TOWN OF LADYSMITH

GOVERNMENT SERVICES COMMITTEE

Mandate –To advise Council on a broad spectrum of issues related to departmental matters

Monday, February 15, 2010 at 5:30 p.m.
Council Chambers, City Hall

A G E N D A

Pages

Chairperson: Councillor D. Paterson

1. **CALL TO ORDER**

2. **AGENDA APPROVAL**

3. **MINUTES** **1 – 3**
   - January 18, 2010

4. **DELEGATION**

   4.1 Cowichan Green Community – Jessica Kerr, Judy Stafford, Bev Suderman **4**
   Re: Cowichan Food Charter

5. **CITY MANAGER'S REPORT**

6. **STAFF REPORTS**

   6.1 Visitor Public Washroom **5 – 6**

   6.2 Town of Ladysmith Lighting Assessment **7 – 28**

7. **MEMBER SUBMISSIONS**
   None

8. **CORRESPONDENCE**

   8.1 B. Bennett, Minister of Community and Rural Development **29 - 31**
   H. Nyce President, Union of British Columbia Municipalities
   Re: Local Government Elections Task Force

   Staff Recommendation:
   That:
   a) the correspondence be received;
   b) Staff be directed to coordinate a response from the Town to the Local Government Elections Task Force regarding the topics outlined in the correspondence;
   c) members of Council send their comments to the Corporate Officer for inclusion in the response by April 14, 2010;
   d) a draft of the response be presented to the April 19, 2010 Government Services Committee meeting;

e) Staff send the Task Force's request for written comments to the Ladysmith Chamber of Commerce, the Downtown Business Association, advisory commissions/ committees, and any other organization deemed appropriate and request that they send their comments directly to the Task Force and copy the Town; and,
f) Staff be directed to post a link on the Town's website to information on the Task Force's activities and encourage other interested parties to provide comments directly to the Task Force.

32 – 3

8.2 Ladysmith Community Gardens Society
Re: Request for an Interim Community Gardens Budget

9. NEW BUSINESS

10. UNFINISHED BUSINESS

ADJOURNMENT

LADYSMITH

TOWN OF LADYSMITH
MINUTES OF A REGULAR SESSION OF THE GOVERNMENT SERVICES COMMITTEE
HELD MONDAY, JANUARY 18, 2010
5:30 P.M.

PRESENT:

Councillor Duck Paterson, Chair
Mayor Rob Hutchins
Councillor Jillian Dashwood
Councillor Bruce Whittington
Councillor Steve Arnett
Councillor Lori Evans

ABSENT:

Councillor Scott Bastian

STAFF PRESENT:

Ruth Malli
Felicity Adams
Mark Hermanson
Sandy Bowden
Pat Durban
Rebecca Kalina
Joe Friesenhan

CALL TO ORDER

Councillor Paterson called the meeting to order at 5:31 p.m.

AGENDA APPROVAL

The Chair, Duck Paterson, requested the Committee's consideration of the following changes to the agenda:

- Change in the Order that the Delegations Appear
- Add 7.1 – RCMP Fourth Quarter Report for 2009

2010-001

It was moved, seconded and carried that the agenda be adopted as amended.

MINUTES

2010-002

It was moved, seconded and carried that the Government Services Committee minutes of December 21, 2010 be adopted as circulated.

DELEGATIONS

Councillor S. Arnett arrived in Council Chambers

at 5:35 p.m.

HAYES STEWART LITTLE & COMPANY

Dan Little and Cara Light of Hayes Stewart Little & Company were in attendance to discuss their December 31, 2009 Town of Ladysmith Planning Report. Mr. Little explained that part of the audit process is to discuss the report with the Committee. Ms. Light outlined the changes to the audit process for 2009. Councillor Paterson thanked Mr. Little and Ms. Light for their presentation.

UPDATE – NANAIMO AIRPORT COMMISSION

Ken Bosma, Town of Ladysmith Representative to the Nanaimo Airport Commission and Mike Hooper, CEO Nanaimo Airport, provided an update on Nanaimo Airport Phase 1 projects. They noted that Phase 2 projects will be underway soon and confirmed that expansion of the airport terminal is part of Phase 2. Councillor Paterson thanked Mr. Bosma and Mr. Hooper for their presentation.

REPORTS

CITY MANAGER'S REPORT

The City Manager presented the Committee with a written updated on her top 5 strategic priorities for 2009.

DIRECTOR'S / MANAGER'S REPORTS

The Director of Public Works, the Director of Development Services, the Director of Corporate Services responded to questions regarding their written reports outlining the status of their departmental Top 5 strategic priorities for the fourth quarter of 2009.

RCMP Fourth Quarter Report for 2009

2010-003

It was moved, seconded and carried that it be recommended to Council that the RCMP Fourth Quarter Report for 2009 be received.

CORRESPONDENCE

Canada Post

2010-004

It was moved, seconded and carried that it be recommended to Council that the letter dated December 30, 2009 from M. Mebs, Local Area Manager, Canada Post be received and that a representative of the Town meet with representatives of Ladysmith Canada Post Office to resolve the issue of the absence of a recycling bin in the post office and the proliferation of litter on First Avenue in the vicinity of the post office.

It was moved and seconded that staff be requested to investigate the cost of placing a recycling container at the corner of High Street and First Avenue.
MOTION DEFEATED
(Opposed Votes: Mayor Hutchins, Councillor D. Paterson and Councillor S. Arnett)

2010-005

It was moved, seconded and carried that it be recommended to Council that staff be requested to prepare a report to the Government Services Committee regarding the provision of recycling containers in public areas within the Town.

ADJOURNMENT

2010-006

It was moved, seconded and carried that the meeting be adjourned at 6:40 p.m.

_____

Chair (Councillor D. Paterson)

CERTIFIED CORRECT

_____

Corporate Officer (S. Bowden)

☼ THE COWICHAN FOOD CHARTER ☼

Food security exists when ALL members of our community have access to enough nutritious, safe, ecologically sustainable, and culturally appropriate food at all times.

THE VISION

Our food system will be economically viable and ecologically sustainable; our community will grow, harvest, process, preserve, and distribute food to all of its members while minimizing waste. A thriving local food culture that celebrates eating locally and eating together will support us in living healthier, happier, and richer lives - connected to the land, to growers, and to each other.

We support this vision by proclaiming that:

- ☼ We have a collective obligation to ensure that everyone has access to sufficient, high-quality food;
- ☼ For Cowichan to thrive, local farmers and food producers must earn a good and fair living;
- ☼ Food security requires cooperation and communication among the community, farmers, and all levels of local government.

In Cowichan's food-secure future:

1. There will be no more chronic hunger, and no more malnourished children;
2. Farmers will be better connected to consumers through farm markets, Community Supported Agriculture, and school and work lunch programs;
3. Farmers' roles as environmental stewards will be protected and financially supported;
4. Agricultural resources including water, land, and the knowledge of farmers will be protected;
5. Regulations will strengthen the capacity of local farmers to produce and reach their markets;
6. A "Buy Local" campaign that promotes local food production and consumption will be expanded;
7. Traditional teachings about food preservation, seed saving, eating seasonally, and eating locally will be encouraged and supported;
8. Institutional buyers such as hospitals and universities will have the flexibility and incentive to buy more local products;
9. Ongoing research will ensure long-term food security in the face of a changing climate.

THEREFORE, I/WE THE UNDERSIGNED declare my/our commitment to promote and support these values in moving toward a food-secure Cowichan that honours social justice, ecosystem health, and community wellbeing.

Name/Organization: _____ Signature: _____

December 2009 Version

Town of Ladysmith

STAFF REPORT

To: Ruth Malli, City Manager
From: Felicity Adams, Director of Development Services
Date: February 5, 2010
File No:

Re: VISITOR PUBLIC WASHROOM

RECOMMENDATION(S):
That Council request the Chamber of Commerce to provide an evaluation of Visitor Information Centre washroom use and provide Council with a recommendation.

PURPOSE:
The purpose of this report is to provide Council with a request from the Economic Development Commission regarding the public washroom at the Visitor Information Centre.

INTRODUCTION/BACKGROUND:
The Town's contract with the Chamber of Commerce for the operation of the Visitor Information Centre (VIC) requires the provision of a public washroom.

A summary of the 2009 VIC visitor data shows that there were over 6300 visitors to the VIC. In addition, the relocation of the VIC to a downtown location increased visits by 25% from 2007.

Other public washrooms in Ladysmith are located within park settings including: Transfer Beach Park, Brown Drive Park, Holland Creek Park (under construction) and Fishermen's Wharf/Rotary boat launch.

SCOPE OF WORK:
That the Chamber of Commerce, as the VIC contractor, be requested for an evaluation and recommendation.

ALTERNATIVES:
That Council provide direction regarding additional public washrooms to serve visitors to downtown Ladysmith.

FINANCIAL IMPLICATIONS:
The contract for the operation of the Visitor Information Centre is included in the Financial Plan.

LEGAL IMPLICATIONS: N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

At its meeting held December 8, 2009 the Economic Development Commission made the following recommendation following consideration of a recommendation from the Tourism Advisory Committee.

> *It was moved, seconded and carried that the Economic Development Commission recommend that Council conduct a review of the current usage patterns of the Visitor Information Centre public washroom to determine if the needs are being met and, if not, what actions are required to meet the needs.*

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS: N/A

RESOURCE IMPLICATIONS: N/A

ALIGNMENT WITH STRATEGIC PRIORITIES:
Tourism infrastructure is one of the Economic Development Commission's target sectors.

SUMMARY:
The Visitor Information Centre contract requires the provision of a public washroom. Visits to the VIC have increased since it relocated to a First Avenue location.

I concur with the recommendation.

Ruth Malli, City Manager

ATTACHMENTS:
"None".

Town of Ladysmith

STAFF REPORT

To: Ruth Malli, City Manager
From: Joe Friesenhan, Director of Public Works
Date: February 11, 2010
File No:

Re: TOWN OF LADYSMITH LIGHTING ASSESSMENT

RECOMMENDATION(S):

That this staff report be received for information.

PURPOSE:

To inform Council of the program to reduce the energy consumption within the Town owned facilities.

