TYPE IV PLANNED DEVELOPMENT, SUBDIVISION, SHORELINE SUBSTANTIAL DEVELOPMENT, CONDITIONAL USE AND VARIANCE PERMITS, AND CRITICAL AREAS PERMIT:

COLUMBIA WATERFRONT LLC
VANCOUVER WATERFRONT DEVELOPMENT

(MASTER PLAN APPLICATION)

June 2009

Volume 1. Master Plan Application
Volume 2: Design Guidelines
Volume 3 Preliminary Hydrology Report
Volume 4: Pre-Application Conference Notes

Applicant:
Columbia Waterfront, LLC
Contact: David Copenhaver, Vice President, Development
Gramor Development, Inc.
19767 SW 72nd Avenue, Suite 100
Tualatin, OR 97062
(503) 245-1976

Table of Contents

Section 1.0 Introduction
1 1 Project Location

Section 2.0 Master Plan
2.1 Design Intent
2 2 Illustrative Plans
Fig G1 Aerial
Fig G2 Master Plan
Fig G3 Block Plan
Fig G4 Statistics Plan
Fig G5 District Plan
Fig G6 Overlay Plan
Fig G7 Vicinity Zoning Map

Section 3.0 City of Vancouver: Process and Codes
3 1 Private Development Review Process
3.2 The Process
3.3 CX Zoning Description
3 4 Applicable Standards / Codes
3 5 Department Contacts
3 6 Sustainable Design
3.7 Incentives
3.7 1 Additional Height
3 7 2 Reduction in Parking
3.7.3 Reduction in Transparency

Section 4.0 District Design Guidelines
4.1 Experience Retail District
4 1 1 General
4.1 1.a Proposed Uses
4 1.1 b FAR, Lot Coverage and Building Height
4 1 2 Building Architecture
4.1.2.a Design a well proportioned and unified building
4.1.2.b Design corners that build active intersections
4.1.2.c View corridors / view preservation
4.1.2.d Reinforce building entries
4.1.2.e Respond to the neighborhood
4 1.2.f Enhance the skyline
4 1 2.g Integrate roofs and use of roof tops
4.1.2.h Design energy efficient building envelope that is appropriate to the building type and orientation of each individual façade
4.1.2.i Consider sunlight, shadow, glare, reflection, wind and rain
4 1.2.j Lighting (reduce light pollution)
4 1.2.k Provide active-not blank facades
4 1.2 l Encourage diversity in scale and material at sidewalk level
4 1.3 Streets and Pedestrian Areas
4 1.3 a Respond to physical environment (including integrate the river)
4 1 3 b Reinforce and enhance the pedestrian system and safety
4.1.3.c Create public places for gathering and views to the river
4.1.3.d Provide inviting and usable open space
4.1.3.e Encourage design that enhances "place"
4.1.3.f Overhead weather protection
4 1 3 g Mechanical Equipment Services
4.1.3.h Integrate transit and bicycle connections
4 1 3 i Bicycle routes and parking

4.1.3 j Crime Prevention through Environmental Design (CPTED)
4.1 3.k Lighting
4 1 3.l Integrate storm water management systems
4 1 3 m Select appropriate sustainable design elements that can be viewed by public.

4 1 4 Vehicular Access and Parking
4.1.4.a Integrate structured parking and screening
4.1 4.b Minimize curb cut impacts
4 1 4 c Integrate shared parking between uses
4 1 4.d Minimize the presence of service areas
4 1.4 e Solid Waste and Recycling
4.1.4.f Bicycle parking

4.1 5 Streetscape Standards
4 1.5.a Furniture, lighting, fixtures, ect.
4 1.5.b Establish a transition between buildings and open space

4 1 6 Signage
4.1 6.a Building Signage
4 1 6.b Parking signage
4.1.6 c Way finding signage
4 1 6.d Hazardous materials discharge. Label drain inlets

4.2 Residential Park District

4.2.1 General
4.2.1.a Proposed Uses
4 2.1.b FAR, Lot Coverage and Building Height

4 2 2 Building Architecture
4.2.2.a Design a well proportioned and unified building
4.2 2.b View corridors / view preservation
4 2.2.c Reinforce building entries
4.2.2.d Respond to the neighborhood
4.2.2.e Enhance the skyline
4.2.2.f Integrate roofs and use of roof tops
4.2.2.g Design energy efficient building envelope that is appropriate to the building type and onentation of each individual façade
4 2.2.h Consider sunlight, shadow, glare, reflection, wind and rain
4.2.2.i Lighting (reduce light pollution)
4.2.2 j Provide active-not blank facades
4.2.2.k Encourage diversity in scale and material at sidewalk level

4.2.3 Streets and Pedestrian Areas
4.2.3.a Respond to physical environment (including integrate the river)
4.2.3 b Reinforce and enhance the pedestrian system and safety
4.2.3.c Create public places for gathering and views to the river
4.2.3 d Provide inviting and usable open space
4.2.3.e Encourage design that enhances "place"
4.2.3.f Overhead weather protection
4.2.3.g Mechanical Equipment Services
4.2.3.h Integrate transit and bicycle connections
4.2 3.i Bicycle routes and parking
4.2.3.j Crime Prevention through Environmental Design (CPTED)
4.2.3.k Lighting
4.2.3 l Integrate storm water management systems
4.2.3.m Select appropriate sustainable design elements that can be viewed by public.

4.2.4 Vehicular Access and Parking
4.2.4 a Integrate structured parking and screening
4.2.4.b Minimize curb cut impacts
4.2.4.c Integrate shared parking between uses
4.2.4.d Minimize the presence of service areas

4 2 4 e Solid Waste and Recycling
4.2 4 f Bicycle parking
4 2 5 Streetscape Standards
4 2 5 a Furniture, lighting, fixtures, ect
4 2 5.b Establish a transition between buildings and open space
4.2 6 Signage
4 2 6 a Building Signage
4.2 6.b Parking signage
4.2 6.c Way finding signage
4 2 6 d Hazardous materials discharge. Label drain inlets

4 3 Columbia Way District
4 3 1 General
4.3 1.a Proposed Uses
4 3.1 b FAR, Lot Coverage and Building Height
4.3 2 Building Architecture
4 3 2.a Design a well proportioned and unified building
4 3 2 b Design corners that build active intersections
4.3 2 c View corridors / view preservation
4 3.2 d Reinforce building entnes
4 3.2.e Respond to the neighborhood
4 3.2.f Enhance the skyline
4 3.2.g Integrate roofs and use of roof tops
4.3.2.h Design energy efficient building envelope that is appropriate to the building type and orientation of each individual façade
4 3.2.i Consider sunlight, shadow, glare, reflection, wind and rain
4 3.2.j Lighting (reduce light pollution)
4 3 2.k Provide active-not blank facades
4.3 2 l Encourage diversity in scale and material at sidewalk level
4 3 3 Streets and Pedestrian Areas
4.3 3 a Respond to physical environment (including integrate the river)
4 3.3.b Reinforce and enhance the pedestrian system and safety
4 3 3.c Create public places for gathering and views to the river
4 3 3.d Provide inviting and usable open space
4 3.3.e Encourage design that enhances "place"
4.3 3 f Overhead weather protection
4.3 3 g Mechanical Equipment Services
4 3.3.h Integrate transit and bicycle connections
4 3.3.i Bicycle routes and parking
4 3 3 j Crime Prevention through Environmental Design (CPTED)
4.2.3.k Lighting
4.2.3 l Integrate storm water management systems
4 3.3 m Select appropriate sustainable design elements that can be viewed by public.
4.3.4 Vehicular Access and Parking
4 3 4.a Integrate structured parking and screening
4 3 4 b Minimize curb cut impacts
4.3 4.c Integrate shared parking between uses
4.3 4 d Minimize the presence of service areas
4 3 4 e Solid Waste and Recycling
4.3.4.f Bicycle parking
4.3.5 Streetscape Standards
4 3 5.a Furniture, lighting, fixtures, ect
4 3 5.b Establish a transition between buildings and open space
4 3 6 Signage
4 3 6.a Building Signage
4 3.6.b Parking signage
4 3 6.c Way finding signage

4 3 6.d Hazardous materials discharge Label drain inlets

4.4 Cultural District
4.4.1 General
4.4.1.a Proposed Uses
4 4 1.b Proposed FAR, Lot Coverage and Building Height
4 4.2 Building Architecture
(No Design Guidelines at this time for this District)
4.4 3 Streets and Pedestrian Areas
(No Design Guidelines at this time for this District)
4 4.4 Vehicular Access and Parking
(No Design Guidelines at this time for this District)
4 4 5 Streetscape Standards
(No Design Guidelines at this time for this District)
4 4 6 Signage
(No Design Guidelines at this time for this District)

Section 5.0 Overlays (narratives and graphics)
5 1 Access Overlay
5 2 Festival Streets Overlay
5.3 Service Overlay
5 4 Grant and Esther Overlay

Section 6.0 Parks and Open Space
Figure G8 – Illustrative Plan
6.1 Parks and Open Space Concept
6.1.1 Design Intent
6 1.2 Design References
6 1.3 Vision
6.1.4 Principles
6 1.5 Program
6.2 Parks and Open Space Character Precincts
6.2.1 Western Waterfront Park
6 2 2 Grant Street Plaza
6 2.3 Eastern Riverfront Park and Esplanade
6.2.4 Internal Neighborhood Park
6.2 5 Mews
6.3 Materials Palette
6.4 Plant Materials
6.4.1 Selection Criteria
6 4.2 Representative Plant Lists
6.4.2.a Parks and Open Space Planting
6.4.2.b Rain Garden Planting
6.4.2.c Urban Agriculture Planting
6.4.2.d Meadow Planting
6.4.2.e Riparian Planting
6.5 Site Furnishings
6.6 Signage / Interpretation
6 7 Trail and Path Standards
6 7.1 Renaissance Water Trail
6.3.1 a Trail Widths
6.3.1.b Surface Materials
6.3.1.c Lighting
6.7 2 Waterfront Trail
6.3.2.a Trail Widths
6 3.2.b Surface Materials
6.3 2.c Lighting
6.7.3 Park Trails
6.3.2.a Trail Widths

6.3.2 b Surface Materials
6 3 2 c Lighting
6.8 Children's Play Area
6.9 Lighting Approach
6 10 CPTED Approach
6.11 Universal Accessibility Approach
6 12 Sustainability Guidelines and Approach
6 12 1 Rainwater Management
6.9 1.a Absorbent Landscape
6 9 1 b Infiltration Swales
6 9.1 c Rain Gardens
6.9 1.d Pervious Paving
6.9 1.e Green Roofs
6 12.2 Ecology and Biodiversity
6 12 3 Urban Agriculture
6.12 4 Energy
6.12 5 Recycling

Section 7.0 Figures
7 1 Experience / Retail District Figures
Fig E1 Block 08
Fig E2 Block 09
Fig E3 Block 11
Fig E4 Block 12
Fig E5 Block 16
Fig E6 Section C Green Street 1
Fig E7 Section C.2· Green Street 2
Fig E8 Section D: Retail 1
Fig E9 Section D 2: Retail 2
Fig E10 Section D.3: Retail 3
Fig E11 Section F.3· Grant Street Corridor 3
Fig E12 Section J 4. Green Street
Fig E13 Street Intersection
Fig E14 Street Intersection
Fig E15 Street Intersection
7 2 Residential Park District Figures
Fig R1 Block 17
Fig R2 Block 18
Fig R3 Block 19
Fig R4 Block 20
Fig R5 Block 21
Fig R6 Section A.3 Residential Park 2
Fig R7 Section B. Access 1
Fig R8 Section G: Residential Park
Fig R9 Section G.2· Green Street
Fig R10 Section H.3: Service 3
Fig R11 Section J: Green Street 1
Fig R12 Section J.2: Green Street 2
Fig R13 Section J 3: Green Street 3
Fig R14 Street Intersection
Fig R15 Street Intersection
7 3 Columbia Way District Figures
Fig C1 Block 03
Fig C2 Block 04
Fig C3 Block 05
Fig C4 Block 06
Fig C5 Block 07
Fig C6 Block 08
Fig C7 Block 10

Fig C8 Block 11
Fig C9 Block 13
Fig C10 Block 14
Fig C11 Section A: Retail
Fig C12 Section A 2. Residential Park 1
Fig C13 Section B 2: Access 2
Fig C14 Section E. Esther Street Corridor 1
Fig C15 Section E.2. Esther Street Corridor 2
Fig C16 Section F Grant Street Corridor 1
Fig C17 Section F.2 Grant Street Corridor 2
Fig C18 Section H Service 1
Fig C19 Section H.2· Service
Fig C20 Street Intersection
Fig C21 Street Intersection
Fig C22 Street Intersection
Fig C23 Street Intersection

7 4 Cultural District Figures
Fig P1 Block 01

Fig P2 Block 02
Fig P3 Street Intersection
Fig P4 Street Intersection

7.5 Streetscape Figures
Fig S1 Bicycle Racks
Fig S2 Bus Shelters
Fig S3 Parking Meters
Fig S4 Street Bench
Fig S5 Pedestrian Lights
Fig S6 Street Lights
Fig S7 Trash Compactor
Fig S8 Recycling Bins
Fig S9 Bollard

Section 8.0 Glossary
Definitions

Section One

Section 1.0 Introduction:

Located within the city limits of Vancouver, Washington, on the former Boise Cascade parcel along the Columbia River, the Waterfront development will be an extension of downtown Vancouver and will connect the Ester Short neighborhood to the Columbia River waterfront The project will be constructed over a period of 10 to 15 years and will include a wide variety of uses

The development will become a new urban focus in Vancouver, featuring shopping, restaurants, residences, entertainment attractions, hotels, offices, landscaped parks, and public plazas.

The guidelines set forth in this document are designed to ensure that the Vancouver Waterfront integrates into and sets the tone of future development for the central business district. A focus of the guidelines is the creation of a pedestrian friendly neighborhood The appropriate placement of trees, fountains, benches, street lights, and decorative sidewalk treatments will add a human-scaled texture to the many plazas and streets.

The combination of pedestrian-oriented urban streets, distinctive architecture, sensitive integration with Vancouver's history and values, and progressive planning strategies will make The Vancouver Waterfront an attractive and treasured gathering place for Vancouver's citizens and its visitors for years to come

The Vancouver Waterfront provides the context for success necessary to meet the City's goals, and fulfill and expand Vancouver's urban potential by

- Linking the waterfront with the downtown and public open spaces
- Retaining a significant amount of existing open space.
- Creating a unique mixed-use project that sustains urban synergy within the project as well as throughout downtown Vancouver, leading the way for future revitalization of the entire downtown district

1.1 Project Location:

The project site is located on the site of the former Boise Cascade paper facility in downtown Vancouver within the SW ¼ of Sec 27 and the SE ¼ of Sec. 28 T2N R1E WM. It is referred to in the VCCV as the Columbia West Renaissance District. The site is bounded on the north by the Port of Vancouver's (Port) schedule 1 rail project, on the south by the Columbia River, on the east by the Port's Terminal 1, and on the west by land partially used by the adjacent cement facility (Figure A-1, A-2). The project site is composed of tax parcels 49335-000, 502180-000, 48841-000, 48843-000 and 502240-000. A portion of the project site is owned by the Port and subject to a lease agreement. Adjacent to the project site is 3 18 acres of land and bedlands owned by the State of Washington and managed by Department of Natural Resources (DNR) (no tax parcel #) that are subject to a lease agreement with Columbia Waterfront LLC but are not part of the project site

The site totals 32.62 acres, including 28 44 acres owned by Columbia Waterfront LLC, and 4.18 acres owned by the Port

This page to remain blank

Section Two

Section 2.0 Master Plan:

2.1 Design Intent:

The need for this project is best articulated in the vision established by the VCCV plan:

> *Many of the components of a successful city center are already in place in Vancouver, such as Esther Short Park and the ring of new buildings around it. The vision that is articulated in this plan is to cultivate a diversity of new uses that will complement those that exist and, at the same time, serve the resident, working, and visiting populations in and around the city center.*

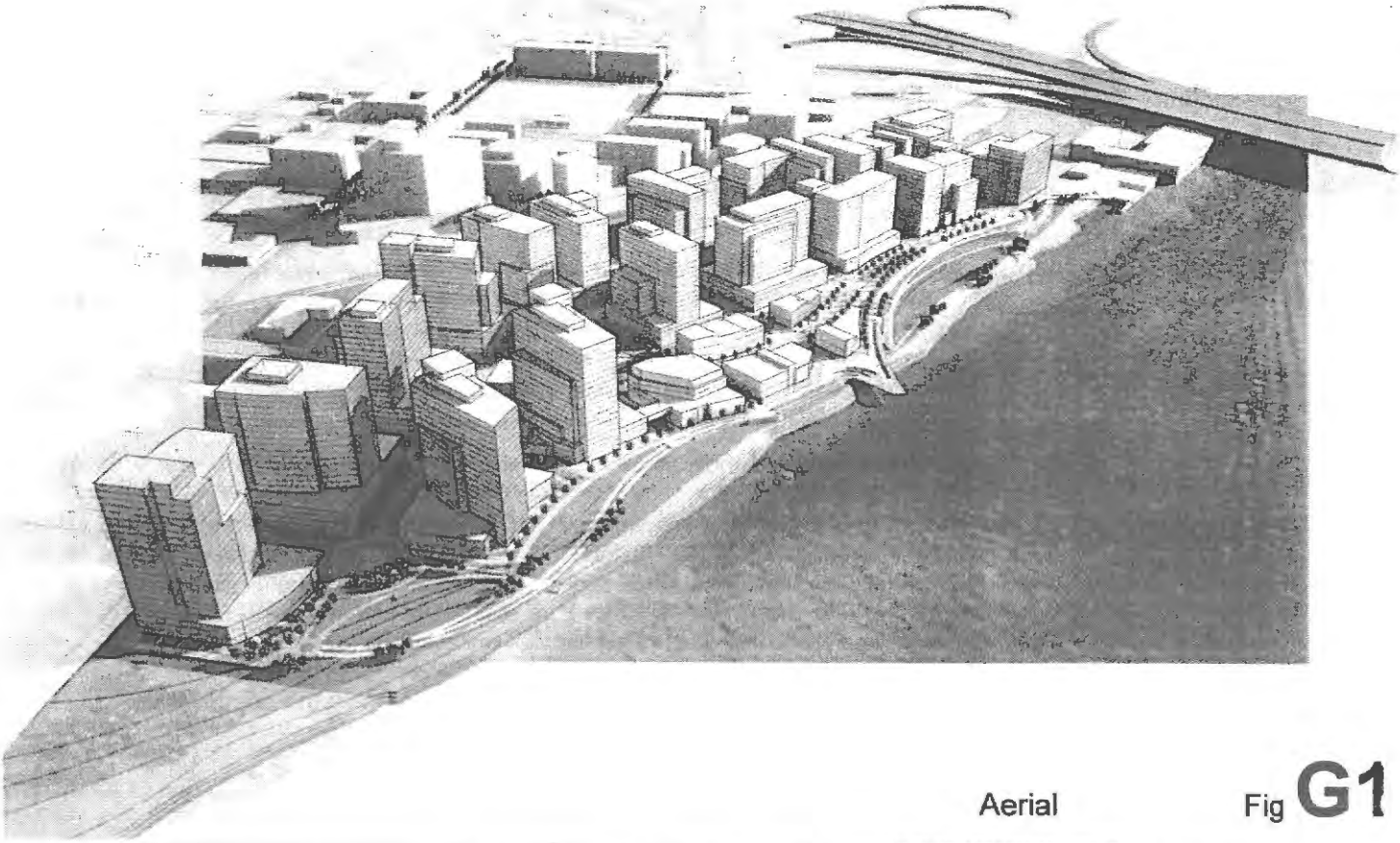
Columbia Waterfront LLC took on the challenge of developing the Vancouver waterfront for the simple fact that they want to make Vancouver a better place to live and work, propel this city and region into the 21st century and beyond, and return the title of "gateway to the Pacific Northwest" to the Columbia shores of the city where it was founded. The lineage of industry is no stronger anywhere than in what can be seen in the history of the waterfront site and the surrounding shores. The factories, mills, and shipyards that once were the key to the economic vitality of this community and region have given way to a new generation of economic opportunities that will continue to keep this community and region relevant in an ever-changing world.

The site, long closed to the public, will now have the opportunity to be experienced by everyone. In taking on this charge, Columbia Waterfront LLC realizes the incredible responsibility it has to the community in preserving the past while reaching for the future In identifying this delicate balance, 12 main goals emerged for the design of the waterfront

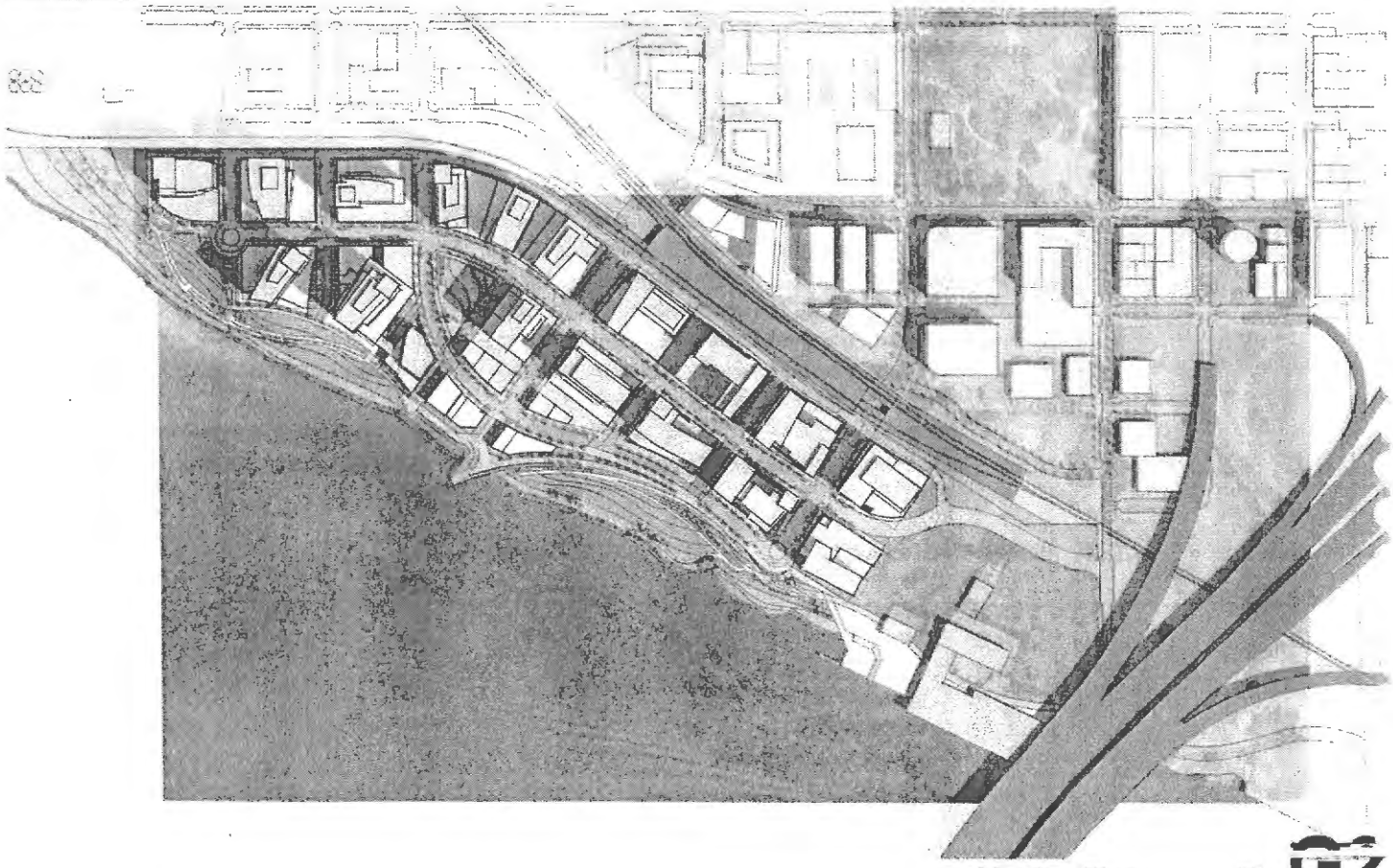
- Public access to waterfront
- Seamless connection of waterfront to downtown.
- Diversity of people and uses
- Create a sense of community.
- Take into account the history and culture of the site and region.
- First phase needs to stand alone
- Regional attraction – a sense of pride
- Has a presence from the air, I-5, rail, and water
- Positive catalyst for growth in downtown Vancouver.
- Implement environmental strategies for redevelopment of a current industrial site into a public amenity.
- Adaptation of the VCCV subarea plan as development program goals.
- Be an integral part of a transit system that serves Vancouver and the greater region

2.2 Illustrative Plans:

Fig 1 Aerial
Fig 2 Master Plan
Fig 3 Block Plan
Fig 4 Statistics Plan
Fig 5 District Plan
Fig 6 Overlay Plan
Fig 7 Vicinity Zoning Map

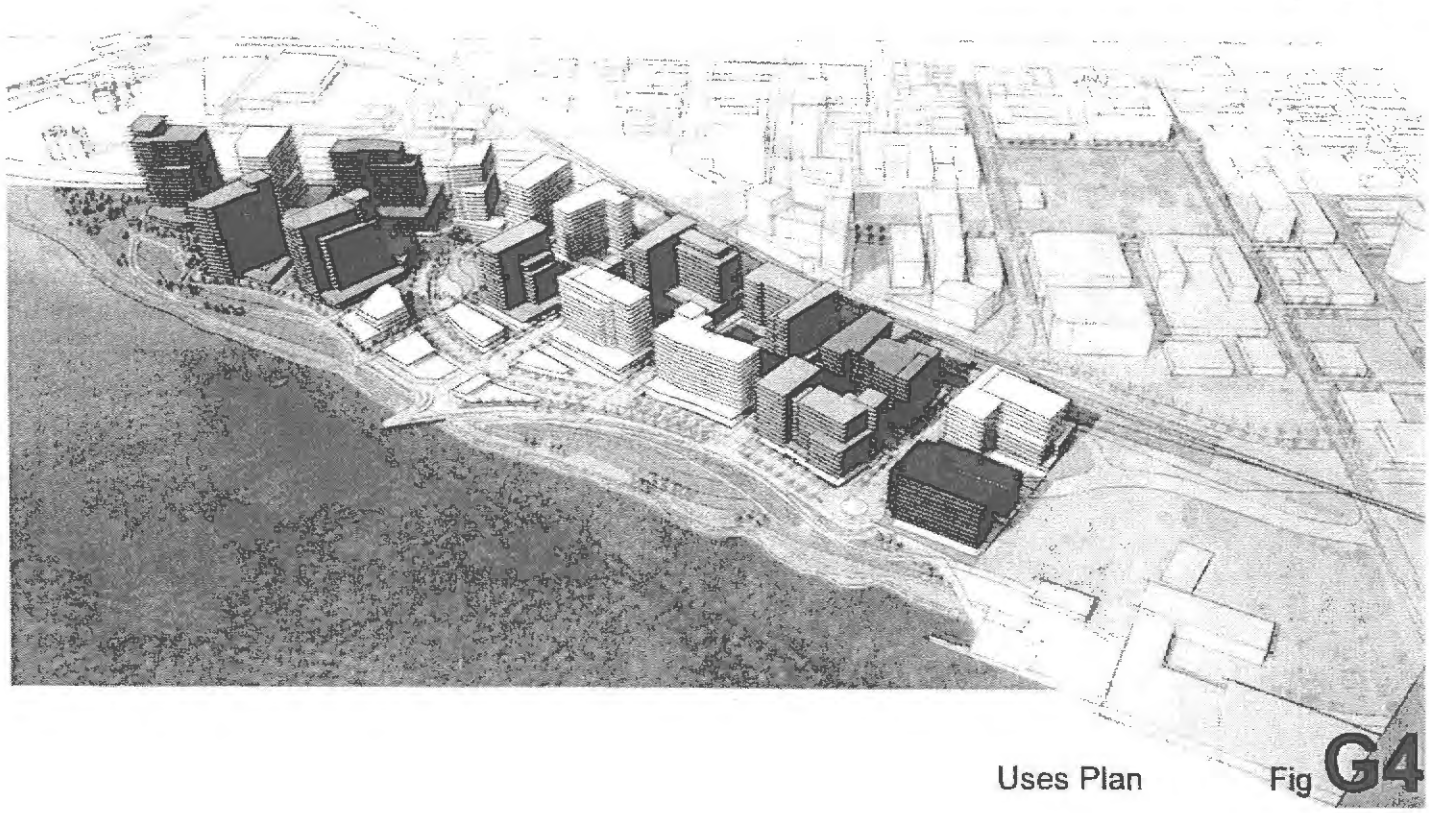


Aerial Fig **G1**

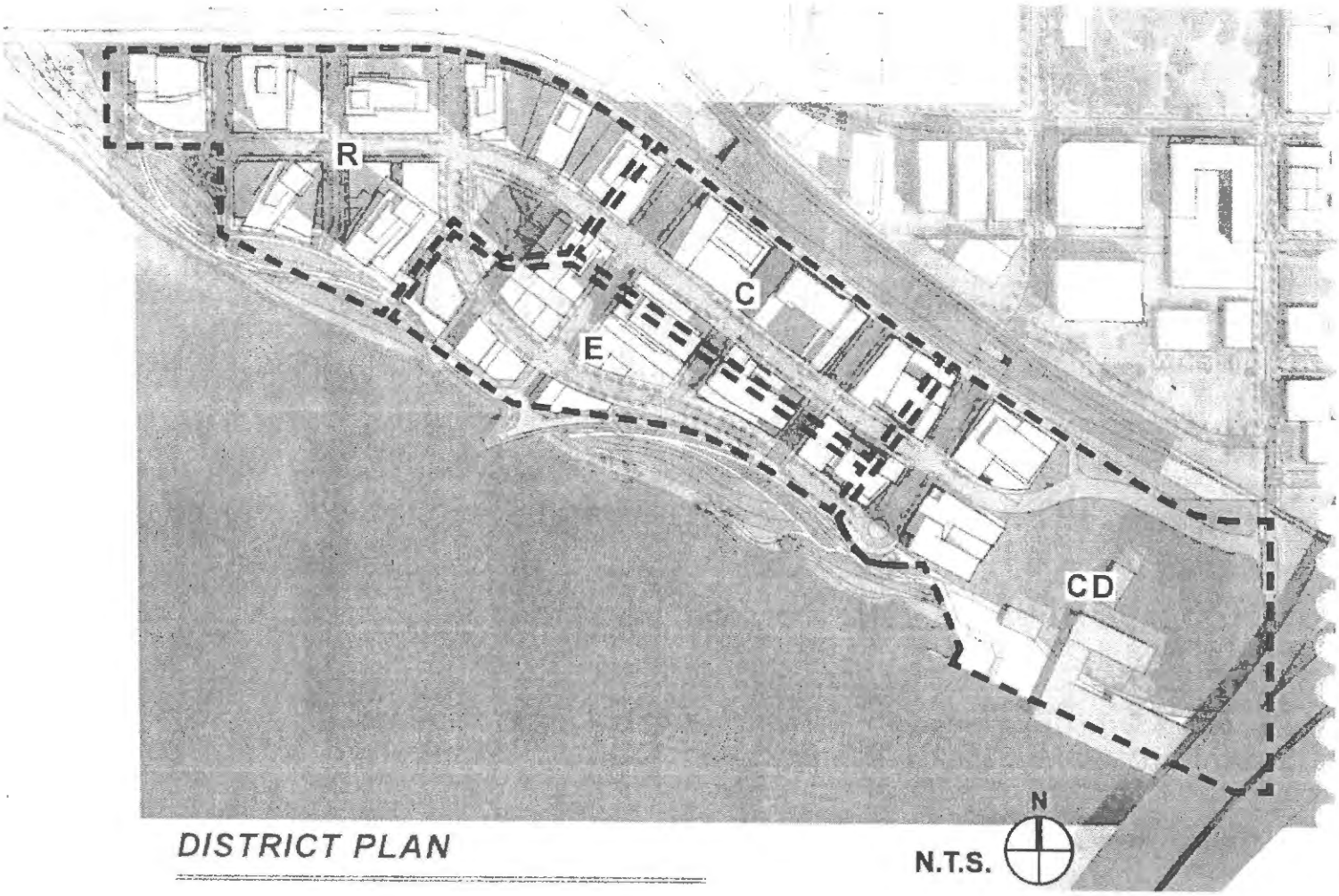


Master Plan Fig **G2**

Block Plan Fig **G3**



Uses Plan Fig **G4**



DISTRICT PLAN

C COLUMBIA WAY DISTRICT

- Columbia Way District is designed to be the transit connection and the main route through the waterfront
- Allowed uses include retail, residential, and office.
- Podiums height 60'-0" max.
- Towers over 80' in height must come down to sidewalk.
- Above and below grade structured parking allowed.

R RESIDENTIAL PARK DISTRICT

- Residential Park District is envisioned to create a quieter and greener area.
- Double tree lined sidewalks.
- Allowed uses include ground floor townhouses, live/work, retail and office.
- Buildings must provide active roof uses and green roofs for unoccupied areas.
- Above and below grade structured parking allowed.

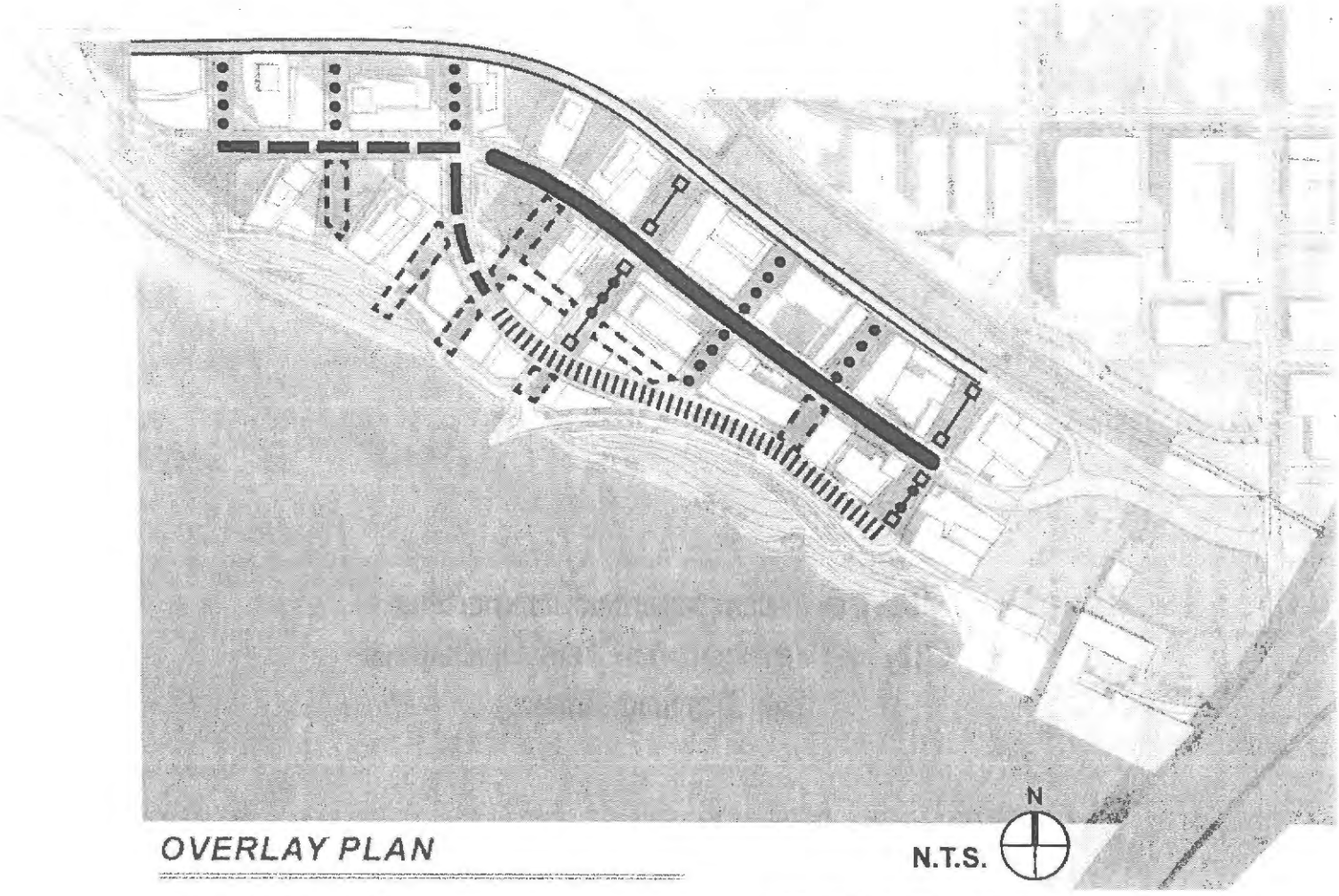
E EXPERIENCE / RETAIL DISTRICT

- Experience Retail District includes the Festival Street. This area is envisioned to be the heart of the waterfront with connections to the river, restaurants and retail core.
- Allowed uses include are retail, restaurants, hotel and office.
- Buildings must provide active roof uses and green roofs for unoccupied areas.
- Additional signage allowed.
- Below grade structured parking allowed.

CD CULTURAL DISTRICT

- Allowed uses include cultural civic, retail hotel, office and light industrial.
- Above and below grade structured parking allowed.
- No residential uses allowed.

District Plan Fig **G5**



OVERLAY PLAN

ACCESS

- One curb cut allowed per block for parking and service entries.
- Must provide 50% transparency at Grade.

URBAN GREEN STREETS

- Plazas, no cars allowed.
- Water features and enhanced landscape.
- Pavers or other pervious systems required.

SERVICE

- No street parking allowed.
- Two curb cuts allowed per block for parking & service entries.

COLUMBIA WAY

- Street parking allowed.
- No curb cuts allowed.
- Must provide 70% transparency at Grade.
- Transit street: bike, pedestrian, public transit and bike only lanes.

EXPERIENCE RETAIL

- Street parking allowed.
- No curbs cuts allowed.
- Must provide 70% transparency of entire building at grade.
- Additional signage allowed.

GRANT AND ESTHER

- Main "portal" to the Waterfront.
- Establish view corridors setback towers.
- Street parking allowed.
- One curb cut allowed per block for parking and service entries.
- Must provide 70% transparency at Grade.

RESIDENTIAL PARK

- Double tree lined sidewalk.
- Residential allowed at base.
- Street parking allowed.
- One curb cut allowed per block for parking and service entries.

Overlay Plan Fig **G6**

To be incorporated once the
City of Vancouver has updated
the Zoning Map.

Vincinity Zoning Map Fig G7

Section Three

Section 3.0 City of Vancouver: Process and Codes

3.1 Private Development Review Process:

All projects in the Waterfront must submit their application and design to the Vancouver Waterfront Design Review Committee (VWDRC) for approval, prior to submittal to the City of Vancouver

This process is intended to assist the building developer in designing projects that are compatible with the Vancouver Waterfront Design Guidelines and the character of the Vancouver Waterfront

Once a complete application is received by the VWDRC, the project is then scheduled for the next available project review meeting, at which a presentation is made by the applicant before the committee. The VWDRC will review design for consistency with the design guidelines and character of the Waterfront The committee then will either, approve, approve with modifications or reject the project based on its criteria.

Once final Project Review approval has been obtained, the applicant may submit to the City of Vancouver

Any development agreements will be required to meet the standards of VMC 20 250

3.2 The Process:

All new / major developments within the Waterfront require Project Review Committee approval prior to the city issuing a building permit for proposed construction Minor development changes as defined by the City of Vancouver, will need to follow the City of Vancouver's minor development process. Design Guidelines associated with minor development changes will be addressed in the future when applicable

Once a project has been identified as requiring approval by the Project Review Committee, the property owner or his/her agent must submit an application along with required architectural plans and information to the Department of Community Preservation and Development to schedule a meeting with the committee.

The project review process is intended to assist the building developer in designing projects that are compatible with the Design Guidelines, and therefore it is imperative that projects be presented and discussed with the Committee at the earliest possible stage of design. Discussions with the Committee early in the design process will help to facilitate the project's direction.

For major projects, a two-step review process is required, with the first meeting to be used for preliminary discussion of a project's design, and the second meeting to consider a more "finished" project proposal This two-step process is also recommended for smaller projects.

Once a complete application is received by the department of Community Preservation and development, the project is then scheduled for the next available Project Review Committee meeting, at which a presentation is made by the applicant before the Committee at a public hearing. The Committee reviews the project for consistency with adopted guidelines and review criteria, and either approves, approves with modifications or disapproves the project based on its criteria

Once final Project Review approval has been obtained, the applicant may submit a building permit application to the City Building Division.

- Design Review (VMC 20.265)

3.3 CX Zoning Description:

The CX zoning district is designed to provide for a concentrated mix of retail, office, civic and housing uses in downtown Vancouver The broad range of allowed uses is intended to promote Vancouver as the commercial, cultural, financial and municipal center of Clark County Typical uses include, but are not limited to retail sales, hotel/motel, restaurants, professional offices, educational, cultural and civic institutions, public buildings; and commercial parking Ground floor residential is allowed with the exception of properties fronting Main Street between Sixth Street and Mill Plain All of the property that has a CX zoning designation lies within the Downtown Plan District

3.4 Applicable Standards / Codes:

Below is a list of Vancouver Municipal Codes that should be reviewed by all developers looking to design / build a project on the Waterfront This list is only for reference

- VMC Title 11· Street and Sidewalk Standards
- VMC Title 11.95. Concurrency
- VMC Title 12: Trees and Vegetation
- VMC Title 14.04, 14.10 and 14 16· Water and Sewers
- VMC Title 14.24: Erosion Control
- VMC Title 16: Fire Code
- VMC Title 17 Building and Construction
- VMC Title 20 Zoning / Land Division / SEPA
- VMC Title 20.570 Airport Height Overlay District
- VMC Title 20 620· Columbia River Shoreline Enhancement Plan District
- VMC Title 20 630 Downtown Plan District
  - Building Lines (VCM 20 630.020)
  - Rain Protection (VCM 20.630 030)
  - Blank Walls (VCM 20 630.040)
  - Building Heights (VCM 20.630 050)
  - Parking Control (VCM 20 630.060)
  - City Center Waterfront (VCM 20.630.080)
- VMC Title 20.710. Archaeological Resource Protection
- VMC Title 20.740· Critical Areas Protection .
- VMC Title 20.760. Shoreline Management Area
- VMC Title 20.770: Tree Conservation
- VMC Title 20 790: SEPA Regulations
- VMC Title 20.915: Impact Fees
- VMC Title 20.925. Landscaping
- VMC Title 20.945. Parking and Loading
- VMC Title 20.960: Signs
- VMC Title 20.970 Solid Waste Disposal and Recycling

3.5 Department Contacts:

For more information about the project Review Process, please contact the Department of Community Preservation and Development at (360) 696-8005 and for Public Works, contact the Department of Public Works (360) 696-8290

3.6 Sustainable Design:

The Vancouver Waterfront is striving to be a sustainable neighborhood The neighborhood will be certified by the USGBC under the LEED program. As a requirement of that rating system, all buildings in this area must be 10% better than ASHRAE 90.1-2007 and use 20% less water than baseline buildings.

Buildings have the greatest opportunity to reverse the effects of climate change by reducing their overall energy demand and generating their own energy on site Buildings currently use 72% of electricity consumption and produce 39% of CO2 emissions (according to Environmental Information Administration (2008) EIA Annual Energy Outlook) Many strategies to save energy reduce operating cost of the building, while either not adding to the initial construction cost or adding minimal cost that will payback within a few years

Options that may help a design team meet the proposed sustainable design goals include· use passive strategies first, then have mechanical and electrical systems as needed, provide operable windows for occupants. Size mechanical and electrical systems appropriately for the building (do not oversize) and reduce water use also reduces energy use, as energy is required to pump water to the building, treat grey/black water, heat water, etc.

Projects should reference the LEED reference guide for documentation for the energy and water efficiency requirements

3.7 Incentives:

- Additional Height
- Reduction in Parking
- Reduction in Transparency

This page to remain blank

Section Four

Section 4.0 District Design Guidelines

4.1 Experience Retail District

The Experience / Retail Street District is located and designed to be the heart of the Waterfront, and the connection between the river and the retail and restaurant core It features "festival streets", street dining and entertainment, traffic calming street design, street trees and wider sidewalks with changing materials and colors, truly a pedestrian oriented area. Architectural features, building modulation and transparency, ensure the desired scale and urban character, along with site features that include plaza's which incorporate water and sustainable features, specialty signage and lighting.

4.1.1 General

4.1.1.a Proposed Uses

The proposed uses allowed in the Experience/Retail Street District include retail, restaurant, residential and commercial / office. Ground floor spaces should be devoted to "active uses", inactive uses such as storage of office requiring privacy should not be located on the ground floor

4.1.1.b FAR, Lot Coverage and Building Height

See figures

Fig G3	Block Plan,
Fig G4	Statistics Plan,
Fig E1	Block 08
Fig E2	Block 09
Fig E3	Block 11
Fig E4	Block 12
Fig E5	Block 16
Fig E6	Section C. Green Street 1
Fig E7	Section C.2: Green Street 2
Fig E8	Section D· Retail 1
Fig E9	Section D.2· Retail 2
Fig E10	Section D 3: Retail 3
Fig E11	Section F.3: Grant Street Corridor 3
Fig E12	Section J.4: Green Street

4.1.2 Building Architecture

4.1.2.a Design a well proportioned and unified building

The building shall be designed with an architectural concept that is appropriate to the neighborhood. The concept shall be cohesive and carried throughout the building design, from overall massing, setbacks, shapes of distinct building volumes and roof design through to building details, materials, fenestration patterns, etc.

The building shall also be well proportioned. One way to achieve this is by the tripartite vertical structure consisting of a base, middle and top vertical articulation In a mixed use building, the podium shall provide an identifiable break between the uses in the base and the tower. The break can be created from a change in materials or a change in fenestration pattern The skin should reinforce the integrity of the design concept and the building's structural elements. See Section 7 1

4.1.2.b Design corners that build active intersections

The Experience/Retail Street District is intended to be a very active pedestrian area The corners of the building are a great opportunity to attract pedestrians from two different street fronts. Each building should highlight the corners by having a building entry within 10 feet of each corner of the building on each façade

The marquee at the corner of the building shall have a different design and shall be mounted at least 2 feet higher than the marquee next to the corner The design should also consider different lighting, landscaping and other features to accent the corner from the remainder of the building See Section 7 1.

4.1.2.c View corridors / view preservation

Preserve existing views from Vancouver Waterfront as well as create more interesting views from the Columbia River The development of the Vancouver Waterfront shall preserve existing views as well as create new views Buildings should be sited appropriately based on a study of existing views and consideration of other projects planned around the site. See Section 7.1.

4.1.2.d Reinforce building entries

Building entries should be visible and clearly identifiable from the public right of way. A building is more inviting if it is clear where to enter and the path leading to the entry creates the feeling of personal safety. In order to clearly distinguish the entry of the building, the tower element shall come down to the sidewalk for a width of 20 feet. The tower can be recessed from the podium extenor up to 10 feet.

In addition to the tower coming down to the sidewalk, a different marquee shall delineate the entry and the design should consider a change in sidewalk color or material. Lighting should also be designed to highlight the entry without creating night sky pollution. See Section 7 1

4.1.2.e Respond to the neighborhood

Reinforce the predominant attributes of the other buildings in the Vancouver Waterfront to create a cohesive neighborhood Though the neighborhood is new, each building will help define the Vancouver Waterfront, and therefore needs to build on the success of each project that supersedes it Buildings should respond to the amenities of the community around them through arrangement of massing, setbacks that relate to other buildings, location of entries to enhance pedestrian areas, providing direct access to public transportation or other ideas.

4.1.2.f Enhance the skyline

Design the building such that if a site has more than one tower on the site, the towers will be a minimum of 60 feet apart. See Section 7 1

4.1.2.g Integrate roofs and use of roof tops

Design the upper portion of the building to promote visual interest and variety in the waterfront skyline. Roof shape should be consistent with the building concept. Reducing the area of the top floors can help to reduce the overall bulk and produce a more interesting building form.

The building should be considered from all different approaches, included how it will be seen traveling on Interstate 5, both from the north and south, from the water, from air traffic and from downtown Vancouver.

Active roof top uses and green roofs are strongly encouraged for roofs that will be visible from other buildings in the waterfront Mechanical equipment shall be designed into the building form whenever possible and completely screened with materials from the building when not possible to integrate into the building design

Rooftops, including top of podiums, that are the roof of a space 3 stories or less shall contain an active use and the remainder of the roof shall be green roof There will be tall buildings in this area that will look down on the lower roofs. The roofs of the lower buildings in the Experience/Retail District provide a great opportunity for roof top decks that look out over the river. The active use on the rooftop should be for one of the main occupants of the building, such as a roof top deck for restaurant in a building or deck for office workers in an office building

Green roof shall have at least 8" in soil depth and provide visual interest through variety in planting material, height of planting material, or seasonal color See Section 7.1.

4.1.2.h Design energy efficient building envelope that is appropriate to the building type and orientation of each individual façade

The building envelope presents a great opportunity to reduce a building's energy use The building envelope is comprised of the outer elements of a building foundations, walls, roof, windows, doors and floors. The prime functions of the building envelope are to provide shelter, security, solar and thermal control, moisture control, indoor air quality control, access to daylight, and views to outside, fire resistance, acoustics, cost effectiveness and aesthetics Because of the varied and sometimes competing functions associated with the building envelope, an integrated, synergistic approach considering all phases of the facility life cycle is warranted This sustainable approach supports an increased commitment to environmental stewardship and conservation, through increased insulation value, design based on modules of exterior material to minimize waste, and commissioning to verify envelope is functioning as designed to avoid unnecessary replacement of materials.

Design should begin with whole building design and sustainable goals before starting schematic design. When sustainable design items are worked in to the design of the building, as opposed to trying to add them later, they can be very cost effective in the building

Create an energy efficient building envelope through judicious use of vision glass, not exposing building structure, advanced framing for wood framed buildings, etc Vision glass in a building does not add benefit of daylight or views below 2'-6" AFF, and therefore should limit the vision glass to 10% of area below 2'-6" AFF. Concrete and steel structure of the building shall not extend from the tempered space to the exterior without a thermal break. Wood framed buildings shall use advanced framing to maximize insulation in the envelope as well as minimize wood structure. Treat each elevation appropriate to the sun and wind exposure. Size of openings, sun shades, operable windows, light shelves, etc should be designed for each façade of the building per the orientation to the sun and the use of the space inside.

Integrate Photovoltaic Panels as part of the building envelope or canopies to generate on-site, renewable energy. Explore alternative building footprints to create views and daylight for the most occupants Commission Envelope Elements to insure that all performance requirements are being met. Commissioning the building envelope will

not only avoid air infiltration and areas that are not performing thermally, but will also avoid areas of moisture intrusion Moisture in the envelope will negate the effect of insulation as well as cause more serious damage to the building

4.1.2.i Consider sunlight, shadow, glare, reflection, wind and rain

To encourage a lively and inviting neighborhood throughout the year, the building design shall accommodate the possible weather and consider how the weather will affect the building design . Consideration should be given to rain and wind all year long as well as sun, glare and reflection during the heat of the summer. Materials that reflect unnecessary amounts of light onto neighboring properties or pedestrians should not be used

4.1.2.j Lighting (reduce light pollution)

Light Pollution is misdirected or misused light, generally directed up into the night sky The results of light pollution are loss of visibility of the stars in the night sky, disruption to nocturnal animal, unwanted light shining onto neighbors and neighboring buildings, and wasting of electricity on lighting that is not effective

Projects should target LEED requirements for Light Pollution Reduction, GIB Credit 16 in the October 31, 2008 version of LEED
Projects shall be designed to limit the amount of light that is cast outside the property line and up to the sky at night time.

The Vancouver Waterfront is located in a flight path and must meet all requirements of the FAA.

4.1.2.k Provide active-not blank facades

Per Vancouver Zoning Ordinance and Design Guidelines· at least 70% of the width of any new or reconstructed first-story building wall facing a street shall be devoted to interest-creating features, pedestrian entrances, transparent show or display windows, or windows affording views into retail, office or lobby space Blank walls in excess of 15 lineal feet along sidewalks or other pedestrian areas are not permitted. All new construction having walls in excess of 15 lineal feet should have a substantial part of such wall surfaces provided with window areas open to interior views or displays Where windows are not feasible, more than one type of surface material, texture, or color, should be used to visually break up long walls. Measures to enhance the appearance of existing blank walls in excess of 15 lineal feet, such as landscaping or murals, are encouraged.

4.1.2.l Encourage diversity in scale and material at sidewalk level

The sidewalk level shall be designed for the pedestrian. The scale of the elements below the marquee shall be scaled to create interest and activity along the sidewalk The façade should be varied within the block through recess for entries, different marquee treatment or height, variety of materials and fixtures or other architectural interest Façade materials and canopies shall be varied at a minimum of 75' In lieu of a separate material, a building can recess the building by a minimum of 2' for a minimum of 20'. Canopies must vary the height by a minimum of 2' every 75'.

In addition to variety in material and canopy, landscape, lighting and other design features are encouraged to be varied to match the changes in the building design

4.1.2.m Encourage design that enhances "place"

Buildings with identifiable design features, art, landscaping or other distinguishing feature attract visitors and provide orientation and comfort to people using the space.. Designs should incorporate an element or more that can identify the building, either in building design, landscape, water feature, public art, furniture, kiosks, or treatment of the building or sidewalk

4.1.3 Streets and Pedestrian Areas

4.1.3.a Respond to physical environment (including integrate the river)

Each building site lies within the larger Vancouver Waterfront and smaller district. The Vancouver Waterfront should not be a self-contained new town in the city, but an integral part of Vancouver Each building shall develop an architectural concept and massing to enhance the district and Waterfront around it Items to respond to include views to and from the site, successful massing or building concept of buildings around the site, irregular shaped sites due to changes in the street layout, responding to the park, etc

4.1.3.b Reinforce and enhance the pedestrian system and safety

Livelier street edges make for safer streets. The ground floor façade shall be designed to encourage pedestrians through creating visual interest and a safe feeling. Active facades with views into the interior uses in the building create interest for pedestrians Lighting and signage are also important factors in creating a safe environment for pedestrians along with landscaping and places to sit and gather

4.1.3.c Create public places for gathering and views to the river

The Vancouver Waterfront has a very fortunate geographical location and would like to celebrate its proximity to the river The area will be very successful in attracting visitors if the potential to utilize the benefits of the river is maximized. Buildings are encouraged to provide open space with a view to the river that is inviting for people to gather and spend time in the Waterfront.

4.1.3.d Provide inviting and usable open space

Design usable open space to create a visually pleasing, safe and inviting community Open space should be located to provide views and have solar access for people to gather. Public buildings are encouraged to provide public open space to enhance the areas for visitors and workers Residential buildings are encouraged to provide private open space for residents

Open space shall be designed to be comfortable and safe feeling to encourage active streets. The areas shall have as much sunlight as possible, provide seating to encourage people to gather, and have visual access to create a feeling of safety. Spaces should have landscape to provide a connection to nature in this urban setting.

4.1.3.e Overhead weather protection

Provide marquees along all street fronts to help define pedestrian area and help bring down the building scale at the streetscape Marquees should be continuous, with the exception of breaks for building structure to come down to the ground Marquees should be varied along a façade, with a maximum of one type of marquee for 100 feet of building façade The height of marquees should also be varied by a minimum of

2' every 100'. Variety in type and height can be achieved by a different marquee for a building entry or other significant area to be highlighted

Marquees should be designed to complement the overall building concept and consider signage and lighting The marquee or signage, whichever is lower, shall be 8 feet above the sidewalk at the lowest point The marquee shall extend from the building a minimum of 6 feet, though 8 feet is more desirable. See Section 7 1

4.1.3.f Mechanical Equipment Services

Buildings are very complex and require many mechanical system to function properly, including but not limited to transformer, emergency generator, garage exhaust, gas meters, HVAC equipment, exhaust for residential units, etc, Buildings also require services such as loading, waste removal, maintenance on grease interceptor, generator, etc These items are unsightly and adversely impact the downtown pedestrian environment These functions should be accounted for off the public right of way to avoid creating an eyesore or disruption to public using the space.

No services shall be on pedestrian classified streets, including louvers or vents from restaurants. All services should be accounted for in the design review presentation Areas for trash, recycling and compost should be accounted for. Loading dock should be provided for sizes of trucks necessary to service the building out of the public right of way. Exhaust fans shall be placed so that no smoke or steam is visible from the sidewalk.

4.1.3.g Integrate transit and bicycle connections

Columbia Way is the main transit and bicycle path through the Vancouver Waterfront. Streetscape design shall include bus/streetcar stops per the Master Plan. Building should consider additional seating, landscaping, larger canopy, etc. at areas designated for a transit stop To encourage cyclists, bike racks should be provided in the streetscape for visitors to the area.

4.1.3.h Bicycle routes and parking

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors. For long term parking requirements in the building, please see Section 4.1.4.f below Visitor bicycle racks shall be provided in accordance with the table below.

Use	Bicycle Parking Required
Office	1 visitor space in rack per 10,000 sf, but no fewer four spaces per project
Retail	1 visitor space in rack per 5,000 sf, but no fewer than one space per business or four spaces per project, whichever is greater

Visitor bicycle racks must be positioned in area with active visual surveillance and night lighting, and protected from damage from nearby vehicles. Bicycle racks must be located within 50 feet of each building's main entries For retail buildings or other buildings with multiple main entries, bicycle racks must be proportionally disbursed within 50 feet of business or other main entries.

4.1.3.i Crime Prevention through Environmental Design (CPTED)

1 Natural Surveillance - A design concept directed primarily at keeping intruders easily observable Promoted by features that maximize visibility of people, parking areas and building entrances doors and windows that look out on to streets and parking areas; pedestrian-friendly sidewalks and streets, front porches; adequate nighttime lighting
2 Territorial Reinforcement - Physical design can create or extend a sphere of influence Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.
3 Natural Access Control - A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.
4 Target Hardening - Accomplished by features that prohibit entry or access. window locks, dead bolts for doors, interior door hinges.

4.1.3.j Lighting

Lighting should consider both the pedestrian scale and vehicular scale while trying to unify the project as a whole and enhance the facade and safety of the area.

4.1.3.k Integrate storm water management systems

See Section 6, for information regarding Storm-water management

4.1.3.l Select appropriate sustainable design elements that can be viewed by public

The Vancouver Waterfront has a tremendous opportunity to create a sustainable community. Many design features that make a building more efficient are not visible to the general public. People that occupy and visit the Vancouver Waterfront have a large role in how sustainable the area will be Visible items to the general public will remind them of the commitment made to the environment and encourage them to conduct their actions with the same commitment to reducing their impact on the environment.

Examples of highly visible sustainable features include bio-swale, photovoltaic panels, wind turbine, window shading systems, rain water collection for landscape irrigation, developing special landscape environments, exterior lighting on light sensors to only be on when needed, electric plug in stations for electric vehicles, etc

4.1.4 Vehicular Access and Parking

4.1.4.a Integrate structured parking and screening

All structured parking must be located below grade In order to be considered below grade, the ceiling of the floor above the parking must not be more than 4 feet above grade except for the garage entry. See Section 7 1.

4.1.4.b Minimize curb cut impacts

Curb cuts create an unsafe feeling for pedestrians as well as a blank façade In order to preserve the character of the streets, curb cuts are

only allowed in the Access Overlay see Figure G6. No curb cuts are allowed outside the Access Overlay

4.1.4.c Integrate shared parking between uses

The Vancouver Waterfront will have a great mixture of uses to create a vibrant community A result of the variety of uses comes with a variety in peak parking demand Due to the high water table in the area, buildings are strongly encouraged to pursue opportunities for shared parking with other uses. Shared parking agreements will need to be documented with the county

Provide carpool parking spaces equivalent to 10% of the total automobile parking for each non-residential and mixed use building. Signage indicating carpool parking spots must be provided, and carpool parking must be within 200 feet of entrances to buildings served.

4.1.4.d Minimize the presence of service areas

Service areas including but not limited to trucks needed to service the building for delivery, waste pickup, grease interceptor cleanout, fuel for generator, etc are not allowed except in the Access Overlay as noted in Figure G6.

4.1.4.e Solid Waste and Recycling

Encourage proper disposal of waste by providing adequate containers for the public to use as well as adequate space in the building to accommodate trash, recycling and compost.

In buildings, provide both trash and recycling chutes, or chutes that have the ability to multifunction to different dumpsters Consider compost in the building design, and how it can be accommodated during the initial design or in the future. Generate plan with waste haulers for frequency of pick up and size of containers required to provide adequate room at the street level for collection

In the streetscape or landscaping, wherever a trash can is provided a properly labeled recycling can shall be placed directly next to the trash can. Compost cans should be evaluated and placed in areas near restaurants, etc.

4.1.4.f Bicycle parking

The requirements in this Section are for bicycle parking required within the building For bike racks required on the sidewalk please see Section 4.1.3 h above

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors.

Use	Bicycle Parking Required
Office	1 accessible, indoor, secure storage space for 10% of retail workers planned
Retail	1 accessible, indoor, secure storage space for 10% of retail workers planned
Residential	1 space for every dwelling unit

Bicycle parking shall be provided in a safe, accessible and convenient location A well marked path with directional signage shall be installed when bike parking facilities are not clearly visible from the street or sidewalk Bicycles should not be required to ride up and down speed ramps greater than 12%.

Structures containing two hundred fifty thousand (250,000) square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters One (1) shower per gender shall be required for every two hundred fifty thousand (250,000) square feet of office use. Such facilities shall be for the use of the employees and occupants of the building, and shall be located where they are easily accessible to parking facilities for bicycles

4.1.5 Streetscape Standards

4.1.5.a Furniture, lighting, fixtures, etc.

See Section 7, for specifications.

4.1.5.b Establish a transition between buildings and open space

Open space should be sheltered to create a serene place for people to feel comfortable gathering or resting, however not provide a feeling of isolation. The transition between the building and the open space shall be softened with landscape, furniture, water feature, etc

4.1.6 Signage

4.1.6.a Building signage

The number and size of signs are regulated by the City's sign ordinance (VMC 20.960) In the Experience/Retail District, signage shall be designed for both vehicular and pedestrian traffic Auto-oriented fascia signs should be of minimum area required for readability from no more than one block away There shall only be one primary building sign with a maximum area of 36 square feet per building façade. Signs for building tenants can be up to 10 feet are unlimited.

Pedestrian oriented signs shall include a blade sign attached to the underside of the canopy for each tenant. Board signs are permitted to be on "Festival Streets" only during business hours.

No freestanding signs are allowed in the Waterfront area

4.1.6.b Parking signage

The Vancouver Waterfront will need a signage plan for parking signage All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings.

4.1.6.c Way finding signage

The Vancouver Waterfront will need a signage plan for way finding signage. All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings.

4.1.6.d Hazardous materials discharge.

Label drain inlets to educate people about where the drain discharges in hopes to discourage people from dumping hazardous material down storm drains.

4.2 Residential Park District

The Residential Park District is envisioned to create a quieter, greener area for people to call home in the Waterfront, with direct connections to the river and trails, and adjacent to the retail and restaurant core It features townhouses at street level with double row street trees and wider sidewalks making it very pedestrian friendly. Architectural features and building modulation ensure the desired scale and urban character for urban living

4.2.1 General

4.2.1.a Proposed Uses

The proposed uses allowed in the Residential Park District include residential, retail, restaurant, office and hotel. Ground floor uses include live/work, retail, office under 1000 sf, and restaurant. Structured parking is allowed above grade at blocks 17, 19 and 21.

