Energy Case Study

GROSVENOR

Grosvenor invested in a comprehensive, sustainability focused renovation to reinvigorate Broadmead Village and its connection to the community. The project involved modernization of design elements while incorporating practices and technologies to reduce energy consumption, water use, and waste generation. The range of improvements typifies Grosvenor’s long-term approach to shaping a sustainable urban landscape. Improvements at Broadmead include:

- Increasing energy efficiency of the buildings by installing new double-glazed, low-emissivity glass and building facades.
- Reducing water consumption by removing one water feature and replacing another with a smaller feature.
- Introducing an expanded recycling program that intends to increase recycling rates and decrease waste sent to landfills.
- Changing all new lighting to LEDs, including new common-area lighting, wayfinding lighting, and tenant signage.
- Planting only native plants and used drip irrigation that is equipped with rain sensors.
- Managing stormwater runoff by using permeable pavers around all new trees.
- Purchasing 23.56 tonnes of carbon offsets to ensure that the new heated outdoor elements, the covered seating area, and the outdoor fireplace are carbon neutral.
- Changing the center’s adjoining road connection to reduce vehicular pollution and congestion at the entrance and promote bicycle riding.

Cost
$7.85 million, including environmentally responsible features and architectural design elements.

Energy and Water Reductions from 2012 to 2013

<table>
<thead>
<tr>
<th>TOTAL ELECTRICITY SAVED</th>
<th>TOTAL WATER SAVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,668 kWh</td>
<td>4,794 kL</td>
</tr>
</tbody>
</table>

Benefits
The center is now an example that can be used to educate retailers, customers, Grosvenor personnel, and industry professionals. The upgrade has also enabled the center to achieve BOMA BESt Level 1 certification and pursue Level 2 certification.

Challenges
The challenges include understanding how to manage sustainability practices at a public, open-air retail environment where management has little control over consumption; how to keep sustainability at the top of mind for tenants; and how and whether to budget for improvements as capital expenditures or operating costs.