INTRODUCTION/BACKGROUND:

In April, 2009, the Public Works Department commenced an investigation of the feasibility of changing the lights at the Public Works yard with newer, more efficient energy saving lights. A number of the lighting companies were contacted to do an assessment of our current lighting system. In November, 2009, representatives from Philips and Wesco offered to assess all Town sites and report back the possible savings by switching over to new more efficient lights. Philips is the manufacturer of lights and Wesco is the supplier.

SCOPE OF WORK:

The work will involve changing all the ballasts from existing light fixtures and installing the new lights.

ALTERNATIVES:
n/a

FINANCIAL IMPLICATIONS:

The initial cost of $8,560 will be funded through various building operations budgets. Rebates from Hydro and the reduction in energy consumption will offset these costs.

LEGAL IMPLICATIONS:
n/a

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

During the visioning process, residents sent a clear message that sustainability is an important issue. Increasing energy efficiency will be positively received by the public.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

Each department will ensure that their operations accounts have sufficient funds to complete the program

RESOURCE IMPLICATIONS:

The Public Work Department will coordinate the program and install the fixtures with current staff.

ALIGNMENT WITH STRATEGIC PRIORITIES:

Reducing energy consumption will assist in making the community meet its sustainability goals which is high on the strategic priorities.

SUMMARY:

The Town has completed an energy assessment done by Philips and Wesco which identifies an annual cost savings in energy consumption by changing a number of ballasts in light fixtures. BC Hydro has a rebate program which will cover all but $1,500 of the purchase price of the fixtures. The cost savings in energy will offset the remainder in less than one year. The BC Hydro rebate will be received after the fixtures are purchased and prior to installation. A commitment for the rebate from BC Hydro will be received prior to purchase of the fixtures.

I concur with the recommendation.

Ruth Malli, City Manager

ATTACHMENTS:
Report fro Philips and Wesco.

January 29, 2010

Lighting Report – Cost Savings Recommendation

Mike Ganderton
Town of Ladysmith
410 Esplanade
Ladysmith, BC
V9G 1A2

Dear Mr. Ganderton,

This report summarizes the energy savings and return on investment (ROI) based on the existing lamp and ballast types and fixture quantity types that were audited at the various building locations in Ladysmith (Public Works Building, Frank Jameson Community Center, Aggie Hall and Ladysmith City Hall). The audit recommendation includes moving from your current fluorescent technology to Philips Energy Advantage® T8, low Hg, extra long life fluorescent lamps operating on Philips/Advance high efficiency electronic ballasts. Eligible BC Hydro Rebates are also included.

For this overview, we have used an estimated kwhr charge rate of $0.070 and have shown the ROI for each area. Additionally, we have shown estimated relative light levels of the replacement lamp/ballast system compared with your current system.

Additional savings possible are as follows:

- Reduced lamp replacement material costs from the use of longer life T8 lamps.
- Labour savings from fewer lamp replacements.
- Usage of occupancy sensors in office areas where applicable.

Other Benefits:

- Philips Energy Advantage® T8 lamps have ALTO® II tech nology providing the industry's lowest mercury content, a valued consideration when spent lamps are disposed of.
- Philips Energy Advantage® lamps are warranted for 48 months from their installation date.
- Philips Energy Advantage® lamps have a lumen maintenance of 97% longer lamp life will reduce annual lamp replacements if spot re-lamped.

We look forward to an opportunity to discuss this report further with you.

Sincerely

Jason Fisher
Philips Lighting

Bob McFall
Wesco Nanaimo

PHILIPS

TEL: (778) 389-3774
FAX: (866) 275-3680
www.philips.com

Alto® Lamp Technology

SUMMARY: ENERGY COST ANALYSIS – ALL AREAS COMBINED

COST OF LAMPS	$	2,337.58
COST OF BALLASTS	$	5,040.41
COST OF NEW FIXTURES	$	N/A
COST OF EXIT SIGNS	$	264.60
COST OF OCCUPANCY SENSORS	$	N/A
ASSESSMENT FEE	$	N/A
TOTAL PST/GST	$	917.11
TOTAL PROJECT COST	$	8,559.70
LESS UTILITY REBATE (issued and verified by BC Hydro - post installation)	$	-7,075.00
NET INVESTMENT	**$**	**1,499.70**

SUMMARY: ENERGY COST ANALYSIS – BREAKDOWN BY AREA

AREA	PRODUCT COST	BC HYDRO REBATE**	INVESTMENT	ENERGY SAVINGS	PAYBACK
Public Works	$ 2,921,37	$ 2,725.00	$ 196.37	$ 562.41	0.35 Years
Community Centre	$ 3,441.03	$ 2,480.00	$ 961.03	$ 981.27	0.98 Years
Aggie Hall	$ 937.35	$ 575.00	$ 362.35	$ 49.04	7.39 Years
City Hall	$ 1,259.94	$ 1,295.00	$ -35.06	$ 292.96	-0.12 Years
Totals	$ 8,559.70	$ 7,075.00	$ 1,499.70	$ 1,885.67	0.79 Years

*Payback is improved further **(to approx 0.40yrs)** if a new system is installed as there would be no lamp failures for a number of years and this would save the replacement costs that would normally be required if the existing system was not changed. See calculations in the report on these savings.

Area Type & Return on Investment (ROI)

Area	#	Location	Existing System	Proposed System	Pay Back (Years)	ROI (with Rebate)	Relative Lgt Output to Existing (Photopic)
Public Works Building	1	Reception	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	2	Director's Office	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	3	Bldg Inspctr Off.	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	4	Lunchroom	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	5	Hallway	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	6	Room	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	7	Shop # 1	2 Lamp 4ft T12 Mag Ind.	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	8	Changeroom	2 Lamp 4ft T12 Mag Ind.	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	9	Shop # 2	2 Lamp 4ft T12 Mag Ind.	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	10	Stores Room	2 Lamp 4ft T12 Mag Strip	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	11	Sm. Equip. Rm	2 Lamp 4ft T12 Mag Ind.	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
Frank Jameson Community Centre	12	Aerobics Room	2 Lamp 4ft T12 Mag Rec 2X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.26	-386%	101%
			2 Lamp Inc. Exit	1 Lamp LED Exit	0.55	182%	
	13	Kitchen	2 Lamp 4ft T12 Mag Rec 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.26	-386%	101%
	14	Hallway	2 Lamp 4Ft T12 Mag Wall Mnt	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
			2 Lamp Inc. Exit	1 Lamp LED Exit	0.55	182%	
	15	Daycare	2 Lamp 4ft T12 Mag Rec 2X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.16	-643%	101%
	16	Stairs	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
			2 Lamp Inc. Exit	1 Lamp LED Exit	0.55	182%	
	17	Stairwell (Main Flr)	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
	18	Mens Chngrm	2 Lamp 4ft T12 Mag VT	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
			2 Lamp 8ft T12 Mag Vt	2 Lamp 8ft T8 Ele HE & Lamps	4.03	25%	114%
	19	Ladies Chngrm	2 Lamp 4ft T12 Mag VT	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
			2 Lamp 8ft T12 Mag Vt	2 Lamp 8ft T8 Ele HE & Lamps	4.03	25%	114%
	20	Lifeguard Office	4 Lamp 4ft T12 Mag Rec 2X4 Swit	2 Lamp 4ft T8 Ele HE & ES Lamps Switched	0.17	572%	100%
			1 Lamp 4ft T12 Mag Wrap	1 Lamp 4ft T8 Ele HE & ES Lamps	0.70	142%	101%
	21	Aquatics Svcs Off.	4 Lamp 4ft T12 Mag 2x4 Rec Swit	2 Lamp 4ft T8 Ele HE & ES Lamps Switched	0.17	572%	100%
	22	Hallway	2 Lamp 4ft T12 Mag 1X4	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
			4 Lamp 4ft T12 Mag 2x4 Rec	4 Lamp 4ft T8 Ele HE & ES Lamps	-0.39	-256%	100%
			1 Lamp R40 Incandescent	1 Lamp CFL R40	0.14	694%	100%
	23	Administration	2 Lamp 4ft T12 Mag 2x4 Rec	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
	24	Stairs (down)	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.10	-1029%	101%
	25	Green Room (Basement)	2 Lamp 8ft T12 Mag Ind	2 Lamp 8ft T8 Ele HE & Lamps	10.74	9%	114%
Aggie Hall	26	Aggie Hall	2 Lamp 4ft T12 Mag Ind	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.52	-193%	101%
			2 Lamp 8ft T12 Mag Ind	2 Lamp 8ft T8 Ele HE & Lamps	21.48	5%	114%
			2 Lamp Inc. Exit	1 Lamp LED Exit	4.41	23%	
City Hall	27	Reception	4 Lamp 4ft T12 Mag Wrap	4 Lamp 4ft T8 Ele HE & ES Lamps	-0.88	-114%	100%
	28	Photocopy	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	29	Office Area	4 Lamp 4ft T12 Mag Wrap	4 Lamp 4ft T8 Ele HE & ES Lamps	-0.88	-114%	100%
	30	K Cousins	4 Lamp 4ft T12 Mag Wrap	4 Lamp 4ft T8 Ele HE & ES Lamps	-0.88	-114%	100%
	31	Lunchroom	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	32	Boardroom	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	33	M Hermanson	4 Lamp 4ft T12 Mag Wrap	4 Lamp 4ft T8 Ele HE & ES Lamps	-0.88	-114%	100%
	34	Hallway	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	35	J Winter	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%
	36	File Storage (Basement)	2 Lamp 4ft T12 Mag Wrap	2 Lamp 4ft T8 Ele HE & ES Lamps	-0.22	-459%	101%

NOTE: The proposed products have a longer lamp life versus the existing products with the added benefit of (A) fewer annual lamp replacements and (B) lower maintenance costs from the labour time saved changing them (see product information details at the end of this report).

Lamp replacement savings are those existing lamps that would have normally failed during the period the new lamps would operate without failure until they too reach maturity and require replacing. However, the new longer life lamps once mature would have less annual failures than the existing types, so lamps replacement savings would remain although savings would of course be reduced.

Please note that although we have done our best to try and determine what the existing system product types are and thus their wattage consumed, it was not always practical in a number of areas to open up fixtures to check to confirm this. Therefore, due to this and environmental, usage, or system characteristics subject to change that are beyond our control, actual savings may vary.