4.2.1.b FAR, Lot Coverage and Building Height

See figures

Fig G3	Block Plan,
Fig G4	Statistics Plan
Fig R1	Block 17
Fig R2	Block 18
Fig R3	Block 19
Fig R4	Block 20
Fig R5	Block 21
Fig R6	Section A.3: Residential Park 2
Fig R7	Section B· Access 1
Fig R8	Section G Residential Park
Fig R9	Section G.2 Green Street
Fig R10	Section H.3: Service 3
Fig R11	Section J: Green Street 1
Fig R12	Section J.2. Green Street 2
Fig R13	Section J 3· Green Street 3

4.2.2 Building Architecture

4.2.2.a Design a well proportioned and unified building

The building shall be designed with an architectural concept that is appropriate to the neighborhood. The concept shall be cohesive and carried throughout the building design, from overall massing, setbacks, shapes of distinct building volumes and roof design through to building details, materials, fenestration patterns, etc

The building shall also be well proportioned One way to achieve this is by the tripartite vertical structure consisting of a base, middle and top vertical articulation. In a mixed use building, the podium shall provide an identifiable break between the uses in the base and the tower. The break can be created from a change in materials or a change in fenestration pattern. The skin should reinforce the integrity of the design concept and the building's structural elements. See Section 7.2.

4.2.2.b View corridors / view preservation

Preserve existing views from Vancouver Waterfront as well as create more interesting views from the Columbia River.

The development of the Vancouver Waterfront shall preserve existing views as well as create new views Buildings should be sited

appropriately based on a study of existing views and consideration of other projects planned around the site See Section 7.2

4.2.2.c Reinforce building entries

Building entries should be visible and clearly identifiable from the public right of way A building is more inviting if it is clear where to enter and the path leading to the entry creates the feeling of personal safety In order to clearly distinguish the entry of the building, the tower element shall come down to the sidewalk for a width of 20 feet. The tower can be recessed from the podium exterior up to 10 feet.

In addition to the tower coming down to the sidewalk, a different marquee shall delineate the entry and the design should consider a change in sidewalk color or material Lighting should also be designed to highlight the entry without creating night sky pollution

4.2.2.d Respond to the neighborhood

Reinforce the predominant attributes of the other buildings in the Vancouver Waterfront to create a cohesive neighborhood Though the neighborhood is new, each building will help define the Vancouver Waterfront, and therefore needs to build on the success of each project that supersedes it. Buildings should respond to the amenities of the community around them through arrangement of massing, setbacks that relate to other buildings, location of entries to enhance pedestrian areas, providing direct access to public transportation or other ideas

4.2.2.e Enhance the skyline

Design the building such that if a site has more than one tower on the site, the towers will be a minimum of 60 feet apart. See Section 7 2

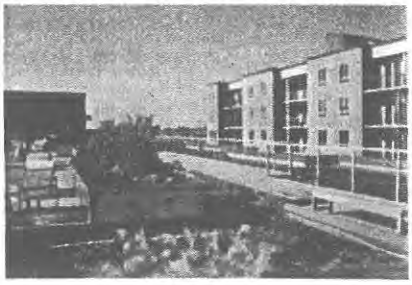
4.2.2.f Integrate roofs and use of roof tops

Design the upper portion of the building to promote visual interest and variety in the waterfront skyline Roof shape should be consistent with the building concept Reducing the area of the top floors can help to reduce the overall bulk and produce a more interesting building form The building should be considered from all different approaches, included how it will be seen traveling on Interstate 5, both from the north and south, from the water, from air travel and from downtown Vancouver.

Active roof top uses and green roofs are strongly encouraged for roofs that will be visible from other buildings in the waterfront. Mechanical equipment shall be designed into the building form whenever possible and completely screened with materials from the building when not possible to integrate into the building design.

Rooftops, including top of podiums, that are the roof of a space 3 stories or less shall contain an active use and the remainder of the roof shall be green roof. There will be tall buildings in this area that will look down on the lower roofs. The roofs of the lower buildings in the Experience/Retail District provide a great opportunity for roof top decks that look out over the river. The active use on the rooftop should be for one of the main occupants of the building, such as a roof top deck for restaurant in a building or deck for office workers in an office building

Green roof shall have at least 8" in soil depth and provide visual interest through variety in planting material, height of planting material, or seasonal color. See Section 7.2



4.2.2.g Design energy efficient building envelope that is appropriate to the building type and orientation of each individual façade

The building envelope presents a great opportunity to reduce a building's energy use. The building envelope is comprised of the outer elements of a building: foundations, walls, roof, windows, doors and floors. The prime functions of the building envelope are to provide shelter, security, solar and thermal control, moisture control, indoor air quality control, access to daylight, and views to outside, fire resistance, acoustics, cost effectiveness and aesthetics. Because of the varied and sometimes competing functions associated with the building envelope, an integrated, synergistic approach considering all phases of the facility life cycle is warranted. This sustainable approach supports an increased commitment to environmental stewardship and conservation, through increased insulation value, design based on modules of exterior material to minimize waste, and commissioning to verify envelope is functioning as designed to avoid unnecessary replacement of materials.

Design should begin with whole building design and sustainable goals before starting schematic design. When sustainable design items are worked in to the design of the building, as opposed to trying to add them later, they can be very cost effective in the building.

Create an energy efficient building envelope through judicious use of vision glass, not exposing building structure, advanced framing for wood framed buildings, etc. Vision glass in a building does not add benefit of daylight or views below 2'-6" AFF, and therefore should limit the vision glass to 10% of area below 2'-6" AFF. Concrete and steel structure of the building shall not extend from the tempered space to the exterior without a thermal break. Wood framed buildings shall use advanced framing to maximize insulation in the envelope as well as minimize wood structure. Treat each elevation appropriate to the sun and wind exposure. Size of openings, sun shades, operable windows, light shelves, etc. should be designed for each façade of the building per the orientation to the sun and the use of the space inside.

Integrate Photovoltaic Panels as part of the building envelope or canopies to generate on-site, renewable energy. Explore alternative building footprints to create views and daylight for the most occupants.

Commission Envelope Elements to insure that all performance requirements are being met. Commissioning the building envelope will not only avoid air infiltration and areas that are not performing thermally, but will also avoid areas of moisture intrusion. Moisture in the envelope will negate the effect of insulation as well as cause more serious damage to the building.

4.2.2.h Consider sunlight, shadow, glare, reflection, wind and rain

To encourage a lively and inviting neighborhood throughout the year, the building design shall accommodate the possible weather and consider

how the weather will affect the building design Consideration should be given to rain and wind all year long as well as sun, glare and reflection during the heat of the summer Materials that reflect unnecessary amounts of light onto neighboring properties or pedestrians should not be used.

4.2.2.i Lighting (reduce light pollution)

Light Pollution is misdirected or misused light, generally directed up into the night sky The results of light pollution are loss of visibility of the stars in the night sky, disruption to nocturnal animal, unwanted light shining onto neighbors and neighboring buildings, and wasting of electricity on lighting that is not effective

Projects should target the LEED requirements for Light Pollution Reduction, GIB Credit 16 in the October 31, 2008 version of LEED "Projects shall minimize light trespass from site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments " (From LEED reference guide)

The Vancouver Waterfront is located in a flight path and must meet all requirements of the FAA.

4.2.2.j Provide active-not blank facades

Per Vancouver Zoning Ordinance and Design Guidelines at least 70% of the width of any new or reconstructed first-story building wall facing a street shall be devoted to interest-creating features, pedestrian entrances, transparent show or display windows, or windows affording views into retail, office or lobby space Blank walls in excess of 15 lineal feet along sidewalks or other pedestrian areas are not permitted. All new construction having walls in excess of 15 lineal feet should have a substantial part of such wall surfaces provided with window areas open to interior views or displays. Where windows are not feasible, more than one type of surface material, texture, or color (including murals) should be used to visually break up long walls. Measures to enhance the appearance of existing blank walls in excess of 15 lineal feet, such as landscaping or murals, are encouraged.

4.2.2.k Encourage diversity in scale and material at sidewalk level

The sidewalk level shall be designed for the pedestrian. The scale of the elements below the marquee shall be scaled to create interest and activity along the sidewalk. The façade should be varied within the block through recess for entries, different marquee treatment or height, variety of materials and fixtures or other architectural interest. Façade materials and canopies shall be varied at a minimum of 75'. In lieu of a separate material, a building can recess the building by a minimum of 2' for a minimum of 20'. Canopies must vary the height by a minimum of 2' every 75'

In addition to variety in material and canopy, landscape, lighting and other design features are encouraged to be varied to match the changes in the building design.

4.2.3.l Encourage design that enhances "place"

Buildings with identifiable design features, art, landscaping or other distinguishing feature attract visitors and provide orientation and comfort to people using the space. Designs should incorporate an element or more that can identify the building, either in building design, landscape,

water feature, public art, furniture, kiosks, or treatment of the building or sidewalk

4.2.3 Streets and Pedestrian Areas

4.2.3.a Respond to physical environment (including integrate the river)

Each building site lies within the larger Vancouver Waterfront and smaller district The Vancouver Waterfront should not be a self-contained new town in the city, but an integral part of Vancouver Each building shall develop an architectural concept and massing to enhance the district and Waterfront around it. Items to respond to include views to and from the site, successful massing or building concept of buildings around the site, irregular shaped sites due to changes in the street layout, responding to the park, etc.

4.2.3.b Reinforce and enhance the pedestrian system and safety

Livelier street edges make for safer streets. The ground floor façade shall be designed to encourage pedestrians through creating visual interest and a safe feeling. Active facades with views into the interior uses in the building create interest for pedestrians Lighting and signage are also important factors in creating a safe environment for pedestrians along with landscaping and places to sit and gather

4.2.3.c Create public places for gathering and views to the river

The Vancouver Waterfront has a very fortunate geographical location and would like to celebrate its proximity to the river. The area will be very successful in attracting visitors if the potential to utilize the benefits of the river is maximized Buildings are encouraged to provide open space with a view to the river that is inviting for people to gather and spend time in the Waterfront

4.2.3.d Provide inviting and usable open space

Design usable open space to create a visually pleasing, safe and inviting community. Open space should be located to provide views and have solar access for people to gather Public buildings are encouraged to provide public open space to enhance the areas for visitors and workers Residential buildings are encouraged to provide private open space for residents.

Open space shall be designed to be comfortable and safe feeling to encourage active streets The areas shall have as much sunlight as possible, provide seating to encourage people to gather, and have visual access to create a feeling of safety. Spaces should have landscape to provide a connection to nature in this urban setting.

4.2.3.e Overhead weather protection

Provide marquees along all street fronts to help define pedestrian area and help bring down the building scale at the streetscape. Marquees should be continuous, with the exception of breaks for building structure to come down to the ground. Marquees should be varied along a façade, with a maximum of one type of marquee for 100 feet of building façade The height of marquees should also be varied by a minimum of 2' every 100' Variety in type and height can be achieved by a different marquee for a building entry or other significant area to be highlighted.

Marquees should be designed to complement the overall building concept and consider signage and lighting. The marquee or signage, whichever is lower, shall be 8 feet above the sidewalk at the lowest

point The marquee shall extend from the building a minimum of 6 feet, though 8 feet is more desirable. See Section 7 2

4.2.3.f Mechanical Equipment Services

Buildings are very complex and require many mechanical system to function properly, including but not limited to transformer, emergency generator, garage exhaust, gas meters, HVAC equipment, exhaust for residential units, etc, Buildings also require services such as loading, waste removal, maintenance on grease interceptor, generator, etc These items are unsightly and adversely impact the downtown pedestrian environment These functions should be accounted for off the public right of way to avoid creating an eyesore or disruption to public using the space

No services shall be on pedestrian classified streets, including louvers or vents from restaurants All services should be accounted for in the design review presentation. Areas for trash, recycling and compost should be accounted for Loading dock should be provided for sizes of trucks necessary to service the building out of the public right of way. Exhaust fans shall be placed so that no smoke or steam is visible from the sidewalk

4.2.3.g Integrate transit and bicycle connections

Columbia Way is the main transit and bicycle path through the Vancouver Waterfront Streetscape design shall include bus/streetcar stops per the Master Plan Building should consider additional seating, landscaping, larger canopy, etc. at areas designated for a transit stop To encourage cyclists, bike racks should be provided in the streetscape for visitors to the area

4.2.3.h Bicycle routes and parking

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors. For long term parking requirements in the building, please see Section 4.2 4.f below Visitor bicycle racks shall be provided in accordance with the table below

Use	Bicycle Parking Required
Office	1 visitor space in rack per 10,000 sf, but no fewer four spaces per project
Retail	1 visitor space in rack per 5,000 sf, but no fewer than one space per business or four spaces per project, whichever is greater

Visitor bicycle racks must be positioned in area with active visual surveillance and night lighting, and protected from damage from nearby vehicles. Bicycle racks must be located within 50 feet of each building's main entries For retail buildings or other buildings with multiple main entries, bicycle racks must be proportionally disbursed within 50 feet of business or other main entries Spaces within dwelling units or on balconies do not count toward the bicycle parking requirement

4.2.3.i Crime Prevention through Environmental Design (CPTED)

1. Natural Surveillance - A design concept directed primarily at keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas and building entrances: doors and windows that look out on to streets and parking areas; pedestrian-

friendly sidewalks and streets, front porches, adequate nighttime lighting

2. Territorial Reinforcement - Physical design can create or extend a sphere of influence Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences
3. Natural Access Control - A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements
4. Target Hardening - Accomplished by features that prohibit entry or access window locks, dead bolts for doors, interior door hinges

4.2.3.j Lighting

Lighting should consider both the pedestrian scale and vehicular scale while trying to unify the project as a whole and enhance the facade and safety of the area.

4.2.3.k Integrate storm water management systems

See Section 6, for information regarding Storm-water management.

4.2.3.l Select appropriate sustainable design elements that can be viewed by public.

The Vancouver Waterfront has a tremendous opportunity to create a sustainable community Many design features that make a building more efficient are not visible to the general public. People that occupy and visit the Vancouver Waterfront have a large role in how sustainable the area will be Visible items to the general public will remind them of the commitment made to the environment and encourage them to conduct their actions with the same commitment to reducing their impact on the environment.

Examples of highly visible sustainable features include bio-swale, photovoltaic panels, wind turbine, window shading systems, rain water collection for landscape irrigation, developing special landscape environments, exterior lighting on light sensors to only be on when needed, electric plug in stations for electric vehicles, etc.

4.2.4 Vehicular Access and Parking

4.2.4.a Integrate structured parking and screening

All structured parking must be located below grade In order to be considered below grade, the ceiling of the floor above the parking must not be more than 4 feet above grade except for the garage entry. See Section 7.2

4.2.4.b Minimize curb cut impacts

Curb cuts create an unsafe feeling for pedestrians as well as a blank façade. In order to preserve the character of the streets, curb cuts are only allowed in the Access Overlay see figure G6 No curb cuts are allowed outside the Access Overlay

4.2.4.c Integrate shared parking between uses

The Vancouver Waterfront will have a great mixture of uses to create a vibrant community A result of the variety of uses comes with a variety in peak parking demand Due to the high water table in the area, buildings are strongly encouraged to pursue opportunities for shared parking with other uses Shared parking agreements will need to be documented with the county

Provide carpool parking spaces equivalent to 10% of the total automobile parking for each non-residential and mixed use building Signage indicating carpool parking spots must be provided, and carpool parking must be within 200 feet of entrances to buildings served

4.2.4.d Minimize the presence of service areas

Service areas including but not limited to trucks needed to service the building for delivery, waste pickup, grease interceptor cleanout, fuel for generator, etc are not allowed except in the Access Overlay as noted in Figure G6.

4.2.4.e Solid Waste and Recycling

Encourage proper disposal of waste by providing adequate containers for the public to use as well as adequate space in the building to accommodate trash, recycling and compost

In buildings, provide both trash and recycling chutes, or chutes that have the ability to multifunction to different dumpsters. Consider compost in the building design, and how it can be accommodated during the initial design or in the future Generate plan with waste haulers for frequency of pick up and size of containers required to provide adequate room at the street level for collection

In the streetscape or landscaping, wherever a trash can is provided a properly labeled recycling can shall be placed directly next to the trash can. Compost cans should be evaluated and placed in areas near restaurants, etc

4.2.4.f Bicycle parking

The requirements in this Section are for bicycle parking required within the building. For bike racks required on the sidewalk please see Section 4.2 3.h above.

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors.

Use	Bicycle Parking Required
Office	1 accessible, indoor, secure storage space for 10% of retail workers planned
Retail	1 accessible, indoor, secure storage space for 10% of retail workers planned
Residential	1 space for every dwelling unit

Bicycle parking shall be provided in a safe, accessible and convenient location. A well marked path with directional signage shall be installed when bike parking facilities are not clearly visible from the street or

sidewalk. Bicycles should not be required to ride up and down speed ramps greater than 12%

Structures containing two hundred fifty thousand (250,000) square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters. One (1) shower per gender shall be required for every two hundred fifty thousand (250,000) square feet of office use. Such facilities shall be for the use of the employees and occupants of the building, and shall be located where they are easily accessible to parking facilities for bicycles

4.2.5 Streetscape Standards

4.2.5.a Furniture, lighting, fixtures, etc.

See Section 7, for specifications.

4.2.5.b Establish a transition between buildings and open space

Open space should be sheltered to create a serene place for people to feel comfortable gathering or resting, however not provide a feeling of isolation The transition between the building and the open space shall be softened with landscape, furniture, water feature, etc

4.2.6 Signage

4.2.6.a Building signage

The number and size of signs are regulated by the City's sign ordinance (VMC 20.960). In the Residential District, signage shall be designed for both vehicular and pedestrian traffic Auto-oriented fascia signs should be of minimum area required for readability from no more than one block away. There shall only be one primary building sign with a maximum area of 36 square feet per building façade Signs for building tenants can be up to 10 feet are unlimited

No freestanding signs are allowed in the Waterfront area

4.2.6b Parking signage

The Vancouver Waterfront will need a signage plan for parking signage All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings.

4.2.6.c Way finding signage

The Vancouver Waterfront will need a signage plan for way finding signage All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings.

4.2.6.d Hazardous materials discharge.

Label drain inlets to educate people about where the drain discharges in hopes to discourage people from dumping hazardous material down storm drains.

4.3 Columbia Way District

Columbia Way District is designed to be the transit connection and a main transportation route through the Waterfront. The sidewalks are wide and lined with street trees to encourage a lively streetscape with retail flanking both sides of street Street parking is allowed, but no curb cuts or service elements are allowed along Columbia Way to encourage the pedestrian character of the street Architectural features, building modulation and transparency, ensure the desired scale and urban character, making this the urban core

4.3.1 General

4.3.1.a Proposed Uses

The proposed uses in the Columbia Way District are retail, office, residential, hotel and restaurants. Structured parking is allowed above grade at blocks 3, 5, 7, 10, 13 and 14.

4.3.1.b FAR, Lot Coverage and Building Height

See figures

Fig G3	Block Plan
Fig G4	Statistics Plan
Fig C1	Block 03
Fig C2	Block 04
Fig C3	Block 05
Fig C4	Block 06
Fig C5	Block 07
Fig C6	Block 08
Fig C7	Block 10
Fig C8	Block 11
Fig C9	Block 13
Fig C10	Block 14
Fig C11	Section A: Retail
Fig C12	Section A.2 Residential Park 1
Fig C13	Section B.2. Access 2
Fig C14	Section E Esther Street Corridor 1
Fig C15	Section E.2· Esther Street Corridor 2
Fig C16	Section F· Grant Street Corridor 1
Fig C17	Section F.2: Grant Street Corridor 2
Fig C18	Section H Service 1
Fig C19	Section H.2 Service

4.3.2 Building Architecture

4.3.2.a Design a well proportioned and unified building

The building shall be designed with an architectural concept that is appropriate to the neighborhood. The concept shall be cohesive and carried throughout the building design, from overall massing, setbacks, shapes of distinct building volumes and roof design through to building details, materials, fenestration patterns, etc

The building shall also be well proportioned. One way to achieve this is by the tripartite vertical structure consisting of a base, middle and top vertical articulation In a mixed use building, the podium shall provide an identifiable break between the uses in the base and the tower. The break can be created from a change in materials or a change in fenestration pattern. The skin should reinforce the integrity of the design concept and the building's structural elements. See Section 7.3.

4.3.2.b Design corners that build active intersections

The Experience/Retail Street District is intended to be a very active pedestrian area The corners of the building are a great opportunity to attract pedestrians from two different street fronts. Each building should highlight the corners by having a building entry within 10 feet of each corner of the building on each façade

The marquee at the corner of the building shall have a different design and shall be mounted at least 2 feet higher than the marquee next to the corner The design should also consider different lighting, landscaping and other features to accent the corner from the remainder of the building See Section 7.3

4.3.2.c View corridors / view preservation

Preserve existing views from Vancouver Waterfront as well as create more interesting views from the Columbia River.

The development of the Vancouver Waterfront shall preserve existing views as well as create new views. Buildings should be sited appropriately based on a study of existing views and consideration of other projects planned around the site See Section 7.3

4.3.2.d Reinforce building entries

Building entries should be visible and clearly identifiable from the public right of way A building is more inviting if it is clear where to enter and the path leading to the entry creates the feeling of personal safety. In order to clearly distinguish the entry of the building, the tower element shall come down to the sidewalk for a width of 20 feet The tower can be recessed from the podium exterior up to 10 feet.

In addition to the tower coming down to the sidewalk, a different marquee shall delineate the entry and the design should consider a change in sidewalk color or material Lighting should also be designed to highlight the entry without creating night sky pollution See Section 7.3.

4.3.2.e Respond to the neighborhood

Reinforce the predominant attributes of the other buildings in the Vancouver Waterfront to create a cohesive neighborhood. Though the neighborhood is new, each building will help define the Vancouver Waterfront, and therefore needs to build on the success of each project that supersedes it. Buildings should respond to the amenities of the community around them through arrangement of massing, setbacks that relate to other buildings, location of entries to enhance pedestrian areas, providing direct access to public transportation or other ideas.

4.3.2.f Enhance the skyline

Design the building such that if a site has more than one tower on the site, the towers will be a minimum of 60 feet apart See Section 7.3

4.3.2.g Integrate roofs and use of roof tops

Design the upper portion of the building to promote visual interest and variety in the waterfront skyline. Roof shape should be consistent with the building concept. Reducing the area of the top floors can help to reduce the overall bulk and produce a more interesting building form. The building should be considered from all different approaches, included how it will be seen traveling on Interstate 5, both from the north and south, from the water, from air travel and from downtown Vancouver.

Active roof top uses and green roofs are strongly encouraged for roofs that will be visible from other buildings in the waterfront. Mechanical equipment shall be designed into the building form whenever possible and completely screened with materials from the building when not possible to integrate into the building design.

Rooftops, including top of podiums, that are the roof of a space 3 stories or less shall contain an active use and the remainder of the roof shall be green roof. There will be tall buildings in this area that will look down on the lower roofs. The roofs of the lower buildings in the Experience/Retail District provide a great opportunity for roof top decks that look out over the river. The active use on the rooftop should be for one of the main occupants of the building, such as a roof top deck for restaurant in a building or deck for office workers in an office building.

Green roof shall have at least 8" in soil depth and provide visual interest through variety in planting material, height of planting material, or seasonal color. See Section 7.3.

4.3.2.h Design energy efficient building envelope that is appropriate to the building type and orientation of each individual façade

The building envelope presents a great opportunity to reduce a building's energy use. The building envelope is comprised of the outer elements of a building: foundations, walls, roof, windows, doors and floors. The prime functions of the building envelope are to provide shelter, security, solar and thermal control, moisture control, indoor air quality control, access to daylight, and views to outside, fire resistance, acoustics, cost effectiveness and aesthetics. Because of the varied and sometimes competing functions associated with the building envelope, an integrated, synergistic approach considering all phases of the facility life cycle is warranted. This sustainable approach supports an increased commitment to environmental stewardship and conservation, through increased insulation value, design based on modules of exterior material to minimize waste, and commissioning to verify envelope is functioning as designed to avoid unnecessary replacement of materials.

Design should begin with whole building design and sustainable goals before starting schematic design. When sustainable design items are worked in to the design of the building, as opposed to trying to add them later, they can be very cost effective in the building.

Create an energy efficient building envelope through judicious use of vision glass, not exposing building structure, advanced framing for wood framed buildings, etc. Vision glass in a building does not add benefit of daylight or views below 2'-6" AFF, and therefore should limit the vision glass to 10% of area below 2'-6" AFF. Concrete and steel structure of the building shall not extend from the tempered space to the exterior

without a thermal break Wood framed buildings shall use advanced framing to maximize insulation in the envelope as well as minimize wood structure Treat each elevation appropriate to the sun and wind exposure. Size of openings, sun shades, operable windows, light shelves, etc. should be designed for each façade of the building per the orientation to the sun and the use of the space inside.

Integrate Photovoltaic Panels as part of the building envelope or canopies to generate on-site, renewable energy Explore alternative building footprints to create views and daylight for the most occupants

Commission Envelope Elements to insure that all performance requirements are being met Commissioning the building envelope will not only avoid air infiltration and areas that are not performing thermally, but will also avoid areas of moisture intrusion Moisture in the envelope will negate the effect of insulation as well as cause more serious damage to the building.

4.3.2.i Consider sunlight, shadow, glare, reflection, wind and rain

To encourage a lively and inviting neighborhood throughout the year, the building design shall accommodate the possible weather and consider how the weather will affect the building design.. Consideration should be given to rain and wind all year long as well as sun, glare and reflection during the heat of the summer. Materials that reflect unnecessary amounts of light onto neighboring properties or pedestrians should not be used.

4.3.2.j Lighting (reduce light pollution)

Light Pollution is misdirected or misused light, generally directed up into the night sky The results of light pollution are loss of visibility of the stars in the night sky, disruption to nocturnal animal, unwanted light shining onto neighbors and neighboring buildings, and wasting of electricity on lighting that is not effective.

Projects should target LEED requirements for Light Pollution Reduction, GIB Credit 16 in the October 31, 2008 version of LEED "Projects shall minimize light trespass from site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction, and reduce development impact on nocturnal environments." (From LEED reference guide)

The Vancouver Waterfront is located in a flight path and must meet all requirements of the FAA.

4.3.2.k Provide active-not blank facades

Per Vancouver Zoning Ordinance and Design Guidelines: at least 70% of the width of any new or reconstructed first-story building wall facing a street shall be devoted to interest-creating features, pedestrian entrances, transparent show or display windows, or windows affording views into retail, office or lobby space. Blank walls in excess of 15 lineal feet along sidewalks or other pedestrian areas are not permitted. All new construction having walls in excess of 15 lineal feet should have a substantial part of such wall surfaces provided with window areas open to interior views or displays Where windows are not feasible, more than one type of surface material, texture, or color (including murals) should be used to visually break up long walls. Measures to enhance the appearance of existing blank walls in excess of 15 lineal feet, such as landscaping or murals, are encouraged.

4.3.2.l Encourage diversity in scale and material at sidewalk level

The sidewalk level shall be designed for the pedestrian. The scale of the elements below the marquee shall be scaled to create interest and activity along the sidewalk The façade should be varied within the block through recess for entries, different marquee treatment or height, variety of materials and fixtures or other architectural interest. Façade materials and canopies shall be varied at a minimum of 75'. In lieu of a separate material, a building can recess the building by a minimum of 2' for a minimum of 20' Canopies must vary the height by a minimum of 2' every 75'.

In addition to variety in material and canopy, landscape, lighting and other design features are encouraged to be varied to match the changes in the building design

4.3.2.m Encourage design that enhances "place"

Buildings with identifiable design features, art, landscaping or other distinguishing feature attract visitors and provide orientation and comfort to people using the space Designs should incorporate an element or more that can identify the building, either in building design, landscape, water feature, public art, furniture, kiosks, or treatment of the building or sidewalk.

4.3.3 Streets and Pedestrian Areas

4.3.3.a Respond to physical environment (including integrate the river)

Each building site lies within the larger Vancouver Waterfront and smaller district The Vancouver Waterfront should not be a self-contained new town in the city, but an integral part of Vancouver. Each building shall develop an architectural concept and massing to enhance the district and Waterfront around it Items to respond to include views to and from the site, successful massing or building concept of buildings around the site, irregular shaped sites due to changes in the street layout, responding to the park, etc

4.3.3.b Reinforce and enhance the pedestrian system and safety

Livelier street edges make for safer streets The ground floor façade shall be designed to encourage pedestrians through creating visual interest and a safe feeling. Active facades with views into the interior uses in the building create interest for pedestrians. Lighting and signage are also important factors in creating a safe environment for pedestrians along with landscaping and places to sit and gather.

4.3.3.c Create public places for gathering and views to the river

The Vancouver Waterfront has a very fortunate geographical location and would like to celebrate its proximity to the river The area will be very successful in attracting visitors if the potential to utilize the benefits of the river is maximized Buildings are encouraged to provide open space with a view to the river that is inviting for people to gather and spend time in the Waterfront.

4.3.3.d Provide inviting and usable open space

Design usable open space to create a visually pleasing, safe and inviting community. Open space should be located to provide views and have solar access for people to gather Public buildings are encouraged to provide public open space to enhance the areas for visitors and workers Residential buildings are encouraged to provide private open space for residents

Open space shall be designed to be comfortable and safe feeling to encourage active streets The areas shall have as much sunlight as possible, provide seating to encourage people to gather, and have visual access to create a feeling of safety Spaces should have landscape to provide a connection to nature in this urban setting

4.3.3.e Overhead weather protection

Provide marquees along all street fronts to help define pedestrian area and help bring down the building scale at the streetscape Marquees should be continuous, with the exception of breaks for building structure to come down to the ground. Marquees should be varied along a façade, with a maximum of one type of marquee for 100 feet of building façade. The height of marquees should also be varied by a minimum of 2' every 100'. Variety in type and height can be achieved by a different marquee for a building entry or other significant area to be highlighted

Marquees should be designed to complement the overall building concept and consider signage and lighting The marquee or signage, whichever is lower, shall be 8 feet above the sidewalk at the lowest point. The marquee shall extend from the building a minimum of 6 feet, though 8 feet is more desirable

4.3.3.f Mechanical Equipment Services

Buildings are very complex and require many mechanical system to function properly, including but not limited to transformer, emergency generator, garage exhaust, gas meters, HVAC equipment, exhaust for residential units, etc,. Buildings also require services such as loading, waste removal, maintenance on grease interceptor, generator, etc These items are unsightly and adversely impact the downtown pedestrian environment These functions should be accounted for off the public right of way to avoid creating an eyesore or disruption to public using the space.

No services shall be on pedestrian classified streets, including louvers or vents from restaurants All services should be accounted for in the design review presentation Areas for trash, recycling and compost should be accounted for. Loading dock should be provided for sizes of trucks necessary to service the building out of the public right of way

Exhaust fans shall be placed so that no smoke or steam is visible from the sidewalk.

4.3.3.g Integrate transit and bicycle connections

Columbia Way is the main transit and bicycle path through the Vancouver Waterfront Streetscape design shall include bus/streetcar stops per the Master Plan. Building should consider additional seating, landscaping, larger canopy, etc. at areas designated for a transit stop To encourage cyclists, bike racks should be provided in the streetscape for visitors to the area

4.3.3.h Bicycle routes and parking

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors For long term parking requirements in the building, please see Section 4.3.4.f below. Visitor bicycle racks shall be provided in accordance with the table below.

Use	Bicycle Parking Required

Office	1 visitor space in rack per 10,000 sf, but no fewer four spaces per project
Retail	1 visitor space in rack per 5,000 sf, but no fewer than one space per business or four spaces per project, whichever is greater

Visitor bicycle racks must be positioned in area with active visual surveillance and night lighting, and protected from damage from nearby vehicles Bicycle racks must be located within 50 feet of each building's main entries For retail buildings or other buildings with multiple main entries, bicycle racks must be proportionally disbursed within 50 feet of business or other main entries. Spaces within dwelling units or on balconies do not count toward the bicycle parking requirement

4.3.3.i Crime Prevention through Environmental Design (CPTED)

1 Natural Surveillance - A design concept directed primarily at keeping intruders easily observable Promoted by features that maximize visibility of people, parking areas and building entrances doors and windows that look out on to streets and parking areas, pedestrian-friendly sidewalks and streets; front porches; adequate nighttime lighting.
2 Territorial Reinforcement - Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged Promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, and "CPTED" fences.
3 Natural Access Control - A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. Gained by designing streets, sidewalks, building entrances and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.
4. Target Hardening - Accomplished by features that prohibit entry or access window locks, dead bolts for doors, interior door hinges.

4.3.3.j Lighting

Signage should follow the Vancouver Waterfront master signage plan. Signage and lighting should consider both the pedestrian scale and vehicular scale while trying to unify the project as a whole and enhance the facade and safety of the area

4.3.3.k Integrate storm water management systems

See Section 6, for information regarding Storm water Management

4.3.3.l Select appropriate sustainable design elements that can be viewed by public.

The Vancouver Waterfront has a tremendous opportunity to create a sustainable community Many design features that make a building more efficient are not visible to the general public People that occupy and visit the Vancouver Waterfront have a large role in how sustainable the area will be. Visible items to the general public will remind them of the commitment made to the environment and encourage them to conduct their actions with the same commitment to reducing their impact on the environment

Examples of highly visible sustainable features include bio-swale, photovoltaic panels, wind turbine, window shading systems, rain water

collection for landscape irrigation, developing special landscape environments, exterior lighting on light sensors to only be on when needed, electric plug in stations for electric vehicles, etc

4.3.4 Vehicular Access and Parking

4.3.4.a Integrate structured parking and screening

All structured parking must be located below grade In order to be considered below grade, the ceiling of the floor above the parking must not be more than 4 feet above grade except for the garage entry

4.3.4.b Minimize curb cut impacts

Curb cuts create an unsafe feeling for pedestrians as well as a blank façade In order to preserve the character of the streets, curb cuts are only allowed in the Access Overlay see figure G7. No curb cuts are allowed outside the Access Overlay.

4.3.4.c Integrate shared parking between uses

The Vancouver Waterfront will have a great mixture of uses to create a vibrant community. A result of the variety of uses comes with a variety in peak parking demand. Due to the high water table in the area, buildings are strongly encouraged to pursue opportunities for shared parking with other uses Shared parking agreements will need to be documented with the county

Provide carpool parking spaces equivalent to 10% of the total automobile parking for each non-residential and mixed use building Signage indicating carpool parking spots must be provided, and carpool parking must be within 200 feet of entrances to buildings served.

4.3.4.d Minimize the presence of service areas

Service areas including but not limited to trucks needed to service the building for delivery, waste pickup, grease interceptor cleanout, fuel for generator, etc are not allowed except in the Access Overlay as noted in Figure G6.

4.3.4.e Solid Waste and Recycling

Encourage proper disposal of waste by providing adequate containers for the public to use as well as adequate space in the building to accommodate trash, recycling and compost.

In buildings, provide both trash and recycling chutes, or chutes that have the ability to multifunction to different dumpsters. Consider compost in the building design, and how it can be accommodated during the initial design or in the future. Generate plan with waste haulers for frequency

of pick up and size of containers required to provide adequate room at the street level for collection.

In the streetscape or landscaping, wherever a trash can is provided a properly labeled recycling can shall be placed directly next to the trash can. Compost cans should be evaluated and placed in areas near restaurants, etc.

4.3.4.f Bicycle parking

The requirements in this Section are for bicycle parking required within the building For bike racks required on the sidewalk please see Section 4.3.3.h above.

Provide safe and convenient bicycle parking, including safe access to the parking. Long term and short term parking should be provided to accommodate building occupants as well as occasional visitors

Use	Bicycle Parking Required
Office	1 accessible, indoor, secure storage space for 10% of retail workers planned
Retail	1 accessible, indoor, secure storage space for 10% of retail workers planned
Residential	1 space for every dwelling unit

Bicycle parking shall be provided in a safe, accessible and convenient location. A well marked path with directional signage shall be installed when bike parking facilities are not clearly visible from the street or sidewalk. Bicycles should not be required to ride up and down speed ramps greater than 12%

Structures containing two hundred fifty thousand (250,000) square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters. One (1) shower per gender shall be required for every two hundred fifty thousand (250,000) square feet of office use Such facilities shall be for the use of the employees and occupants of the building, and shall be located where they are easily accessible to parking facilities for bicycles

4.3.5 Streetscape Standards

4.3.5.a Include furniture, lighting, fixtures, etc.

See Section 7, for specifications

4.3.5.b Establish a transition between buildings and open space

Open space should be sheltered to create a serene place for people to feel comfortable gathering or resting, however not provide a feeling of isolation. The transition between the building and the open space shall be softened with landscape, furniture, water feature, etc

4.3.6 Signage

4.3.6.a Building signage

The number and size of signs are regulated by the City's sign ordinance (VMC 20 960) In the Columbia Way District, signage shall be designed for both vehicular and pedestrian traffic. Auto-oriented fascia signs

should be of minimum area required for readability from no more than one block away. There shall only be one primary building sign with a maximum area of 36 square feet per building façade. Signs for building tenants can be up to 10 feet are unlimited

Pedestrian oriented signs shall include a blade sign attached to the underside of the canopy for each tenant

No freestanding signs are allowed in the Waterfront area

4.3.6.b Parking signage

The Vancouver Waterfront will need a signage plan for parking signage. All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings

4.3.6.c Way finding signage

The Vancouver Waterfront will need a signage plan for way finding signage. All projects to follow the signage plan to provide a cohesive feeling and make it clear to all visitors where to park and enter buildings

4.3.6.d Hazardous materials discharge.

Label drain inlets to educate people about where the drain discharges in hopes to discourage people from dumping hazardous material down storm drains.

4.4 Cultural District

Cultural District is envisioned in the future to be the cultural core of the Waterfront and potentially being the area that focuses on the performing arts and theater It is designed to be transit oriented and an extension of main transportation route through the waterfront The sidewalks are wide and lined with street trees to encourage a lively streetscape. Street parking is allowed, but no curb cuts or service elements are allowed along Columbia Way to encourage the pedestrian character of the street

4.4.1 General

4.4.1.a Proposed Uses

The proposed uses in the Cultural District are office, retail, and restaurants, cultural and civic Structured parking is allowed above grade at Block 1. Residential is not allowed in this district.

4.4.1.b FAR, Lot Coverage and Building Height

See figures

Fig G3 Block Plan
Fig G4 Statistics Plan
Fig CD1 Block 01
Fig CD2 Block 02

4.4.2 Building Architecture

(No Design Guidelines at this time for this District)

4.4.3 Streets and Pedestrian Areas

(No Design Guidelines at this time for this District)

4.4.4 Vehicular Access and Parking

(No Design Guidelines at this time for this District)

4.4.5 Streetscape Standards

(No Design Guidelines at this time for this District)

4.4.6 Signage

(No Design Guidelines at this time for this District)

This page to remain blank

Section Five

Section 5.0 Overlays

5.1 Access Overlay

The access overlays designate an area which can have one curb cut 25' wide per block for parking and service entries In order to accommodate this, the transparency requirements are reduced to 50% in the areas designated in this overlay

5.2 Festival Streets Overlay

The streets designated as Festival Streets are pedestrian oriented streets. Select appropriate enhanced landscape and include water features to provide more interest for pedestrians Marquees shall be at least 8 feet in depth to provide additional weather protection. Additional seating shall be provided on these streets. Pavers or other pervious ground cover systems are required in the areas designated in this overlay.

5.3 Service Overlay

The alley is primarily a service corridor and not designed to encourage pedestrians, however it still needs to provide a safe and comfortable pedestrian environment No dumpsters or other service items shall be stored in the alley.

The façade shall have some modulation or material variety to provide visual interest in the blank façade The building shall modulate at least 18" every 20 feet, change building material every 20 feet or a combination of modulation and material change so that there is not a flat material for more than 20 feet in width In the service overlay, structured parking is allowed above grade up to 120' from the property line perpendicular from the alley The parking can be an open parking garage provided the openings are high enough to avoid headlights from being seen from other buildings in the Vancouver Waterfront.

Buildings are allowed two curb cuts per block for parking and service entries. The building massing at the end of the alley should consider a chamfer or other massing change to provide visibility to cars exiting the alley

5.4 Grant and Esther Street Overlay

Grant and Esther Street are the two main gateways into the Vancouver Waterfront from the downtown area and are intended to be a main pedestrian and vehicular connection to the downtown area The corners of the building are the first impression pedestrians have of the area as they enter the Waterfront The northern corners of the sites on Grant and Esther Streets shall be treated as a gateway Design towers to be built to maximum allowable height and not more than 5' back from podium façade to create gateway on Grant Street and Esther Street at the north property line. The corner treatment of the building massing and design should respond to the gateway corner At the sidewalk level, the corners should be treated special as well through highlighting of the entries, special marquees, landscape, art, etc

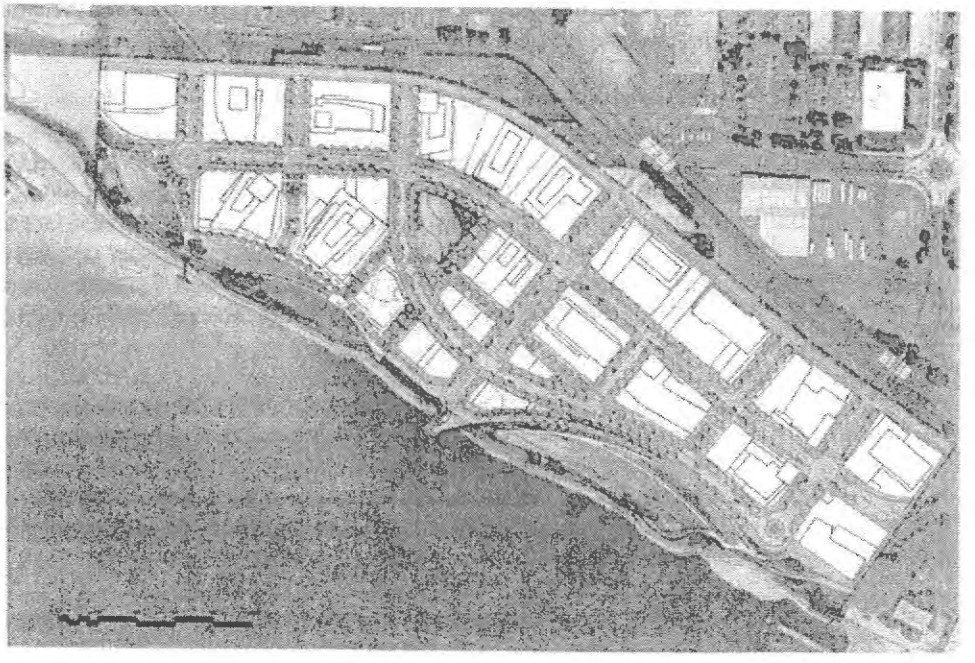
This page to remain blank

Section Six

Section 6.0 Parks and Open Space Introduction

The Parks and Open Space system for the Vancouver Waterfront development is comprised of 32.62 acres and includes passive and active waterfront park spaces, trails, mews connections, a pedestrian esplanade, and an internal park. Together these form a cohesive system that supports the needs of the new residential and commercial population as well as serving needs of the greater Vancouver, Washington residents. The Vancouver Waterfront parks and open space system is intended to reconnect the City with its waterfront and the Columbia River - through maximizing visual as well as physical, environmental and cultural connections. The parks and open space system also provides a means to reconnect and reweave the waterfront into the city's fabric. Parks and open spaces are organized so that they best serve those living and working in the new neighborhood as well as the general public.

Section 6.1 describe the overall concept for the parks and open space system, the design references used, and the Vision, Principles and Program established through an extensive public process undertaken in the fall of 2008. Following sections provide design guidance for further design development, beginning with an expansion on the different Character Precincts in the open space system and followed by more specific design guidelines for project elements such as materials, planting, and trails.



6.1 Parks and Open Space Concept

6.1.1 Design Intent

A majority of the planned open space for the Vancouver Waterfront development is on the waterfront, where people would like to congregate and where the best views and sunniest spots can be had. The waterfront park is envisioned as a vibrant, inspiring, world class park that will serve all residents and visitors. It is intended as a place where the visitor can discover, explore and experience the people, the place and the river. The intent of the open space plan is to capture the user's imagination by providing a varied experience and character at the water's edge and throughout the development.

The experience should range from passive natural to active urban and reinforce the surrounding land use The waterfront should be designed to engage and attract the public while protecting and enhancing the environment and expressing sustainability.

The various components of the open space plan include a more urban and designed waterfront open space on the eastern end which is intended to have more active use and interface between the built spaces and the open spaces A promenade along the waterfront street provides an urban edge and hard surface for strolling, seating, arts or performance Un-programmed space for events as well as informal play is provided in a large open green space at the waterfront's eastern end Built in seat steps and a sloping lawn provide flexibility and the opportunity for programmable venue space Waterfront open space on the western end of the site transitions to a softer and more natural park experience, with native planting, a gentler riverfront edge, a looping trail system, and interactive play areas.

The wide, linear waterfront open spaces are punctuated by activity nodes at important junctions These nodes are celebrated as major public spaces for people to gather and interact, helping to create community These are also places where people can more closely and creatively connect with the river and the waterfront. These include the large public plaza space at the foot of Grant Street, the terraced viewing areas and steps down to the waterfront at the foot of Esther Street, and the looped trails at the western end of the site. The active internal park in the western half of the site provides a neighborhood park experience for the residents of the development

Esther and Grant Streets connect with the city and draw people from the downtown into the site and to the waterfront. A green street treatment along Esther Street connects the development with Esther Short Park, drawing people between these two destinations and to surrounding public amenities. Large public spaces at the terminus of both Esther and Grant Streets provide viewing opportunities, and the potential for a variety of ways to interact with the ever-changing river These include terraced steps with water views, decks over the water, docks with water access, and rock steps down to the water.

Parks and public open spaces are central to the overall plan and are therefore linked together by a varied system of pedestrian pathways, sidewalks, mews and street end plazas. These critical elements in the overall open space system also serve to link the parks and open spaces to the surrounding community and to extend the waterfront park character back into the site.

Another major element of the parks and open space system are the trail connections that link to the surrounding areas The design connects in with the City's Columbia River Renaissance Trail system, providing a continuous waterfront trail that varies in scale and character as it extends east and west The character of the trail also varies across the site, providing a variety of trail experiences

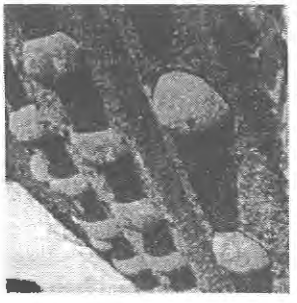
Finally, it is intended that the development embed and demonstrate sustainability in all the parks and open spaces, promoting sustainable practices and making them visible This will happen in a variety of ways, including introducing native planting and enhanced shoreline treatment to create biodiversity and varied ecosystems, the development of demonstration areas (e.g., storm water treatment), and the use of educational and interpretive materials.

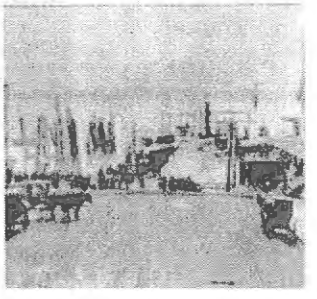
6.1.2 Design References

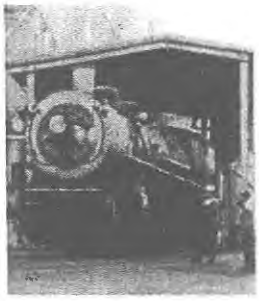
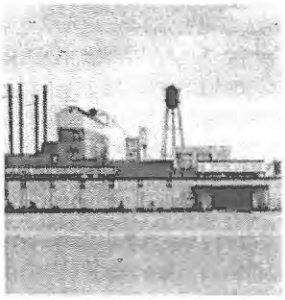
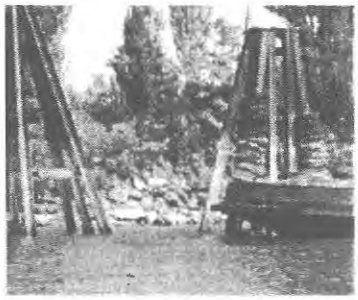
While the Vancouver Waterfront development helps propel Vancouver forward into the future, the past is not forgotten...the importance of the site's industrial heritage helps set the stage for defining a unique industrial/marine character for the development. The character of the waterfront draws its inspiration from the historical significance of the site, particularly the lumber and paper mills, and their associated waterfront uses. Familiar historical references along the shoreline may be reinterpreted and updated to become character defining elements that are incorporated into the public realm. Elements relating to the lumber and paper mill past of the site, along with others relating to the trading (Hudson's Bay Co.), native American, fishing, rail, brewing and shipbuilding history of Vancouver, may be used to provide a "storied" experience at the water's edge. Additionally, elements from the site's pre-industrial past, including native shoreline planting, will be woven into the new development.

There is an incredible richness of history that references the people, the place, and the river. The design references for the parks and open space should reinforce the notion of reconnection to the riverfront. These references would include features and elements such as fishing piers, timber overlook decks, timber boardwalks, piers, terraces to the water, interpretive signage, and restored river ecology.

Vancouver Waterfront – Historic





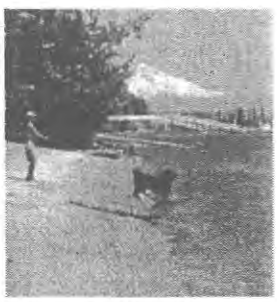




6.1.3 Vision

The Vision for the Vancouver Waterfront parks and open space system forms the overall conceptual basis for the project. This Vision emerged during discussions with the City, the Stakeholders group, and the public. These are presented below and the concepts have been incorporated in the Conceptual Design and in the Guidelines.

CONNECTING TO THE COLUMBIA RIVER
DISCOVER, EXPLORE & EXPERIENCE THE PEOPLE, THE PLACE, & THE RIVER

- Create a vibrant, inspiring, world class waterfront park
- Create places and spaces that serve all residents and visitors
- Think outside the box - look for exciting opportunities
- Provide spaces that are multi-purpose, multi-functional, all season, diverse.
- Ensure appropriate programming
- Celebrate and enhance the natural environment
- Promote sustainable practices and make them visible on site
- Look toward the future, while celebrating the past history of site and area.
  a) The River: Nature/Natural Forces, Changes through Time, Economic Importance.
  b) Hudson Bay Co., Fort Vancouver, Native Americans, Early Settlers.
  c) Industrial Uses on Site: Lumber and Paper Mills
  d) Industries in the Area: Breweries, Shipbuilding, Terminal 1.
  e) Gateway to Washington State



6.1.4 Principles

The following Set of Principles where also developed through public and stakeholder workshops, and reflect the values that have been reflected in the subsequent design. These principles should be used in making subsequent design and programming decisions for the parks and open space system.

OVERALL DESIGN

1. Provide a sense of identity that reflects, respects and builds on the unique history of the site and community.

2. Provide flexible spaces that maximize programming opportunities.
3. Provide variety and diversity in park & open space experiences.
4. Integrate public art into parks & open space.
5. Use quality materials to provide a sense of permanence.
6. Maximize universal access to parks and open spaces.

WATERFRONT

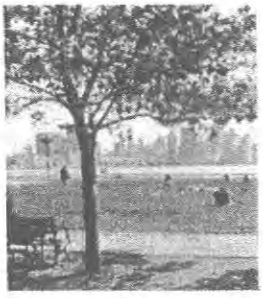
1. Maximize physical and visual access to the waterfront.
2. Capture the imagination through varied experience & character at the water's edge.
3. Extend the waterfront park character back into the site.

CONNECTIONS

1. Link the parks and open spaces to the surrounding community - e.g., provide strong connections to Esther Short Park and surrounding public amenities.
2. Provide a continuous waterfront experience that connects to the waterfront trail.
3. Provide continuous linkages that connect the parks and open spaces together by pathways, sidewalks and mews.

ENVIRONMENT & CULTURE

1. Maximize sunlight to all public parks & open spaces.
2. Ensure parks & open spaces provide all season interest, activity & functions.
3. Incorporate the Columbia River's natural resources and history into design.
4. Embrace sustainable programs in parks and open spaces.
5. Create biodiversity and a variety of ecosystems.



6.1.5 Program

Finally, through the public process, a desired set of park program elements were identified. Through the conceptual design process, these have all been located within the parks and open space system.

OPEN SPACE:

1. Venue space for new community events
2. Large, flexibly programmed green space
3. Viewing areas, including:
   a) Water's edge decks
   b) Seating areas
   c) Wildlife viewing (incl. birding)
4. Variety of Seating
   a) Benches
   b) Terraced seating steps

   c) Boulders
   d) Lawn

5 Access to river / water e g., fishing, boating, viewing
   a) Rock steps down to water
   b) Dock(s)
   c) Beach area
6 Urban plaza at water's edge
7 Picnic areas, including picnic benches & informal spaces
8. People watching spaces/places to just 'hang out'
9 Passive recreation areas
10. Restrooms
11 Natural areas with interpretive materials
12 Sustainability focus with demonstration areas (e g , stormwater treatment)
14 Public art integrated in design
15. Interpretive and educational opportunities
16. Way finding and information elements
17. Urban Agriculture (e g., fruit trees, berry bushes)

TRAILS / PATHS / MEWS
1 Extension of regional trails system
2 Combined & separated riverfront trail system (bike & ped)
3. Natural/informal trail system
4 Connections to river and back to the City
5 Mews - Park connections to the neighborhood
6. On-leash dog walking trail

PLAY AREAS
1 "Ribbon of Play" including interactive play areas
2 Large lawn areas for informal play
3 Water play, including spray park
4. Play areas for kids of all ages

6.1 Parks and Open Space Character Precinct

The following section describes the preliminary concepts and design ideas contained in the Parks and Open Space Conceptual Master Plan

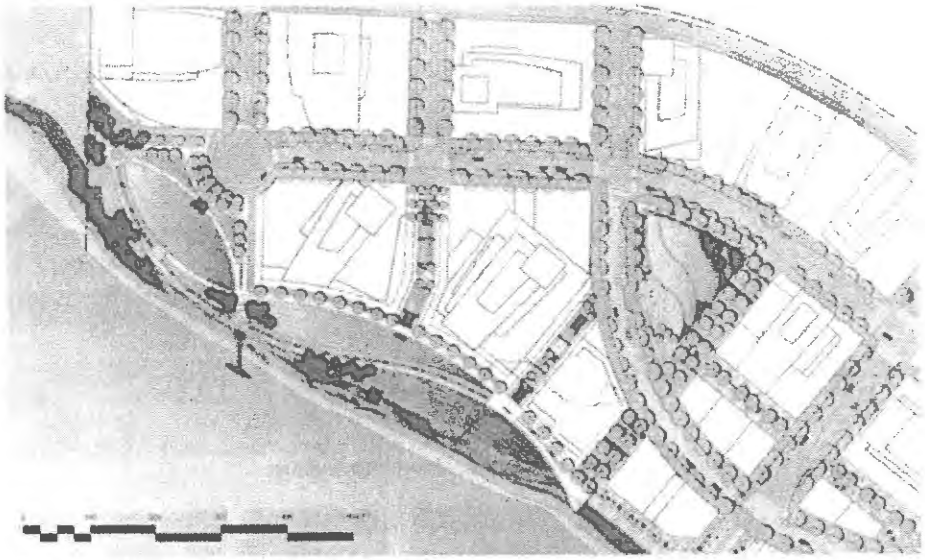
6.2.1 Western Riverfront Park

The Western Riverfront Park is the most westerly waterfront park, defined on the north edge by residential parcels 21, 20 and 18, and to the east by parcel 16 and Grant Street Plaza

The Western Riverfront Park is characterized by a large expanse of flexible open space that gently slopes towards the river's top of bank. The park's riverfront edge condition transitions from a human oriented use program on the easterly half to a restored riparian condition on its westerly half providing habitat for a variety of native flora and fauna. The park accommodates the separated pedestrian walkway/bikeway that meanders through the site, intersecting with specific riverfront access points, including a fishing wharf, and a series of timber view decks providing both physical and visual access to the river's edge

The northerly edge of the park is defined by a secondary pedestrian path that establishes a transitional edge interface with the adjoining ground-oriented residences on parcels 16, 18 and 20 The idea of the park edge serving as the front face of the adjacent residences reinforces the notion of the park as a "Commons" for the neighborhood. Park-like mews connections between these development parcels establish important connections between Festival and Columbia Streets and the Riverfront Commons, and

provide a creative landscape approach of extending the city street grid through the park space and ultimately to the river's edge.

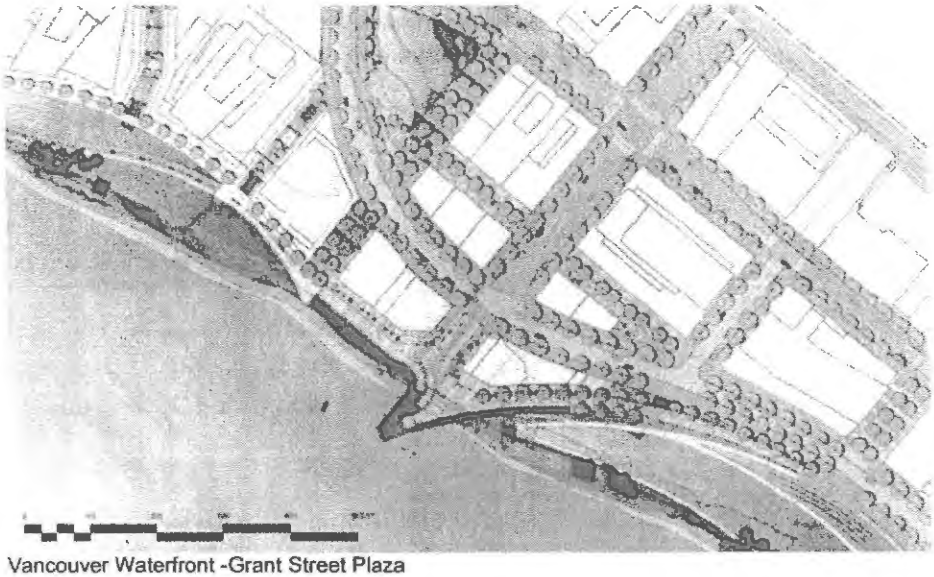


Vancouver Waterfront – Western Riverfront Park

Where the park makes a direct connection with the Columbia St. turnaround, the sloping condition maximizes opportunities for a naturalized children's play area that integrates with a re-circulating water course. The character of the area south of the Renaissance Trail is intended to be predominantly more natural while the area north should transition to a more formal landscaped character.

6.2.2 Grant Street Plaza

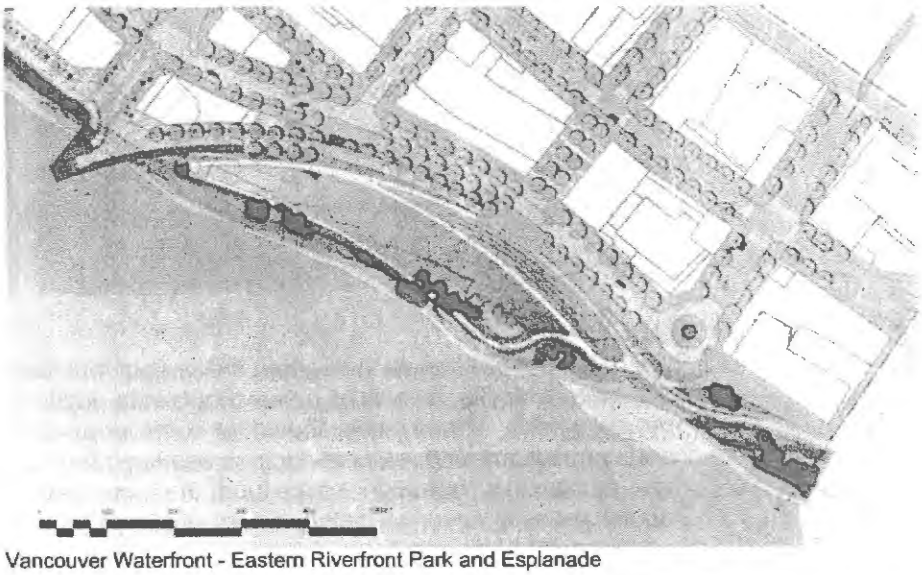
Grant Street Plaza marks the terminus of Grant Street where it meets the River's edge. It is intended as the most intensively used public space on the Vancouver Waterfront, comprised of a terraced plaza with a pier extension over the Columbia River. The plaza is an active gathering space that is animated with commercial/restaurant uses and their constituent patio zones that line its perimeter. Benefiting from its southern exposure, the Grant Street Plaza can accommodate small outdoor events during the peak periods of the year along with comfortable areas for passive seating and viewing of the river. A proposed seating feature at the plaza prow provides an optimal viewing opportunity and will serve as a memorable landmark defining the epicenter of the Vancouver Waterfront community.



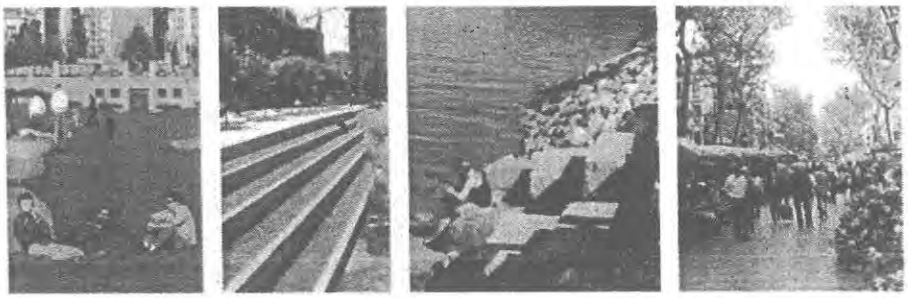
Vancouver Waterfront -Grant Street Plaza

6.2.3 Eastern Riverfront Park and Esplanade

The Eastern Riverfront Park and Esplanade stretches from the Grant Street Plaza to the most easterly edge of the site. This precinct is characterized by a major pedestrian esplanade located along the southern edge of Festival Street that provides active pedestrian and cyclist connectivity between Grant Street Plaza and the Esther Street Landing. The tree lined Esplanade is a wide plaza–like promenade with seating and an array of corten steel light columns whose form trace out the ribs of a ship's hull. South of the Esplanade is an open waterfront park, whose grades terrace down as a series of amphitheater steps. The park area can accommodate temporary staging and performance areas in order to serve as a waterfront performance venue. During non-event times the waterfront park maintains its capacity as a flexible park space for a variety of activities such as sunbathing, picnics, frisbee, informal ball games and interpretive nature walks. A series of timber "pier extensions" align with the north/south street ends and notionally carry forward the street corridors to the rivers' edge in the form of a series of view-points that are connected by a secondary informal waterfront path.

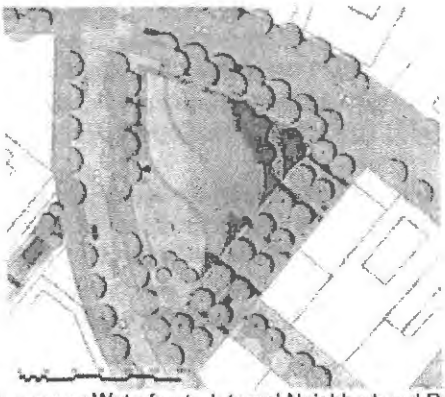


Vancouver Waterfront - Eastern Riverfront Park and Esplanade



6.2.4 Internal Neighborhood Park

The Internal Neighborhood Park provides an active outdoor amenity for the internalized residential and commercial/retail blocks that define its perimeter. The park marks a significant destination point for the commercial shopping mews that extends easterly to the curvature of Festival Street. An active water play plaza and picnic kiosk with outdoor seating form an activity node at its southern point. A series of "land waves" emanate from the activity node, consisting of an array of scalloped lawn berms defined with low curving stone walls, creating an ideal location for picnicking and passive play. The perimeter of the park is defined with rows of deciduous trees with seating beneath, a continuous rain garden that forms a green border all around, and timber boardwalks that link the sidewalks to the interior of the park. Urban agriculture in an informal manner is proposed for this park area. Plant material such as berry bushes, vines and flowering perennials should be integrated with the framework planting.



Vancouver Waterfront - Internal Neighborhood Park

6.2.5 Mews

There are several mews throughout the project that connect the waterfront to the internal blocks, as well as mews that create public walkways within the project blocks. These mews should be considered as urban park extensions and connections with features such as seating, storm water collection, public art and planting. Although private land, the mews will be publicly dedicated rights-of-way to ensure a sense of permeability through the project and to ensure ease of movement and public spaces throughout.

