	13	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	36.6	0.30	1,252
PWLMS	BOYS	2L4' T8/EL	wrap	13	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	36.6	0.30	1,252
~~PWLMS~~	~~BOYS~~	~~2L4' T8/EL~~	~~wrap~~	~~14~~	~~60~~	~~4112~~	~~2L4' T8 28w/ELEC/RELAMP ONLY~~	~~relamp~~	0		0.00	0
PWLMS	D hall	2L4' T8/EL	trof acr	15	60	7487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	15	36.6	0.35	2,631
PWLMS	E HALL	2L4' T8/EL	trof acr	15	60	7487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	15	36.6	0.35	2,631
PWLMS	C hall	2L4' T8/EL	trof acr	17	60	7487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	17	36.6	0.40	2,981
PWLMS	A HALL	2L4' T8/EL	trof acr	18	60	7487	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	18	36.6	0.42	3,157
~~PWLMS~~	~~aLL~~	~~2L4' T8/EL~~	~~trof acr~~	~~75~~	~~60~~	~~7487~~	~~2L4' T8 28w/ELEC/RELAMP ONLY~~	~~relamp~~	0		0.00	0
PWLMS	LIB	2L4' T8/EL	box para	98	60	2096	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	98	36.6	2.30	4,811
PWLMS	KITCHEN OFFICE	4L4' T8/EL	trof acr	2	112	6,500	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	980
PWLMS	B4	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B6	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B7	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B11	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B12	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B14	4L4' T8/EL	trof acr	2	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	2	36.6	0.15	196
PWLMS	B3	4L4' T8/EL	trof acr	3	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	3	36.6	0.23	293
PWLMS	B8	4L4' T8/EL	trof acr	3	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	3	36.6	0.23	293
PWLMS	B1O	4L4' T8/EL	trof acr	3	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	3	36.6	0.23	293
PWLMS	B15	4L4' T8/EL	trof acr	3	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	3	36.6	0.23	293
PWLMS	C12	4L4' T8/EL	trof acr	4	112	6,500	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	4	36.6	0.30	1,961
PWLMS	D12	4L4' T8/EL	trof acr	4	112	6,500	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	4	36.6	0.30	1,961
PWLMS	E12	4L4' T8/EL	trof acr	4	112	6,500	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	4	36.6	0.30	1,961
PWLMS	BaND	4L4' T8/EL	trof acr	4	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	5	36.6	0.27	344
PWLMS	B9	4L4' T8/EL	trof acr	4	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	4	36.6	0.30	391
PWLMS	B13	4L4' T8/EL	trof acr	5	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	5	36.6	0.38	489
PWLMS	B5	4L4' T8/EL	trof acr	6	112	1,297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	6	36.6	0.45	587
PWLMS	COUNSELOR RECEP	4L4' T8/EL	trof acr	6	112	1297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	6	36.6	0.45	587
PWLMS	CONF	4L4' T8/EL	trof acr	6	112	1492	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	6	36.6	0.45	675
PWLMS	KITCHEN	4L4' T8/EL	trof acr	29	112	1297	2L4' T8 28w/ELEE HI/RFL	rlrb rfl	29	36.6	2.19	2,837
PWLMS	BOYS	2L4' T8/EL	vapor tight	1	60	4112	2L4' T8 28w/ELEE LO	rlrb	1	36.6	0.02	96
PWLMS	F9 BALL STOR.	2L8' T12 EE/EEMAG-8'	industrial	2	123	1200	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	2	36.6	0.17	207
PWLMS	F10 MECH.	2L8' T12 EE/EEMAG-8'	industrial	7	123	1200	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	7	36.6	0.60	726
PWLMS	MECH.	2L8' T12 EE/EEMAG-8'	industrial	7	123	1200	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	7	36.6	0.60	726
PWLMS	F8 MECH.	2L8' T12 EE/EEMAG-8'	industrial	9	123	1200	2L4' T8 28w/ELEE LO/STRIP KIT-8'	rlrb strip kit	9	36.6	0.78	933
PWLMS	GIRLSD	2L4' T12/STD./STD.	wrap	3	94	1200	2L4' T8 28w/ELEE/LO	rlrb	3	36.6	0.17	207