**All retrofit technologies must meet applicable Code, standard, safety and regulatory requirements including, but not limited to, CSA/UL/cUL. It is the applicant's responsibility to ensure that the technology is suitable (properly sized, etc.) to its intended application.

Please consult with your installation professional about the proposed retrofit upgrade proposal and please also check with your local utility representative for verification of rebate amounts.

PUBLIC WORKS BUILDING

EXISTING SYSTEM OPERATING COST

Prepared for:

Town of Ladysmith - Public Works Building

KWHR rate = $0.0700

Hours per Day Operation = 10 Hrs X 5 Days X 52 Weeks

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	FIXT QTY		WATTS / Fixt	TOTAL WATTS		ANNUAL HRS		ANNUAL ENERGY COST	Mean Lumens / Fixt
1	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	16	x	72	1152	x	2600	=	$209.66	4048
2	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
3	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
4	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
5	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
6	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
7	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	40	x	72	2880	x	2600	=	$524.16	4048
8	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
9	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	19	x	72	1368	x	2600	=	$248.98	4048
10	2 Lamp 4ft T12 Mag Strip	F34T12/WW	6	x	72	432	x	2600	=	$78.62	4048
11	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	4	x	72	288	x	2600	=	$52.42	4048
			109			7.848	KW		SUBTOTAL	$1,428.34	
									GST	$71.42	
									TOTAL	$1,499.75	

Notes:

MAINTENANCE COST: LAMP REPLACEMENTS & LABOUR

Area #	SYSTEM TYPE	LAMP TYPE	LAMP QTY	Avg Life	ANNUAL FAILURES		COST PER LAMP		ANNUAL COST
1	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	32	20000	4.16	x	$1.60	=	$6.66
2	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
3	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
4	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
5	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
6	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
7	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	80	20000	10.40	x	$1.60	=	$16.64
8	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
9	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	38	20000	4.94	x	$1.60	=	$7.90
10	2 Lamp 4ft T12 Mag Strip	F34T12/WW	12	20000	1.56	x	$1.60	=	$2.50
11	2 Lamp 4ft T12 Mag Ind.	F34T12/WW	8	20000	1.04	x	$1.60	=	$1.66
	Total		218		**28.34**			=	**$45.34**
	Labour Costs to Replace Failed Lamps					x	$0.00	=	**$0.00**
	Hour Labour Rate								
	Estimated Avg Time (min.) to Change								
							MATERIAL		$45.34
							PST + GST		$5.44
							LABOUR		$0.00
							TOTAL		$50.79

Notes: Annual failures per above is a statiscal calculation based on a mature installation that is spot lamp replaced

SUMMARY:

ENERGY COST	+	LAMP REPLACEMENT COST	=	ANNUAL COST
$1,499.75	+	$50.79	=	$1,550.54

PUBLIC WORKS BUILDING – CONT'D

OPERATING COST OF PROPOSED SYSTEM

Prepared for:

Town of Ladysmith - Public Works Building

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	Fixt Qty		Watts / Fixt		TOTAL WATTS		OPER. HRS.		ANNUAL ENERGY COST	Mean Lumens / Fixt
1	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	16	x	45	=	720	x	2600	=	$131.04	4101
2	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
3	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
4	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
5	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
6	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
7	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	40	x	45	=	1800	x	2600	=	$327.60	4101
8	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
9	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	19	x	45	=	855	x	2600	=	$155.61	4101
10	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	6	x	45	=	270	x	2600	=	$49.14	4101
11	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4	x	45	=	180	x	2600	=	$32.76	4101
			109				4.905	KW		SUBTOTAL	$892.71	
										GST	$44.64	
										TOTAL	$937.35	

Notes:

LAMP REPLACEMENT MAINTENANCE & LABOUR COST (See note below)

Area #	SYSTEM TYPE	LAMP TYPE	Years before failure	LAMP QTY	Avg Life	Annual Failures		COST PER LAMP		ANNUAL COST
1	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	32	40,000	2.08	x	$3.49	=	$7.26
2	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
3	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
4	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
5	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
6	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
7	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	80	40,000	5.20	x	$3.49	=	$18.15
8	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
9	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	38	40,000	2.47	x	$3.49	=	$8.62
10	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	12	40,000	0.78	x	$3.49	=	$2.72
11	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	8	40,000	0.52	x	$3.49	=	$1.81
	Total			218		14.17			=	$49.45
	Labour Costs to Replace Failed Lamps									
	Hour Labour Rate					$0.00			=	$0.00
	Estimated Avg Time (min.) to Change									
								MATERIAL		$49.45
								PST + GST		$5.93
								LABOUR		$0.00
								TOTAL		$55.39

*Note: IF All new lamps installed then lamp replacements & labour costs don't begin until per above

see ROI by area / type further in report

SUMMARY:

LAMP & LABOUR COST CAN ONLY BE INCLUDED ONCE NEW INSTALLATION MATURES AND SPOT RELAMPED SAME AS EXISTING

Annual replacement cost once new matures

ENERGY COST	+	LAMP & LABOUR COST	=	ANNUAL COST
$937.35	+	$0.00	=	$937.35

PUBLIC WORKS BUILDING – CONT'D

FINANCIAL SUMMARY: RETURN ON INVESTMENT

Prepared for:

Town of Ladysmith - Public Works Building

Summary:

ANNUAL OPERATING COST OF EXISTING	-	ANNUAL OPERATING COST OF PROPOSED*	=	OPERATING SAVINGS
$1,550.54		**$937.35**		**$613.19**

BILL OF MATERIAL INVESTMENT	QTY		PRICE EACH	COST TOTALS
Lamps				
F32T8/ADV835/XLL 25W	218	x	$ 3.49	$760.82
Ballasts /Fixtures				
2 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP2S32SC	109	x	$ 16.95	$1,847.55
BC Hydro Rebate Estimate (PIP Program) **				
From 2 Lamp 4' T12 MAG to 2 Lamp 4' T8 HE ELE Ballast with ES Lamps	109	x	$ (25.00)	-$2,725.00
**Utility rebates are subject to approval by BC Hydro				

PRODUCTS	$2,608.37
PST /GST @ 7% & 5%	$313.00
PRODUCTS TOTAL	$2,921.37
LABOUR INSTALLATION	
LABOUR - GST	$0.00
LABOUR TOTAL	$0.00
ELECTRICAL PERMIT	
RECYCLING	
GST	$0.00
ASSESSMENT FEE	$0.00
GST	$0.00
OTHER TOTAL	$0.00
TOTAL INVESTMENT COST	$2,921.37
UTILITY REBATE	($2,725.00)
NET INVESTMENT COST (AFTER REBATE)	$196.37

Kilowatt Hours Saved

Existing System	20404.80	
Proposed System	-12753.00	
Savings	7651.80	Kwhrs

SUMMARY: PAYBACK & R.O.I.

Return on Investment - Energy Savings Only

INVESTMENT COST	ENERGY SAVINGS	PAYBACK / ROI
$196.37	$562.41	**0.35** Years
		286.4%

Return on Investment - Energy Savings & Lamp Replacement Savings

INVESTMENT COST	ENERGY SAVINGS	LAMP REPLACEMENT SAVINGS	PAYBACK / ROI
$196.37	$562.41	*$453.44*	**0.19** Years
			517.3%

Cost saved from not having to maintain existing mature system after new system installed & before it too requires replacements

OPERATING SAVINGS AFTER NEW INSTALLATION MATURES & SPOT RELAMPED
(longer life lamps will reduce labour time, not calculated in this report)

ENERGY SAVINGS = **$562.41** MAINTENACE SAVINGS = **($4.11)**

FRANK JAMESON COMMUNITY CENTER

EXISTING SYSTEM OPERATING COST

Prepared for:

Town of Ladysmith - Frank Jameson Community Center

KWHR rate = $0.0700

Hours per Day Operation = 16 Hrs X 7 Days X 52 Weeks

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	FIXT. QTY.		WATTS / Fixt	TOTAL WATTS		ANNUAL HRS		ANNUAL ENERGY COST	Mean Lumens / Fixt
12	2 Lamp 4ft T12 Mag Rec 2X4	F34T12/WW	18	x	72	1296	x	2184	=	$198.13	4048
	2 Lamp Inc. Exit	15T6	1	x	30	30	x	8760	=	$18.40	
13	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	6	x	72	432	x	2184	=	$66.04	4048
14	2 Lamp 4Ft T12 Mag Wall Mnt	F34T12/WW	2	x	72	144	x	5824	=	$58.71	4048
	2 Lamp Inc. Exit	15T6	1	x	30	30	x	8760	=	$18.40	
15	2 Lamp 4ft T12 Mag Rec 2X4	F34T12/WW	6	x	72	432	x	3640	=	$110.07	4048
16	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	3	x	72	216	x	5824	=	$88.06	4048
	2 Lamp Inc. Exit	15T6	1	x	30	30	x	8760	=	$18.40	
17	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	x	72	72	x	5824	=	$29.35	4048
18	2 Lamp 4ft T12 Mag VT	F34T12/WW	3	x	72	216	x	5824	=	$88.06	4048
	2 Lamp 8ft T12 Mag Vt	F96T12/WW	1	x	126	126	x	5824	=	$51.37	8360
19	2 Lamp 4ft T12 Mag VT	F34T12/WW	3	x	72	216	x	5824	=	$88.06	4048
	2 Lamp 8ft T12 Mag Vt	F96T12/WW	1	x	126	126	x	5824	=	$51.37	8360
20	4 Lamp 4ft T12 Mag Rec 2X4 Switched	F34T12/WW	4	x	144	576	x	5824	=	$234.82	8096
	1 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	x	43	43	x	5824	=	$17.53	2024
21	4 Lamp 4ft T12 Mag 2x4 Rec Switched	F34T12/WW	4	x	144	576	x	5824	=	$234.82	8096
22	2 Lamp 4ft T12 Mag 1X4	F34T12/WW	3	x	72	216	x	5824	=	$88.06	4048
	4 Lamp 4ft T12 Mag 2x4 Rec	F34T12/WW	3	x	144	432	x	5824	=	$176.12	8096
	1 Lamp R40 Incandescent	120BR40 130V	9	x	120	1080	x	5824	=	$440.29	1300
23	2 Lamp 4ft T12 Mag 2x4 Rec	F34T12/WW	14	x	72	1008	x	5824	=	$410.94	4048
24	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	2	x	72	144	x	5824	=	$58.71	4048
25	2 Lamp 8ft T12 Mag Ind	F96T12/WW	18	x	126	2268	x	2184	=	$346.73	8360
			105			9.709	KW		SUBTOTAL	$2,892.44	
									GST	$144.62	
									TOTAL	$3,037.06	

