



IBI/HB
Architects

Beach Towers Rezoning Application

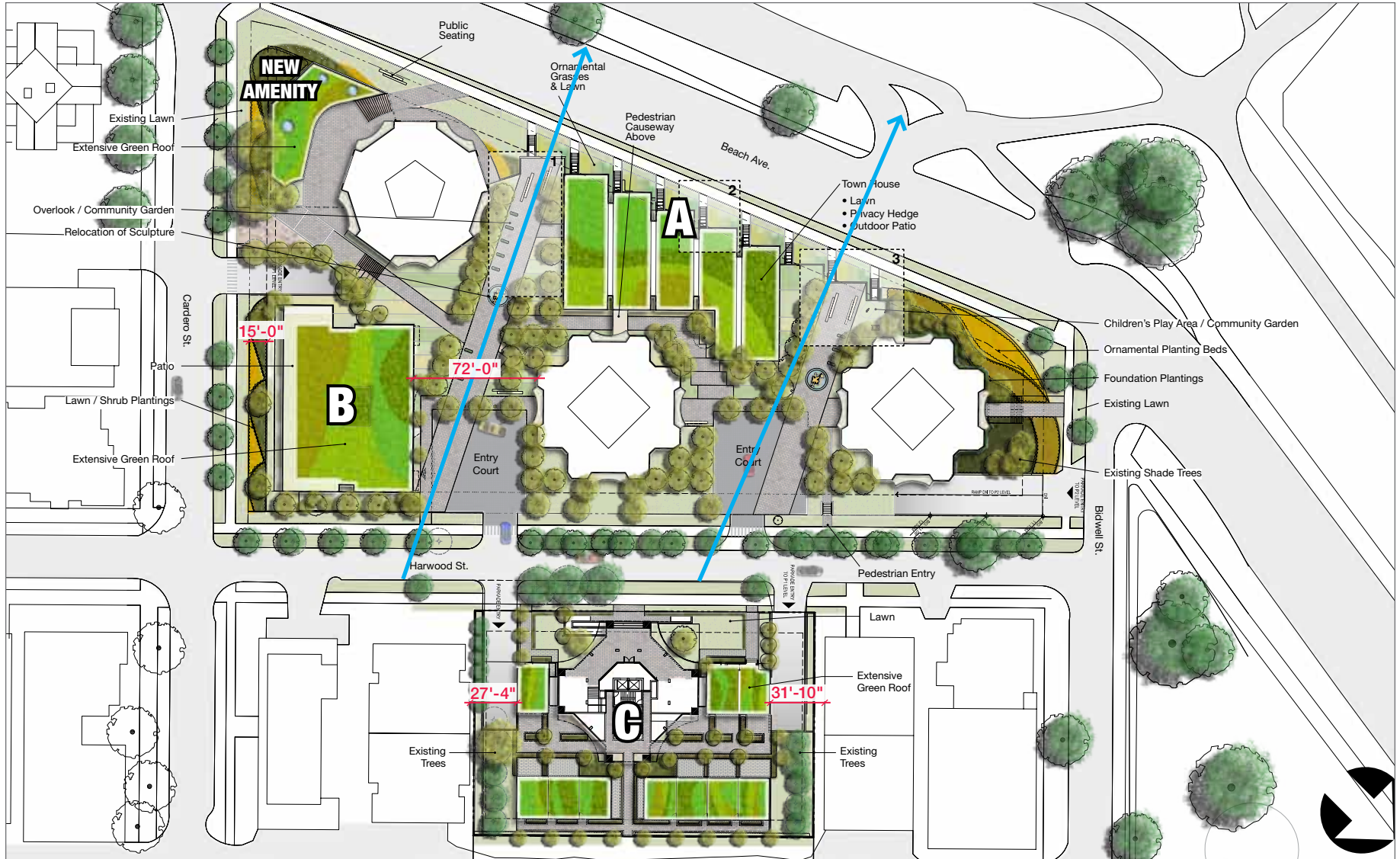
1600 Beach Avenue & 1651 Harwood Street, Vancouver BC



Site Plan/Landscape Plan

The new scheme decreases the length of building elements and increases separation between new and old elements on site.

