CITY OF VANCOUVER
COMMUNITY SERVICES GROUP

DEVELOPMENT PERMIT STAFF COMMITTEE REPORT
APRIL 9, 2014

FOR THE DEVELOPMENT PERMIT BOARD
MAY 5, 2014

1462 GRANVILLE STREET (COMPLETE APPLICATION)
DE417598 – ZONE CD-1 (Pending)

PO/BM/MS/LH

DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS

Present:
J. Greer (Chair), Development Services
M. Holm, Engineering Services
*A. Thompson, Real Estate Services
W. Mendes, Social Policy

* April 9 DPSC meeting only

Also Present:
P. O'Sullivan, Urban Design & Development Planning
*A. Molaro, Urban Design & Development Planning
*B. Mah, Development Services
*B. Badelt, Engineering Services
M. So, Development Services

APPLICANT:
DIALOG
Attention: Bruce Haden
406-611 Alexander Street
Vancouver, BC
V6A 1E1

PROPERTY OWNER:
Howe Street Ventures Ltd.
501-1067 West Cordova
Vancouver, BC
V6C 1C7

EXECUTIVE SUMMARY

- **Proposal:** To develop a six-storey building comprising of retail and office uses over two levels of underground parking with vehicular access from Rolston Street (Note: the street name is subject to Council approval).

See Appendix A Standard Conditions
Appendix B Standard Notes and Conditions of Development Permit
Appendix C Engineering – Neighbourhood Energy Utility (NEU) comments
Appendix D Responses to Rezoning Sustainability and District Energy Conditions
Appendix E Plans and Elevations
Appendix F Applicant's Design Rationale

- **Issues:**
  1. Provision of pedestrian connection to Granville Bridge
  2. Pedestrian interest to storefronts at ground level

- **Urban Design Panel: Support**

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATION: APPROVE

THAT the Board APPROVE Development Application No. DE417538 submitted, the plans and information forming a part thereof, thereby permitting the development of a six-storey building comprising of retail stores and general offices over two levels of underground parking with vehicular access from Rolston Street, subject to Council's enactment of the CD-1 By-law and approval of the Form of Development and subject to the following conditions:

1.0 Prior to the issuance of the development permit, revised drawings (sealed and signed) and information shall be submitted, to the satisfaction of the Director of Planning, clearly indicating:

1.1 design development to provide, as part of the development, a more direct and enhanced pedestrian connection (vertical elevators/stairs and horizontal bridge) between the upper Granville Street Bridge deck sidewalks and Granville Street below, integrated within both sub-areas both podium buildings;

Note to Applicant: In addition to the elevator access required, pedestrian access through the terraced semi-public courtyards to Pacific Street should also be maintained. Public access through the vertical circulation will be secured through a Statutory Right-of-Way (SRW). Provide enlarged drawings at a 1:50 scale or larger, with notation specifying materials, dimension and finish of the pedestrian connection bridges. Refer to Standard Condition A.2.2.

1.2 design development to provide a greater sense of welcoming and identification to the entry to the semi-private internal courtyards from ground-level on Pacific Street;

Note to Applicant: This can be achieved in a number of ways including a change in ground surface treatment, way-finding signage, or with architectural or landscape elements.

1.3 design development to provide an enhanced Public Realm treatment that contributes to the unique environment under the Granville Street Bridge and ramps;

Note to Applicant: Intent is to reiterate Rezoning Condition 2. High quality material treatment that balances the needs of pedestrians and vehicle movements while offering flexibility for potential programming of the space under the bridge and bridge ramps should be provided. Material treatments should consider variations of concrete finishes, with limited accent pavers and a design approach that minimizes the use of bollards. Other Public Realm features, such as landscaping, seating opportunities, patio spaces and kiosks, need to be considered. Features that are on City streets require a separate application to Engineering.

1.4 design development to the loading area to improve the Public Realm interface and to reduce pedestrian conflicts;

Note to Applicant: Intent is to clarify and qualify Rezoning Condition 10. Care should be taken to reduce the impact of the large blank overhead loading gate. Design development opportunities to enhance the visual expression of the overhead gate are encouraged.

1.5 design development to provide weather protection at the major entry points to the Office lobbies; and

Note to Applicant: Intent is to clarify Rezoning Condition 13 to provide weather protection at major entry points. Employ glass canopies or similar devices to ensure maximum daylight reaches the street levels. If the weather protection extends into City road, Standard Condition A.2.18 will apply.

1.6 design development to the ground-oriented storefront, display and weather protection systems to ensure variety and pedestrian interest in the expression of tenant frontages.

Note to Applicant: Intent is to reiterate Rezoning Condition 14. If the weather protection extends into City road, Standard Condition A.2.18 will apply.

2.0 That the conditions set out in Appendix A be met prior to the issuance of the Development Permit.

3.0 That the Notes to Applicant and Conditions of the Development Permit set out in Appendix B be approved by the Board.

- **Technical Analysis:**

	PERMITTED (MAXIMUM)	REQUIRED	PROPOSED
Site Size	-	-	irregular
Site Area	-	-	1 930 m^2
Use	Office Retail		General Office Retail Store
Floor Area[1]	5 264.7 m^2	-	General Office 3 676 m^2 Retail Store 1 530 m^2 Total 5 206 m^2
Height	26.2 m	-	Top of Parapet Wall 26.0 m
Parking[2]	Non-Residential 32 Small Car (25% max.) 25% x 42 spaces = 10 spaces	Non-Residential 25 Disability Space 3	Standard 38 Small Car 2 Disability 2 Total 42
Loading[3]	-	Class A / Class B / Class C General Office 1 / 1 / n/r Retail Store n/r / 2 / n/r Total 1 / 3 / n/r	Class A / Class B / Class C General Office 0 / 1 / 0 Retail Store 0 / 1 / 0 Total 0 / 2 / 0
Bicycle Parking[4]	-	Class A / Class B General Office 8 / 6 Retail Store 3 / 6 Total 11 / 12 Vertical: 30% x 20 Class A = 6 spaces Locker: 20% x 20 Class A = 4 lockers Electrical Outlet: 1 outlet/2 Class A spaces = 10 electrical outlets Clothing Lockers: 8 lockers/gender = 16	Class A / Class B General Office 14 / 0 Retail Store 6 / 0 Total 20 / 0 Vertical: to be determined Locker: to be determined Electrical Outlet: to be determined Clothing Lockers: 0 locker
Amenity	929 m^2 (max.)		96 m^2 (balconies)

[1]**Note on Floor Area:** Storage rooms in the parking level were not taken into account during the rezoning review. If included, the proposed floor area may exceed the maximum floor area allowed. Balconies are included in the proposed office and retail floor areas but can be considered as amenity spaces which can be excluded from floor area. This may offset the storage rooms and culminating within the maximum floor area. Standard Condition A.1.2 seeks compliance and clarification of the floor areas.

[2]Note **on Parking:** Parking spaces are not required for the first 3 900 m^2 of retail floor area. Standard Condition A.1.3 seeks compliance with the required number of disability parking spaces.

[3]**Note on Loading:** Staff is willing to consider a loading relaxation subject to the Transportation Assessment in the requested Loading Management Plan. Refer to Engineering Services commentary and Standard Condition A.2.11.

[4]**Note on Bicycle Parking:** Standard Condition A.1.4 seeks verification of the number of Class A bicycle parking spaces and compliance with the required number of Class B bicycle parking spaces. Standard Condition A.1.5 seeks provision of the required number of clothing lockers.

- **Legal Description**

Lot:	C
Block:	123
District Lot:	541 Group 1 NWD
Plan:	EPP40230

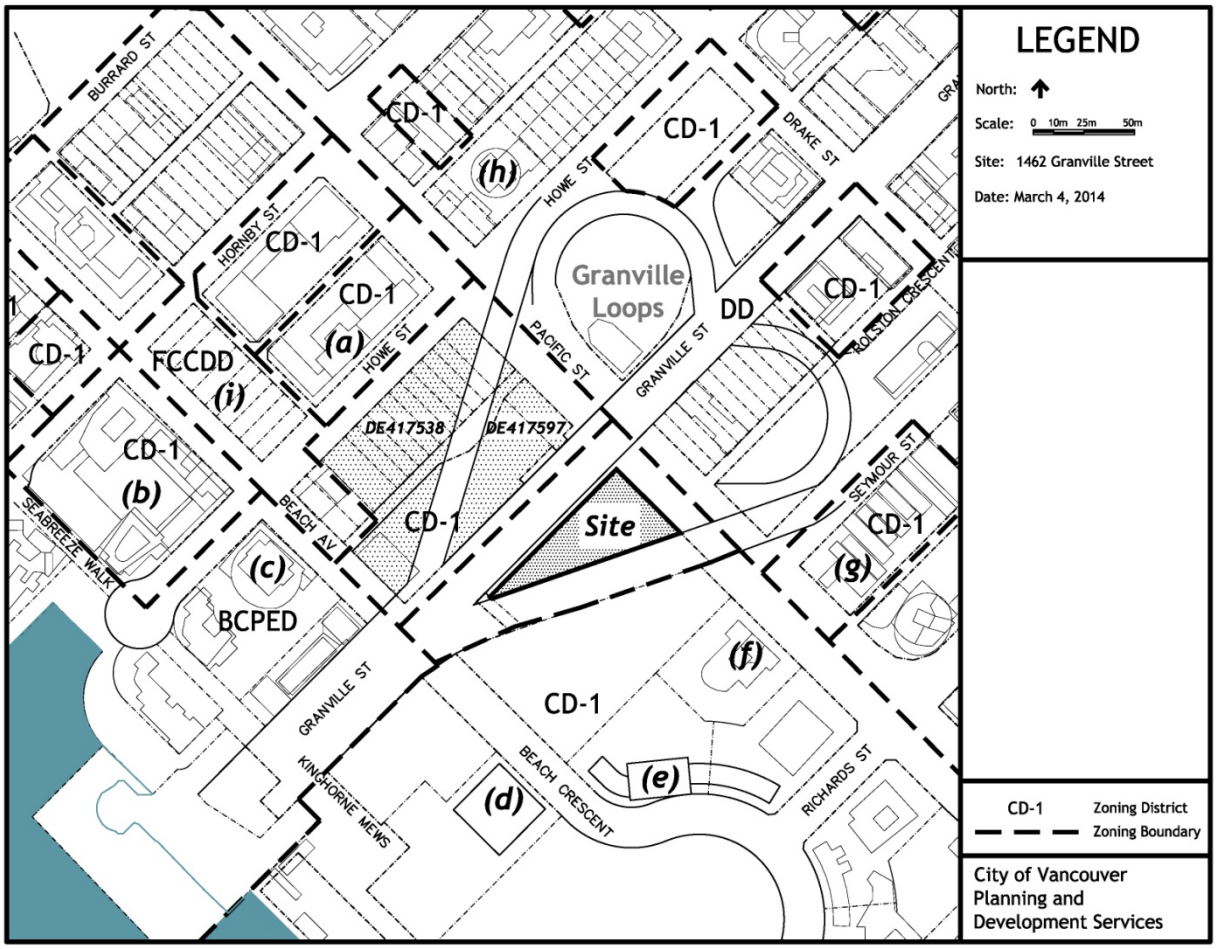
- **History of Application:**

13 12 19 Complete DE submitted
14 02 26 Urban Design Panel
14 04 09 Development Permit Staff Committee
14 04 23 Development Permit Staff Committee

- **Site:** The site is located adjacent to and under the Granville Street Bridge and the Seymour Street ramps, bounded by Pacific Street to the north and Rolston Street (located under the Seymour Street ramp) to the east.

- **Context:** Significant adjacent development includes:

(a) the "Pomaria" at 1455 Howe Street, a 31- storey residential tower
(b) 888 Beach Avenue, 8-, 18- and 31-storey residential towers
(c) the "Discovery" at 1500 Howe Street, a 24-storey residential tower
(d) the "Icon" at 638 Beach Crescent, a 24-storey residential tower
(e) the "Parkwest Tower II" at 583 Beach Avenue, a 31-storey residential tower
(f) the "Aqua at the Park" at 550 Pacific Street, a 24-storey residential tower
(g) "The Mark" at 1372 Seymour Street, a 41-storey residential tower
(h) the "Executive Hotel Vintage Park" at 1379 Howe Street, an 18-storey hotel
(i) May and Lorne Brown Park, located on Beach Avenue, between Howe and Hornby Streets



● Background:

The CD-1 By-law for this site, along with the form of development was approved by Council, subject to a series of conditions, following a Public Hearing on October 24 and 29, 2013. This application is brought to the Development Permit Board as a part of larger development that includes 1480 Howe Street (DE417538) and 1461 Granville Street (DE417597).

Prior to the Public Hearing, the CD-1 application was reviewed in February 2013 by a Special High Building review process for higher buildings in which the urban Design Panel was supplemented by two respected design leaders in the local community and two notable international architects. The design issues identified by the panel constructed many of the rezoning approval design conditions.

● Applicable By-laws and Guidelines:

1. **CD-1 Bylaw (Pending)**
2. **Under the Granville Bridge Neighbourhood Commercial Centre Policies and Guidelines (2007)**
3. **Bridgehead Guidelines (1997)**
4. **General Policy for Higher Buildings (1997, last amended 2011)**
5. **Granville Slopes Policies (1989, last amended 1993)**

● Response to the Applicable By-laws and Guidelines:

1. CD-1 Bylaw (Pending)

Use and Density: The proposed use of commercial-office and commercial-retail density conforms to the provisions of the CD-1 By-law.

Height: The proposed height conforms to the provisions of the CD-1 By-law.

2. Under the Granville Bridge Neighbourhood Commercial Centre Policies and Guidelines (2007)

The policy anticipates a local-servicing commercial centre, with a retail mix anchored by a grocery store, and smaller retail and service neighbourhood-oriented uses. Active frontages and a high quality public realm are intended to contribute to pedestrian amenity and visual interest, including the outdoor display of goods and sidewalk seating that provides an extension to potential restaurant and café spaces. With the development along the False Creek waterfront and of the adjacent neighbourhoods, there is an established population and a need for shopping amenities and services in this part of the downtown.

The proposed mix, location and orientation of retail uses to streets, established at the rezoning and further developed with this application, generally satisfies the policy. Further design development is sought to strengthen the relationship between ground-level retail and the Public Realm at certain locations.

The policy anticipates that the development of the lands beneath the Granville Street Bridge will include an enhanced Public Realm treatment that distinguishes the area as a local-serving commercial centre while meeting the City standards for safety and maintenance.

The application proposes a Public Realm design that strives to provide an exceptionally active and interesting interface with the commercial uses while balancing the needs of pedestrian and vehicle

movement. The design also offers flexibility for potential programming of the street space under the Granville Street Bridge to accommodate a broad range of activities.

Staff are generally satisfied with the proposed approach. However, further design development concerning the extent and pattern of streetscape treatments; and clarifications regarding the long-term maintenance costs, and performance requirements of the streetscape treatment are required. Recommended Condition 1.3

3. Bridgehead Guidelines (1997)

The intent of the Bridgehead Guidelines is to maintain key public views from the bridges, reinforce and enhance the experience of crossing the bridge with roof treatment for the lower buildings and establish optimum setbacks and heights for buildings adjacent to the bridges.

This application maintains and refines the well-considered solution approved at the rezoning. Dynamic triangulated low-rise forms with canted green roofs rising above the bridge deck should provide a visual link between the upper bridge deck and the distinct Public Realm environment below. Together with the iconic shape of the tower, the development is expected to enhance public views from the Granville Street Bridge.

4. General Policy for Higher Buildings (1997, last amended 2011)

The General Policy for Higher Buildings requires that all higher buildings demonstrate leadership and advances in sustainable design and energy consumption, and establish a significant and recognizable new benchmark for architectural creativity and excellence.

The proposal's form of development, architectural expression, design quality and sustainable performance were supported at rezoning. This development application maintains and further develops the form and architectural quality. However, though LEED Platinum was targeted at rezoning, this application includes a preliminary LEED scorecard indicating that the project could attain LEED Gold.

The General Policy for Higher Buildings further identifies the inclusion of open space, which represents a significant contribution to the downtown network of green and plaza spaces, as an important consideration. To address this requirement, the application proposes a pedestrian connection between the Granville Street Bridge deck sidewalks to and from the podium buildings at 1461 and 1462 Granville Street below, allowing pedestrians to circulate through a series of terraced green courtyards down to Pacific Street. In order to better accommodate a variety of users, including cyclists, a more direct vertical link, such as stairs and elevators integrated within both 1461 and 1462 Granville Street buildings, is desirable. This link is an important component in achieving a more direct pedestrian and cycling connection, and in integrating this neighbourhood centre into its local context. Identified as a condition of the rezoning (refer to Rezoning Condition 1), Staff are recommending further design development to ensure that the publicly accessible vertical connections will accommodate direct access between the upper bridge deck and the underside of the Granville Street Bridge. Recommended Condition 1.1. The same Condition is recommended to the related 1461 Granville Street (DE 417597) which applies to the westerly connection.

Refer to Sustainability section for discussion about this policy's energy consumption targets.

5. Granville Slopes Policies (1989, last amended 1993)

This policy's general recommendations with respect to density, height and use were addressed at rezoning. This development proposal remains consistent with the density, height and use of the rezoning.

- **Response to Urban Design and Landscape Rezoning Conditions of Approval:**

Not all conditions of the Rezoning are included for discussion in this section. Only conditions with relevant or remaining issues are included below.

Rezoning Condition 1: Design development to provide a more direct and enhanced pedestrian connection (vertical elevators/stairs and horizontal bridge) between the upper Granville Bridge deck sidewalks and Granville Street below, integrated within both sub-areas A and B.

Note to applicant: In addition to the elevator access required, pedestrian access through the terraced semi-public courtyards to Pacific Street should also be maintained. Public access through the vertical circulation will be secured through a SRW. See also Engineering condition (c)2.

Applicant Response: Strategies for an enhanced pedestrian connection to the bridge (both elevators and horizontal bridges) are being developed. Options for this connection have been included in this book. The design team will continue to work with city staff through the application process to develop a workable solution that is legible to future users and complies with CPTED requirements.

Staff Assessment: The condition is carried through as part of the development permit. Staff are also seeking drawings to clearly show the details of the pedestrian connections, including elevators. Recommended Condition 1.1. See also commentary under the General Policy for Higher Buildings, page 7.

Rezoning Condition 2: Design development to provide an enhanced public realm treatment that contributes to the unique environment under the Granville Bridge and ramps.

Note to applicant: High quality material treatment that balances the needs of pedestrians and vehicle movements while offering flexibility for potential programming of the space under the bridge and bridge ramps should be provided. Material treatments should consider variations of concrete finishes, with limited accent pavers and a design approach that minimizes the use of bollards. Other public realm features, such as landscaping, seating opportunities, patio spaces and kiosks, need to be considered. Features that are on City streets require a separate application to Engineering.

Applicant Response: Paving across the public realm is conceived of as one unified carpet, and carries across both sidewalk and street. The overall material is cast in place concrete, with thin bands of white split-face granite inset with black basalt cobbles. The overall effect is one of a field of pixilation, which serves to counter the monolithic scale and materiality of the concrete bridge. Stone paver accent bands will be mortar set in concrete to handle vehicular loads. Stairs will be detailed with basalt risers. The overall percentage of pavers within the concrete field is 7%.

Staff Assessment: This condition has been partially met. Staff are generally satisfied with the proposed conceptual approach and material choices. However, further design development concerning the extent, pattern and locations of stone paving is required. See Recommended Condition 1.3.
Engineering has concerns with the long-term maintenance costs of the proposed streetscape treatment. Staff continues to work with the applicant to meet the design objectives of the project

while meeting performance requirements related to accessibility, longevity, maintenance, and legibility for all users. If needed, Staff may consider higher quality treatments under maintenance agreement with the owner. The provision of an acceptable street treatment is identified in Standard Condition A.2.13.

Rezoning Condition 3: Design development and provision of a conceptual lighting strategy and implementation plan for pedestrian scale lighting and feature lighting to enhance the unique under the bridge/ramp environment.

Note to applicant: Public realm lighting needs to be coordinated to meet Engineering standards and requirements.

Applicant Response: A conceptual lighting plan for the public realm has been provided. Please refer to the landscape drawings in the appendix of this book.

Staff Assessment: The condition has been satisfied. Staff will continue to work with the applicant to develop a lighting strategy that enhances the environment and meets Engineering requirements and standards. If needed, Staff may consider certain architectural lighting features under a maintenance agreement with the owner. The provision of an acceptable lighting plan is identified in Standard Condition A.2.13.