PWLMS	F5	2L4' T8/EL	trof acr	2	60	1297	2L4' T8 28w/ELEE/LO	rlrb	2	36.6	0.05	61
PWLMS	RR	2L4' T8/EL	wrap	2	60	4112	2L4' T8 28w/ELEe/lo	rlrb	1	36.6	0.08	343
PWLMS	KITCHEN	2L4' T12 U EE/EEMAG	trof acr 2x2	2	70	1,297	2L4' T8 U 30w/ELEE LO	rlrb	2	32.8	0.07	96
PWLMS	E6	2L4' T12 U EE/EEMAG	trof para 2x2	7	70	6,500	2L4' T8 U 30w/ELEE LO	relamp	7	32.8	0.26	1,693
PWLMS	EXITS	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	D2	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
PWLMS	D4	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	D5	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	D6	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	D9	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	D10	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E1	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E2	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E4	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E5	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E7	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	E9	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	HaLL	2x 20 INCANDESCENTS	exit sign battery	1	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	1	3.0	0.04	324
PWLMS	C hall	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PWLMS	A HALL	2x 20 INCANDESCENTS	exit sign battery	2	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	648
PWLMS	D hall	2x 20 INCANDESCENTS	exit sign battery	3	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	3	3.0	0.11	972
PWLMS	MAIN ENTRY	2x 20 INCANDESCENTS	exit sign battery	4	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	4	3.0	0.15	1,296
PWLMS	E HALL	2x 20 INCANDESCENTS	exit sign battery	5	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	5	3.0	0.19	1,621
PWLMS	EXITS	2x 20 INCANDESCENTS	exit sign battery	10	40	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	8	3.0	0.38	3,294
PWLMS	a11	3L4' T8/EL	trof parabolic	1	88	1297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	76.0	0.01	16
PWLMS	PRaCTICE	3L4' T8/EL	trof parabolic	2	88	1200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	4	76.0	-0.13	-154
PWLMS	G6 SIDE	3L4' T8/EL	trof parabolic	2	88	1200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	76.0	0.02	29
PWLMS	a8	3L4' T8/EL	trof parabolic	2	88	1,200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	76.0	0.02	29
PWLMS	a9	3L4' T8/EL	trof parabolic	2	88	1,200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	76.0	0.02	29
PWLMS	a4	3L4' T8/EL	trof parabolic	3	88	1,200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	76.0	0.04	43
PWLMS	a12	3L4' T8/EL	trof parabolic	5	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	76.0	0.06	78
PWLMS	a5	3L4' T8/EL	trof parabolic	5	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	5	76.0	0.06	390
PWLMS	E11	3L4' T8/EL	trof parabolic	6	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	468
PWLMS	G9	3L4' T8/EL	trof parabolic	6	88	1,309	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	94
PWLMS	a5	3L4' T8/EL	trof parabolic	6	88	1,200	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	86
PWLMS	a11	3L4' T8/EL	trof parabolic	6	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	76.0	0.07	93
PWLMS	a3	3L4' T8/EL	trof parabolic	7	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	76.0	0.08	546
PWLMS	WEIGHT ROOM	3L4' T8/EL	trof parabolic	10	88	3,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	10	76.0	0.12	420
PWLMS	a10 Break rm	3L4' T8/EL	trof parabolic	13	88	1,309	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	13	76.0	0.16	204