| | | UDP Meeting Sept. 21, 2011 | Revised Scheme Nov. 7, 2011 | Change |
|-----------|---|-------------------------------|--------------------------------|------------------|
| LOWRISE | Length on Podium Separation from Towers A & B | 151' | 126' | Reduced by 18' |
| | | 59' | 84' | Increased by 25' |
| MIDRISE | Length along Cardero St. Separation from Tower A | 114' | 104' | Reduced by 33' |
| | | 25' | 40' | Increased by 15' |
| TOWNHOMES | Frontage along Harwood St. | 160' | 147' | Reduced by 13' |
| | Depth | 44' | 29' | Increased by 15' |
| | Separation from Neighbours | 46' | 59' | Increased by 13' |



New Amenity

NEW MASSING

BUILDING D
AMENITY PAVILION



Building A | Lowrise on Beach Avenue

CURRENT SCHEME - VIEWED FROM ABOVE



Building B | Midrise on Cardero Street

NEW SCHEME - VIEWED FROM BEACH AVENUE



NEW SCHEME - VIEWED FROM HARWOOD STREET



NEW SCHEME - VIEWED FROM INNER COURTYARD



Building C | Townhomes on Harwood Street

VIEW OF TOWNHOMES ON WEST SIDE OF TOWER



VIEW OF TOWNHOME ON EAST SIDE OF TOWER



Infill under Existing Towers

MacDonald House (Midblock – Harwood Street)

BEFORE



AFTER



Heritage Value



Beach Towers is an apartment complex of four point towers on two sites – one an entire city block bounded by Beach Avenue, Bidwell Street, Harwood Street and Cardero Street and the other at 1651 Harwood Street – Located in Vancouver’s West End overlooking English Bay.

The buildings are not listed on the Vancouver Heritage Register, but were identified in the City of Vancouver’s Recent Landmarks inventory in the “A” Category.

Heritage Value

Beach Towers is of heritage value for it’s role in the development of the West End, as a cultural landscape and for its architectural design.

In the post World War II era the West End of Vancouver was being rebuilt with higher density apartment buildings replacing many of the older single-family houses in what was once Vancouver’s premier residential neighbourhood.

WEMAC Score Card

West End Community Priorities Scorecard Report

Development Application Name: REVISED Rezoning Application - 1600 Beach Avenue and 1651 Harwood Street

Application Date subject to this review: Revised Application September 14, 2011

Date of WEMAC Review: September 15, 2011

| Priority | Score | Comment |
|----------------------------------|---------------|--|
| Housing | 38/50 | <ul style="list-style-type: none"> - Support increase in rental and family housing for the community. - Support diversity of housing options |
| Design | 18/25 | <ul style="list-style-type: none"> - Zig-zag design of townhomes reflects existing building style - WEMAC encourages the applicant to choose final materials and finishes that will complement design and look of current buildings on site. |
| Livability | 10/15 | <ul style="list-style-type: none"> - WEMAC encourages the applicant to increase safety components wherever possible. - WEMAC encourages the applicant to increase pet friendly options. - The streetscape will be improved by this development. |
| Public Space & Facilities | 5/10 | <ul style="list-style-type: none"> - WEMAC encourages the applicant to consider increasing tenant and access to green space. i.e. rooftops - WEMAC encourages the applicant to consider the addition of community garden space to the site. |
| Sub-total | 71/100 | Note: This scorecard should be considered with reference documents: <i>WEMAC Community Priorities Scorecard</i> <i>Community Priorities for the West End: Interim Report to Mayor Gregor Robertson: July 20, 2011</i> |
| Value Added: Bonus Points | 2.5/10 | |
| Total Point Score | 73.5 | |
| Grade Score | 3 | |
| Point and Grade Legend | | |
| Points Awarded | Grade | Description |
| 0 - 50 | 1 | Overall project is counterproductive to the priorities of the West End community. |
| 50 – 65 | 2 | Overall project does not meet the priorities of the West End Community, but it does not negatively affect them. |
| 65 – 80 | 3 | Overall project meets multiple priorities of the West End Community and will enhance multiple priority areas. |
| 80 - 110 | 4 | 80-100 – Overall project will enhance all major priorities of the West End Community. |

WEMAC Rezoning Application Community Priorities Scorecard
Dated: September 15, 2011



Parking / Transportation

- West End is a walkable community with less reliance on cars.
- Bike storage facilities will be provided for all existing and new dwelling units to meet City requirements.
- No additional parking is proposed.
- Existing parking is reduced by 43 cars as per the transportation study.
- Dedicated on site visitor parking will be provided.
- Existing drop off areas are retained off Harwood Street.
- On site car share for residents.