Rezoning Condition 4: Provision of an animation strategy and implementation plan demonstrating the proposed use of City streets and structures, and provision of basic infrastructure, to support public realm programming.

Note to applicant: Basic infrastructure should be provided to facilitate event programming, including electricity, water, storage, and accessibility to public washrooms, including arrangements to secure public access.

Applicant Response: Refer to the animation strategy and implementation plan in the appendix of this book.

Staff Assessment: The condition has been satisfied. Confirmation required that arrangements for public access to the washrooms and storage have been secured. See Standard Conditions A.2.5 and A.2.13.

Rezoning Condition 5: Design development to maintain the high quality materials indicated (zinc cladding, stainless steel channeling, triple glazing, thermally enhanced slab construction and glazed balustrades) for the sloped facades and for the internal semi-public courtyards (wood beams and decking, basalt steps and triple glazing), and to maintain the level of detailing implied and necessary to accomplish and construct the proposed design aesthetic with exceptional detailing.

Applicant Response: Noted. The applicant is committed to the use of high quality materials but is requesting flexibility at this stage of the design process. The final material selection will be decided through ongoing detailed design development.

Staff Assessment: Staff are satisfied that proposed materials are maintained or substituted with those of a quality consistent with those proposed at the Rezoning stage. Where materials are labeled inconsistently between the drawings, Staff are seeking clarification.

The provision of representative details for particular building conditions and transitions is sought in Standard Condition A.1.13.

Rezoning Condition 6: Design development at the building corners where canted over the sidewalk to ensure a pedestrian clearance of 3.1 m (10 ft.).

Note to applicant: Height clearance is to be provided above a minimum 2.4 m (8 ft.) wide sidewalk.

Applicant Response: Please refer to page 35 in this book for an illustration of the overhead structures at Rolston and Continental Streets. Please also refer to the architectural plans in the appendix of this book.

Staff Assessment: This condition has been satisfied. Given the proposed geometry of the building and sidewalk widths at the time of DE submission, the required clearance has been provided. Standard Condition A.1.14 is to ensure that this clearance is maintained through the entire design process.

Rezoning Condition 8: Design development to the loading areas to improve the public realm interface, and pedestrian and grade conflicts.

Note to applicant: Consideration may be given to on-street loading, subject to an approved Loading Management plan (LMP). Also see Engineering condition (c) 3.

Applicant Response: Loading in Sub-area C is limited to two loading bays. Loading cannot be reduced further without significantly compromising the viability of the retail area.

Staff Assessment: Staff are seeking further design development to enhance the at-grade frontage at the opening to the loading space. Recommended Condition 1.4.

Rezoning Condition 9: Design development to maintain and enhance the green roof treatments indicated on the canted roof slope(s).

Applicant Response: Green roofs are to be maintained.

Staff Assessment: This condition has been satisfied. The grazing lighting across the green roofs as proposed in the Urban Design Panel submission material is supported by staff as an effective enhancement. Standard Condition A.1.17 seeks the inclusion of this lighting approach into the full drawing set.

Rezoning Condition 10: Design development to the public realm interface to ensure an active, engaged interface between the sidewalk elevations and retail activities, implementing stepped slabs within the buildings.

Note to applicant: Design development should configure the public realm to accommodate level areas for active outdoor use. Depressed entries located within the public realm are to be avoided as these entries should be configured and located within the building.

Applicant Response: The current plan, arrived at through consultation with city staff, proposes a series of level areas along Continental street for patio seating and kiosks. Where recessed entries occur at retail frontages, steps have been "feathered" into the landscape to eliminate the need for retaining walls. Under the Granville Bridge, proposed events have been limited to those that can work with the proposed street grade. (See the programming strategy in the appendix of this book) The design team will continue to work with city staff through the application process to further refine these solutions.

Staff Assessment: Entries along the east side of Granville Street, as proposed, require exterior steps to accommodate grade changes of 0.75 m (2.5 ft.) or greater. Staff are seeking a reduction in these vertical transitions that are occurring within the Public Realm. The rezoning condition is carried over

with specific design performance criteria. Standard Condition A.2.13.

Rezoning Condition 11: Design development to provide weather protection at major entry points.

Note to applicant: Employ glass canopies or similar devices to ensure maximum daylight reaches the street levels.

Applicant Response: Canopies are being proposed at the northeast entry of sub-lot C, the north west entry of sub lot B, and the food store entrance at the north end of sub-lot A. Please refer to page 48 & 49 The residential tower also provides weather protection at the main entry.

Staff Assessment: An opaque weather protection has been provided at the building's northerly retail entry. Weather protection is provided to the southerly retail entry by virtue of the building's geometry. Recommended Condition 1.5 seeks additional weather protection at the building's two major office entries.

Rezoning Condition 12: Design development to the ground-oriented storefront, display and weather protection systems to ensure variety and pedestrian interest in the expression of tenant frontages.

Applicant Response: A number of options are currently being explored for retail frontages and will continue to evolve through detailed design development. The final design will depend on the specific tenants.

Staff Assessment: The development permit application contains no information that directly responds to this condition. The condition is carried through. Staff anticipate that the ground-oriented storefront, display and weather protection systems may, in part, be integrated with the signage strategy. Refer to Recommended Condition 1.6 and Standard Condition A.1.15.

Rezoning Condition 13: Provision of a conceptual signage strategy to ensure a well-conceived and disciplined approach to announcing tenancy.

Note to applicant: The strategy should confirm general signage hierarchy, location and type. Back-lit box signs are not supported.

Applicant Response: Please refer to the signage strategy on page 55 of this book.

Staff Assessment: The condition has been satisfied. The conceptual strategy indicates large areas of building façade for signage that is integrated with the architecture. Design development and signage details for further description of this concept are sought in Standard Condition A.1.15.

- **Response to Landscape Conditions of Approval:**

Rezoning Condition 17: Provision of a diversity of landscape experiences and spaces to improve the livability of building occupants and benefit the pedestrian experience.

Note to applicant: This landscape experience could include a variety of outdoor spaces on the roof decks of the three low-rise buildings (i.e. the buildings in sub-area B and 1410 Granville Street, and the podium of the sub-area A building). In addition to the extensive green roof cover, areas of intensive green roof space should be included, including opportunities for urban agriculture and outdoor amenity decks for social gatherings.

Applicant Response: A variety of landscape experiences are provided across the project from the extensive green roof 'meadows' on the podium roofs, to two wood lined office courtyards, residential

terrace and highly urban ground plane. The residential terrace provides a children's play zone within a raised planted mound of edible landscape including fruit producing trees, berry bushes and fragrant groundcovers. Adjacent is an open area for informal gatherings. The ground plane is designed to be a shared condition between vehicular and pedestrian traffic- and detailed as a continuous carpet of high quality materials that is able to accommodate special programmed events. Combined with the public art, artistic lighting of the bridge structure, and a rotating selection of curated plantings, the under-the-bridge environment will be a highly iconic, visually compelling place to be.

Staff Assessment: This condition has been partially satisfied. Additional requirements regarding lighting is requested. Refer to Standard Conditions A.1.17.

Rezoning Condition 20: Provision of a full landscape plan at the time of development permit application. The landscape plan should illustrate proposed plant materials (with common and botanical names, plant sizes and quantities), paving, walls, fences, light fixtures, site grading and other landscape features. Plant material should be listed in a plant list that is clearly keyed to the landscape plan. The landscape plan should be a minimum 1:100 or 1/8" scale.

Applicant Response: See landscape drawings in the appendix of this book.

Staff Assessment: This condition has been partially satisfied. Staff is aware that there are on-going changes to the Public Realm. Street level plans reflecting these plans are requested. Refer to Recommended Condition A.1.3.

Rezoning Condition 21: Provision of large scale sections (1/4"=1' or 1:50) at the time of full development permit application. The sections should illustrate the public realm lanes, including lighting, bollard location, sidewalk width, curbs and any street furniture.

Applicant Response: See landscape drawings in the appendix of this book.

Staff Assessment: This condition has been partially satisfied. Standard Condition A.1.22 requests for additional planters and street furniture details to be provided.

- **Response to Engineering Conditions of Approval:**

Rezoning Condition 30: Provision of revised landscape plans to the satisfaction of the General Manager of Engineering Services.

Note to applicant: Pursuant to the applicable policies and guidelines the public realm should achieve a high quality design while meeting requirements for safety and accessibility. Landscape plans must consider the following:

a. *Sidewalks should be constructed of smooth materials such as concrete that meet City standard widths respective to the adjacent use. Extended lengths of pavers create uncomfortable surfaces for some pedestrians however use of unit pavers may be appropriate in accent areas that are not within the primary sidewalk. The use of decorative concrete including coloured, saw-cut or stamped concrete is encouraged to achieve high quality design and meet accessibly requirements while minimizing maintenance costs.*

b. *A curb and gutter system should be used to separate the driving and walking surfaces. The use of lower 10 cm (4 in.) standard curb may be a suitable alternative. The proposed flush treatment and amount of bollards in lieu of curbs is not supportable.*

c. Driving and parking surfaces must be constructed of durable materials, such as concrete or asphalt, that are able to accommodate the anticipated vehicle and truck movements. Unit pavers are not supportable. Decorative concrete may extend into the driving areas to achieve a cohesive plaza design.

d. Standard curb ramps at all pedestrian crossings to facilitate and clarify safe crossing points for pedestrians of all ages and abilities.

e. Public realm street-lighting including bridge/pier up-lighting is supportable subject to review of further information.

f. Trench drains should be replaced with grading and standard catch basins to collect storm water runoff. Runoff should be directed away from bridge piers.

g. More detail is required prior to accepting plantings around the bridge piers. Any plantings must be planted in shallow soil depth, not interfere with the bridge piers. If climbing ivy is desirable, it may be planted on screens that are offset from the piers and are easily removable for maintenance and cleaning.

Applicant Response: See landscape plan. Paving across the public realm is conceived of as one unified carpet, and carries across both sidewalk and street. The overall material is cast in place concrete, with thin bands of white split-face granite inset with black basalt cobbles. The overall effect is one of a field of pixilation, which serves to counter the monolithic scale and materiality of the concrete bridge. Stone paver accent bands will be mortar set in concrete to handle vehicular loads. Stairs will be detailed with basalt sawn slab risers. The overall percentage of pavers within the concrete field is 10-12%.

A 4" height curb and gutter system is used to separate the driving and walking surfaces. Standard curb ramps have been included. Catch Basins and grading have replaced the previously shown trench drains.

See lighting plan. The lighting strategy includes 3 uplights and 1 pedestrian light per bridge pier, LED lighting to uplight street furnishings, and LED pin lights embedded within the overall groundplane.

There will be no planting below the bridge due to extremely low light levels.

Staff Assessment: This condition has been partially met. The submission generally meets the high-level requirements of the urban design objectives of this unique space. However, the street treatment needs to be revised such that the northern portion of Granville Street has a higher level of surface treatment than Continental and Rolston Streets. Conversely, surface treatment should be simplified on Continental and Rolston Streets. Stone paving bands should not be used to delineate parking stalls. Street and pedestrian lighting is to meet current City standards. Architectural lighting (LED pin lights in ground plane, light boxes, etc.) will require an Encroachment Agreement to the satisfaction of the General Manager of Engineering Services and Director of Legal Services, with maintenance to be the responsibility of the owner. Refer to Standard Condition A.2.13.

● **Sustainability:**

This re-zoned site is subject to the Rezoning Policy for Greener Buildings, the Rezoning Policy for Greener Larger Sites and the sustainability expectations in the General Policy for Higher Buildings.

The Rezoning Policy for Greener Buildings requires that the buildings achieve a minimum LEED Gold, with minimum required target points for energy performance (6), water efficiency (1) and storm water

management (1). The policy also requires the project be registered with the Canada Green Building Council. The application includes a preliminary LEED scorecard, which conforms to the Rezoning policy, indicating that the project could attain 66 points, and therefore, would be eligible for a LEED Gold rating. Staff recommend that the features needed to accomplish these points be more completely noted on the drawings in Standard Condition A.1.18, including clarity on the presence of photovoltaic panel arrays on the roof of the tower which are inconsistently represented among the materials submitted at time of application.

This site is also subject to the Rezoning Policy for Larger Greener Sites as the new development parcels exceed the 2-acre threshold for policy application. The policy is designed to achieve higher sustainability outcomes on site developments through the exploration and implementation of district and renewable energy opportunities, sustainable site design, green mobility strategies, sustainable rainwater management, solid waste diversion strategies; and, strategies to ensure housing affordability & housing mix. Staff are requiring further measures be provided through the Green Mobility Strategy to reduce the number of vehicle trips to the site (see Standard Condition A.2.12). Staff are also requiring the provision of a Sustainable Rainwater Management Plan and Solid Waste Strategy Plan (see Standard Conditions A.2.16 and A.2.17).

The General Policy for Higher Buildings requires that the development achieve specific energy consumption reduction targets and that the development demonstrate leadership and advances in sustainable design and energy consumption (to achieve a 40-50% reduction in energy consumption from 2010 levels that also requires a maximum energy use intensity of 115 kWhr/m^2/year for the residential portion and 122 kWhr/m^2/year for the office portion of the development). This was a condition of the rezoning that is being carried over as part of the development permit. Standard Condition A.1.19 seeks confirmation that these targets will be maintained. See also commentary under the General Policy for Higher Buildings.

At the special High Building Review, the design team noted that the project will target LEED Platinum certification. Currently, the development permit application proposes that it can achieve LEED Gold.

● Other issues

Public Realm interface
Staff are satisfied that the changes in grade occurring within the Public Realm on Granville Street at the Retail entry and the Office entry are sufficiently minor. Standard Condition A.1.10 seeks to ensure that changes in grade not exceeding 0.6 m (2 ft.) are maintained throughout the design development process.

● Conclusion:
The proposal for 1462 Granville Street together with concurrent proposals for 1461 Granville Street and 1480 Howe Street comprise a new neighbourhood commercial centre that demonstrates a significant and recognizable new benchmark for architectural creativity and an enhanced Public Realm.

Staff recommend approval of this carefully-considered proposal subject to further design development, particularly to the interface between certain building frontages and the Public Realm.

URBAN DESIGN PANEL

The Urban Design Panel reviewed this application on February 26, 2014, and provided the following comments:

EVALUATION: SUPPORT (6-0)

- **Introduction:** Patrick O'Sullivan, Development Planner, introduced the proposal for three development permit applications on three sites following rezoning. The rezoning was approved by Council at a public hearing on October 24, 2013. Mr. O'Sullivan mentioned that the proposal had been to the Panel twice before and had received general support for the heights, from, density and uses. He added that this review was for further comment on the detailed design aspects and the treatment of the public realm. Because of the scope and size of the proposal comments related to the public art, configuration of the Granville Bridge greenway and programing beneath the bridge are not part of this review. Although important to the development, a separate process will take place in terms of how that will be delivered and executed. Mr. O'Sullivan mentioned that the materials for the tower and podiums will be cool-toned metal panel, stainless steel or zinc with warmer metal accent panels on the tower balconies. He also described the tower façade system noting the expression is based on the notion of a repeated open-box balcony form that will carry through the entire project. As well the podium façade system will repeat the pattern but in a slightly different design and will use wood spandrel on the inner facades.

  Advice from the Panel on this application is sought on the following:
  - The overall design quality of the proposal and as well as the detailed design as it relates to the building surfaces, material selection and application and the architectural gestures. (Requirement for the rezoning is to maintain the zinc cladding, triple glazing, thermally enhanced slab construction, glazed balustrades, sandstone paving, ipe wood decking and basalt steps).
  - Is further design development to the treatment of the public realm along Howe Street advised to achieve the following:
    - To engage active uses along the Howe Street sidewalk; comment on the placement of the skylights in light of this objective.
    - To improve the relationship of the CRUs at the base of the tower to the grade of the sidewalk to enhance visibility and access to light for those retail units.
  - Should the triangular podium buildings be splayed further from the edges of the Granville bridge deck to facilitate greater quality of daylight on Granville Street under the bridge?
  - Is further design development advised to reduce the depth of the stepped grade transition at sidewalks, i.e. should grade changes in the pedestrian realm be made more gradual by accommodating transition within buildings?
  - Do the Pacific Street grade-level entries to the terraced courtyard plazas above offer sufficient identification/announcement to those public spaces? Is further attention to CPTED and safety issues at the interiors of the steps advisable?
  - The overall landscape and lighting design as it relates to the public realm: courtyard spaces, rooftop spaces, surface treatments, sidewalk seating, vehicle spaces and access, and under-bridge conditions.

  Mr. O'Sullivan took questions from the Panel.

- **Applicant's Introductory Comments**: Kelty McKinnon, Landscape Architect, described the plans for the landscaping and mentioned that from the start they wanted to enhance and play up the underside of the bridge. The idea from the public realm point of view is to play up the ground plane with site furnishings, lighting, architecture, public art and a signage strategy. The streetscapes are adhering to the basic guidelines and are adding a double row of street trees along Pacific Street. There is a bikeway that goes down Rolston Street so they will be adding in asphalt pathways. Howe Street is the standard streetscape treatment but they will be adding in street trees. Ms. McKinnon described the paving patterns in the spaces and mentioned that they have created a primary concrete surface with some liner banding of stone and basalt. There is a slope across the site so in order to deal with that they have created terracing spaces for tables and chairs. They have featured the stairs to make a smoother connection with the sidewalk and additional spaces to sit. There are a variety of spaces under the bridge including five retail kiosks and at the base of the building there is a terrace element for seating. Bicycle parking will also be

included. The lighting strategy is still being developed but it will be to enhance the overhead structures of the bridge as well as delineating the site furnishings. There are some semi-public courtyards that are predominately wood that will serve the people who work within the buildings but are accessible for the public. There are residential terraces with play area for children and edible landscaping. The dominant feature of the landscaping is the green roof expression.

Reid Shier described the public art strategy. The underside of the bridge has two significant public art works that will be installed. One of the art pieces will be backlit photographic panels filled with imagery produced by students at Emily Carr University. The other piece over Beach Avenue is a large kinetic sculpture, a spinning chandelier based on the work of artist Rodney Graham.

Bruce Haden, Architect, further described the proposal and noted that that there is an important aspect around the public realm which is the two way car movement on Continental Street. He mentioned that one of their concerns was the building edge. They want to have a dramatic variety of buildings facades. As the retailers come on board they will be able to work individually with them to perfect the facades. They aren't sure what they will look like at this point but he added that he thought it was essential for the success of the project. As well, signage and graphics will be important and individual tenants will have the opportunity express their identity. The material strategy for the tower is two-toned as a contrast to the overall of the size and scale of the tower. They have upgraded from zinc to stainless steel as they had some concerns about maintenance. The balcony infills will be copper that will keep its brightness. Mr. Haden said they have looked at the top of tower and are comfortable with the way it terminates. From a sustainability perspective they are still targeting LEED™ Platinum for the tower.

The applicant team took questions from the Panel.

- **Panel's Consensus on Key Aspects Needing Improvement:**

  - Design development to improve the Howe Street frontage;
  - Design development to improve the expression of the skylights in the Howe Street sidewalk;
  - Design development to improve the ground plane in relation to the tower base on the west side;
  - Consider adding rain protection around the buildings;
  - Design development to improve the identity of the entrances to the courtyards;
  - Design development to improve the connection to the Granville Street bridge;
  - Design development to remove the curb cuts;
  - Consider placing the chandelier elsewhere in the project.

- **Related Commentary:** The Panel supported the proposal and thought it was a creative project.

  The Panel supported the overall design quality of the proposal and as well as the detailed design as it relates to the building surfaces, material selection and application and the architectural gestures. They thought it was a positive treatment of the bridge head and that the sidewalk under the bridge was much improved. Some Panel members thought the Howe Street frontage could be improved, made more functional, as well as better contribute to the neighbourhood to the west. They felt there could be a café or something that would articulate the street. As well they wanted to see the retaining wall at the tower interface improved. Most of the Panel thought the skylight expression could also be improved.

  The Panel thought the feathering of the stepping in the sidewalks at major entries and the manner in which the ground plane interacts with the base of the building didn't offer opportunities for patios and more functional uses.

The Panel supported the material palette and supported change from the zinc cladding to stainless steel. There was some concern with the wood deck as some members thought it may be hard to maintain and slippery in wet weather. The Panel also thought there needed to be rain protection on the buildings but that it could be done discreetly.