Mews – Precedent Images

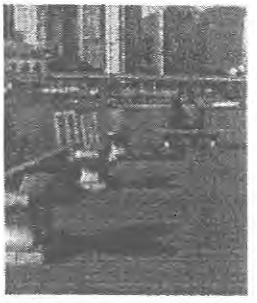
6.3 Materials Palette

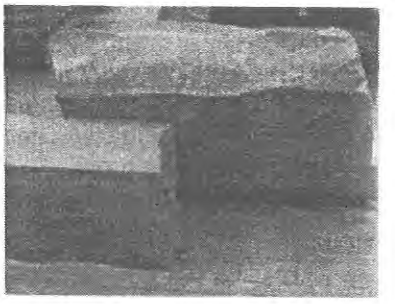
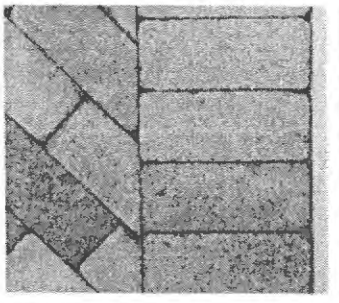
A variety of materials are envisioned in the parks and open space system. Where possible, local and regional materials should be used for paving, walls and landscape features. Their design character and application should be contemporary in their expression and harmonize with the natural character of the river's edge while providing imaginative references to the historical context of the site and the region.

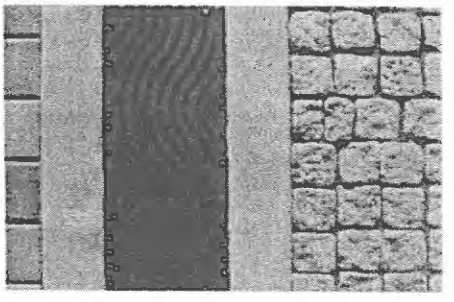
Such materials may include regionally quarried/recycled stone such as basalt, locally produced/recycled concrete and concrete products, and regionally and/or sustainably harvested/recycled timber. Special provisions should be made for the application of "found" materials or artifacts that may have been specific to past activities on the site, whether in its more recent industrial period, its earlier aboriginal settlement period, or during periods pre-dating human settlement.

The esplanade consisting of the widened pedestrian walkway on the south side of the Festival Street and the upper plaza at the foot of Esther Street should be constructed in materials of a higher level of quality, sophistication and refinement than their counterparts along the adjacent pathways and open spaces, and should complement the quality and character of the Grant Street Plaza.

Where concrete seating walls are proposed in the park amphitheatre, along pathway edges and at the foot of Esther Street, stone surfacing, such as a basalt veneer, should be considered both on the top and side surfaces to provide an added level of quality and durability. Durability should be considered as all materials are selected and specified.





6.4 Plant Materials

6.4.1 Selection Criteria

Selected plant materials will play an important role in the parks and open spaces. Plant material should be selected and designed to reinforce the park or open space character and enhance the quality of the outdoor spaces. The following principles apply to all selected and proposed plant material.

A. Plant material should have minimal/limited maintenance requirements.
B. Plant material should be hardy and selected for specific biodiversity zones.
C. Plant material should be of a significant scale so the impact can be realized and appreciated soon after parks are completed.
D. Native and adaptive plant materials are encouraged over highly ornamental plant materials.
E. Plant material should be utilized to create a variety of ecosystems and increase the biodiversity of the area.
F. Plant material selection should reinforce the Urban Forest goals of the City of Vancouver

6.4.2 Representative Plant List

6.4.2.a Parks and Open Space Planting:

Trees:

Botanical Name	**Common Name**
Acer cappadocium 'Rubrum'Coliseum	Maple

Acer circinatum	Vine Maple
Acer rubrum 'Armstrong'	Armstrong Red Maple
Acer rubrum 'Autumn Glory'	Autumn Glory Red Maple
Amelanchier x grandiflora	Serviceberry
Cercidiphyllum japonicum	Japanese Katsura Tree
Cornus kousa	Kousa Dogwood
Cornus nuttallii 'Eddie's White Wonder'	Eddie's White Wonder Dogwood
Davidia involucrata	Dove Tree
Liquidambar styraciflua 'Worpelsdon'	Worpelsdon Sweetgum
Picea omorika	Serbian Spruce
Platanus x acerifolia 'Bloodgood'	Bloodgood London Plane Tree
Pseudotsuga menziesii	Douglas Fir
Quercus frainetto 'Forest Green'	Forest Green Frainetto Oak
Quercus coccinea	Scarlet Oak
Quercus garryana	Garry Oak
Quercus rubra	Northern Red Oak
Stewartia pseudocamellia	Japanese Stewartia
Thuja plicata	Western Red Cedar
Tilia tomentosa 'Green Mountain'	Green Mountain Linden

Shrubs:

Botanical Name	**Common Name**
Berberis verruculosa	Warty Barberry
Buxus microphylla 'Winter Gem'	Winter Gem Boxwood
Choisya ternate	Mexican Orange Blossom
Cornus sericea	Red Osier Dogwood
Hydrangea quercifolia	Oak Leaf Hydrangea
Ilex crenata 'Convexa'	Japanese Holly
Kalmia latifolia 'Olympic Fire'	Olympic Fire Mountain Laurel
Ligustrum japonicum 'Texanum'	Japanese Privet
Mahonia repens	Creeping Barberry
Mahonia aquifolium	Oregon Grape
Physocarpus capitalus	Pacific Ninebark
Rosa 'Meidiland Pink'	Meidiland Pink Rose
Rosa 'Meidiland var Meikrotal'	Scarlet Meidiland Rose
Rosa 'White Meidiland'	White Meidiland Rose
Rosa 'William Baffin'	William Baffin Rose
Rosa mediland Meidomanac	Bonica Mediland Rose
Rosa rugosa 'Hansa'	Hansa Rose
Rosa rugosa 'Max Graff'	Max Graff Rose
Ribes sanguineum 'King Edward VII'	King Edward VII Flowering Currant
Skimmia reevesiana	Reeves Skimmia
Taxus x media 'H M.Eddie'	H.M Eddie Yew
Vaccinium ovatum	Evergreen Huckleberry
Vaccinium ovatum 'Thunderbird'	Thunderbird Evergreen Huckleberry
Vaccinium parvifolium	Red Huckleberry

Ground Covers / Ferns:

Botanical Name	**Common Name**
Arctostaphylos uva-ursi	Kinnikinnick
Blechnum spicant	Deer Fern
Gaultheria shallon	Salal
Pachysandra terminalis	Japanese Spurge
Polystichum munitum	Western Swordfern
Rubus calcynoides 'Emerald Carpet'	Emerald Carpet Taiwan Creeping Rubus

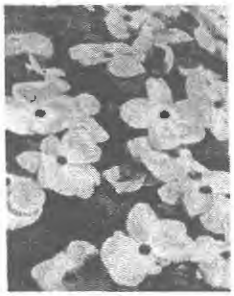
Climbing Vines:

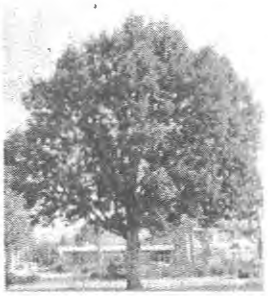
Botanical Name	**Common Name**
Akebia quinata	Five Leaf Akebia

Clematis armandii	Evergreen Clematis
Hydrangea anomala petiolaris	Climbing Hydrangea
Parthenocissus tricuspidata	Boston Ivy
Wisteria sinensis (variety)	Chinese Wisteria

Ornamental Grasses and Perennials:

Botanical Name	**Common Name**
Anemone hybrid	Japanese Anemone
Calamagrostis x acutiflora 'Karl Forster'	Feather Reedgrass
Coreopsis 'Moonbeam'	Moonbeam Corepsis
Echinecea purpurea	Purple Cone Flower
Epimedium xversicolor 'Sulphureum'	Persian Epimedium Barrenwort
Festuca rubra	Red Fescue
Helictotrichon sempervirens	Blue Oat Grass
Hemerocallis 'Stella d'Oro'	Stella d'Oro Daylily
Hemerocallis Hybrids Mixed	Daylily
Hosta siefoldiana 'Elegans'	Elegans Plantain Lily
Lavandula 'Hidcote'	Hidcote Lavender
Lavandula angustifolia 'Munstead'	Munstead Lavender
Liriope muscari	Big Blue Lily Turf
Mahonia nervosa	Dwarf Oregon Grape
Miscanthus sinensis 'Gracillimus'	Maiden Grass
Miscanthus sinensis 'Morning Light'	Flame Grass
Miscanthus sinensis 'Purpurescens'	Purple Maiden Grass
Miscanthus sinensis 'Variegatus'	Variegated Japanese Silver Grass
Miscanthus sinensis 'Yaku Jima'	Yaku Jima Miscanthus
Pennisetum alopecuroides 'Hamelin'	Dwarf Fountain Grass
Pennisetum orientale	Oriental Fountain Grass
Perovskia atriplicifolia	Russian Sage
Phormium tenax	New Zealand Flax
Rudbeckia fulgida 'Goldstrum'	Black-eyed Susan
Sedum purpurium 'Autumn Joy'	Purple Stonecrop
Stipa gigantean	Giant Feather Grass





6.4.2.b Rain Garden Planting:

Trees:

Botanical Name	**Common Name**
Acer circinatum	Vine Maple
Acer macrophyllum	Big Leaf Maple
Amelanchier alnifolia	Saskatoon Serviceberry
Betula nigra	Water Birch
Thuja plicata	Western Red Cedar

Shrubs:

Botanical Name	**Common Name**
Cornus sericea	Red-osier Dogwood
Gaultheria shallon	Salal

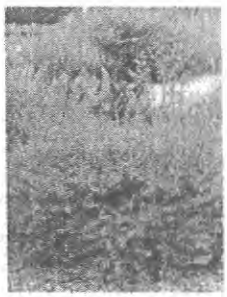
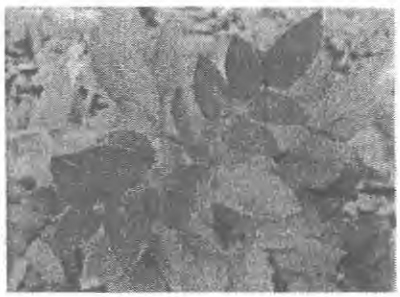
Lonicera involucrata	Black Twinberry
Mahonia aquifolium	Oregon Grape
Oemleria cerasiformis	Indian Plum
Philadelphus lewisii	Interior Mock Orange
Polystichum munitum	Western Swordfern
Ribes sanguineum 'King Edward VII'	King Edward VII Flowering Currant
Rubus spectabilis	Salmonberry
Salix purpurea 'Nana'	Dwarf Arctic Willow
Spiraea douglasii	Western Spiraea
Symphoricarpos albus	Snowberry
Vaccinium ovatum	Evergreen Huckleberry
Vaccinium parvifolium	Red Huckleberry

Perennials, Ferns and Ornamental Grasses:

Botanical Name	**Common Name**
Adiantum pedatum	Northern Maidenhair
Festuca rubra	Red Fescue
Luzula nivea	Snowy Wood Rush
Carex mertensii	Mertens Sedge
Carex obnupta	Slough Sedge
Carex sitchensis	Sitka Sedge
Carex stipata	Sawbeak Sedge

Aquatic Plants:

Botanical Name	**Common Name**
Juncus effusus	Common Rush
Lysichiton americanus	Yellow Skunk Cabbage

6.4.2.c Urban Agriculture Planting:

trees

Botanical Name	**Common Name**
Amelanchier alnifolia	Saskatoon Serviceberry
Amelanchier x grandiflora	Serviceberry
Cornus mas	Cornelian Cherry
Corylus cornuta	Western Hazelnut
Malus fusca	Western Crabapple
Malus varieties	Apple
Malus varieties	Crabapple
Pyrus varieties	Pear

Shrubs

Botanical Name	**Common Name**
Arctostaphylos Columbiana	Hairy Manzanita
Camellia sinensis	Tea

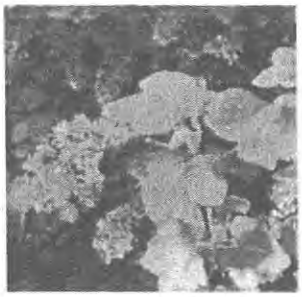
Ficus varieties	Fig
Gaultheria shallon	Salal
Mahonia aquifolium	Oregon grape
Rheum x hybridum	Rhubarb
Ribes divaricatum	Wild Gooseberry
Ribes sanguineum	Red Current
Rubus parviflorus	Thimbleberry
Rubus spectabilis	Salmonberry
Rubus varieties	Raspberry
Sambucus nigra caerulea	Blue Elderberry
Sambucus racemosa	Red Elderberry
Vaccinium ovatum	Evergreen Huckleberry
Vaccinium parvifolium	Red Huckleberry
Vaccinium varieties	Blueberry

Climbing Vines

Botanical Name	**Common Name**
Actinidia chinensis	Chinese Gooseberry
Humulus lupulus (varieties)	Hops
Vitis vinifera (varieties)	Grape Vine

Ground Cover / Ferns

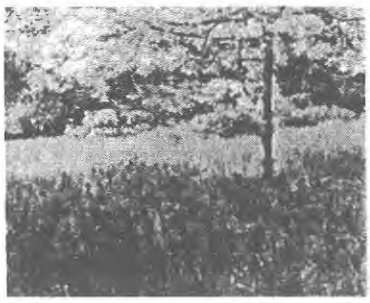
Botanical Name	**Common Name**
Gaultheria procumbens	Wintergreen
Fragaria chiloensis	Coastal Strawberry
Nasturtium varieties	Nasturtium
Rubus calcynoides 'Emerald Carpet'	Emerald Carpet Taiwan Creeping Rubus
Rubus x 'Apache'	Apache Thornless Blackberry



6.4.2.d Meadow Planting:

Perennials, Ferns, Bulbs and Seeded Grasses:

Botanical Name	**Common Name**
Achillea millefolium	Common yarrow
Allium cernuum	Nodding Onion
Anaphalis margaritacea	Pearly Everlasting
Aquilegia formosa	Western columbine
Camassia leichtlinii	Leichtlin's (Great) Camas
Camassia quamash	Common Camas
Delphinium menziesii	Menzies' Larkspur
Lilium columbianum	Tiger Lily



6.4.2.e Riparian / Native / Adaptive Planting:

Trees:

Botanical Name	Common Name
Abies grandis	Grand Fir
Acer macrophyllum	Big Leaf Maple
Alnus rubra	Red Alder
Arbutus menziesii	Pacific Madrone
Cornus nuttallii 'Eddie's White Wonder'	Eddie's White Wonder Dogwood
Quercus garryana	Garry Oak
Salix scouleriana	Scouler Willow
Thuja plicata	Western Red Cedar

Shrubs:

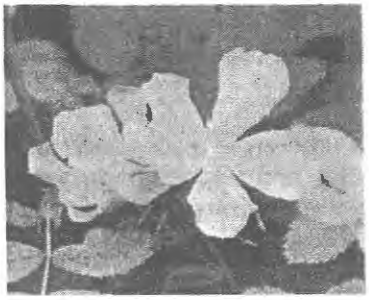
Botanical Name	Common Name
Blechnum spicant	Deer Fern
Cornus sericea	Red-osier Dogwood
Gaultheria shallon	Salal
Lonicera involucrata	Black Twinberry
Mahonia aquifolium	Oregon Grape
Oemleria cerasiformis	Indian Plum
Philadelphus lewisii	Interior Mock Orange
Polystichum munitum	Western Swordfern
Rhododendron macrophyllum	Pacific Rhododendron
Ribes sanguineum	Flowering Currant
Rosa gymnocarpa	Baldhip Rose
Rubus spectabilis	Salmonberry
Salix sitchensis	Sitka Willow
Spiraea douglasii	Western Spiraea
Symphoricarpos albus	Snowberry
Vaccinium ovatum	Evergreen Huckleberry
Vaccinium parvifolium	Red Huckleberry

Ground Covers:

Botanical Name	Common Name
Arctostaphylos uva-ursi	Kinnikinnick
Cornus canadensis	Bunchberry

Grasses:

Botanical Name	Common Name
Carex mertensiiMertens Sedge	
Carex obnupta	Slough Sedge
Carex sitchensis	Sitka Sedge
Carex stipata	Sawbeak Sedge



6.5 Site Furnishings and Public Art

6.5.1 Site Furnishings:

Site furnishings, coordinated with paving materials and lighting, help define the character of public places and can play a key role in creating a unified character in urban areas characterized by a variety of architectural styles. A coordinated range of site furnishings that are appropriate to the various Park and Open Space Character Precincts should be developed for the Vancouver Waterfront. Site furnishings include benches, trash receptacles, recycling receptacles, bollards, bike racks, landscape structures, and drinking fountains.

A combination of prefabricated and custom site furnishings should be used that are contemporary in their form and character and harmonize with the ecological and historical context of the site. They should include both a modular family of furnishings that are consistent along the entirety of the waterfront development, and a series of custom pieces that provide uniqueness and interest at key points. All site furnishings should be durable, well made and easily maintained.

Stand-alone furnishings should be limited in favor of integrating seating, receptacles and planters into landscape walls where grade changes occur alongside pathways and park edges. These are intended to provide places for social interaction, viewing of the river, eating, and spectator seating for small performances. Where they are required, locate modular furnishings such as free-standing benches, planters, kiosks, patio seating and receptacles to the edges of the plaza and/or parallel to the flow of pedestrian and bicycle movements, to allow continuous access and maximize flexible use of the plaza.

Seating surfaces, railings and other finer components that are in direct human contact should be constructed with regional and/or sustainably harvested hardwoods that maximize comfort, visual warmth and longevity.. Supporting structural components may be a combination of steel (powder coated, hot-dipped galvanized or corten), architectural concrete and stone (saw cut or flame finished).

Avoid large exposed faces without texture or articulation that are easily tagged or vandalized. Avoid continuous edges that exceed 36" on surfaces that can be accessed by skateboards. Where possible, skateboard deterrents should be integrated into the design of furnishing components to avoid add-on applications at a later date.

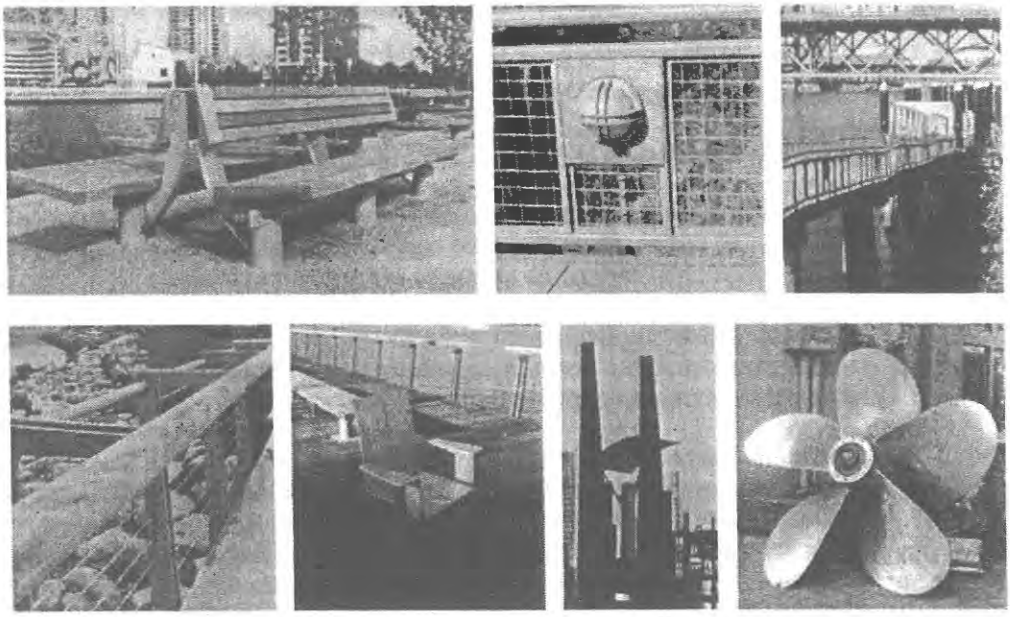
Recycling of materials such as glass, plastic, bottles, newspapers and paper should minimize the need for bottled water.

6.5.2 Public Art:

Public art is a way to incorporate culture and bring a sense of place and interest to a community. Incorporate public art into the project wherever possible. The art should be accessible to the public and relate to the natural, social, cultural and built

environment. Public art should be educational if possible, for example by referencing the site's history, natural processes occurring on the site, or the power of the Columbia River (wind, water, etc.)

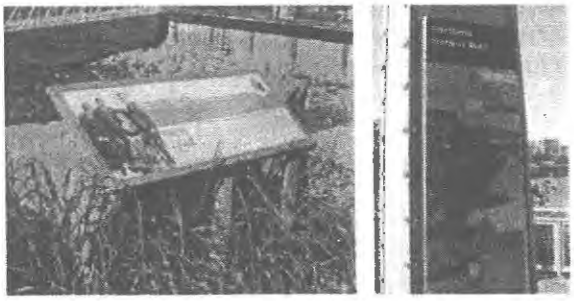
Public art in the project can augment the creation of places that have significance for people such as the parks, streets, mews, and neighborhood gathering places. To achieve this the art should be well integrated into the public realm and not added as an afterthought.



6.6 Public Realm Signage / Interpretation:

A system of way-finding and interpretive signage shall be incorporated into the public realm environment, to assist in the one's directional orientation, as well as one's understanding of the place, and its cultural and historical context. A signage system should be developed that is unique to the Vancouver Waterfront in its graphic quality and physical form so as to reinforce one's sense of place on the riverfront. A contemporary graphic expression that succeeds in "branding" the Vancouver Waterfront development should be considered. Signage should be developed as a hierarchical system that can articulate outdoor spaces ranging in scale and significance. Place names should be highlighted as a means of reinforcing the importance of the people, the place and the river.

Way finding signage should be clearly visible for its application and of an appropriate size and legibility for its intended purpose. The directional/way-finding signage system should be legible for the visually impaired.



6.7 Trail and Path Guidelines

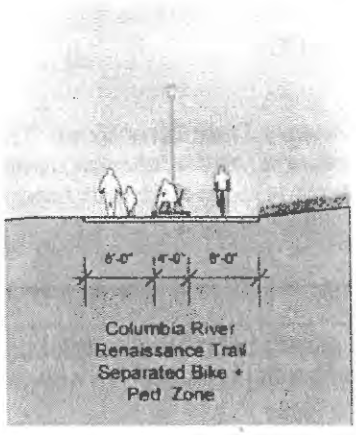
There are a number of paths and trails that extend through the development site and stitch the overall neighborhood areas together. Most of these trails and path connections planned for the Columbia Waterfront LLC are extensions of trails and pathway systems within the existing urban and waterfront context. These Guidelines should be read in context with the January 2004 Paths and Trails Element / Vancouver (WA) Walking & Bicycle Master Plan.

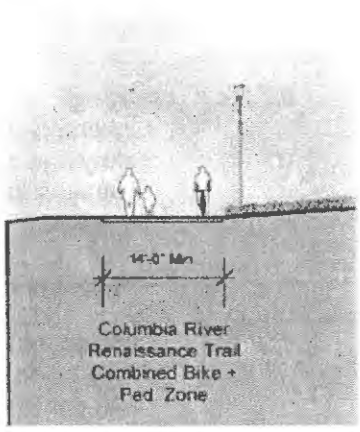
6.7.1 Columbia River Renaissance Trail

The Columbia River Renaissance Trail is an extension of the trail from the east that follows along the Columbia River. The trail will have minimum standards that will be exceeded in various areas, and should reflect the character of the neighborhoods the trail transects. At times the trail will be separated, providing a separate route for wheeled users (cyclists and roller bladders) and pedestrians and at times the trail will be combined to accommodate these same users. This trail at all times will be separated from motor vehicle traffic. Seating should be located along the trail at numerous areas and at nodes and feature areas.

6.7.1.a Trail Widths

Combined Trail	min. 14'
Separated Trail	min. width 18' - 20'
Pedestrians	8'
Wheeled Users	8'
Separator Strip	2' Hard Landscape (min.)
Separator Strip	3-4' Soft Landscape (if possible)





6.7.1.b Surface Materials

Pedestrian Areas
- Concrete unit pavers (permeable and Impermeable)
- Sandblasted scored concrete paving

Bike / Wheeled User Areas
- Asphalt (permeable)
- Sandblasted scored concrete

Feature Areas at major pedestrian crossings
- Special Paving / Concrete Unit Pavers

6.7.1.c Lighting

Similar to the overall lighting concept for the Columbia Waterfront Project, the objective is to reduce light pollution both to the sky and excess light to the surrounding area. The Renaissance Trail should be lit for safety and security reasons to the following levels as noted in the

IESNA (Illuminating Engineering Society of North America) RP-08-00 guidelines

Bike ways· 5 lux (0 5ft) and 4:1 average to min uniformity.
Pedestrian walkways 4 lux (0 4fc) and 4 1 average to min uniformity (with no major road crossings)

These are the minimum level for safety and security and will provide a good quality lighting level without over lighting the trail Lighting for the trail should be indirect with no glare / full cutoff lighting fixtures All fixtures should be pole mounted, metal halide, good quality, and durable

6.7.2 Secondary Park Trails

There are a number of Secondary Park Trails in the waterfront park, in addition to the Renaissance Trail, that provide access and connections through the waterfront park These trails should vary in scale and material and should reflect the character of the park area. Seating should be provided in various locations along the trail and/or at nodes or feature areas.

6.7.2.a Trail Widths

Trail width min 6' - max 12'

6.7.2.b Surface Materials

Pedestrian Areas

- Concrete unit pavers (permeable and Impermeable)
- Sandblasted scored concrete paving
- Local stone paving

6.7.2.c Lighting

Lighting on the Secondary Trails is required The trails should be lit for safety and security reasons to the following levels as noted in the IESNA (Illuminating Engineering Society of North America) RP-08-00 guidelines.

Pedestrian walkways 4 lux (0 4fc) and 4·1 average to min uniformity.

Lighting for the trail should be indirect with no glare / full cutoff lighting fixtures All fixtures should be bollard or pole mounted, metal halide, good quality, and durable.

6.7.3 Riverfront Trail

The Riverfront Trail is the informal trail network that follows the top of bank and foreshore area along the Columbia River This trail is intended predominantly for pedestrians but does not exclude cyclists. The trail character is distantly informal yet provides seating, viewing platforms, and interpretation nodes along its length As the trail is on the edge of the top of bank, it is intended for day time use only Informal seating should be located at nodes and viewing decks along the waterfront trail.

6.7.3.a Trail Widths

Trail width min 6' - max. 12'

6.7.3.b Surface Materials

Granular
Timber Decking / Special Paving at nodes

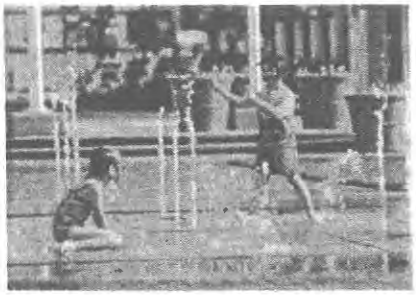
6.7.3.c Lighting

Lighting on the waterfront trail is not required

6.8 Children's Play Areas:

Children's play should be encouraged and integrated in areas where identified on the Parks and Open Space Program Plans. The approach to children's play is intended to be in a more 'adventure,' imaginative and natural state as opposed to formalized play structures. Climbing structures that are custom made from old root wads, boulders, logs, sand and water features are the play quality and character that the project envisions.

The play areas should encourage imaginative play and connect children more deeply with nature and being outdoors.



6.9 Lighting Approach:

A hierarchical lighting system that can respond to open spaces and circulation routes that range in scale and significance should be developed. Select a family of lighting fixtures that complement one another and serve to create a unified identity for the site. Design expression should be of a modern, contemporary character that is complimentary to both the natural and industrial context of the site.

Post top lighting should only be used where necessary, specifically in high traffic areas such as sidewalks, pedestrian promenades, and primary pathways. Low level lighting is encouraged along secondary pathways and mews where post top lighting may be visually intrusive.

Avoid the use of any lighting in areas where people are not encouraged to be at night, or where there is a high degree of ecological sensitivity. All light fixtures should be full cutoff in order to reduce light pollution. Where light fixtures are in close proximity to residential units or other places sensitive to the impacts of exterior lighting, side cut-offs or directional lighting may be necessary to mitigate glare. Use only indirect fixtures for low level lighting and/or bollard lighting to reduce eye level glare. When possible post top lighting should be indirect as well.

6.10 CPTED Approach

"CPTED is the proper design and effective use of the built environment which may lead to a reduction in the fear and incidence of crime, and an improvement of the quality of life." - National Crime Prevention Institute

Crime Prevention Through Environmental Design (CPTED) principles should be applied to all public areas, parks, public right of ways, public open spaces, and streets. The following principles for CEPTED should apply to all these notes areas.

A. Create a sense of ownership in the pubic realm.
B. Create seamless connections to the streets, plazas, and mews from the park spaces, allowing views into the public space/park.
C. Ensure clear and clean visibility. Discourage landscape features and elements where people can hide behind or that create visibility issues.
D. Create numerous watching / viewing spaces so there are many eyes on the public spaces. Provide ample benches and seating opportunities long walkways, trails, in plazas, and along the street edges.
E. Ensure park and open space design supports and enhances the overall urban environment, both social and physical, through improved design and beautification.
F. Ensure there are alternative routes for people to travel on so they have a choice. Providing an alternate, less convenient route along the street for more fearful times can be a design solution that reduces fear, and also can reduce risk of actual crime.
G. Be discriminate with lighting. Lighting creates places for crimes to occur. All public areas do not require lighting, therefore light only the areas where you expect and encourage people to be at night.
I. Design to 'Reduce fear of crime'. Provide emergency measures only where appropriate. Emergency telephones should be provided along the Renaissance Waterfront and Waterfront Trail at approximately 500'. They should be integrated into the landscape and park elements of the trail design such as signage, viewing areas, or seating areas.

6.11 Universal Accessibility Approach

All public spaces and their elements shall conform to the Americans with Disabilities Act. Outdoor spaces shall be barrier free, offering accessible routes throughout. Adequate seating shall be provided to maximize places rest for the mobility impaired. Paving materials and their construction shall be in conformance to ADA paving standards with slopes not exceeding 5%. Where stairs, terraces and slopes exceeding 5% occur, and alternate accessible route shall be provided within close proximity.

6.12 Sustainability Guidelines and Approach

6.12.1 Rainwater management

Provisions should be made to maximize rain water retention and infiltration using hard and soft methods, or a combination thereof, within the plaza and park spaces. Where possible, runoff should be intercepted, retained and/or infiltrated prior to entering a conventional storm sewer. Alternative Design Standards (ADS), and best practices for sustainable rainwater management should be employed within parks and plazas to collect runoff from those areas as well as from private development parcels and streets. Opportunities should be considered that include rainwater harvesting for irrigation, ground water recharge, habitat restoration and enhancement, children's play and artistic expression/interpretation.

6.12.1.a Absorbent Landscape

Maximize the surface area coverage of trees, shrubs, grasses, surface organic matter, and soils in order to increase the absorptive capacity of the site, and minimizing the areas of impervious materials that contribute to excess overland flow.

6.12.1.b Bioswales

Vegetated swales promote storm water retention and infiltration, and improve water quality through filtration and infiltration processes. Vegetated swales can either be simple swales with no under-drain layer or they can design with under drain layers, depending on local conditions and objectives.

6.12.1.c Rain Gardens

Utilize planted depressions that allow rainwater runoff from impervious urban areas like roofs, driveways, walkways, and compacted lawn areas the opportunity to be absorbed, thereby reducing rainwater runoff.

Native plants are recommended for rain gardens because they generally don't require fertilizer and are more tolerant of the local climate, soil, and water conditions. The plants - a selection of wetland edge vegetation, such as wildflowers, sedges, rushes, ferns, shrubs and small trees - take up excess water flowing into the rain garden. Water filters through soil layers before entering the groundwater system. Root systems enhance infiltration, moisture redistribution, and diverse microbial populations involved in bio-filtration. See representative plant list sec. 6.5.2b

6.12.1.d Pervious Paving

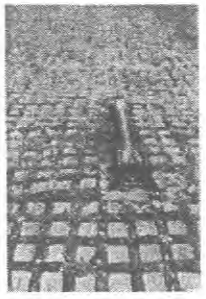
Use previous paving as possible throughout the site. Pervious paving materials can be used to reduce the imperviousness of hard surfaces that have light, or no, vehicle traffic (e.g. driveways, roadway shoulders, parking areas, sidewalks, patios). Pervious paving materials include porous concrete or asphalt mixtures, permeable interlocking paving blocks, concrete grid pavers, perforated brick pavers, and compacted gravel.

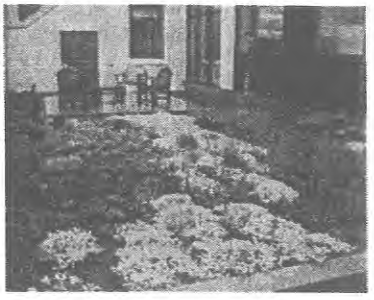
Pervious paving is often underlain by a drain rock base course, which serves as a reservoir that retains storm water and allows it to infiltrate into the surrounding native soil. Pervious paving and reservoir base course systems can be used to retain and infiltrate runoff from adjacent impervious surfaces, and can also be used as inlets/covers for infiltration trenches.

6.12.1.e Green Roofs

Green roofs are an effective means of managing runoff from rooftops. Conventional building and parkade rooftops can be replaced with a layer of lightweight, absorbent growing media underlain by a drainage layer (granular material, "egg carton" type sheet or geotextile). The growing media and drainage layer retain rainfall and allows it evaporate or transpire from the rooftop vegetation. Runoff from green roofs passes through the absorbent growing media into the drainage layer, which attenuates peak runoff rates. There should be no direct surface runoff from green roofs that are properly designed.

The green roofs proposed and designed for the development should have adequate soil depth for their intended use and plant material selection. Extensive green roofs should have a minimum of 4-6" soil depth and intensive green roofs soil depth should vary and accommodate the plant type.





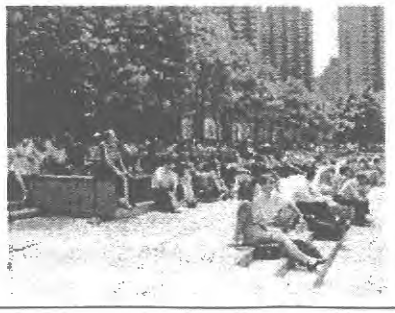
6.12.2 Ecology and Biodiversity

6.12.2.e Urban Forestry

Establish a tree strategy that aims to enhance tree coverage in the urban environment. Long ranging benefits include providing opportunities for urban habitat, CO2 absorption, canopy shading that can reduce the heat island effect, and increasing the interception and absorption of storm water. Strive to achieve a diversity of tree species in parks, streets and plaza spaces in order to minimize diseases that impact tree monocultures. Restore and enhance riparian and shoreline ecologies using native tree species that provide habitat, improve the natural hydrology and provide shoreline stability.

Based on the goals of the City of Vancouver's Urban Forestry Program the trees planted on the Vancouver Waterfront development should also strive to improve and restore the tree canopy, provide adequate and healthy conditions for park, open space and street trees, create a cohesive eco -system, and enhance the urban environment. Through the detailed design of the parks and open space the landscape architects should work in concert with the City to determine an appropriate tree canopy and coverage that works with the buildings and their uses, streets, park and open space uses, views, and the environment.

Tree selection is a critical part of achieving the City's Urban Forestry objectives. Where ever possible large-scale trees with significant canopies should be encouraged. In areas where spaces are narrow and views are important large trees with narrow canopies should be selected.



6.12.2.b Aquatic / Riparian Habitat Shoreline Enhancement

Enhancing the river ecology is an important part of achieving a sustainable waterfront development. Shoreline edge conditions provide critical habitat for wildlife including birds, fish, insects and other animals, while trees and understory vegetation improve natural hydrology and provide shoreline stabilization. Use non-invasive, native aquatic and riparian planting where parks and open spaces interface with the shoreline and the top of bank respectively. See plant list sec.

6.12.3 Urban Agriculture

Urban agriculture is encouraged in an informal manner within parks and open spaces and may include fruit bearing shrubs/trees/vines that are integrated within the various planting areas of the parks and open spaces for public use (See representative plant list Sec. 6.5.2.c). Opportunities also exist on private development sites to incorporate agricultural garden plots onto roof decks that serve the residents of the building.

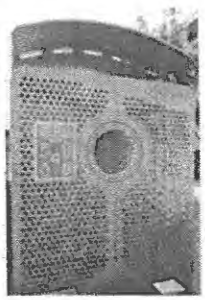
6.12.4 Energy

Energy consumption is an important part of measuring the operational and lifecycle costs of products and materials. Costs of manufacturing, transportation, installation and maintenance all result in cumulative energy inputs. Landscape product and material selection should aim to minimize energy inputs from these activities. When procuring products such as lighting, furnishings, timber products and paving products, select products from sources that rely on renewable energy, or with low carbon emissions. To minimize the costs of shipping and transportation, select materials and products that are produced locally or regionally, such as quarried stone, concrete, unit paving products, lighting and furnishings and plant material. Aim for products that can be produced and delivered within a 100 mile radius of the site.

Select products that minimize long term maintenance costs. This could include plant materials that are low maintenance such as eco-turf and natural planting that require minimal cutting and irrigation. Also consider products such as solar/wind powered lights, solar powered compacting trash receptacles, solar pumps for water features and solar powered trash compactors that can exist off the power grid. These products can minimize or eliminate the installation of costly electrical connections

6.12.5 Recycling

Consider selecting products with recycled content or that can be reused. Landscape product manufacturers now provide products with recycled plastic and metal content. Reuse products or select products that are reusable, such as stone, brick, broken concrete, and paving stones.



This page to remain blank

Section Seven

Section 7.0 Figures

7 1 Experience / Retail District Figures
- Fig E1 Block 08
- Fig E2 Block 09
- Fig E3 Block 11
- Fig E4 Block 12
- Fig E5 Block 16
- Fig E6 Section C Green Street 1
- Fig E7 Section C.2 Green Street 2
- Fig E8 Section D: Retail 1
- Fig E9 Section D.2 Retail 2
- Fig E10 Section D 3. Retail 3
- Fig E11 Section F 3. Grant Street Corridor 3
- Fig E12 Section J 4: Green Street
- Fig E13 Street Intersection
- Fig E14 Street Intersection
- Fig E15 Street Intersection

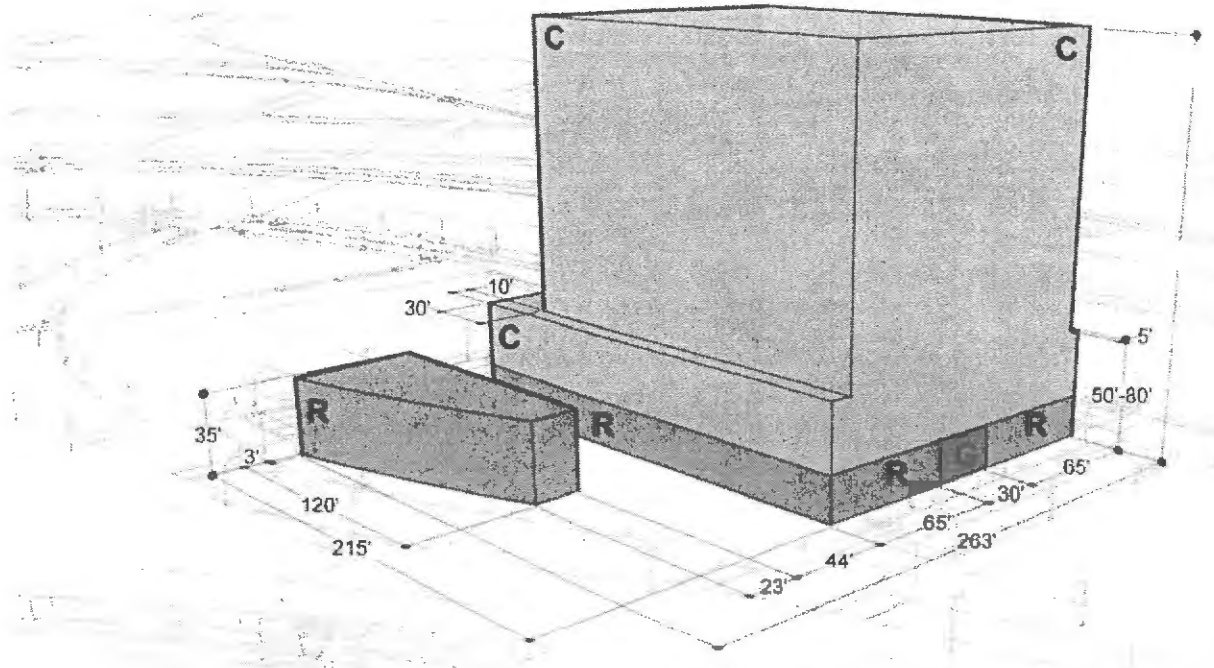
7.2 Residential Park District Figures
- Fig R1 Block 17
- Fig R2 Block 18
- Fig R3 Block 19
- Fig R4 Block 20
- Fig R5 Block 21
- Fig R6 Section A 3· Residential Park 2
- Fig R7 Section B· Access 1
- Fig R8 Section G Residential Park
- Fig R9 Section G 2. Green Street
- Fig R10 Section H 3· Service 3
- Fig R11 Section J. Green Street 1
- Fig R12 Section J.2. Green Street 2
- Fig R13 Section J.3: Green Street 3
- Fig R14 Street Intersection
- Fig R15 Street Intersection

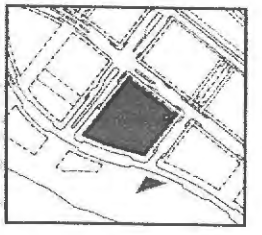
7.3 Columbia Way District Figures
- Fig C1 Block 03
- Fig C2 Block 04
- Fig C3 Block 05
- Fig C4 Block 06
- Fig C5 Block 07
- Fig C6 Block 08
- Fig C7 Block 10
- Fig C8 Block 11
- Fig C9 Block 13
- Fig C10 Block 14
- Fig C11 Section A: Retail
- Fig C12 Section A.2: Residential Park 1
- Fig C13 Section B.2: Access 2
- Fig C14 Section E. Esther Street Corridor 1
- Fig C15 Section E.2: Esther Street Corridor 2
- Fig C16 Section F. Grant Street Corridor 1
- Fig C17 Section F.2 Grant Street Corridor 2
- Fig C18 Section H: Service 1

Fig C19 Section H 2: Service
Fig C20 Street Intersection
Fig C21 Street Intersection
Fig C22 Street Intersection
Fig C23 Street Intersection

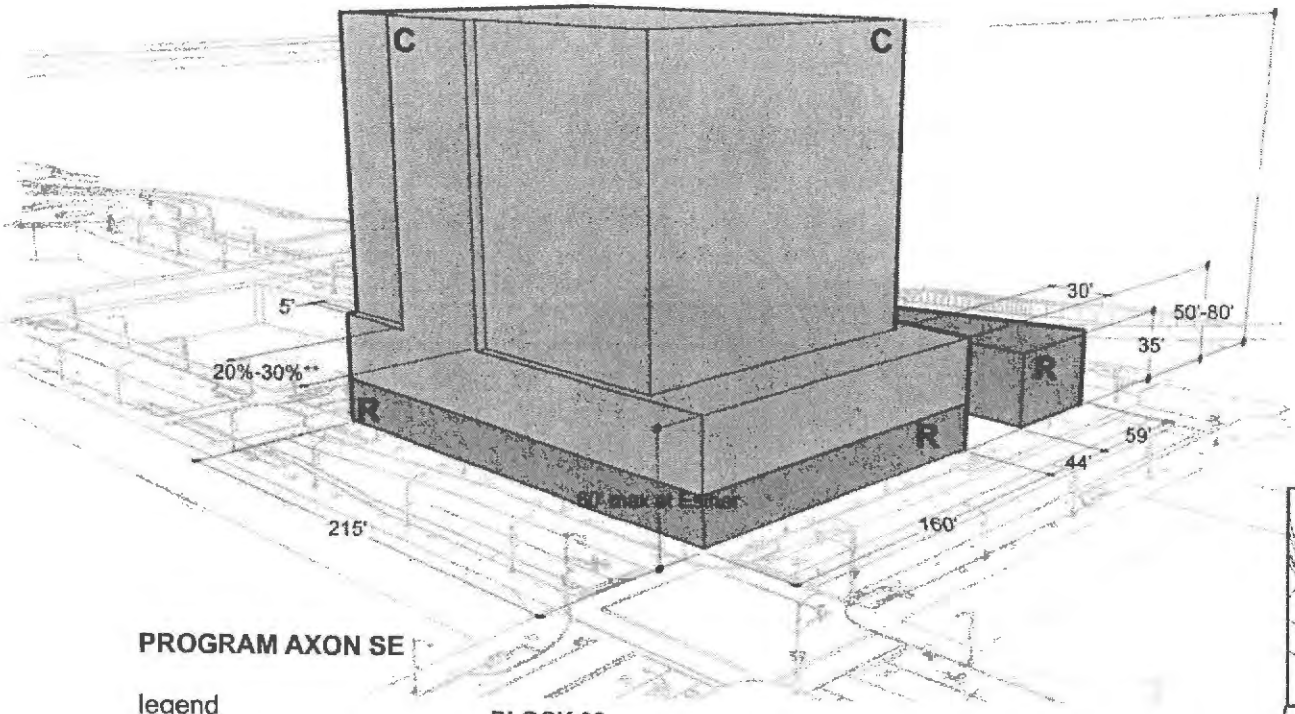
7 4 Cultural District Figures
Fig P1 Block 01
Fig P2 Block 02
Fig CD3 Street Intersection
Fig CD4 Street Intersection

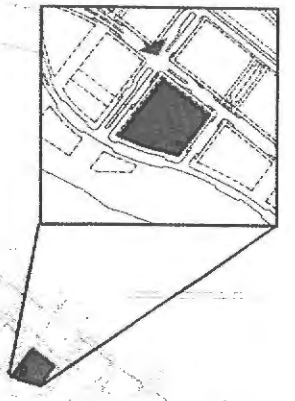
7.5 Streetscape Figures
Fig S1 Bicycle Racks
Fig S2 Bus Shelters
Fig S3 Parking Meters
Fig S4 Street Bench
Fig S5 Pedestrian Lights
Fig S6 Street Lights
Fig S7 Trash Compactor
Fig S8 Recycling Bins
Fig S9 Bollard





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

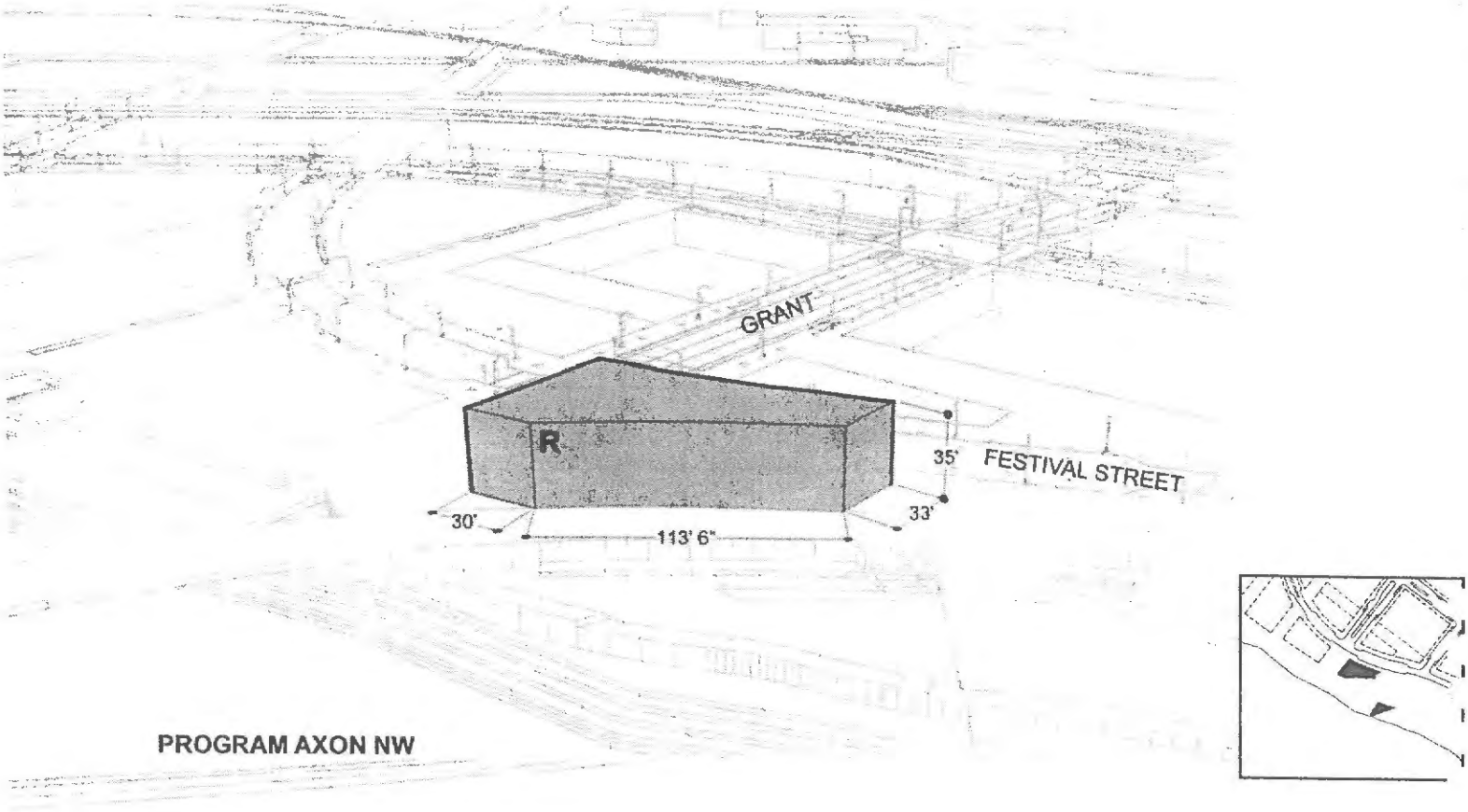
BLOCK 08

SITE AREA	49,315	SF
ACRES	1.13	ACRES
FAR	6.61	
RETAIL	39,000	SF
COMMERCIAL	287,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	143,000	SF
SPACES (1/380 SF)	407	STALLS
TOTAL BUILDING AREA	469,000	SF

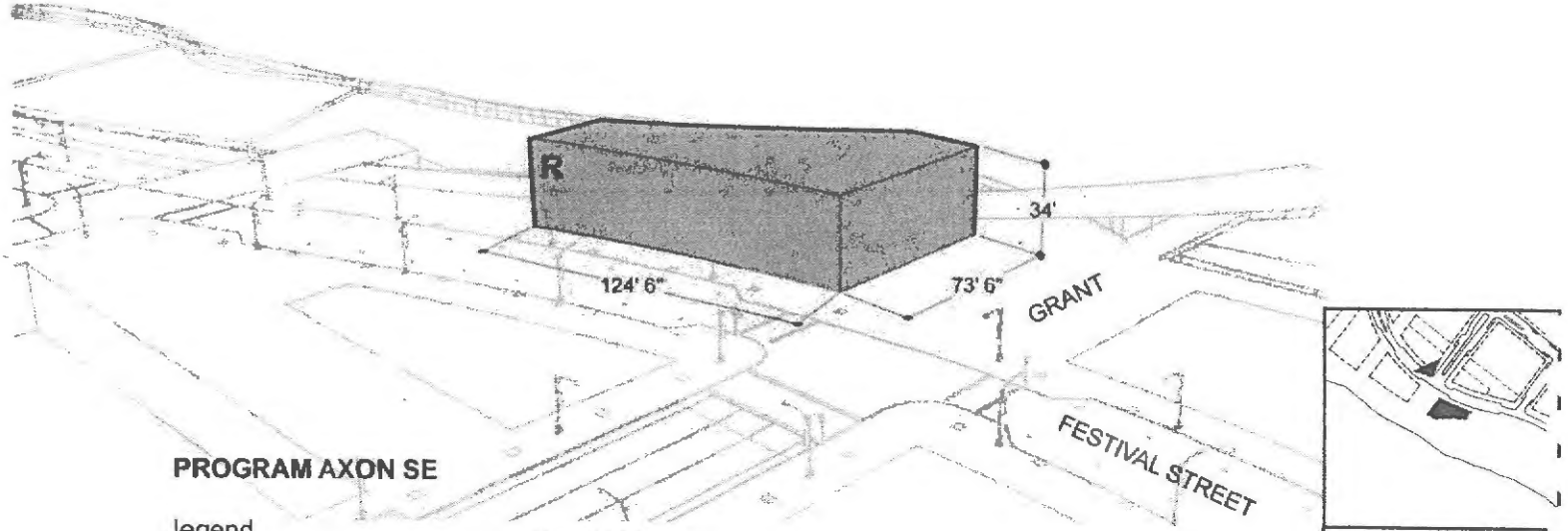
KEY PLAN

Vancouver Waterfront
Experience / Retail District

figure E1



PROGRAM AXON NW



PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 09

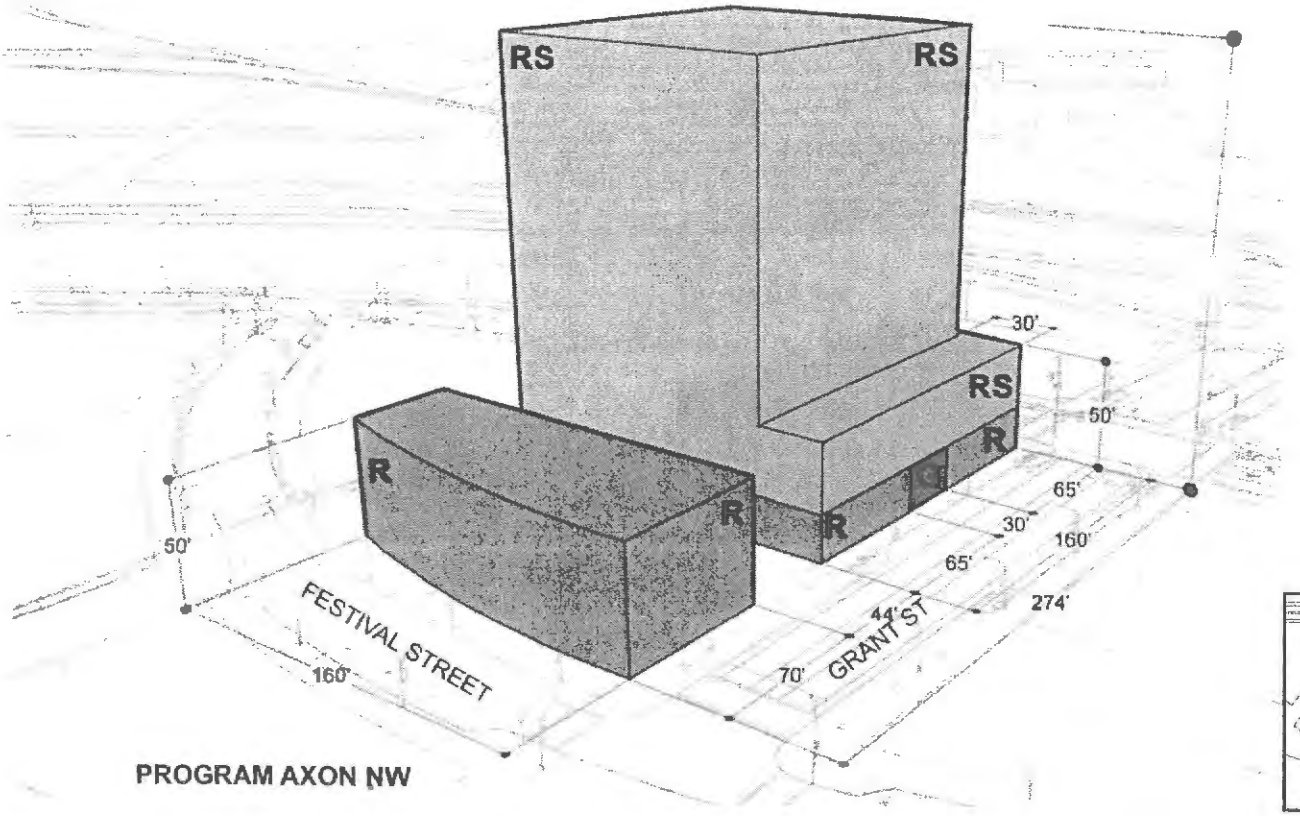
SITE AREA	6,800	SF
ACRES	0.16	ACRES
FAR	#########	
RETAIL	10,000	SF
HOTEL	0	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	11,000	SF
SPACES (1/380 SF)	30	STALLS
TOTAL BUILDING AREA	21,000	SF

KEY PLAN

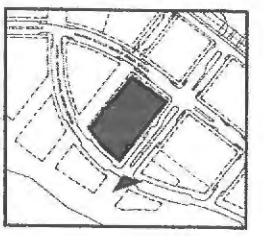
Block 09
May 15, 2009

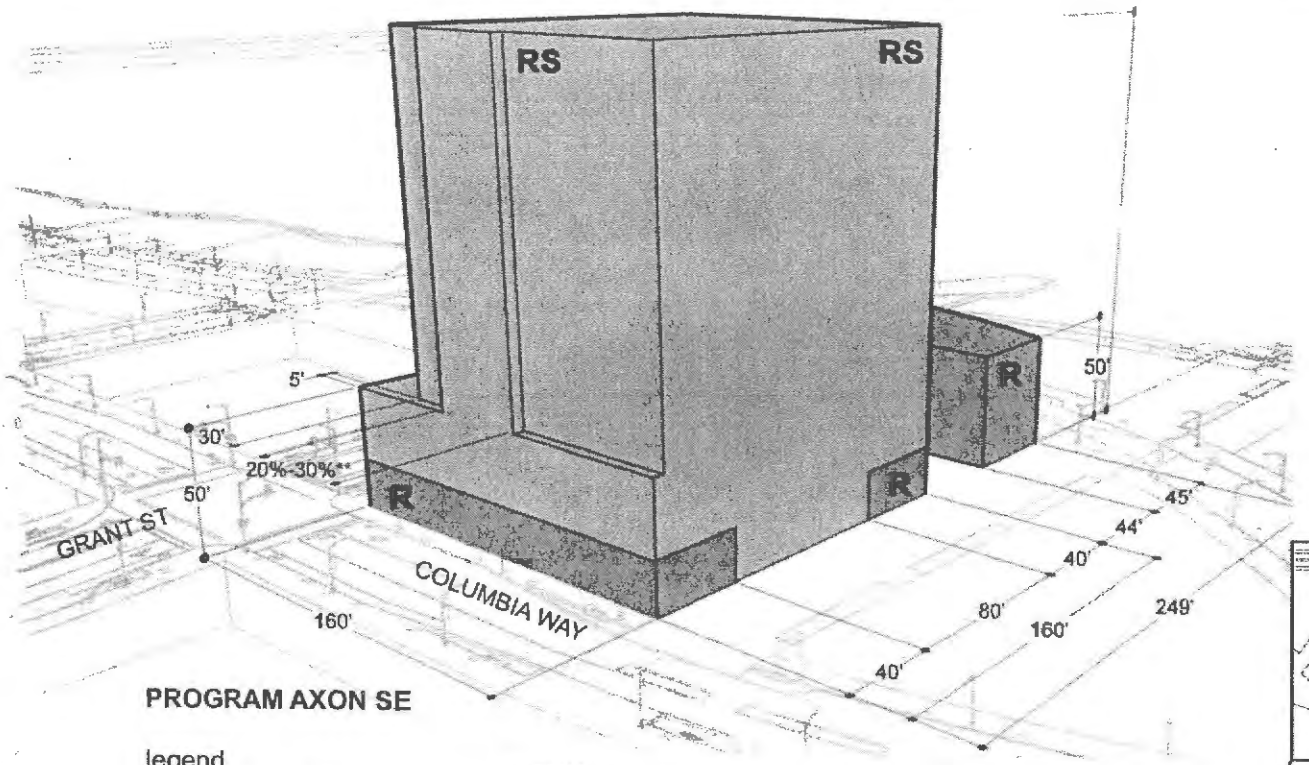
Vancouver Waterfront
Experience / Retail District

figure **E2**

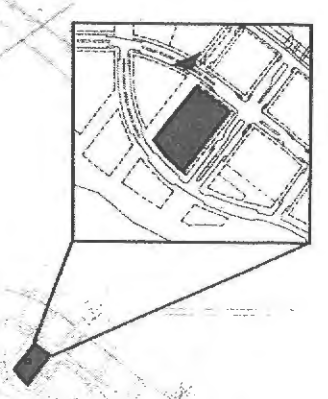


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 11

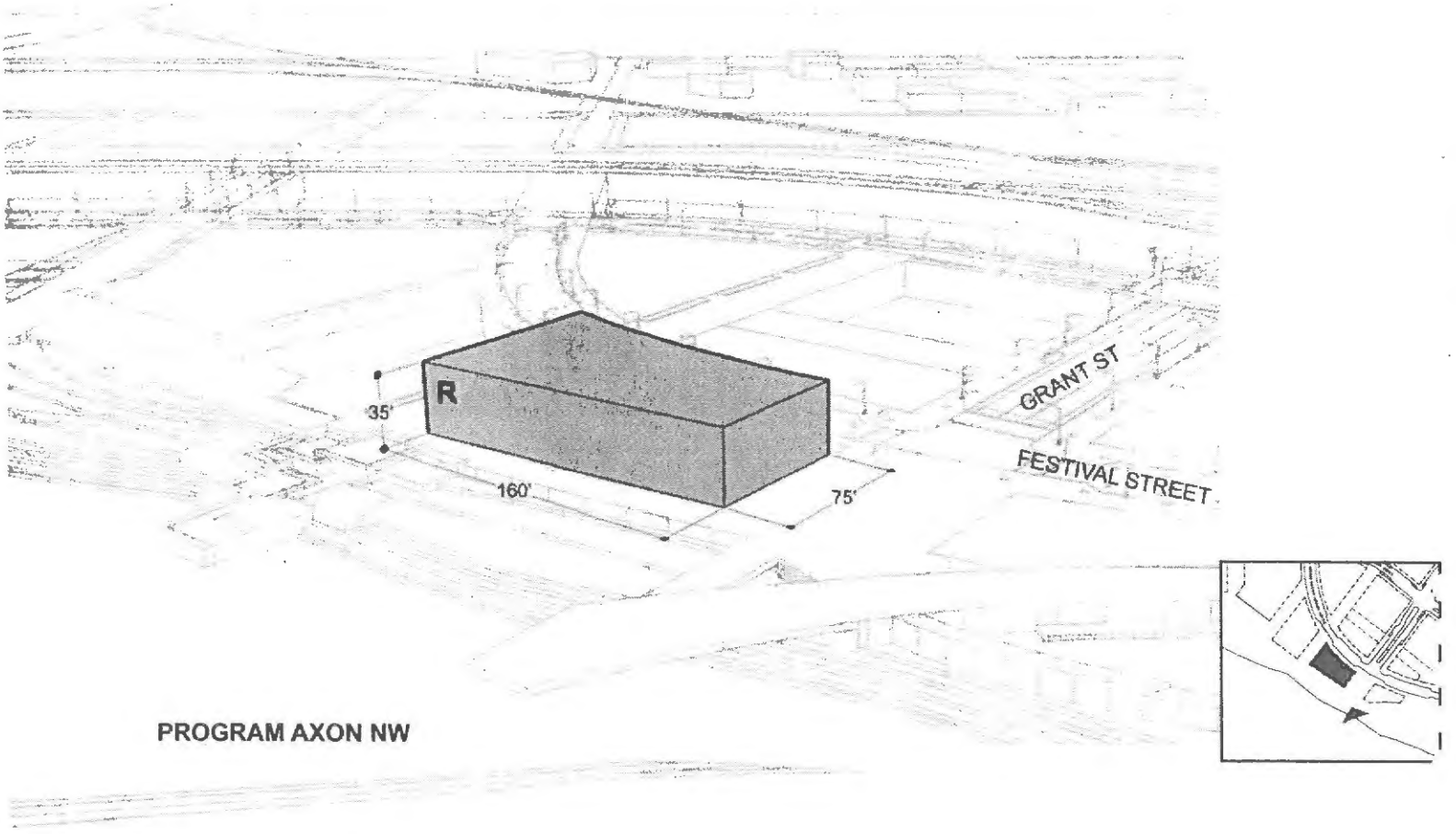
SITE AREA	42,687	SF
ACRES	0.98	ACRES
FAR	6.65	
RETAIL	47,000	SF
RESIDENTIAL	237,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	216,000	SF
SPACES (1/380 SF)	338	STALLS
TOTAL BUILDING AREA	500,000	SF
	415	(77)