PWLMS	C1	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C2	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C4	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C5	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C7	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C8	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C9	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	C10	3L4' T8/EL	trof parabolic	14	88	1,297	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	218
PWLMS	D1	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D2	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D4	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D5	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D6	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D7	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D9	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	D10	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E1	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E10	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E2	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	**Room**	**Existing Description**	**Existing Style**	**Existing Qty**	**Existing Watts**	**Hours**	**Retro Description**	**Retro Style**	**Retro Qty**	**Retro Watts**	**Saved kW**	**Saved kWh**
PWLMS	E4	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E5	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E8	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E7	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	E9	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	a1	3L4' T8/EL	trof parabolic	14	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	14	76.0	0.17	1,092
PWLMS	a2	3L4' T8/EL	trof parabolic	15	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	15	76.0	0.18	1,170
PWLMS	a4	3L4' T8/EL	trof parabolic	17	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	17	76.0	0.20	1,326
PWLMS	a6	3L4' T8/EL	trof parabolic	17	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	17	76.0	0.20	1,326
PWLMS	a7	3L4' T8/EL	trof parabolic	17	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	17	76.0	0.20	1,326
PWLMS	a9	3L4' T8/EL	trof parabolic	17	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	17	76.0	0.20	1,326
PWLMS	C6	3L4' T8/EL	trof parabolic	18	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	18	76.0	0.22	1,404
PWLMS	D3	3L4' T8/EL	trof parabolic	18	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	18	76.0	0.22	1,404
PWLMS	E3	3L4' T8/EL	trof parabolic	18	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	18	76.0	0.22	1,404
PWLMS	a8	3L4' T8/EL	trof parabolic	18	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	18	76.0	0.22	1,404
PWLMS	C3	3L4' T8/EL	trof parabolic	19	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	19	76.0	0.23	1,482
PWLMS	D8	3L4' T8/EL	trof parabolic	19	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	19	76.0	0.23	1,482
PWLMS	E6	3L4' T8/EL	trof parabolic	19	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	19	76.0	0.23	1,482
PWLMS	a5	3L4' T8/EL	trof parabolic	22	88	6,500	3L4' T8 28w/ELEC/RELAMP ONLY	relamp	22	76.0	0.26	1,716
PWLMS	GYM	250W METAL HALIDE	lowbay	2	295	7,487	3L4' T8 28w/ELEE HI/NEW	new T8 hibay lens	3	98.0	0.30	2,216
PWLMS	CaNOPY	100W HI PRESSURE SODIUM	lowbay acrylic dor	2	130	3650	50W HI PRESSURE SODIUM/NEW	new canopy	4	65.0	0.00	0
PWLMS	CaNOPY	100W MERCURY VAPOR	lowbay acrylic dor	64	120	3,650	50W HI PRESSURE SODIUM/NEW	new canopy	71	65.0	3.07	11,187
PWLMS	WaLL	100W HI PRESSURE SODIUM	wallpack	5	130	3650	50W METAL HALIDE	rlrb	5	65.0	0.33	1,186
PWLMS	**Totals**			**1639**					**1554**		**41.21**	**166,373**
Transportation	OFFICE 2	2L4' T12 EE/EEMAG	wrap	2	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	262