The Panel thought the public realm was supportable but was the most challenged because of the connection with the Granville Street Bridge. A couple of Panel members noted that the entrances to the raised courtyard were not well expressed for public access. As well they thought there was an awkward connection to the bridge deck level from these spaces. One Panel member thought the trees could be separated or a paving pattern could be created that would announce the grade level entrances more legibly.

Most of the Panel thought that the curb cuts were problematic and encouraged Engineering Services to consider eliminating them. They wanted to see the ground plane be created as a people place that would as engaging as possible. As well, the Panel supported the 2-way street system proposed by the applicant.

The Panel supported the inclusion of public art in the project but thought inclusion of the chandelier as an art piece was a great idea, they believed that it might be in the wrong place. They wanted to see it to be somewhere more visible or in a location where people could get closer to it and perhaps be able to interact with it.

The Panel agreed that it was important to create a public place under the bridge and to make it a celebratory space. They thought this would be something very different from any other place in the city.

- **Applicant's Response:** Mr. Haden agreed that more work needs to be done on the courtyards. He noted that it is an odd site and not really a pedestrian route. The retail concentration will be mostly on Continental Street. As for weather protection, Mr. Haden thought it would be a mistake to default to the standard condition as they are trying to make a space that is distinctive. As well people will be able to dash under the bridge to stay dry.

ENGINEERING SERVICES

The road network that is being delivered with this development is designed to minimize impacts on the surrounding neighbourhood. The site will be accessed directly by either Pacific Street or Beach Avenue. Provisions of a new signal at Rolston and Pacific Streets and upgrades to the diverter on Beach Avenue are both designed to minimize the amount of circulation through adjacent neighbourhoods. Two new diagonal streets will be constructed under the west and east ramps, as extensions of Continental and Rolston Streets, respectively. Staff recommended the extensions also be named Continental and Rolston Streets at the Civic Asset Naming Committee meeting of March 3, 2014 which was approved unanimously.

At the time of rezoning, the two new diagonal streets (Continental and Rolston) were intended to accommodate two-way traffic. This was a change from the original design concept for area approved in the Under the Granville Bridge Neighbourhood Commercial Centre Policies and Guidelines, which envisioned one-way streets on the diagonals. Staff are comfortable that one-way traffic flow provides reasonable access, however the applicant has indicated that they feel that two-way traffic flow is important to the development. Staff supports an attempt to achieve two-way streets, however through the subsequent design process it has become clear that the west diagonal street (Continental Street) is more highly constrained than previously anticipated by the existing bridge piers and the

proposed building face of 1461 Granville Street. This is creating design challenges in achieving reasonable widths for sidewalks and the roadway.

The minimum drivable width required for emergency vehicle response is 6.0 m (19.7 ft.), however Vancouver Fire and Rescue Services has indicated that 5.5 m (18 ft.) pinch points at the columns can be accepted. Even with this reduced roadway width, the resulting design only leaves 2.8 m (9.2 ft.) for sidewalk (from face of curb to building face) on the east side of the street – much less than the ideal width for sidewalks in a downtown commercial environment, which are typically at least 5 m (16.4 ft.) wide. The 2.8 m (9.2 ft.) sidewalk is a significant compromise in with is expected to be a very important pedestrian zone. Given the challenging nature of the site and the unique urban environment, Staff feels that this width could be accepted, but would be very concerned about narrowing the sidewalk any further and ideally would want to see additional width for the sidewalk.

Staff believes that the proposed 5.5 m (18 ft.) street width at the columns will function for two-way traffic flow given the nature of the street and area, despite it being approximately 0.6 m (1.97 ft.) narrower that the minimum 6.1m (20 ft.) that would typically be provided. There is a risk, though, that the constrained width will require that the street be converted to one-way (northbound) operation in the future. This risk would be significantly reduced if the building face at 1461 Granville Street were set back by an additional 0.6 m (1.97 ft.) to create a 6.1 m (20 ft.) roadway.

In order to improve access for pedestrians and cyclists, the applicant will be expected to provide upgrades to the existing signal at Howe Street and Pacific Street, a new separated bike facility on Rolston Street and barrier-free pedestrian connections from Granville Street Bridge to street level (elevator/walkway/stairs) (refer to Recommended Condition 1.1 and Standard Condition A.2.2). Staff are also requiring further measures be provided through the Green Mobility Strategy to reduce the number of vehicle trips to the site (refer to Standard Condition A.2.12).

The applicant has proposed a Public Realm landscape and lighting design that is intended to recognize this unique space and be celebratory in nature. Staff continues to work with the applicant to achieve the design objectives of the project while meeting performance requirements related to accessibility, longevity, maintenance, and legibility for all users. If needed, Staff may consider higher treatments under maintenance agreement with the owner.

The site is required to meet the number of spaces for parking as required by the Parking By-Law (refer to Standard Condition A.1.3). Staff are prepared to accept the loading supply proposed by the Transportation Assessment which proposes a reduction from By-Law requirements. Further, Staff are also prepared to consider relocating some of the loading for this parcel (1461 Granville Street) on-street in order to achieve the following:

- Minimizing parking entry width and therefore disruption to the sidewalk; and
- Minimizing maneuvering of vehicles on public realm, particularly across pedestrian areas.

The applicant is required to submit an updated Loading Management Plan showing how on-street loading could be accommodated, which will be reviewed by Staff (refer to Standard Condition A.2.11).

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The proposal's form, materiality and configuration has generally been designed to comply with CPTED requirements. However, implications of the public access from the Granville Street Bridge through to the semi-private courtyards need to be reviewed by staff from a CPTED perspective. Standard Condition A.1.25 seeks an operations management plan of the courtyard spaces so the around-the-clock use and security can be understood.

LANDSCAPE

The recommendations of Landscape are contained in the prior-to conditions notes in Appendix A attached to this report.

ENVIRONMENTAL CONTAMINATION TEAM

The recommendations of Environmental Contamination Team are contained in the prior-to conditions notes in Appendix A attached to this report.

NOTIFICATION

Three site signs were placed and their installation verified on February 25, 2014. On February 24, 2014, 4767 notification postcards were sent to neighbouring property owners advising them of the three development applications (1480 Howe Street, 1461 Granville Street and 1462 Granville Street), and offering additional information on the city's website.

To date, a total of 9 written responses have been received. One of the comments indicated support for the proposal. Two respondents requested additional information. Six of the respondents, opposed the proposal. Comments received dealt with the all three sites as a whole.

Comments received from the notification are summarized below:

Height: Several respondents indicated concerns that the height of the buildings would cast shadows on May & Lorne Brown Park located on Beach Avenue and neighbouring buildings.

> **Staff Response:** Shadowing impacts were carefully assessed by the Higher Building process of the rezoning stage. By virtue of the site's identification as a location for a 129.5 m (425 ft.) high tower, the High Building Policy (1997, last amended 2011) has long anticipated that there would be a shadow impact on May and Lorne Brown Park from 10 am till noon measured at the Equinox.
>
> Shadow analysis included with the development application shows that the shadow of the tower clears the park by 12 noon.

Densification: One respondent commented on the increase in density in the downtown. She indicated that she would like to see the increase of density to occur gradually and at a rate that respects the livability, proportions and character of the existing neighbourhood. Other densification concerns mentioned include increase crime and inadequate access to schooling.

> **Staff Response:** Existing policies, the Granville Slopes Policies (1989, last Amended 1993) and the Under the Granville Bridge Neighbourhood Commercial Centre Policies and Guidelines (2007), together anticipated this precinct to become a neighbourhood consisting of towers linked to lower residential forms and a locally-serving commercial node to serve the established and emerging nearby residential base.
>
> The proposed forms of building mass at grade and the configuration of building uses are well-considered from the perspective of crime prevention. Additional CPTED commentary is provided in this report.

Design: One respondent wanted to see the incorporation of different materials in the buildings.

> **Staff Response:** The proposal satisfies conditions of the rezoning requiring high quality materials throughout the project including triple glazing, cool and warm toned metal panel systems and ipe wood environments to the semi-private courtyards. The proposal demonstrates sophisticated building facades using durable materials. The overall composition is strong in its purity and simplicity of its architectural expression.

Traffic: Several respondents were concerned with the lack of parking provided on site and the potential for increased traffic in this already congested area.

> **Staff Response:** The parking provided on site will meet the current City parking bylaw. The street design for the site is intended to minimize traffic impacts to the surrounding neighbourhood. The applicant is required to fund improvements to the existing traffic signal at Pacific Street and Howe Street and install a new signal on Pacific Street at Rolston Street, which should improve traffic movement. The existing traffic diverter at Beach Avenue and Granville Street is also expected to be improved.
>
> The applicant is also required to deliver a Green Mobility Strategy which seeks to reduce private automobile trips. See Standard Condition A.2.12.

DEVELOPMENT PERMIT STAFF COMMITTEE COMMENTS:

The Staff Committee has considered the approval sought by this application and concluded that with respect to the Zoning and Development By-law it requires decisions by both the Development Permit Board and the Director of Planning.

With respect to the Parking By-law, the Staff Committee has considered the approval sought by this application and concluded that it seeks a relaxation of loading. The Development Permit Staff Committee has considered this application and supports the proposal with the conditions contained in this report.

J. Greer
Chair, Development Permit Staff Committee

P. O'Sullivan
Development Planner

B. Mah
Project Coordinator

Project Facilitator: M. So

DEVELOPMENT PERMIT STAFF COMMITTEE RECOMMENDATIONS

The following is a list of conditions that must also be met prior to issuance of the Development Permit.

A.1 Standard Conditions

A.1.1 enactment of the pending CD-1 By-law and approval of the Form of Development by City Council;

A.1.2 compliance with Section 4.1 (Density) of the draft CD-1 By-law;

Note to Applicant: If the storage rooms in the parking level are used by commercial tenants, the floor areas must be included in the summary of commercial floor spaces. Should this increase exceed the maximum floor area allowed, the total floor area must be reduced to comply. Clarify the balcony areas and include in the summary. Show public access / SRW from Granville Street Bridge to the terrace on Level 7 and down to Pacific Street. FSR drawings must be consistent with the set of plans, both sealed and signed. Revised FSR drawings (March 26, 2014) do not match the floor plans. It is recommended that the applicant review the data/formatting of the summary tables with the Project Coordinator.

A.1.3 compliance with Section 4.8.4 (Required Disability Parking Spaces) of the Parking By-law;

Note to Applicant: One additional disability parking space is required, for a total of three.

A.1.4 compliance with Section 6.4 (Class B Bicycle Spaces) of the Parking By-law and provision of a layout of the Class A bicycle spaces in the bicycle room;

Note to Applicant: Provide dimensions on bicycle spaces and maneuvering aisles. Vertical spaces shall be no more than 30% and lockers must be a minimum of 20%. Add note to provide one electrical outlet for every 2 Class A bicycle spaces. Provide a summary of all bicycle spaces with a complete summary in Project Data.

A.1.5 compliance with Section 6.5 (Clothing Lockers) of the Parking By-law;

Note to Applicant: When the number of required Class A bicycle spaces exceeds 3, Section 3.7.4.10 of the Building By-law requires shower and other change facilities.

A.1.6 clarification of all uses as defined under Section 2 (Definitions) of the Zoning and Development By-law;

Note to Applicant: All uses of spaces, rooms and voids should be clearly labeled on all floor plans, including parking plans. Delete all tables and chairs shown on the master site plan (ground level) – a separate application is required for all outdoor patio seating.

A.1.7 clarification of all property lines on the parking and floor plans, including setbacks from the property lines;

A.1.8 details of all parking spaces to comply with the applicable provisions of the Parking By-law, having particular regard to space sizes, maneuvering, height clearances, curbs, etc.;

Note to Applicant: Spaces located next to walls and structure requires extra width. Column sizes, spacing and encroachment into parking spaces may be permitted, subject to compliance with the City Engineer's guidelines. Provide a summary of all parking spaces at each level with a complete summary in Parking Data.

A.1.9 design development to locate, integrate and fully screen any emergency generator, exhaust or intake ventilation, electrical substation and gas meters in a manner that minimizes their visual and acoustic impacts on the building's open space and the Public Realm;

A.1.10 design development to the Public Realm interface to ensure an active, engaged interface between the sidewalk elevations by reducing the depth of the steps required to transition grade changes along Granville Street to a maximum of 0.6 m (2 ft.);

Note to Applicant: Intent is to provide specific guidance to Rezoning Condition 12. Refer to commentary under Other Issues. Design development should configure the Public Realm to accommodate level areas for active outdoor use. Significant grade transitions located within the public realm are to be avoided as these entries should be configured and located within the building by implementing stepped slabs within the building. Refer to Standard Condition A.2.13.

A.1.11 provision of a vertical vent space to accommodate future proposed restaurant exhaust from the commercial level;

Note to Applicant: Intent is to allow for a wider range of uses without requiring the retrofitting of exhaust ducting on the outside of the building.

A.1.12 consistent notation of ipe wood decking to the internal semi-private courtyards throughout the drawing set and finish materials legend;

Note to Applicant: The Landscape Plan indicates ipe decking which is inconsistent with the architectural drawings which indicate western red cedar decking.

A.1.13 provision of details incorporated into the full size drawing set of the following conditions;

- 1:10 section detail through typical basalt steps of the semi-private internal courtyard steps indicating a slip-resistant surface;
- 1:25 typical wall section indicating curtain wall glazing;
- 1:25 podium façade type details;
- 1:10 cross-sectional detail of stepped benches clearly indicating the integrated stone;

A.1.14 confirmation that a pedestrian clearance of 3.1 m (10 ft.). at the building corners where canted over the sidewalk is maintained;

Note to Applicant: Height clearance is to be provided above a minimum 2.4 m (8 ft.) wide sidewalk. This clearance is to be maintained should the dimensions of the sidewalk or the geometry of the building be revised. Provide a dimensioned section/ elevation at the most critical location with gridlines and clearly indicating that the required clearance has been provided.

A.1.15 design development to the illuminated signage integrated with the architecture and illuminated fascia and blade signage to the building's facades;

Note to Applicant: Provision of representational signage details at a scale of 1:50 or larger depicting sample signage incorporated into the full size drawing set is required. The requested signage details are for urban design review purposes. A separate sign permit will be required.

A.1.16 provision of canopy details incorporated into the full size drawing set;

Note to Applicant: Refer to Standard Condition A.2.18 for Engineer's canopy application requirements.

A.1.17 design development to maintain the variety and high quality of lighting indicated in the development permit Urban Design Panel submission materials including light grazing green roofs, luminous poles, illuminated pathways, catenary lighting and side step lighting at courtyards, and luminous furniture;

A.1.18 Identification on the plans and elevations of the built elements contributing to the building's sustainability performance in achieving LEED Gold Equivalency, including at least three optimize energy points, one water efficiency point and one storm water point;

Note to Applicant: Provide a LEED checklist conforming LEED Gold equivalency and a detailed written description of how the above noted points have achieved with reference to specific building features in the development. Both the checklist and description should be incorporated into the approved drawing set.

A.1.19 confirmation that the proposed buildings will achieve a maximum energy use intensity of 115 kWhr/m2/year for the residential portion and 122 kWhr/m2/year for the office portion of the development;

A.1.20 notations on plans stating:

"The design of the bicycle spaces (including bicycle rooms, compounds, lockers and/or racks) regarding safety and security measures shall be in accordance with the relevant provisions of Section 6 of the Parking By-law";

"The design of the parking structure regarding safety and security measures shall be in accordance with Section 4.13 of the Parking By-law"; and

"Mechanical equipment (ventilators, generators, compactors and exhaust systems) will be designed and located to minimize the noise impact on the neighbourhood and to comply with Noise By-law #6555."

Standard Landscape Conditions

A.1.21 provision of large scale sections at minimum 1/4" = 1 foot (typical) through all planted areas;

Note to Applicant: sections should include the soil profile, root ball, voiding, the planter and the slab/ retaining walls. Planting conditions should meet or exceed the latest BCLNA Landscape Standard.

A.1.22 provision of large scale details (sections/elevations) for all site furniture and movable planters;

Note to Applicant: details should include materials, color, dimensions and brand name (where applicable).

A.1.23 provision of new street trees adjacent to the development site, to be confirmed prior to the issuance of the building permit.

Note to Applicant: Contact Eileen Curran, Streets Engineering, (604.871.6131) to confirm tree planting locations and Park Board, (604.257.8587 or 311) for tree species selection and planting requirements. Provide a notation on the plan, "Final spacing, quantity and tree species to the satisfaction of the General Manager of Engineering Services. New trees must be of good standard, minimum 6 cm caliper, and installed with approved root barriers, tree guards and appropriate soil. Root barriers shall be 2.5 m (8 ft.) long and 0.45 m (18 inches) in depth.

Planting depth of root ball must be below sidewalk grade. Call Park Board for inspection after tree planting completion".

A.1.24 substitution of birch tree species;

Note to Applicant: Refer to sheet L2.1 courtyard Level 5**.** Birch trees are highly susceptible to bronze birch borer, endemic in the lower mainland. A disease resistant tree species should be specified.

Crime Prevention Through Environmental Design (CPTED)

A.1.25 provision of an operations management plan for the use and security of the semi-private internal courtyard spaces, with particular reference to CPTED measures to discourage off-hours mischief; and

A.1.26 design development to respond to CPTED principles, having particular regards for:
(a) theft in the underground parking;
(b) break and enter;
(c) mail theft; and
(d) mischief in alcove and vandalism, such as graffiti.

Note to Applicant: Building features proposed in response to this condition should be noted on the plans and elevations. Consider use of a legend or key to features on the drawings. Consultation with the social housing operators and Park Board staff with experience of the more specific CPTED risks in this area is recommended, and should be included the response to this condition.

A.2 Standard Engineering Conditions

A.2.1 clearly illustrate geometric designs for Pacific Street, Howe Street, Beach Avenue, Granville Street and for the new diagonal streets under the Granville Bridge ramps to the satisfaction of the General Manager of Engineering Services on all plans;

A.2.2 provision of barrier-free public access (elevator) on drawings that connects the Granville Bridge deck elevation with the Granville Street elevation below;

Note to Applicant: Access is required from both east and west side of Granville Street Bridge (i.e. through 1461 and 1462 Granville Street). Proposed pedestrian access from bridge deck to 1461 Granville Street shows a slope of 6.5 percent. The City's maximum allowable slope for an accessible connection is 5 percent.

A.2.3 arrangements shall be made for a Statutory Right-of-Way (SRW) agreement over the northerly 3.0 m (9.84 ft.) of the resultant Lots D and 2 for a non-exclusive right of way for access purposes as if the right of way area were City sidewalk;

A.2.4 arrangements shall be made for SRW volumetric agreements for public access, with or without vehicles as if dedicated street for those portions of Lot 2 north of the bridge ramps which are productions of Rolston & Continental Streets;

Note to Applicant: There must be a minimum of 7.62 m (25 ft.) from the ground to the encroaching building structure overhead.

A.2.5 arrangements shall be made for a Statutory Right-of-Way (SRW) agreement over those portions of the subject lots required for infrastructure to facilitate event programming, including electricity, water, storage, and public washrooms;

Note to Applicant: See Standard Condition A.2.13.

A.2.6 provision of a traffic warning light system in building 4 as a one-way 3.66 m (12 ft.) wide ramp is being provided;

Note to Applicant: A qualified transportation engineer whose engineering firm specializes in signal design should provide details of the warning system and note the location of all lights, signs and detection devices on the plans.

A.2.7 provision of an alignment of the two parking ramps;

A.2.8 provision of a plan showing the design elevations on both sides of the ramp at all breakpoints and within the parking and loading areas to be able to calculate slopes and cross falls;

Note to Applicant: Notation of the length of ramp at the specified slope should also be provided.

A.2.9 provision of a section drawing showing elevations, vertical clearances, and security gates for the main ramp;

A.2.10 provision of loading and garbage pick-up;

Note to Applicant: Staff are prepared to consider some on-street loading for 1461 and 1462 Granville Street, as a way to reduce the width of the parkade access and avoid loading vehicles having to back over sidewalks. Garbage pick-up must be accommodated on site.

A.2.11 provision of an updated Loading Management Plan to the satisfaction of the General Manager of Engineering Services and arrangements to secure ongoing loading operations;

A.2.12 provision of an updated Green Mobility Strategy to the satisfaction of the General Manager of Engineering Services and arrangements to secure on and off site measures;

Note to Applicant: The proposed Green Mobility Strategy doesn't provide sufficient improvements beyond requirements. Items provided as a Public Benefit (eg. Street construction) are not counted as Green Mobility Strategy items. Provision of Bridge connections and public elevators between the Bridge and lower level and provision of car share spaces would satisfy this requirement.