Sustainability / LEED Gold Registered

| 23 | 0 | 3 | Sustainable Sites | 26 Points |
|-----|---|----|---|-----------|
| ✓ | | | Prereq 1 Construction Activity Pollution Prevention | Required |
| 1 | | | Credit 1 Site Selection | 1 |
| 5 | | | Credit 2 Development Density and Community Connectivity | 3.5 |
| | | 1 | Credit 3 Brownfield Redevelopment | 1 |
| 6 | | | Credit 4.1 Alternative Transportation: Public Transportation Access | 3.6 |
| 1 | | | Credit 4.2 Alternative Transportation: Bicycle Storage & Changing Rooms | 1 |
| 3 | | | Credit 4.3 Alternative Transportation: Low-Emitting & Fuel-Efficient Vehicles | 3 |
| 2 | | | Credit 4.4 Alternative Transportation: Parking Capacity | 2 |
| 1 | | | Credit 5.1 Site Development: Protect and Restore habitat | 1 |
| | | 1 | Credit 5.2 Site Development: Maximize Open Space | 1 |
| 1 | | | Credit 6.1 Stormwater Design: Quantity Control | 1 |
| | | 1 | Credit 6.2 Stormwater Design: Quality Control | 1 |
| 1 | | | Credit 7.1 Heat Island Effect: Non-Roof | 1 |
| 1 | | | Credit 7.2 Heat Island Effect: Roof | 1 |
| 1 | | | Credit 8 Light Pollution Reduction | 1 |
| Yes | ? | No | | |
| 5 | 1 | 2 | Water Efficiency | 10 Points |
| ✓ | | | Prereq 1 Water Use Reduction | Required |
| 2 | | | Credit 1 Water Efficient Landscaping | 2.4 |
| | | 2 | Credit 2 Innovative Wastewater Technologies | 2 |
| 3 | | 1 | Credit 3 Water Use Reduction | 2-4 |
| Yes | ? | No | | |
| 8 | 3 | 24 | Energy & Atmosphere | 35 Points |
| ✓ | | | Prereq 1 Fundamental Commissioning of Building Energy Systems | Required |
| | | | Prereq 2 Minimum Energy Performance | Required |
| | | | Prereq 3 Fundamental Refrigerant Management | Required |
| 6 | 3 | 10 | Credit 1 Optimize Energy Performance | 1-19 |
| | | 7 | Credit 2 On-Site Renewable Energy | 1-7 |
| | | 2 | Credit 3 Enhanced Commissioning | 2 |
| 2 | | | Credit 4 Enhanced Refrigerant Management | 2 |
| | | 3 | Credit 5 Measurement and Verification | 3 |
| | | 2 | Credit 6 Green Power | 2 |
| Yes | ? | No | | |
| 6 | 0 | 8 | Materials & Resources | 14 Points |
| ✓ | | | Prereq 1 Storage and Collection of Recyclables | Required |
| | | 3 | Credit 1.1 Building Reuse: Maintain Existing Walls, Floors, and Roof | 1-3 |
| | | 1 | Credit 1.2 Building Reuse: Maintain Interior Non-Structural Elements | 1 |
| 2 | | | Credit 2 Construction Waste Management | 1-2 |
| | | 2 | Credit 3 Materials Reuse | 1-2 |
| 2 | | | Credit 4 Recycled Content | 1-2 |
| 2 | | | Credit 5 Regional Materials | 1-2 |
| | | 1 | Credit 6 Rapidly Renewable Materials | 1 |
| | | 1 | Credit 7 Certified Wood | 1 |
| Yes | ? | No | | |
| 13 | 0 | 2 | Indoor Environmental Quality | 15 Points |
| ✓ | | | Prereq 1 Minimum Indoor Air Quality Performance | Required |
| ✓ | | | Prereq 2 Environmental Tobacco Smoke (ETS) Control | Required |
| 1 | | | Credit 1 Outdoor Air Delivery Monitoring | 1 |
| 1 | | | Credit 2 Increased Ventilation | 1 |
| 1 | | | Credit 3.1 Construction IAQ Management Plan: During Construction | 1 |
| 1 | | | Credit 3.2 Construction IAQ Management Plan: Before Occupancy | 1 |
| 1 | | | Credit 4.1 Low-Emitting Materials: Adhesives and Sealants | 1 |
| 1 | | | Credit 4.2 Low-Emitting Materials: Paints and Coatings | 1 |
| 1 | | | Credit 4.3 Low-Emitting Materials: Flooring Systems | 1 |
| | | 1 | Credit 4.4 Low-Emitting Materials: Composite Wood and Agrifibre Products | 1 |
| 1 | | | Credit 5 Indoor Chemical and Pollutant Source Control | 1 |
| 1 | | | Credit 6.1 Controllability of System: Lighting | 1 |
| 1 | | | Credit 6.2 Controllability of System: Thermal Comfort | 1 |
| 1 | | | Credit 7.1 Thermal Comfort: Design | 1 |
| 1 | | | Credit 7.2 Thermal Comfort: Verification | 1 |
| 1 | | | Credit 8.1 Daylight and Views: Daylight | 1 |
| 1 | | | Credit 8.2 Daylight and Views: Views | 1 |
| Yes | ? | No | | |
| 1 | 0 | 5 | Innovation in Design | 6 Points |
| | | 1 | Credit 1.1 Innovation in Design | 1 |
| | | 1 | Credit 1.2 Innovation in Design | 1 |
| | | 1 | Credit 1.3 Innovation in Design | 1 |
| | | 1 | Credit 1.4 Innovation in Design | 1 |
| | | 1 | Credit 1.5 Innovation in Design | 1 |
| | | 1 | Credit 2 LEED® Accredited Professional | 1 |
| Yes | ? | No | | |
| 4 | 0 | 0 | Regional Priority | 4 Points |
| 1 | | | Credit 1 Durable Building | 1 |
| 1 | | | Credit 2.1 Regional Priority Credit | 1 |
| 1 | | | Credit 2.2 Regional Priority Credit | 1 |
| 1 | | | Credit 2.3 Regional Priority Credit | 1 |