Notes:

MAINTENANCE COST: LAMP REPLACEMENTS & LABOUR

Area #	SYSTEM TYPE	LAMP TYPE	LAMP QTY.	Avg Life	ANNUAL FAILURES		COST PER LAMP		ANNUAL COST
12	2 Lamp 4ft T12 Mag Rec 2X4	F34T12/WW	36	20000	3.93	x	$1.60	=	$6.29
	2 Lamp Inc. Exit	15T6	2	2000	8.76	x	$1.56	=	$13.67
13	2 Lamp 4ft T12 Mag Rec 1X4	F34T12/WW	12	20000	1.31	x	$1.60	=	$2.10
14	2 Lamp 4Ft T12 Mag Wall Mnt	F34T12/WW	4	20000	1.16	x	$1.60	=	$1.86
	2 Lamp Inc. Exit	15T6	2	2000	8.76	x	$1.56	=	$13.67
15	2 Lamp 4ft T12 Mag Rec 2X4	F34T12/WW	12	20000	2.18	x	$1.60	=	$3.49
16	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	6	20000	1.75	x	$1.60	=	$2.80
	2 Lamp Inc. Exit	15T6	2	2000	8.76	x	$1.56	=	$13.67
17	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	2	20000	0.58	x	$1.60	=	$0.93
18	2 Lamp 4ft T12 Mag VT	F34T12/WW	6	20000	1.75	x	$1.60	=	$2.80
	2 Lamp 8ft T12 Mag Vt	F96T12/WW	2	12000	0.97	x	$3.65	=	$3.54
19	2 Lamp 4ft T12 Mag VT	F34T12/WW	6	20000	1.75	x	$1.60	=	$2.80
	2 Lamp 8ft T12 Mag Vt	F96T12/WW	2	12000	0.97	x	$3.65	=	$3.54
20	4 Lamp 4ft T12 Mag Rec 2X4 Switched	F34T12/WW	16	20000	4.66	x	$1.60	=	$7.45
	1 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	20000	0.29	x	$1.60	=	$0.47
21	4 Lamp 4ft T12 Mag 2x4 Rec Switched	F34T12/WW	16	20000	4.66	x	$1.60	=	$7.45
22	2 Lamp 4ft T12 Mag 1X4	F34T12/WW	6	20000	1.75	x	$1.60	=	$2.80
	4 Lamp 4ft T12 Mag 2x4 Rec	F34T12/WW	12	20000	3.49	x	$1.60	=	$5.59
	1 Lamp R40 Incandescent	120BR40 130V	9	2000	26.21	x	$5.03	=	$131.83
23	2 Lamp 4ft T12 Mag 2x4 Rec	F34T12/WW	28	20000	8.15	x	$1.60	=	$13.05
24	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	4	20000	1.16	x	$1.60	=	$1.86
25	2 Lamp 8ft T12 Mag Ind	F96T12/WW	36	12000	6.55	x	$3.65	=	$23.91
	Total		222		99.57			=	$265.56
	Labour Costs to Replace Failed Lamps					x	$0.00	=	$0.00
	Hour Labour Rate								
	Estimated Avg Time (min.) to Change								
							MATERIAL		$265.56
							PST + GST		$31.87
							LABOUR		$0.00
							TOTAL		$297.43

Notes: Annual failures per above is a statiscal calculation based on a mature installation that is spot lamp replaced

SUMMARY:

ENERGY COST	+	LAMP REPLACEMENT COST	=	ANNUAL COST
$3,037.06	+	$297.43	=	$3,334.48

FRANK JAMESON COMMUNITY CENTER – CONT'D

OPERATING COST OF PROPOSED SYSTEM

Prepared for:

Town of Ladysmith - Frank Jameson Community Center

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	Fixt Qty		Watts / Fixt	=	TOTAL WATTS	x	OPER. HRS.	=	ANNUAL ENERGY COST	Mean Lumens / Fixt
12	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	18	x	45	=	810	x	2184	=	$123.83	4101
	1 Lamp LED Exit	3W LED	1	x	3	=	3	x	8760	=	$1.84	
13	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	6	x	45	=	270	x	2184	=	$41.28	4101
14	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	2	x	45	=	90	x	5824	=	$36.69	4101
	1 Lamp LED Exit	3W LED	1	x	3	=	3	x	8760	=	$1.84	
15	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	6	x	45	=	270	x	3640	=	$68.80	4101
16	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	45	=	135	x	5824	=	$55.04	4101
	1 Lamp LED Exit	3W LED	1	x	3	=	3	x	8760	=	$1.84	
17	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	1	x	45	=	45	x	5824	=	$18.35	4101
18	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	45	=	135	x	5824	=	$55.04	4101
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	1	x	107	=	107	x	5824	=	$43.62	9553
19	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	45	=	135	x	5824	=	$55.04	4101
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	1	x	107	=	107	x	5824	=	$43.62	9553
20	2 Lamp 4ft T8 Ele Switched	F32T8/ADV835/XLL 25W	6	x	87	=	696	x	5824	=	$283.75	8108
	1 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	1	x	24	=	24	x	5824	=	$9.78	2050
21	2 Lamp 4ft T8 Ele Switched	F32T8/ADV835/XLL 25W	8	x	87	=	696	x	5824	=	$283.75	8108
22	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	45	=	135	x	5824	=	$55.04	4101
	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	87	=	261	x	5824	=	$106.40	8108
	1 Lamp CFL R40	EL/A R40 23W CFL	9	x	23	=	207	x	5824	=	$84.39	1300
23	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	14	x	45	=	630	x	5824	=	$256.84	4101
24	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	2	x	45	=	90	x	5824	=	$36.69	4101
25	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	18	x	107	=	1926	x	2184	=	$294.45	9553
			113				6.778	KW		SUBTOTAL	$1,957.90	
										GST	$97.89	
										TOTAL	$2,055.79	

Notes:

LAMP REPLACEMENT MAINTENANCE & LABOUR COST (See note below)

Area #	SYSTEM TYPE	LAMP TYPE	Years before failure	LAMP QTY	Avg Life	Annual Failures		COST PER LAMP		ANNUAL COST
12	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	11.9	36	40,000	1.97	x	$3.49	=	$6.86
	1 Lamp LED Exit	3W LED	3.7	1	50,000	0.18	x	$44.10	=	$7.73
13	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	11.9	12	40,000	0.66	x	$3.49	=	$2.29
14	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	4.5	4	40,000	0.58	x	$3.49	=	$2.03
	1 Lamp LED Exit	3W LED	3.7	1	50,000	0.18	x	$44.10	=	$7.73
15	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	7.1	12	40,000	1.09	x	$3.49	=	$3.81
16	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	6	46,000	0.76	x	$3.49	=	$2.65
	1 Lamp LED Exit	3W LED	3.7	1	50,000	0.18	x	$44.10	=	$7.73
17	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	2	46,000	0.25	x	$3.49	=	$0.88
18	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	6	46,000	0.76	x	$3.49	=	$2.65
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	3.3	2	30,000	0.39	x	$8.34	=	$3.24
19	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	6	46,000	0.76	x	$3.49	=	$2.65
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	3.3	2	30,000	0.39	x	$8.34	=	$3.24
20	2 Lamp 4ft T8 Ele Switched	F32T8/ADV835/XLL 25W	5.1	16	46,000	2.03	x	$3.49	=	$7.07
	1 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	1	46,000	0.13	x	$3.49	=	$0.44
21	2 Lamp 4ft T8 Ele Switched	F32T8/ADV835/XLL 25W	5.1	16	46,000	2.03	x	$3.49	=	$7.07
22	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	6	46,000	0.76	x	$3.49	=	$2.65
	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	12	46,000	1.52	x	$3.49	=	$5.30
	1 Lamp CFL R40	EL/A R40 23W CFL	0.9	9	8,000	6.55	x	$7.70	=	$50.45
23	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	28	46,000	3.55	x	$3.49	=	$12.37
24	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	5.1	4	46,000	0.51	x	$3.49	=	$1.77
25	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	8.9	36	30,000	2.62	x	$8.34	=	$21.86
	Total			219		27.81			=	$162.47
	Labour Costs to Replace Failed Lamps					$0.00			=	$0.00
	Hour Labour Rate									
	Estimated Avg Time (min.) to Change									
								MATERIAL		$162.47
								PST + GST		$19.50
								LABOUR		$0.00
								TOTAL		$181.96

*Note: IF All new lamps installed then lamp replacements & labour costs don't begin until per above

see ROI by area / type further in report

SUMMARY:

LAMP & LABOUR COST CAN ONLY BE INCLUDED ONCE NEW INSTALLATION MATURES AND SPOT RELAMPED SAME AS EXISTING

Annual replacement cost once new matures

ENERGY COST	+	LAMP & LABOUR COST	=	ANNUAL COST
$2,055.79	+	$0.00	=	$2,055.79

FRANK JAMESON COMMUNITY CENTER – CONT'D

FINANCIAL SUMMARY: RETURN ON INVESTMENT

Prepared for:

Town of Ladysmith - Frank Jameson Community Center

Summary:

ANNUAL OPERATING COST OF EXISTING	-	ANNUAL OPERATING COST OF PROPOSED*	=	OPERATING SAVINGS
$3,334.48		**$2,055.79**		**$1,278.69**