A.2.13 provision of a separate application to the General Manager of Engineering Services for street trees and or sidewalk improvements is required. Please add the following statement to the landscape plan and provide a revised drawing directly to Engineering for records:

a) "sidewalks are to be reconstructed from curb to property line fully at the applicant's expense"; and
b) "This plan is not for construction of any public property facilities, prior to the start of any construction on public property a landscape plan must be submitted to Engineering Services and be issued as "For construction" 8 week notice is requested. No work on public property may begin until plans receive "for construction" approval and related permits are issued. Please contact Frank Battista at 604-873-7317 or Kevin Cavell at 604-873-7773 for details".

Note to Applicant:

- Move proposed second row of trees on Pacific Street to private property;
- Street treatment to be revised such that the northern portion of Granville Street has a higher level of surface treatment than Continental and Rolston Streets. Surface treatment should be simplified on Continental and Rolston Streets. Stone paving bands should not be used to delineate parking stalls;
- Street and pedestrian lighting to meet current City standards. Architectural lighting (up-lighting, light boxes, etc.) will require an Encroachment Agreement to the satisfaction of the General Manager of Engineering Services and Director of Legal Services, with maintenance to be the responsibility of the commercial property owner;
- Provision of infrastructure to facilitate event programming, including electricity, water, storage, and accessibility to public washrooms. Refer to Standard Condition A.2.5 to secure public access;
- Minimize the amount and frequency of steps within 3 m (9.5 ft.) from the edge of any bridge structure (including overhead) to allow easy maintenance access for workers, machinery, and vehicles; and
- Provision of bridge pier protection measures such as high visibility markers and demonstration that bollards may be installed if required to the satisfaction of the General Manager of Engineering Services

A.2.14 provision of a shoring plan to the satisfaction of the General Manager of Engineering Services to be submitted by a Geotechnical Engineer detailing how the bridge footings will be protected during excavation and construction;

A.2.15 provision of an acceptable Bridge Monitoring Strategy to track movements during excavation and construction, establish reporting thresholds and stop work thresholds, certified by a Bridge Engineer and to the satisfaction of the General Manager of Engineering Services;

Note to Applicant: The applicant is responsible at all times to ensure the safety of the bridge and that the Bridge Monitoring Strategy is being carried out. The applicant is to provide a $10,000 deposit for the City to retain an independent Bridge or Geotechnical Engineer to review the monitoring strategy and the results of the monitoring during the critical phases of construction.

A.2.16 provision of a Sustainable Rainwater Management Plan that utilizes sustainable strategies to allow for infiltration, retention, treatment and utilization of rainwater where applicable and appropriate on site;

Note to Applicant: The plan should demonstrate the volume of the post development runoff not exceeding the former use of the site and that it is treated for 85% TSS removal before discharging into the City's stormwater infrastructure.

A.2.17 provision of a Solid Waste Diversion Strategy that addresses waste diversion in all solid waste generating activities within the complex; and

Note to Applicant: The Strategy must identify/provide space, infrastructure and an operational approach to divert organics and recyclables from the waste stream, and minimize the vehicle trips required for collection, to the satisfaction of the General Manager of Engineering Services.

A.2.18 provision of a canopy application to the General Manager of Engineering Services is required.

Note to Applicant: Canopies must be demountable and drain internally into the buildings drainage system.

A.3 Standard Licenses & Inspections (Environmental Contamination Team) Conditions:

A.3.1 Submission of the following documentations are required to be submitted prior-to the issuance of the development permit.

a) Ministry of Environment's release for development, zoning, subdivision and demolition permit applications; and

b) The Remediation Agreement is required to be signed and registered at the Land Title Office prior to the release of any permit applications.

Note to Applicant: There will be no occupancy of any buildings or improvements on the site constructed pursuant to this development, until the proponent has obtained one of the following contaminated sites legal instruments, as applicable:

- A Determination that the site is not a contaminated site, or
- A Certificate of Compliance confirming the satisfactory remediation of the site to the applicable land use (Contaminated Sites Regulation – Commercial standards).

B.1 Standard Notes to Applicant

B.1.1 It should be noted that if conditions 1.0 and 2.0 have not been complied with on or before **November 3, 2014**, this Development Application shall be deemed to be refused, unless the date for compliance is first extended by the Director of Planning.

B.1.2 This approval is subject to any change in the Official Development Plan and the Zoning and Development By-law or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the by-law or regulations can be issued.

B.1.3 Revised drawings will not be accepted unless they fulfill all conditions noted above. Further, written explanation describing point-by-point how conditions have been met, must accompany revised drawings. An appointment should be made with the Project Facilitator when the revised drawings are ready for submission.

B.1.4 A new development application will be required for any significant changes other than those required by the above-noted conditions.

B.1.5 This approval does not in any way constitute a representation or warranty that the necessary approval of the form of development or enactment of the rezoning will be granted by Council. All proceedings by the applicant prior to action by Council are therefore at his/her own risk.

B.1.6 All Building permit applications submitted on or after July 1st, 2014 will be reviewed for compliance to the 2014 Vancouver Building By-Law. Submission of most Building Permit applications now requires an appointment. When your Building Permit application is ready, please phone 604-873-7611 to book an appointment for an application intake with the Project Coordinator who will manage your application. Only full and complete applications will be accepted. If you need advice in preparing your application, you may book an enquiry appointment (604-873-7611), or walk into our Enquiry Centre, 2nd floor, East Wing.

B.2 Conditions of Development Permit:

B.2.1 All approved off-street vehicle parking, loading and unloading spaces, and bicycle parking spaces shall be provided in accordance with the relevant requirements of the Parking By-law prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.2 All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings prior to the issuance of any required occupancy permit or any use or occupancy of the proposed development not requiring an occupancy permit and thereafter permanently maintained in good condition.

B.2.3 All approved street trees shall be planted in accordance with the approved drawings within six (6) months of the date of issuance of any required occupancy permit, or any use or occupancy of the proposed development not requiring an occupancy permit, and thereafter permanently maintained in good condition.

B.2.4 In accordance with Protection of Trees By-law Number 9958, the removal and replacement of trees is permitted only as indicated on the approved Development Permit drawings.

B.2.5 All services, including telephone, television cables and electricity, shall be completely underground.

B.2.6 No exposed ductwork shall be permitted on the roof or on the exterior face of the building without first receiving approval of the Director of Planning.

B.2.7 Any phasing of the development, other than that specifically approved, that results in an interruption of continuous construction to completion of the development, will require application to amend the development to determine the interim treatment of the incomplete portions of the site to ensure that the phased development functions are as set out in the approved plans, all to the satisfaction of the Director of Planning.

B.2.8 The issuance of this permit does not warrant compliance with the relevant provisions of the Provincial Health Acts. The owner is responsible for obtaining any approvals required under the Health Acts. For more information on required approvals and how to obtain these, please contact Vancouver Coastal Health at 604-675-3800 or visit their offices located on the 12th floor of 601 West Broadway. Should compliance with the health Acts necessitate changes to this permit and/or approved plans, the owner is responsible for obtaining approval for the changes prior to commencement of any work under this permit. Additional fees may be required to change the plans.

B.2.9 This site is affected by a Development Cost Levy By-law and levies will be required to be paid prior to issuance of Building Permits.

Engineering – Neighbourhood Energy Utility (NEU)

The following comments have been provided by the Neighbourhood Energy Utility Projects (Engineering) and have been identified requirements of the Rezoning approval by council at a Public Hearing on October 24 and 29, 2013, that will need to be satisfied as part of the Building Application process:

Prior to issuance of the Building Permit:

1. Detailed design of the building HVAC and mechanical heating and cooling system, including provisions for energy metering, must be submitted to and approved by the General Manager of Engineering Services prior to issuance of building permit.

2. Confirmation that the building mechanical design meets the required district energy connectivity provisions, to the satisfaction of the General Manager of Engineering Services, shall include completion and certification by the design engineer of record, at the time of building permit application, of the City of Vancouver Confirmation of District Energy Connectivity Requirements letter of assurance. The applicant shall refer to the City of Vancouver's District Energy Connectivity Standards for specific design requirements.

- **Response to Sustainability Conditions of Approval:**

Rezoning Condition 14: Identification on the plans and elevations of the built elements contributing to the buildings' sustainability performance as required by the Green Buildings Policy for Rezonings for LEED® Gold including six optimize energy performance points, one water efficiency point, and one storm water point.

Note to applicant: Provide a LEED® checklist confirming the above and a detailed written description of how the above-noted points have been achieved with reference to specific building features in the development, and notation of the features on the plans and elevations. The checklist and description should be incorporated into the drawing set. Registration and application for certification of the project is also required under the policy.

Applicant Response: A sustainability diagram highlighting the elements that contribute to the buildings sustainability performance can be found on page 65 of this book. The LEED checklist and written description are also included as part of the submission package. Registration of the project is as follows - Tower: #16539, Building 3: # 16726, Building 4: # 16727. Note: Building 1 (podium) to be registered upon confirmation from CaGBC

Staff Assessment: The LEED checklist provided confirms the applicant's commitment in achieving LEED Gold with a total of 66 points and 6 Optimize Energy points. However, the condition is partly met as additional documentation is to be incorporated into the full size drawing set. See Standard Condition A.1.18.

Refer to more detailed commentary in the Sustainability section.

Rezoning Condition 15: Confirmation that the proposed buildings will achieve a maximum energy use intensity of 115 kWhr/m2/year for the residential portion and 122 kWhr/m2/year for the office portion of the development.

Applicant Response: As per the Energy Performance Statement dated January 31, 2013 from Integral Group, the maximum energy use intensity is of 115 kWhr/m2 year for the residential portion and 122 kWhr/m2.year for the office portion of the development.

Staff Assessment: The intent of the condition has been satisfied. Staff are seeking confirmation that the benchmark energy use intensity targets are maintained or exceeded throughout the entire design process. See Standard Condition A.1.19.

Refer to more detailed commentary in the Sustainability section.

- **Response to District Energy Conditions of Approval:**

Rezoning Condition 41: Provide for any further feasibility studies and/or technical investigations required to confirm the economic and technical viability of the preferred approach(es) to providing low-carbon energy supply to the development to the satisfaction of the General Manager of Engineering Services.

Note to applicant: If results of the further analysis do not support the preferred system development to the satisfaction of the General Manager of Engineering Services, then a suitable low-carbon alternative shall be selected from screened options, where available, and implemented. Such options may include development of a low-carbon energy supply system on site, development of and/or connection to a low-carbon energy system off site, and/or district energy design compatibility to accommodate connection to a future low-carbon district energy system serving the neighbourhood. Where district energy design compatibility is warranted, the applicant shall refer to

the District Energy Connectivity Standards for specific design requirements.

Applicant Response: Following the completion of the initial Phase 1 district energy feasibility study in 2012, Westbank has recently established their new energy utility - Creative Energy - that has been working closely with the City of Vancouver as their chosen proponent for developing a new neighbourhood energy utility for Downtown Vancouver. The feasibility assessment and the schematic design stage of the initial Pilot project for a low-carbon district energy utility serving the South Downtown neighbourhood is currently underway. The initial Pilot project involves conversion of the City's DFPS piping into a dual function Ambient Loop DES. The Beach and Howe development will be the first project connected to this new district energy utility and will derive at least 80% of its annual heating and cooling energy requirements from this low-carbon, highly energy efficient energy source.

Staff Assessment: The applicant has been working with Central Heat Distribution Ltd and City staff to develop a business plan to establish low carbon energy supply to the development by way of a south downtown district energy utility. Consequently the development will be required to connect to a district hot water loop that serves the South Downtown neighbourhood. A condition of development permit is provided to ensure the development is designed to be connectable to this utility prior to issuance of full building permit. The development is required to connect to the district energy utility prior to occupancy via legal agreement that was a condition of bylaw enactment.

Rezoning Condition 42: Implement, where feasible and approved by the General Manager of Engineering Services, a low-carbon energy supply strategy for the development which reduces greenhouse gas emissions by a minimum of 50% compared to a business-as-usual (or reference scenario) approach to heating and cooling.

Applicant Response: As elaborated in 42 above, the Beach and Howe development will derive at least 80% of its annual heating and cooling energy requirements from this low-carbon, highly energy efficient district energy utility.

Staff Assessment: Please refer to staff assessment of condition 41. The Downtown South district energy utility, to which the subject property is required to connect, will be subject to greenhouse gas reduction targets that are to be included in a future franchise agreement.

Rezoning Condition 43: Any on- or off-site low-carbon energy supply system implemented by the proponent, where applicable, shall be designed in such a way as to enable energy metering and the monitoring of performance metrics during system operation, for the purpose of optimizing system performance and preparing system performance reports. The applicant shall refer to the Performance Monitoring and Reporting Requirements for Renewable Energy Systems for a summary of the minimum requirements.

Applicant Response: Energy metering will be provided to monitor the performance of the building as well as for optimization of system performance. Measurement and verification will be provided as per the LEED Measurement and Verification.

Staff Assessment: A condition of enactment is that the applicant delivers to the City detailed performance reporting on the Low Carbon Energy Supply System. Detailed design of the HVAC and mechanical heating system will also need to include provisions for energy metering.

Rezoning Condition 44: Space heating and ventilation make-up air shall be provided by hydronic systems without electric resistance heat or distributed heat generating equipment, including gas-fired make-up air heaters.

Applicant Response: Hydronic heating systems will be provided throughout the spaces and not electric resistance heating will be used for ventilation or space heating.

Staff Assessment: The mechanical engineer of record will be required to certify at the time of building permit application, and prior to the release of building permit, that these and other detailed design provisions have been met.

Rezoning Condition 45: No heat-producing fireplaces are to be installed within residential suites.

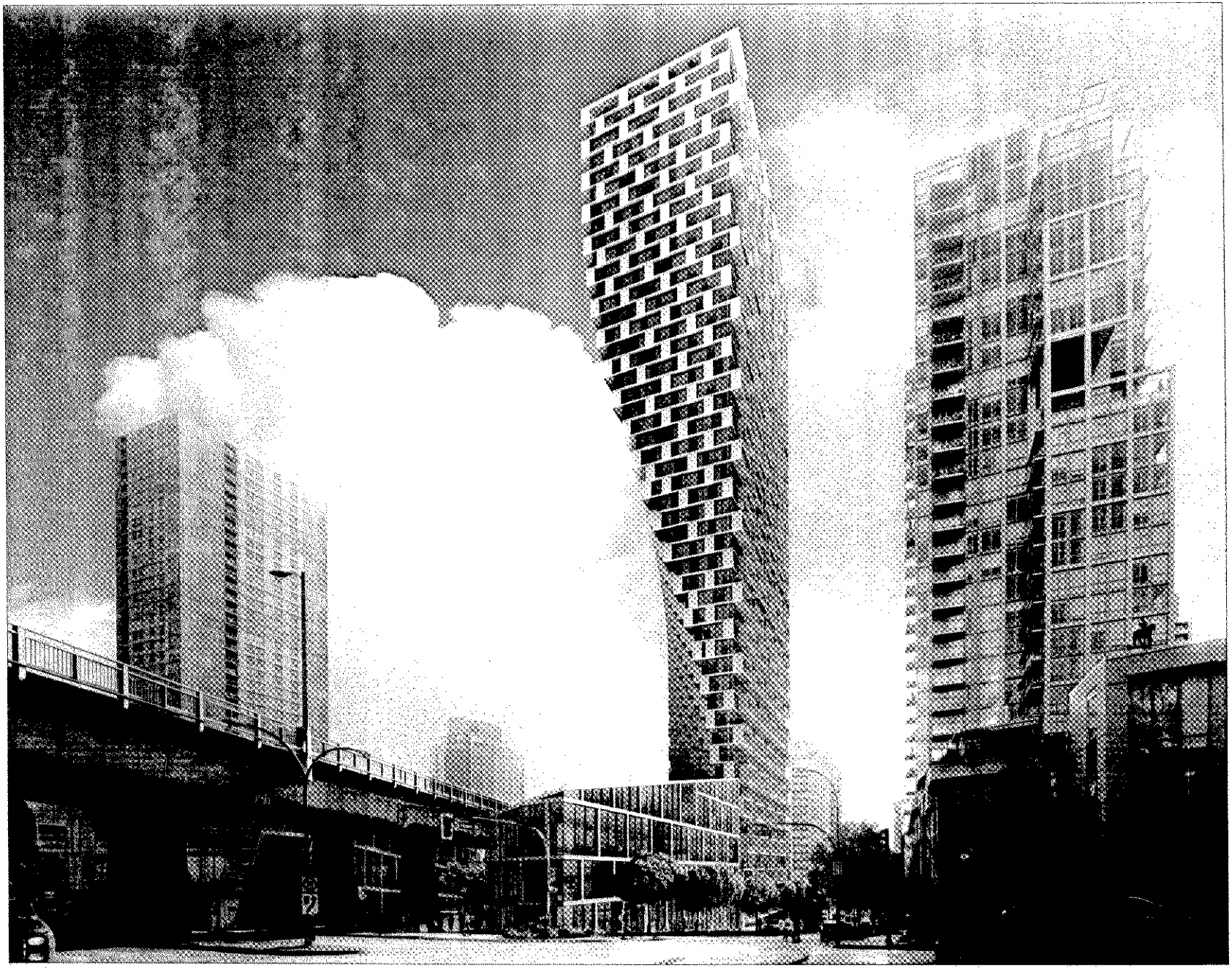
Applicant Response: No heat-producing fireplaces will be installed within residential suites.

Staff Assessment: No heat producing fireplaces are proposed within residential suites. The engineer of record will be required to certify at the time of building permit application, and prior to the release of building permit, that this and other detailed design provisions have been met.

Rezoning Condition 46: Detailed design of the HVAC and mechanical heating system, including any provisions for waste heat recovery and reuse, must be acceptable to the General Manager of Engineering Services.

Applicant Response: The detailed design of the HVAC and mechanical heating system will be provided to the General Manager of Engineering Services for review and approval.

Staff Assessment: The mechanical engineer of record will be required to certify at the time of building permit application, and prior to the release of building permit, that these and other detailed design provisions have been met.