LOW CARBON ENERGY SUPPLY FEASIBILITY SCREENING STUDY

FINAL REPORT JULY 20, 2012

- 40% reduction in GHG emissions.
- Proposed new replacement central heating plant servicing all existing and new buildings on site.
- The central plant will provide hot water heating and domestic hot water

Submitted by:

Light House Sustainable Building Centre
with
Cobalt Engineering Ltd.

Submitted to:

IBI Group



Light House
2060 Pine Street,
Vancouver, BC Canada VJ 4P8
T: 604 682 5960 F: 604 682 5961
www.sustainablebuildingcentre.com

Street End Views – Cardero



BEFORE



AFTER

- AMENITY & LANDSCAPE
- MIDRISE



BEFORE



AFTER

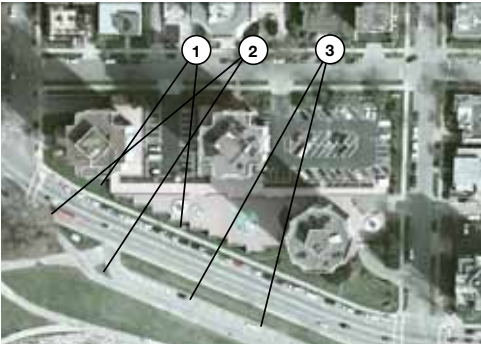
Street Views – Harwood Street



BEFORE



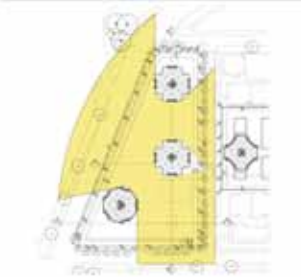
AFTER



BEFORE



AFTER



BEFORE



BEFORE



AFTER



AFTER