KEY PLAN

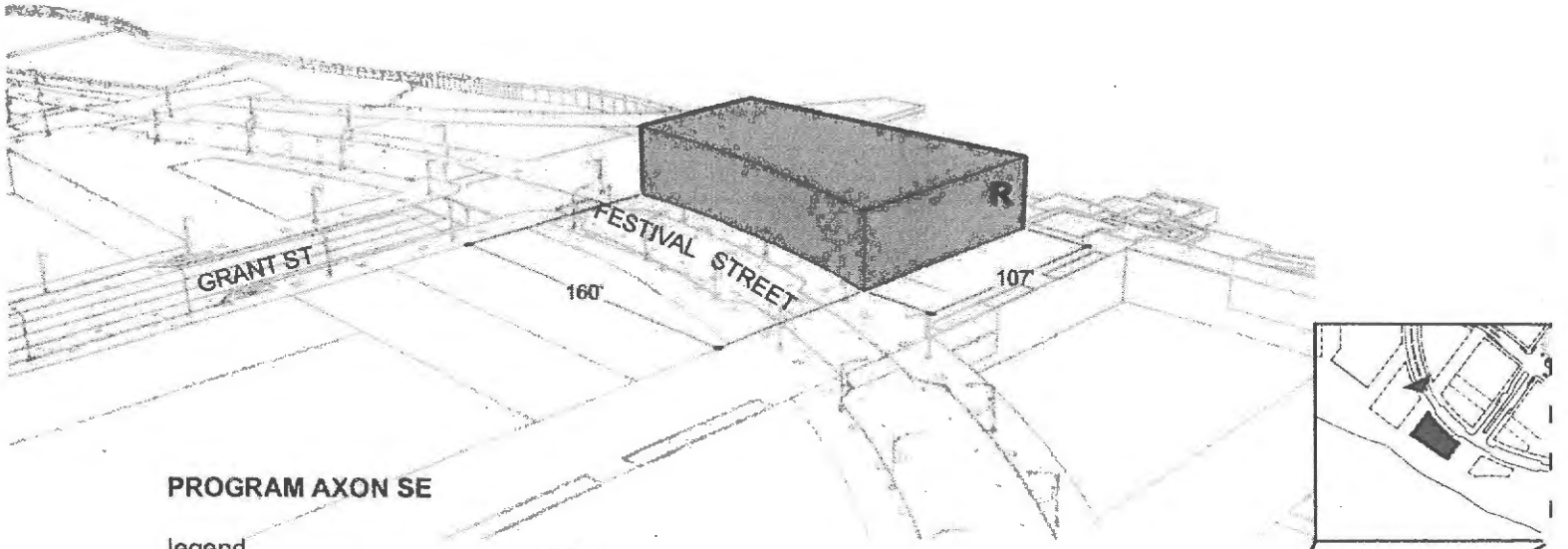
Block 11
May 15, 2009

Vancouver Waterfront
Experience / Retail District

figure **E3**



PROGRAM AXON NW



PROGRAM AXON SE

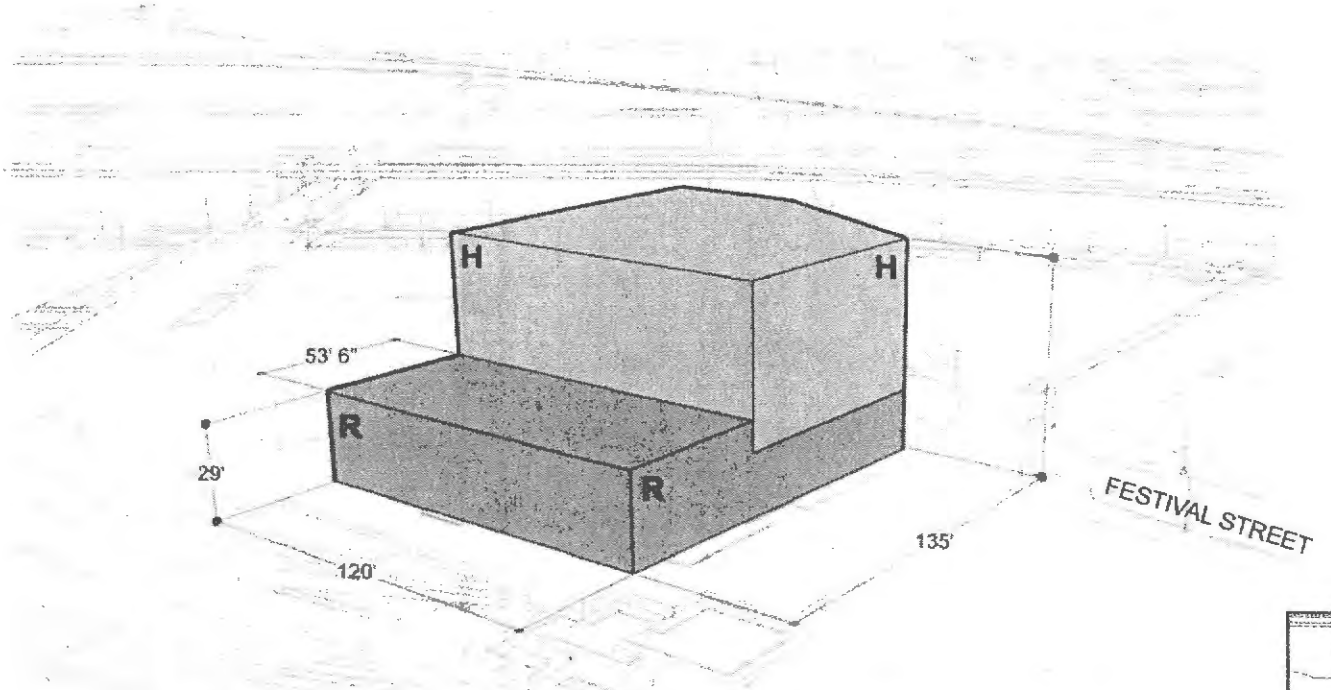
legend

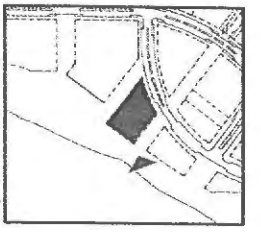
RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 12

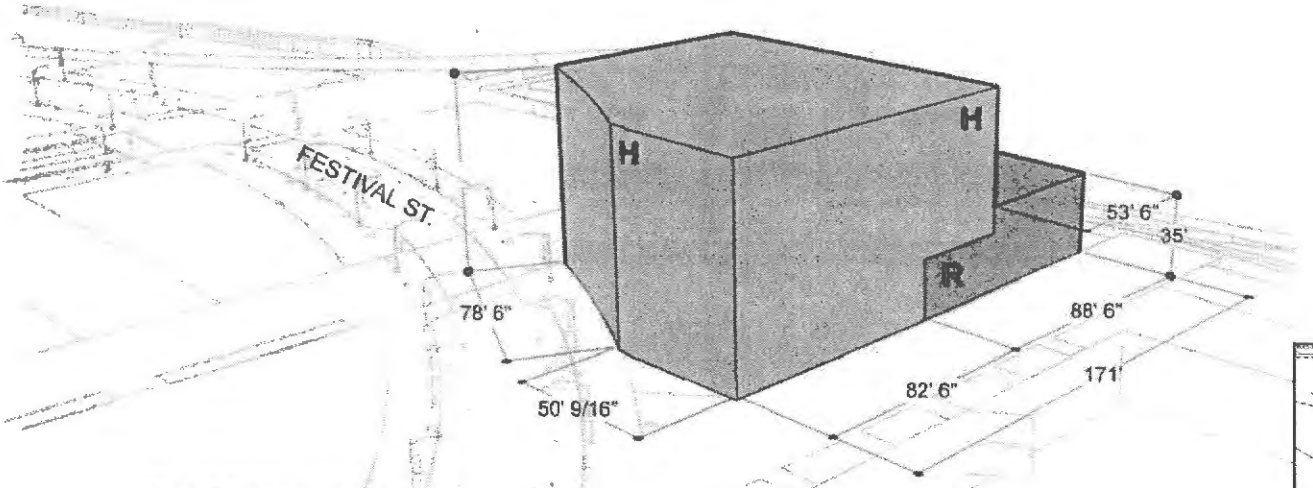
SITE AREA	13,968	SF
ACRES	0.32	ACRES
FAR	1.50	
RETAIL	21,000	SF
RESIDENTIAL	0	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	24,000	SF
SPACES (1/380 SF)	63	STALLS
TOTAL BUILDING AREA	45,000	SF
	50	13

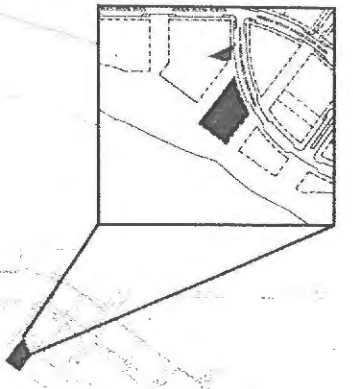
KEY PLAN





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 16

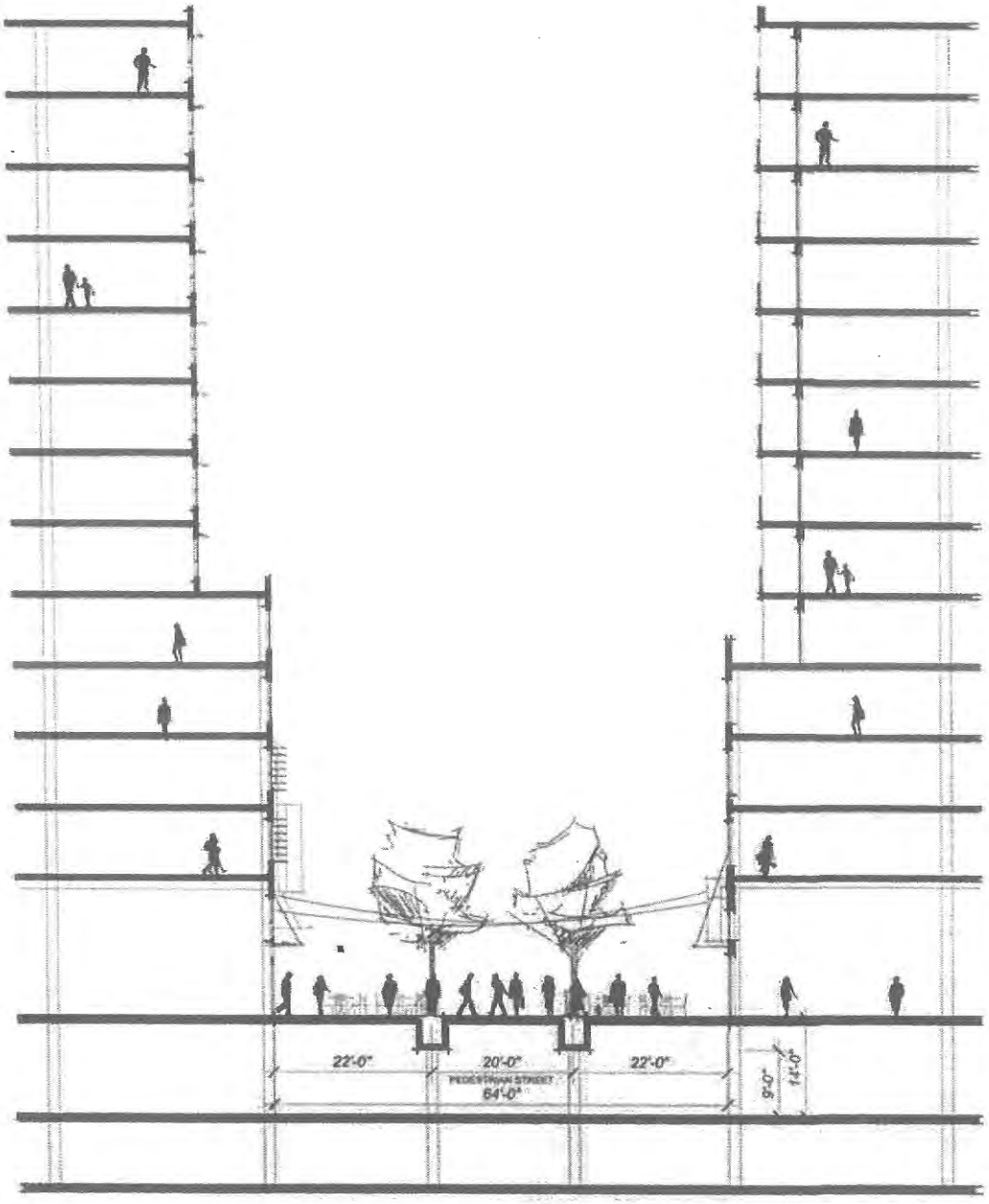
SITE AREA	17,108	SF
ACRES	0.39	ACRES
FAR	3.51	
RETAIL	6,000	SF
HOTEL	54,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	41,000	SF
SPACES (1/380 SF)	108	STALLS
TOTAL BUILDING AREA	101,000	SF
	95	13

KEY PLAN

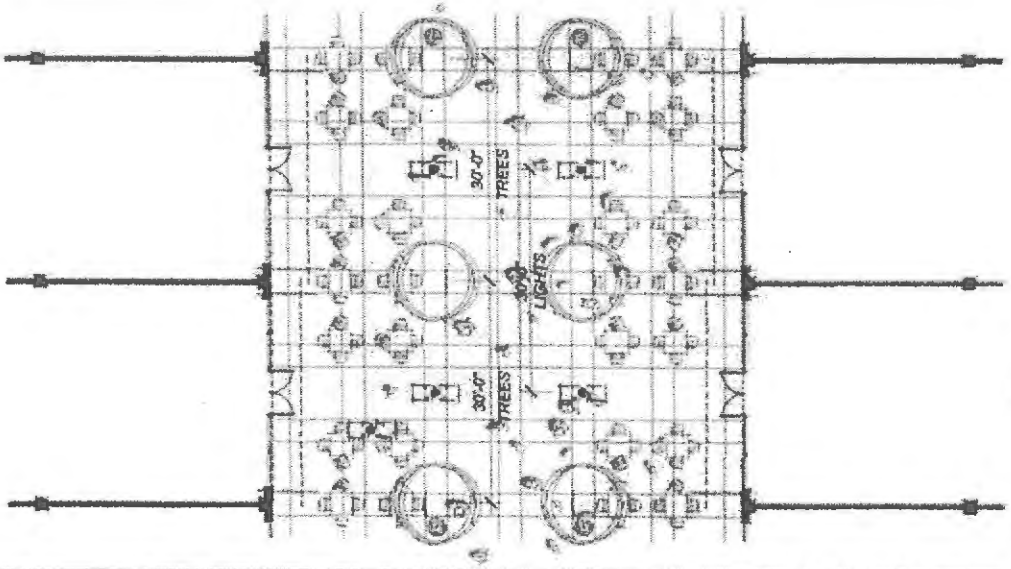
Block 16
May 15, 2009

Vancouver Waterfront
Experience / Retail District

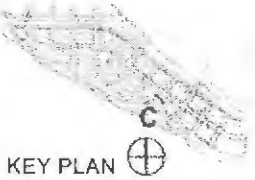
figure **E5**



SECTION



PLAN



KEY PLAN

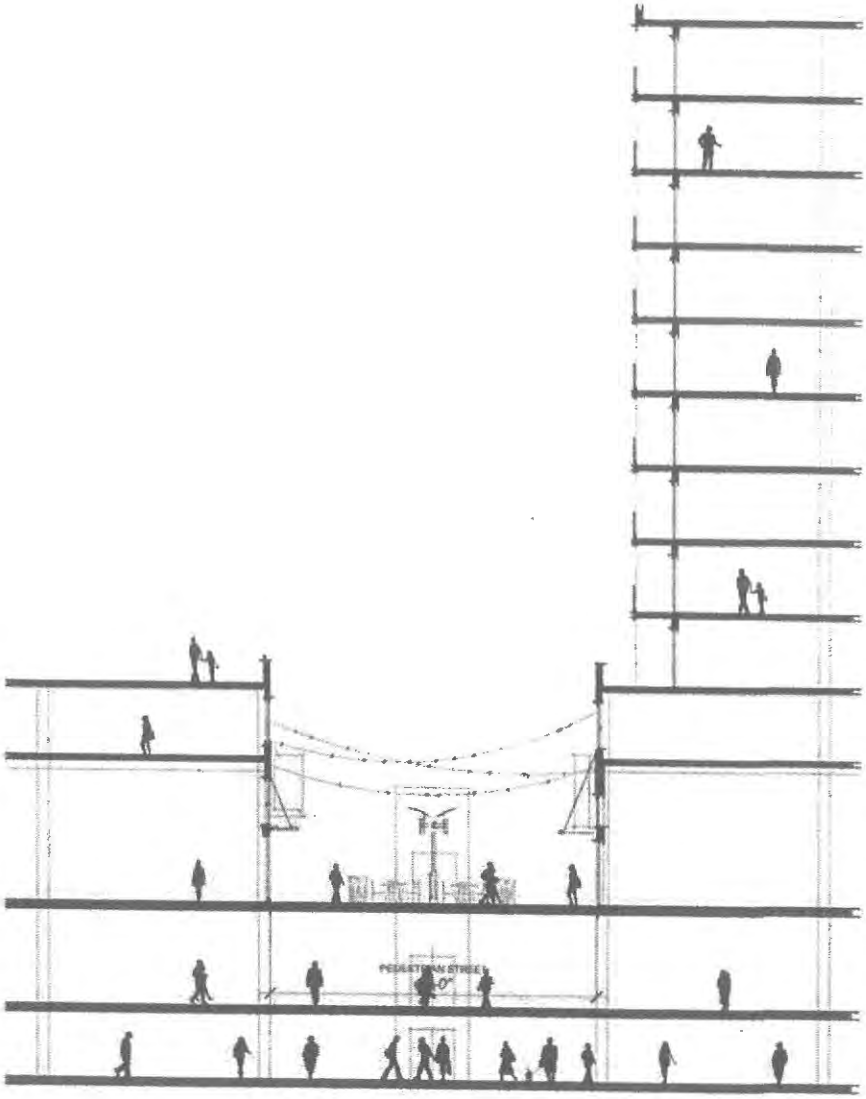
Street Section C: Green Street 1

May 15, 2009

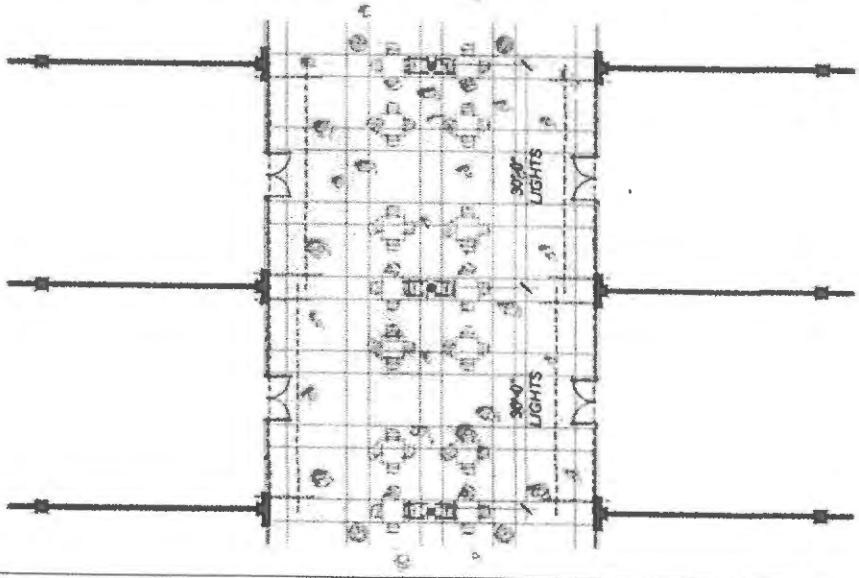
Vancouver Waterfront

Experience / Retail District

figure **E6**



SECTION



PLAN

KEY PLAN

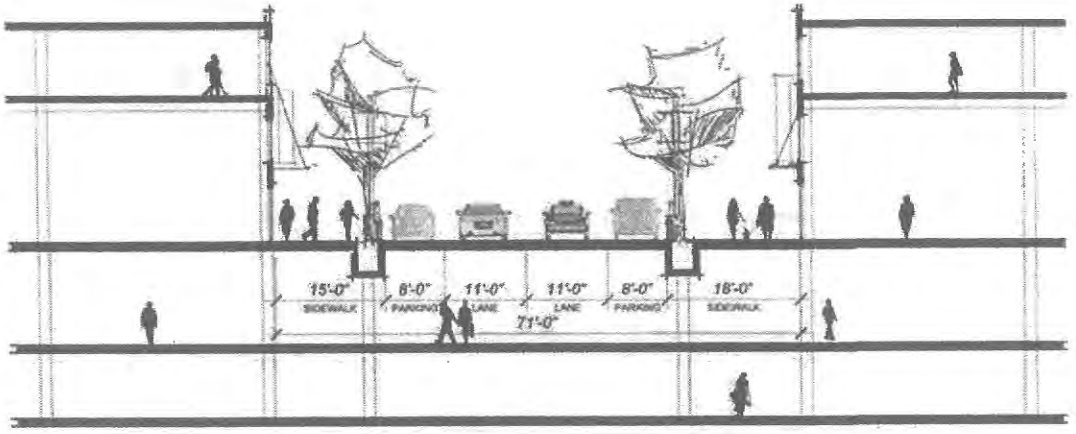
Street Section C.2: Green Street 2

May 15, 2009

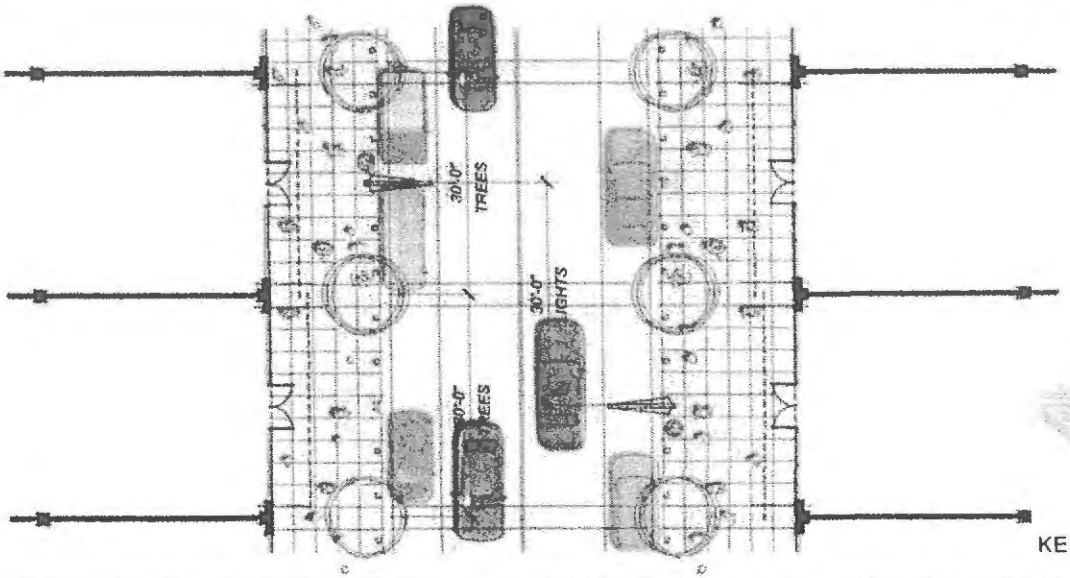
Vancouver Waterfront

Experience / Retail District

figure **E7**



SECTION



KEY PLAN

PLAN

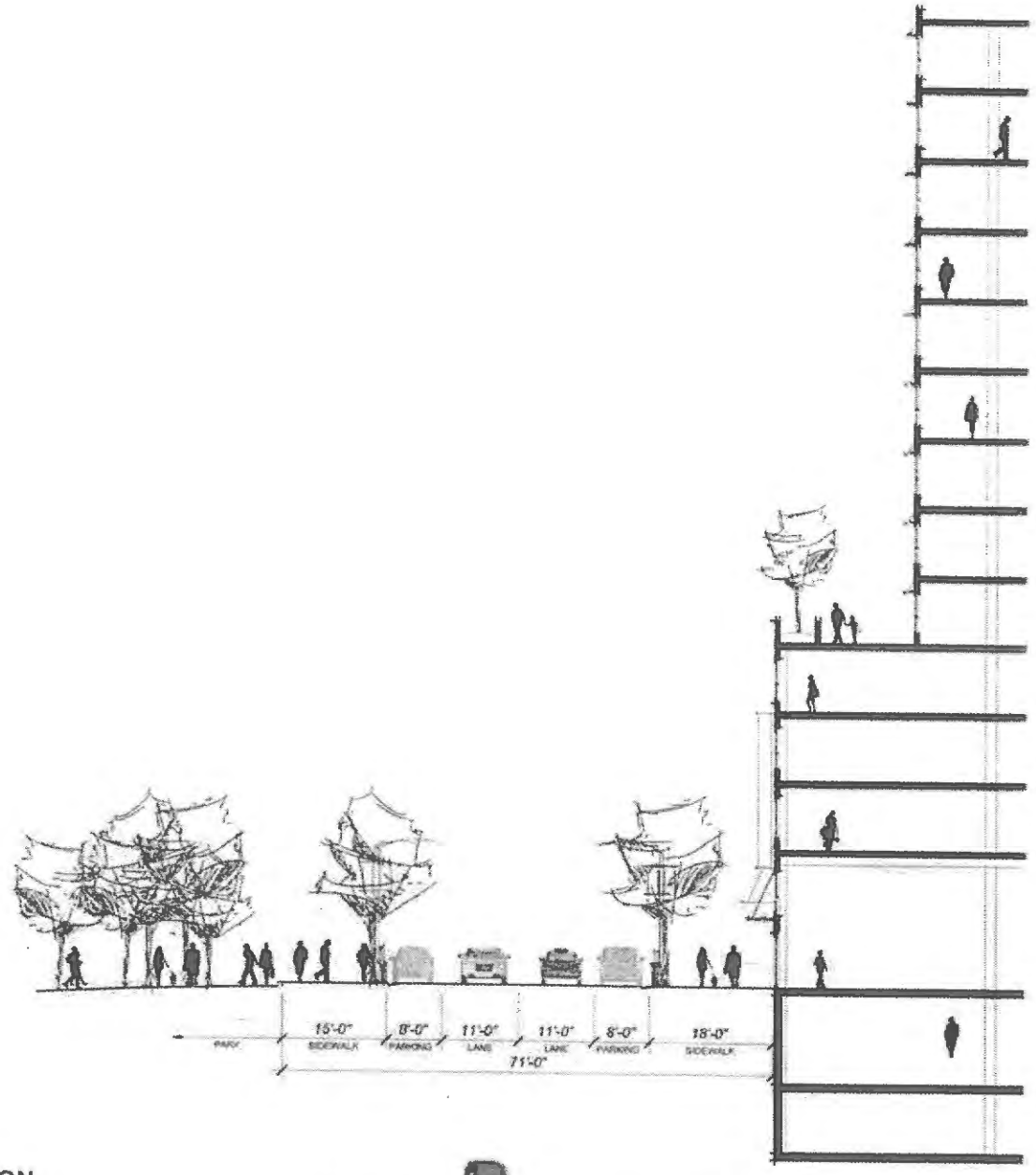
Street Section D: Retail 1

May 15, 2009

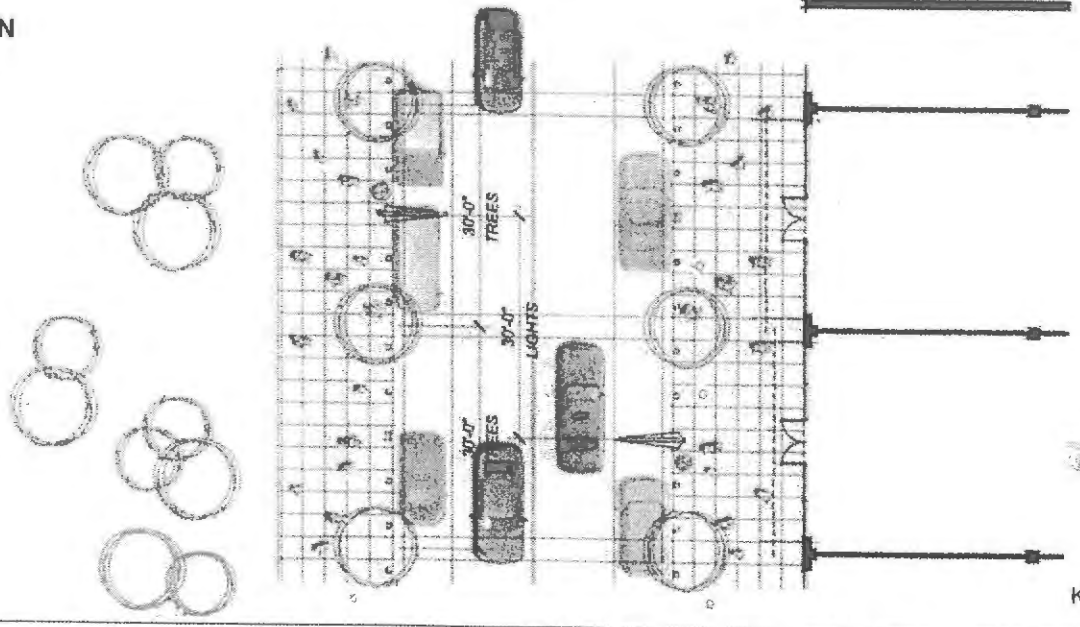
Vancouver Waterfront

Experience / Retail District

figure **E8**



SECTION



PLAN

KEY PLAN

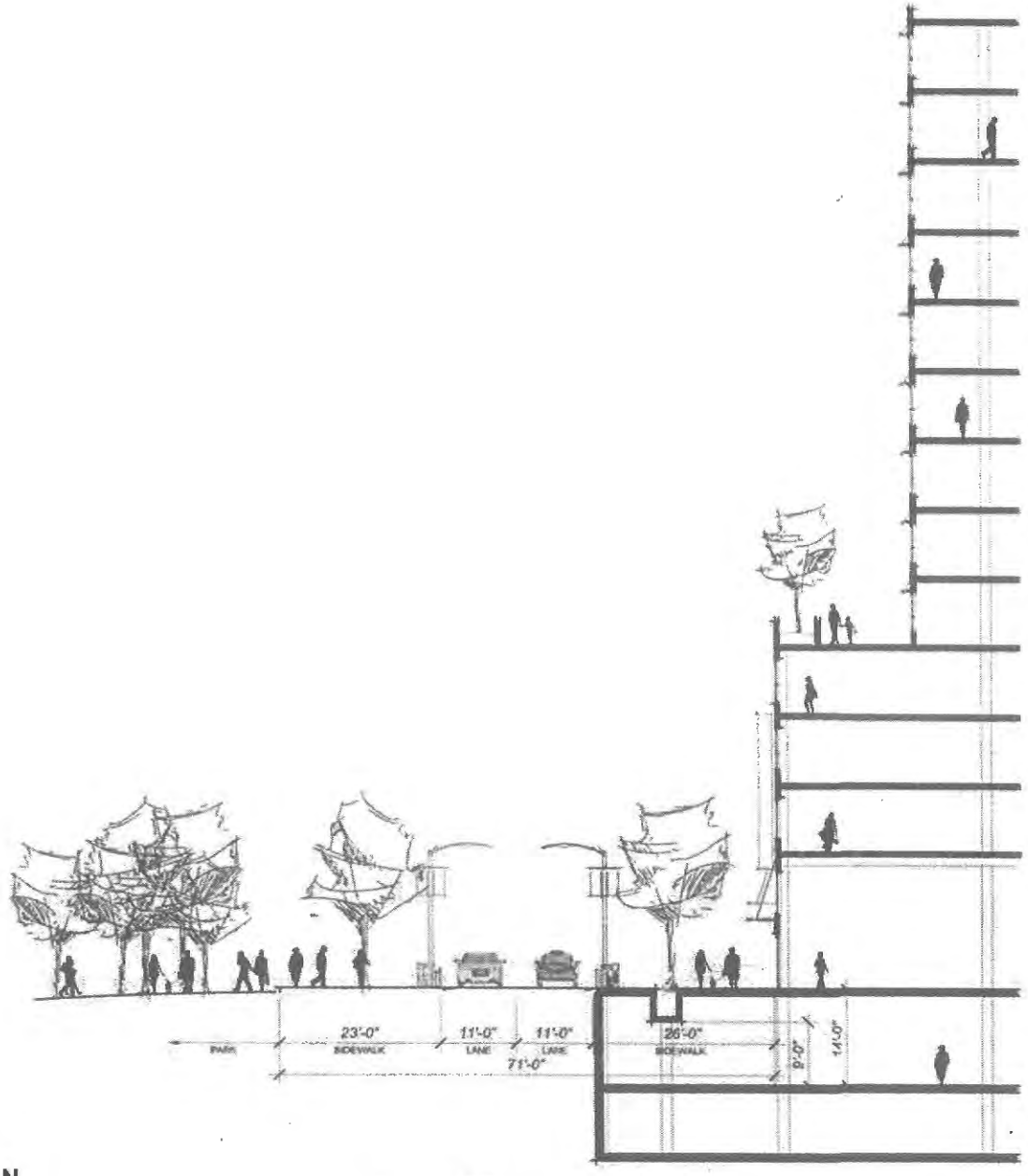
Street Section D.2: Retail 2

May 15, 2009

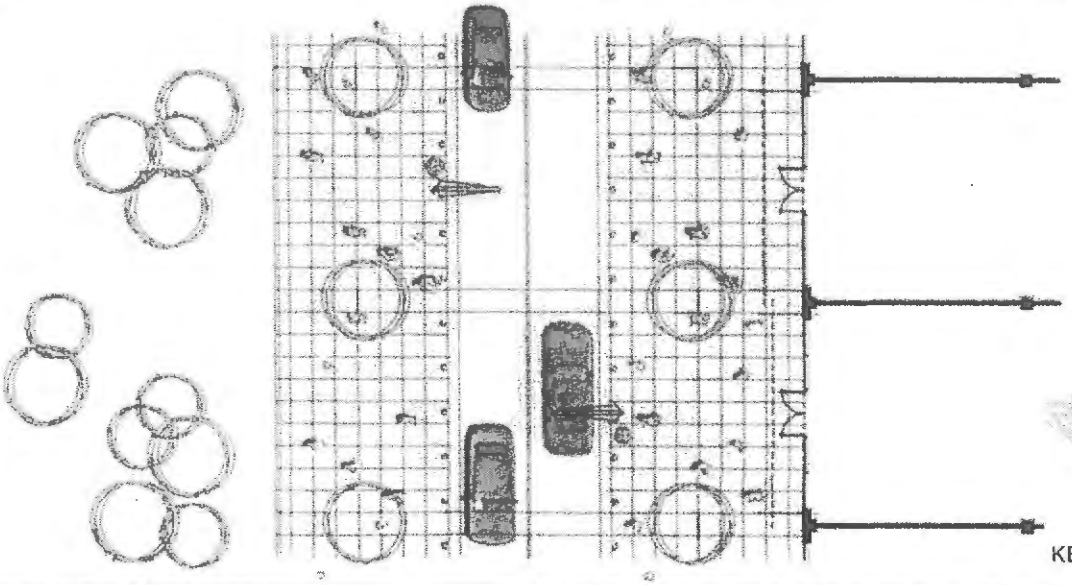
Vancouver Waterfront

Experience / Retail District

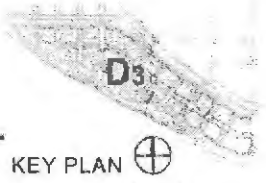
figure **E9**



SECTION



PLAN



KEY PLAN

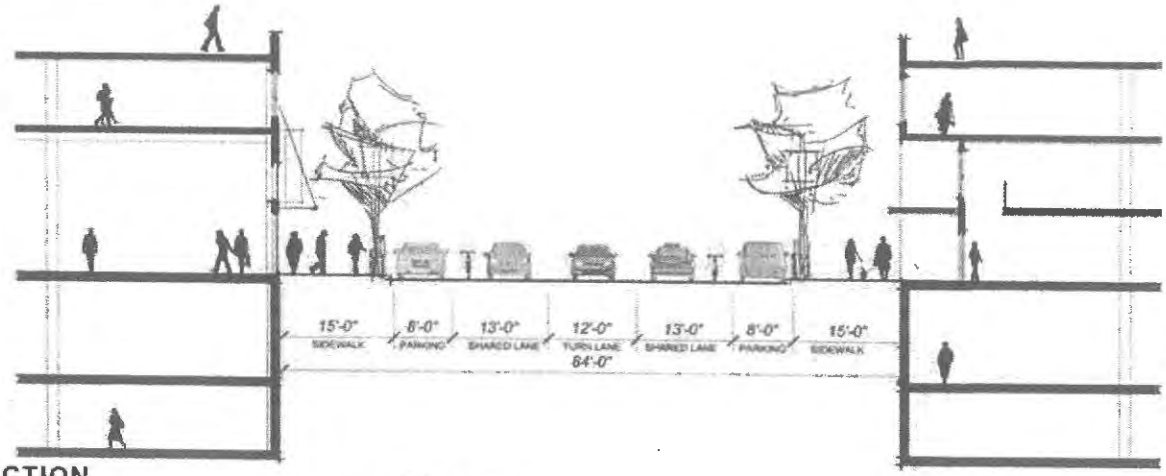
Street Section D.3: Retail 3

May 15, 2009

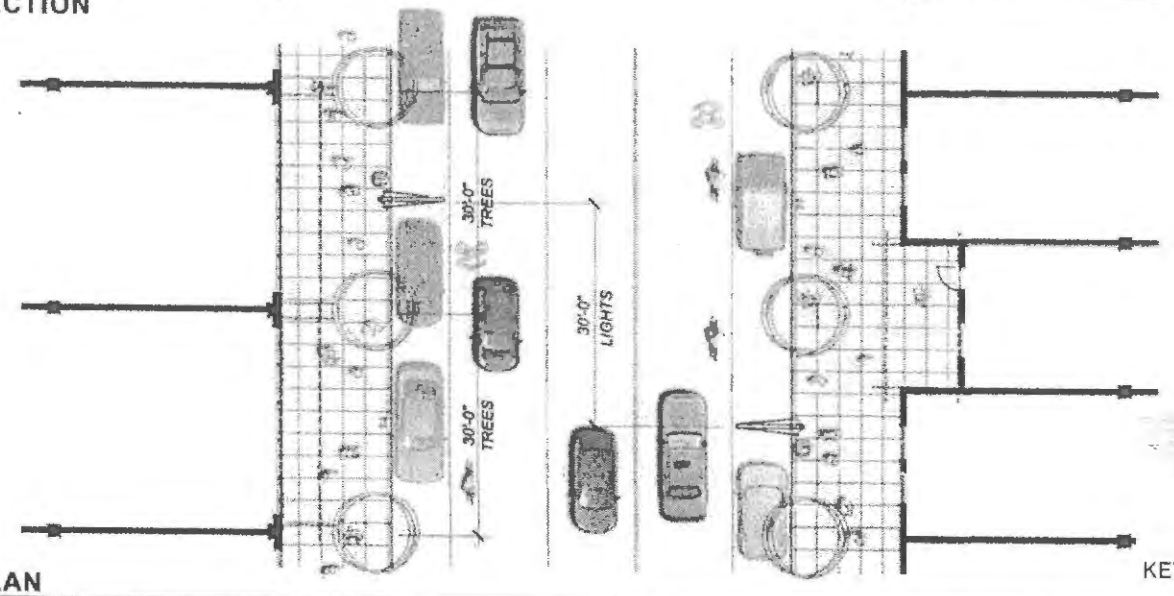
Vancouver Waterfront

Experience / Retail District

figure **E10**



SECTION



PLAN

KEY PLAN

Street Section F.3: Grant Street Corridor 3

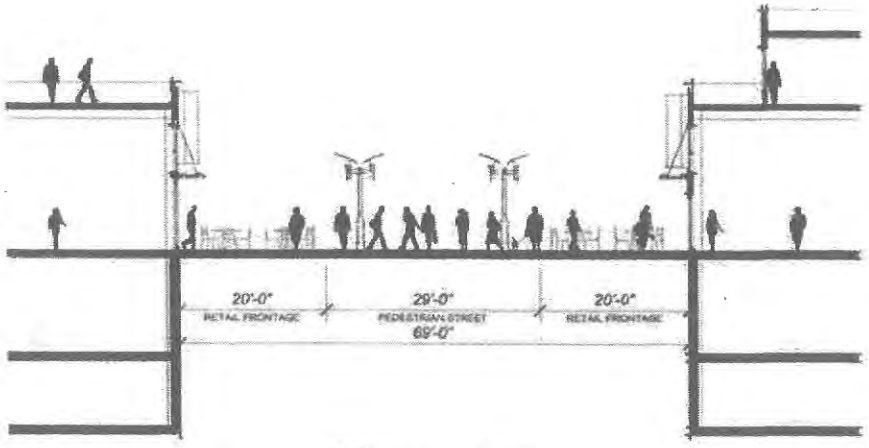
May 16, 2009

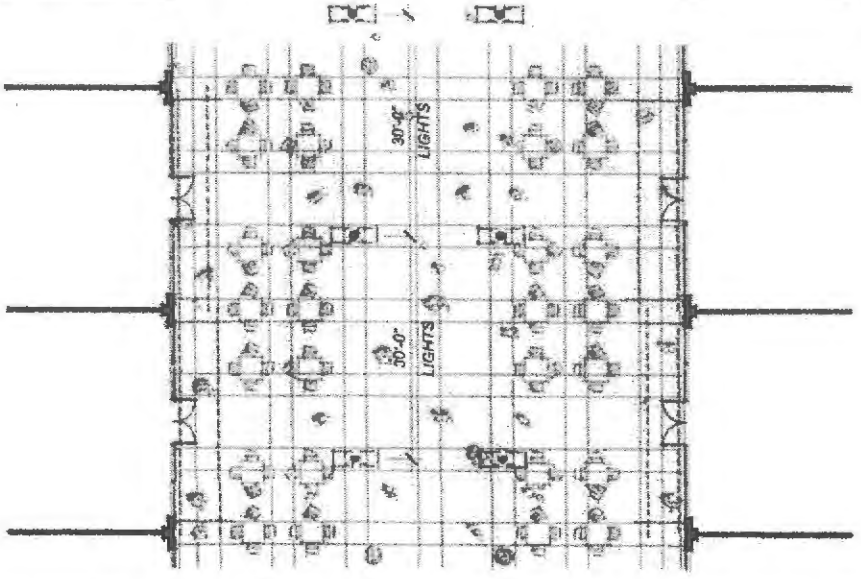
Vancouver Waterfront

Experience / Retail District

figure **E11**

SECTION





PLAN

KEY PLAN

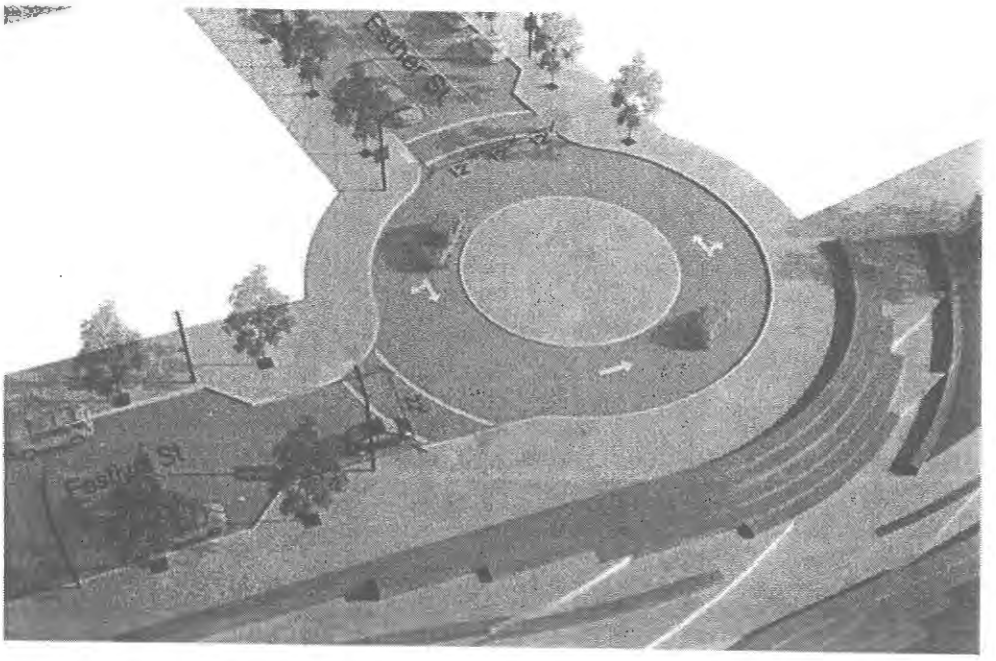
Street Section J.4: Green Street

May 15, 2009

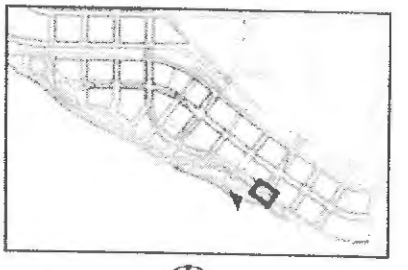
Vancouver Waterfront

Experience / Retail District

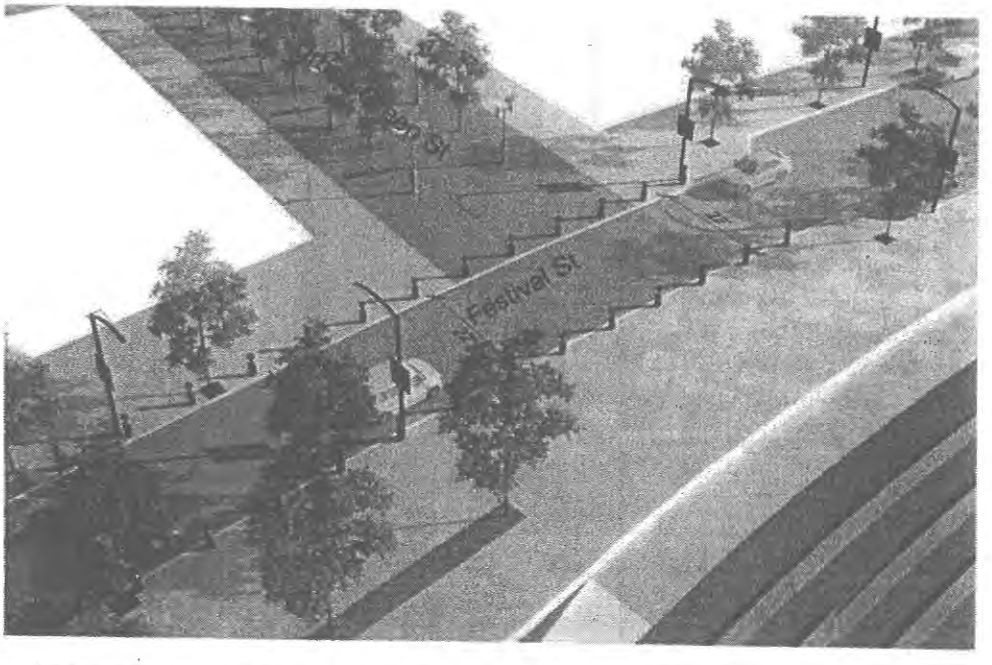
figure **E12**



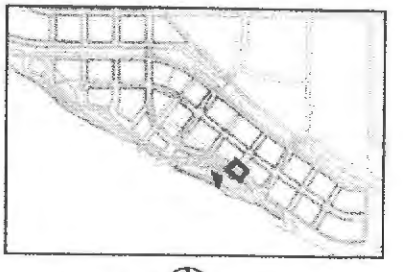
esther st and experience retail st



KEY PLAN



urban green st and experience retail st

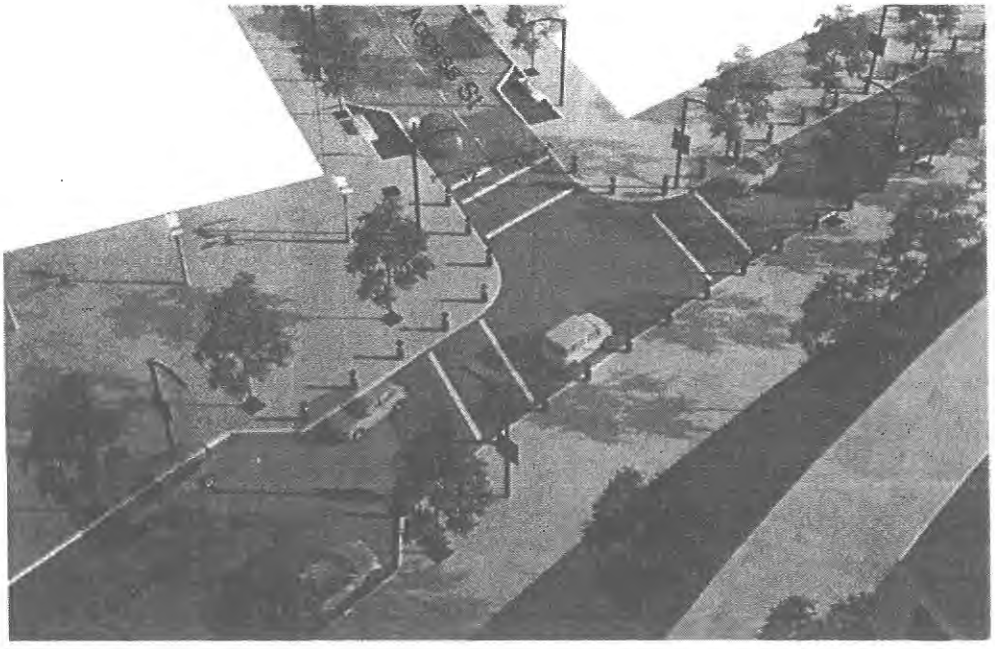


KEY PLAN

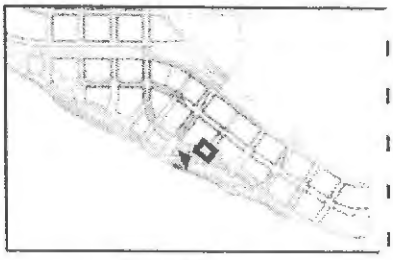
Street Intersections
May 15, 2009

Vancouver Waterfront
Experience / Retail District

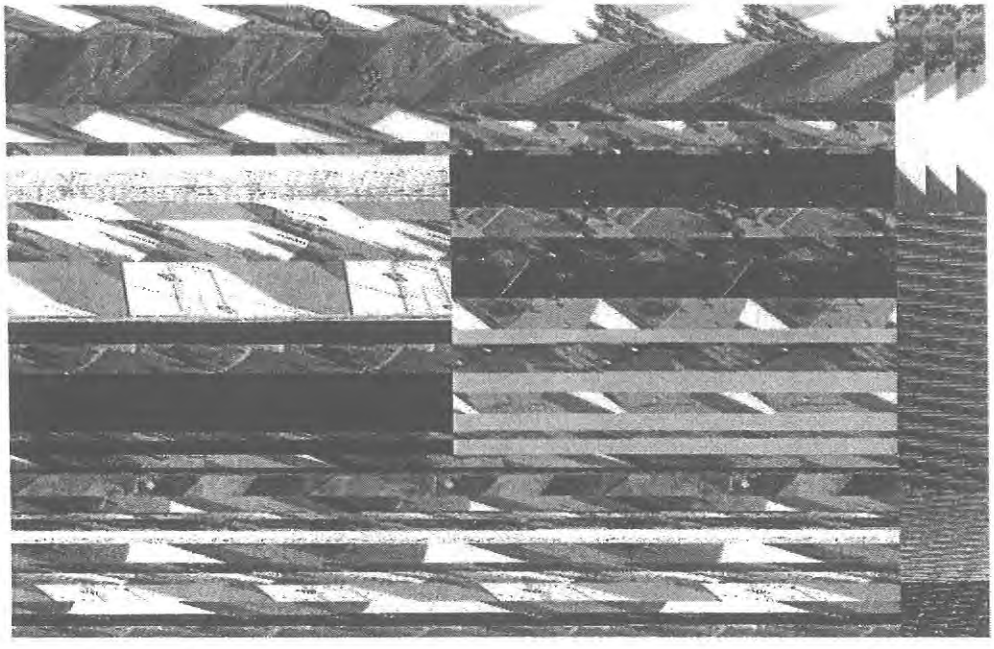
figure **E13**



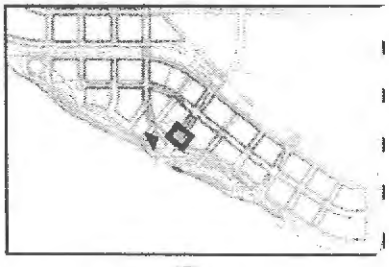
access st and experience retail st



KEY PLAN



grant st and experience retail st

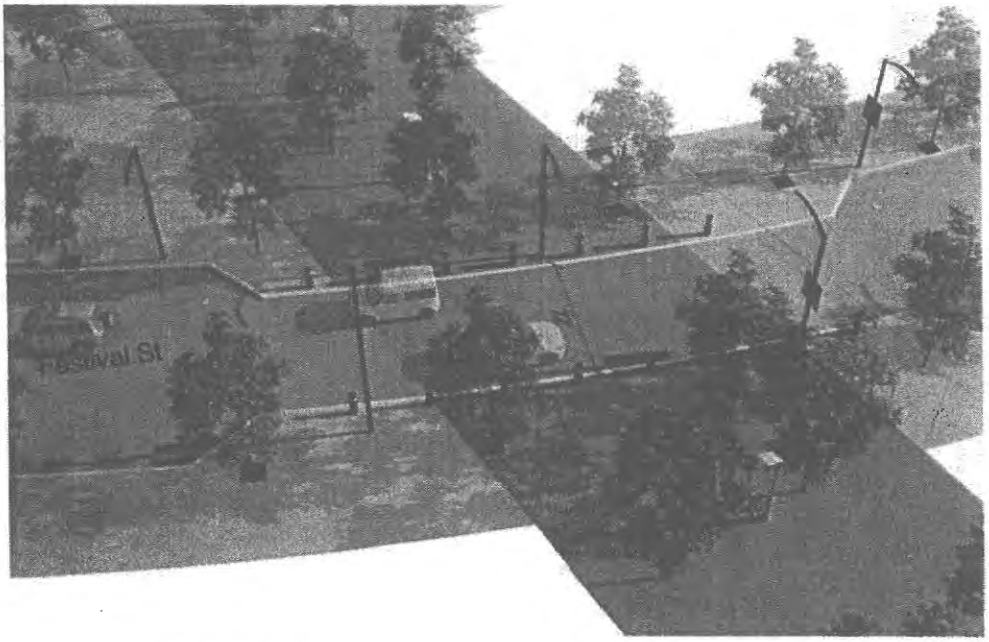


KEY PLAN

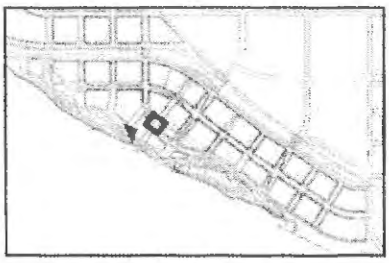
Street Intersections
May 15, 2009

Vancouver Waterfront
Experience / Retail District

figure **E14**



columbia way and residential park



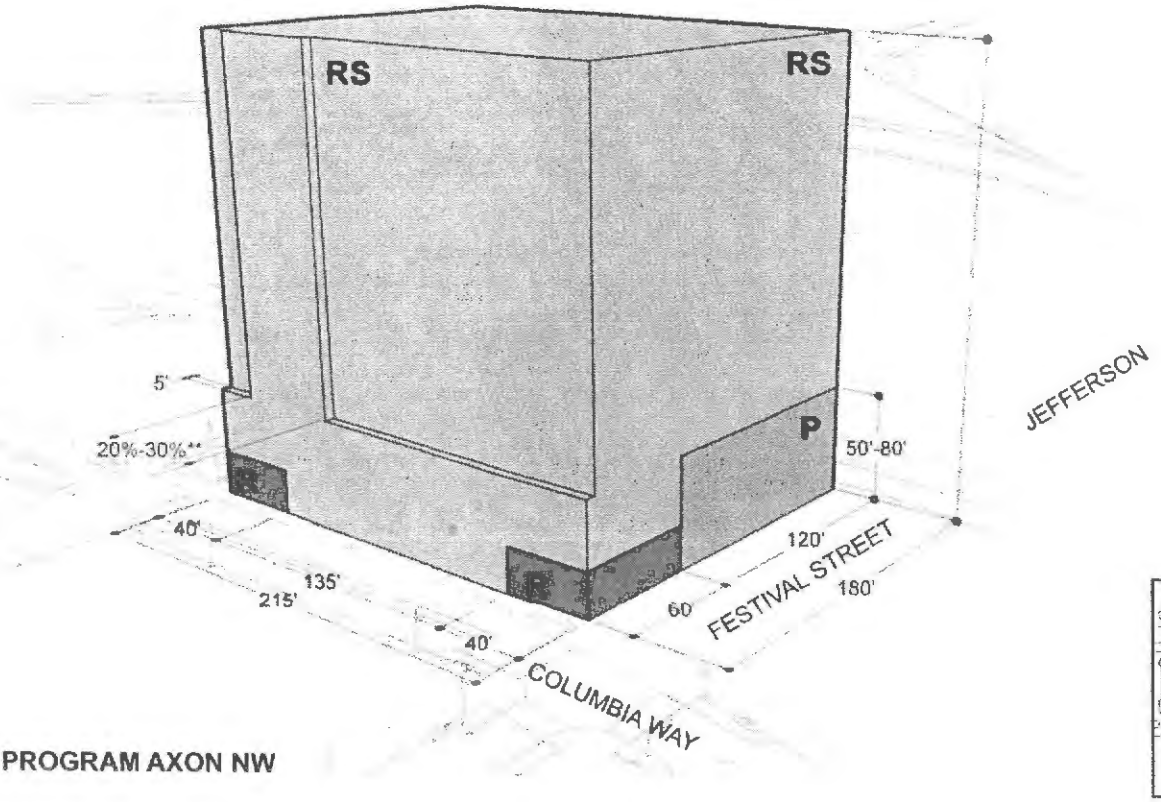
KEY PLAN

Street Intersections
May 15, 2009

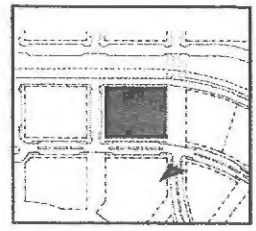
Vancouver Waterfront
Experience / Retail District

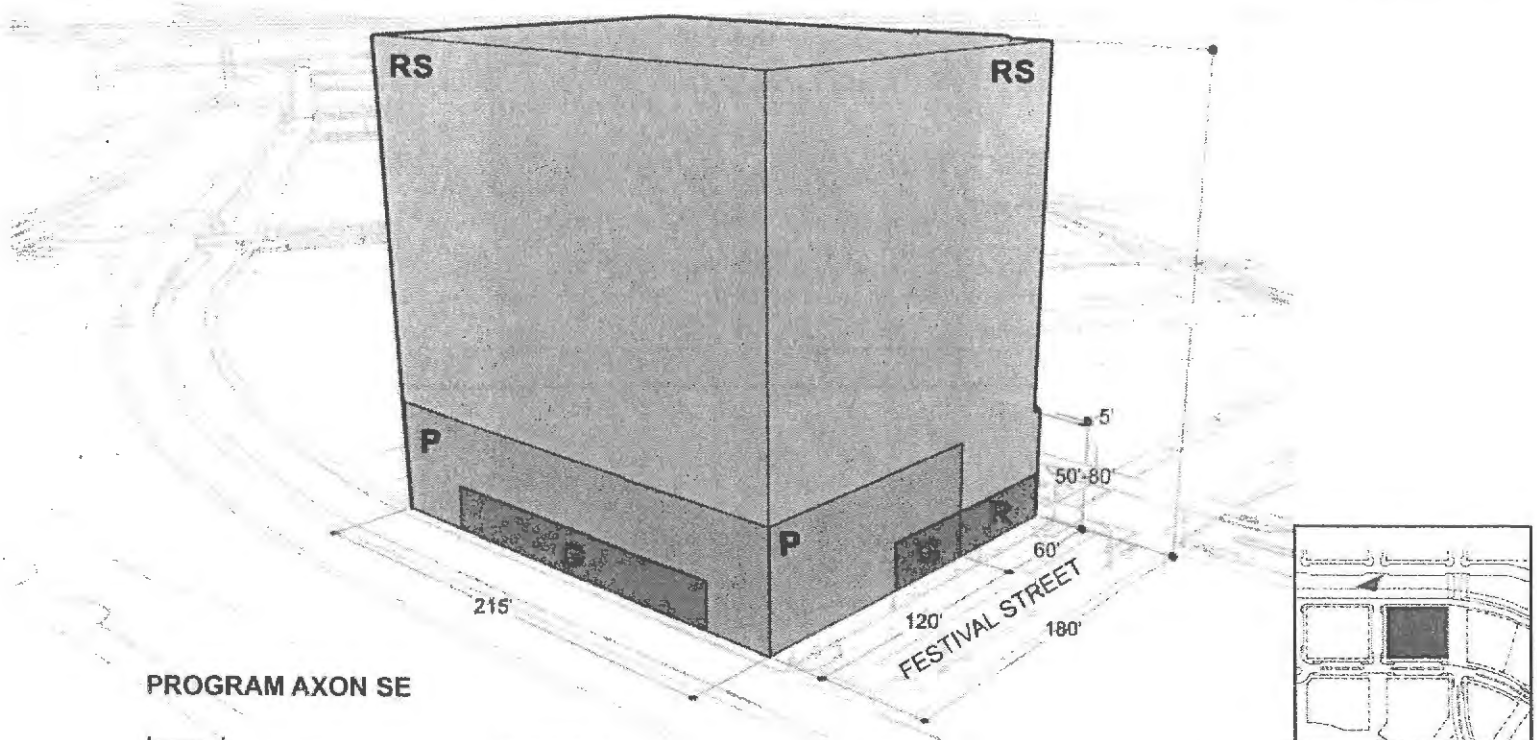
figure **E15**

This page to remain blank

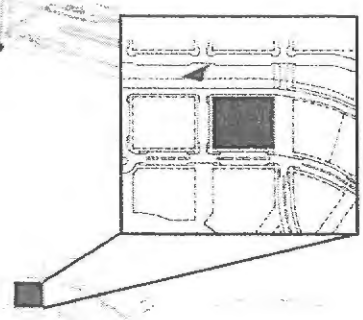


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 17

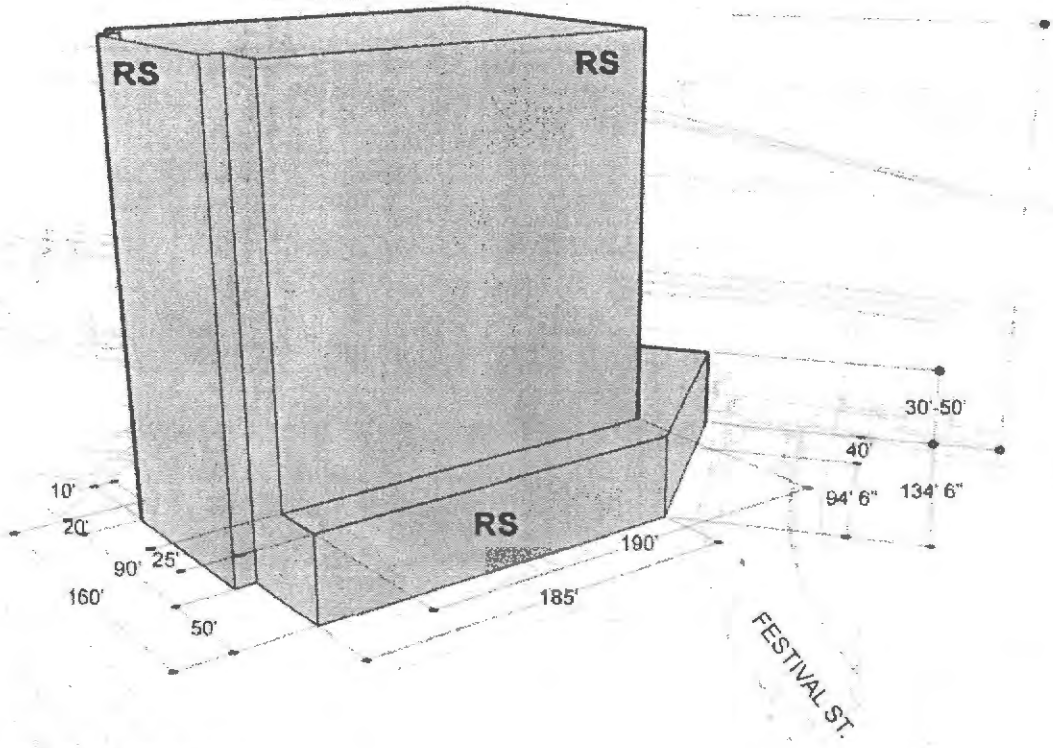
SITE AREA	38,700	SF
ACRES	0.66	ACRES
FAR	6.49	
RETAIL	5,000	SF
RESIDENTIAL	246,000	SF
PARKING (ABOVE GROUND)	128,000	SF
PARKING (BELOW GROUND)	98,000	SF
SPACES (1/380 SF)	584	STALLS
TOTAL BUILDING AREA	477,000	SF
	326	258