BEACH AND HOWE

NOT FOR CONSTRUCTION

COVER SHEET

A0-000

DRAWING LIST

NO	NAME
A0-000	COVER SHEET
A0-001	DRAWING LIST
A0-002	ABBREVIATIONS, SYMBOLS & FINISHES
A0-003	INTERIOR FINISHES AND SCHEDULES
A0-004	PROJECT DATA & STATISTICS
A0-005	CONTEXT PLAN / ZONING PLAN / AERIAL OF SITE
A0-006	EXISTING SURVEY
A0-100	MASTER SITE PLAN (ROOF PLAN)
A0-101	BUILDING HEIGHTS
A0-200	PLAN LEVEL B6
A0-201	PLAN LEVEL B5
A0-202	PLAN LEVEL B4
A0-203	PLAN LEVEL B3
A0-204	PLAN LEVEL B2
A0-205	PLAN LEVEL B1
A0-206	PLAN LEVEL 01
A0-207	PLAN LEVEL 02
A0-208	PLAN LEVEL 03
A0-209	PLAN LEVEL 04
A0-210	PLAN LEVEL 05
A0-211	PLAN LEVEL 06
A0-212	PLAN LEVEL 07
A0-213	PLAN LEVEL 08
A0-214	PLAN LEVEL 09
A0-215	PLAN LEVEL 10
A0-230	ELEVATIONS KEY PLAN
A0-400	ELEVATION NORTH
A0-401	ELEVATION EAST
A0-402	ELEVATION SOUTH
A0-403	ELEVATION WEST
A0-410	SECTION EAST-WEST
A0-411	SECTION NORTH-SOUTH
A1-211A	PLAN LEVEL B6 - NORTH
A1-211B	PLAN LEVEL B6 - SOUTH
A1-219A	PLAN LEVEL B5 - NORTH
A1-219B	PLAN LEVEL B5 - SOUTH
A1-218A	PLAN LEVEL B4 - NORTH
A1-218B	PLAN LEVEL B4 - SOUTH
A1-220A	PLAN LEVEL B3 - NORTH
A1-220B	PLAN LEVEL B3 - SOUTH
A1-221A	PLAN LEVEL B2 - NORTH
A1-221B	PLAN LEVEL B2 - SOUTH
A1-222A	PLAN LEVEL B1 - NORTH
A1-222B	PLAN LEVEL B1 - SOUTH
A1-224A	PLAN LEVEL 1 - NORTH
A1-224B	PLAN LEVEL 1 - SOUTH
A1-226A	PLAN LEVEL 2 - NORTH
A1-226B	PLAN LEVEL 2 - SOUTH
A1-228A	PLAN LEVEL 3 - NORTH
A1-228B	PLAN LEVEL 3 - SOUTH
A1-230A	PLAN LEVEL 4 - NORTH
A1-230B	PLAN LEVEL 4 - SOUTH
A1-232A	PLAN LEVEL 5 - NORTH
A1-232B	PLAN LEVEL 5 - SOUTH
A1-234A	PLAN LEVEL 6 - NORTH
A1-234B	PLAN LEVEL 6 - SOUTH
A1-236A	PLAN LEVEL 7 - NORTH
A1-236B	PLAN LEVEL 7 - SOUTH
A1-238A	PLAN LEVEL 8 ROOF - NORTH
A1-238B	PLAN LEVEL 8 - SOUTH
A1-240B	PLAN LEVEL 9 - SOUTH
A1-241B	PLAN LEVEL 10 ROOF - SOUTH
A1-400	ELEVATION WEST
A1-401	ELEVATION EAST, NORTH
A1-402	ELEVATION EAST, SOUTH
A1-403	ELEVATION NORTH & SOUTH
A1-404	ELEVATION COURTYARD
A1-405	ELEVATION - POOL
A1-406	SECTION A-A
A1-407	SECTION B-B
A1-408	SECTION 1-1 NORTH
A1-409	SECTION 1-1 SOUTH
A1-720	RENTAL UNITS
A1-721	RENTAL UNITS
A1-722	RENTAL UNITS
A1-723	RENTAL UNITS
A1-724	RENTAL UNITS
A1-725	RENTAL UNITS

DRAWING LIST

NO	NAME
A2-300	PLAN TYPICAL BALCONY 1 LOW-RISE
A2-301	PLAN TYPICAL BALCONY 2 LOW-RISE
A2-302	PLAN TYPICAL BALCONY 1 MID-RISE
A2-303	PLAN TYPICAL BALCONY 2 MID-RISE
A2-304	PLAN TYPICAL BALCONY 1 HIGH-RISE
A2-305	PLAN TYPICAL BALCONY 2 HIGH-RISE
A2-400A	ELEVATION NORTH (B2 TO L16)
A2-400B	ELEVATION NORTH (L17 TO L34)
A2-400C	ELEVATION NORTH (L35 TO L52)
A2-401A	ELEVATION EAST (B2 TO L16)
A2-401B	ELEVATION EAST (L17 TO L34)
A2-401C	ELEVATION EAST (L35 TO L52)
A2-402A	ELEVATION SOUTH (B2 TO L16)
A2-402B	ELEVATION SOUTH (L17 TO L34)
A2-402C	ELEVATION SOUTH (L35 TO L52)
A2-403A	ELEVATION WEST (B2 TO L16)
A2-403B	ELEVATION WEST (L17 TO L34)
A2-403C	ELEVATION WEST (L35 TO L52)
A2-720	TOWER UNIT PLANS
A2-721	TOWER UNIT PLANS
A2-722	TOWER UNIT PLANS
A2-723	TOWER UNIT PLANS
A2-724	TOWER UNIT PLANS
A2-725	TOWER UNIT PLANS
A2-726	TOWER UNIT PLANS
A2-727	TOWER UNIT PLANS
A2-728	TOWER UNIT PLANS
A2-729	TOWER UNIT PLANS
A2-730	TOWER UNIT PLANS
A2-731	TOWER UNIT PLANS
A2-732	TOWER UNIT PLANS
A2-733	TOWER UNIT PLANS
A2-734	TOWER UNIT PLANS
A2-735	TOWER UNIT PLANS
A2-736	TOWER UNIT PLANS
A2-737	TOWER UNIT PLANS
A2-738	TOWER UNIT PLANS
A2-739	TOWER UNIT PLANS
A2-740	TOWER UNIT PLANS
A2-741	TOWER UNIT PLANS
A2-742	TOWER UNIT PLANS
A2-743	TOWER UNIT PLANS
A2-744	TOWER UNIT PLANS
A2-745	TOWER UNIT PLANS
A2-746	TOWER UNIT PLANS

DRAWING LIST

NO	NAME
A3-250	PLAN LEVEL B1
A3-252	PLAN LEVEL 1
A3-254	PLAN LEVEL 2
A3-256	PLAN LEVEL 3
A3-258	PLAN LEVEL 4
A3-210	PLAN LEVEL 5
A3-212	PLAN LEVEL 6 (MEZZ.)
A3-214	PLAN - ROOF
A3-400	ELEVATIONS EAST & SOUTHWEST
A3-401	ELEVATIONS NORTH & WEST
A3-402	ELEVATIONS COURTYARD & ATRIUM
A3-403	SECTIONS
A4-250	PLAN LEVEL B1
A4-252	PLAN LEVEL 1
A4-254	PLAN LEVEL 2
A4-256	PLAN LEVEL 3
A4-258	PLAN LEVEL 4
A4-210	PLAN LEVEL 5
A4-212	PLAN LEVEL 6 (MEZZ)
A4-214	PLAN - ROOF
A4-400	ELEVATIONS SOUTHEAST & WEST
A4-401	ELEVATIONS NORTH & EAST
A4-402	ELEVATIONS COURTYARD & ATRIUM
A4-403	SECTIONS

BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BUSO HAPPOLD

BUDTMAN SIMPSON

INTEGRAL GROUP

PFS PHILLIPS FARKVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

DRAWING LIST

A0-001

[illegible]	[illegible]
[illegible]	[illegible]

Concrete

Structural Concrete Assembly

Structural Lightweight

Plywood

Aluminum

Earth

Rigid Insulation

Stone

Wood

Glass

Steel

Resilient Rubber

Steel

Gypsum Plaster

FACADE MATERIALS LIST

A1	A2	A3	A4	KEY CODE	DESCRIPTION	CSI SPEC	COLOR/FINISH	MANUFACTURER	LOCATION
				CONC-	CONCRETE				
				CONC-01	EXPOSED ARCHITECTURAL CONCRETE		LIGHT GRAY		PODIUM 1, 3 & 4 BASE
				CONC-02	EXPOSED ARCHITECTURAL CONCRETE INFILL PANEL		DARK GRAY		PODIUM 1 BASE
				GD-	GLASS DOORS (ADJACENT LITES TO BE SAFETY GLASS AS REQ'D PER CODE)				
				GD-01	BALCONY GLASS SWING DOORS W/ GL-01		MTL-01	SCHUCO ADS 70 HI OR EQUIVALENT	TOWER & PODIUM 1 BALCONIES
				GD-02	BALCONY GLASS SLIDING DOORS W/ GL-01		MTL-01	SCHUCO ASE 70 HI OR EQUIVALENT	TOWER & PODIUM 1 BALCONIES
				GD-03	NARROW STILE STAINLESS STEEL & GLASS ENTRANCE DOORS		SATIN	ELLISON BRONZE FORMED STAINLESS STEEL OR EQUIVALENT	TOWER LOBBY ENTRANCE, PODIUM 1, 3 & 4 ENTRANCES
				GD-04	NARROW STILE BRONZE & GLASS VESTIBULE DOORS		SATIN	ELLISON BRONZE FORMED BRONZE OR EQUIVALENT	TOWER LOBBY ENTRANCE VESTIBULE
				GD-05	STAINLESS STEEL & GLASS SINGLE LEAF DOOR		SATIN	BLUMCRAFT SERIES 250 OR EQUIVALENT	PODIUM 1 ADJACENT TO TOWER LOBBY
				GD-06	NARROW STILE ALUMINUM & GLASS ENTRANCE DOORS		MTL-01	ELLISON BRONZE EXTRUDED ALUMINUM OR EQUIVALENT	PODIUM 1 RENTAL LOBBY, PODIUM 3 & 4 COURTYARD
				GD-07	ALL GLASS ENTRANCE DOORS W/ MINIMAL SSTEEL RAILS		SATIN	BLUMCRAFT SERIES 1301 OR EQUIVALENT	PODIUM 1, 3 & 4 ATRIUM ENTRANCES
				GD-08	SLIDING GLASS DOORS W/ MINIMAL SSTEEL RAILS		SATIN	BLASI 570 OR EQUIVALENT	PODIUM 1 FOOD STORE RETAIL ENTRANCE
				GD-09	FIRE RATED STAINLESS STEEL & GLASS EGRESS DOORS		SATIN	TGP FIREFRAMES DESIGNER SERIES OR EQUIVALENT	PODIUM 1 POOL EGRESS ADJACENT TO SKYLIGHTS
				GD-10	ALUMINUM & GLASS SINGLE LEAF DOOR		MTL-01	ELLISON BRONZE EXTRUDED ALUMINUM OR EQUIVALENT	PODIUM 3 & 4 COURTYARD OFFICE ACCESS
				GD-11	BALCONY GLASS SLIDING DOORS W/ GL-04		MTL-01	SCHUCO ASS 70 HI OR EQUIVALENT	PODIUM 3 & 4 BALCONIES
				GFRC-	GLASS FIBER REINFORCED CONCRETE				
				GFRC-01	GLASS FIBER REINFORCED CONCRETE WALL PANEL		MEDIUM GRAY		PODIUM 1 RENTAL APARTMENT BALCONIES
				GL-	GLASS & GLAZING (ALL GLASS LOW-IRON UNLESS OTHERWISE NOTED)				
				GL-01	TRIPLE GLAZED IGU W/ LOW-E COATING				TOWER & PODIUM 1 TYPICAL GLAZING
				GL-02	LAMINATED HEAT STRENGTHENED SAFETY GLASS				TOWER, PODIUM 1, 3 & 4 BALCONY BALUSTRADE
				GL-03	GL-01 W/ FRIT PATTERN				TOWER GLAZING IN FRONT OF OVERSIZE COLUMNS
		•	•	GL-04	DOUBLE GLAZED IGU W/ LOW-E COATING (SLOPED GLAZING TO BE SAFETY GLASS AS REQ'D PER CODE)				PODIUM 3 & 4 TYPICAL GLAZING
		•	•	GL-05	TRIPLE LAMINATED IGU W/ LOW-E COATING				PODIUM 3 & 4 TERRACE FRAMELESS GLAZING
•		•	•	GL-06	DOUBLE LAMINATED IGU W/ LOW-E COATING				PODIUM 1, 3 & 4 ATRIUM GLAZING & SKYLIGHTS
•				GL-07	GL-06 W/ FRIT PATTERN				TRAFFICABLE SKYLIGHTS ADJACENT TO POOL EGRESS
				GRL-	GRILLES				
•				GRL-01	TRAFFICABLE ORNAMENTAL STAINLESS STEEL GRILLE		SATIN	MCNICHOLS BAR GRATING OR EQUIVALENT	PODIUM 1 BASE
				GRT-	GRATING				
•	•	•	•	GRT-01	STAINLESS STEEL FLOOR GRATING AT ENTRANCES			CONSTRUCTION SPECIALTIES GRIDLINE 2 G6P OR EQUIVALENT	TOWER, PODIUM 1, 3 & 4 ENTRANCES
				HMD-	HOLLOW METAL DOORS				
•		•	•	HMD-01	EGRESS DOORS		COLOR/CLADDING MATCH ADJACENT		PODIUM 1, 3 & 4 DOORS AT GRADE & COURTYARDS
•				HMD-02	POOL DECK DOORS		COLOR/CLADDING MATCH ADJACENT		PODIUM 1 POOL DECK
				INS-	INSULATION				
•	•	•	•	INS-01	SEMI-RIGID MINERAL FIBER INSULATION				
•	•	•	•	INS-02	EXTRUDED POLYSTYRENE BOARD (XPS) INSULATION				
•	•	•	•	INS-03	VACUUM INSULATED PANEL (VIP) INSULATION			DOW CORNING	
•	•	•	•	INS-04	SPRAY FOAM INSULATION				
				LVR-	LOUVERS				
•		•	•	LVR-01	EXTRUDED ALUMINUM STORM RESISTANT FIXED LOUVERS		MATCH ADJACENT	CONSTRUCTION SPECIALTIES RS SERIES OR EQUIVALENT	PODIUM 1, 3 & 4 MECHANICAL LOUVER AREAS
				MP-	METAL PANELS				
•	•	•	•	MP-01	STAINLESS STEEL TYPE 316		NON-DIRECTIONAL LOW GS D69	CONTRARIAN METAL RESOURCES INVARIMATTE OR EQUIVALENT	TOWER, PODIUM 1, 3 & 4 TYPICAL METAL PANEL
	•			MP-02	OPTION 1: STAINLESS STEEL VAPOR DEPOSITION COLORIZED; OPTION 2: COPPER MILL FINISH W/ CLEAR COATING		OPTION 1: SHOT FINISH TITANIUM GOLD	OPTION 1: CMR NEXES OR EQUIVALENT; OPTION 2: RMC TECU CLASSIC W/ NIC INDUSTRIES CERAKOTE MC-150	TOWER ACCENT METAL PANEL
		•	•	MP-03	EXPANDED METAL MESH				PODIUM 3 & 4 OFFICE SUSPENDED CEILING SOFFIT PANEL
				MTL-	METAL FINISHES				
•	•	•	•	MTL-01	ALUMINUM		CLEAR ANODIZED		TOWER, PODIUM 1, 3 & 4 ALUMINUM EXTRUSIONS
				MTL-02	-------				
•	•	•	•	MTL-03	STAINLESS STEEL		SATIN		BALCONY GUARDRAIL CAPS & MISC. CLADDING
				PAV-	PAVERS				
•				PAV-01	PRECAST CONCRETE PAVER		LIGHT GRAY CONCRETE W/ WOOD GRAIN FORMWORK TEXTURE		PODIUM 1 POOL DECK SURFACES
				PLD-	PARKING & LOADING ENTRANCE DOORS				
•		•	•	PLD-01	OVERHEAD ROLLING STEEL DOORS		MATCH ADJACENT		PODIUM 1, 3 & 4 PARKING & LOADING ENTRANCES
				ST-	STONE				
•	•	•	•	ST-01	BALCONY STONE PAVER		GRAY SANDSTONE W/ SLIP RESISTANT TEXTURE		TOWER, PODIUM 1, 3 & 4 BALCONIES
				WDP-	WOOD PANELS				
		•	•	WDP-01	EXTERIOR CLASS A FIRE RETARDANT TREATED WOOD CLADDING		WESTERN RED CEDAR		PODIUM 3 & 4 COURTYARDS
		•	•	WDP-02	EXTERIOR CLASS A FIRE RETARDANT TREATED WOOD DECKING		WESTERN RED CEDAR		PODIUM 3 & 4 COURTYARDS
				WPS-	WATERPROOFING SYSTEMS				
•	•	•	•	WPS-01	SELF-ADHERED SHEET APPLIED MEMBRANE				
•	•	•	•	WPS-02	LIQUID APPLIED MEMBRANE				
				WPS-03					

[redacted]

CHAIRS	BLG 1	[illegible]	SOFA, RENTAL LOBBY					
	BLG 1	[illegible]	SOFA, FLOATING LOBBY	[illegible]	[illegible]		[illegible]	[illegible]
	BLG 1	[illegible]	[illegible]					
	BLG 1	[illegible]	[illegible]					
	BLG 1	[illegible]	[illegible]					
	BLG 1	[illegible]	[illegible]					
TABLE	BLG 1	[illegible]	LOW TABLE FLOATING LOBBY	[illegible]	[illegible]		[illegible]	
	BLG 1	[illegible]	LOW TABLE RENTAL LOBBY					
	BLG 1	[illegible]	DESK RENTAL OFFICE					
	BLG 1	[illegible]	[illegible]					
STORAGE	BLG 1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CARPET	BLG 1	[illegible]	RUG	[illegible]	GLOBAL WARMING	[illegible]		[illegible]

[redacted]

[illegible]	[illegible]	RECESSED FLOOR LIGHT	CUSTOM		[illegible]	
[illegible]	[illegible]	[illegible]	DELTA VOLT, INC		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	DELTA VOLT, INC		[illegible]	[illegible]
RENTAL MAILBOX ROOM	[illegible]	[illegible]	PHILIPS	[illegible]	[illegible]	[illegible]
ELEVATOR FIXTURE	[illegible]	[illegible]	DELTALIGHT	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	DELTALIGHT	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	FLOOR	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	DELTALIGHT	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]					
APARTMENT	[illegible]	[illegible]	DELTALIGHT	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]					
[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	DELTALIGHT	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	THE SAME	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	THE SAME	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	THE SAME	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	THE SAME	[illegible]	[illegible]

BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

ABBREVIATIONS, SYMBOLS & FINISHES

A0-002

INTERIOR MATERIALS LIST

KEY CODE	DESCRIPTION	CSI	COLOR/FINISH	MANUFACTURER	LOCATION
CON	CONCRETE				
CON1	EXPOSED ARCHITECTURAL CONCRETE				RESIDENTIAL AND RENTAL LOBBIES, STRUCTURE
CON2	EXPOSED ARCHITECTURAL CONCRETE, CLEAR DUSTPROOF PAINT				RESIDENTIAL AND RENTAL LOBBIES, STRUCTURE
CON3	DIAMOND POLISHED, AUTOLEVELLING, 20 mm THK		LIGHT GREY RAL 9018	GETTHE REAL SURFACES, PANDOMO	FLOOR OFFICE LOBBY
CON4	DIAMOND POLISHED, AUTOLEVELLING, 20 mm THK		DARK GREY RAL 9018		FLOOR OFFICE LOBBY
ICA	CARPET				
ICA1	FELT(TBC) STRIPES, 10cm WHT X 5 mm THK (to be customized)		LIGHT GREY RAL 9018 LIGHT GREY RAL 9018	RUCKSTUHL	FLOOR CORRIDORS RENTAL
ICO	CORIAN				
ICO1	CORIAN PANELS, 12 mm THK joined on site to create seamless wall		WHITE RAL 9010	CORIAN	WALLS RENTAL AND RESIDENTIAL LOBBY
IGL	GLASS				
IGL1	LAMINATED GLASS, TRANSPARENT		LOW IRON	CARVART GLASS	INTERIOR PARTITIONS
IGL2	BACK-PAINTED GLASS 5 mm THK		WHITE RAL 9010		CHANGING ROOM
IGL3	BACK-PAINTED GLASS 5mm THK		PURPLE (RAL 4005)TBC	CARVART GLASS	ELEVATOR'S CAB RESIDENTIAL
IGL4	BACK-PAINTED GLASS 5 mm THK		BLUE (RAL 5015)TBC	CARVART GLASS	ELEVATOR'S CAB RENTAL
IGL5	BACK-PAINTED GLASS 5 mm THK		GREEN (RAL 6018)TBC	CARVART GLASS	ELEVATOR'S CAB AMENITIES
IGL6	BACK-PAINTED GLASS 5mm THK		RED (RAL 3003)TBC	CARVART GLASS	ELEVATOR'S CAB OFFICES
IGL7	MIRROR 5mm THK		LOW IRON	CARVART GLASS	BATHROOMS, CHANGING ROOMS
IM	METAL				
IM1	METAL PANELS, TO MATCH EXTERIOR LINING, 3 mm THK (TBC)		WARM COLOR		WALLS, CEILING RESIDENTIAL LOBBY
IM2	METAL PANELS, D6 SLIP RESISTANCE RATING (TO MATCH EXTERIOR LINING), 3mm THK (TBC)		WARM COLOR		FLOOR RESIDENTIAL FLOATING LOBBY
IM3	METAL PANELS (TO MATCH EXTERIOR LINING MATERIAL) 3 mm THK (TBC)		COLD FLOOR		WALLS RENTAL LOBBY
IM4	POLISHED CHROMED STAINLESS STEEL		CHROME FINISH		MAILBOX BASES
IM5	STAINED STAINLESS STEEL PANELS		MATT BLACK (RAL 9011)		ELEVATOR TRANSOM AND EXT ELEV DOORS IN RESID LOBBY AND AT LEVELS
IM6	SATIN STAINLESS STEEL		SATIN FINISH		ELEVATOR TRANSOM AND DOORS IN RENTAL AND OFFICE LOBBY AND AT LEVELS
IM7	COATED STAINLESS STEEL		BLACK URETHANE COATING, POLISHED COATING CLEAR		MAILBOXES, RECEPTION DESK, MAIL STAIR RESIDENTIAL LOBBY TRIM IN OFFICES BATHROOMS
IM8	LAMINATED CHROME STAINLESS STEEL ON MDF BOARDS		CHROME		CEILING PUBLIC AREAS(IN ALTERNATIVE TO MIRROR)
IM9	SATIN STAINLESS STEEL GAUGE 13		CHROME		RENTAL MAILBOXES
IM10	SATIN STAINLESS STEEL		SATIN		TRIM OFFICES BATHROOMS
IPA	PAINT				
IPA1	DUSTPROOF COATING				
IPA2	PAINT MATT		WHITE RAL 9010	BENJAMIN MOOR	
IPA3	WATERPROOF PAINT		WHITE RAL 9010	BENJAMIN MOOR	RENTAL CORRIDORS, 3 SERIES RESIDENTIAL CORRIDORS
IPL	PLASTER				
IPL1	PLASTER		WHITE RAL 9010		
IR	RUBBER				
IR1	PVC ROOLS, 3mm THK		PURPLE (RAL 4005)TBC		
IR2	PVC ROOLS, 3mm THK		BLUE (RAL 5015)TBC		
IR3	PVC ROOLS, 3mm THK		GREEN (RAL 6018)TBC		
IR4	PVC ROOLS, 3mm THK		RED (RAL 3003)TBC		
IST	STONE				
IST1	MARBLE CALACATTA, 15mm THK		WHITE		OFFICES BATHROOM WALLS
IST2	TERRAZZO, WHITE CARRARA MARBLE AND PURE WHITE CONNECTOR		WHITE	MORSELETTO	RESIDENTIAL AND RENTAL LOBBIES
ITP	TILES				
ITP1	TILES PORCELAIN 1500X250mmx5mm THK		WHITE RAL 9003, STATUARIO VENATO (TBC)	MAXFINE	RENTAL
ITP2	TILES PORCELAIN 1500X250mmx5mm THK		WHITE RAL 9003, STATUARIO VENATO(TBC)	MAXFINE	BATHROOMS 3 SERIES
ITP3	TILES PORCELAIN 1500X250mmx5mm THK		GREY, DARK DEPTH	MAXFINE	BATHROOMS 3 SERIES
ITP4	TILES PORCELAIN 1500X250mmx5mm THK		WHITE RAL 9003, STATUARIO VENATO(TBC)	MAXFINE	BATHROOMS 7 SERIES
ITP5	TILES PORCELAIN 1500X250mmx5mm THK		GREY, DARK DEPTH	MAXFINE	BATHROOMS 7 SERIES
ITP6	TILES PORCELAIN 1500X250mmx5mm THK		WHITE RAL 9003, STATUARIO VENATO(TBC)	MAXFINE	CHANGING ROOMS
IW	TIMBER				
IW1	WOOD PARQUET 600X80mm		PINE (tbc)		FLOOR RENTAL APARTMENT
IW2	WOOD PLANKS, 2100x80mm		PINE (tbc)LIGHT COLOR		FLOOR RESIDENTIAL SERIES 3
IW3	WOOD PLANKS, 2100x80mm		PINE (tbc)DARK COLOR		FLOOR RESIDENTIAL SERIES 3
IW4	WOOD PLANKS, 2100x130mm		PINE (tbc)LIGHT COLOR		FLOOR RESIDENTIAL SERIES 7
IW5	WOOD PLANKS, 2100x130mm		PINE (tbc)DARK COLOR		FLOOR RESIDENTIAL SERIES 7
IW6	WOOD PLANKS, FLAME SPREAD < 150		PINE (tbc)		WALLS BATHROOMS SERIES 7
IW7	WOOD PLANKS, 15mm THK, corridor lenght		PINE (tbc)		FLOOR CORRIDOR SERIES 7
IW8	WOOD PLANKS, to match with the exterior wood, FLAME SPREAD < 150		PINE (tbc)		WALLS, CORRIDOR SERIES 7
IW9	WOOD PLANKS, to match with the exterior wood, FLAME SPREAD < 150		PINE (tbc)		CRACK, TO MATCH THE EXTERIOR WALL
IW10	WOOD PLANKS, to match with the exterior wood, FLAME SPREAD < 150		PINE (tbc), PAINTED WHITE RAL 9010		TRIM

BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

INTERIOR FINISHES AND SCHEDULES

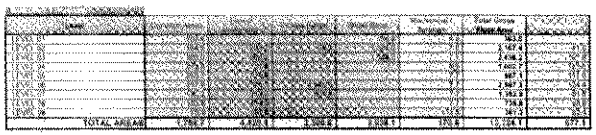
A0-003

Appendix E : page 4 of 44

Floor Area Summary, Sub Area A

Project Data Summary Sub Area A

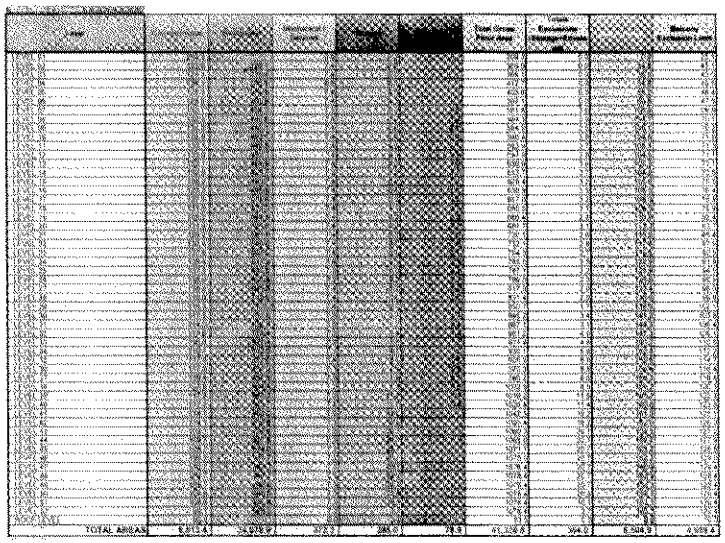
Sub Area Proposed	4,697.6
Proposed Building Height	181.5
Proposed Number Of Storeys	52



Balcony Summary

Allowable Balcony Exclusion	
12% Total Floor Area	Applied
Proposed Balcony	
Balcony Coverage	0.00

Total Floor Area	12,334.1
Balcony Exclusions	0.00
Building 1 Area For FSR	12,334.1



Exclusion Summary

Proposed Storage Exclusion	
Proposed Amenities Exclusion	
Total Exclusions	364.6

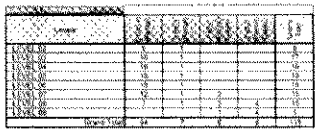
Balcony Summary

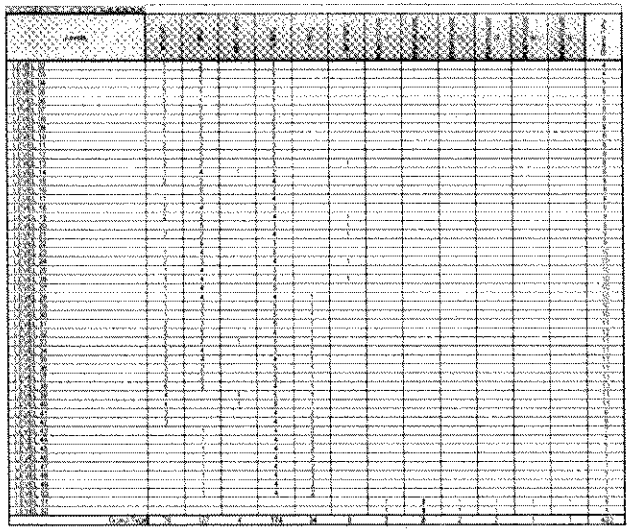
Allowable Balcony Exclusion	
12% Total Floor Area	
Proposed Balcony	
Balcony Coverage	7,446.40

Total Floor Area	41,536.6
Exclusions	-364.6
Balcony Exclusions	-7,446.40
Building 2 Area For FSR	42,518.06

Total Building Area For FSR	54,734.1
Proposed FSR	11.65

Unit Types Summary, Sub Area A

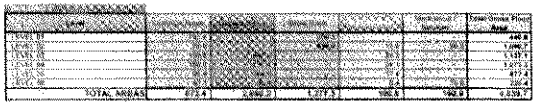




Floor Area Summary, Sub Area B

Project Data Summary SubArea B

Proposed Site Area	1,988.9
Proposed Building Height	31.1
Proposed Number Of Storeys	9

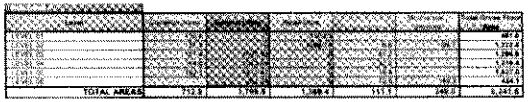


Total Building Area For FSR	4,839.7
Proposed FSR	2.43

Floor Area Summary, Sub Area C

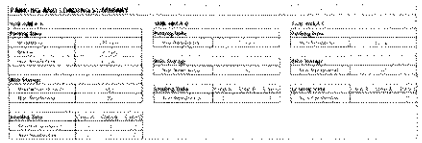
Project Data Summary SubArea C

Proposed Site Area	2,277.1
Proposed Building Height	31.1
Proposed Number Of Storeys	8



Total Building Area For FSR	6,241.8
Proposed FSR	2.7

Parking And Loading Summary

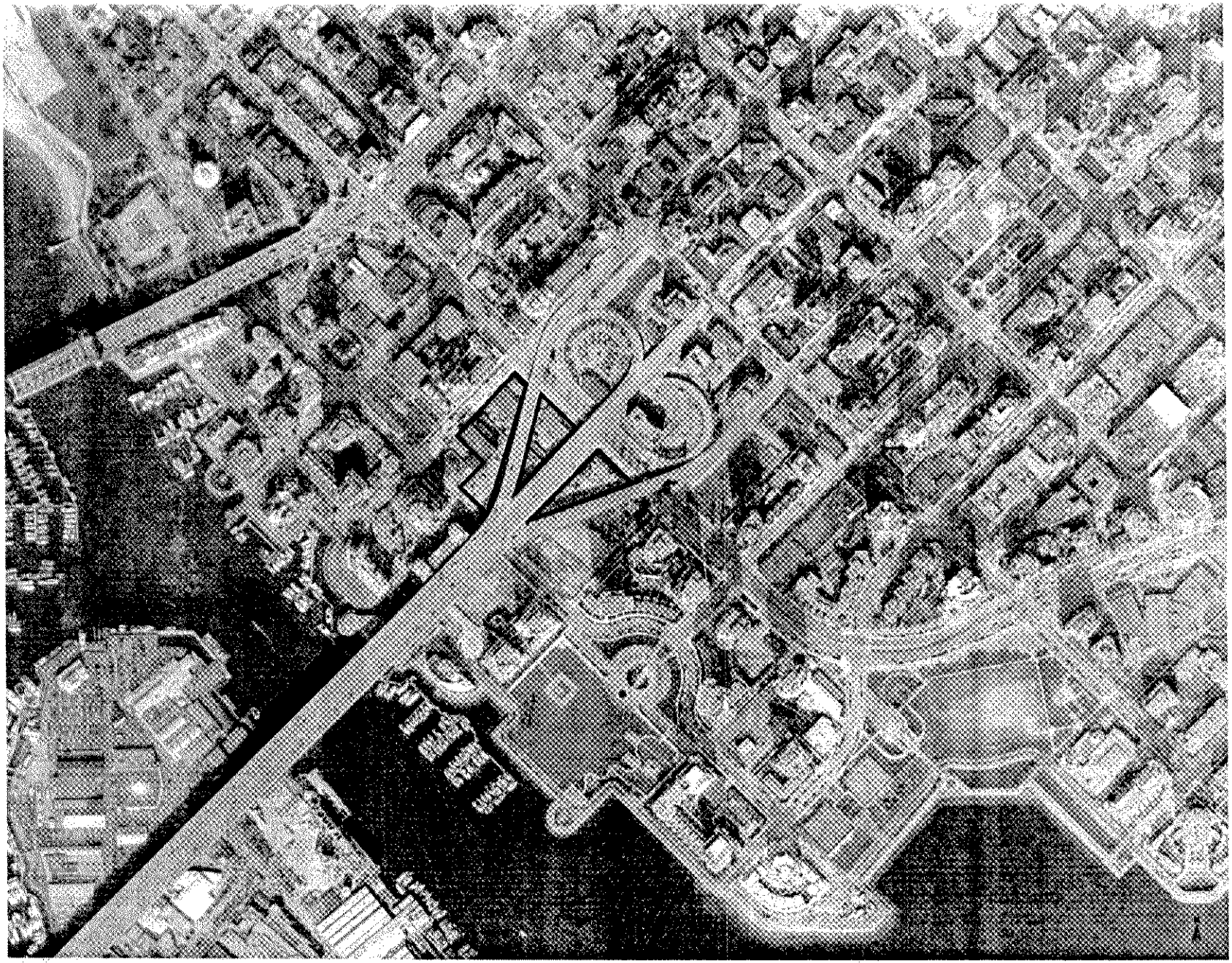


BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PROJECT DATA

A0-004

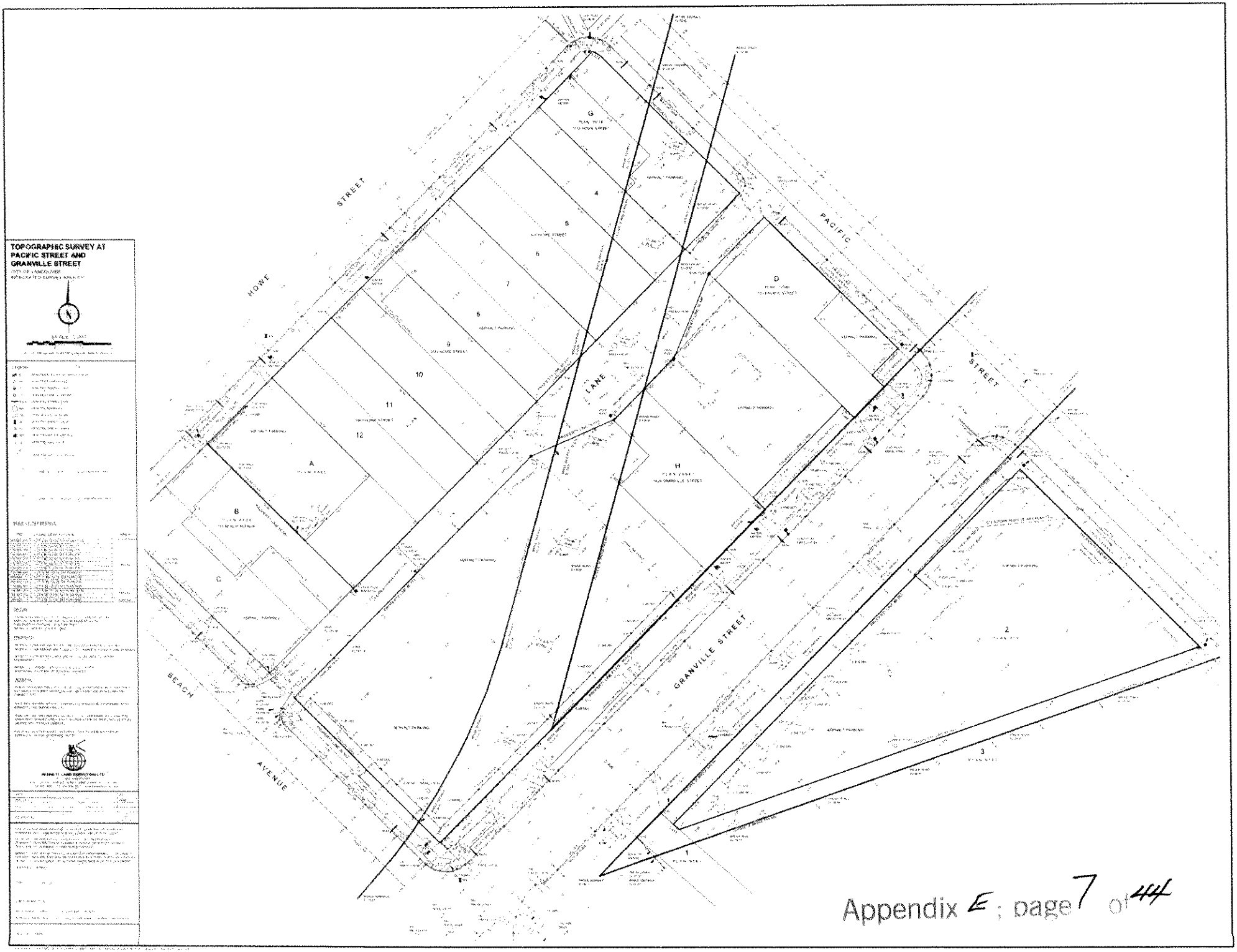


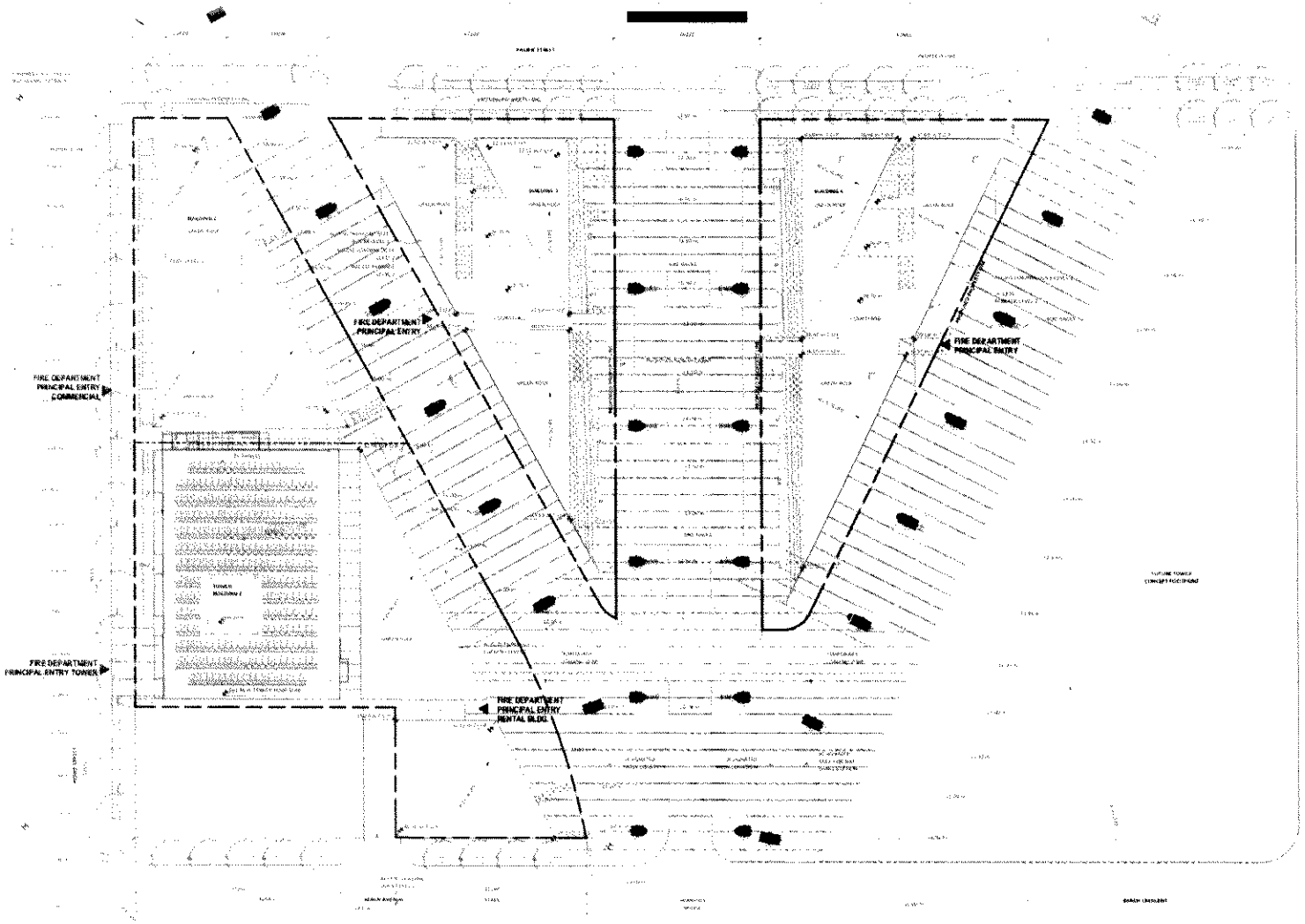
BEACH AND HOWE

NOT FOR CONSTRUCTION

CONTEXT PLAN / ZONING PLAN / AERIAL OF SITE

A0-005


TOPOGRAPHIC SURVEY AT
PACIFIC STREET AND
GRANVILLE STREET
HOWE
STREET
PACIFIC
STREET
LANE
GRANVILLE STREET
BEACH
AVENUE
A
B
C
D
G
H
1
2
3
4
5
6
7
8
9
10
11
12