BILL OF MATERIAL INVESTMENT	QTY		PRICE EACH	COST TOTALS
Lamps				
F32T8/ADV835/XLL 25W	167	x	$ 3.49	$582.83
F96T8/TL835/PLUS	40	x	$ 8.34	$333.60
EL/A R40 CFL	9	x	$ 5.03	$45.27
Ballasts /Fixtures				
1 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP1S32SC35M	1	x	$ 16.95	$16.95
2 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP2S32SC35M	77	x	$ 16.95	$1,305.15
4 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP4S32SC35M	3	x	$ 21.95	$65.85
2 Lamp High Efficiency Electronic T8 Ballast (Instant Start - 8Ft Lamps) IOP2P58SC	20	x	$ 29.52	$590.40
LED Exit Sign	3	x	$ 44.10	$132.30
BC Hydro Rebate Estimate (PIP Program) **				
From 1 Lamp 4' T12 MAG to 1 Lamp 4' T8 HE ELE Ballast with ES Lamps	1	x	$ (15.00)	-$15.00
From 2 Lamp 4' T12 MAG to 2 Lamp 4' T8 HE ELE Ballast with ES Lamps	61	x	$ (25.00)	-$1,525.00
From 4 Lamp 4' T12 MAG to 4 Lamp 4' T8 HE ELE with 2 Ballasts and ES Lamps (switched)	8	x	$ (50.00)	-$400.00
From 4 Lamp 4' T12 MAG to 4 Lamp 4' T8 HE ELE Ballast with ES Lamps	3	x	$ (45.00)	-$135.00
From 2 Lamp 8' T12 MAG to 2 Lamp 8' T8 HE ELE Ballast Lamps	20	x	$ (15.00)	-$300.00
From Incandescent Exit to LED Exit	3	x	$ (35.00)	-$105.00
**Utility rebates are subject to approval by BC Hydro				

PRODUCTS	$3,072.35
PST /GST @ 7% & 5%	$368.68
PRODUCTS TOTAL	$3,441.03
LABOUR INSTALLATION	
LABOUR - GST	$0.00
LABOUR TOTAL	$0.00
ELECTRICAL PERMIT	
RECYCLING	
GST	$0.00
ASSESSMENT FEE	$0.00
GST	$0.00
OTHER TOTAL	$0.00
TOTAL INVESTMENT COST	$3,441.03
UTILITY REBATE	($2,480.00)
NET INVESTMENT COST (AFTER REBATE)	$961.03

Kilowatt Hours Saved

Existing System	41320.53	
Proposed System	-27969.98	
Savings	13350.55	Kwhrs

SUMMARY: PAYBACK & R.O.I.

Return on Investment - Energy Savings Only

INVESTMENT COST	ENERGY SAVINGS	PAYBACK / ROI
$961.03	$981.27	**0.98** Years
		102.1%

Return on Investment - Energy Savings & Lamp Replacement Savings

INVESTMENT COST	ENERGY SAVINGS	LAMP REPLACEMENT SAVINGS	PAYBACK / ROI
$961.03	$981.27	*$886.55*	**0.51** Years
			194.4%

Cost saved from not having to maintain existing mature system after new system installed & before it too requires replacements

OPERATING SAVINGS AFTER NEW INSTALLATION MATURES & SPOT RELAMPED
(longer life lamps will reduce labour time, not calculated in this report)

ENERGY SAVINGS = **$981.27** MAINTENACE SAVINGS = **$103.09**

AGGIE HALL

EXISTING SYSTEM OPERATING COST

Prepared for:

Town of Ladysmith - Aggie Hall

KWHR rate = $0.0700

Hours per Day Operation = 3 Hrs X 7 Days X 52 Weeks

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	FIXT QTY		WATTS / Fixt		TOTAL WATTS		ANNUAL HRS		ANNUAL ENERGY COST	Mean Lumens / Fixt
26	2 Lamp 4ft T12 Mag Ind	F34T12/WW	14	x	72		1008	x	1092	=	$77.05	4048
	2 Lamp 8ft T12 Mag Ind	F96T12/WW	8	x	126		1008	x	1092	=	$77.05	8360
	2 Lamp Inc. Exit	15T6	3	x	30		90	x	1092	=	$6.88	0
			25				2.106	KW	SUBTOTAL		$160.98	
									GST		$8.05	
									TOTAL		$169.03	

Notes:

MAINTENANCE COST: LAMP REPLACEMENTS & LABOUR

Area #	SYSTEM TYPE	LAMP TYPE	LAMP QTY	Avg Life	ANNUAL FAILURES		COST PER LAMP		ANNUAL COST
26	2 Lamp 4ft T12 Mag Ind	F34T12/WW	28	20000	1.53	x	$1.60	=	$2.45
	2 Lamp 8ft T12 Mag Ind	F96T12/WW	16	12000	1.46	x	$3.65	=	$5.31
	2 Lamp Inc. Exit	15T6	6	2000	3.28	x	$1.56	=	$5.11
	Total		50		6.26			=	$12.87
	Labour Costs to Replace Failed Lamps					x	$0.00	=	$0.00
	Hour Labour Rate								
	Estimated Avg Time (min.) to Change								
							MATERIAL		$12.87
							PST + GST		$1.54
							LABOUR		$0.00
							TOTAL		$14.42

Notes: Annual failures per above is a statiscal calculation based on a mature installation that is spot lamp replaced

SUMMARY:

ENERGY COST	+	LAMP REPLACEMENT COST	=	ANNUAL COST
$169.03	+	$14.42	=	$183.45

OPERATING COST OF PROPOSED SYSTEM

Prepared for:

Town of Ladysmith - Aggie Hall

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	Fixt Qty		Watts / Fixt		TOTAL WATTS		OPER. HRS		ANNUAL ENERGY COST	Mean Lumens / Fixt
26	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	14	x	45	=	630	x	1092	=	$48.16	4101
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	8	x	107	=	856	x	1092	=	$65.43	9553
	1 Lamp LED Exit	3W LED	3	x	3	=	9	x	1092	=	$0.69	0
			25				1.495	KW	SUBTOTAL		$114.28	
									GST		$5.71	
									TOTAL		$119.99	

Notes:

LAMP REPLACEMENT MAINTENANCE & LABOUR COST (See note below)

Area #	SYSTEM TYPE	LAMP TYPE	Years before failure	LAMP QTY	Avg Life	Annual Failures		COST PER LAMP		ANNUAL COST
26	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	23.8	28	40,000	0.76	x	$3.49	=	$2.67
	2 Lamp 8ft T8 Ele	F96T8/TL835/PLUS	14.3	16	24,000	0.73	x	$8.34	=	$6.07
	1 Lamp LED Exit	3W LED	29.8	3	50,000	0.07	x	$44.10	=	$2.89
	Total			47		1.56			=	$11.63
	Labour Costs to Replace Failed Lamps					$0.00			=	$0.00
	Hour Labour Rate									
	Estimated Avg Time (min.) to Change									
								MATERIAL		$11.63
								PST + GST		$1.40
								LABOUR		$0.00
								TOTAL		$13.02

*Note: IF All new lamps installed then lamp replacements & labour costs don't begin until per above — see ROI by area / type further in report

SUMMARY: LAMP & LABOUR COST CAN ONLY BE INCLUDED ONCE NEW INSTALLATION MATURES AND SPOT RELAMPED SAME AS EXISTING

Annual replacement cost once new matures

ENERGY COST	+	LAMP & LABOUR COST	=	ANNUAL COST
$119.99	+	$0.00	=	$119.99

AGGIE HALL – CONT'D

FINANCIAL SUMMARY: RETURN ON INVESTMENT

Prepared for:

Town of Ladysmith - Aggie Hall

Summary:

ANNUAL OPERATING COST OF EXISTING	-	ANNUAL OPERATING COST OF PROPOSED*	=	OPERATING SAVINGS
$183.45		**$119.99**		**$63.46**

BILL OF MATERIAL/INVESTMENT	QTY		PRICE EACH	COST/TOTALS
Lamps				
F32T8/ADV835/XLL 25W	28	x	$ 3.49	$97.72
F96T8/TL835/PLUS	16	x	$ 8.34	$133.44
Ballasts /Fixtures				
2 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP2S32SC	14	x	$ 16.95	$237.30
2 Lamp High Efficiency Electronic T8 Ballast (Instant Start - 8Ft Lamps) IOP2P59SC	8	x	$ 29.52	$236.16
LED Exit Sign	3	x	$ 44.10	$132.30
BC Hydro Rebate Estimate (PIP Program) **				
From 2 Lamp 4' T12 MAG to 2 Lamp 4' T8 HE ELE Ballast with ES Lamps	14	x	$ (25.00)	-$350.00
From 2 Lamp 8' T12 MAG to 2 Lamp 8' T8 HE ELE Ballast Lamps	8	x	$ (15.00)	-$120.00
From Incandescent Exit to LED Exit	3	x	$ (35.00)	-$105.00
**Utility rebates are subject to approval by BC Hydro				

PRODUCTS	$836.92
PST /GST @ 7% & 5%	$100.43
PRODUCTS TOTAL	$937.35
LABOUR INSTALLATION	
LABOUR - GST	$0.00
LABOUR TOTAL	$0.00
ELECTRICAL PERMIT	
RECYCLING	
GST	$0.00
ASSESSMENT FEE	$0.00
GST	$0.00
OTHER TOTAL	$0.00
TOTAL INVESTMENT COST	$937.35
UTILITY REBATE	($575.00)
NET INVESTMENT COST (AFTER REBATE)	$362.35

Kilowatt Hours Saved

PHILIPS sense and simplicity

Existing System	2299.75	
Proposed System	-1632.54	
Savings	667.21	Kwhrs

SUMMARY: PAYBACK & R.O.I.