KEY PLAN

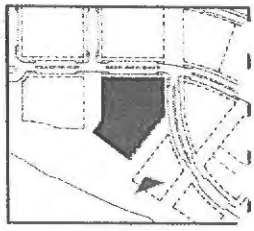
Block 17
May 15, 2009

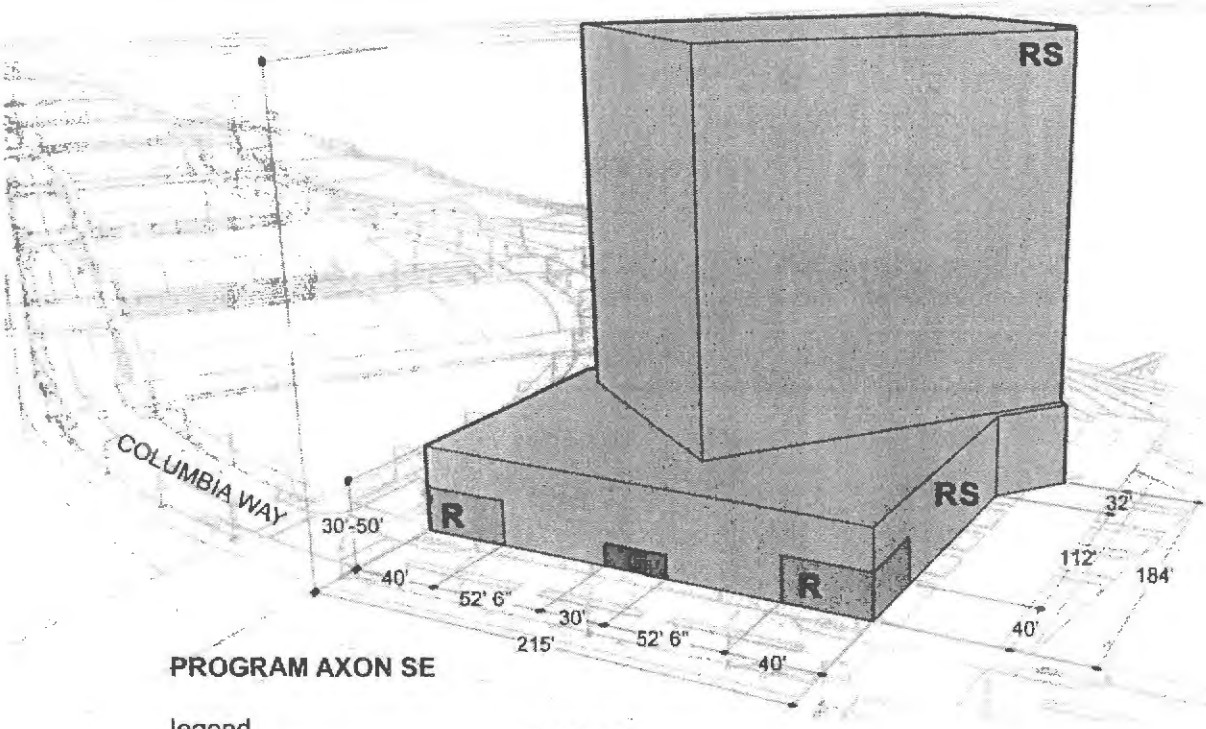
Vancouver Waterfront
Residential Park District

figure **R1**

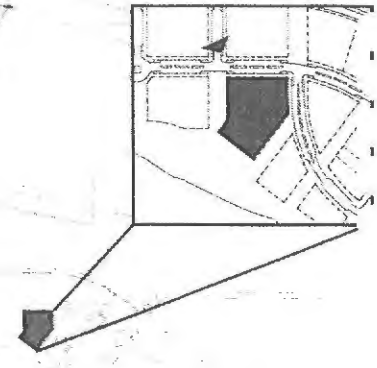


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 18

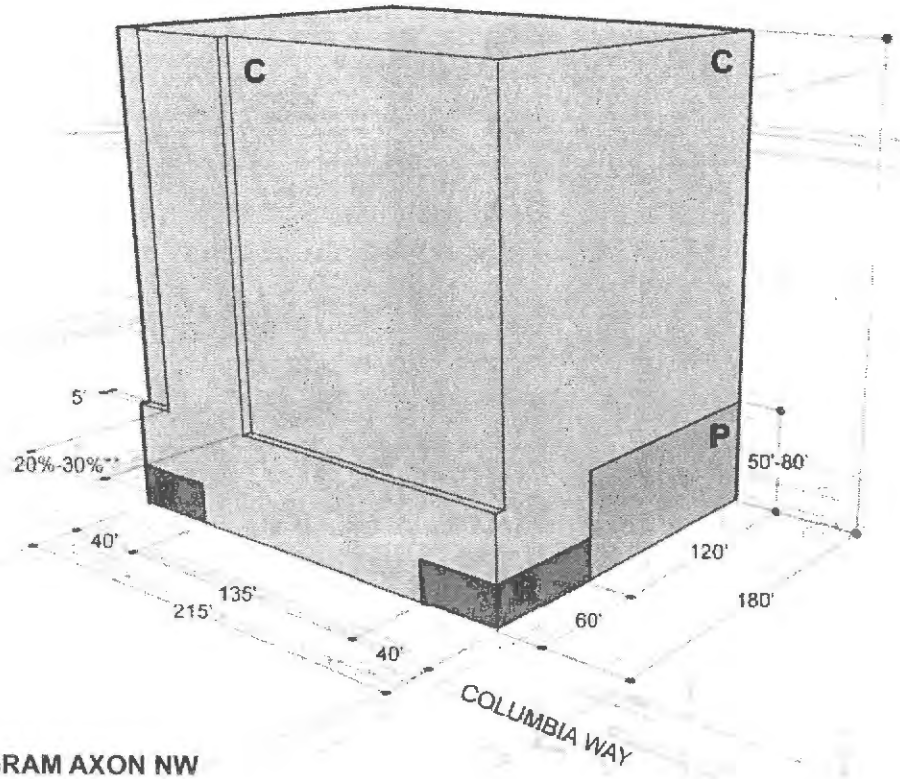
SITE AREA	51,356	SF
ACRES	1.18	ACRES
FAR	7.42	
RETAIL	5,000	SF
RESIDENTIAL	376,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	129,000	SF
SPACES (1/380 SF)	637	STALLS
TOTAL BUILDING AREA	510,000	SF
	491	146

KEY PLAN

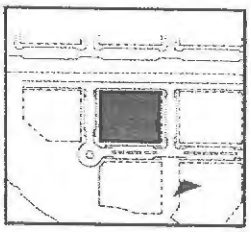
Block 18
May 15, 2009

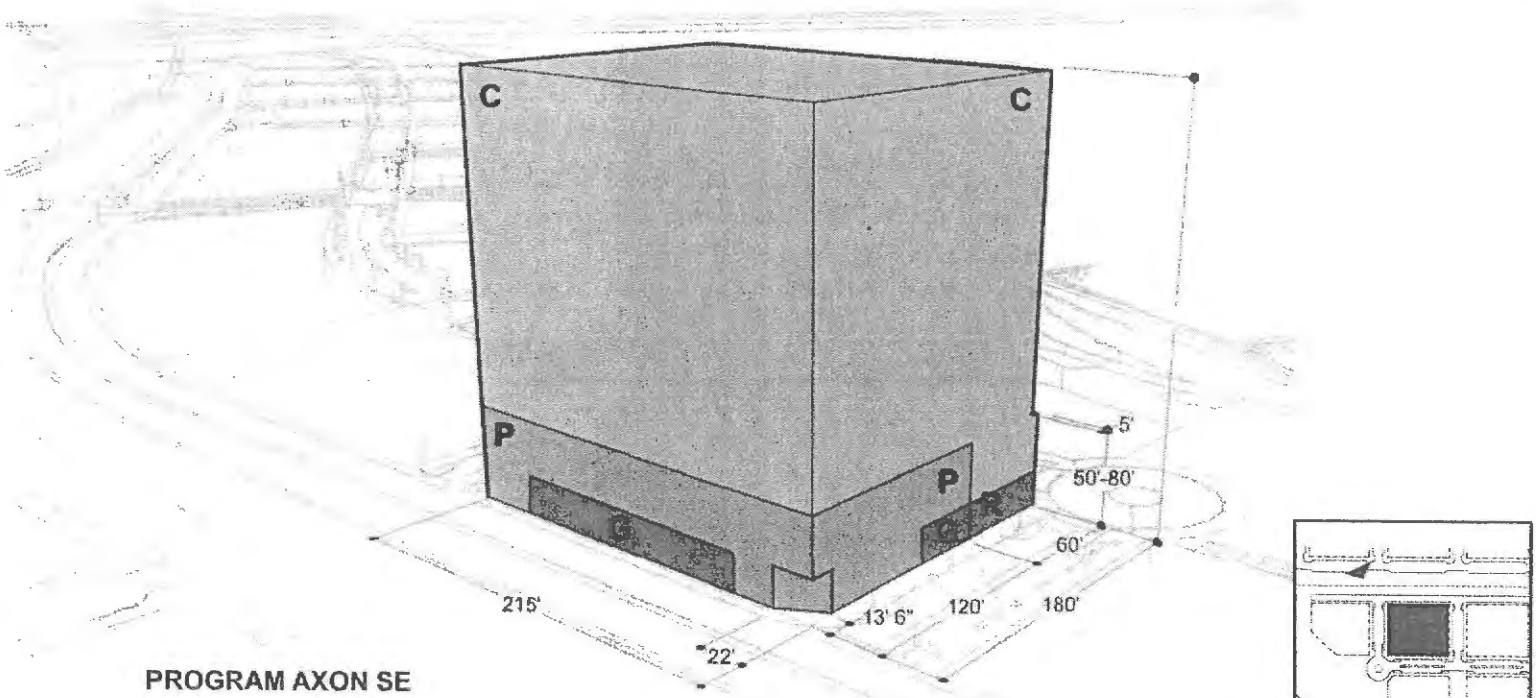
Vancouver Waterfront
Residential Park District

figure **R2**

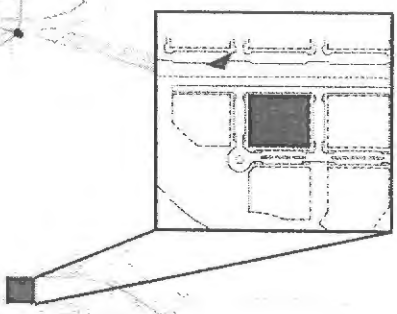


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 19

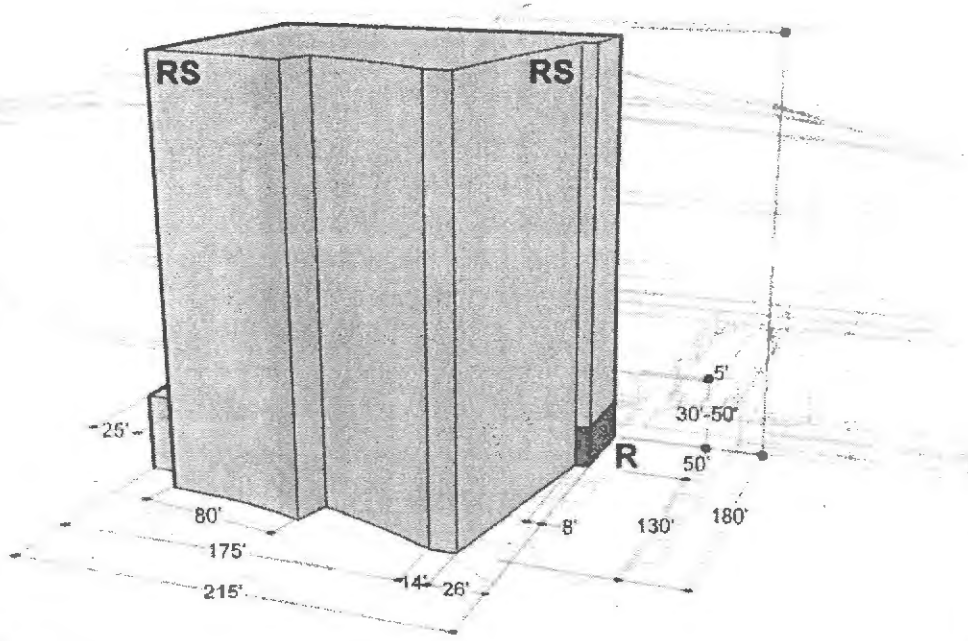
SITE AREA	38,700	SF
ACRES	0.89	ACRES
FAR	8.60	
RETAIL	5,000	SF
COMMERCIAL	328,000	SF
PARKING (ABOVE GROUND)	128,000	SF
PARKING (BELOW GROUND)	98,000	SF
SPACES (1/380 SF)	569	STALLS
TOTAL BUILDING AREA	559,000	SF
	848	(275

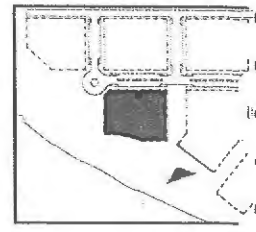
KEY PLAN

Block 19
May 15, 2009

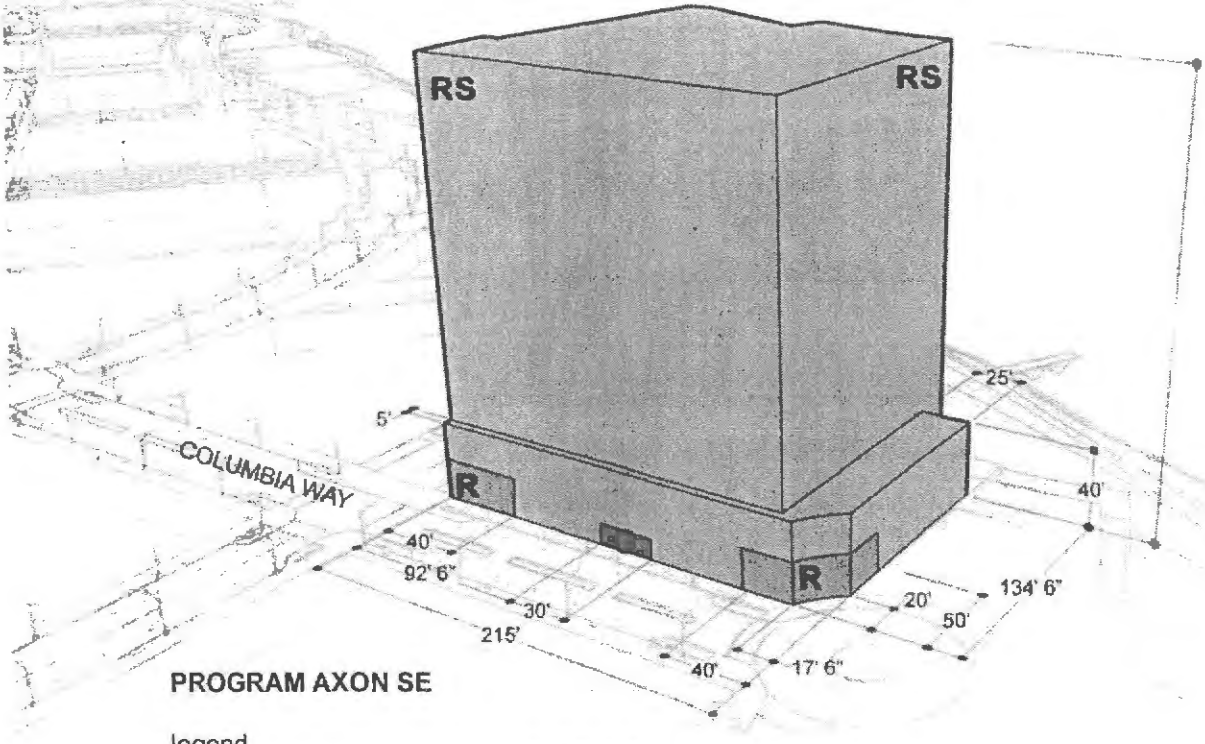
Vancouver Waterfront
Residential Park District

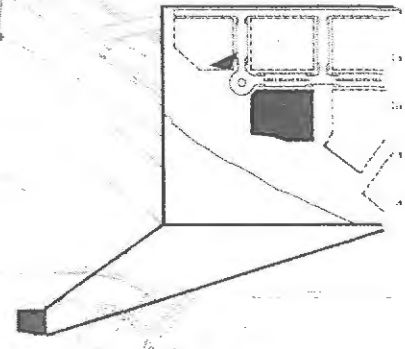
figure **R3**





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 20

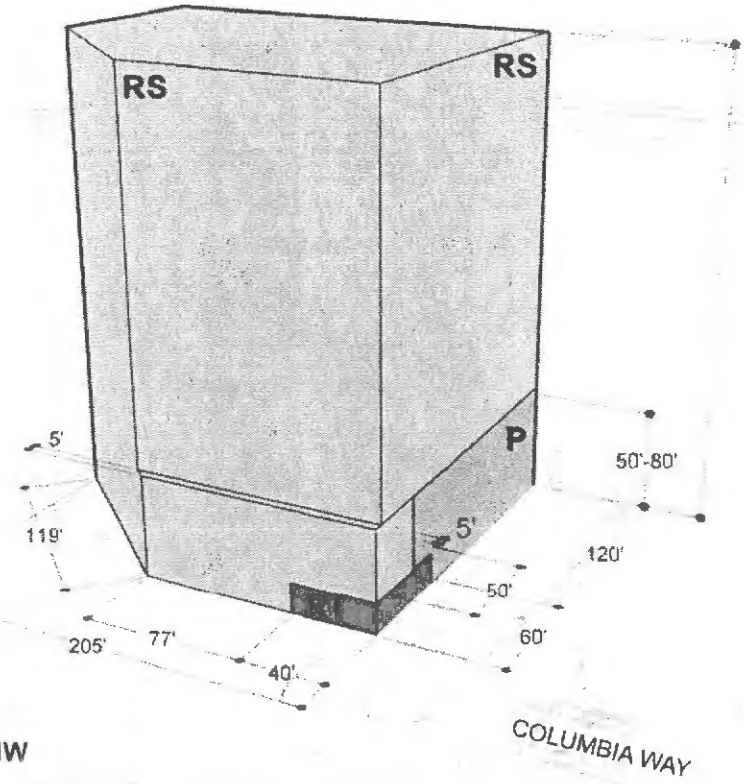
SITE AREA	31,675	SF
ACRES	0.73	ACRES
FAR	9.69	
RETAIL	5,000	SF
RESIDENTIAL	302,000	SF
PARKING (ABOVE GROUND)	1,000	SF
PARKING (BELOW GROUND)	114,000	SF
SPACES (1/380 SF)	322	STALLS
TOTAL BUILDING AREA	422,000	SF
	397	(75)

KEY PLAN

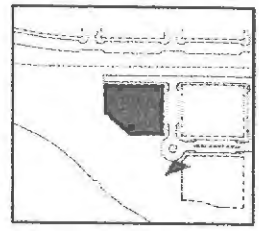
Vancouver Waterfront
Residential Park District

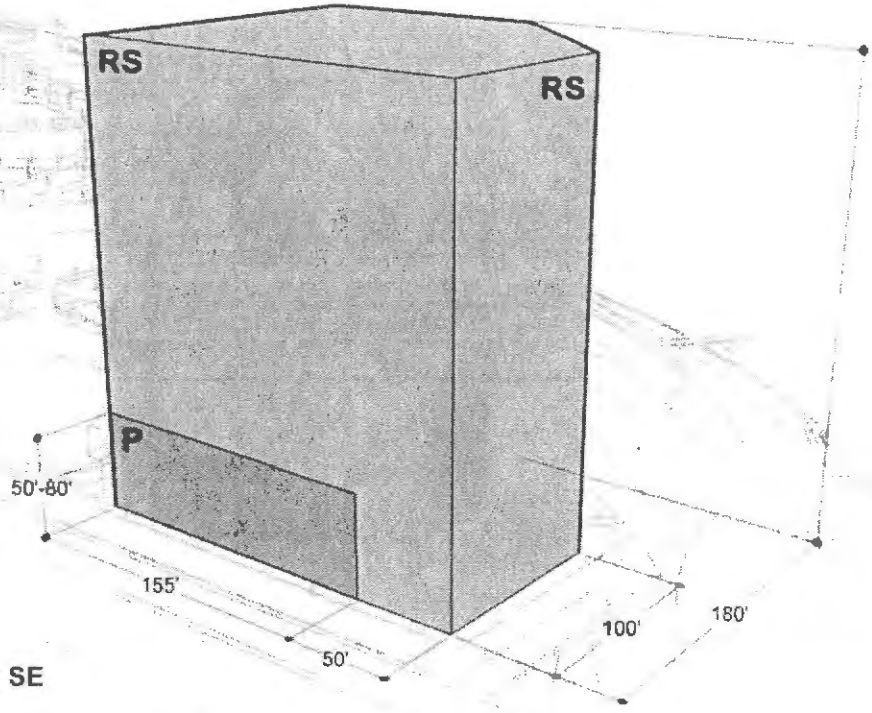
figure **R4**

Block 20
May 15, 2005

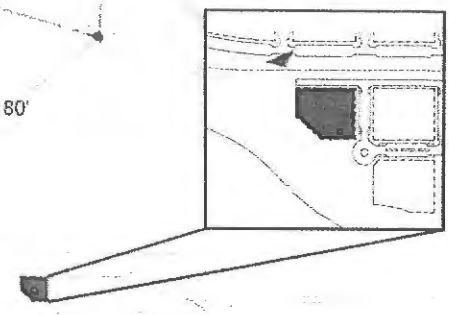


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 21

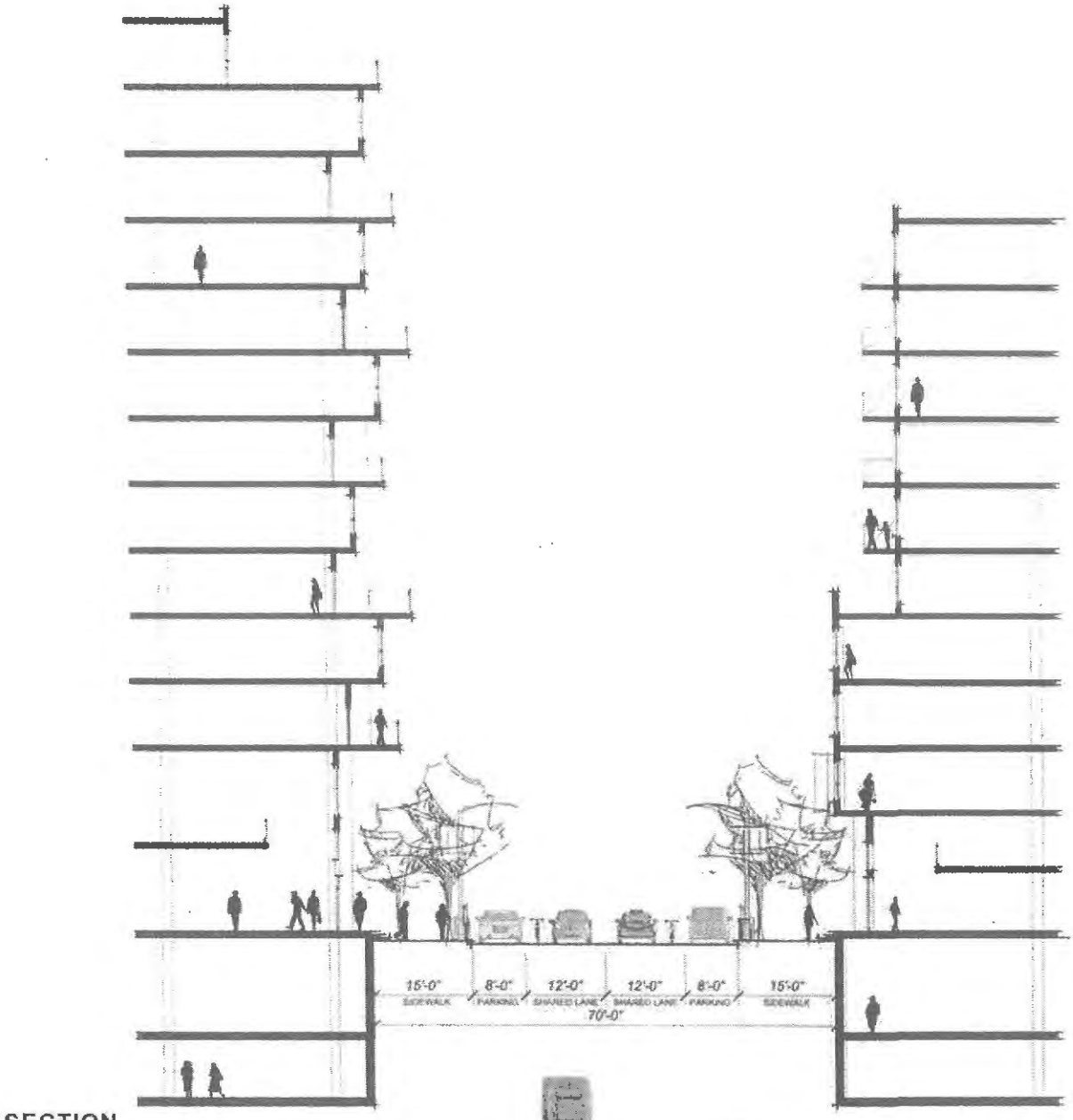
SITE AREA	33,397	SF
ACRES	0.77	ACRES
FAR	12.49	
RETAIL	3,000	SF
RESIDENTIAL	414,000	SF
PARKING (ABOVE GROUND)	54,000	SF
PARKING (BELOW GROUND)	40,000	SF
SPACES (1/380 SF)	283	STALLS
TOTAL BUILDING AREA	511,000	SF
	535	(252)