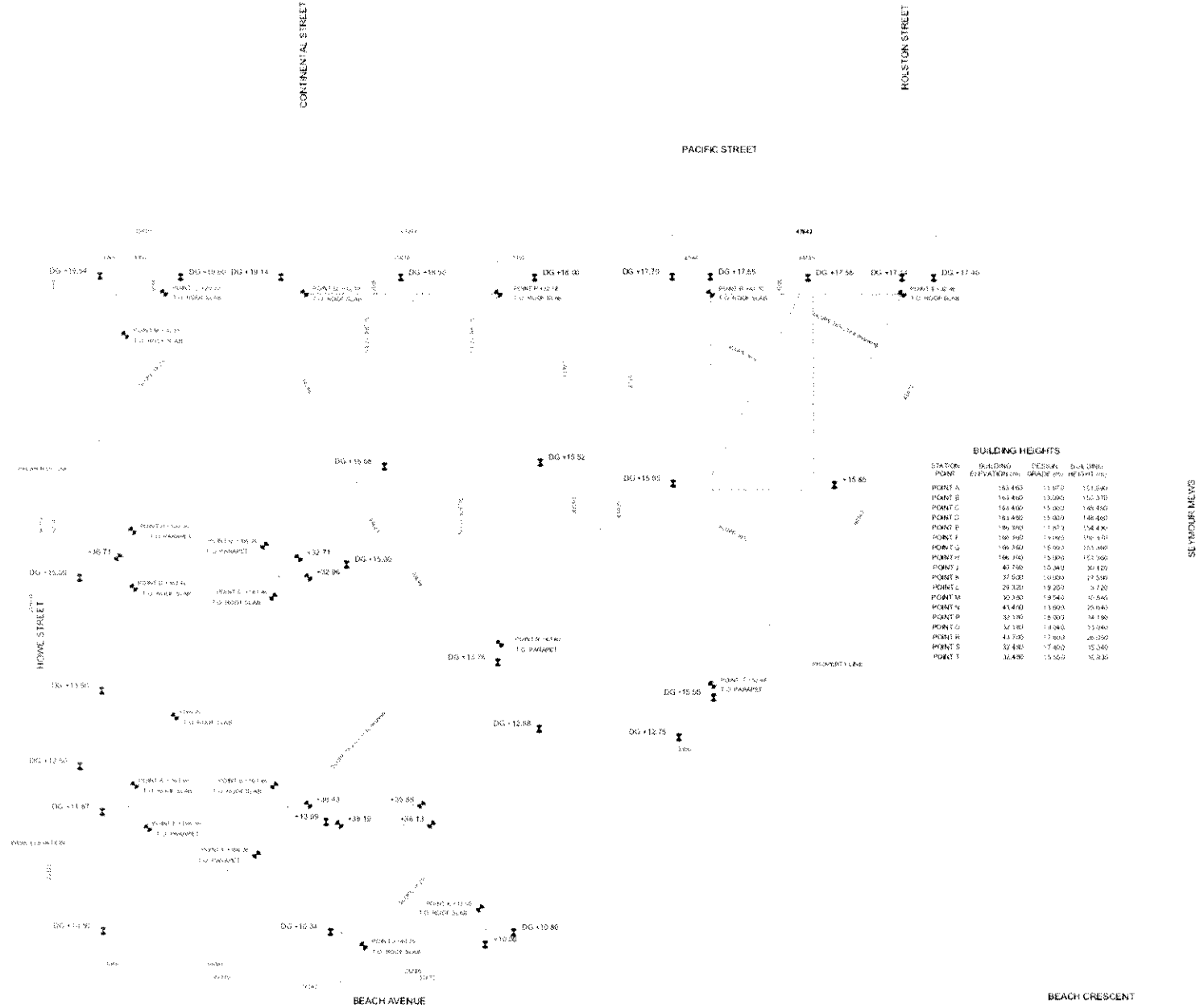


BEACH AND HOWE

NOT FOR CONSTRUCTION

MASTER SITE PLAN (GROUND LEVEL)

