

**ENVIRONMENTAL ADVISORY COMMITTEE
RECOMMENDATION INDEX
Wednesday, February 18, 2004**

C. DISCUSSION OF DELEGATIONS

1. **Kathy Wardell**
Busby and Associates
File: 0540-20 EAC

It was Moved by T. Godwin
Seconded by H. Locke
That the Environmental Advisory Committee recommends that Council
hear the LEED presentation and consider using LEED in the renovations to Surrey's City Hall building.
Carried

B. DELEGATIONS

2. **Jean Lamontagne**
Manager, Planning, Design, and Corporate Facilities
File: 0540-20 EAC

It was Moved by T. Godwin
Seconded by F. Perello
That the Environmental Advisory Committee recommends that Council
develop a specific management plan for acquisition and management of wildlife habitats and biodiversity
preservation in the City of Surrey.
Carried

J. OTHER COMPETENT BUSINESS (continued)

2. **Light Standards**

It was Moved by T. Godwin
Seconded by B. Stillwell
That the Environmental Advisory Committee recommends that Council
request the Ministry of Transportation and Highways to review the design criteria of the high mass lighting at
the interchange located at Pacific Highway and the Trans Canada Highway, and other similar sites, with a
view to minimizing light pollution to adjacent areas.
Carried

It was Moved by B. Stillwell
Seconded by T. Godwin
That the Environmental Advisory Committee recommends that Council
request staff to develop guidelines governing the installation of outdoor lighting with particular reference to
installation, efficiency and minimizing light pollution.
Carried

City of Surrey

Environmental Advisory Committee

Minutes

Executive Boardroom
City Hall
14245 - 56 Avenue
Surrey, B.C.
WEDNESDAY, FEBRUARY 18, 2004
Time: 7:00 p.m.

Present:

Dr. R.M. Strang - Chair

Absent:

J. Grewal

Staff Present:

C. Baron, Drainage & Environment Manager

Dr. T. Godwin
H. Locke
D. Maher
Dr. F. Perello
B. Stillwell
S. VanKeulen
Councillor Bose

J. Sarwal
R. Wetzel

C. Bonneville, Legislative Services

Guests:

Ms. Kathy Wardell, Busby and Associates
Mr. Rod Maas, Busby and Associates
Dr. Dennis Woods, Co-Chair, Surrey Environmental Partners
Ms. Deb Jack, Co-Chair, Surrey Environmental Partners
Ms. Liz Walker

The Chair opened the meeting and introduced Dr. Dennis Woods as Co-Chair of the Surrey Environmental Partners.

B. DELEGATIONS

**1. Kathy Wardell
Busby and Associates
File: 0540-20 EAC**

Dr. Dennis Wood, introducing Ms. Wardell, provided the following comments:

- The Surrey Environmental Partners (SEP) is a newly formed, non-profit society.
- SEP is bringing together individuals and environmental organizations in Surrey concerned with the preservation and stewardship of natural areas within Surrey.
- The Leadership in Energy and Environmental Design (LEED) presentation was presented a couple months ago to SEP

At the January EAC meeting a motion was made to invite Kathy Wardell of Busby and Associates to present information regarding the LEED program. (*See also Information Items, Item I.1*)

Ms. Kathy Wardell introduced Mr. Rod Maas and circulated a copy of their presentation to the EAC members. The following comments were made during the presentation:

- The US Green Building Council was created in 1993 to provide leadership, education and multi-disciplinary integration of sustainable building design.
- Since 1993 the Green Building Council has flourish and rapidly grown, a result of this organization is the creation of LEED.
- There are a number of chapters of the Green Building Council, like the Cascadia Chapter and the Vancouver Chapter.
- The US LEED Green Building Rating System is currently based on existing building and commercial interiors; in development is the rating system of 'core and shell', homes, and neighbourhood developments.
- There are 5,000 accredited professionals, and 1,003 registered projects.
- In January 2003, Canada Green Building Council was formed and in July, 2003 signed a licensing agreement to be the sister organization in Canada to USGBC. Currently in the process of taking the US information and making it Canadian (ie. include storm water management and energy consumption).
- Some LEED registered projects in BC are the, Semiahmoo Library in Surrey, the Vancouver Island Technology Park in Victoria and the Operations Building in White Rock.
- There are six main categories in the LEED certification, to obtain a certain level of certification a certain number of points must be achieved. The categories and possible points are as follows:
 - Sustainable site design – 14 possible points – 22%
 - Water efficiency – 4 possible points – 8%
 - Energy and atmosphere – 17 possible points – 27%
 - Material and resources – 18 possible points – 20%
 - Indoor environmental quality – 15 possible points – 23%
 - Innovation and design – 5 possible points

The total possible points are 69.