KEY PLAN

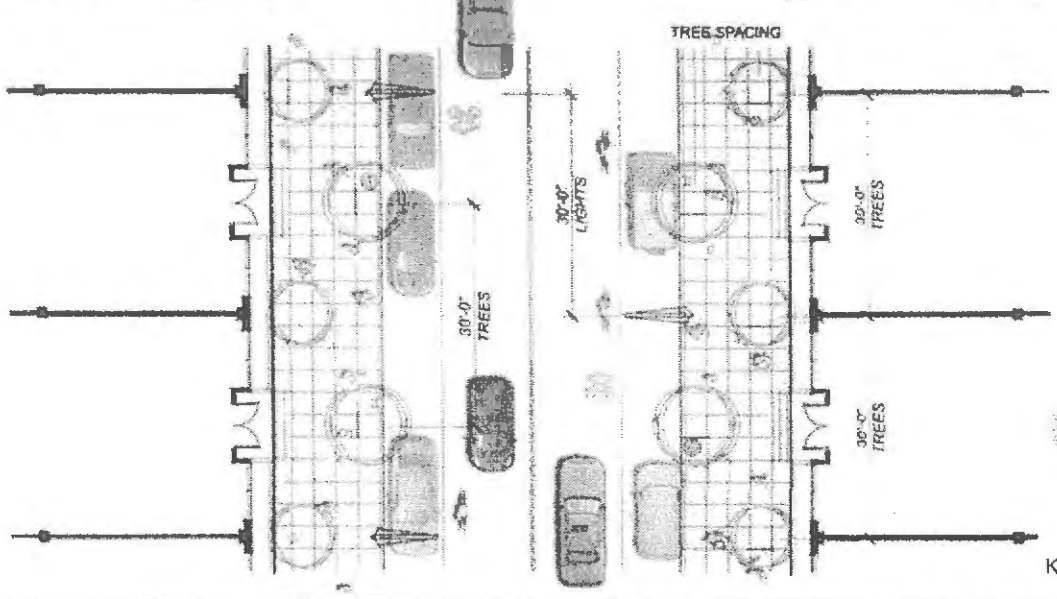
Block 21
May 15, 2009

Vancouver Waterfront
Residential Park District

figure **R5**



SECTION



PLAN

KEY PLAN

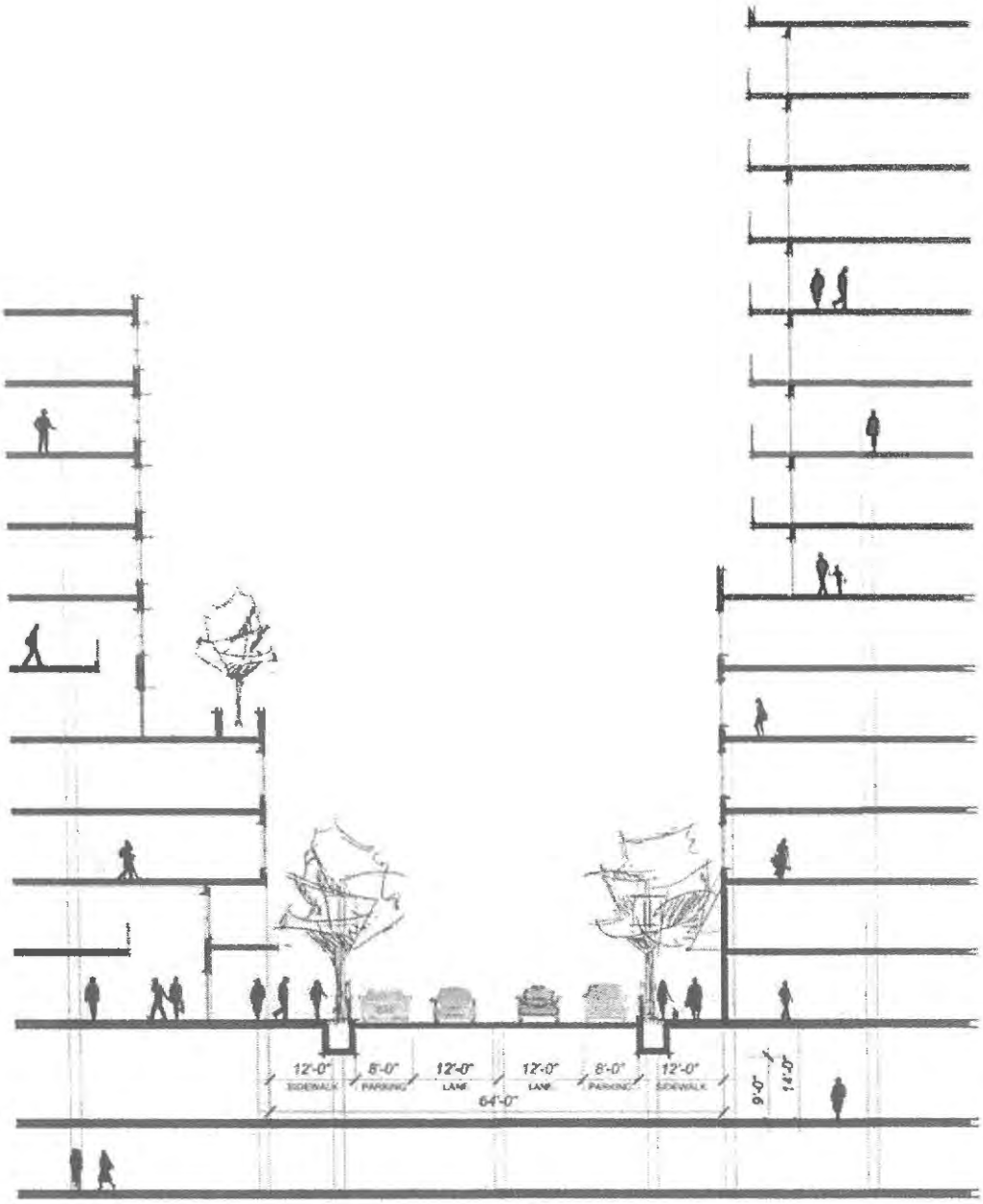
Street Section A.3: Residential Park 2

May 15, 2008

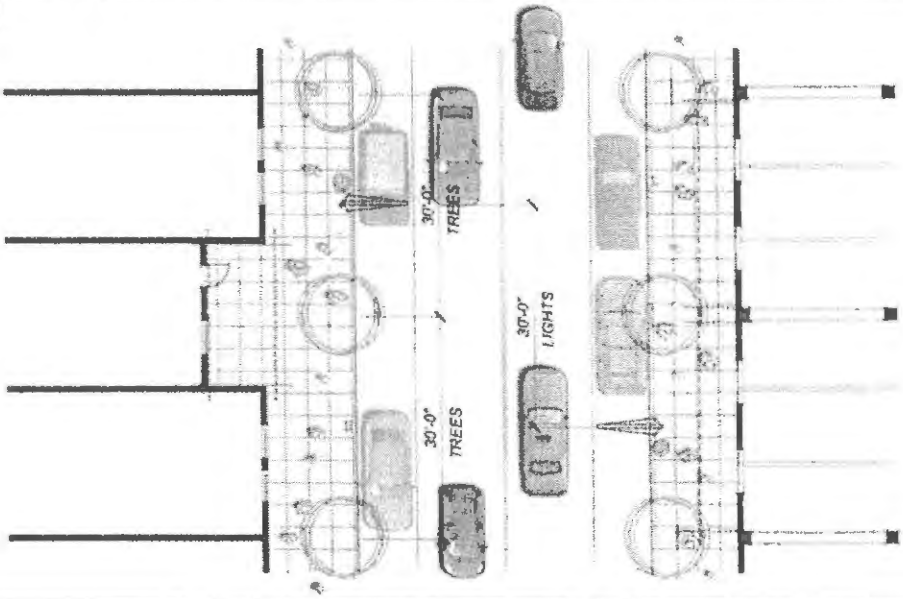
Vancouver Waterfront

Residential Park District

figure **R6**



SECTION



PLAN

KEY PLAN

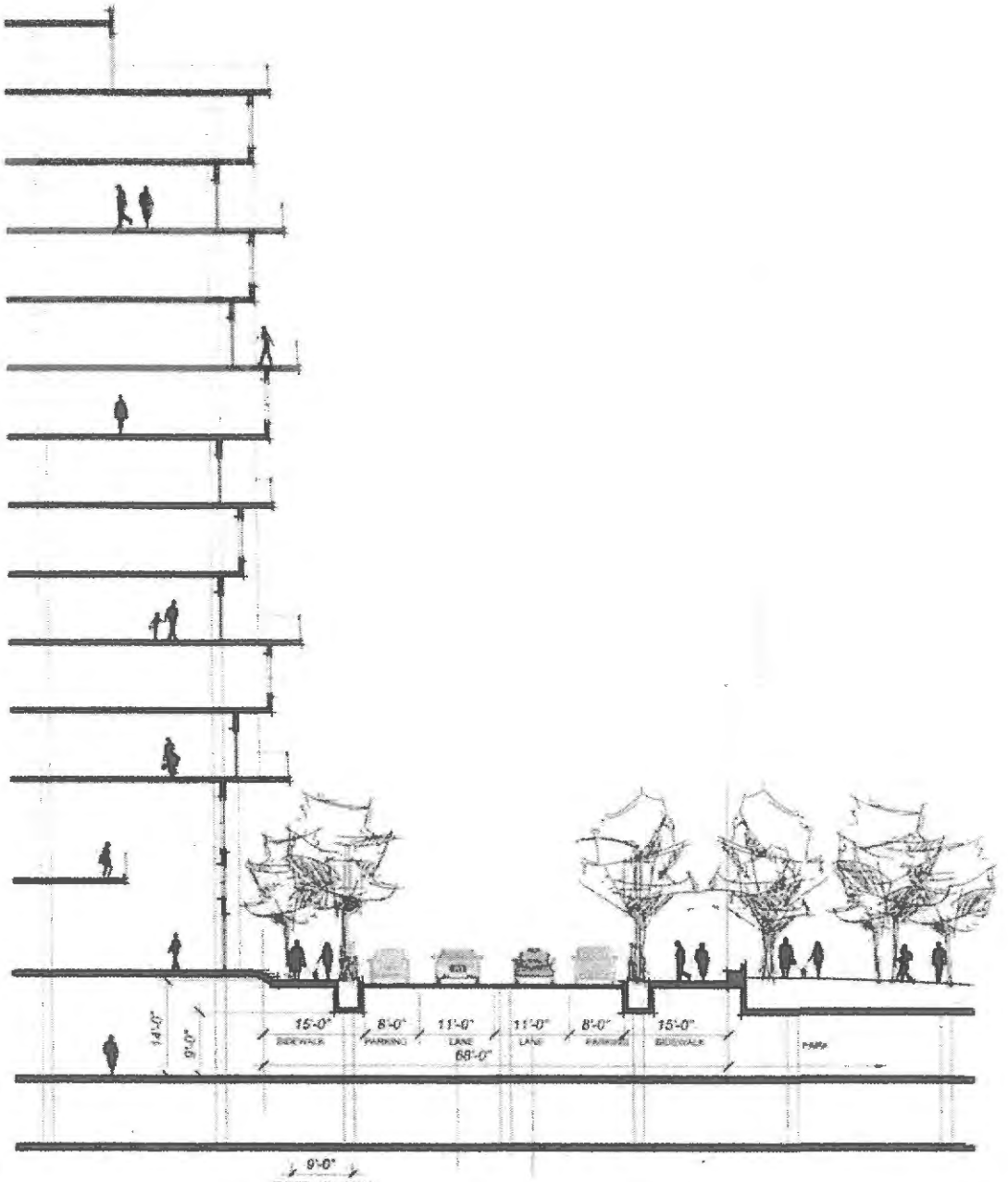
Street Section B: Access 1

May 15, 2009

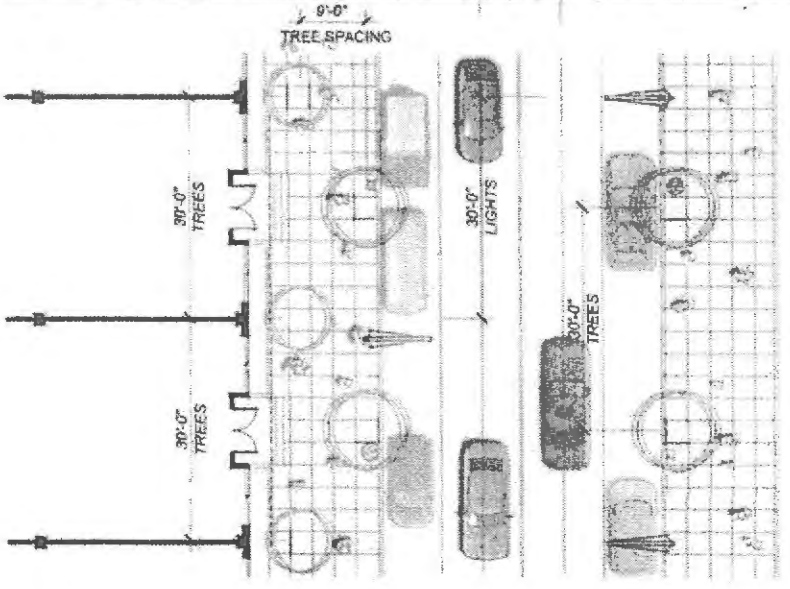
Vancouver Waterfront

Residential Park District

figure **R7**



SECTION



PLAN

KEY PLAN

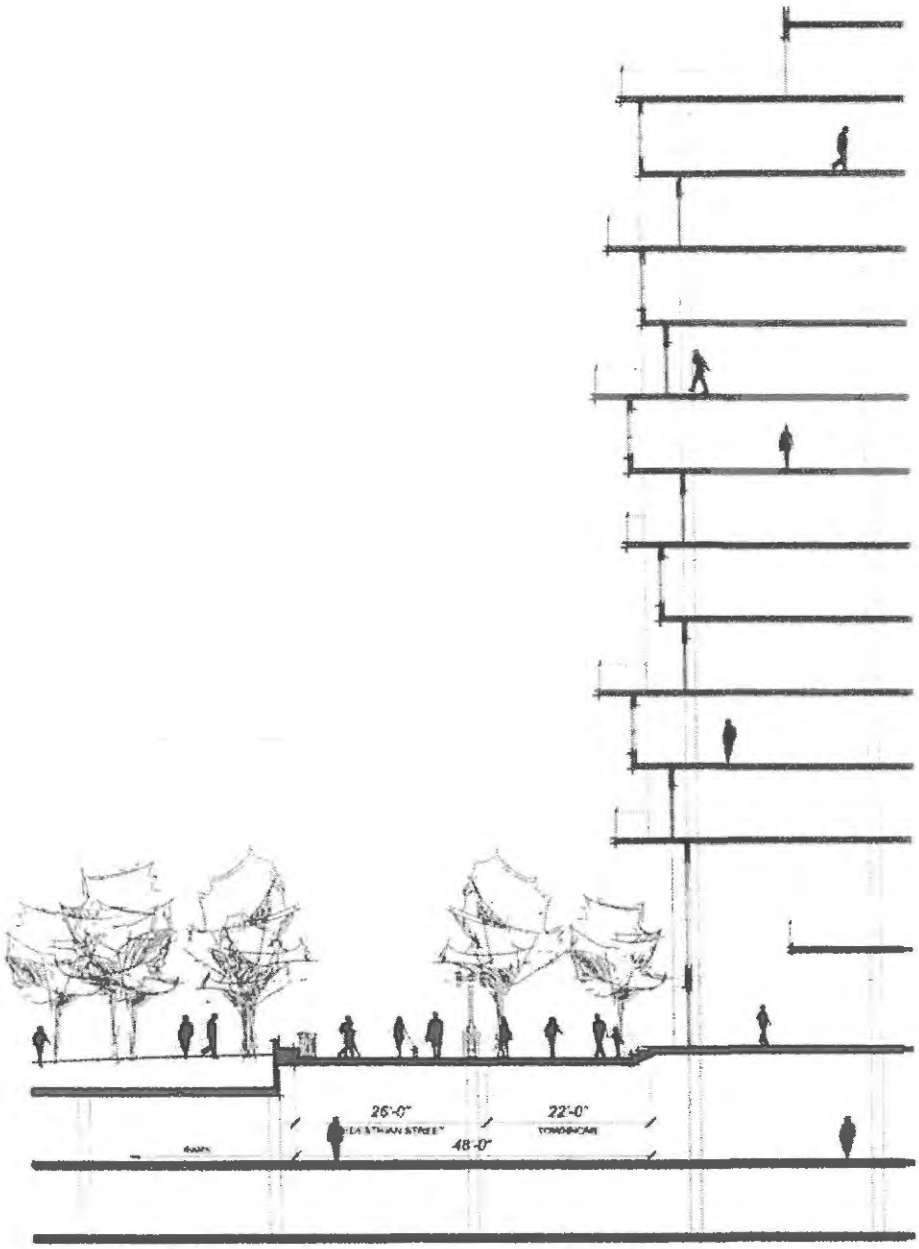
Street Section G: Residential Park

May 15, 2009

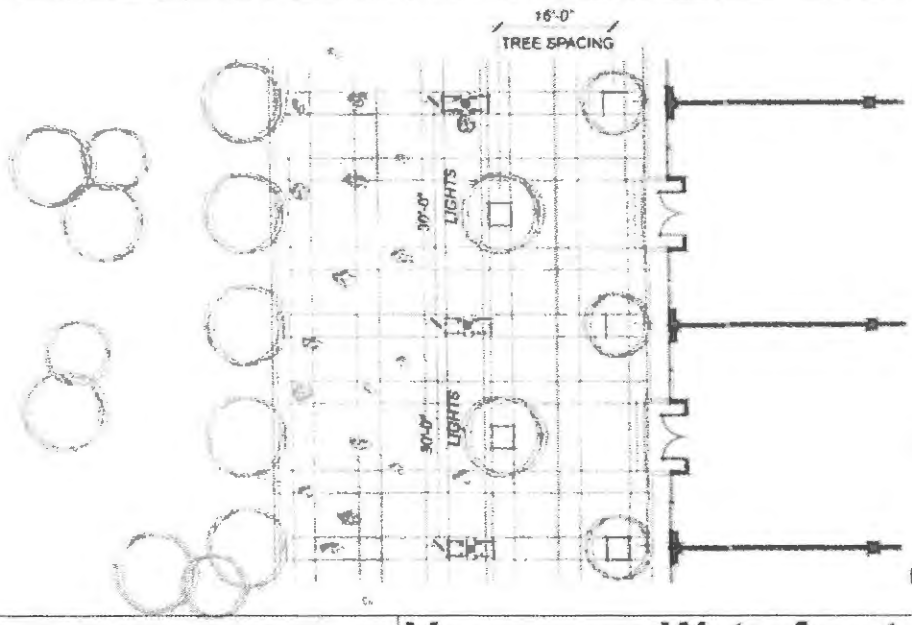
Vancouver Waterfront

Residential Park District

figure **R8**



SECTION



PLAN

G2

KEY PLAN

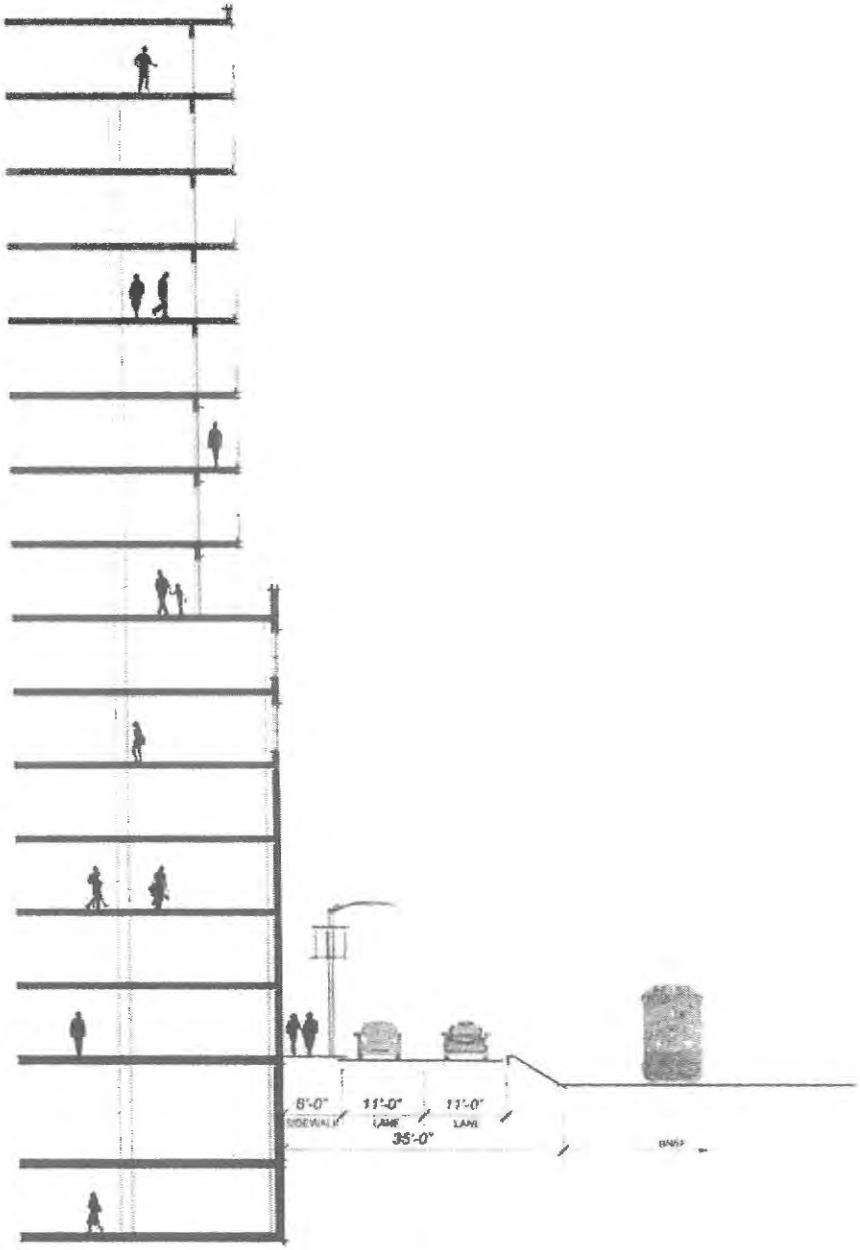
Street Section G.2: Green Street

May to 2100

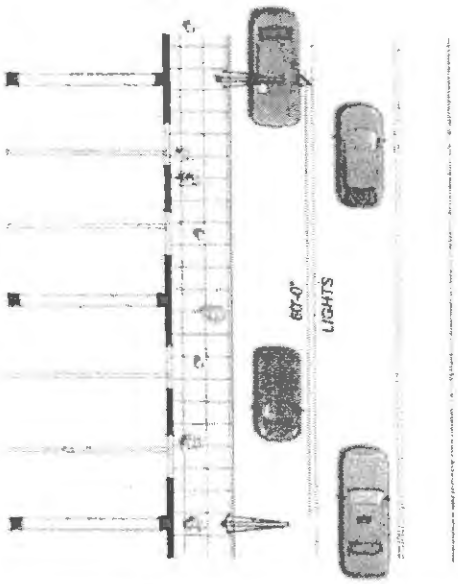
Vancouver Waterfront

Residential Park District

figure **R9**



SECTION



PLAN

KEY PLAN

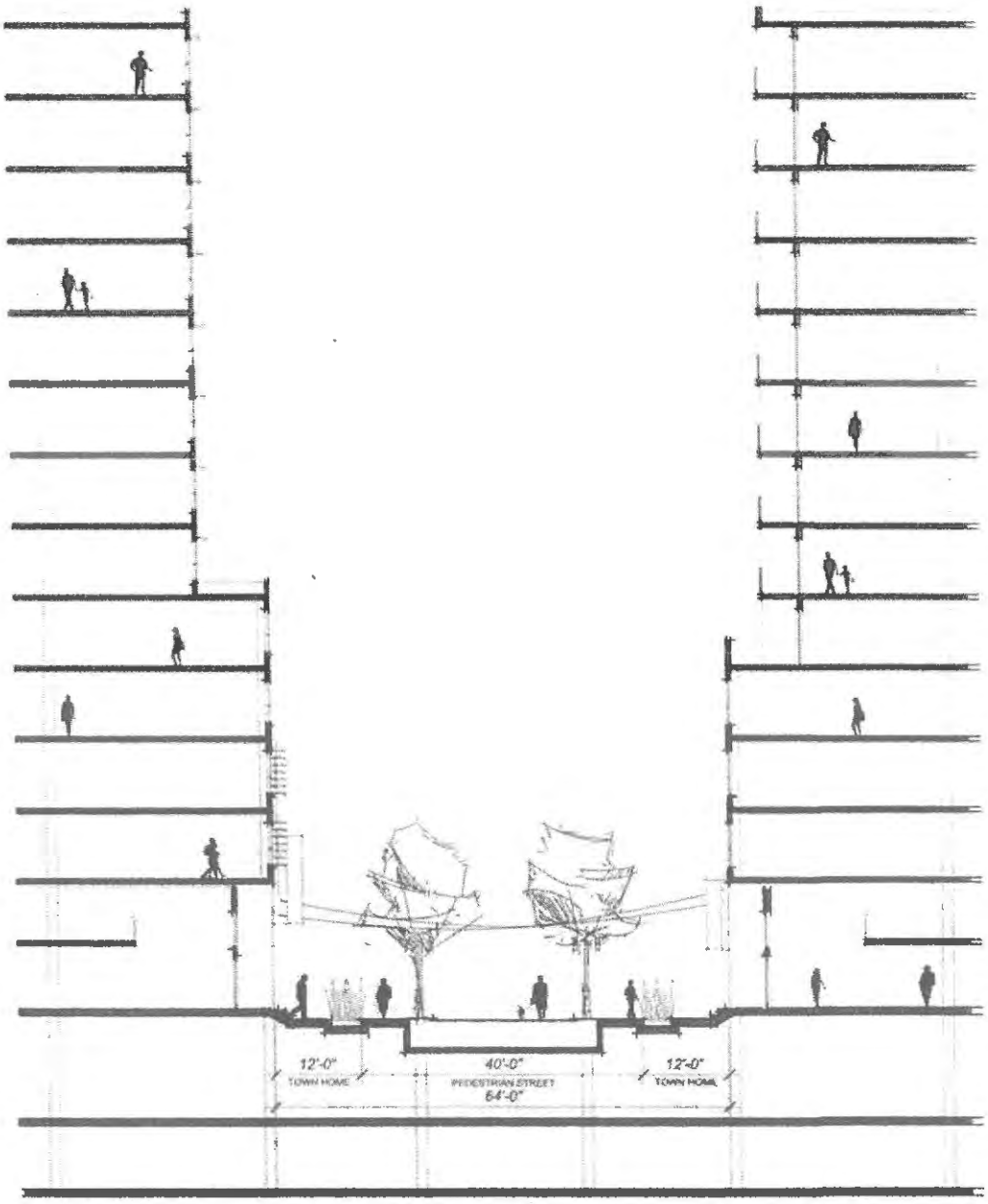
Street Section H.3: Service 3

May 15, 2009

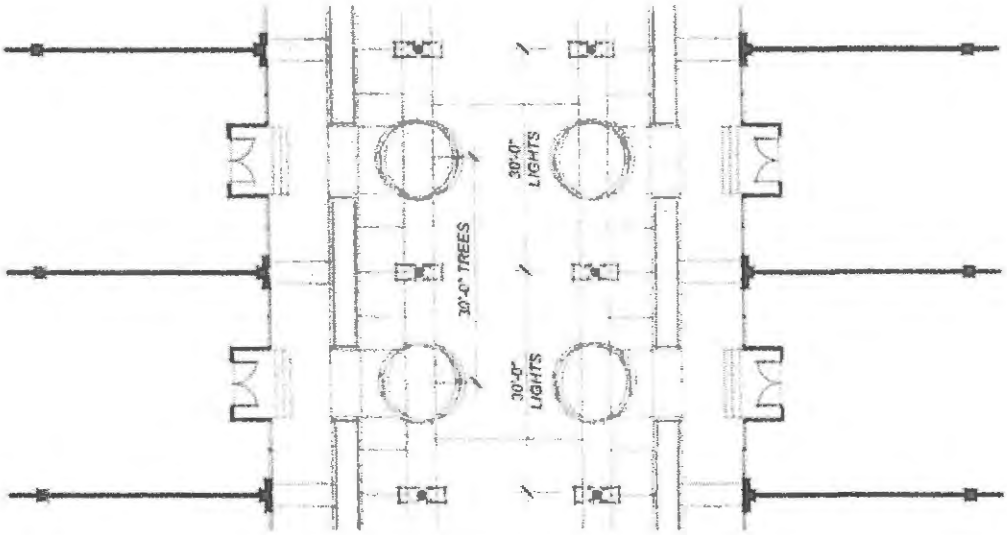
Vancouver Waterfront

Residential Park District

figure **R10**



SECTION



PLAN

KEY PLAN

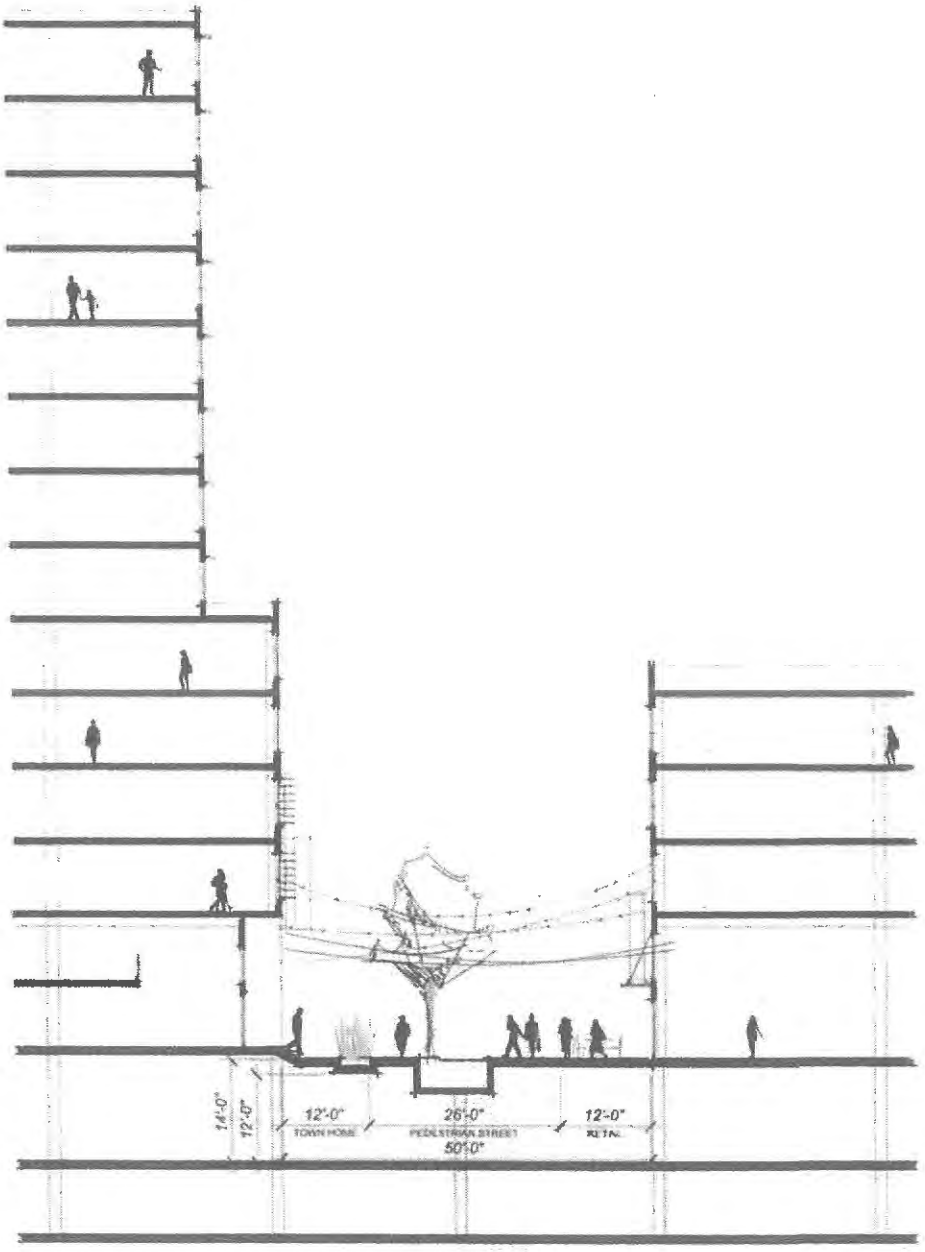
Street Section J: Green Street 1

May 15, 2009

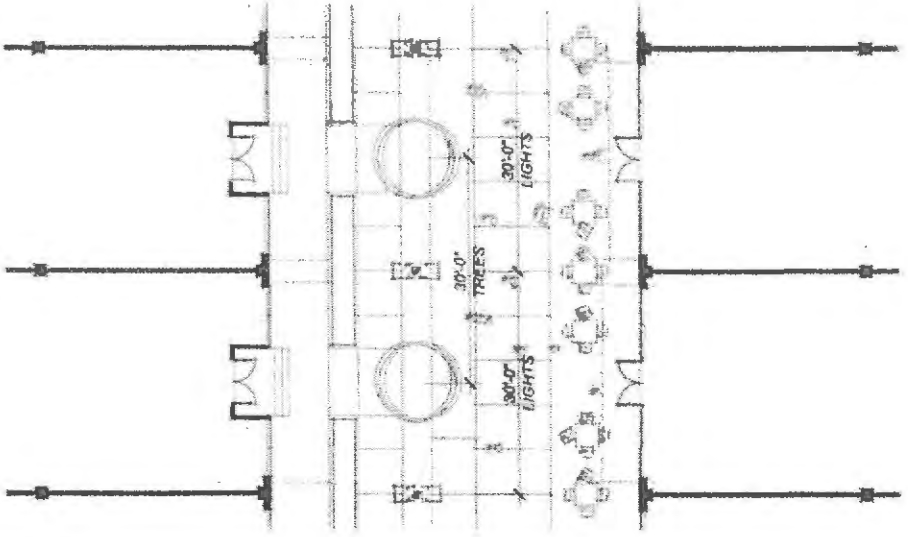
Vancouver Waterfront

Residential Park District

figure **R11**



SECTION



PLAN

KEY PLAN

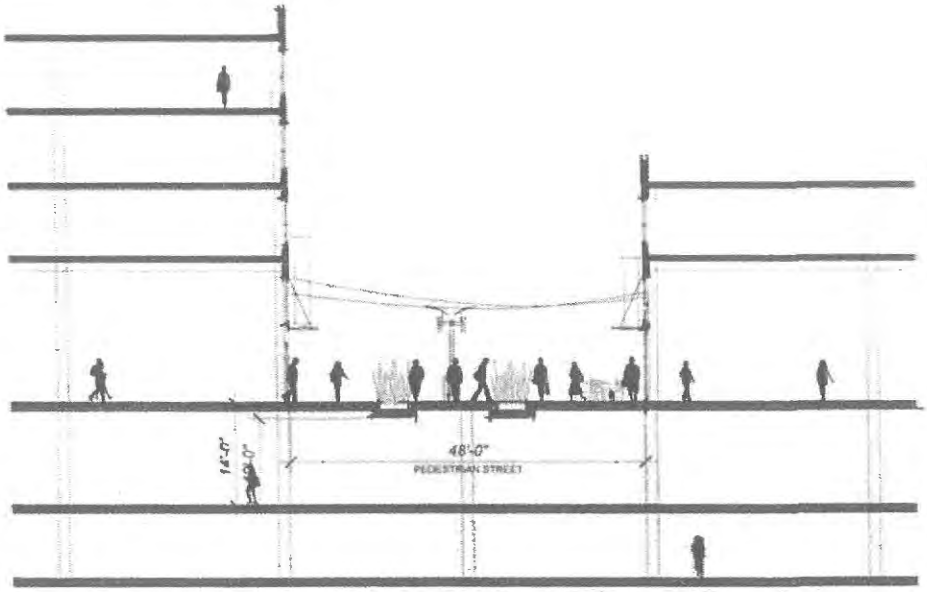
Street Section J.2: Green Street 2

May 15, 2009

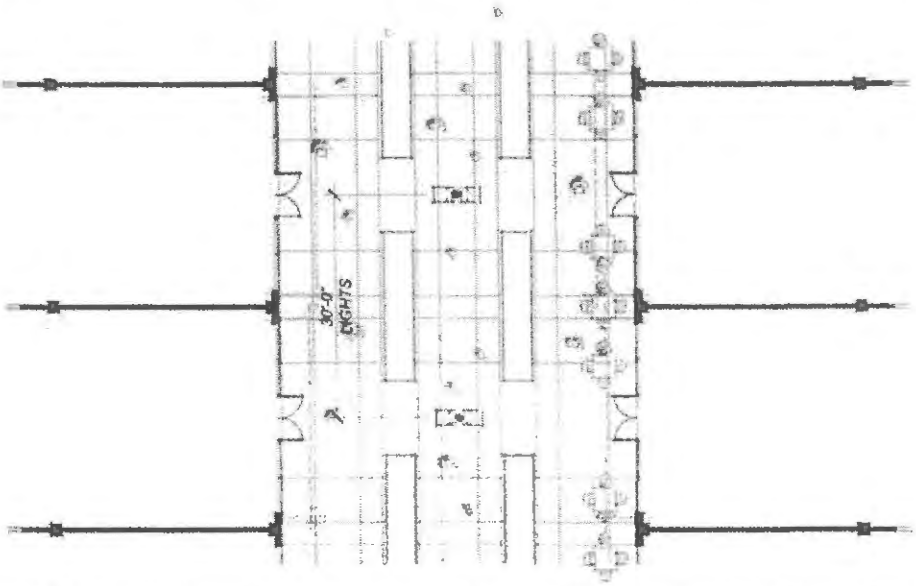
Vancouver Waterfront

Residential Park District

figure **R12**



SECTION



PLAN

KEY PLAN

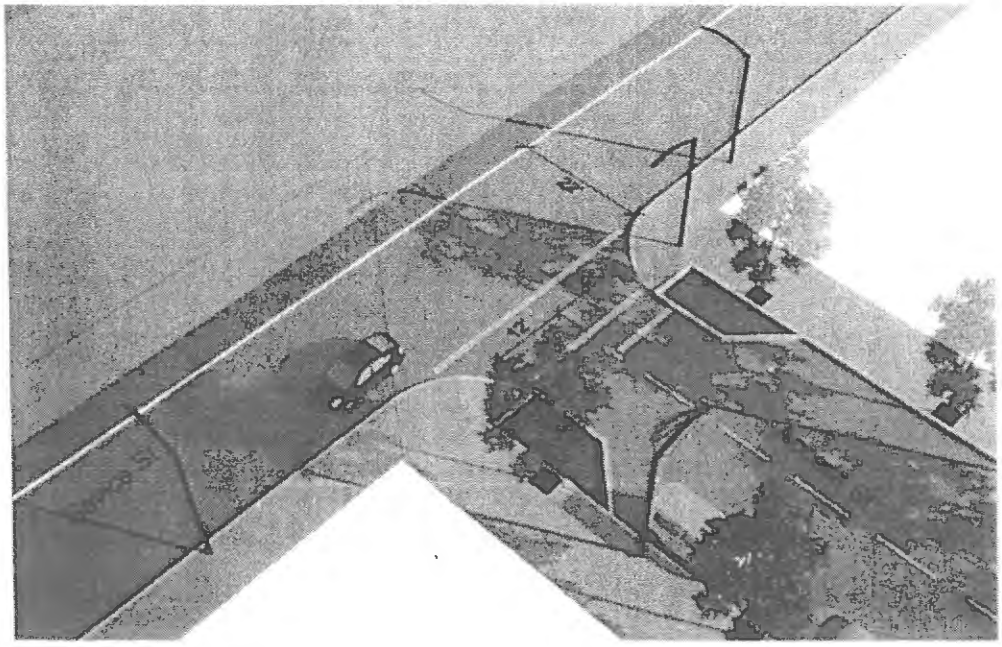
Street Section J.3: Green Street 3

May 15 2006

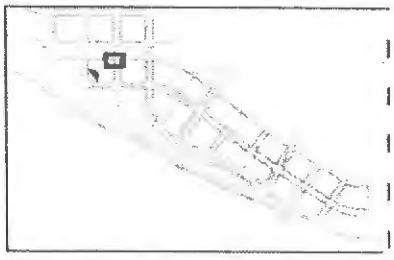
Vancouver Waterfront

Residential Park District

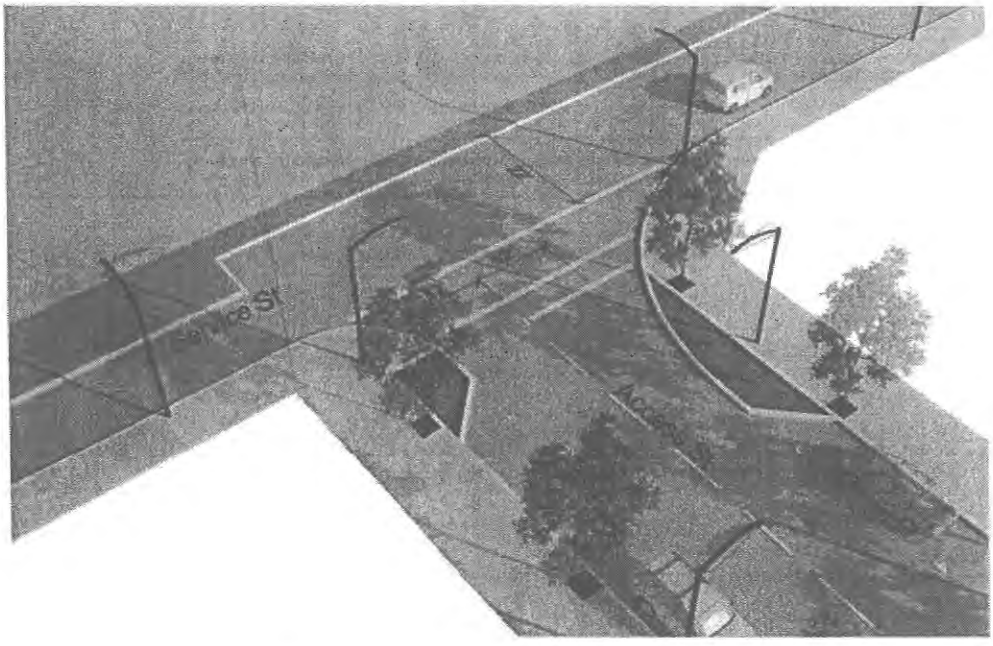
figure **R13**



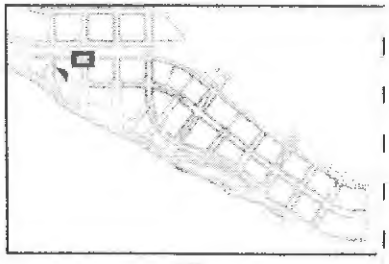
service st and access st



KEY PLAN



service st and access st

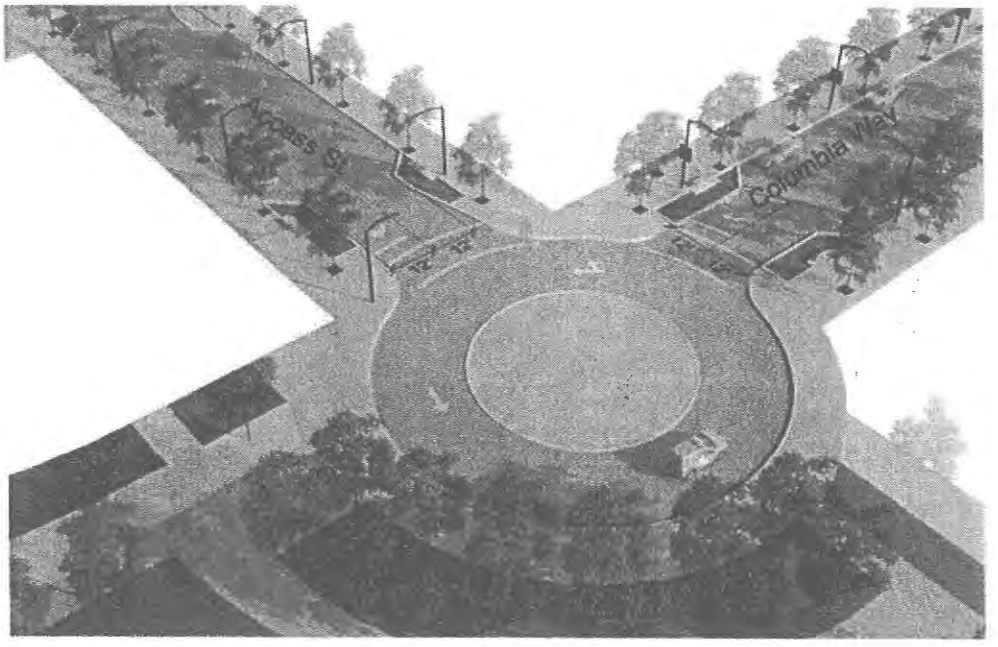


KEY PLAN

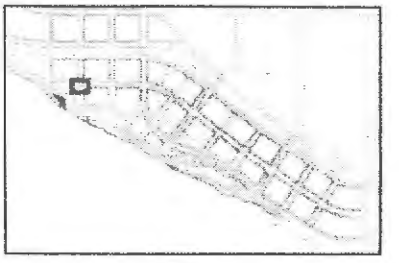
Street Intersections
May 15, 2006

Vancouver Waterfront
Residential Park District

figure **R14**



columbia way and access st



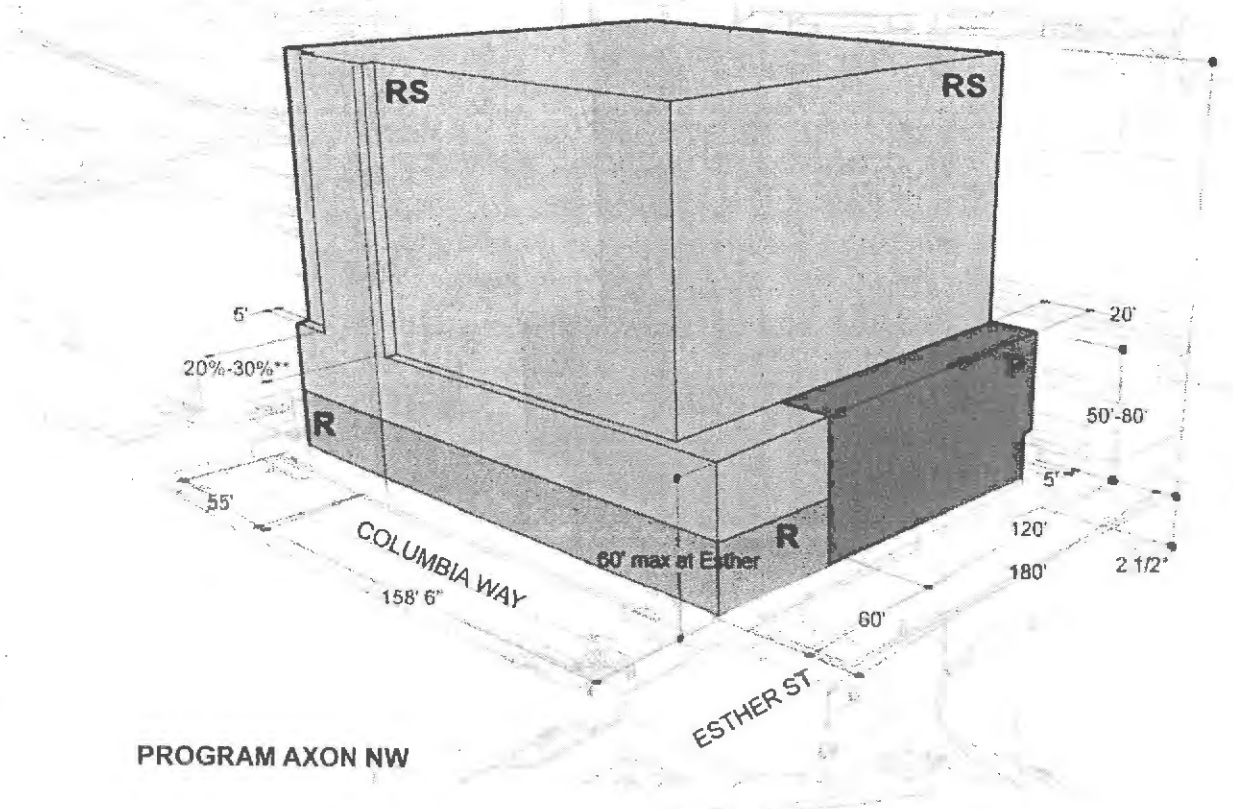
KEY PLAN

Street Intersection
May 15, 2009

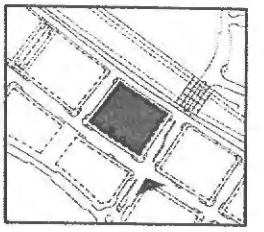
Vancouver Waterfront
Residential Park District

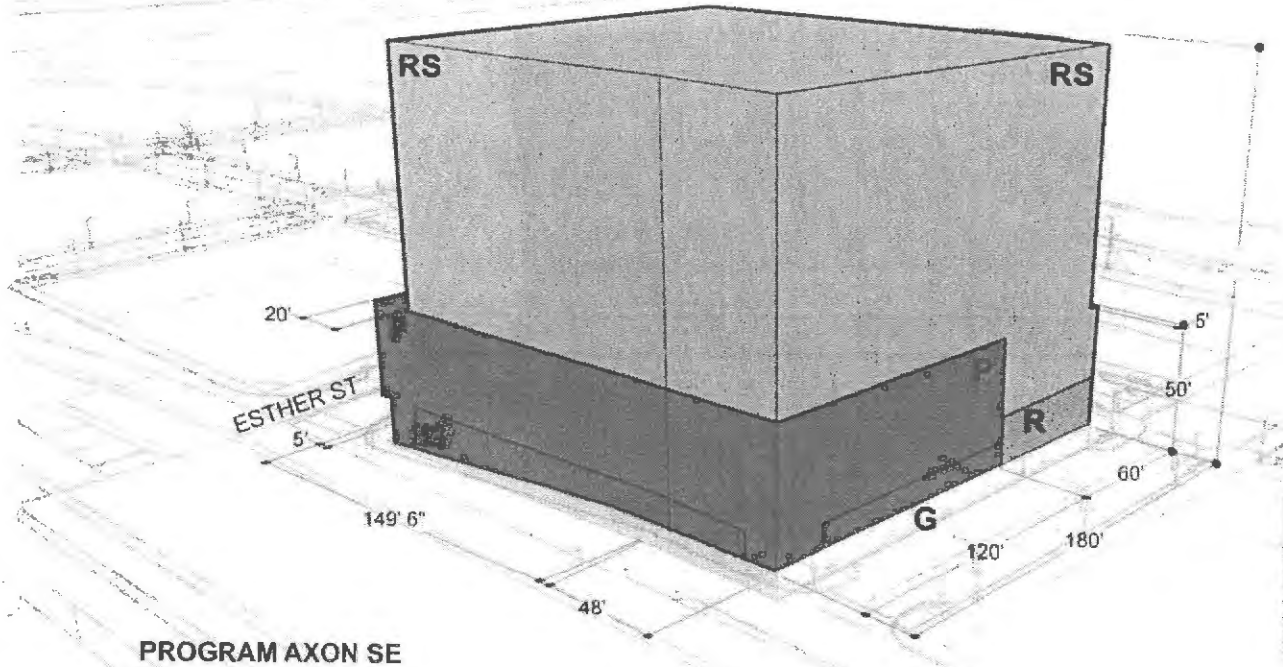
figure **R15**

This page to remain blank

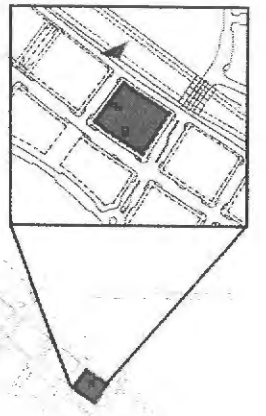


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 03

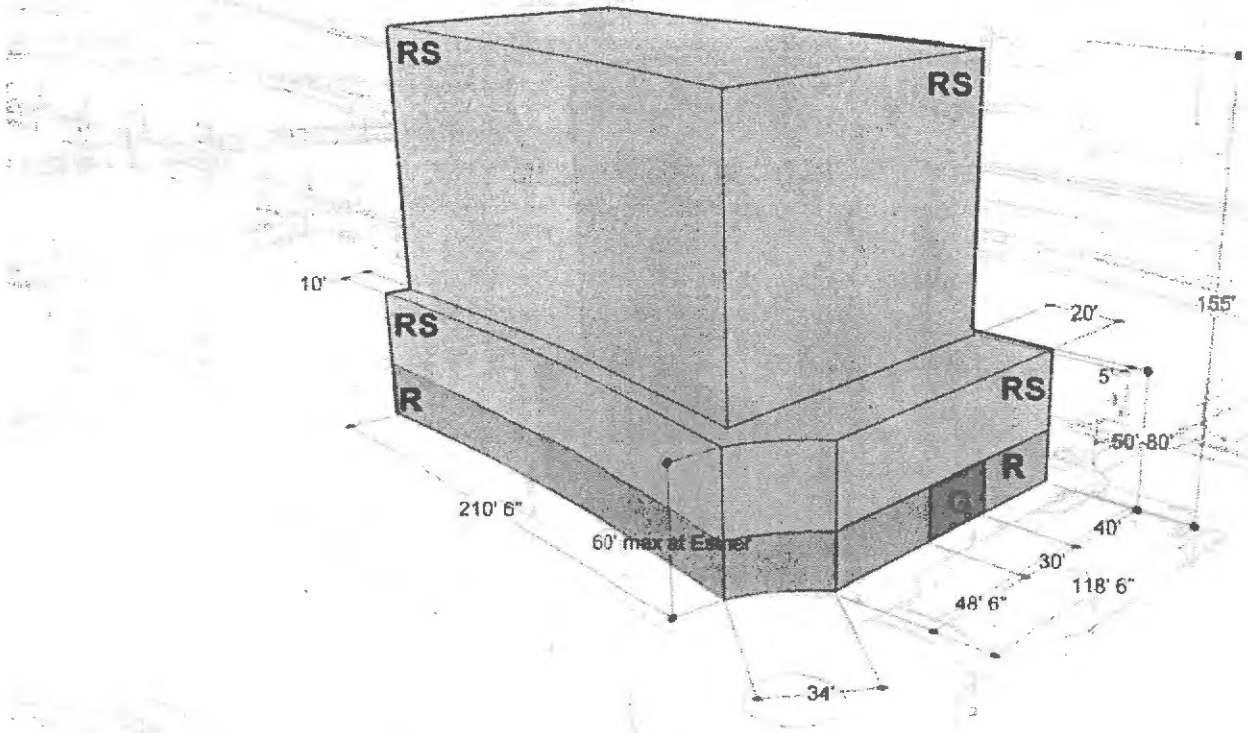
SITE AREA	36,992	SF
ACRES	0.85	ACRES
FAR	7.38	
RETAIL	10,000	SF
RESIDENTIAL	263,000	SF
PARKING (ABOVE GROUND)	120,000	SF
PARKING (BELOW GROUND)	72,000	SF
SPACES (1/380 SF)	453	STALLS
TOTAL BUILDING AREA	465,000	SF
	359	94

KEY PLAN

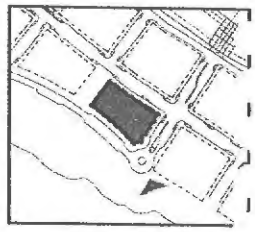
Block 03
May 15, 2009

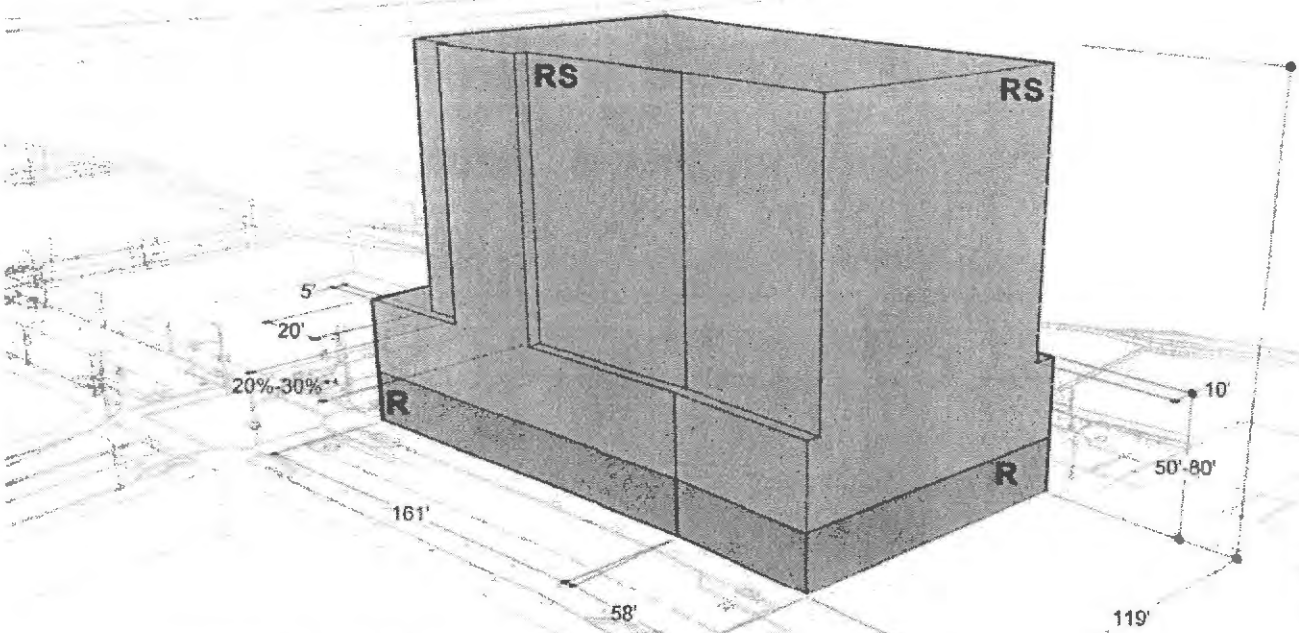
Vancouver Waterfront
Columbia Way District

figure **C1**

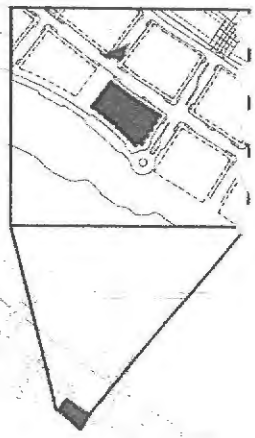


PROGRAM AXON NW





PROGRAM AXON SE



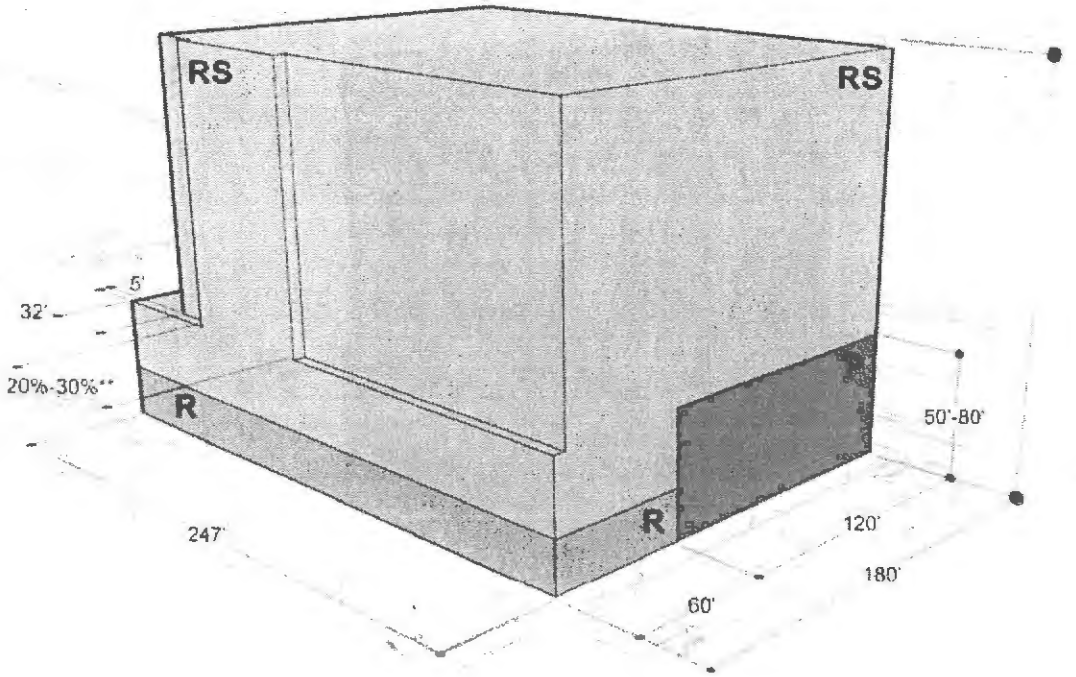
legend

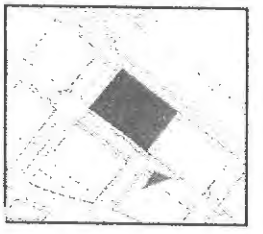
RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 04

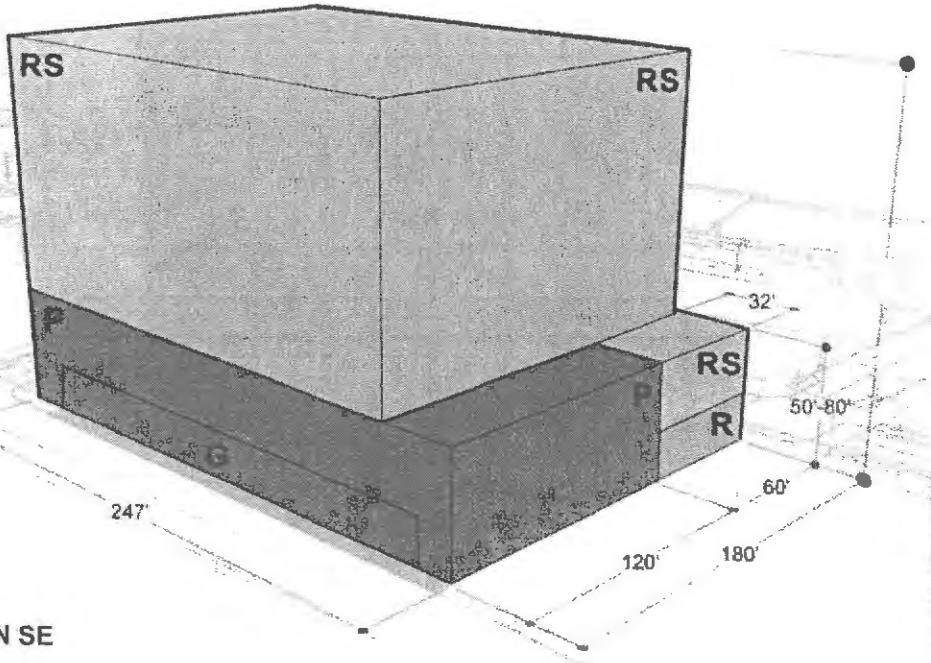
SITE AREA	28,583	SF
ACRES	0.66	ACRES
FAR	10.22	
RETAIL	21,000	SF
HOTEL	271,000	SF
PARKING (ABOVE GROUND)	1,000	SF
PARKING (BELOW GROUND)	88,000	SF
SPACES (1/380 SF)	226	STALLS
TOTAL BUILDING AREA	381,000	SF
	396	(170)

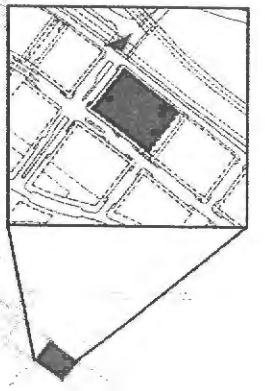
KEY PLAN





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 05

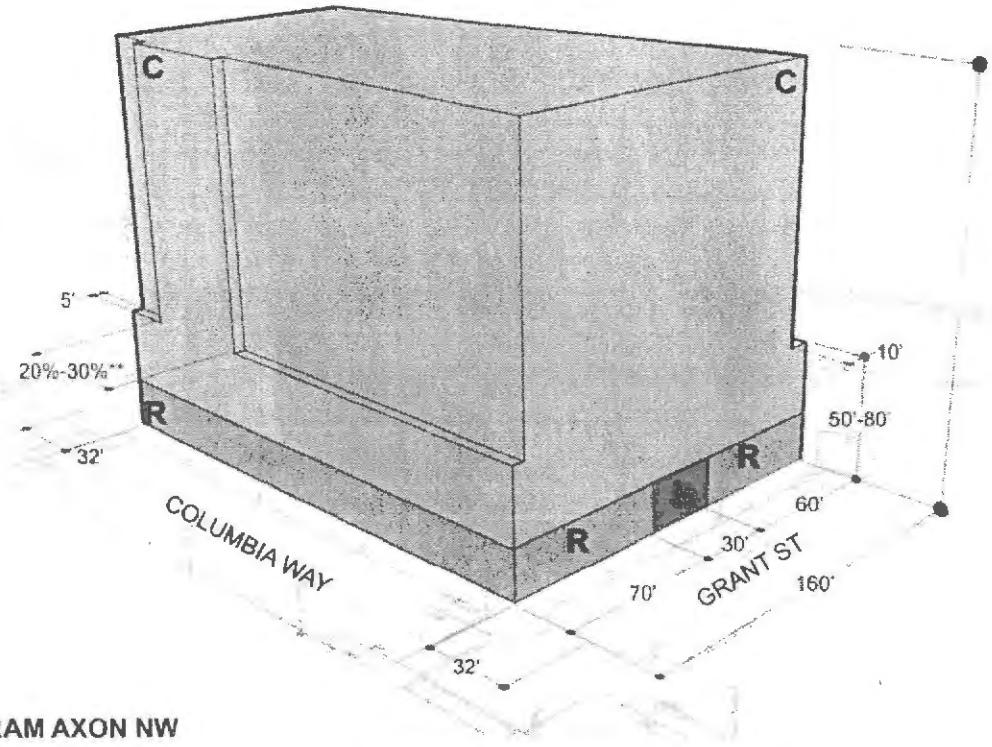
SITE AREA	44,460	SF
ACRES	1.02	ACRES
FAR	5.98	
RETAIL	499,000	SF
RESIDENTIAL	256,000	SF
PARKING (ABOVE GROUND)	145,000	SF
PARKING (BELOW GROUND)	88,000	SF
SPACES (1/380 SF)	731	STALLS
TOTAL BUILDING AREA	499,000	SF
	350	381

KEY PLAN

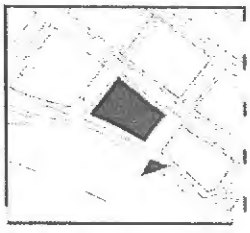
Block 05
May 15, 2008

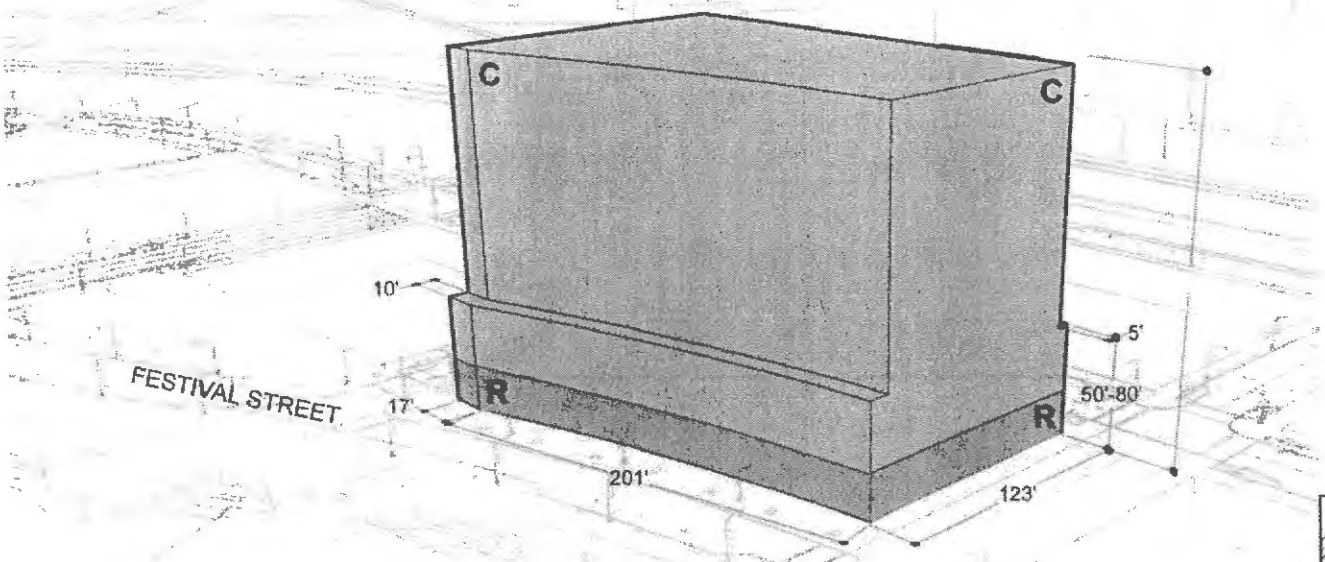
Vancouver Waterfront
Columbia Way District

figure **C3**

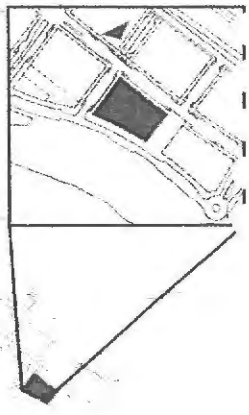


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 06

SITE AREA	30,278	SF
ACRES	0.70	ACRES
FAR	9.25	
RETAIL	26,000	SF
COMMERCIAL	254,000	SF
PARKING (ABOVE GROUND)	1,000	SF
PARKING (BELOW GROUND)	126,000	SF
SPACES (1/380 SF)	330	STALLS
TOTAL BUILDING AREA	407,000	SF
	710	(380)

KEY PLAN

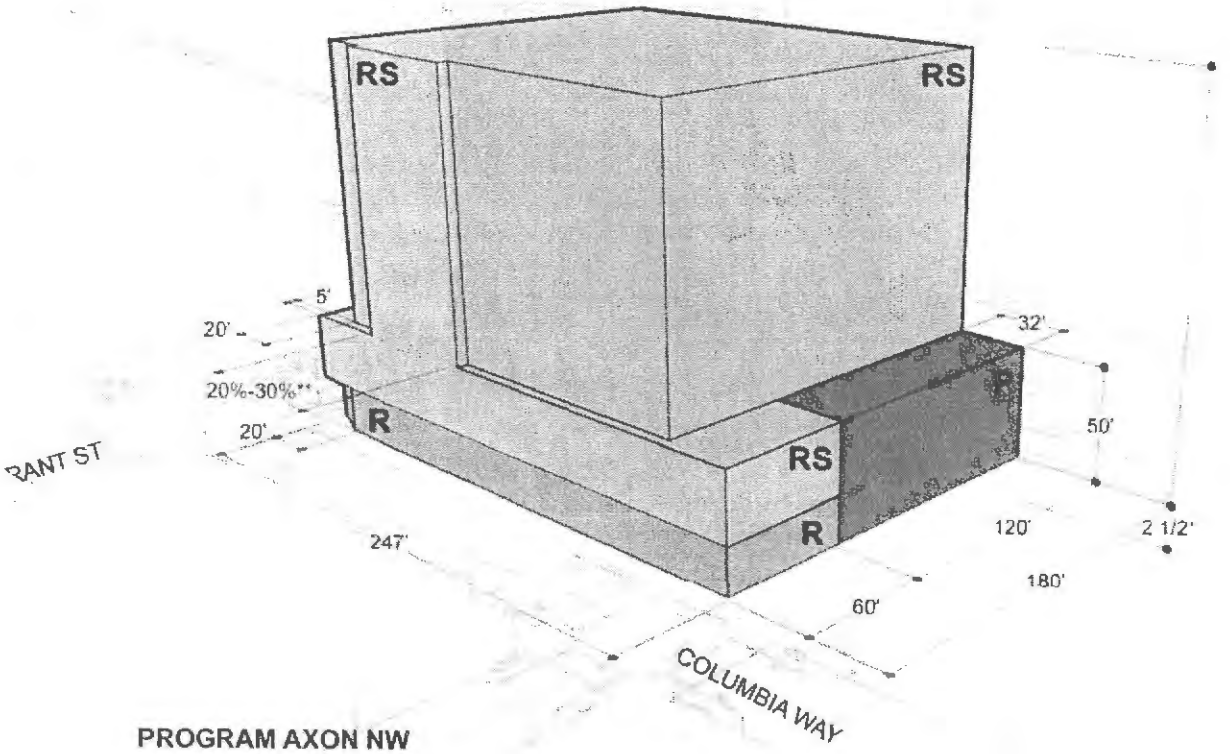
Vancouver Waterfront

Columbia Way District

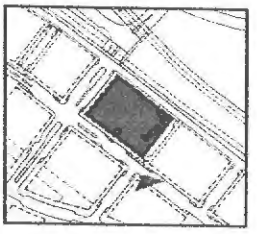
figure **C4**

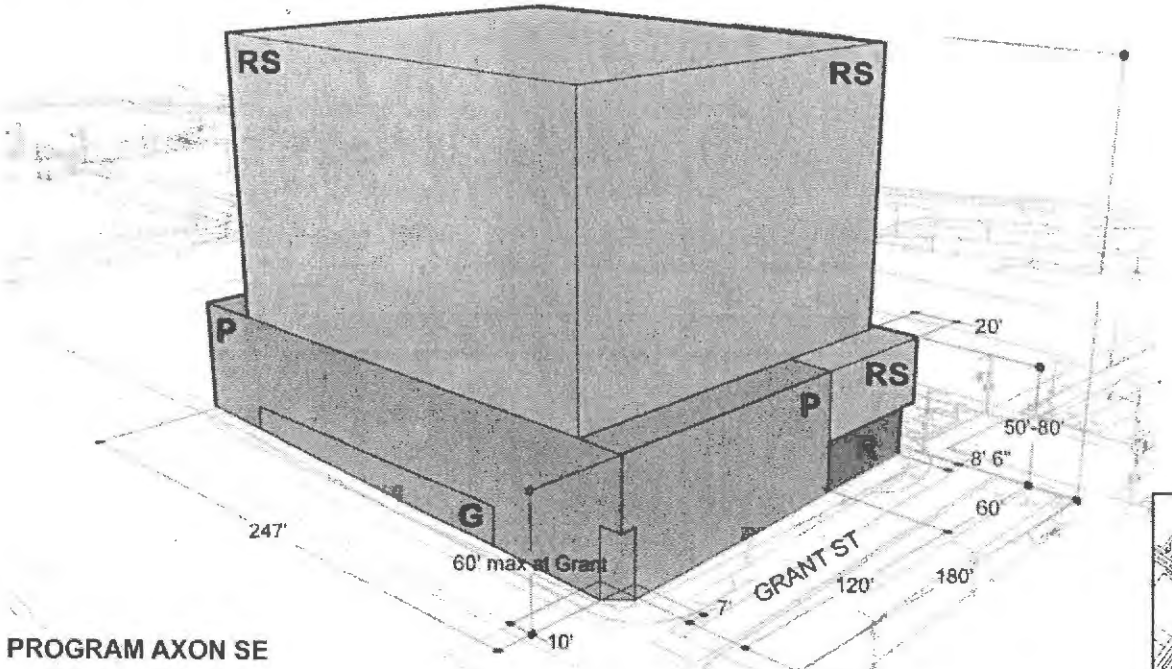
Block 06

May 15 2008

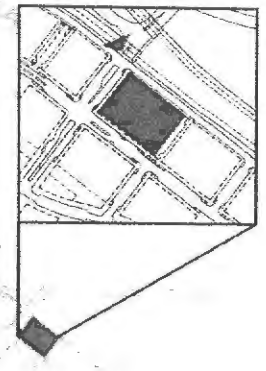


PROGRAM AXON NW





PROGRAM AXON SE



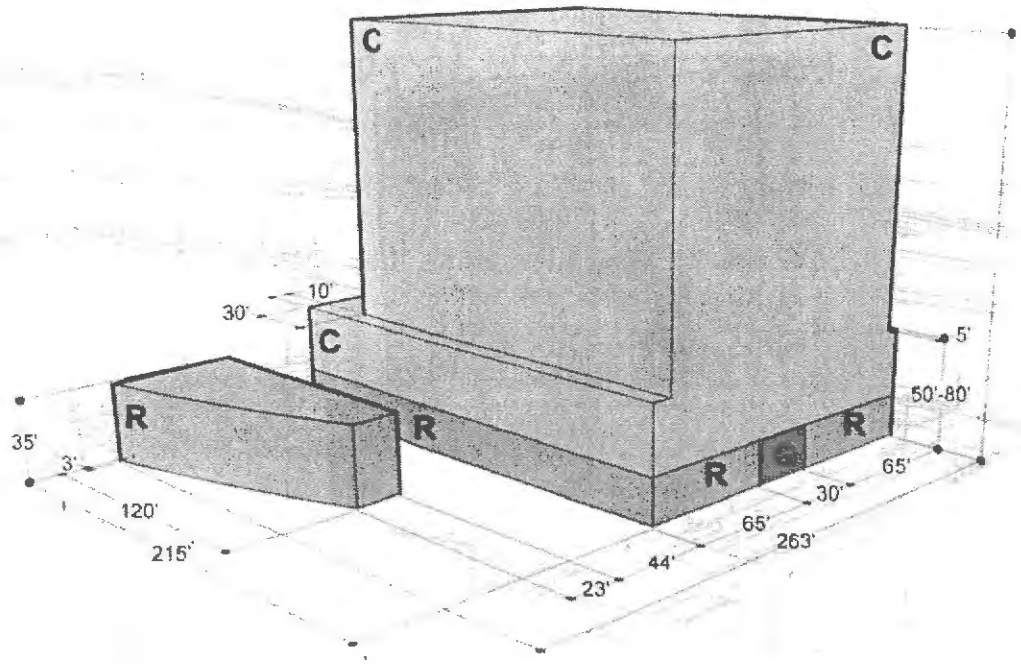
legend

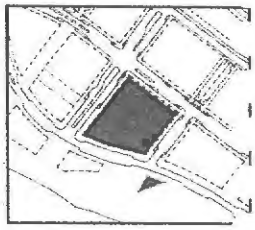
RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 07

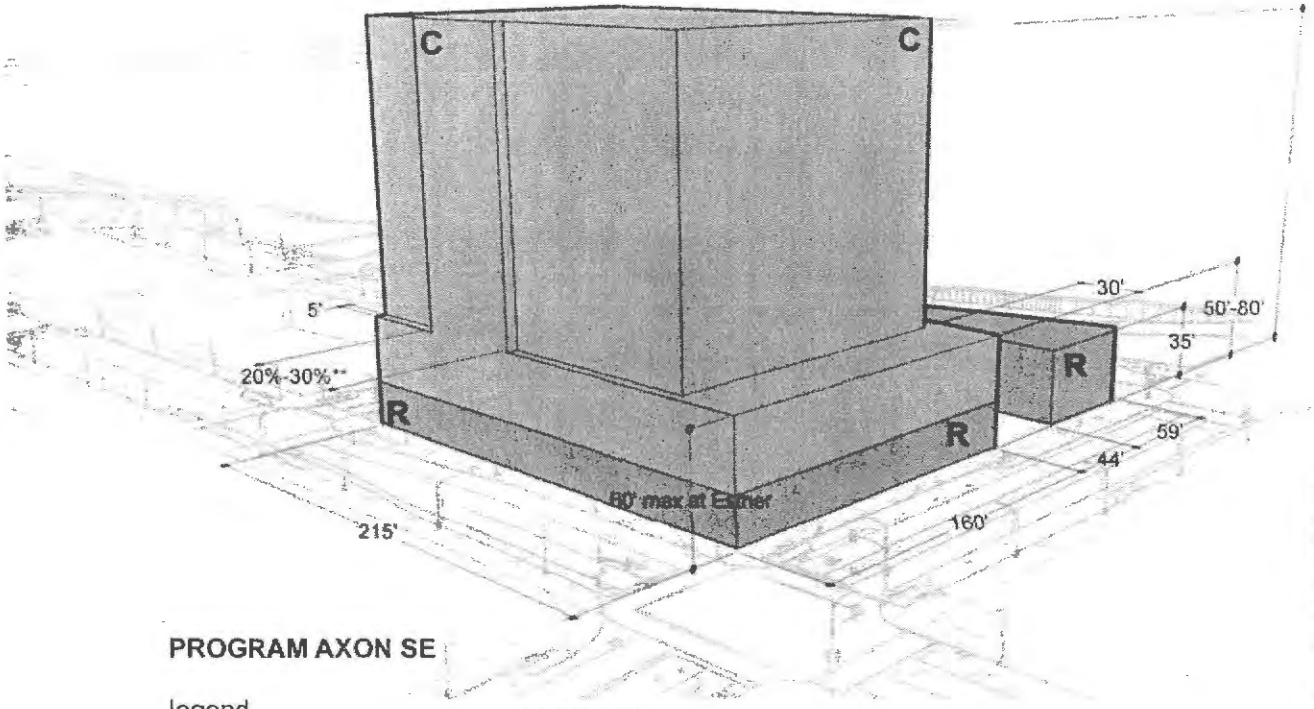
SITE AREA	44,460	SF
ACRES	1.02	ACRES
FAR	6.41	
RETAIL	10,000	SF
RESIDENTIAL	275,000	SF
PARKING (ABOVE GROUND)	145,000	SF
PARKING (BELOW GROUND)	88,000	SF
SPACES (1/380 SF)	702	STALLS
TOTAL BUILDING AREA	518,000	SF
	375	327

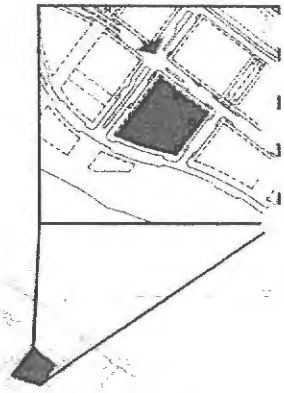
KEY PLAN





PROGRAM AXON NW





PROGRAM AXON SE

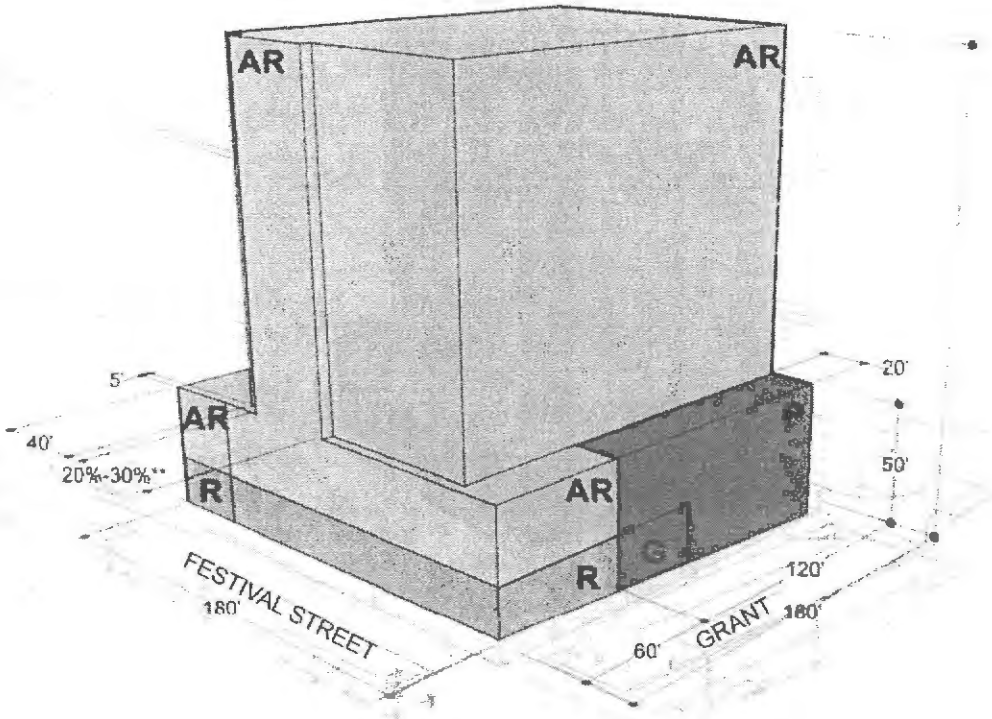
legend

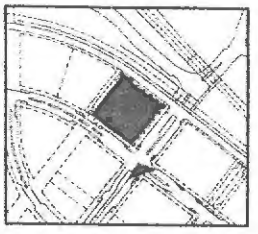
RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 08

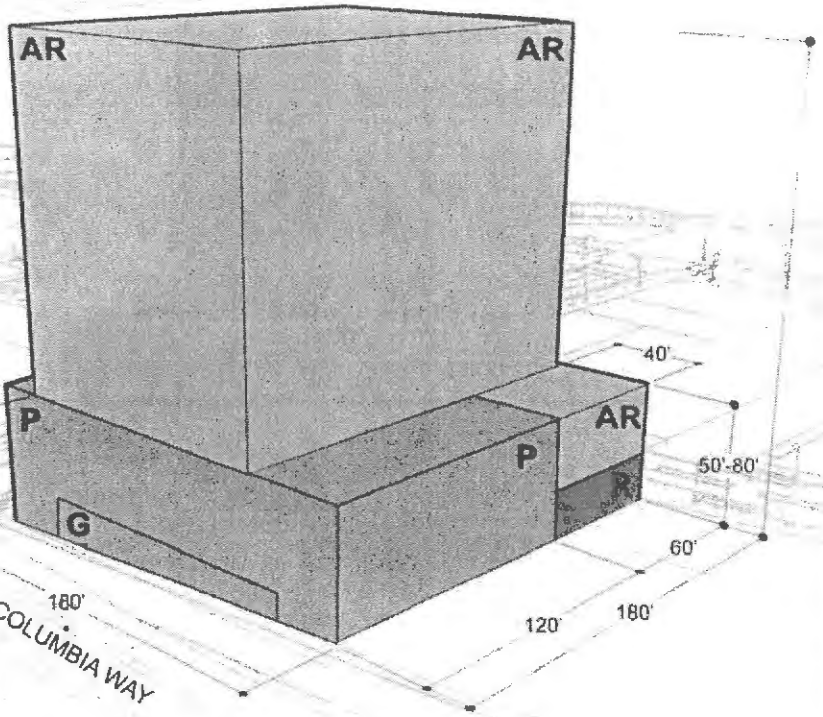
SITE AREA	49,315	SF
ACRES	1.13	ACRES
FAR	6.61	
RETAIL	39,000	SF
COMMERCIAL	287,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	143,000	SF
SPACES (1/380 SF)	407	STALLS
TOTAL BUILDING AREA	469,000	SF
	825	(418)

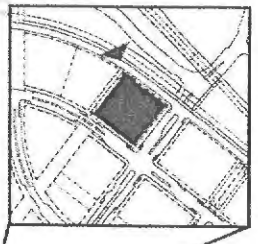
KEY PLAN





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 10

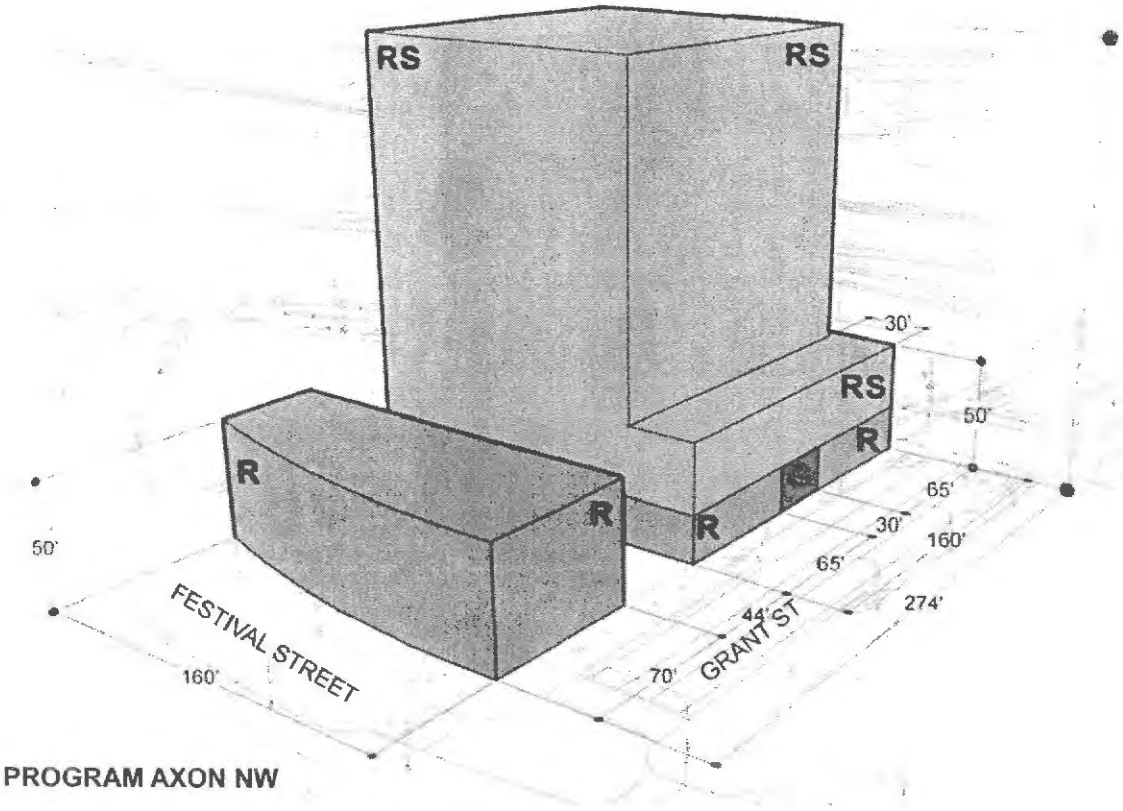
SITE AREA	32,414	SF
ACRES	0.74	ACRES
FAR	6.48	
RETAIL	3,000	SF
AGE RESTRICTED	207,000	SF
PARKING (ABOVE GROUND)	101,000	SF
PARKING (BELOW GROUND)	64,000	SF
SPACES (1/380 SF)	479	STALLS
TOTAL BUILDING AREA	375,000	SF
	104	375

KEY PLAN

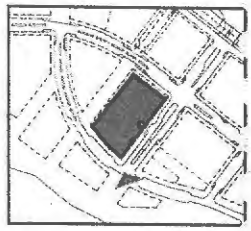
Block 10
May 15, 2008

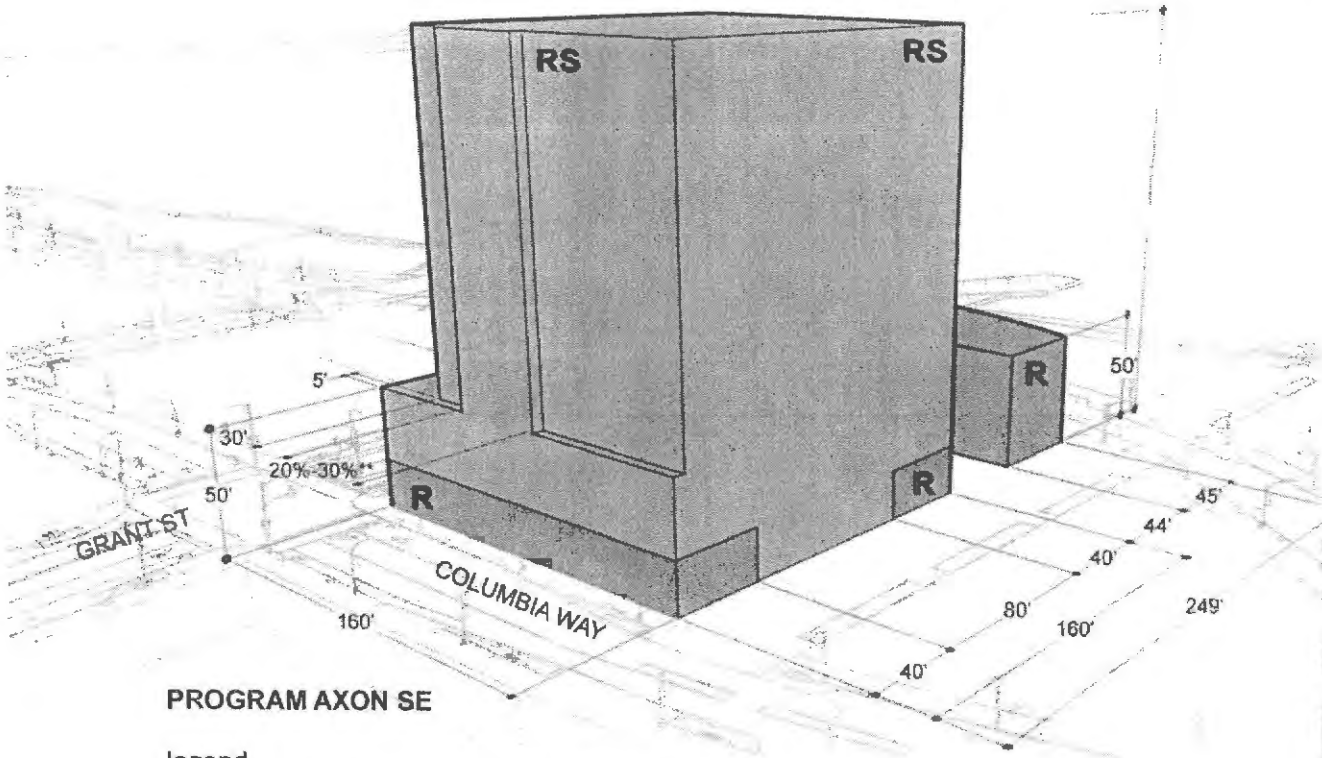
Vancouver Waterfront
Columbia Way District

figure **C7**

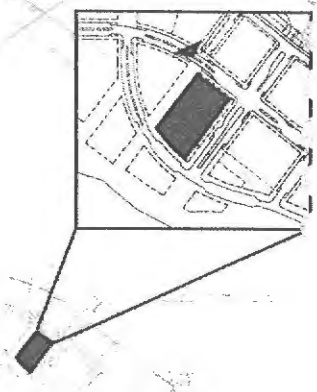


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

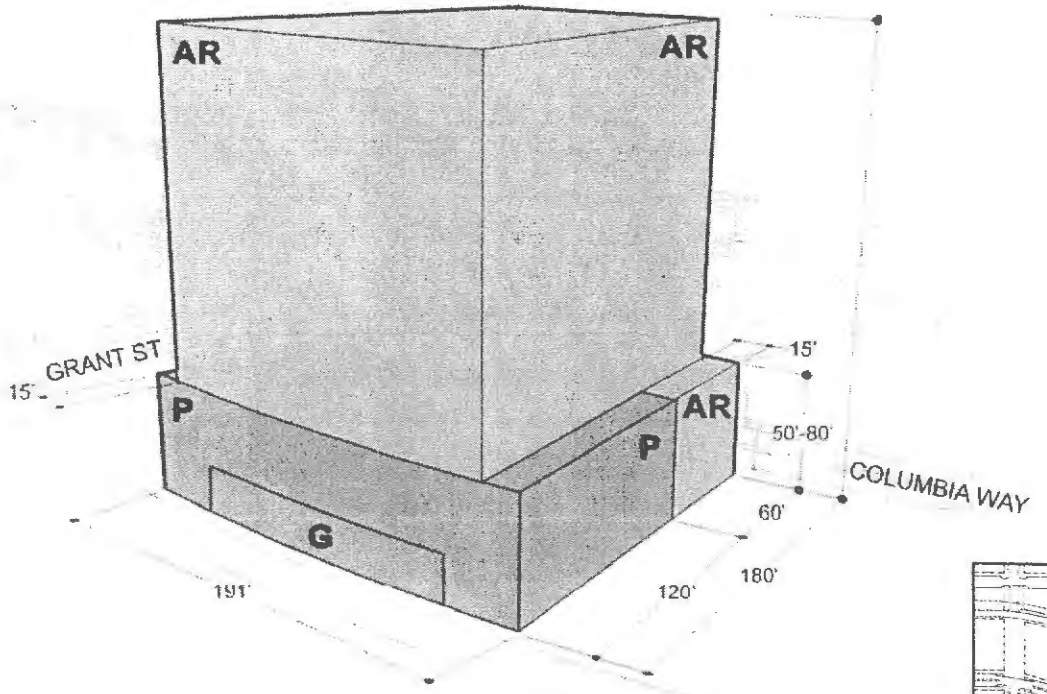
BLOCK 11

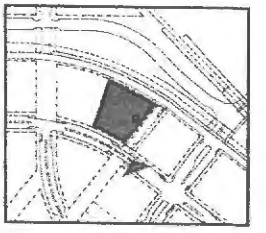
SITE AREA	42,687	SF
ACRES	0.98	ACRES
FAR	6.65	
RETAIL	47,000	SF
RESIDENTIAL	237,000	SF
PARKING (ABOVE GROUND)	0	SF
PARKING (BELOW GROUND)	216,000	SF
SPACES (1/380 SF)	338	STALLS
TOTAL BUILDING AREA	500,000	SF
	415	(77)

KEY PLAN

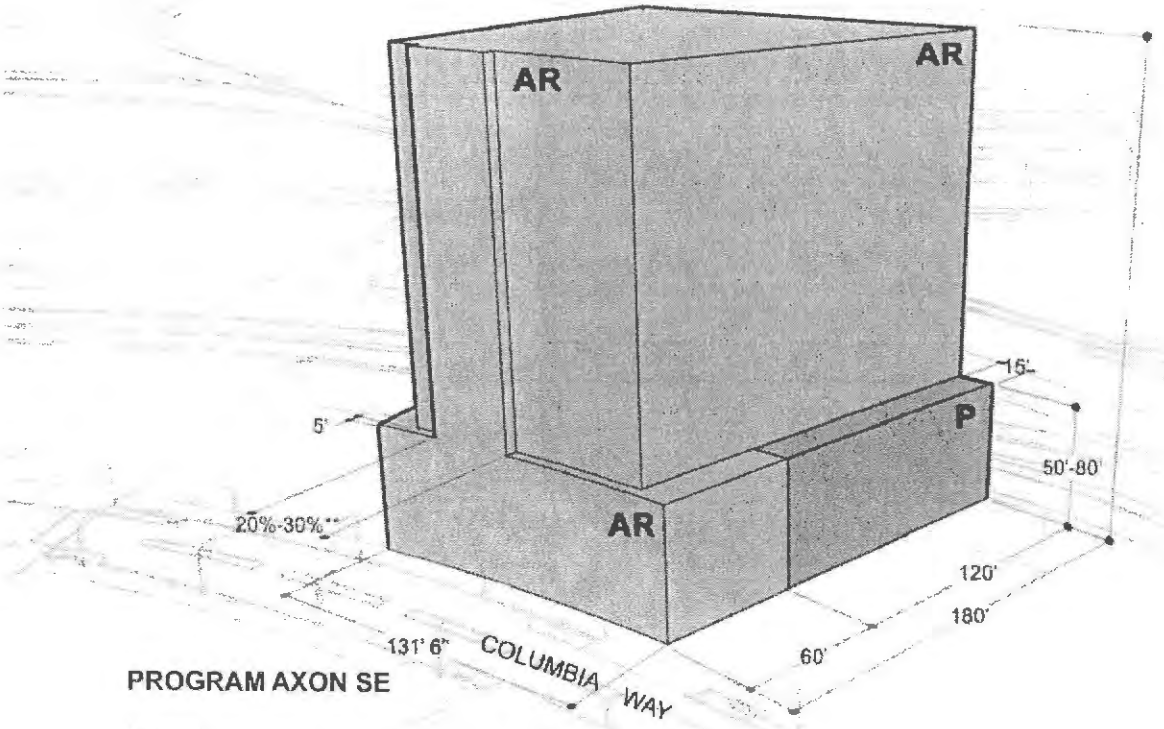
Vancouver Waterfront
Columbia Way District