Return on Investment - Energy Savings Only

INVESTMENT COST	ENERGY SAVINGS	PAYBACK / ROI
$362.35	$49.04	**7.39** Years
		13.5%

Return on Investment - Energy Savings & Lamp Replacement Savings

INVESTMENT COST	ENERGY SAVINGS	LAMP REPLACEMENT SAVINGS	PAYBACK / ROI
$362.35	$49.04	*$286.26*	**1.08** Years
			92.5%

Cost saved from not having to maintain existing mature system after new system installed & before it too requires replacements

OPERATING SAVINGS AFTER NEW INSTALLATION MATURES & SPOT RELAMPED
(longer life lamps will reduce labour time, not calculated in this report)

ENERGY SAVINGS = **$49.04** MAINTENACE SAVINGS = **$1.24**

CITY HALL

EXISTING SYSTEM OPERATING COST

Prepared for:

Town of Ladysmith - City Hall

KWHR rate = $0.0700

Hours per Day Operation = 10hrs X 5 Days X 52 Weeks

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	FIXT. QTY		WATTS / Fixt.	TOTAL WATTS		ANNUAL HRS		ANNUAL ENERGY COST	Mean Lumens / Fixt
27	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	8	x	144	1152	x	2600	=	$209.66	8096
28	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	2	x	72	144	x	2600	=	$26.21	4048
29	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	6	x	144	864	x	2600	=	$157.25	8096
30	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	x	144	144	x	2600	=	$26.21	8096
31	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	7	x	72	504	x	2600	=	$91.73	4048
32	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	8	x	72	576	x	2600	=	$104.83	4048
33	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	x	144	144	x	2600	=	$26.21	8096
34	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	2	x	72	144	x	2600	=	$26.21	4048
35	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	3	x	72	216	x	2600	=	$39.31	4048
36	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	1	x	72	72	x	2600	=	$13.10	4048
			39			3.96	KW		SUBTOTAL	$720.72	
									GST	$36.04	
									TOTAL	$756.76	

Notes:

MAINTENANCE COST: LAMP REPLACEMENTS & LABOUR

Area #	SYSTEM TYPE	LAMP TYPE	LAMP QTY	Avg Life	ANNUAL FAILURES		COST PER LAMP		ANNUAL COST
27	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	32	20000	4.16	x	$1.60	=	$6.66
28	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	4	20000	0.52	x	$1.60	=	$0.83
29	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	24	20000	3.12	x	$1.60	=	$4.99
30	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	4	20000	0.52	x	$1.60	=	$0.83
31	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	14	20000	1.82	x	$1.60	=	$2.91
32	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	16	20000	2.08	x	$1.60	=	$3.33
33	4 Lamp 4ft T12 Mag Wrap	F34T12/WW	4	20000	0.52	x	$1.60	=	$0.83
34	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	4	20000	0.52	x	$1.60	=	$0.83
35	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	6	20000	0.78	x	$1.60	=	$1.25
36	2 Lamp 4ft T12 Mag Wrap	F34T12/WW	2	20000	0.26	x	$1.60	=	$0.42
	Total		110		14.30			=	$22.88
	Labour Costs to Replace Failed Lamps					x	$0.00	=	$0.00
	Hour Labour Rate								
	Estimated Avg Time (min.) to Change								

Notes: Annual failures per above is a statiscal calculation based on a mature installation that is spot lamp replaced

MATERIAL	$22.88
PST + GST	$2.75
LABOUR	$0.00
TOTAL	$25.63

SUMMARY:

ENERGY COST	+	LAMP REPLACEMENT COST	=	ANNUAL COST
$756.76	+	$25.63	=	$782.38

CITY HALL – CONT'D

OPERATING COST OF PROPOSED SYSTEM

Prepared for:

Town of Ladysmith - City Hall

ENERGY COST

Area #	SYSTEM TYPE	LAMP TYPE	Fixt Qty		Watts / Fixt		TOTAL WATTS		OPER. HRS.		ANNUAL ENERGY COST	Mean Lumens / Fixt
27	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	8	x	87	=	696	x	2600	=	$126.67	*8108*
28	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	2	x	45	=	90	x	2600	=	$16.38	*4101*
29	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	6	x	87	=	522	x	2600	=	$95.00	*8108*
30	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	1	x	87	=	87	x	2600	=	$15.83	*8108*
31	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	7	x	45	=	315	x	2600	=	$57.33	*4101*
32	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	8	x	45	=	360	x	2600	=	$65.52	*4101*
33	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	1	x	87	=	87	x	2600	=	$15.83	*8108*
34	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	2	x	45	=	90	x	2600	=	$16.38	*4101*
35	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	3	x	45	=	135	x	2600	=	$24.57	*4101*
36	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	1	x	45	=	45	x	2600	=	$8.19	*4101*
			39				2.427	KW		SUBTOTAL	$441.71	
										GST	$22.09	
										TOTAL	$463.80	

Notes:

LAMP REPLACEMENT MAINTENANCE & LABOUR COST (See note below)

Area #	SYSTEM TYPE	LAMP TYPE	Years before failure	LAMP QTY	Avg Life	Annual Failures		COST PER LAMP		ANNUAL COST
27	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	32	40,000	2.08	x	$3.49	=	$7.26
28	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	4	40,000	0.26	x	$3.49	=	$0.91
29	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	24	40,000	1.56	x	$3.49	=	$5.44
30	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	4	40,000	0.26	x	$3.49	=	$0.91
31	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	14	40,000	0.91	x	$3.49	=	$3.18
32	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	16	40,000	1.04	x	$3.49	=	$3.63
33	4 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	4	40,000	0.26	x	$3.49	=	$0.91
34	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	4	40,000	0.26	x	$3.49	=	$0.91
35	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	6	40,000	0.39	x	$3.49	=	$1.36
36	2 Lamp 4ft T8 Ele	F32T8/ADV835/XLL 25W	10.0	2	40,000	0.13	x	$3.49	=	$0.45
	Total			110		7.15			=	$24.95
	Labour Costs to Replace Failed Lamps									
	Hour Labour Rate					$0.00			=	$0.00
	Estimated Avg Time (min.) to Change									
								MATERIAL		$24.95
								PST + GST		$2.99
								LABOUR		$0.00
								TOTAL		$27.95

*Note: IF All new lamps installed then lamp replacements & labour costs don't begin until per above

see ROI by area / type further in report

SUMMARY:

LAMP & LABOUR COST CAN ONLY BE INCLUDED ONCE NEW INSTALLATION MATURES AND SPOT RELAMPED SAME AS EXISTING

Annual replacement cost once new matures

ENERGY COST	+	LAMP & LABOUR COST	=	ANNUAL COST
$463.80	+	$0.00	=	$463.80

CITY HALL – CONT'D

FINANCIAL SUMMARY: RETURN ON INVESTMENT

Prepared for:

Town of Ladysmith - City Hall

Summary:

ANNUAL OPERATING COST OF EXISTING	-	ANNUAL OPERATING COST OF PROPOSED*	=	OPERATING SAVINGS
$782.38		**$463.80**		**$318.58**

BILL OF MATERIAL INVESTMENT	QTY		PRICE EACH	COST TOTALS
Lamps				
F32T8/ADV835/XLL 25W	110	x	$ 3.49	$383.90
Ballasts /Fixtures				
2 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP2S32SC	23	x	$ 16.95	$389.85
4 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP4S32SC	16	x	$ 21.95	$351.20
BC Hydro Rebate Estimate (PIP Program) **				
From 2 Lamp 4' T12 MAG to 2 Lamp 4' T8 HE ELE Ballast with ES Lamps	23	x	$ (25.00)	-$575.00
From 4 Lamp 4' T12 MAG to 4 Lamp 4' T8 HE ELE Ballast with ES Lamps	16	x	$ (45.00)	-$720.00
**Utility rebates are subject to approval by BC Hydro				

PRODUCTS	$1,124.95
PST /GST @ 7% & 5%	$134.99
PRODUCTS TOTAL	$1,259.94
LABOUR INSTALLATION	
LABOUR - GST	$0.00
LABOUR TOTAL	$0.00
ELECTRICAL PERMIT	
RECYCLING	
GST	$0.00
ASSESSMENT FEE	$0.00
GST	$0.00
OTHER TOTAL	$0.00
TOTAL INVESTMENT COST	$1,259.94
UTILITY REBATE	($1,295.00)
NET INVESTMENT COST (AFTER REBATE)	-$35.06

Kilowatt Hours Saved

Existing System	10296.00	
Proposed System	-6310.20	
Savings	3985.80	Kwhrs

SUMMARY: PAYBACK & R.O.I.

Return on Investment - Energy Savings Only

INVESTMENT COST	ENERGY SAVINGS	PAYBACK / ROI
-$35.06	$292.96	-0.12 Years
		-835.7%

Return on Investment - Energy Savings & Lamp Replacement Savings

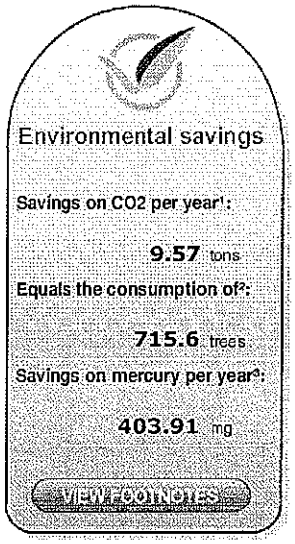
INVESTMENT COST	ENERGY SAVINGS	LAMP REPLACEMENT SAVINGS	PAYBACK / ROI
-$35.06	$292.96	*$228.80*	-0.07 Years
			-1488.4%

Cost saved from not having to maintain existing mature system after new system installed & before it too requires replacements

OPERATING SAVINGS AFTER NEW INSTALLATION MATURES & SPOT RELAMPED
(longer life lamps will reduce labour time, not calculated in this report)

ENERGY SAVINGS = **$292.96** MAINTENACE SAVINGS = **($2.07)**

ENVIRONMENTAL IMPACT (ALL AREAS COMBINED)



*Fluorescent T8 4Ft only

Environmental savings footnotes

[1] The reduction of CO2 emissions over the course of one year. Savings on CO2 Emissions Per Year is defined as: ((Original CO2 Emissions Per Year) - (New CO2 Emissions Per Year)), where CO2 Emissions Per Year is defined as ((1.341)† * (Electricity Consumption)), and Electricity Consumption is defined as: ((Number of Lamps) * (Lamp Wattage) * (Burning Hours per year)) / 1000).

[2] One tree = 12 kg per year of CO2‡. The number of trees saved per year is defined as: ((Original CO2 Emissions Per Year) - (New CO2 Emissions Per Year)) / (12 kg Per Year)‡, where CO2 Emissions Per Year is defined as ((1.341)† * (Electricity Consumption)), and Electricity Consumption is defined as: ((Number of Lamps) * (Lamp Wattage) * (Burning Hours per year)) / 1000).

[3] The reduction of mercury pollution by upgrading to lamps with longer rated average life, reduced mercury content, or both. Savings on mercury per year is defined as:((Mercury of Original) * (Bulbs Per Year for Original) * (Number of Lamps)) - ((Mercury of New) * (Bulbs Per Year for New) * (Number of Lamps)), where Bulbs Per Year is defined as ((Burning Hours Per Year) / (Lamp Life)).