- Following are the levels of LEED certification:
 - LEED Platinum – 52 points plus
 - LEED Gold – 39 – 51 points
 - LEED Silver – 33 - 38 points
 - LEED Certified – 26 – 32 points
- The points (credits) in each category were review in more detail as follows:
 - Sustainable sites (14 points)
 - Prerequisite: Erosion and Sediment Control
 - Prerequisite: Streamside Protection
 - Site Selection – 1 point
 - Urban redevelopment – 1 point
 - Brownfield redevelopment – 1 point
 - Alternative transportation – 4 points
 - Reduced Site disturbance – 2 points
 - Storm water management – 2 points
 - Landscape and exterior design – 2 points
 - An example is to reduce the 'urban heat island affect' – in urban developments it's hotter as the dark surfaces absorb heat and make a warmer climate.
 - Light pollution reduction – 1 point
 - Water efficiency (5 points)
 - Water efficiency landscaping – 2 points
 - An example is to capture the rainwater and reuse.
 - Innovative wastewater technologies – 1 point
 - Water use reduction – 2 points
 - An example is use waterless urinals and using energy star rated appliances.
 - Energy & Atmosphere (17 points)
 - Prerequisite: fundamental building systems commissioning
 - Prerequisite: minimum energy performance
 - Prerequisite: CFC reduction in HVAC&R equipment
 - Optimize energy performance (1 – 10 points)
 - Renewable energy (1 – 3 points)
 - Additional commissioning (1 point)
 - An example is an operational manual for staff orientation and resource.
 - Ozone depletion (1 point)
 - Measurement and verification (1 point)
 - An example is metering of energy and water consumption.
 - Green power (1 point)
 - An example is purchasing green power certificates from BC Hydro.
 - Material and Resources (13 points)
 - Prerequisite: Storage and Collection of recyclables
 - Building reuse – 3 points
 - Construction waste management – 2 points
 - Resource reuse – 2 points
 - Recycled content – 2 points
 - Local/regional materials – 2 points
 - Rapidly renewable materials – 1 point
 - Using materials that can regenerate within a 10 year period.
 - Certified wood – 1 point
 - Indoor Environmental quality (15 points)
 - Prerequisite: minimum IAQ performance
 - Prerequisite: environmental tobacco smoke control
 - Carbon dioxide monitoring – 1 point
 - Ventilation effectiveness – 1 point
 - Construction IAQ management plan – 2 points
 - An example would be having a fresh air flush of the building prior to occupancy.
 - Low emitting material – 4 points

- An example is environment friendly paints and sealants.
- Indoor chemical and pollutant source control – 1 point
 - An example is a photocopy room.
- Controllability of systems – 2 points
- Thermal comfort – 2 points
- Daylight and views – 2 points.
- Innovation and Design Process (5 points)
 - Innovation in design – 4 points
 - LEED accredited professional – 1 point
 - If you exceed on one category you may gain innovation points.
 - An education program may be worthy of an innovation point.
- A project team can vary what they would like to achieve, the point system give flexibility on which point to achieve.

C. DISCUSSION OF DELEGATIONS

1. **Kathy Wardell** **Busby and Associates** **File: 0540-20 EAC**

In response to questions from the Environmental Advisory Committee members the delegation provided the comments:

- Regarding highway lighting and light pollution, something could be custom fabricated to direct the light.
- Regarding the cost-benefit ratio, it depends on whether the client comes to us with a green agenda, from there we would identify the design practice. The life cycle cost is always presented to clients.
- There are hard and soft costs, however LEED reduces hard cost by reducing energy cost in the long run.
- Regarding new technology, our firm tries to employ passive technology, like maximizing daytime lighting.
- Green power certificate allow BC hydro to purchase power from independent power producers that do not have a huge impact on the eco system. The certificates allow BC Hydro to bring more power onto the grid and the user pays a premium if they have purchase certificates. White Rock's operations building is a showcase for their leadership in green building and they support their leadership through purchasing green power certificates.
- Even though lighting and heating is functioning at 95% efficiency there is room for improvement in other areas such as solar hot water tubing, and ground source heating pumps.
- The LEED certification process allows for the picking and choosing where the points will be achieved.
- Regarding the cost associated with LEED, an example was used, and MBAT is an aboriginal college located in Merrit that used the LEED guidelines. The project cost came in at two dollars more a square foot, but the saving in the long run are greater then the initial cost.
- We typically look for additional funding, NRCAN provides up to \$60,000 if you can prove that the building will improve energy consumption. There is also a green municipal enabling fund and funding available through the FCM for civic projects.
- After a building is LEED certified there is no follow up, however certification can be done on existing buildings.
- The LEED is a evolving rating system and is currently undergoing revision for release in 2005. Managing acoustics currently is rated under innovations.