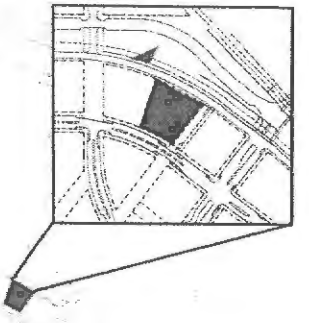
figure C8





PROGRAM AXON NW





PROGRAM AXON SE

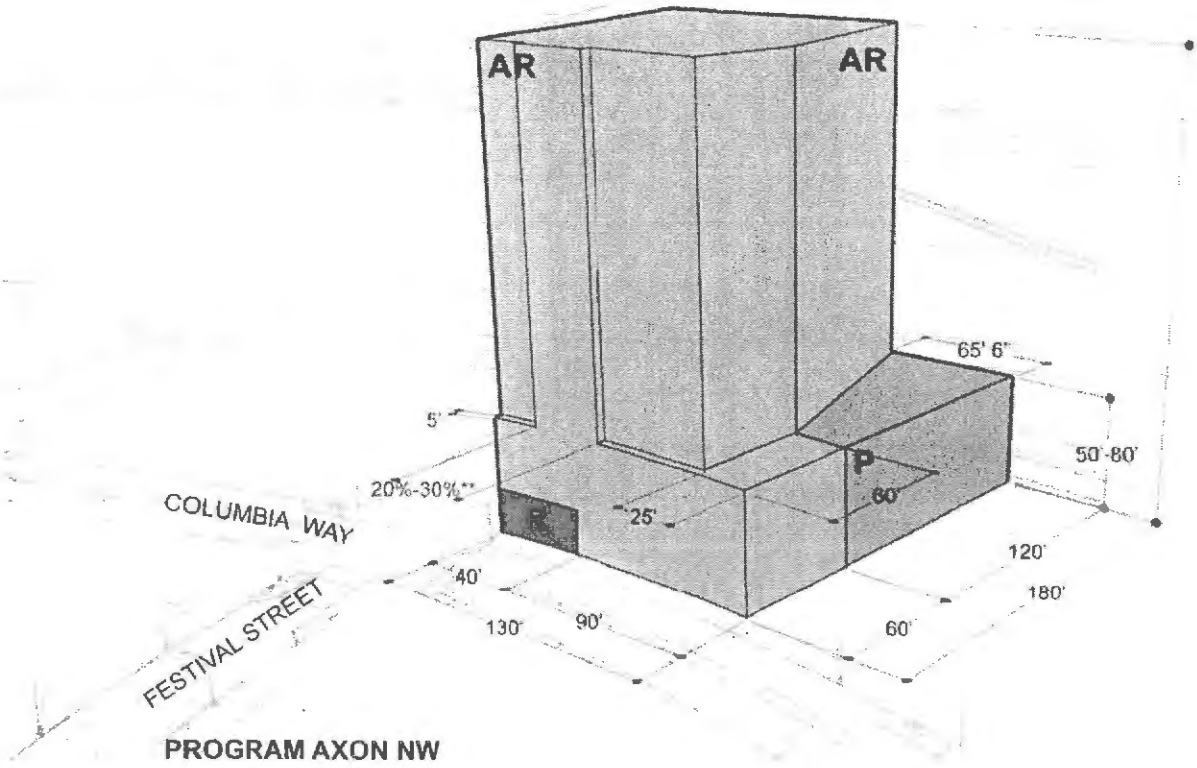
legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

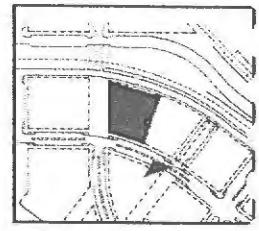
BLOCK 13

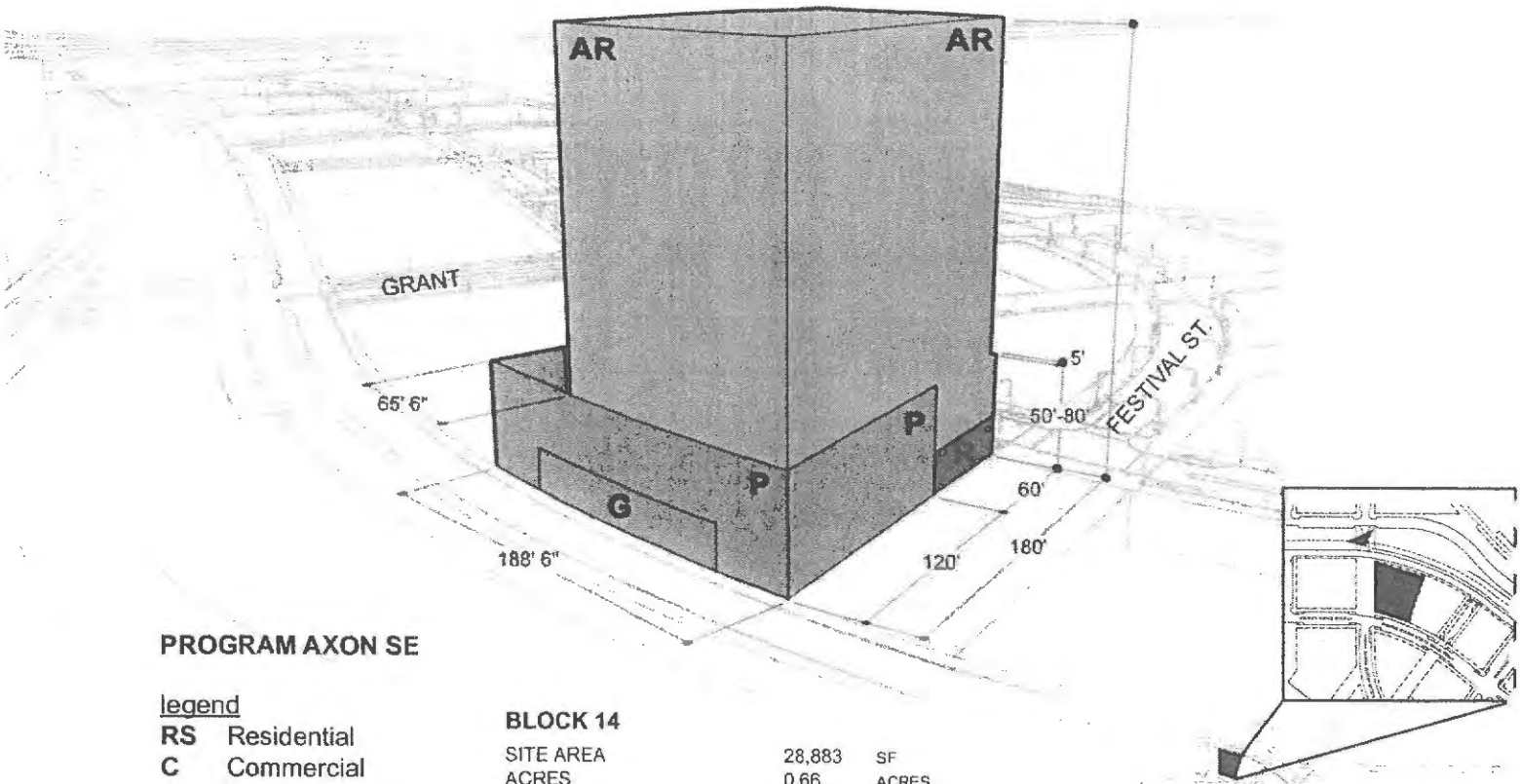
SITE AREA	29,183	SF
ACRES	0.67	ACRES
FAR	7.06	
RETAIL	0	SF
AGE RESTRICTED	206,000	SF
PARKING (ABOVE GROUND)	101,000	SF
PARKING (BELOW GROUND)	64,000	SF
SPACES (1/380 SF)	485	STALLS
TOTAL BUILDING AREA	371,000	SF
	97	388

KEY PLAN



PROGRAM AXON NW





PROGRAM AXON SE

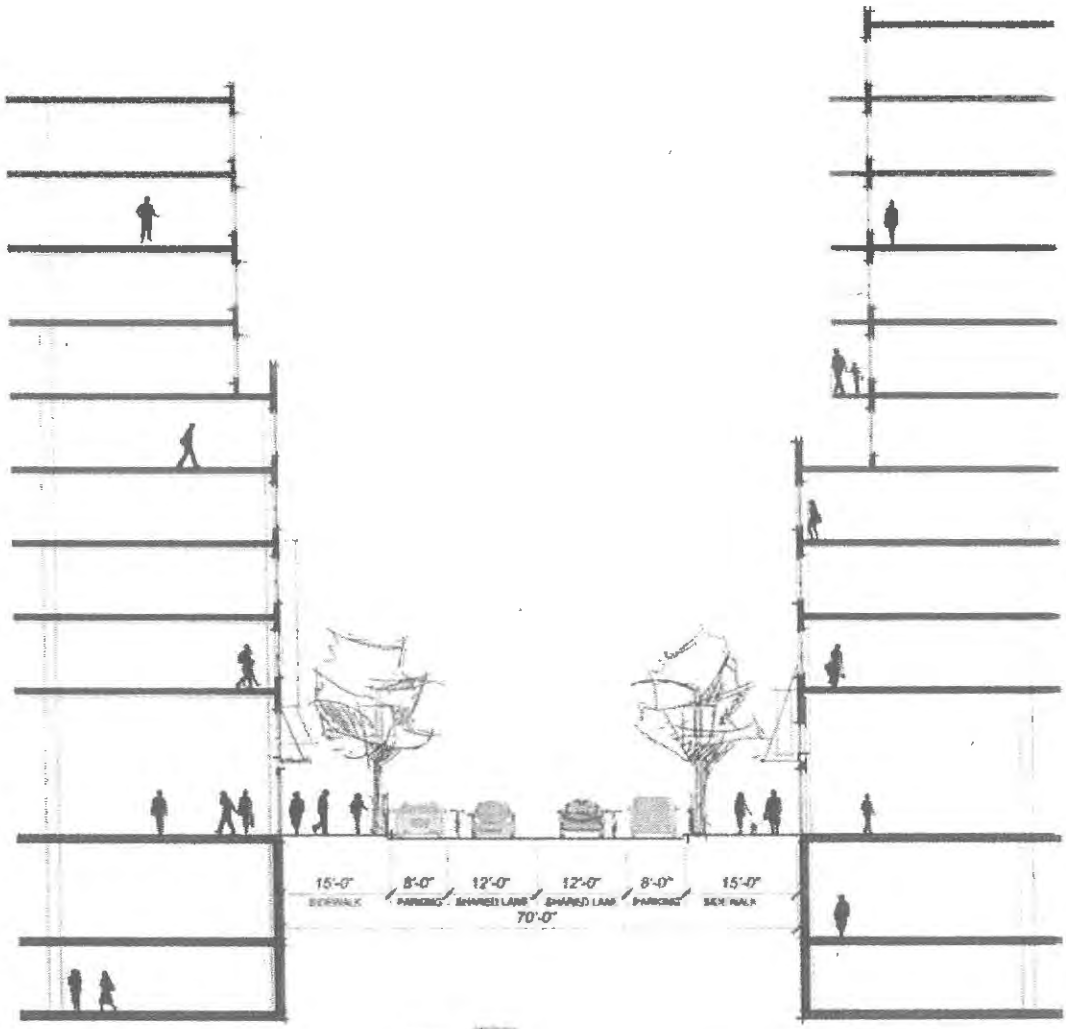
legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

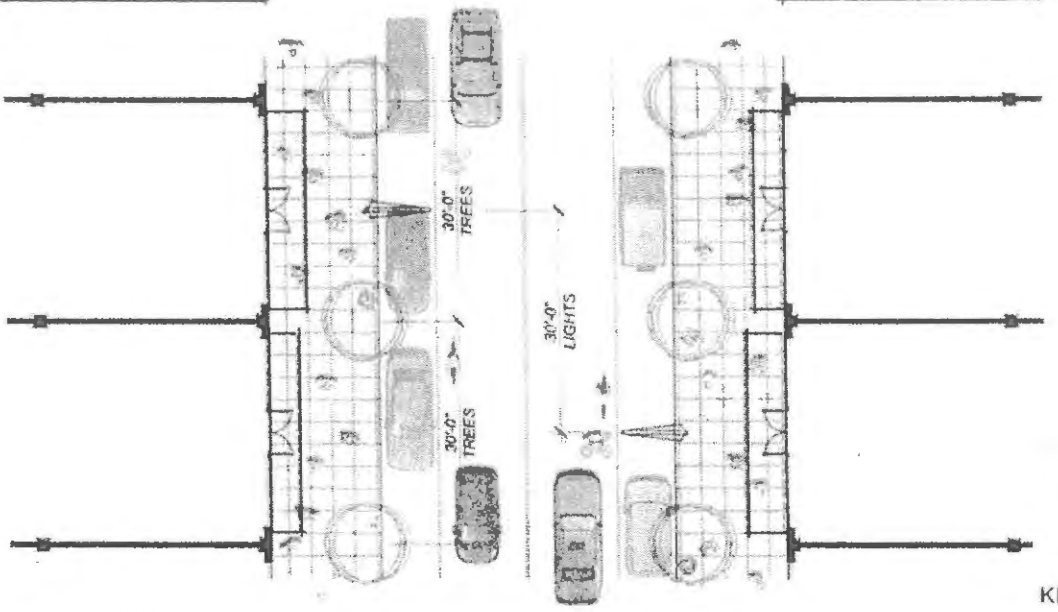
BLOCK 14

SITE AREA	28,883	SF
ACRES	0.66	ACRES
FAR	7.69	
RETAIL	3,000	SF
AGE RESTRICTED	219,000	SF
PARKING (ABOVE GROUND)	101,000	SF
PARKING (BELOW GROUND)	64,000	SF
SPACES (1/360 SF)	485	STALLS
TOTAL BUILDING AREA	387,000	SF
	110	375

KEY PLAN



SECTION



PLAN

A'

KEY PLAN

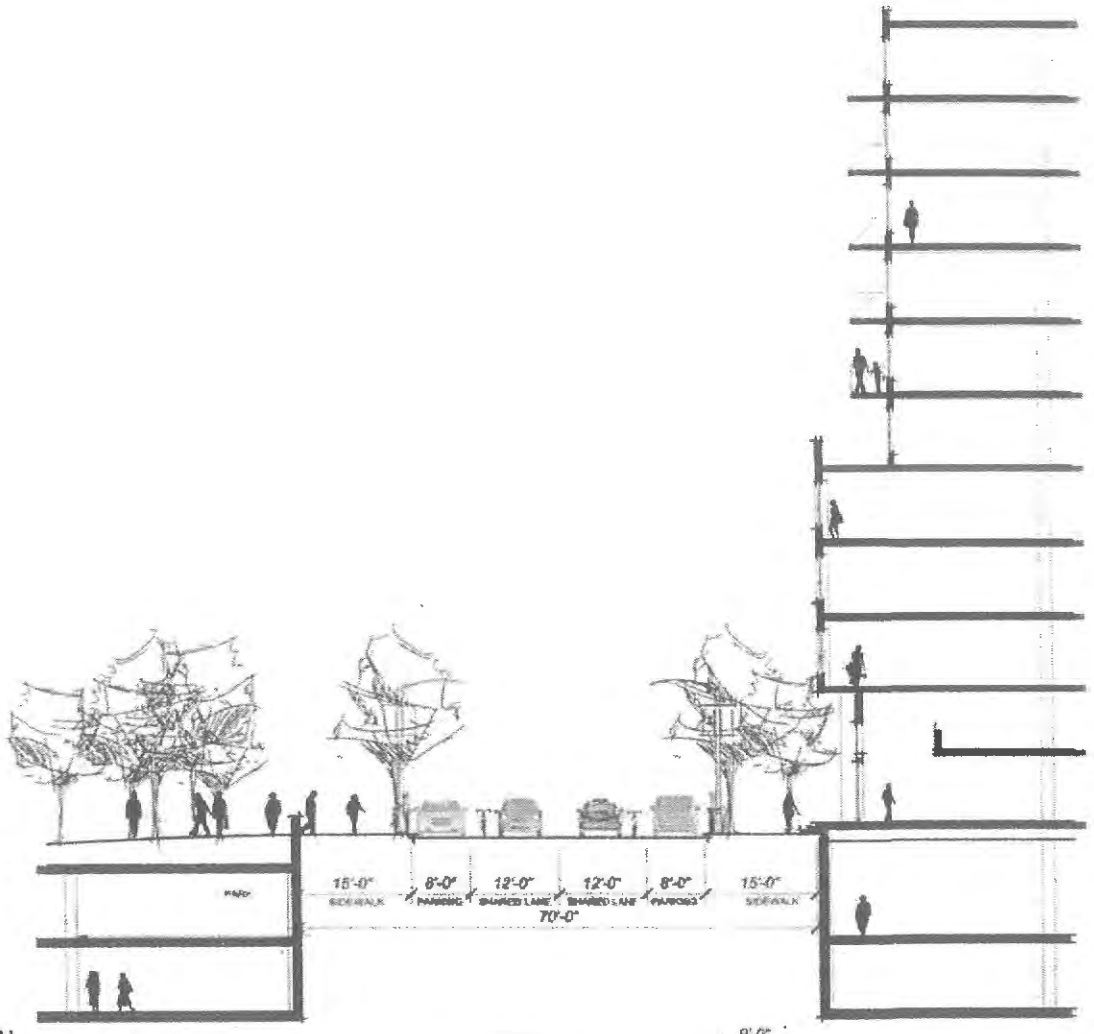
Street Section A: Retail

May 15, 2006

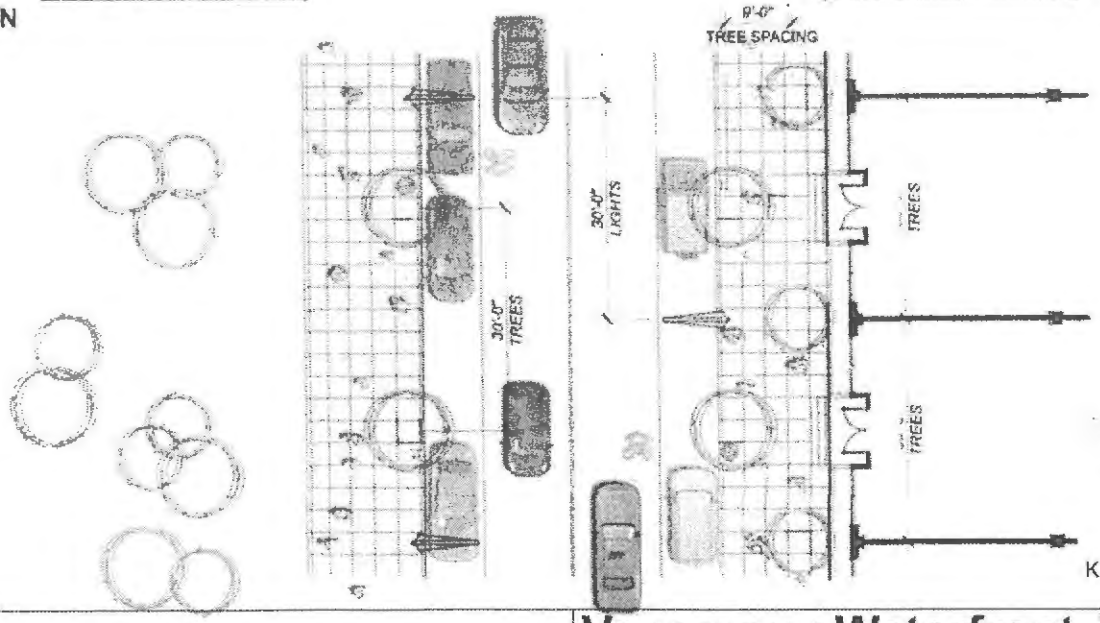
Vancouver Waterfront

Columbia Way District

figure **C11**



SECTION



PLAN

KEY PLAN

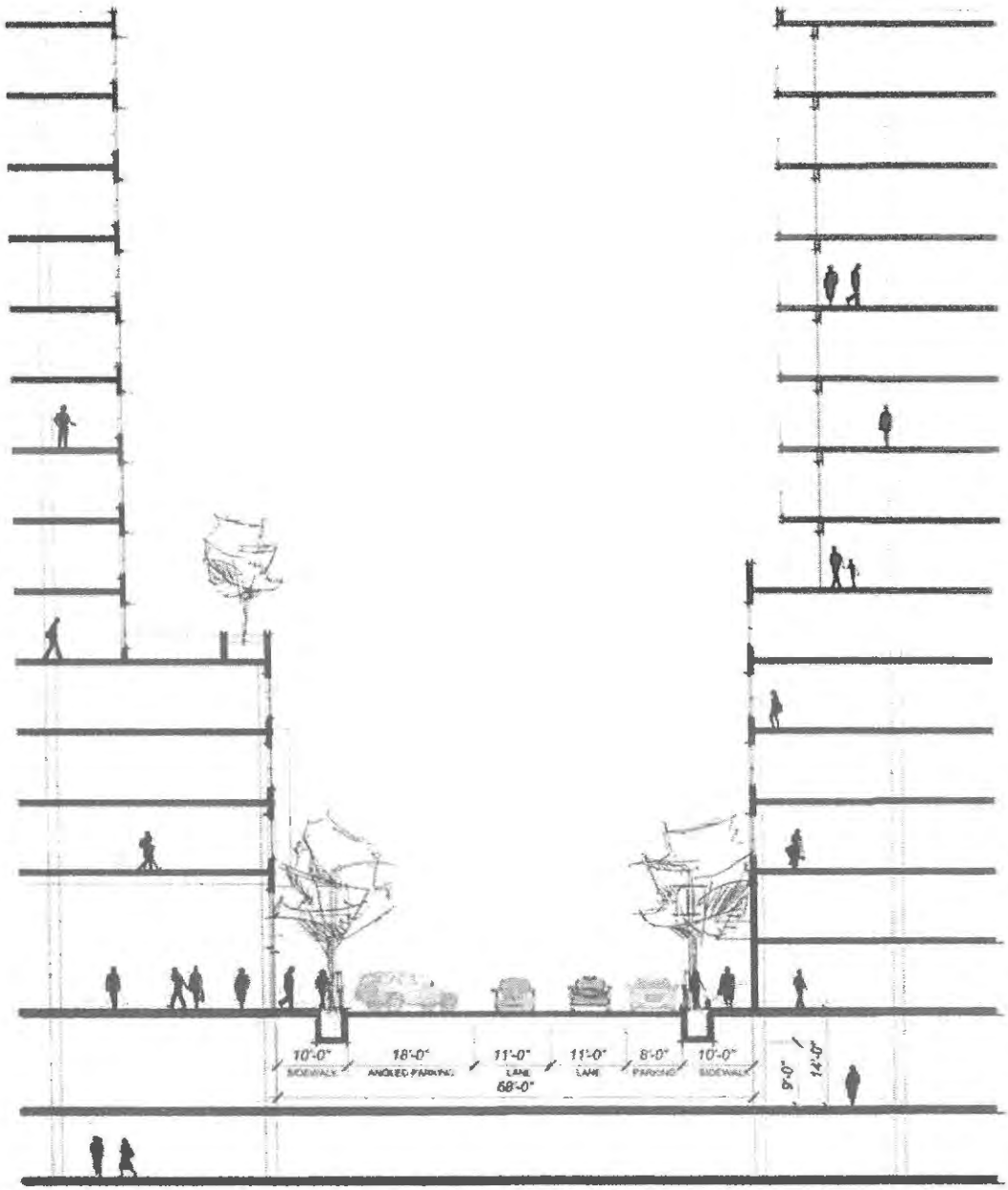
Street Section A.2: Residential Park 1

May 15, 2009

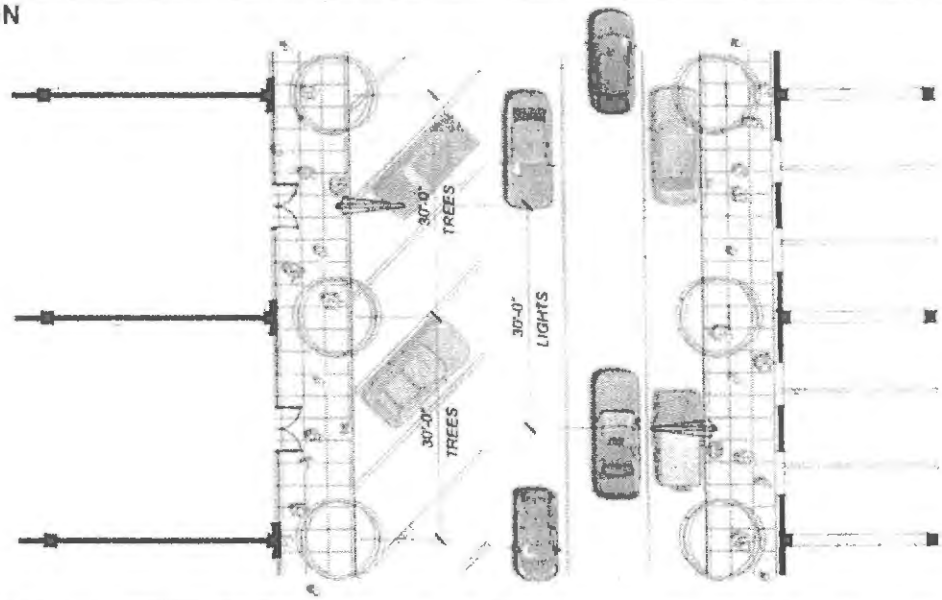
Vancouver Waterfront

Columbia Way District

figure **C12**



SECTION



PLAN

KEY PLAN

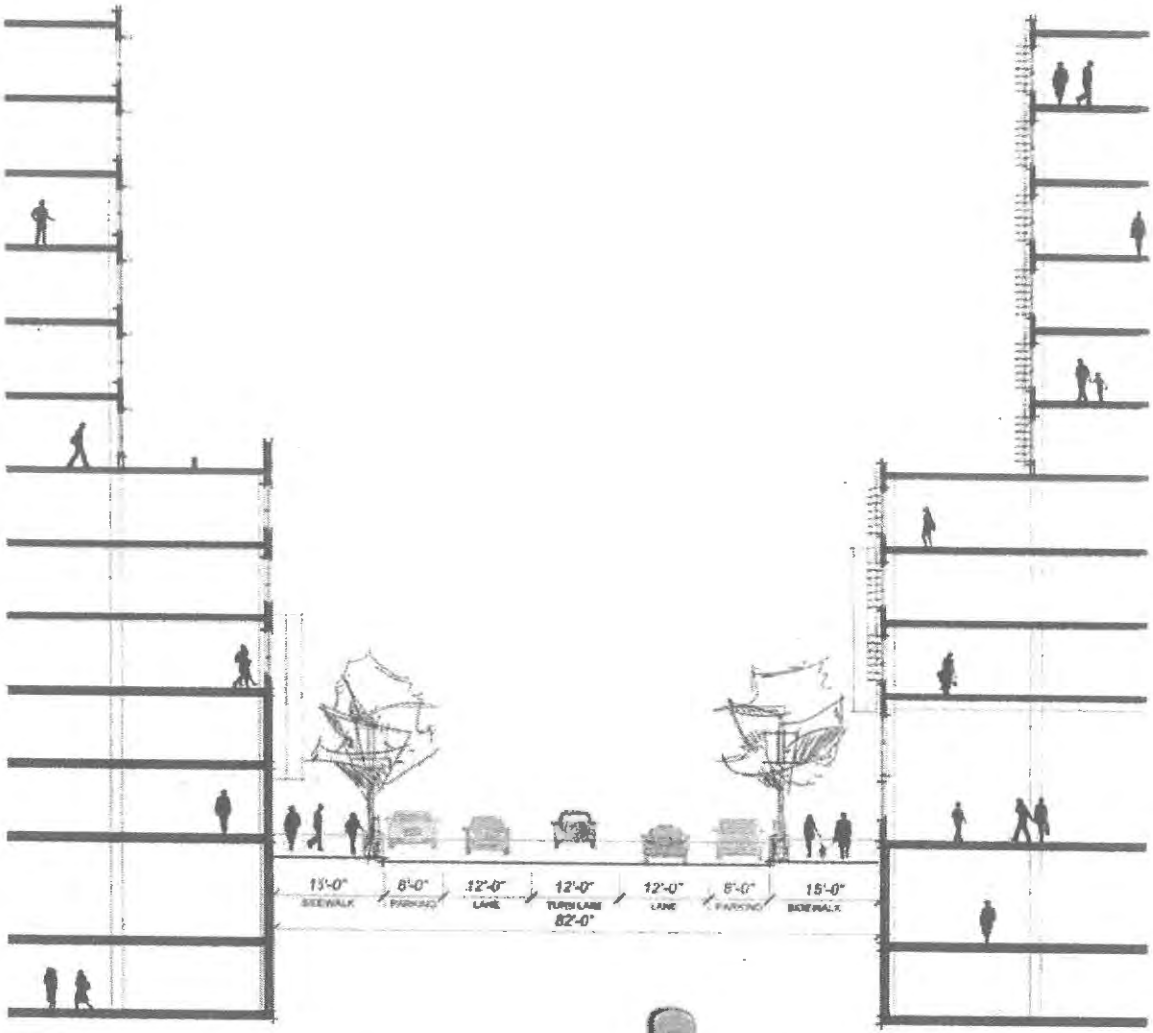
Street Section B.2: Access 2

May 15 2009

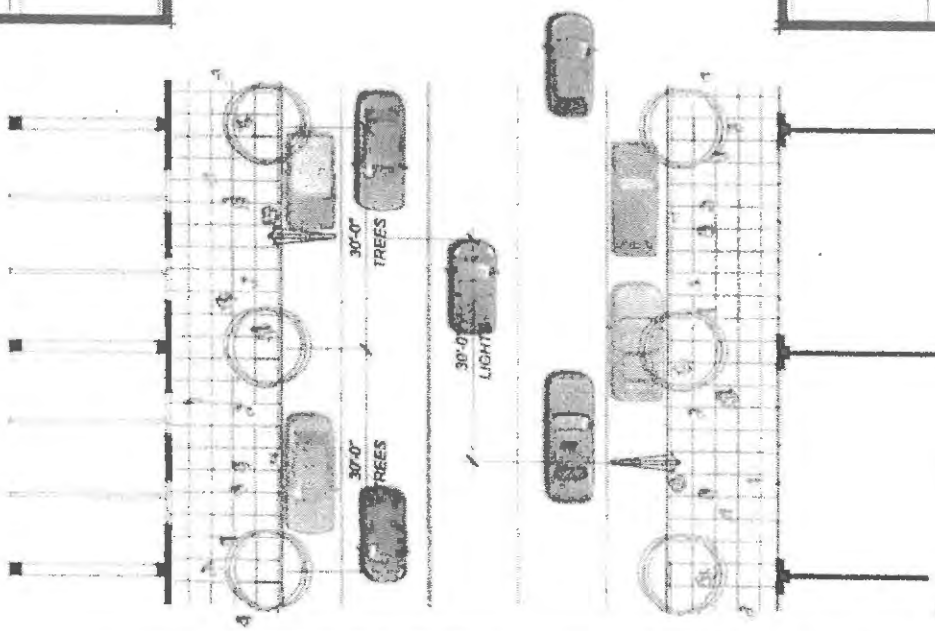
Vancouver Waterfront

Columbia Way District

figure **C13**



SECTION



PLAN

KEY PLAN

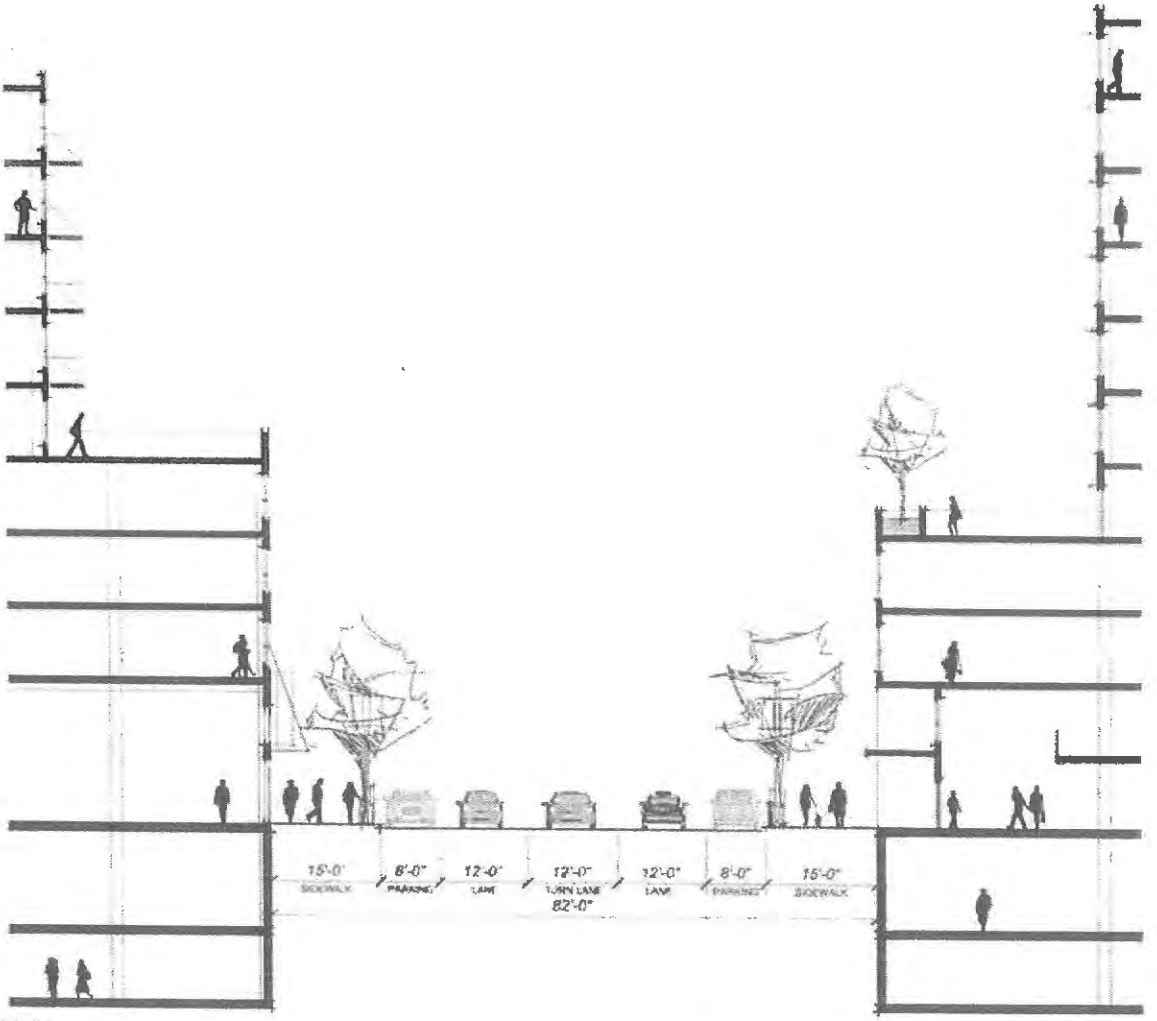
Street Section E: Esther Street Corridor 1

May 15, 2009

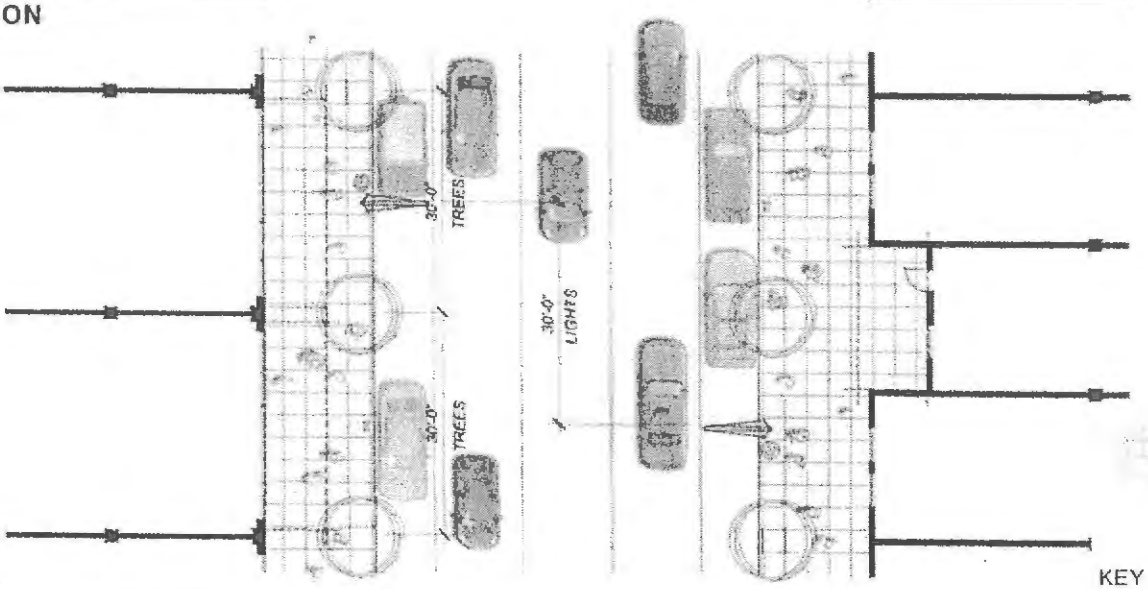
Vancouver Waterfront

Columbia Way District

figure **C14**



SECTION



PLAN

KEY PLAN

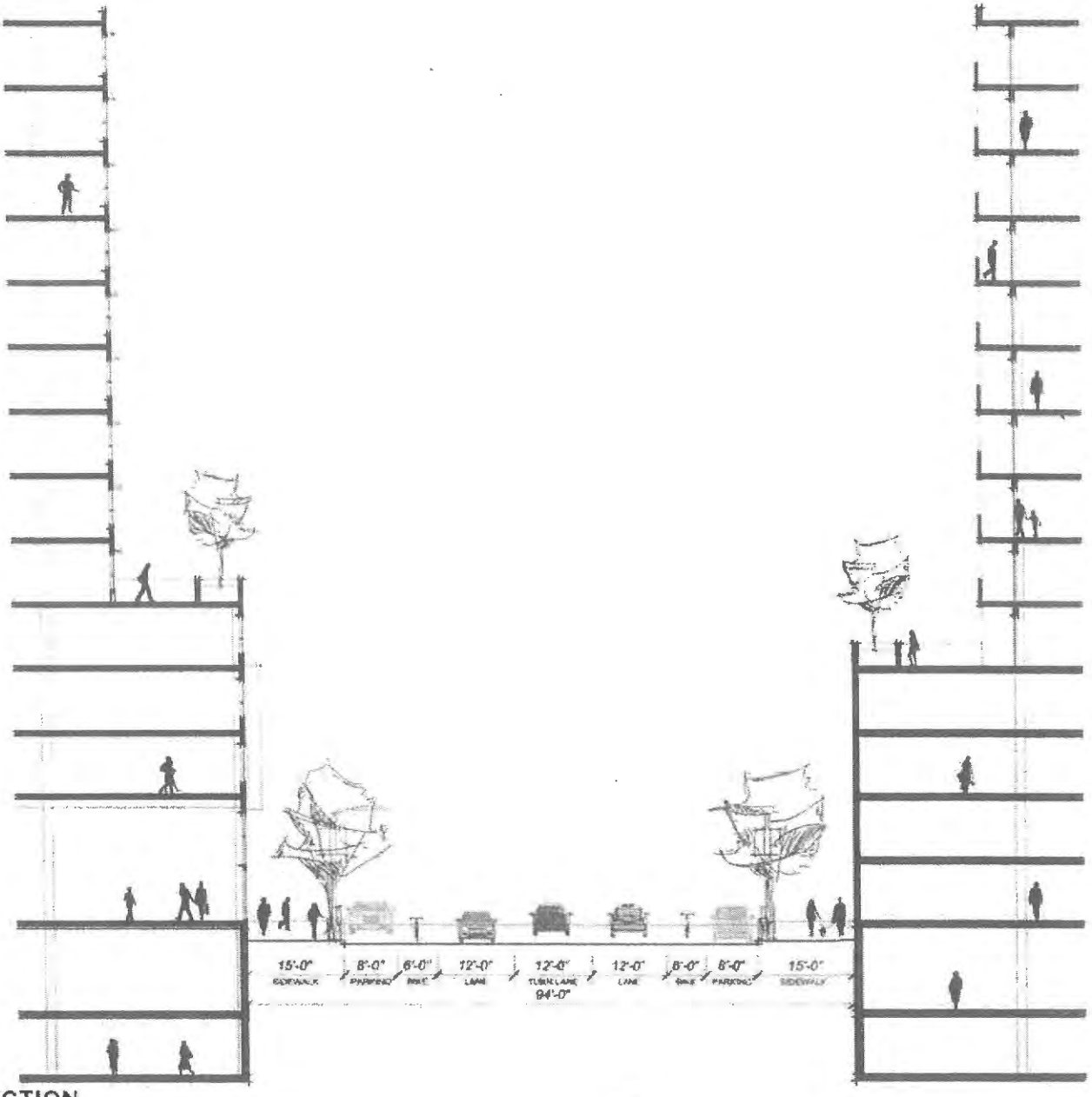
Street Section E.2: Esther Street Corridor 2

May 15, 2009

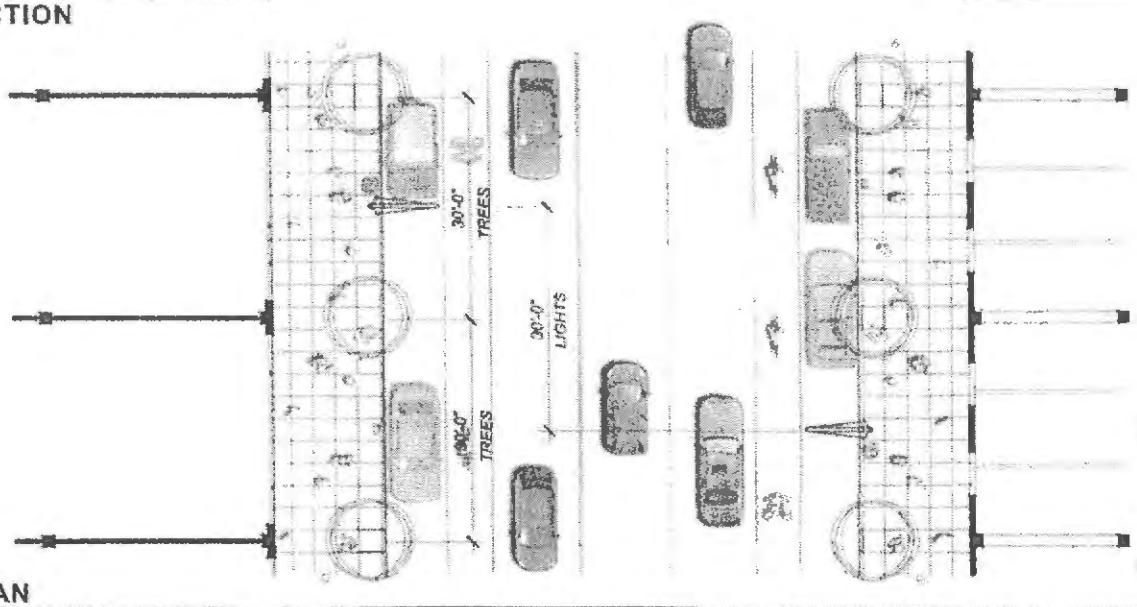
Vancouver Waterfront

Columbia Way District

figure **C15**



SECTION



PLAN

KEY PLAN

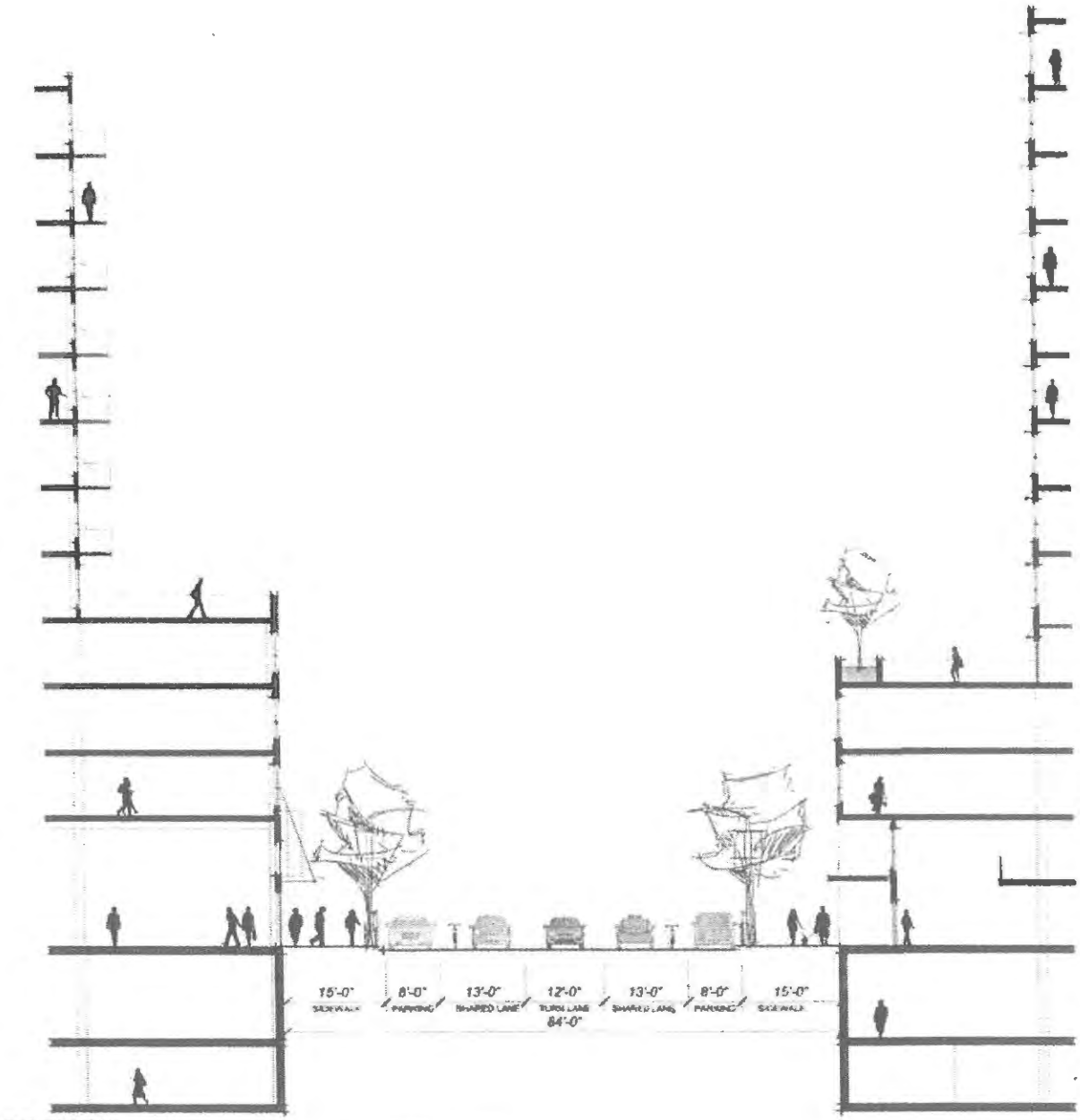
Street Section F: Grant Street Corridor 1

May 16, 2008

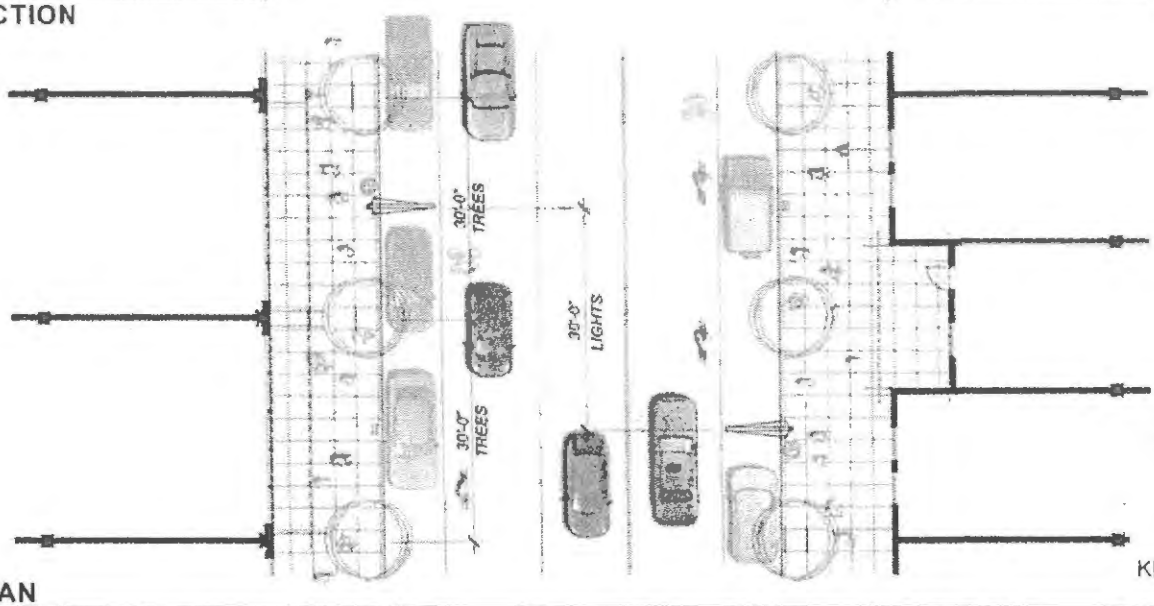
Vancouver Waterfront

Columbia Way District

figure **C16**



SECTION



PLAN

KEY PLAN

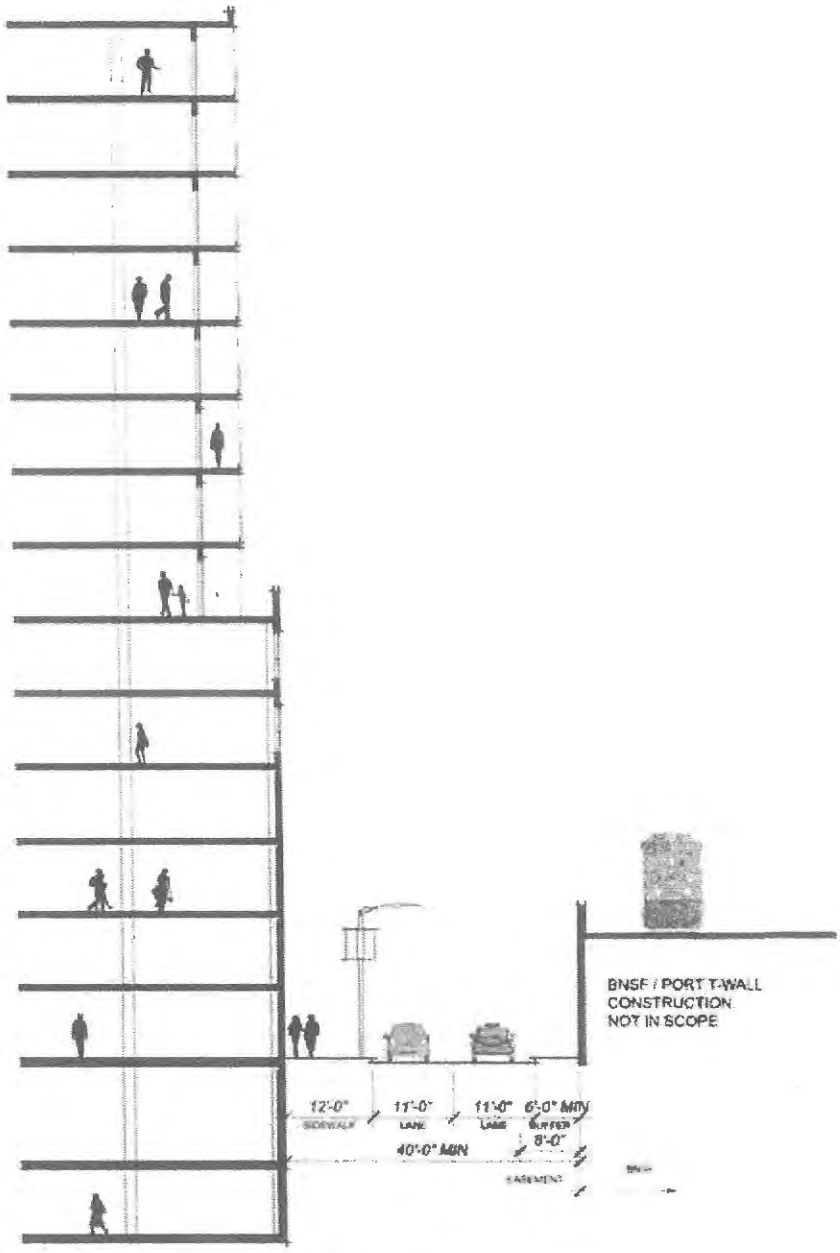
Street Section F.2: Grant Street Corridor 2