† According to the U.S. Department of Energy and the EPA. See page 6 from the source below: http://www.eia.doe.gov/cneaf/electricity/page/co2_report/co2emiss.pdf

‡ According to the United Nations Environment Programme. See Fast Fact 10 from the source below: http://www.unep.org/billiontreecampaign/FactsFigures/FastFacts/index.asp

Green Lighting Aspects	Environmental Impact
Less mercury	Better for the environment
Less energy	Reduced CO_2 emissions (climate)
Longer relamp cycles	Reduced CO_2 emissions (less lamps to produce)
Recycling	Less waste

BILL OF MATERIALS – ALL AREAS COMBINED

BILL OF MATERIAL INVESTMENT	QTY		PRICE EACH	COST TOTALS
Lamps				
F32T8/ADV835/XLL 25W	523	x	$ 3.49	$1,825.27
F96T8/TL835/PLUS	56	x	$ 8.34	$467.04
EL/A R40 CFL	9	x	$ 5.03	$45.27
Ballasts /Fixtures				
1 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP1S32SC35M	1	x	$ 16.95	$16.95
2 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP2S32SC35M	223	x	$ 16.95	$3,779.85
4 Lamp High Efficiency Electronic T8 Ballast (Programmed Start) IOP4S32SC35M'	19	x	$ 21.95	$417.05
2 Lamp High Efficiency Electronic T8 Ballast (Instant Start - 8Ft Lamps) IOP2P59SC	28	x	$ 29.52	$826.56
LED Exit Sign	6	x	$ 44.10	$264.60
BC Hydro Rebate Estimate (PIP Program) **				
From 1 Lamp 4' T12 MAG to 1 Lamp 4' T8 HE ELE Ballast with ES Lamps	1	x	$ (15.00)	-$15.00
From 2 Lamp 4' T12 MAG to 2 Lamp 4' T8 HE ELE Ballast with ES Lamps	207	x	$ (25.00)	-$5,175.00
From 4 Lamp 4' T12 MAG to 4 Lamp 4' T8 HE ELE with 2 Ballasts and ES Lamps (switched)	8	x	$ (50.00)	-$400.00
From 4 Lamp 4' T12 MAG to 4 Lamp 4' T8 HE ELE Ballast with ES Lamps	19	x	$ (45.00)	-$855.00
From 2 Lamp 8' T12 MAG to 2 Lamp 8' T8 HE ELE Ballast Lamps	28	x	$ (15.00)	-$420.00
From Incandescent Exit to LED Exit	6	x	$ (35.00)	-$210.00
**Utility rebates are subject to approval by BC Hydro				

PRODUCTS	$7,642.59
PST /GST @ 7% & 5%	$917.11
PRODUCTS TOTAL	$8,559.70
LABOUR INSTALLATION	
LABOUR - GST	$0.00
LABOUR TOTAL	$0.00
ELECTRICAL PERMIT	
RECYCLING	
GST	$0.00
ASSESSMENT FEE	$0.00
GST	$0.00
OTHER TOTAL	$0.00
TOTAL INVESTMENT COST	$8,559.70
UTILITY REBATE	($7,060.00)
NET INVESTMENT COST (AFTER REBATE)	$1,499.70

Kilowatt Hours Saved

Existing System	74321.08	
Proposed System	-48665.72	
Savings	25655.36	Kwhrs

SUMMARY: PAYBACK & R.O.I.

Return on Investment - Energy Savings Only

INVESTMENT COST	ENERGY SAVINGS	PAYBACK / ROI
$1,484.70	$1,885.67	0.79 Years
		127.0%

Return on Investment - Energy Savings & Lamp Replacement Savings

INVESTMENT COST	ENERGY SAVINGS	LAMP REPLACEMENT SAVINGS	PAYBACK / ROI
$1,484.70	$1,885.67	*$1,855.05*	0.40 Years
			252.0%

Cost saved from not having to maintain existing mature system after new system installed & before it too requires replacements

Philips Energy Advantage T8 25W Extra Long Life Lamps featuring ALTO II™ Technology

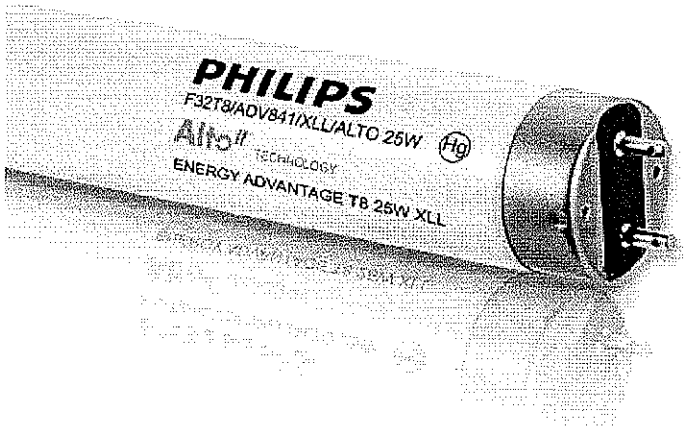
Ideal for applications where energy savings and longer relamp cycles would be beneficial

T8 COLLECTION

Alto II™

ALTO II™ means 50% less mercury than the original ALTO T8 lamps!

§ Original 2', 3' and 4' T8 lamps featuring ALTO® Lamp Technology had 3.5mg of mercury. New 2', 3' and 4' T8 lamps featuring ALTO II™ Technology have 1.7mg of mercury.



Energy savings, extra long life, extra low mercury

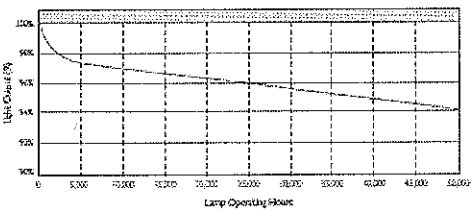
Philips Energy Advantage T8 25W Extra Long Life lamps are an industry first. These lamps offer high energy savings, are environmentally responsible and have extra long life.

Outstanding energy savings
- Save 7 watts per lamp instantly when compared to a 32W T8 lamp
- Save $28 in energy costs over the rated average life of the lamp*
- Operates on any Instant Start and Programmed Start Ballast‡

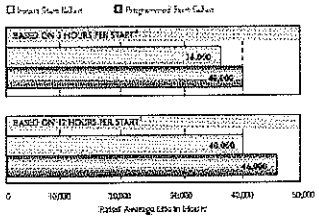
Extra long life
- Significantly reduce maintenance and recycling costs by extending the relamping cycle
- Up to 67% longer life than an industry standard T8 lamp◊
- Warranty period: 48 months

Better for the environment
- Only 1.7mg of mercury with ALTO II™ Technology
- Reduced impact on the environment without sacrificing performance

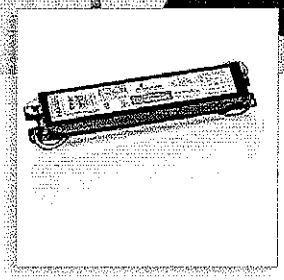
97% Lumen Maintenance
Philips Energy Advantage T8 25W XLL Lamps



Rated Average Life
Philips Energy Advantage T8 25W XLL Lamps



◊) Average life across specified rated lives with lamps turned off one minute no more frequently than once every 3 operating hours. Lamp life is approximately longer if lamps are started less frequently.



Redefining the rules

Philips Advance Optanium® high efficiency programmed start T8 ballasts have redefined the rules for T8 lighting fixtures

Philips Advance's Optanium high-efficiency electronic ballasts are engineered to optimize lighting performance and maximize energy savings. These ballasts provide an unparalleled package of features and benefits to support the wide variety of T8 fluorescent lamps out in the market place.

Optanium ballasts for T8 lamps are part of our effort to promote environmental responsibility through Smart Solutions™ — energy efficient products, lighting systems, services, and expertise through Philips Advance branded products. They are also one of the charter products of the NEMA Premium® Ballast Program. All of this makes these ballasts part of an overall high-efficiency lighting system that may help you achieve LEED certification, meet ASHRAE standards, become Title 24 compliant, or any other local energy code that you or your customers need to be in compliance.

Optanium ballasts will help you and your customers meet a variety of application challenges including design, installation, maintenance, and evolving lamp technology. Optanium ballasts are available in both a standard light output design (0.87 ballast factor) and a low-watt design (0.77 ballast factor). Also these ballasts have a cold-starting capability down to -0°F (with standard lamps) These two features combined make it ideal for just about any T8 fixture design and application. The ballast's programmed start ignition also provides extended lamp life in frequent switching applications such as those where occupancy sensors or motion detectors are being used.

Available in a broad range of options, Optanium ballasts enable T8 lighting systems to reach their full potential and represent the industry's most flexible and comprehensive family of high-efficiency lighting solutions.

Hi-efficiency
- Promotes sustainability by consuming less input watts than standard efficiency electronic ballasts

IntelliVolt® Technology (108-305V, 50/60Hz)
- Enhances accuracy and ease of ordering while reducing stocking/SKU requirements

Striation Reduction circuitry
- Reduces the potential for lamp striation typically seen when using energy saving lamps

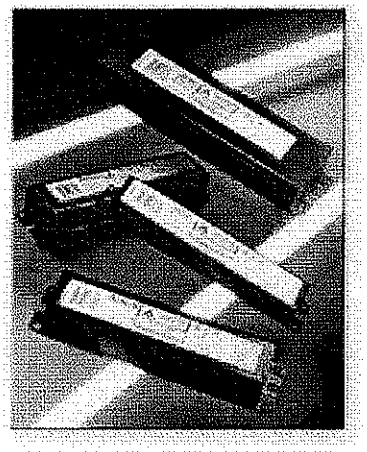
* For more information about our Smart Solutions program go to www.philips.com/advancesustainability.