The meeting recessed at 7:03 p.m. and reconvened at 7:07 p.m. with the same members in attendance.

A discussion ensued regarding LEED presentation to Council and that the delegates should emphasize of minimal cost and the cost benefits in the long run.

COMMITTEE RECOMMENDATION

It was

Moved by T. Godwin
Seconded by H. Locke

That the Environmental Advisory Committee recommends that Council hear the LEED presentation and consider using LEED in the renovations to Surrey's City Hall building.

Carried

The Chair thanked Ms. Wardell and Mr. Maas of Busby and Associates for their LEED presentation

A. ADOPTION OF MINUTES

1. Environmental Advisory Committee - Minutes - January 21, 2004

It was Moved by B. Stillwell
Seconded by T. Godwin
That the minutes of the Environmental Advisory committee meeting of
January 21, 2004 be adopted.

Carried

J. OTHER COMPETENT BUSINESS

1. Resignation of Donna Maher

The Chair was pleased to advise that Donna Maher will not be leaving the Environmental Advisory Committee as mentioned in the previous minutes.

B. DELEGATIONS

2. Jean Lamontagne Manager, Planning, Design, and Corporate Facilities File: 0540-20 EAC

At the October EAC meeting it was decided that the Manager, Planning, Design, and Corporate Facilities be requested to do a presentation in December/January regarding how the acquisition program works and how the Parks is leading in acquisition of parks and natural areas, and further some history on Mud Bay and the foreshore areas.

At the January EAC meeting the Chair advised that a staff member would attend this meeting to provide a presentation to the Committee members.

Members of the Environmental Advisory Committee expressed their disappointment that the Manager, Planning, Design, and Corporate Facilities was not in attendance nor did he send a staff member to attend in his place.

The Environmental Advisory Committee made the following comments:

- There is a concern for wildlife areas and riparian zones. We need to protect the wildlife and the ecosystem of Surrey.
- There is no plan in place for wildlife areas; we don't know how much is needed. The OCP states that for every 1,000 of the population there should be .8 of a hectare reserved for wildlife. There is a parkland inventory and there are greenbelts - in the Parks Master plan they are called natural links and areas and are parkland set aside.
- Surrey needs a plan in place or there will be no salmon or woodpeckers in the city. The storm water drainage is depositing into the watercourses and in two years there will be no salmon.
- This is not the way to run a wildlife plan – do we downsize and only keep areas for smaller birds. We require a plan for wildlife and an acquisition plan for wildlife areas.

The Drainage and Environment Manager responded to the concerns stating:

- There are different things happening at different levels. Engineering department has taken on the riparian

reserves because restrictive covenants weren't working. The GVRD has begun a biodiversity plan for the region addressing the different existing habitat communities. Engineering and parks staff members sit in on the GVRD committee.

- Species at Risk Legislation (SARA) will change how we look at the wildlife and will assist us in getting the land in the future. The province is working at bringing it down to the city level and the federal government is working on bring it down to the provincial level.

COMMITTEE RECOMMENDATION

It was Moved by T. Godwin
Seconded by F. Perello
That the Environmental Advisory Committee recommends that Council develop a specific management plan for acquisition and management of wildlife habitats and biodiversity preservation in the City of Surrey.

Carried

J. OTHER COMPETENT BUSINESS (continued)

2. Light Standards

The Environmental Advisory Committee made the following comments concerning light standards:

- The high mass lighting on the interchange along the highway is under the supervision of MoTH. This is an example of the primary lighting of concern with regards to light pollution.
- There should be some staff research as to what the other cities are doing to reduce light pollution.
- The Environmental Advisory Committee requested that the Chair write a letter to the Planning and Development Manager requesting information or clarification of the process that lead to the range lighting installed in the driving range on Colebrook Road east of King George Highway.

COMMITTEE RECOMMENDATION

It was Moved by T. Godwin
Seconded by B. Stillwell
That the Environmental Advisory Committee recommends that Council request the Ministry of Transportation and Highways to review the design criteria of the high mass lighting at the interchange located at Pacific Highway and the Trans Canada Highway, and other similar sites, with a view to minimizing light pollution to adjacent areas.

Carried

COMMITTEE RECOMMENDATION

It was Moved by B. Stillwell
Seconded by T. Godwin
That the Environmental Advisory Committee recommends that Council request staff to develop guidelines governing the installation of outdoor lighting with particular reference to installation, efficiency and minimizing light pollution.

Carried

D. BUSINESS ARISING FROM THE MINUTES

1. Discussion of EAC Minutes – October 16, 2003 File: 0540-20 EAC

At the January EAC meeting the following item was discussed:

Page 8, under Item E.2 Preservation of Park and Natural land areas second paragraph:

- (i) consider amendment to the first sentence that read “The Drainage and Environmental Manager advised that there is a program for acquisition in place.”