May 15, 2000

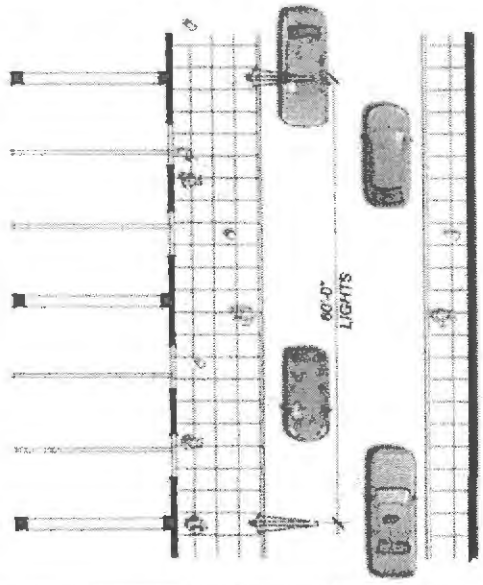
Vancouver Waterfront

Columbia Way District

figure **C17**



SECTION



PLAN

KEY PLAN

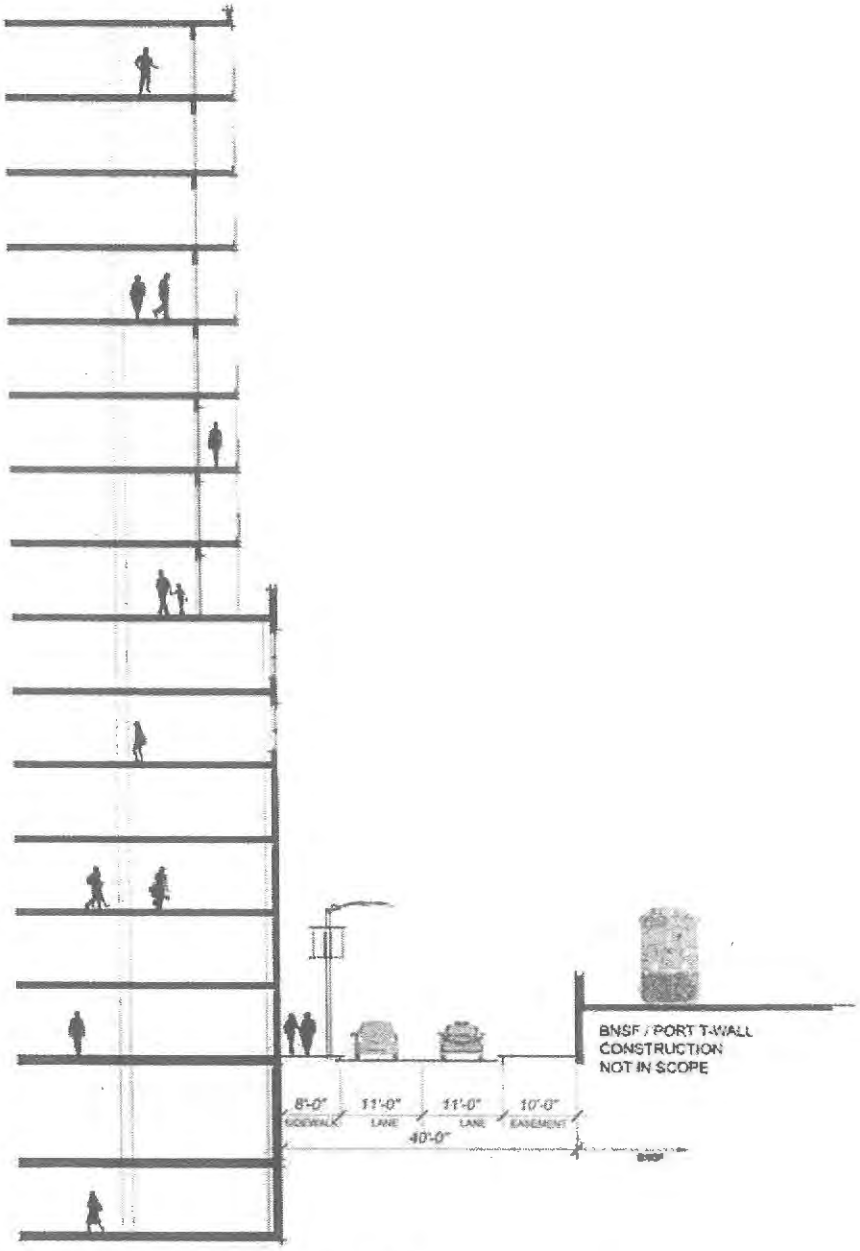
Street Section H: Service 1

May 15, 2000

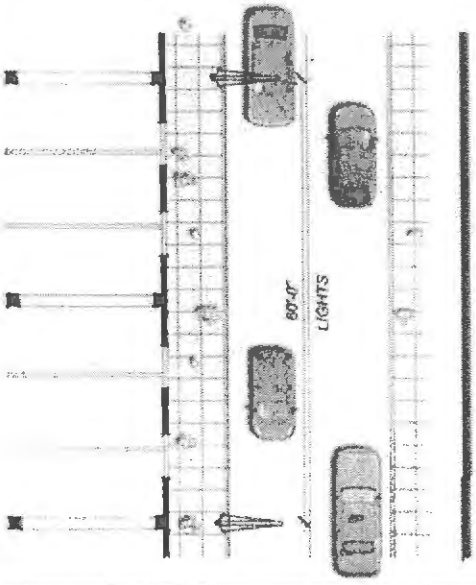
Vancouver Waterfront

Columbia Way District

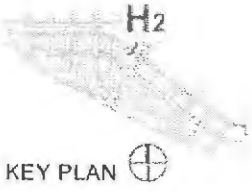
figure **C18**



SECTION



PLAN



KEY PLAN

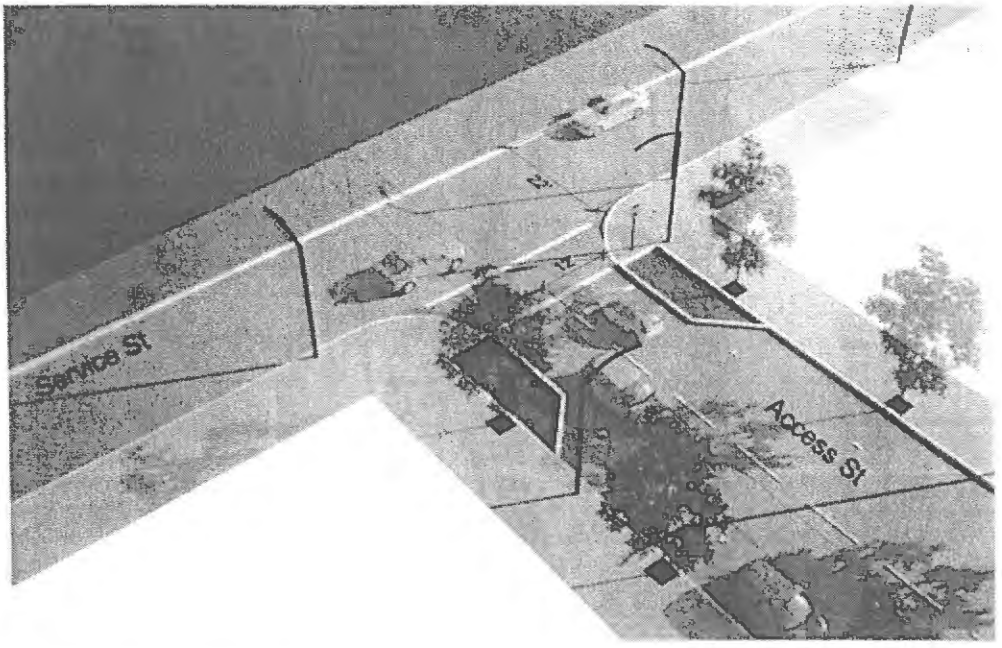
Street Section H.2: Service 2

May 15, 2009

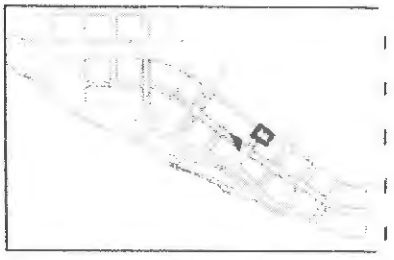
Vancouver Waterfront

Columbia Way District

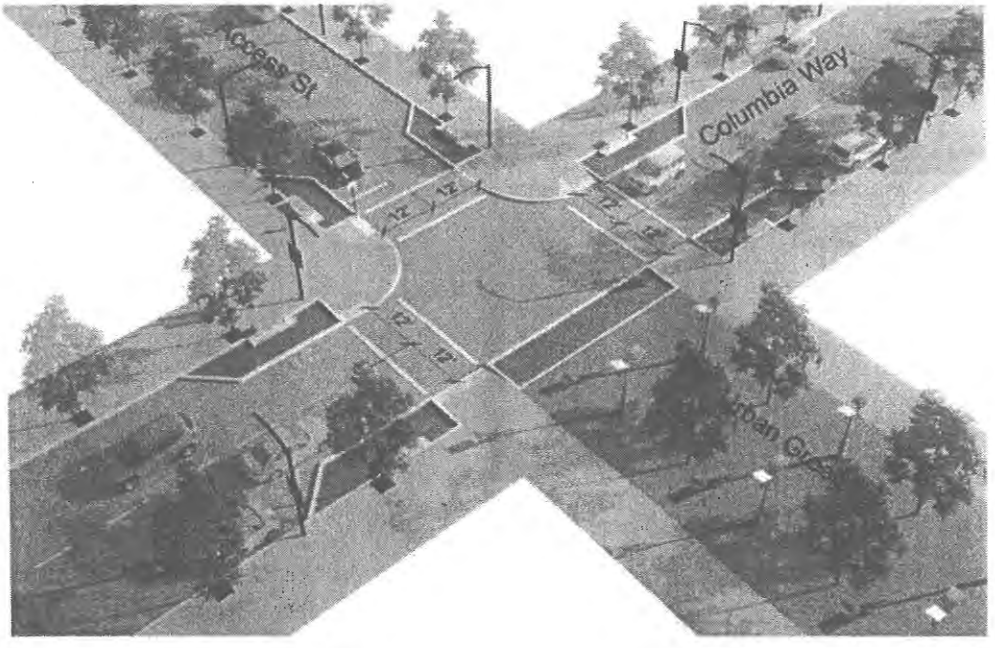
figure **C19**



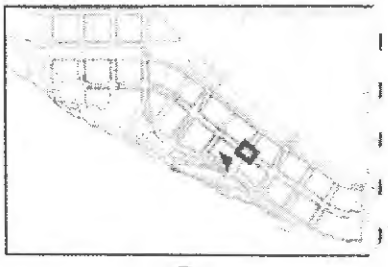
service st and acess st



KEY PLAN



columbia ave and urban green st



KEY PLAN

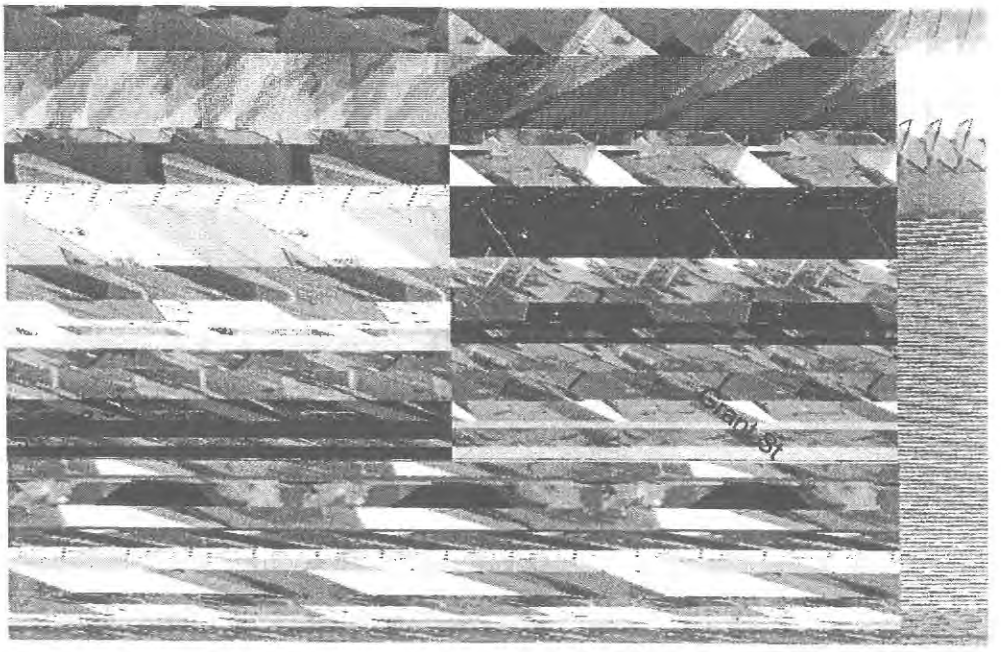
Street Intersections

May 15 2009

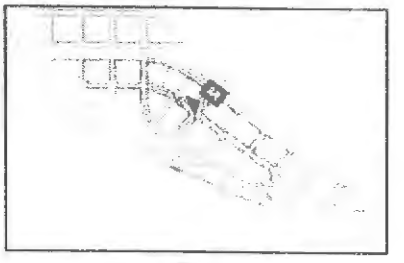
Vancouver Waterfront

Columbia Way District

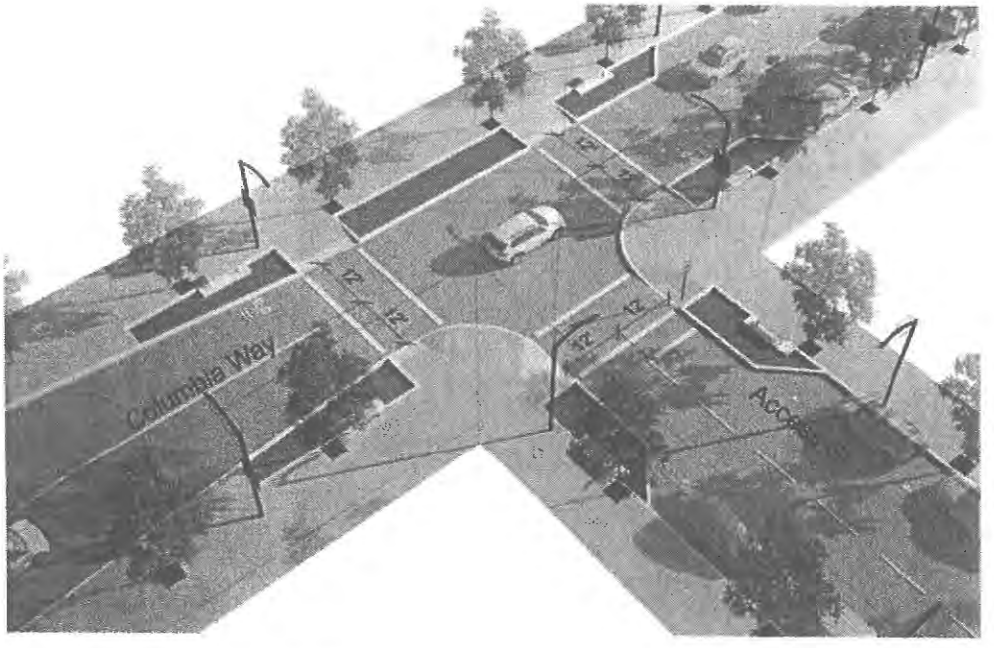
figure **C20**



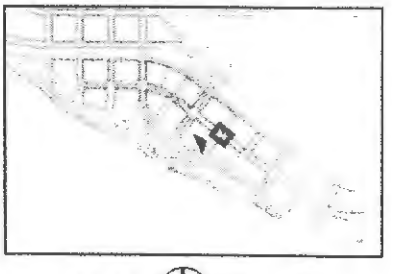
grant st entry



KEY PLAN



columbia way and access st

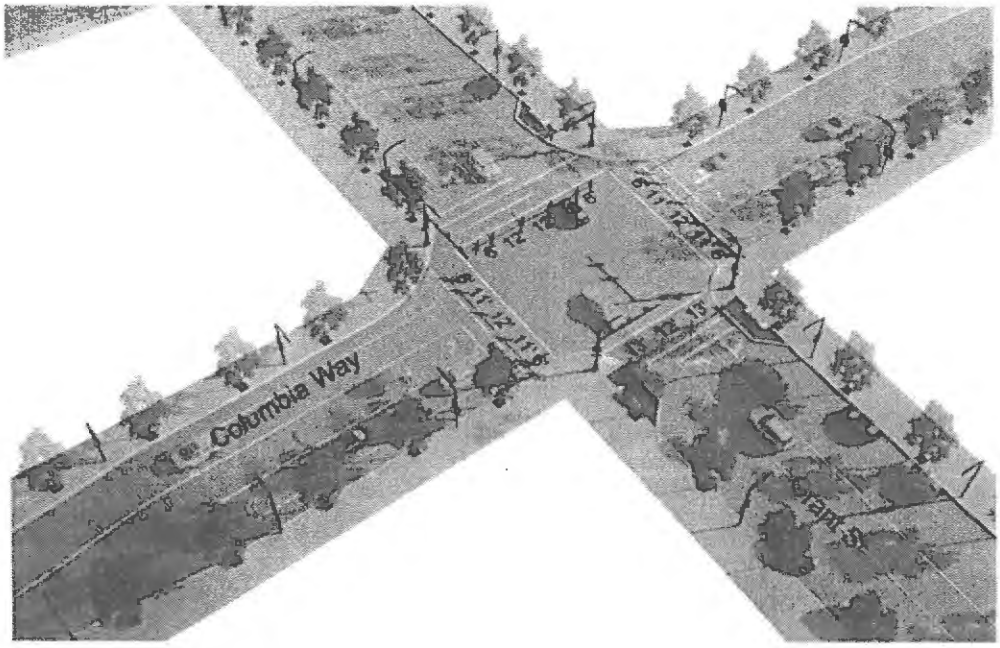


KEY PLAN

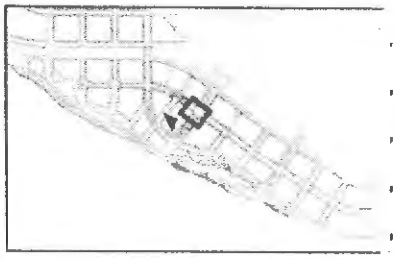
Street Intersections
May 15, 2009

Vancouver Waterfront
Columbia Way District

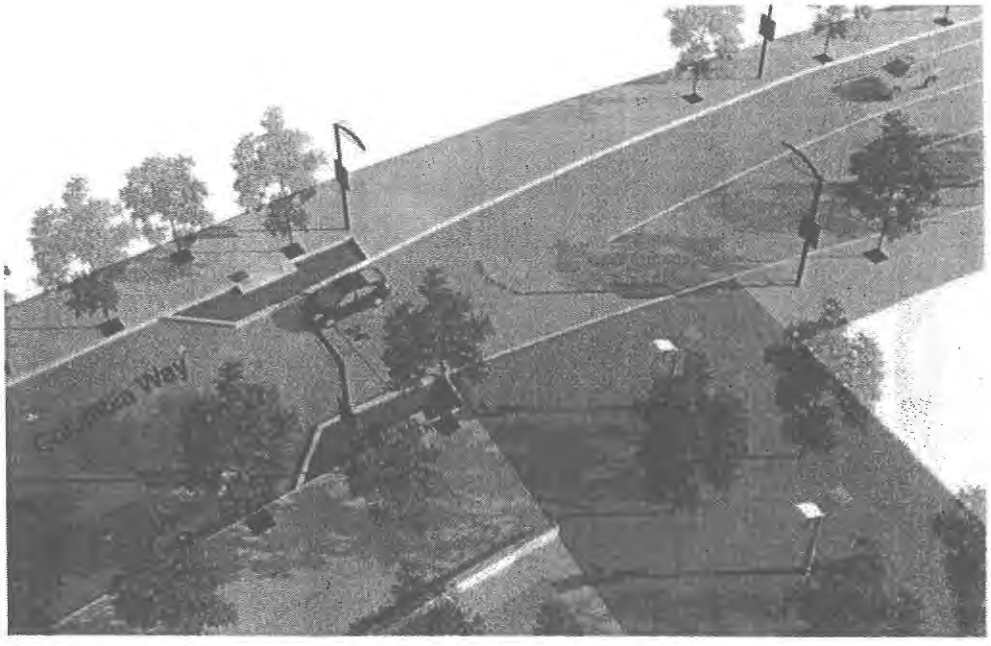
figure **C21**



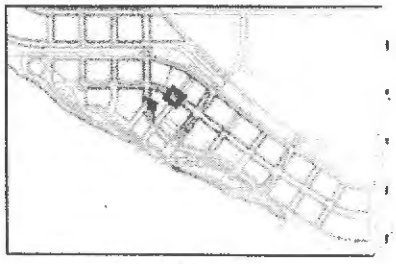
grant st and columbia way



KEY PLAN



columbia way and residential park

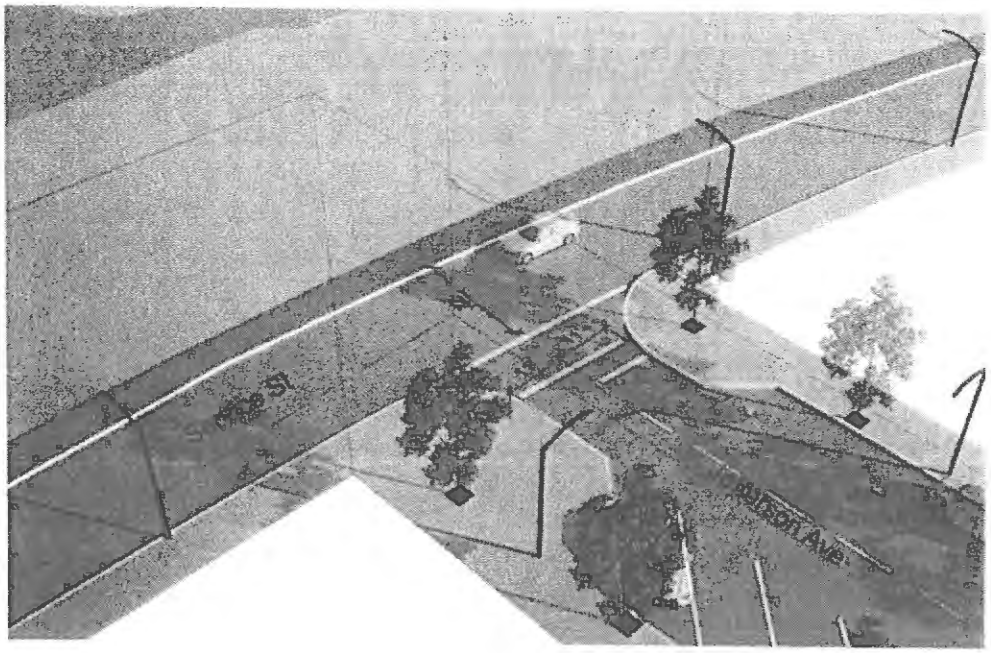


KEY PLAN

Street Intersections
May 15, 2000

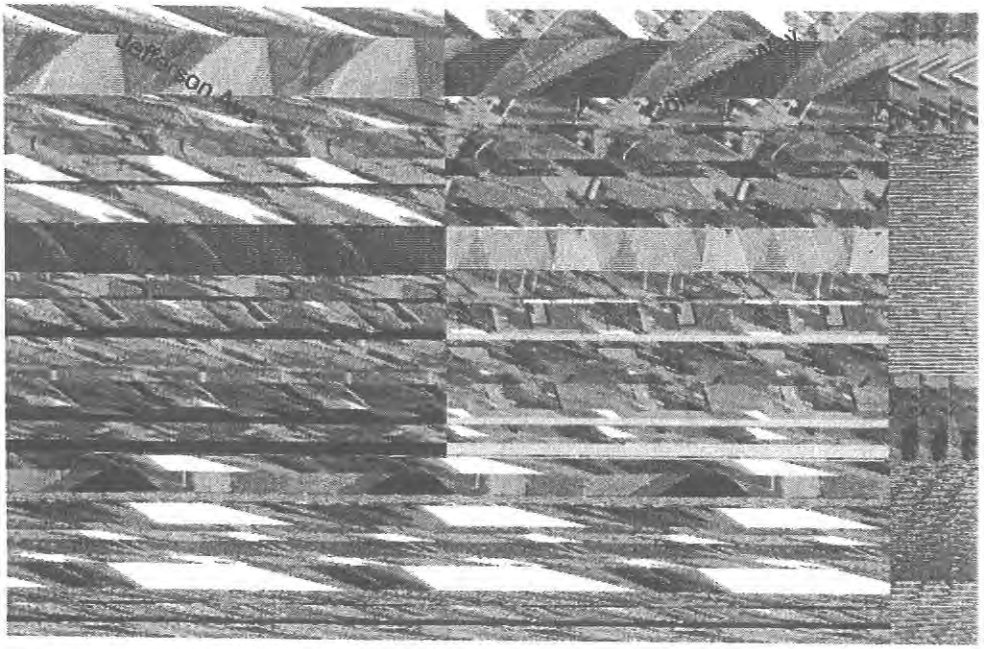
Vancouver Waterfront
Columbia Way District

figure **C22**

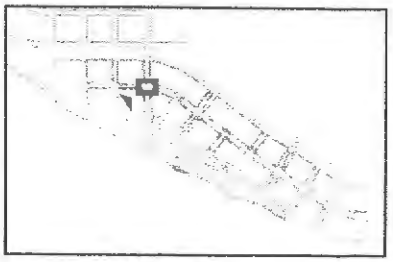


service st and urban green st

KEY PLAN



columbia way and residential st / green st



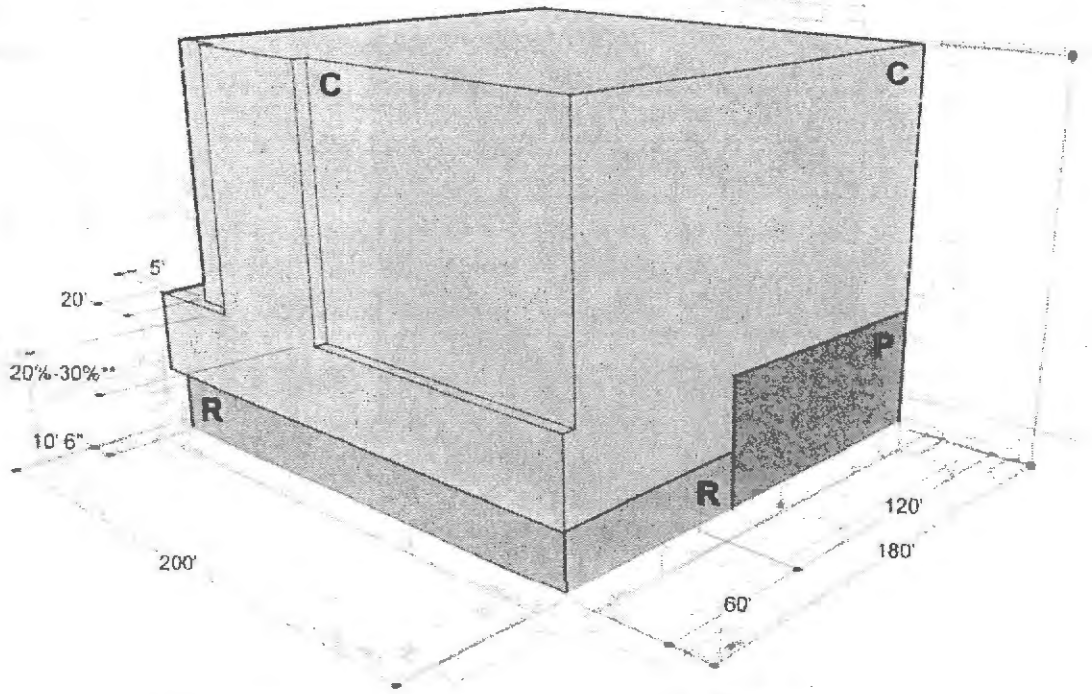
KEY PLAN

Street Intersections
May 15, 2009

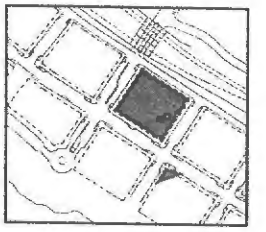
Vancouver Waterfront
Columbia Way District

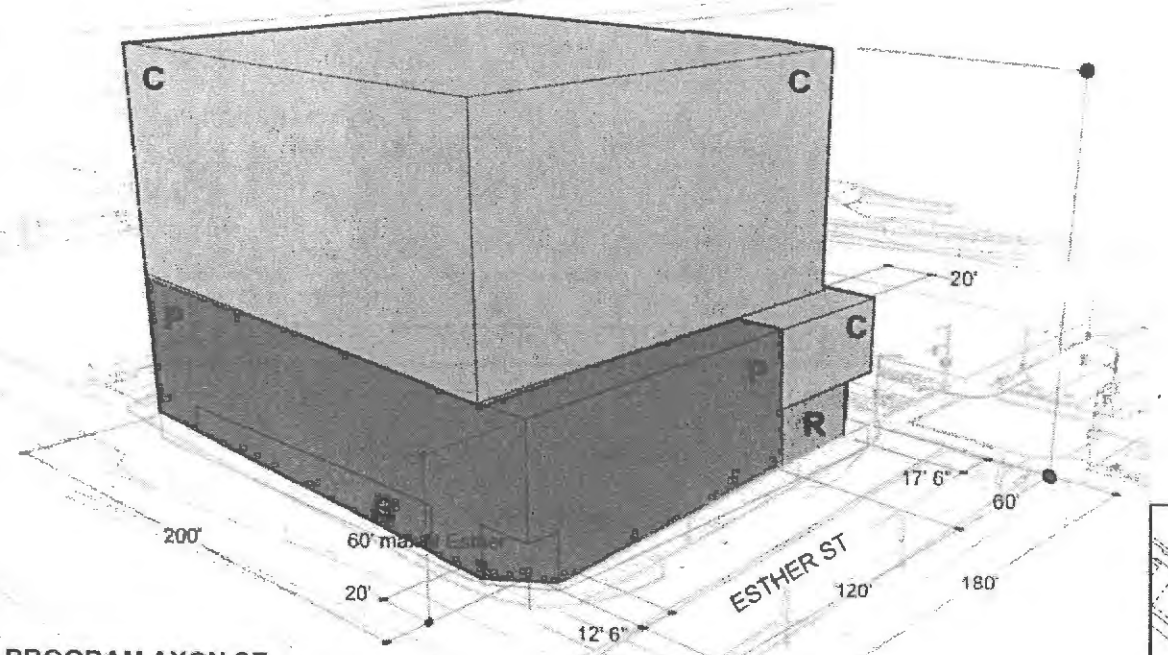
figure **C23**

This page to remain blank

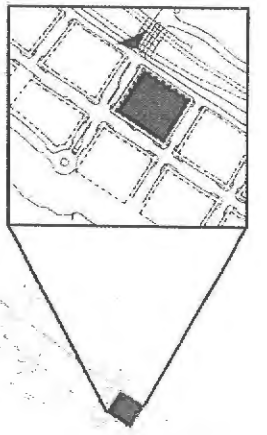


PROGRAM AXON NW





PROGRAM AXON SE



legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 01

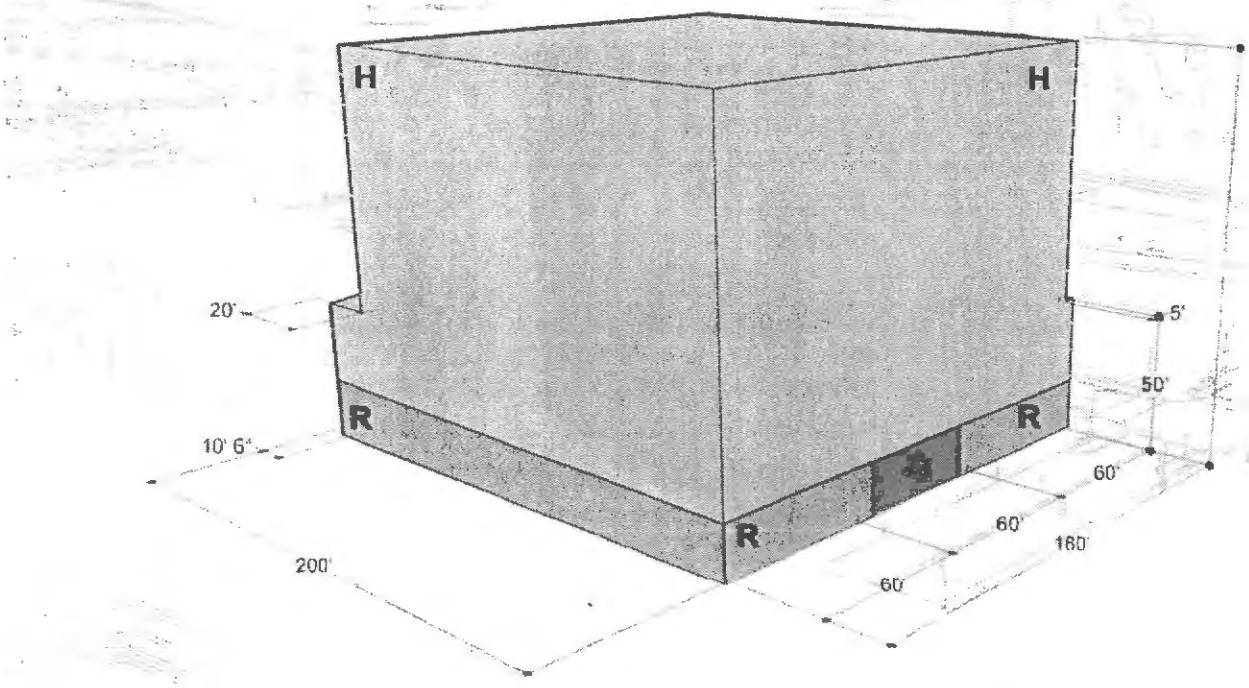
SITE AREA	34,400	SF
ACRES	0.79	ACRES
FAR	5.99	
RETAIL	10,000	SF
COMMERCIAL	196,000	SF
PARKING (ABOVE GROUND)	117,000	SF
PARKING (BELOW GROUND)	72,000	SF
SPACES (1/380 SF)	430	STALLS
TOTAL BUILDING AREA	395,000	SF
	524	(94)

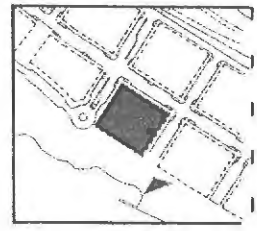
KEY PLAN

Block 01
May 15, 2009

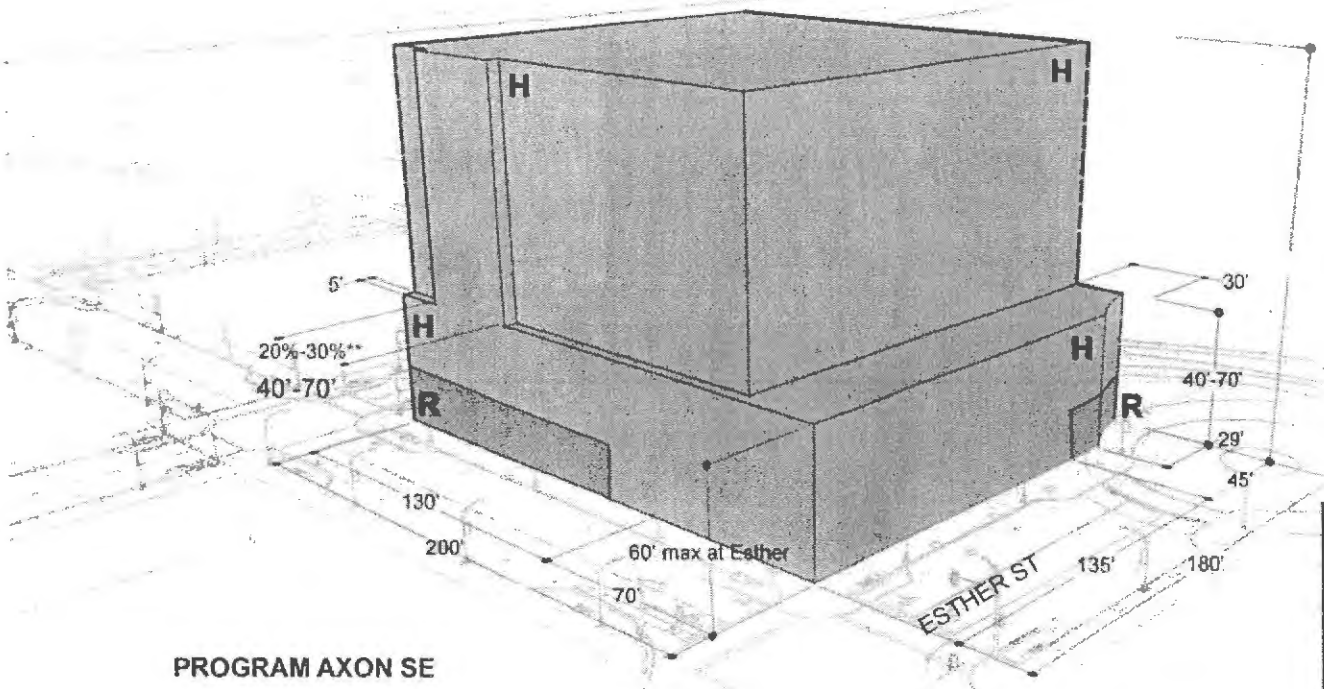
Vancouver Waterfront
Cultural District

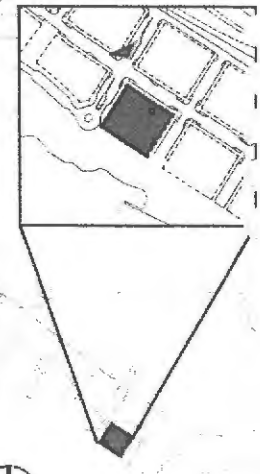
figure **CD1**





PROGRAM AXON NW





PROGRAM AXON SE

legend

RS	Residential
C	Commercial
H	Hotel
AR	Age Restricted
R	Retail
P	Parking
G	Garage Entry

BLOCK 02

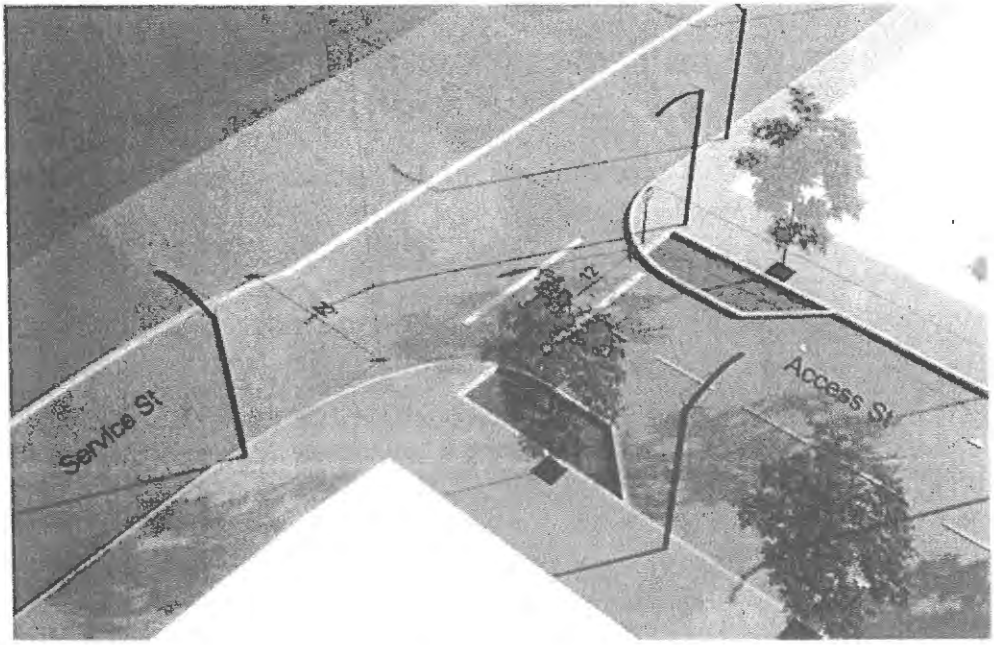
SITE AREA	35,752	SF
ACRES	0.82	ACRES
FAR	7.47	
RETAIL	14,000	SF
HOTEL	253,000	SF
PARKING (ABOVE GROUND)	1,000	SF
PARKING (BELOW GROUND)	62,000	SF
SPACES (1/380 SF)	140	STALLS
TOTAL BUILDING AREA	330,000	SF
	413	(273)

KEY PLAN

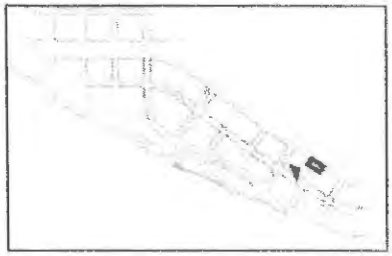
Vancouver Waterfront
Cultural District

figure **CD2**

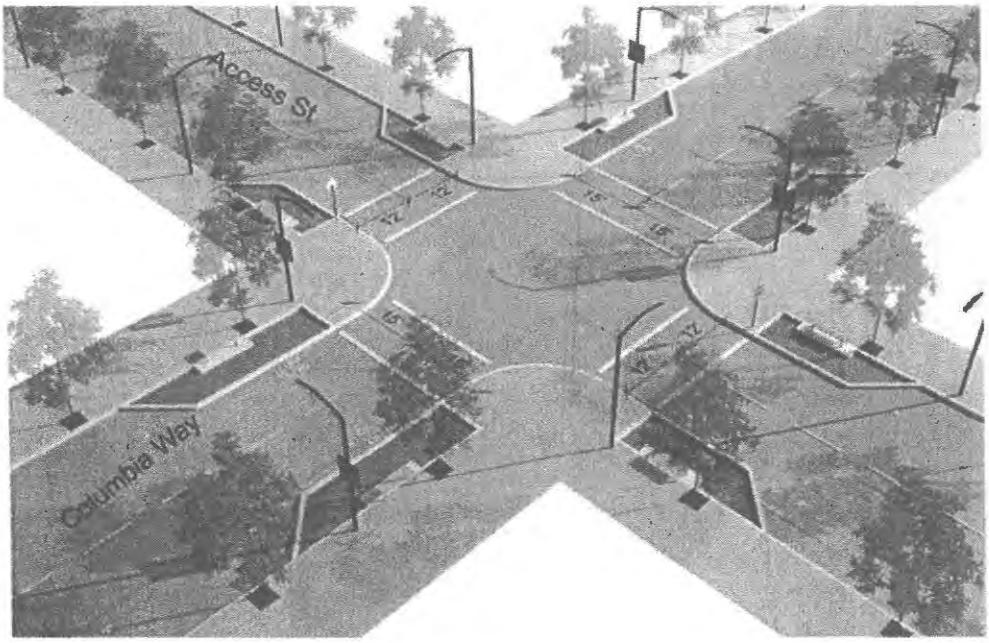
Block 02
May 15, 2009



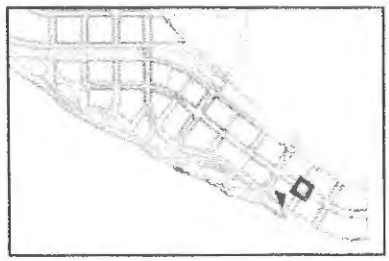
service st and access st - future phase



KEY PLAN



columbia way and access st - future phase

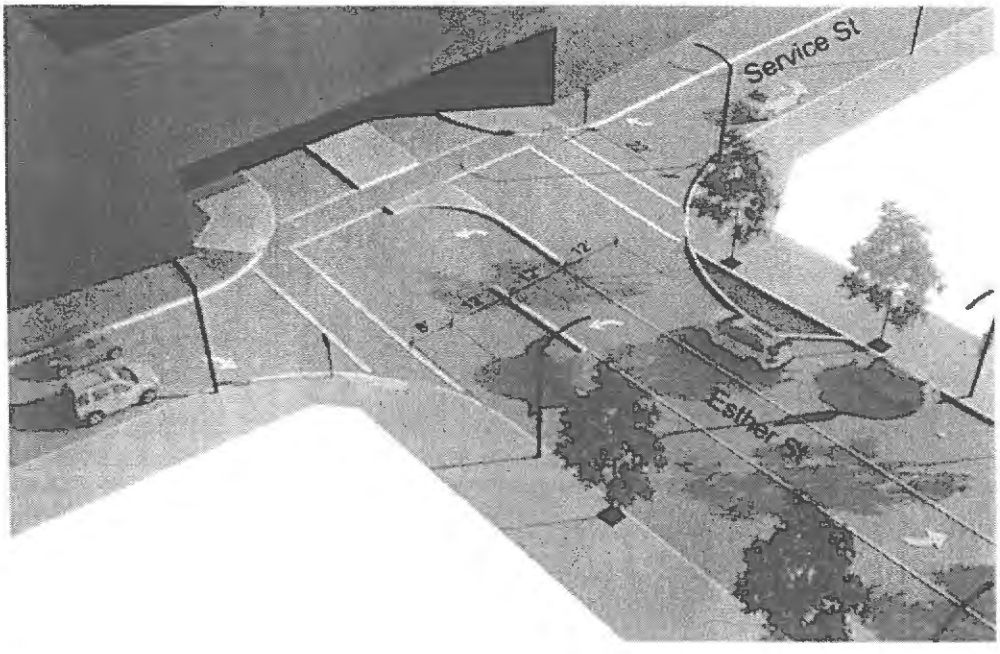


KEY PLAN

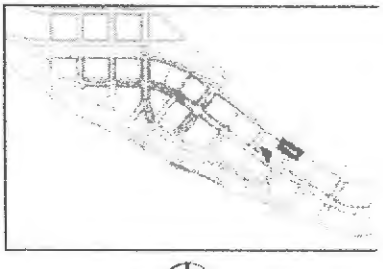
Vancouver Waterfront
Cultural District

figure **CD3**

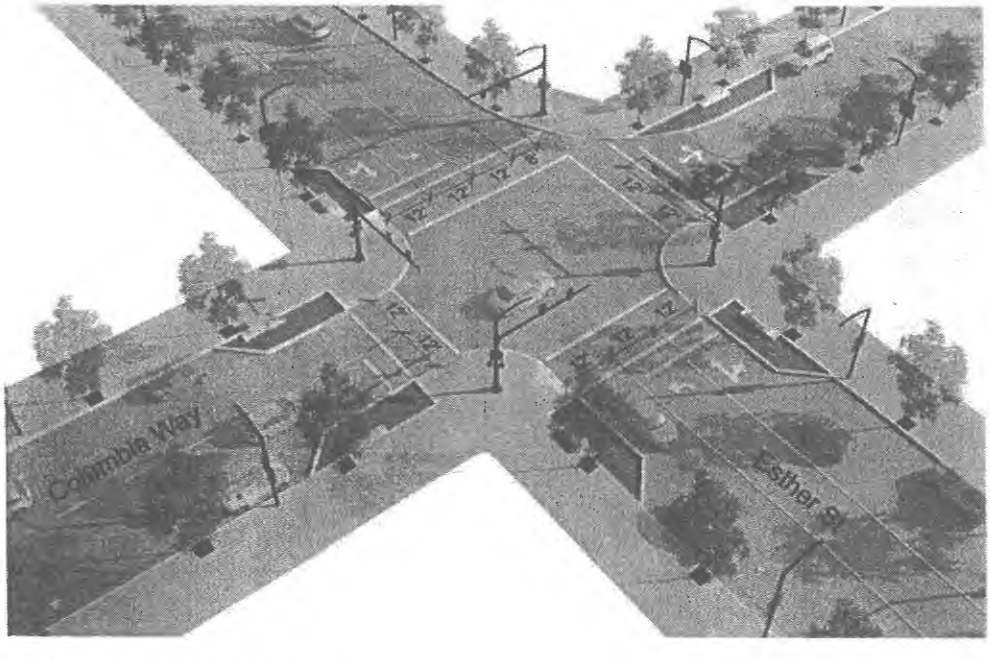
Street Intersections
May 15 2009



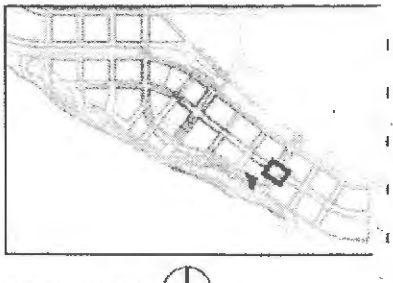
esther st entry



KEY PLAN



esther st and columbia way



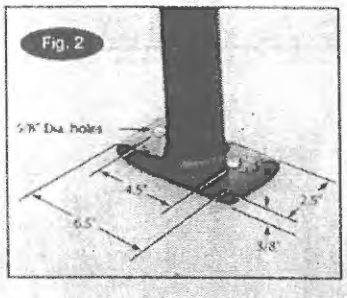
KEY PLAN

Street Intersections
May 15, 2009

Vancouver Waterfront
Cultural District

figure **CD4**

Surface Mount Installation



Dropin Anchor

Inverted U/2 Rack, SURFACE-MOUNT / 2 Bicycle Capacity

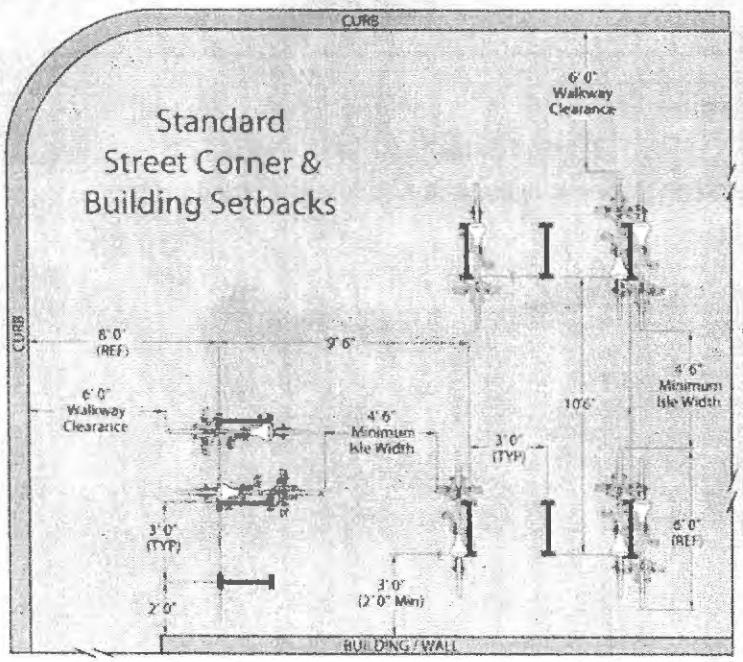
Recommended Installation:

Highland Surface mount U/2 Bike Racks can be anchored with tamper resistant concrete anchor screws and a Dropin anchor system (figure 3). All inverted-U racks come with optional square pipe.

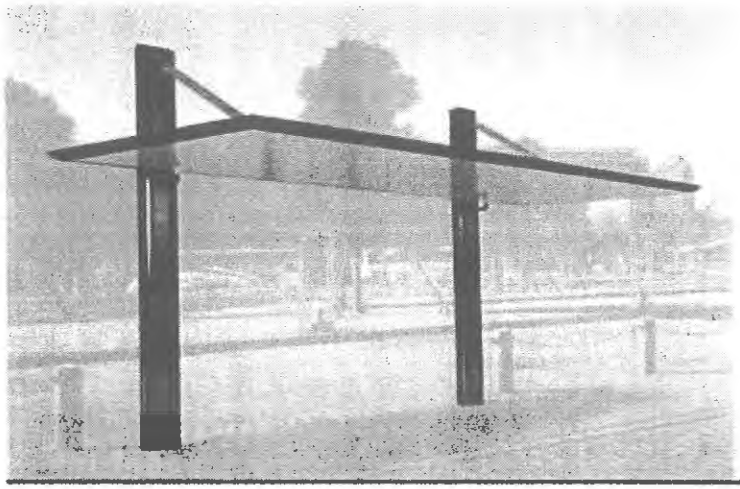
Installation Layouts & Space Requirements:

Based on recommendations from the Association of Pedestrian and Bicycle Professionals and over 26 years in the bike parking industry, the following diagrams show typical configurations and space allowances for installations of multiple bike racks.

The minimum space between each rack is 3'0", more if possible to allow for ease of access. Aisles separate the rows of racks, with a minimum between aisles to be 4'-6", to allow for one person to walk one bike. In high traffic areas, the recommended aisle width is 6'-0". Aisle widths are measured tip to tip of bike tires between the rows of racks. Six feet should be allowed for each row of parked bicycles. Conventional upright bicycles are just less than 72 inches long, with handlebar widths varying from 22"-27" and can be easily accommodated with these recommended spacings.



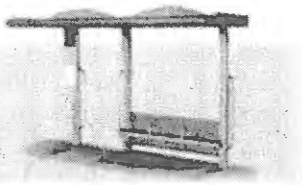
KOTOBUKI Street Furniture Bus Shelter



Bus Shelter

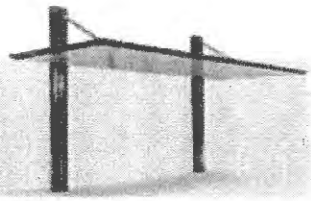
COM-PASS

Accessibility Street Furniture for bus stops.



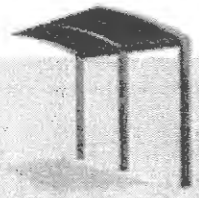
ALASHADE

Bus shelter with a simple and light form



K-LINE

K-Line series bus shelter with its simple and sharp design keeps urban space in order.

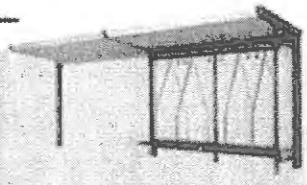


STANDARD SHELTER

Bus shelter with excellent strength and a standard design

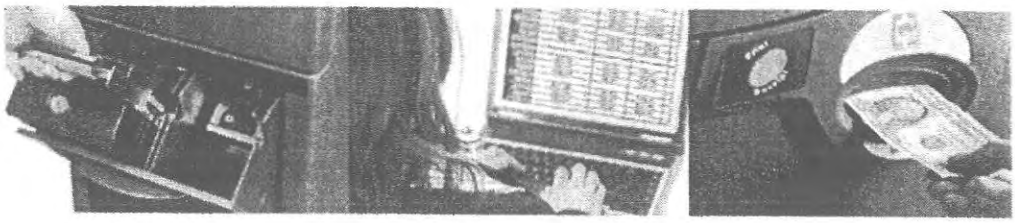
Bus stop shelter—

Sheltering system with accessible handrail and options such as benches, lighting, and windshield.



Strada

The Newest, Most Powerful Multi-Space Meter Yet



Choice of Collection Method

Only Strada offers you a choice of the traditional with cash box exchange (replace the full cash box with an empty one) or the ability to transfer the coins from the full box into a specially-designed collection canister. With the Transfer System you just slide an easy-to-use collection box under your coin box, unlock the aperture to let the coins drop into it, slide the box out and both box and aperture lock automatically. It's as securely and automatically triggered.

Flexible Printing Capacity

Custom messaging, custom paper design, and custom ticket length are all possible with our thermal-graphic printer. What's more, the printer does not require servicing – the thermal head is self-cleaning and the printer blade is self-sharpening. If printer replacement does become necessary, it can be changed easily without tools. And the printer unit has a built-in paper jam detector. Rest assured, Strada printers can handle single- and doublelength tickets as well as "sticky-back" tickets.

Ample, Flexible Graphic Display Area

Strada offers a full graphical display with a 160x80 pixel area capable of delivering 6 lines of text at once.
You also have a wide range of graphical choices – city logo, district icons, transaction illustrations, even "character" languages such as Chinese, Cyrillic, and Arabic.
The display can also be read under various daytime and nighttime lighting conditions. A light sensor activates the backlit display so the unit can adapt to ambient lighting conditions.
The display is mechanical independent of the mainboard so it can be installed and used by your workers even when open, helping perform maintenance activities more easily.

Dual-Function Card Reader

Custom messaging, custom paper design, and custom ticket length are all possible with our thermal-graphic printer. What's more, the printer does not require servicing – the thermal head is self-cleaning and the printer blade is self-sharpening. If printer replacement does become necessary, it can be changed easily without tools. And the printer unit has a built-in paper jam detector. Rest assured, Strada printers can handle single- and doublelength tickets as well as "sticky-back" tickets.

Specifications Brief

Terminal Size:
62 in (h) x 11.4 in (w) x 10.0 in (d)

62 in (h) x 16.9 in (w) x 11.4 in (d) for Bill Note Accepting Model

Weight: 180 lbs (no bill acceptor) and 270 lbs (with bill acceptor)

Body Thickness: 11 gauge steel construction

Temperature Range: -22°F to 131°F as well as in 95% RH

Printer: Thermal graphic; 6500 tickets per roll at standard size (2.36 x 2.76 in); Self adhesive paper accepted

Display: 160 x 80 pixels, 2 x 4 inch, 6 lines of text available, separate area for permanent display of time & date

Power Supply: Solar panels integrated into top of meter; AC mains option available

Power Consumption: Less than 3mA in standby mode

Payment Forms Accepted: Coins, tokens, bills, re-loadable and disposable smart cards, debit and credit cards

Coinbox Capacity: 3200 quarters, 164 ounces; 8.7in (h) x 5.7 in (w) x 11.4 in (d); empty 7.1 lbs, full 55 lbs

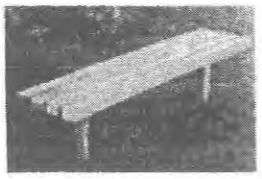
Bill Stacker: 500 bill capacity ; 7.09 in (h) x 3.94 in (w) x 5.51 in (d)

Highland Products Group
3350 NW Boca Raton Blvd. Suite B2
BOCA RATON, FL 33431
UNITED STATES
Phone: (561) 620-7878
Email: sales@theparkcatalog.com

Product Profile

136-2490

6'L Redwood Stationary Hot-Dip Galvanized Trailside Bench.



The end frames shall be one-piece welded construction with 2-1/2"x2-1/2" square steel post, seat brackets shall be constructed of 3/8"x4" A-36 flat steel bar to mount four 3"x4" timrbars, portable model shall include welded-on foot of formed 3/8"x4" A-36 flat steel bar with anchor holes, 3/8" galvanized carriage bolts and nuts shall be provided for timber connections optional in lie of carriage bolts zinc plated lag screw shall be provided for timber connections. Standard - lumber shall be redwood 3"x4" nominal sized, all lumber shall be surface planed on all four sides, precision drilled for fast easy assembly and shall have all exposed edges removal to 3/8" radius.

Price:	**$362.00**
Weight:	86 LB
Dimensions:	6'L
Warranty:	1 Year Warranty

EverLast® Lighting A Product of Full Spectrum Solutions, Inc. 2009, All Rights Reserved
888.574.7014 www.everlastlight.com
712 E. South Street Jackson Michigan, 49203 U.S.A.

- Wattage: 85w
- Lamp Life Rating: 80,000 hours
- Ballast Life Rating: 60,000 hours
- CCT: 5000k
- CRI: 82-85
- IP Rating: IP54

EverLast® Induction Lighting EGW-EG-85W

Specifications

Lamp

Wattage (W)	Lumens (LM)	CRI	CCT (Kelvin)	Rated Life (Hours)
85	7,200	82-85	5000	80,000

Ballast

Input Power (W)	Input Voltage (V)	Input Current (A)	Input Freq. (Hz)	Power Factor (PF)	Operating Temp. (°F)	THD (%)
90	120-277	0.76-0.34	50/60	>.95	-5 to 130	<10

- Wattage: 85w
- Lamp Life Rating: 80,000 hours
- Ballast Life Rating: 60,000 hours
- CCT: 5000k
- CRI: 82-85
- IP Rating: IP54

EverLast® Induction Lighting EOW-EG-85W

Specifications

Lamp

Wattage (W)	Lumens (LM)	CRI	CCT (Kelvin)	Rated Life (Hours)
85	7,200	82-85	5000	80,000

Ballast

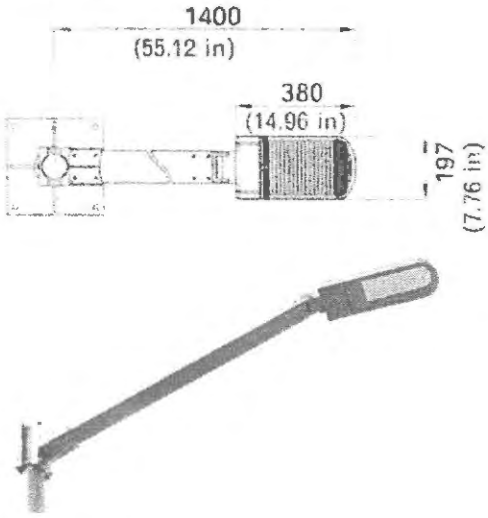
Input Power (W)	Input Voltage (V)	Input Current (A)	Input Freq. (Hz)	Power Factor (PF)	Operating Temp. (°F)	THD (%)
90	120-277	0.76-0.34	50/60	>.95	-5 to 130	<10

LEDALUX® 30 NAVILUX™ Series Headpiece With Arm

Product Specifications

Light Source	30 One Watt LED's
Lumen Output	1799
Equivalent Source	HPS 70 Watt
Color Rendering Index (CRI)	83
Total Wattage Draw	37
Input Voltage	100-240VAC 50/60Hz
EPA Calculation	.61
Fixture Weight	33lbs
Recommended Pole Height	12-15 Ft
Rated Life	50,000 Hours
Warranty	2 Year Limited
Ratings	UL, IP65

Dimensions

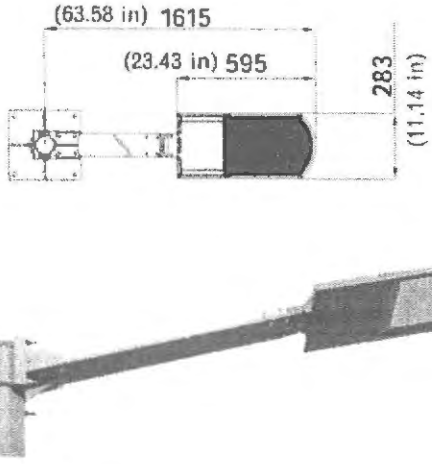


LEDALUX® 60 NAVILUX™ Series Headpiece With Arm

Product Specifications

Light Source	60 One Watt LED's
Lumen Output	3599
Equivalent Source	HPS 100 Watts
Color Rendering Index (CRI)	83
Total Wattage Draw	72
Input Voltage	100-240VAC 50/60Hz
EPA Calculation	.681
Fixture Weight	44lbs
Recommended Pole Height	18-21 Ft
Rated Life	50,000 Hours
Warranty	2 Year Limited
Ratings	UL, IP65

Dimensions

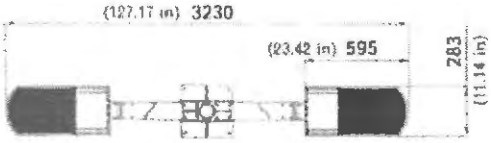


LEDALUX® 60 NAVILUX™ Series Double Headpiece With Arms

Product Specifications

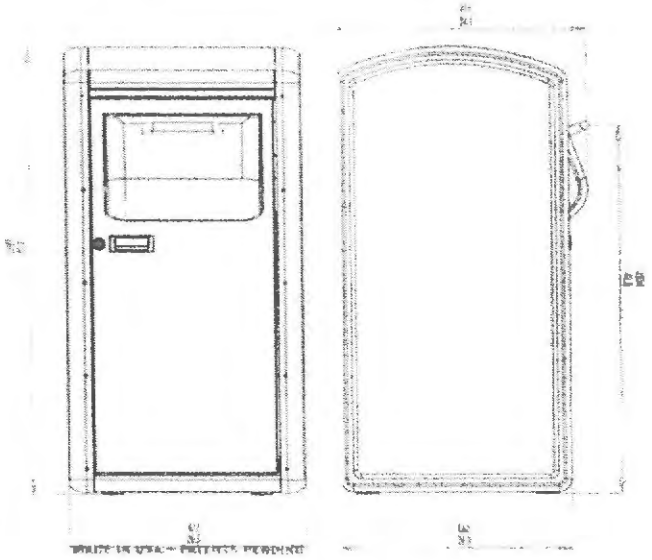
Light Source	60 One Watt LED's x 2
Lumen Output	3599 x 2
Equivalent Source	HPS 100 Watts x 2
Color Rendering Index (CRI)	83
Total Wattage Draw	72 x 2
Input Voltage	100-240VAC 50/60Hz
EPA Calculation	1.96
Fixture Weight	58lbs
Recommended Pole Height	18-21 Ft
Rated Life	50,000 Hours
Warranty	2 Year Limited
Ratings	UL, IP65

Dimensions



Technical Specs

BigBelly®
SOLAR COMPACTOR



Overall Machine Dimensions

Height: 50.4" (1281mm)

Width: 26.1 (664mm)

Depth: 25.9" (657mm)

Handle Height (ADA Compliant): 41.6" (1056mm)

Weight: 300 lbs (136 kg)

Trash Hopper Insertion Opening: 6" x 17" (152mm x 432mm)

Bin Volume: 32 gallons

Liner Bag: 32" H, 92" circumference
(recommended thickness at least 2 mil)

Conforms to ADAH standards

Materials

RoHS compliant

Galvanized sheet metal steel interior and exterior construction (recycled content)

Heavy duty plastic side panels for dent and scratch resistance (recycled content)

Exterior Finish: polyester TGIC powder-coat finish for outdoor and salt-spray durability

Trash Bin: single bin is leak proof made out of low-density polyethylene plastic

Compaction Features

Compaction Force: 1250 lbs. max.(570 kg)

Cycle Time: 41 seconds
(users can deposit trash during cycle—no lock-out)

Motor Size: 1/6-HP DC gear-motor

System Voltage: 12 Volts DC

Drive System: Gear-motor with chain drive
(non-hydraulic); ANSI No. 40 heavy-duty chains

Fully automated, IC processor controlled system
senses trash level, fullness and machine status

3-color LED status lamps indicate compacted trash level, machine status and error codes

Unique design achieves deep ram penetration

Vertical ram travel provides even compaction

Photovoltaic System

Polycrystalline silicon cell module

Nominal Output: 30 Watts

Shock-dampening mount system

PV panel protected by polycarbonate bubble

Spill-proof, sealed maintenance-free 12V battery

Charge maintained by Pulse Width Modulator

Cordless, self-powered unit requires no wiring

Fully portable – no installation required

Safety Features

CE approved

Fully interlocked access doors protect users and service personnel

Locked front trash removal door

Separately keyed service access

Fault-tolerant design for trash hopper insertion door prevents access to compaction area

Low-voltage system

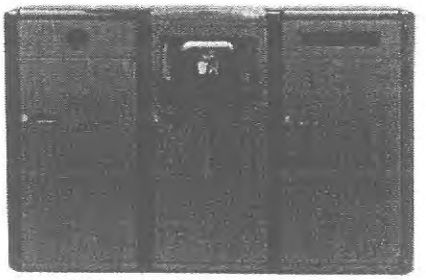
BigBelly® Solar
50 Brook Road Needham MA 02494

sales@bigbellysolar.com
bigbellysolar.com

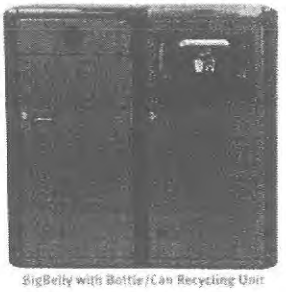
T. 888-870-0300
outside US T. 781-444-6092

©Copyright 2005 BigBelly Solar. All rights reserved. BigBelly® is a registered trademark of Seamobile Power Co., d.b.a. BigBelly Solar.

BigBelly Recycling Unit Options



BigBelly with Bottle/Can & Paper Recycling Units



BigBelly with Bottle/Can Recycling Unit

BigBelly with Single Stream Recycling Unit

BigBelly with Paper Recycling Unit

Product Specifications

	BigBelly with 1 Recycling Unit	BigBelly with 2 Recycling Units
Dimensions	50.1"W x 25.9"D x 50.4"H (127.3 cm W x 65.8 cm D x 128 cm H)	73.7"W x 25.9"D x 50.4"H (187.2 cm W x 65.8 cm D x 128 cm H)
Bin	50 gallon polyethylene 19" x 19" x 34"	50 gallon polyethylene 19" x 19" x 34"
Weight	470 lbs.	620 lbs.
Insertion Opening	Bottle/Can opening: 5" diameter Paper opening: 1.75" x 12" Single stream: Bottle/Can opening 5" diameter Paper opening: 1.75" x 10"	Bottle/Can opening: 5" diameter Paper opening: 1.75" x 12"

Environmental Footprint

At BigBelly Solar, in addition to making products that are good for the environment, the standards we meet, materials we choose and the way we build our products is also good for the environment.

Side panels and Hopper Cover
Our black ABS plastic contains post consumer recycled content of 80% to 100% and can itself be recycled.

Packaging
We use recycled cardboard and wooden pallets that can be recycled.

Powder Coat Painting
An environmentally friendly way to paint, it is nontoxic, has no fumes and virtually no VOC (volatile organic compounds).

RoHS Compliant
(Restriction of Hazardous Substances Directive)
BigBelly Solar products meet this tough European standard. There is no lead used in our circuit boards and no chromium is used in the plating of our steel.

Lead Acid Battery
Our battery is recyclable.

Leak Proof Bins
Customer can choose to eliminate bags entirely.

BigBelly® Solar
50 Brook Road Needham MA 02494
sales@bigbellysolar.com
bigbellysolar.com
T. 888-820-0300
Outside US T. 781-444-6002

©Copyright 2008 BigBelly Solar. All rights reserved. BigBelly® is a registered trademark of Seahorse Power Co., d/b/a BigBelly Solar

Section Eight

Section 8.0 Glossary

- **Amenity:** Aesthetic or other features of a development that increase its marketability or usability to the public.
- **Architectural Features:** Prominent or significant parts or elements of a building or structure.
- **Architectural Style:** The characteristic form and detail of buildings from a particular historical period or school of architecture, e.g. the Bauhaus School, the Post Modern School, the Neo-traditional School, etc.
- **Articulation:** The manner in which portions of a building form are expressed (materials, color, texture, pattern, modulation, etc.) and come together to define the structure.
- **Block Face:** The row of front façades, facing the street, for the length of one block.
- **Bonus:** Technically this term refers to the amount of additional square footage achievable by providing a public benefit feature.
- **Bonus Ratio:** Refers to the proportional value assigned to a particular public benefit feature in a particular District. For example, the Bonus Ratio for the retail shopping *public benefit feature* in the DOC-1 zone is 3, such that an additional 3 feet of Gross Floor Area would be provided for every square foot of retail shopping area provided on a project.
- **Canopy:** A removable fabric or plastic covering over a public walkway or sidewalk.
- **Compatibility:** The size and character of a building element relative to other elements around it. For example, the size and proportion of windows in a building façade are usually related to one another, the spaces between them, and the scale of surrounding buildings.
- **Context:** The characteristics of the buildings, streetscape, and landscape that supports or surrounds a given building, site or area such as predominance of period architecture or materials, wide sidewalks, or continuous and overhead weather protection, or consistent street trees.
- **Cornice:** A molded and projecting horizontal feature that crowns a façade.
- **Design Principles:** A guiding concept as part of the overall project design development that reflects desirable characteristics of the urban environment, or responds to specific site/vicinity opportunities or constraints.
- **Façade:** Any vertical, exterior face or wall of a building, usually the front, often distinguished from other faces by architectural details.
- **Fenestration:** The arrangement and design of windows and other openings on a building's façade.
- **Floor Area Ratio:** A measure of density expressed as a ratio of the amount of *chargeable Gross Floor Area* permitted and/or existing in a structure to the area of the lot on which the structure is located. Referred to as FAR.

- **Gateway:** A principal or ceremonial point of entrance into a district or neighborhood.

- **Grid:** Two or more intersecting sets of regularly space parallel lines. It generates a pattern of regularly spaced parts, such as a street grid.

- **Gross Floor Area:** The number of square feet of total floor area bounded by the inside face of the outside wall of a structure, measured at the floor line. Referred to as GFA. Chargeable Gross Floor Area means the net floor area after deducting any allowed exemptions as permitted in the District FAR provisions.

- **Marquee:** A shelter projecting over an entrance frequently ornamental and of metal with or without glazing.

- **Massing:** The three dimensional bulk of a structure: height, width and depth.

- **Modulation:** A stepping back or projecting forward of sections of a structure's façade within specified intervals of building width and depth, as a means of breaking up a structure's apparent bulk.

- **Open Space:** Land and/or water area with its surface open to the sky and predominantly undeveloped, which is set aside to serve the purposes of providing active or passive recreational opportunities, conserving valuable natural resources, and structuring urban development and form.

- **Parapet:** A low, protective wall or railing along the edge of a roof, balcony or similar structure.

- **Pedestrian Orientation:** The characteristics of an area where the location and access to buildings, types of uses permitted on the street level and storefront design are based on the needs of persons on foot.

- **Podium:** A low wall serving as a foundation or terrace wall; often used to refer to the base of tall buildings. In classical architecture, the mass of masonry on the flat top of which a classical temple was built.

- **Presentation Drawings:** Drawings prepared to communicate the design character of the structure, usually prepared in color and including realistic representations of the building in its context, showing colors of building surfaces, shadow cast, people and landscaping. Three dimensional sketches and projected or computer drawings should be included along with two dimensional floor plans, elevations and building section drawings.

- **Proportion:** The balanced relationship of parts of a building, landscape and structures to each other and to the whole.

- **Public Benefit Feature:** Means amenities, uses and other features of benefit to the public, that are provided by a developer and which can qualify for an increase in floor area (the *bonus*). Examples include public open space, pedestrian improvements, housing and provision of human services.

- **Rhythm:** Reference to the regular or harmonious recurrence of lines, shapes, forms or colors, incorporating the concept of repetition as a device to organize forms and spaces in architecture.

- **Scale:** The spatial relationship among structures along a street or block front, including height, bulk and yard relationships. Proportional relationship of the size of parts to one another and to the human figure.

- **Scale, Human:** Used to describe the quality of a building that includes structural or architectural components of size and proportions that relate to the human form and/or that exhibits through its structural or architectural components the human functions contained within.

- **Setback:** The required or actual placement of a building a specified distance away from a road, property line or other structure.

- **Site Plan:** A detailed plan showing the proposed placement of structures, parking areas, open space, landscaping and other development features on a parcel of land.

- **Streetscape:** The visual character of a street as determined by elements such as structures, access, greenery, open space, view, etc. The scene as may be observed along a public street composed of natural and man-made components including buildings, paving planting, street hardware and miscellaneous structures.

- **Transparency:** A street level development standard that defines a requirement for clear or lightly tinted glass in terms of a percentage of the façade area between an area falling within 2' and 8' above the adjacent sidewalk or walkway.

- **Upper Level Coverage Limit Area:** In certain zones a standard limiting the percentage of lot coverage of a building above a certain height, the specific provisions of which may depend on site size, height above street-level and number of street frontages.

- **Urban Form:** The spatial arrangement of a particular environment, as defined by the connectivity of build mass and form, the natural environment and the movement of persons, goods and information within.