SMART™ SOLUTIONS

PHILIPS ADVANCE

Advance Plus 90 Protection®

The Industry's Most Comprehensive Ballast/Lamp System Warranty



For the first time, Advance

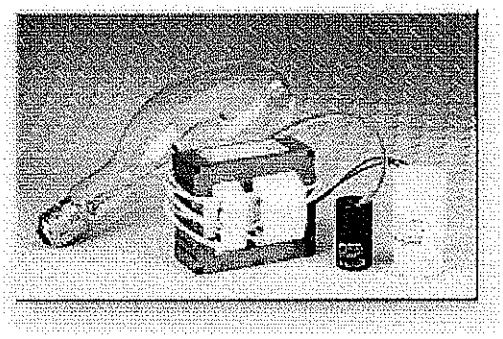
brings you a Ballast/Lamp System

Warranty that means **freedom** —

- Advance's exclusive Plus 90 Protection™ brings you *complete freedom from concern about warranty coverage on your lighting systems.* That's because Plus 90 Protection matches the published "system" warranty of *any* major manufacturer, fluorescent or HID...*and extends it for an additional 90 days.*
- And, Plus 90 Protection gives you the *freedom* to use any major lamp brand you select—now or in the future.

That means you can select Advance—the unquestioned preferred ballast brand, the first choice of contractors, specifiers and end-users everywhere. And use whichever major lamp brand you prefer. With no sacrifice in warranty coverage.

Plus 90 Protection™ Benefits:



- Warrants both the lamps and the ballasts.
- Matches the published "system" warranties offered by any major lamp manufacturer...including relamping provisions.
- Extends protection for 90 days past other "system" warranties.
- Eliminates finger-pointing. You're covered no matter what part of the lighting system might fail...no matter which brand of lamp you choose to employ, now or in the future.
- Provides quick, direct access to Advance's Warranty Service Team. Just call 1-800-372-3331 for immediate response and assistance.

PHILIPS

The Philips Environmental Awareness and Knowledge Award

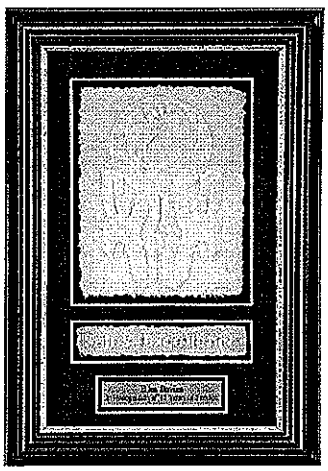
The Philips Environmental Awareness and Knowledge Award, "PEAK", is proudly presented to Philips End User Customers for their conscious use of environmentally friendly and sustainable lighting products, featuring ALTO Lamp Technology, which are manufactured by the Philips Lighting Company.

The world today is a fragile place, its environmental health being increasingly threatened in many ways, from 'global warming', caused mainly by carbon dioxide emissions from industry and transport, to chemicals from manufacturing, and from waste when products reach the end of their useful lives. As a result, the safe and responsible management of our global environment is crucial for the health of our planet, all its inhabitants, and for future generations.

Philips Lighting has been an industry leader in environmental initiatives educating end-users for more than nine years. With the landmark launch of our first ALTO fluorescent lamp in 1995, we pioneered a new category of low-mercury fluorescent lamps, heightened corporate environmental awareness, and eliminated more than 9 tons of mercury at its source. ALTO lamps use 100 percent recycled mercury during the ALTO manufacturing process. Philips ALTO fluorescent lamps combine low mercury with long life and energy efficiency – which together help achieve sustainability.

With the use of these environmentally friendly Philips ALTO lighting products, our Customers are meeting the needs of the present generation without compromising our future generations.

Philips Lighting is the product division within Philips Electronics that manufactures and markets Philips lamps and Advance ballasts. Philips Lighting's environmental policy reflects that of Philips Electronics. As a global lighting player and leader in technical innovation, we at Philips Lighting aim to ensure that our environmental credentials become as widely respected as our products and as our customers that use them.



Philips Environmental Awareness & Knowledge Award

- Reward and acknowledge end users that have taken the moral and ethical decision to install energy saving (sustainable) Philips ALTO lamps.
- Plaque, Press Release, Presentation, Acknowledgment letter for staff, write-up for corporate website or newsletter

BRITISH COLUMBIA
The Best Place on Earth

Ref: 134885

JAN 2 9 2010

His Worship Mayor Robert R. Hutchins
and Members of Council
Town of Ladysmith
PO Box 220 Stn Main
Ladysmith, BC V9G 1A2

Dear Mayor Hutchins and Councillors:

The Local Government Elections Task Force is currently seeking written comments from your local government, and from organizations and individuals in your community, to assist in its review of local government election issues.

Announced at the Union of British Columbia Municipalities (UBCM) 2009 Convention, the Local Government Elections Task Force is a joint, consensus-based group of provincial and UBCM members. The Task Force co-chairs are Honourable Bill Bennett, Minister of Community and Rural Development, and Chair Harry Nyce, President of the UBCM. Other Task Force members are:

- Surrey Councillor, Barbara Steele, first vice-president, UBCM;
- Quesnel Mayor, Mary Sjostrom, third vice-president, UBCM;
- Donna Barnett, MLA, Cariboo–Chilcotin; and
- Douglas Horne, MLA, Coquitlam–Burke Mountain.

Recognizing the importance of hearing from local governments throughout British Columbia, the Task Force invites you to submit the comments of your local government on any or all of the following topics:

- Campaign finance, including contribution/spending disclosure and limits, and tax credits;
- Enforcement processes and outcomes;
- Role of the British Columbia Chief Electoral Officer in local government elections;

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Ministry of Community
and Rural Development

Office of the Minister

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29
BRITISH COLUMBIA HOST PROVINCE

PO Box 9056 Stn Prov Govt
Victoria BC V8W 9E2

Phone: 250 387-2283
Fax: 250 387-4312
www.gov.bc.ca/cd

- Election cycle (term of office);
- Corporate vote; and,
- Matters raised in election resolutions submitted to the 2009 UBCM Convention, such as the eligibility of volunteers.

To assist in its deliberations, the Task Force would appreciate your comments as soon as possible, preferably by April 15, 2010. It is anticipated that the Task Force will deliver its recommendations to the Province of British Columbia and the UBCM by May 30, 2010, after which legislation is expected to be presented to the Legislature in time for the 2011 local government elections.

The Task Force is aware of the tight time frame and that the interest in local government elections extends beyond local governments to the broader community including individuals, community groups and other representative organizations. **As such, the Task Force requests that you share this request for written comments within your community, particularly with local groups and individuals interested in local government election issues.**

Written comments can be made via email to: LocalElectionsTaskForce@gov.bc.ca, by fax to: 250 387-7972, or by mail to:

Local Government Elections Task Force
c/o Ministry of Community and Rural Development
PO Box 9839 Stn Prov Govt
Victoria, BC V8W 9T1

Though the Task Force will receive feedback primarily through written comments, individual Task Force members will also engage in conversations on the election issues under review as they meet with local government representatives, organizations and citizens during the normal course of their responsibilities.

For local governments, the UBCM is planning a one-day workshop in March for its members who wish to attend. In addition, Area Associations will have a further opportunity to discuss these issues at their Spring Conventions. Workshop details will be announced shortly.

For further information on the Local Government Elections Task Force, please visit the website at: www.LocalElectionsTaskForce.gov.bc.ca.

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We look forward to hearing from you on ways to improve our local government election processes.

Sincerely,

Bill Bennett
Minister of Community
and Rural Development

Harry Nyce
President
Union of British Columbia Municipalities

Ladysmith Community Gardens Society (LCGS)
c/o Ladysmith Resources Centre Association
721 1st Avenue, Box 1653,
Ladysmith B.C.
V9G 1B2
February 8, 2010

Mayor Rob Hutchins and Ladysmith Town Council
410 Esplanade,
Ladysmith, B.C.
V9G 1A1

Dear Mayor Hutchins and Town Council

We are writing on behalf of the Ladysmith Community Gardens Society as follow up to Council Resolution 2009-619 to 921. The purpose of this letter is to request an interim community gardens budget of $8010 for essential goods and services to allow start up of the garden this spring.

It is our understanding that the decision on our budget request for the establishment of a partnership for the Community Gardens at High Street will be forthcoming in May 2010. We have proceeded to establish a society for the administration of community gardens (registration documents sent Feb. 8, 2010) and are now ready to move ahead with construction to begin in middle March to be ready for gardening this spring.

Specifically, this will include the following works scheduled for March and early April:

1. Provide a letter of access to the site on an interim basis or proceed to finalize a land use agreement by mid-March 2010.
2. Construction of access through the retaining wall on High Street and provision of gate to prevent unauthorized vehicle access to the site and ball park
3. Order ½ half of the original raised bed ties to enable the start of raised bed construction ($1500)
4. Installation of basic water line to the site, including valves and metering. ($1900)
5. Installation of fencing along retaining walls for safety purposes. This is the largest single budget item ($3700) but it is deemed essential for safety reasons.
6. Removal of sod and transport to town compost

In summary these essential actions require approval of an interim budget of $8010.00 in goods and services from the town. We understand that the remainder of the $18,000 requested in the original budget will be considered in the normal budget process.

In undertaking these works the Ladysmith Community Gardens Society will:

1. Work to sign-off a conceptual design with the town by the middle of March 2010.
2. Work in good faith to finalize and sign a land use agreement
3. Demarcate areas on the ground to be cleared of sod
4. Layout areas for raised beds
5. Provide labour for construction of raised beds
6. Work with other sponsors and partners for construction of facilities described in the conceptual master plan.

This initial phase will allow the start of gardening this spring. Subsequent phases will see the completion of other components of the garden such as communal plots, completion of all raised beds, storage shed, composting areas, access paths, patio, shelter, completion of water system, provision of electrical outlets etc. once town budget and other funding partners are secured.

Thank you for your consideration;

Greg Roberts, Director, LCGS

Karen Armitage, Director, LCGS

John Anderson, Founding Member, LCGS

COUNCIL MOTIONS REGARDING COMMUNITY GARDENS

2009-619
It was moved, seconded and carried that Council support in principle the concept of a community garden to be located adjacent to Little League Ball Park.

2009-620
It was moved, seconded and carried that Staff be authorized to enter into negotiations with community gardens representatives to develop a land use agreement for the community gardens to be located adjacent to Little League Ball Park.

2009-621
It was moved, seconded and carried that the request for $18,000 for the development of a community gardens be referred to 2010 budget discussions.