Transportation	KITCHEN	2L4' T12 EE/EEMAG	wrap	2	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	262
Transportation	OFFICE 1	2L4' T12 EE/EEMAG	wrap	3	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	393
Transportation	RR	2L4' T12 EE/EEMAG	wrap	3	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	393
Transportation	LEFT SID	2L4' T12 EE/EEMAG	wrap	7	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	7	28.0	0.29	917
Transportation	RIGHT SIDE	2L4' T12 EE/EEMAG	wrap	9	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	10	28.0	0.35	1,092
Transportation	MEN	4x 100W INCANDESCENTS	vanity	2	400	3120	2L2' T8/EL LO/NEW vanity	new vanity	1	39.9	0.76	2,372
Transportation	Entrances	20W INCANDESCENT	exit sign battery h	2	20	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.03	298
Transportation	WaLL	175W MERCURY VAPOR	flood	2	205	3120	70W METAL HALIDE CWA/NEW	new wallpack	2	95.0	0.22	686
Transportation	**Totals**			**32**					**32**		**2.08**	**6,676**
Vehicle Maintenance	FUEL ISLaND	175W MERCURY VAPOR	flood	2	205	3120	100W METAL HALIDE CWA/NEW	new flood	5	128.0	-0.23	-718
Vehicle Maintenance	FRONT OFICE	2L4' T12 EE/EEMAG	wrap	2	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	262
Vehicle Maintenance	RR	2L4' T12 EE/EEMAG	wrap	2	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	2	28.0	0.08	262
Vehicle Maintenance	HaLL	2L4' T12 EE/EEMAG	wrap	3	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	3	28.0	0.13	393
Vehicle Maintenance	OFFICECINDY PaRNHaM	2L4' T12 EE/EEMAG	wrap	4	70	3120	1L4' T8 28w/ELEE/NEW wrap	new wrap	4	28.0	0.17	524
Vehicle Maintenance	HaLL	20W INCANDESCENT	exit sign battery h	5	20	8760	3 WATT LED/NEW EXIT BATTERY	new exit bat	5	3.0	0.09	745
Vehicle Maintenance	BREaK ROOM	2L8' T12 STD/STD	strip	4	173	3120	4L4' T8 28w/ELEE/new 8'	new wrap	4	116.1	0.23	710
Vehicle Maintenance	LOFT	NO EXISTING FIXTURE	no fixture exists	0	0	3120	4L4' T8 28w/ELEE/new 8'	new wrap	10	116.1	-1.16	-3,624
Vehicle Maintenance	MaCHINE aREa	4L4' T12 EE/EEMAG-8'	wrap	4	140	3120	4L4' T8 28w/ELEE/NEW-8'	new wrap	4	116.1	0.10	298
Vehicle Maintenance	BAYS	400W METAL HALIDE	high bay	16	455	3120	6L4' T8 28w/ELEE HI/NEW	new T8 hibay	16	165.8	4.63	14,437
Vehicle Maintenance	**Totals**			**42**					**55**		**4.11**	**13,290**

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE												
Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
ZCES	WaLL	100W INCANDESCENT	cone	1	100	6440	13W COMPACT/NEW	new sconce	1	13.0	0.09	560
ZCES	CUSTODIAN	60W INCANDESCENT	keyless	1	60	1200	15W COMPACT SI	screw in	1	15.0	0.05	54
ZCES	KITCHEN	60W INCANDESCENT	hood	2	60	1441	15W COMPACT/SI	screw in	2	15.0	0.09	130
ZCES	CLO	60W INCANDESCENT	square recessed	1	60	1200	18W COMPACT	screw in	1	18.0	0.04	50
ZCES	RR	60W INCANDESCENT	square recessed	4	60	4112	18W COMPACT/NEW	new square	4	18.0	0.17	691
ZCES	H	60W INCANDESCENT	square recessed	4	60	6440	18W COMPACT/NEW	new square	4	18.0	0.17	1,082
ZCES	ATTIC	2L4' T12 EE/EEMAG slimline	wrap	7	80	1441	1L4' T8 28w/ELEC LO/ref kit	rlrb strip rfl kit	7	28.0	0.36	525
ZCES	JaNITOR	1L4' T12 EE/EEMAG	strip cage	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
ZCES	MECH	1L4' T12 EE/EEMAG	strip cage	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
ZCES	CUSTODIAN	1L4' T12 EE/EEMAG	strip cage	2	40	1200	1L4' T8 28w/ELEE LO	rlrb	2	28.0	0.02	29
ZCES	RR	1L4' T12 EE/EEMAG	wrap	10	40	4,112	1L4' T8 28w/ELEE LO	rlrb	10	28.0	0.12	493
ZCES	ELECTRICaL	2L4' T12 EE/EEMAG	strip	1	70	1,200	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	1	28.0	0.04	50
ZCES	H	2L4' T12 EE/EEMAG	strip	5	70	6,440	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	5	28.0	0.21	1,352
