CORNER BROOK LONG TERM CARE FACILITY

THE VALUE OF LEED
PERSPECTIVE BY NL TRANSPORTATION AND WORKS

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LEED Rating System

- Certified: 26 to 32 Points
- Silver: 33 to 38 Points
- Gold: 39 to 51 Points
- Platinum: 52 or More Points

LEED Prerequisites

- Erosion & Sedimentation control during construction
- Engage an independent commissioning agent
- Energy performance must be 25% better than MNECB
- Eliminate CFC based refrigerants & Halon in fire suppression equipment
LEED Prerequisites

Continued…

- Building design must meet MNECB
- Recycling area provided for building operation
- Ventilation to meet ASHRAE 62-2001 Ventilation for Acceptable Indoor Air Quality
- Environmental tobacco smoke control

LEED SCORE CARD
CORNER BROOK LONG-TERM CARE FACILITY

<table>
<thead>
<tr>
<th>Green Design Category</th>
<th>Possible</th>
<th>Targeted</th>
<th>Pending</th>
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<tbody>
<tr>
<td>Sustainable Sites</td>
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Green Building Highlights

- 880 Kw earth energy system
- Building envelope – roof assembly 68%, wall assembly 87% better than MNECB
- Annual Energy Savings predicted to be over 50% better (over $250,000 per year)
- GHG Savings – 780 tonnes Co²/year

Green Building Highlights

- Water consumption estimated almost 40% below NL DOE design standard
- On-site wastewater treatment using no energy input and a natural treatment process
- Storm water treatment and retention for 2 yr storm
Green Building Highlights

- 60% minimum effective heat recovery on air handling systems
- Heat rejected from cooler/freezer added to heat pump water loop
- Use of local produced and materials with recyclable content
Project Procurement

- CP-1 – Site Infrastructure – General Construction Contract
- CP-1A – Geothermal Loop Field – Assigned Construction Contract
- CP-2 – Design Build Contract
- Owner Supply & Contractor Installed
  - Card Access System
  - Patient Wandering System
  - Food Services and Laundry Equipment

Project Procurement

- Owner Supply and Install
  - Window Treatment
  - Way Finding Signage
  - Furniture
  - Closet Cabinets

- Document Management System – Project Website
## Timelines

- **Site Selection**: April 2005
- **CP-1 – Contract Start**: October 2005
- **CP-1A – Contract Start**: September 2006
- **CP-2 – Design Build Award**: February 2007
- **CP-2 – Construction Start**: July 2007
- **Expected Construction Completion**: September 2009
- **Facility Occupancy**: November 2009

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## The Value of LEED

### .... At Design Stage

- Higher knowledge of codes and standards required
- Expanded design expertise
  - Energy Consultant
  - LEED Professional
  - Bldg. Science Professional
  - Landscape Architect
  - Stormwater Hydrology expertise
  - Commissioning Agent
Continued…

- More integrated design deliberations
- Greater transfer of design knowledge and required buy in by facility operators
- Measurable energy performance and GHG emission reductions
- Demands a project sponsor (from the Owner) to achieve success

.... At Construction Stage

- Mandatory environment protection measures
- Promotes collection, storage and recycling of construction waste
- Fosters green building attitude amongst construction work force
Continued…

- A cleaner construction site is a safer workplace
- Product tracking (locally sourced, recyclable content, low VOC) improves product compliance with specifications
- Commissioning as work progresses yields higher built quality and durability

.... At Project Completion & Handover Stage

- Enhanced indoor air quality at time of occupancy due to extended building flush out
- Thorough building systems performance testing
- Complete documentation, from start of design to project completion, in hands of operational staff
- Comprehensive training results in better building operations
.... After Occupancy

- Continuous Performance Measurement Program for building systems
- Green Housekeeping Program
- Green Building Education Program
- Exceptional Occupant Comfort – The end result

Setting the New Building Design/Construction Standard

- LEED GOLD (39 to 51 pts)
- LEED SILVER (33 to 38 pts)
- LEED CERTIFIED (26 to 32 pts)
New Buildings

- Points Awarded for Percentage Reductions in Design Energy Cost Relative to MNECB

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Questions