The Chair advised that he would contact Jean Lamontagne regarding his presentation to the Environmental Advisory Committee.

2. Gateway Council

At the January meeting of the EAC a motion was made to invite Gateway Council as a delegation. The delegation has agreed to present at the March 17 meeting of the EAC. The Administrative Assistant has provided a federal news release for the EAC's information.

A discussion ensued regarding the March 17 meeting being during Spring Break, it was decided that the March 17 meeting would be rescheduled to March 24.

3. Campbell Heights

File: 6250-20 (Campbell Heights); 0540-20 EAC

At the January EAC meeting a motion was made that EAC be provided with an index of the reports, regarding Campbell Heights, the index is attached.

At the January EAC meeting it was mentioned that Corporate Report L001 would be included on the next EAC agenda. The Corporate Report is attached for the EAC's information.

The Chair expressed his displeasure in not having received a response regarding the concerns raised by the Environmental Advisory Committee members.

The Administrative Assistant advised of the process for a response stating that because the direction came from Council a response will be directed to Council and then forwarded to the Environmental Advisory Committee.

4. EAC's Outstanding Action List

At the January EAC meeting the Administrative Assistant requested clarification of the purpose of the action list. The Chair requested that the concerns of the Administrative Assistant be considered for discussion at the February meeting.

The Chair asked the Environmental Advisory Committee for comments and none were forthcoming. The Chair deferred this item to the March 24 meeting, and requested that the members provide comments.

5. Proposed Pyrolysis – 12510 – 88 Avenue

File: 0450-01; 0540-20 EAC

At the January EAC meeting concerns were raised by the members regarding the response from the GVRD. The Chair sent an email to Greg Arnold of the GVRD and attached is the response.

S. VanKeulen advised that manure was picked up from his operation to be processed at this plant. This operation of green power and cogeneration will be very useful.

E. NEW BUSINESS

F. ITEMS REFERRED BY COUNCIL

G. UPDATES

H. CORRESPONDENCE

I. INFORMATION ITEMS

1. Canada's First LEED Certified Library

The Environmental Advisory Committee members reviewed the news release of January 22, 2004.

2. Broadview Green Grid Project

At the January EAC meeting T. Godwin provided information regarding the Broadview Green Grid Project. The information is being provided for the EAC's perusal.

3. Highway 15 Open House

The Chair advised that on table there is an invitation to the Environmental Advisory Committee members, from the Border Infrastructure Program to attend an open house at Shannon Hall, 6050 – 176 Street from 6pm – 9pm on February 25, 2004, to view preliminary designs for the Highway 15 improvement project.

J. OTHER COMPETENT BUSINESS (continued)

3. Surrey Environmental Partners

The Chair introduced Dr. Dennis Wood and Ms. Deb Jack, Co-Chairs of Surrey Environmental Partners (SEP). Dr. Wood and Ms. Jack provided the following comments:

- SEP is writing to Surrey's Council with the intention of introducing their organization and introducing LEED and recommending that they consider the LEED system, specifically to Grandview Development and other subsequent developments.
- There was a need to develop an organization of people that were concerned with the natural heritage of Surrey. This organization brings the various stewardship groups together in Surrey to better share information and work together. There are other organizations, such as the Georgia Basin Society, that go beyond the boundaries of Surrey; our organization emphasizes the natural area of Surrey.
- Our mission is to preserve, protect, enhance and restore the ecological integrity, biodiversity and natural heritage of Surrey.
- We will bring issues to Council and are available for assistance. We hope that we will assist developers on landmasses and limit approval of clear cutting as we're losing bird habitats among other things. We need to have a community that is concerned with the natural aspects of Surrey and place as much emphasis on natural aspects as we do parks.

The Chair suggested open communication between the Environmental Advisory Committee and SEP so as not to send conflicting messages to Council.

It was suggested that a representative from LEPS provide a presentation to the Environmental Advisory Committee at a future meeting. The SEP organization is based on the LEPS organization and their work preserving and enhancing the environment within the Township of Langley.

4. Environmental Advisory Committee Expired Terms

The Chair requested any changes to the members list circulated on table. The Administrative Assistant advised that request for committee appointments would be advertised the local newspaper in the upcoming months. She also stated that reappointment letters are required if members wish to continue to serve on the Environmental Advisory Committee. Terms that have expired as of December 31, 2003 are Dr. Strang, Dr. Godwin, Dr. Perello, Mr. Sarwal, and Ms. Maher.

K. NEXT MEETING

The next meeting of the Environmental Advisory Committee is scheduled for March 24, 2004 at 7:00 p.m. in the Executive Board Room.

L. ADJOURNMENT

The Environmental Advisory Committee adjourned at 9:30 p.m.

Chairperson