ZCES	RESOURCE ROOM	2L4' T12 EE/EEMAG	strip	9	70	1,859	1L4' T8 28w/ELEE LO	rlrb strip rfl kit	9	28.0	0.38	703
ZCES	BOOH ROOM	1L4' T12 EE/EEMAG	strip cage	2	40	1200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.02	29
ZCES	HaLL	1L4' T12 EE/EEMAG	wrap	5	40	6,440	1L4' T8 28w/ELEE LO/NEW	rlrb	5	28.0	0.06	386
ZCES	HaLL	1L4' T12 EE/EEMAG	strip cage	11	40	6,440	1L4' T8 28w/ELEE LO/NEW	new wrap	11	28.0	0.13	850
ZCES	KIT STaFF	2L4' T12 EE/EEMAG	wrap	1	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	1	28.0	0.04	61
ZCES	RR	2L4' T12 EE/EEMAG	wrap	1	70	4,112	1L4' T8 28w/ELEE LO/NEW	new wrap	1	28.0	0.04	173
ZCES	WORK ROOM	2L4' T12 EE/EEMAG	strip wide	2	70	1441	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	121
ZCES	CLOSET	2L4' T12 EE/EEMAG	wrap	2	70	1200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	101
ZCES	STO	2L4' T12 EE/EEMAG	strip wide	2	70	1200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	101
ZCES	LIBRaRY	2L4' T12 EE/EEMAG	wrap	2	70	1200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	101
ZCES	RR	2L4' T12 EE/EEMAG	wrap	2	70	4112	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	345
ZCES	NURSE	2L4' T12 EE/EEMAG	wrap pend	2	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	121
ZCES	FILE	2L4' T12 EE/EEMAG	strip wide	2	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	101
ZCES	KIT	2L4' T12 EE/EEMAG	strip	2	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	2	28.0	0.08	101
ZCES	entry	2L4' T12 EE/EEMAG	wrap	4	70	6,440	1L4' T8 28w/ELEE LO/NEW	new wrap	4	28.0	0.17	1,082
ZCES	STaFF	2L4' T12 EE/EEMAG	wrap	4	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	4	28.0	0.17	242
ZCES	COPY	2L4' T12 EE/EEMAG	wrap	4	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	4	28.0	0.17	242
ZCES	TaBLES	2L4' T12 EE/EEMAG	wrap	4	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	4	28.0	0.17	202
ZCES	LINK	2L4' T12 EE/EEMAG	wrap pend	6	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	6	28.0	0.25	468
ZCES	SPEECH	2L4' T12 EE/EEMAG	wrap pend	6	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	6	28.0	0.25	468
ZCES	PRINCIPaL	2L4' T12 EE/EEMAG	wrap	6	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	6	28.0	0.25	363
ZCES	CUST	2L4' T12 EE/EEMAG	wrap	6	70	1,200	1L4' T8 28w/ELEE LO/NEW	new wrap	6	28.0	0.25	302
ZCES	LIBRaRY	2L4' T12 EE/EEMAG	box acrylic	8	70	1,441	1L4' T8 28w/ELEE LO/NEW	new wrap	8	28.0	0.34	484
ZCES	aDMIN	2L4' T12 EE/EEMAG	wrap	8	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	8	28.0	0.34	625
ZCES	HaLL	2L4' T12 EE/EEMAG	wrap	17	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	17	28.0	0.71	1,327
ZCES	8	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	7	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	6	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	5	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	4	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	9	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	10	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	11	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	12	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	13	2L4' T12 EE/EEMAG	wrap	18	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	18	28.0	0.76	1,405
ZCES	14	2L4' T12 EE/EEMAG	box acrylic	23	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	23	28.0	0.97	1,796

DOUGLAS COUNTY SCHOOL DISTRICT - LIGHTING RETROFIT SCOPE

Building	Room	Existing Description	Existing Style	Existing Qty	Existing Watts	Hours	Retro Description	Retro Style	Retro Qty	Retro Watts	Saved kW	Saved kWh
ZCES	15	2L4' T12 EE/EEMAG	box acrylic	23	70	1,859	1L4' T8 28w/ELEE LO/NEW	new wrap	23	28.0	0.97	1,796
ZCES	LIBRaRY	2L4' T12 EE/EEMAG	box acrylic	24	70	2096	1L4' T8 28w/ELEE LO/NEW	new wrap	24	28.0	1.01	2,113
ZCES	VANE	1L4' T12 EE/EEMAG	vanity	1	40	1200	1L4' T8 28w/ELEE/lo	rlrb	1	28.0	0.01	14
ZCES	entry	2L4' T12 EE/EEMAG	wrap wall mt.	6	70	6440	1L4' T8 28w/ELEE/lo	dlrb	6	28.0	0.25	1,623
ZCES	COMPUTER LaB	2L4' T12 EE/EEMAG	box para	14	70	6,440	1L4' T8 28w/ELEE/RFL	rlrb rfl1'	14	28.0	0.59	3,787
ZCES	ELECTRICaL	100W INCANDESCENT	keyless	1	100	1200	20W COMPACT SI	screw in	1	20.0	0.08	96
ZCES	ELECTRICaL	100W INCANDESCENT	keyless	1	100	1200	20W COMPACT SI	screw in	1	20.0	0.08	96
ZCES	PaPER CLOSET	100W INCANDESCENT	keyless	2	100	1200	20W COMPACT SI	screw in	2	20.0	0.16	192
ZCES	MECH	100W INCANDESCENT	keyless	2	100	1200	20W COMPACT SI	screw in	2	20.0	0.16	192
ZCES	RR	100W INCANDESCENT	globe pend	4	100	4112	20W COMPACT SI	screw in	4	20.0	0.32	1,316
ZCES	ATTIC	2L2' T12 STD/STD	wrap	1	56	1,200	2L2' T8/EL	rlrb	1	39.9	0.02	19
ZCES	H	2L4' T12 EE/EEMAG	trof acr	2	70	6,440	2L4' T8 28w/ELEC	rlrb	2	36.6	0.07	430
ZCES	2	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	28
ZCES	1	2L4' T8/EL	wrap	1	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	-0.01	-16
ZCES	RR	2L4' T8/EL	wrap	1	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	1	36.6	0.02	96
ZCES	2	2L4' T8/EL	wrap	2	60	1859	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	87
ZCES	1	2L4' T8/EL	wrap	2	60	1859	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	87
ZCES	RR	2L4' T8/EL	wrap	2	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	2	36.6	0.05	193
ZCES	STO	2L4' T8/EL	wrap	3	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	3	36.6	0.07	84
ZCES	ATTIC	2L4' T8/EL	strip cage	6	60	1200	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	6	36.6	0.14	169
ZCES	HaLL	2L4' T8/EL	indirect/direct	7	60	6440	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	7	36.6	0.16	1,056
ZCES	RR	2L4' T8/EL	wrap	9	60	4112	2L4' T8 28w/ELEC/RELAMP ONLY	relamp	9	36.6	0.21	867
ZCES	VANE	4L4' T12 EE/EEMAG	box acrylic	2	140	1441	2L4' T8 28w/ELEE LO/	dllp	2	36.6	0.21	298
ZCES	CONF ROOM	4L4' T8/EL	wrap wide	2	112	1492	2L4' T8 28w/ELEE LO/NEW	new wrap wide	2	36.6	0.15	225
ZCES	MUSIC/aRT	4L4' T12 EE/EEMAG	trof acr	16	140	1859	2L4' T8 28w/ELEE LO/RFL	rlrb rfl	16	36.6	1.65	3,076
ZCES	MUSIC/aRT	2L4' T12 U EE/EEMAG	trof acr 2x2	3	70	1859	2L4' T8 U 30w/ELEE LO	rlrb	3	32.8	0.11	207
ZCES	HaLL	22W & 32W CIRCL/ELINE HAR	drum	4	58	6,440	2x 13W COMPACT/NEW	new drum	4	26.0	0.13	824
ZCES	HaLL	2x15 incand./emergency	exit sign battery	6	22	6440	3 WATT LED/NEW EXIT BATT/emerge	new	6	3.0	0.11	734
ZCES	MUSIC/aRT	2x 20 INCANDESCENTS	exit sign battery	2	40	1859	3 WATT LED/NEW EXIT BATTERY	new exit bat	2	3.0	0.07	138
ZCES	HaLL	2x20 incandescent	exit sign battery	3	22	6440	3 WATT LED/NEW EXIT BATTERY	new	3	3.0	0.06	367
ZCES	MP	2x20 incandescent	exit sign battery	3	22	6440	3 WATT LED/NEW EXIT BATTERY	new	3	3.0	0.06	367
ZCES	entry	100W METAL HALIDE	can rec	1	120	3650	39W METAL HALIDE	can kit	1	44.0	0.08	277
ZCES	MP	400W METAL HALIDE	high bay	16	455	6440	4L4' T8 28w/ELEE HI/NEW	new T8 hibay lens	16	116.1	5.42	34,916
ZCES	KITCHEN	2L8' T12 STD/STD	strip	3	173	1441	4L4' T8 28w/ELEE LO/NEW-8'	new wrap	3	116.1	0.17	246
ZCES	LIT ROOM	4L8' T12 STD/STD	eggcrate	4	346	2096	4L4' T8 28w/ELEE LO/NEW-8'	new wrap	4	116.1	0.92	1,927
ZCES	COUNSELOR	4L8' T12 STD/STD	eggcrate	4	346	1441	4L4' T8 28w/ELEE LO/NEW-8'	new wrap	4	116.1	0.92	1,325
ZCES	19	4L8' T12 STD/STD	eggcrate	6	346	1859	4L4' T8 28w/ELEE LO/NEW-8'	new wrap	6	116.1	1.38	2,564
ZCES				**553**					**554**		**30.26**	**91,841**
GRAND TOTAL											**574.22**	**1,818,632**

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