A0-100



BEACH AND HOWE

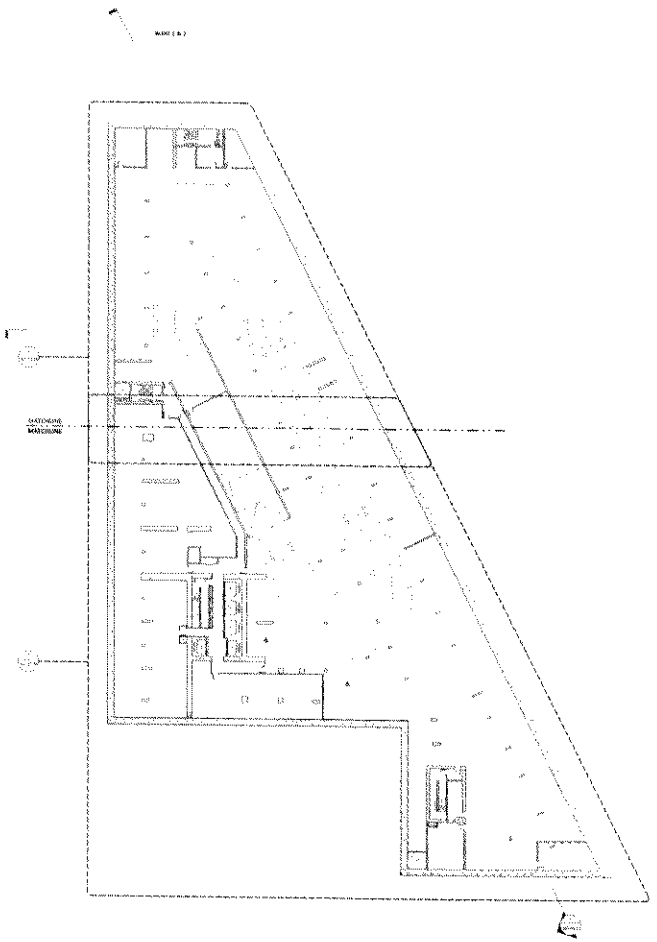
BUILDING HEIGHTS

NOT FOR CONSTRUCTION

THE DISCOVERY

ICON I

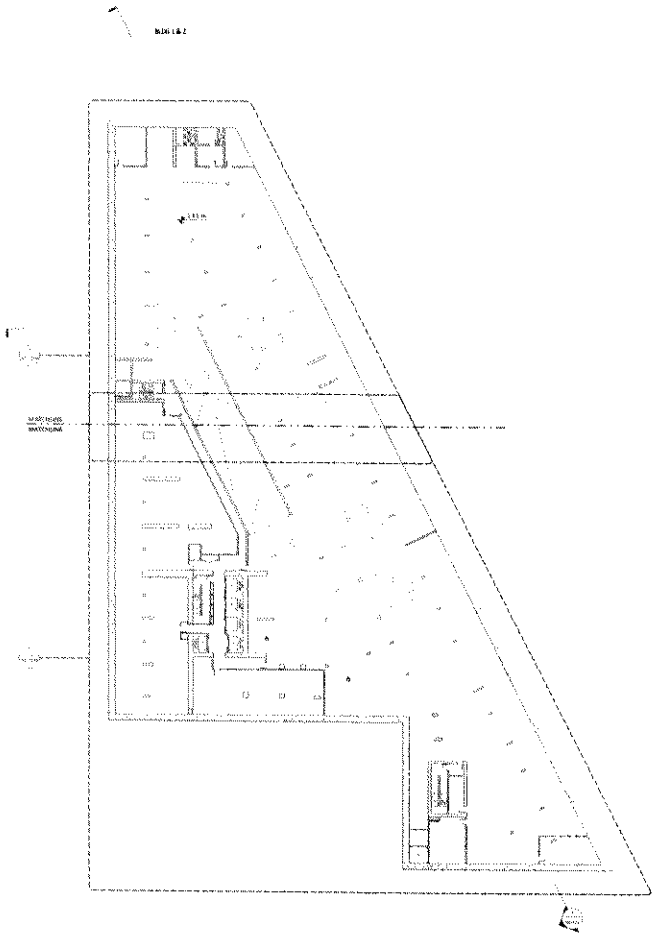
A0-101



BEACH AND HOWE

PLAN LEVEL B6

A0-200

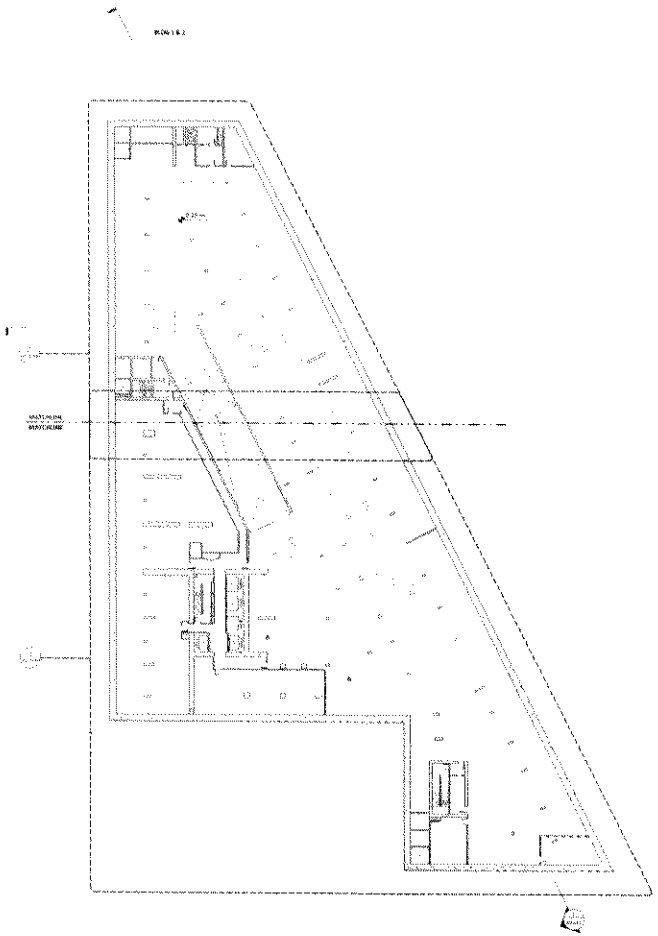


BEACH AND HOWE

NOT FOR CONSTRUCTION

PLAN LEVEL B5

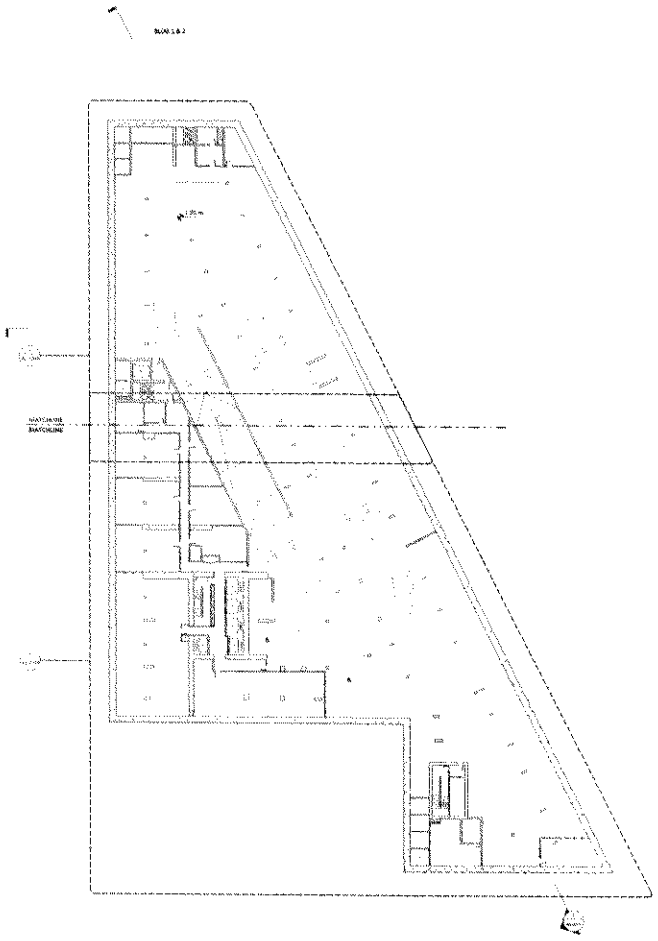
A0-201



BEACH AND HOWE

PLAN LEVEL B4

A0-202

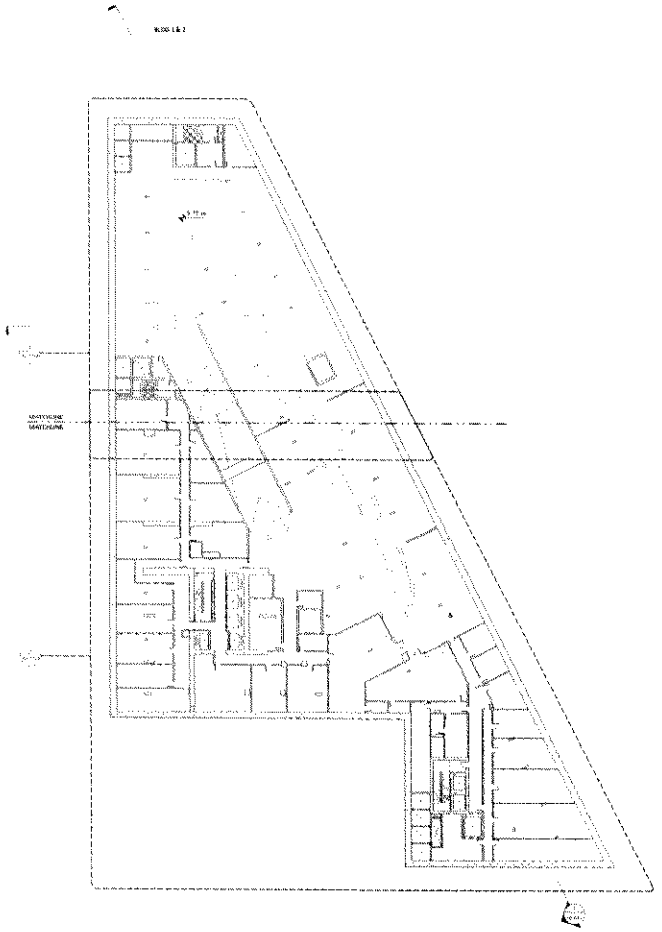


BEACH AND HOWE

NOT FOR CONSTRUCTION

PLAN LEVEL B3

A0-203

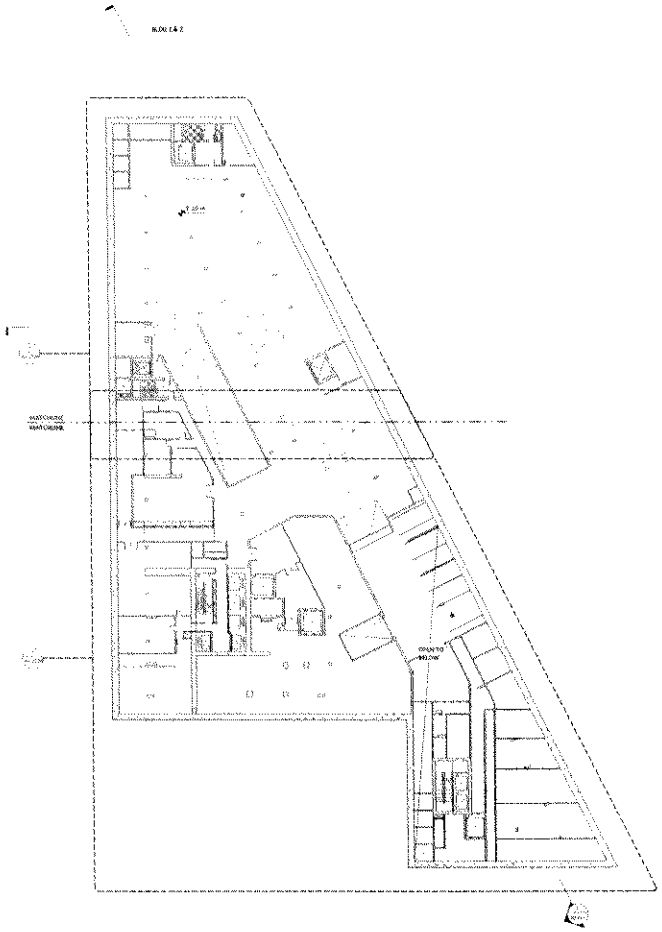


BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PLAN LEVEL B2

A0-204

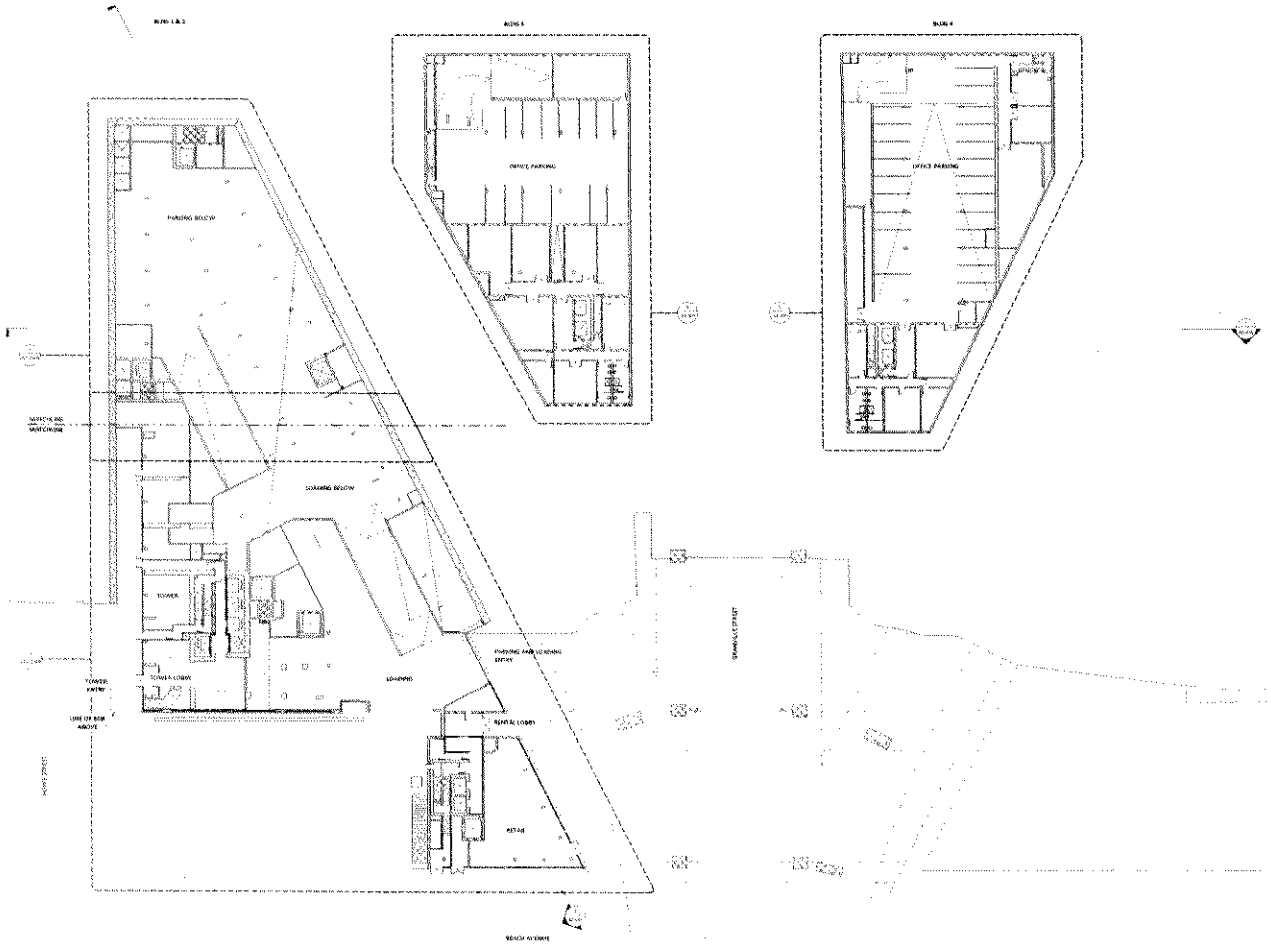


BEACH AND HOWE

NOT FOR CONSTRUCTION

PLAN LEVEL B1

A0-205



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels GROUP

DIALOG

BUNT & HARVARD

GLOTMAN SIMPSON

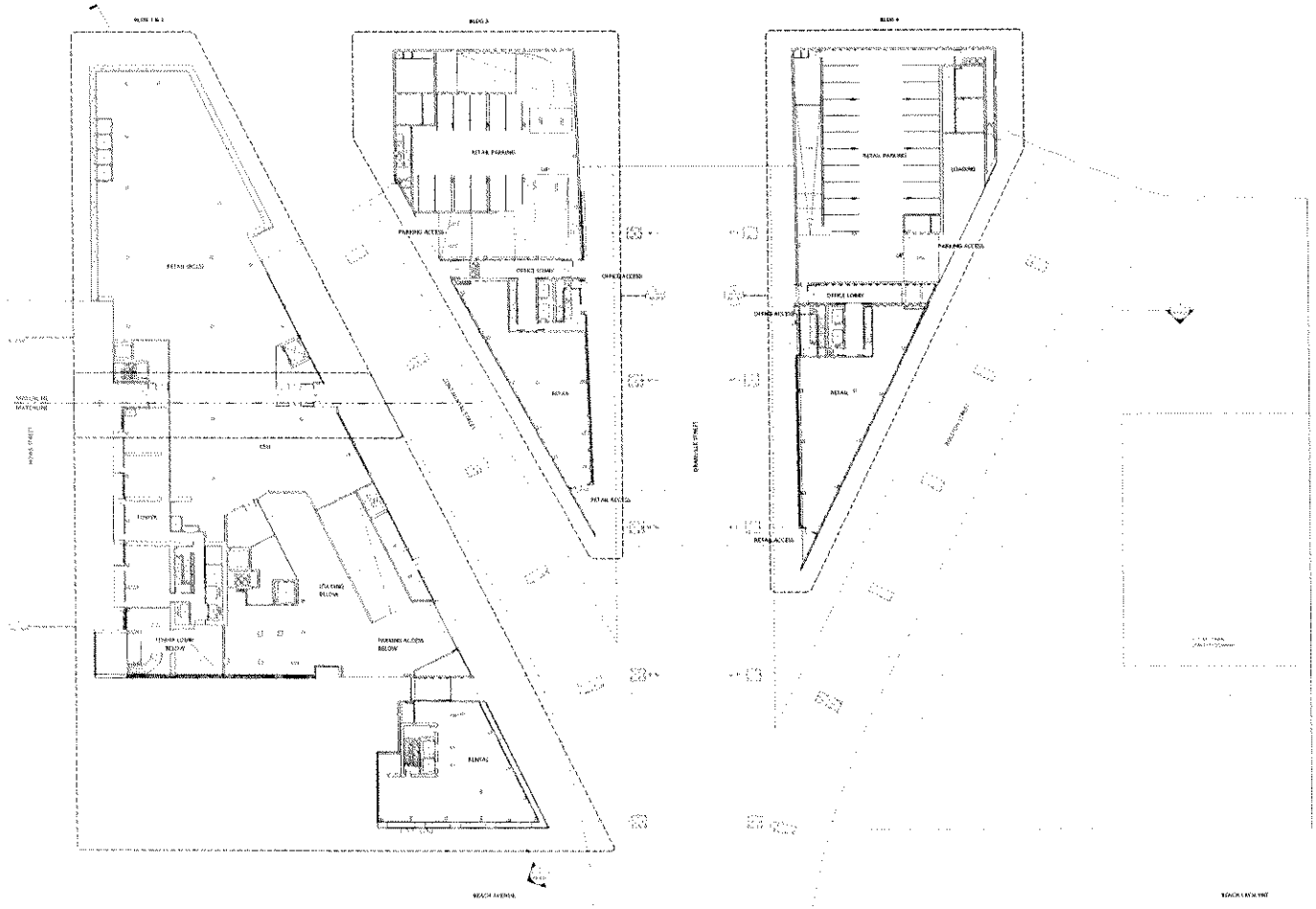
INTEGRAL GROUP

PFS PHILLIPS FARevaag SMALLENBERG

NOT FOR CONSTRUCTION

PLAN LEVEL 01

A0-206



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG (Bjarke Ingels Group)

DIALOG

BUSCH HAPPOLD

GLOTMAN SIMPSON

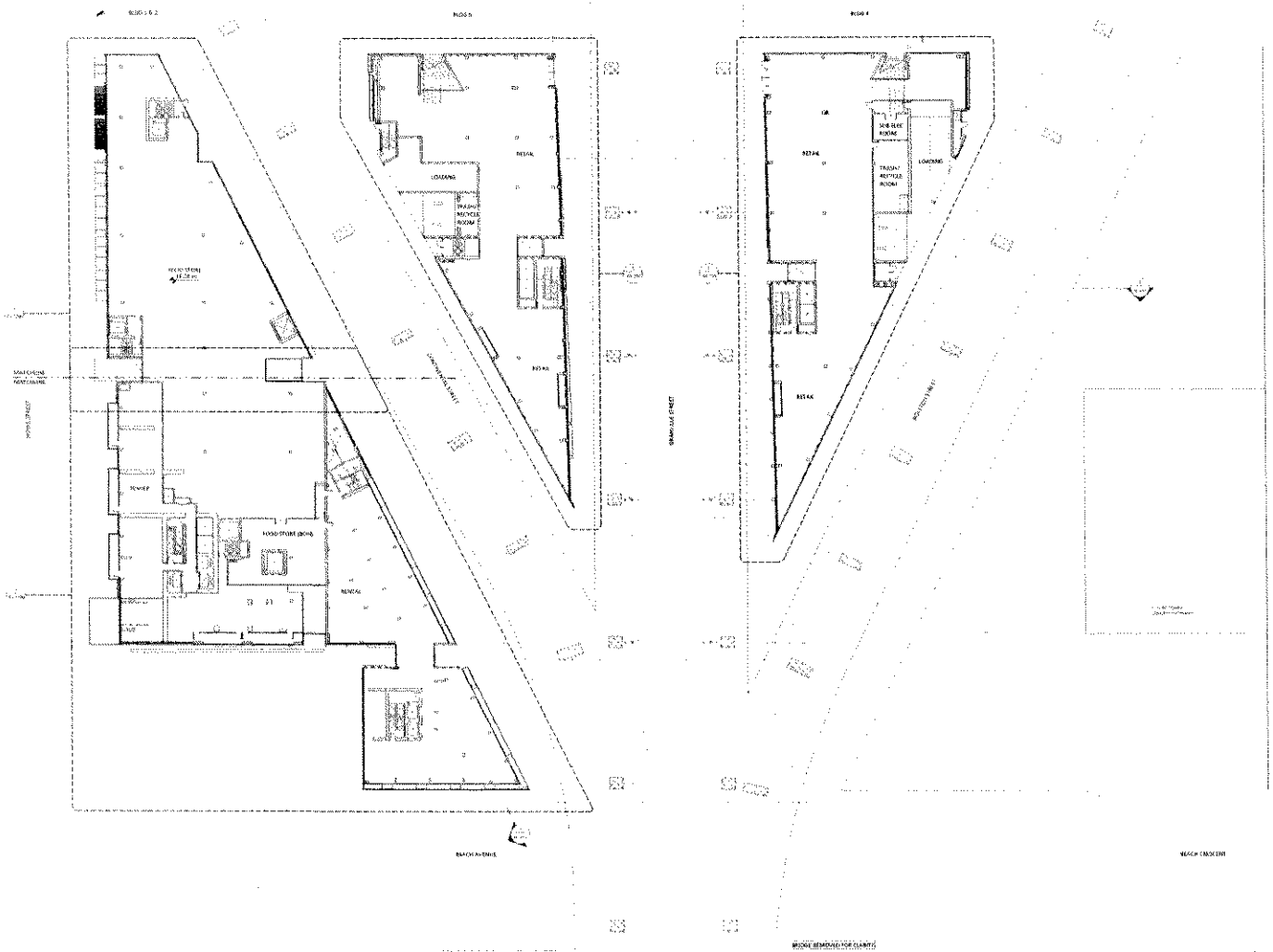
INTEGRAL GROUP

PFS PHILLIPS FARREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN LEVEL 02

A0-207



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DRAGAS

BUNGO RAPPOLT

GLOTMAN SIMPSON

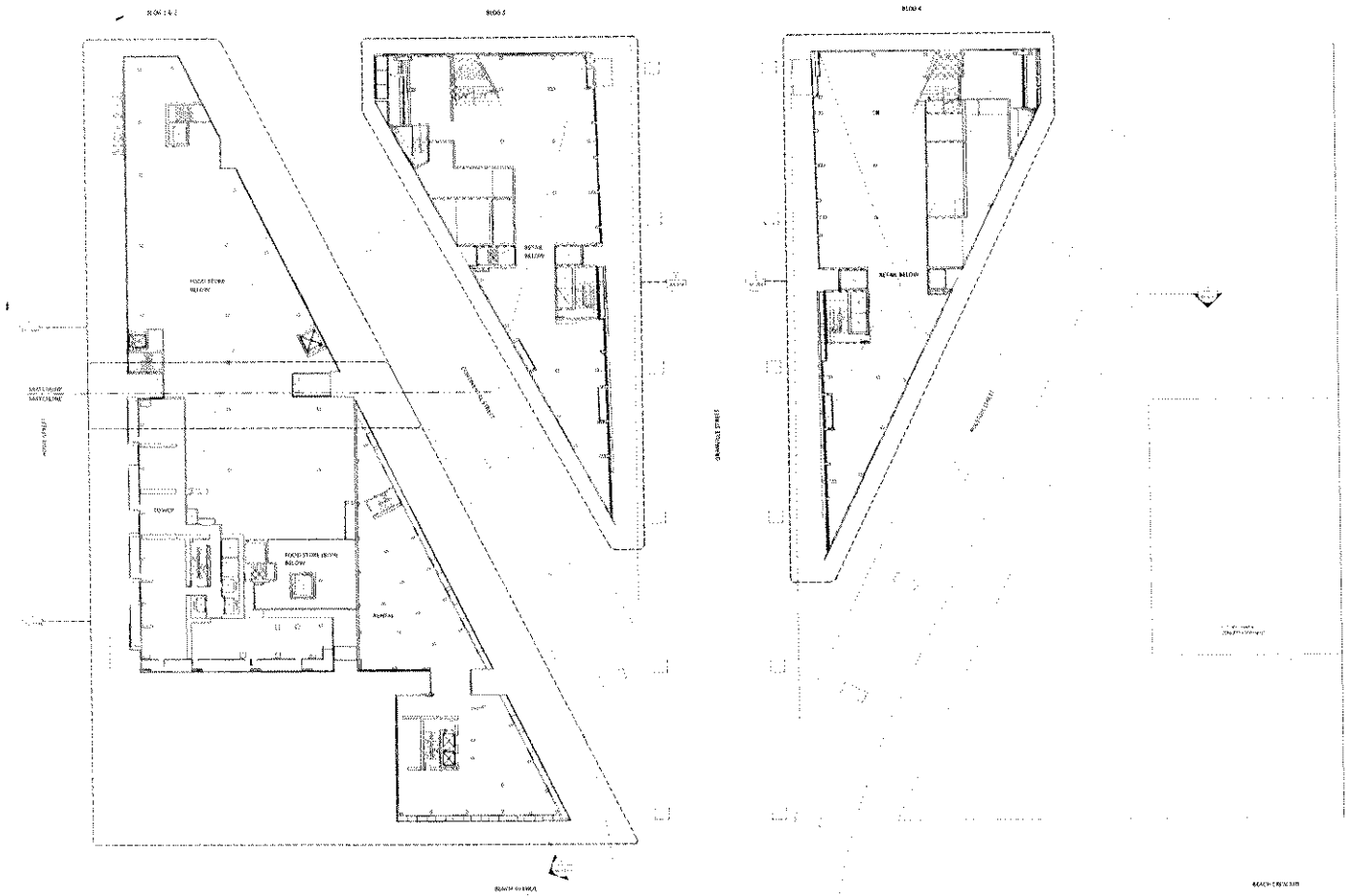
INTEGRAL GROUP

PFS PHILLIPS FARLEVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN LEVEL 03

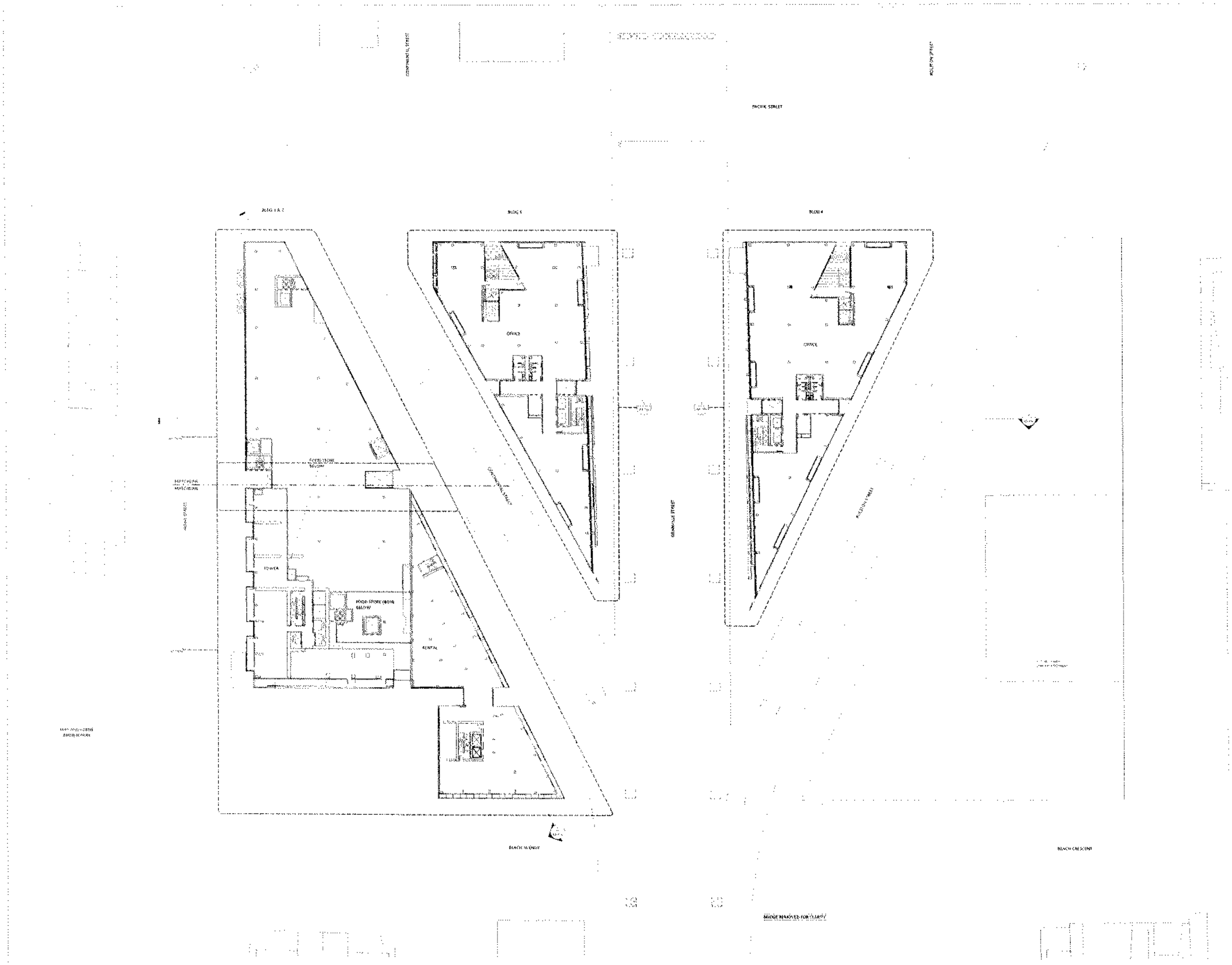
A0-208



BEACH AND HOWE

PLAN LEVEL 04

A0-209



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

INTEGRAL GROUP

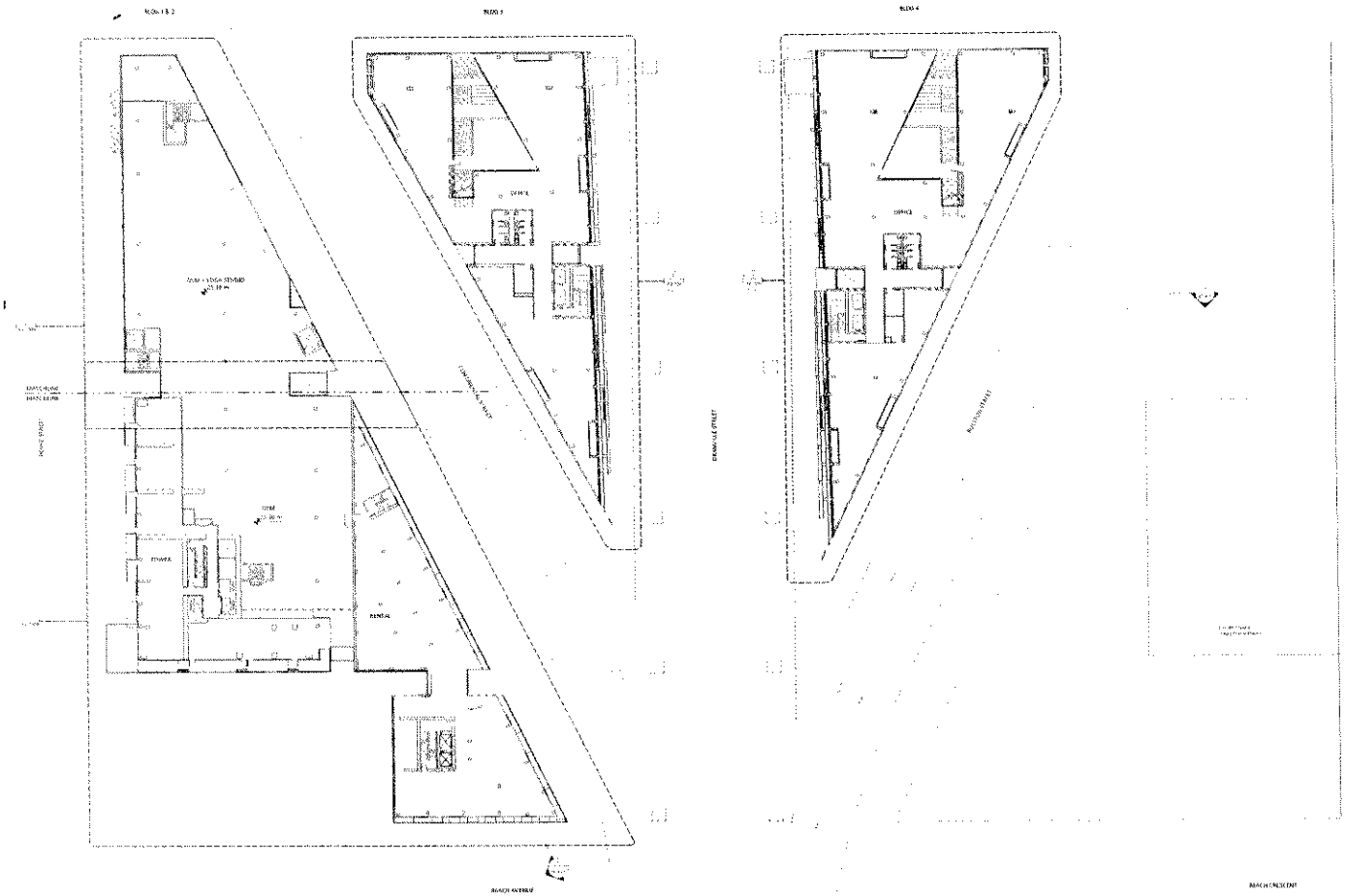
PFS PHILLIPS FAREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN LEVEL 05

A0-210

Appendix E ; page 20 of 44

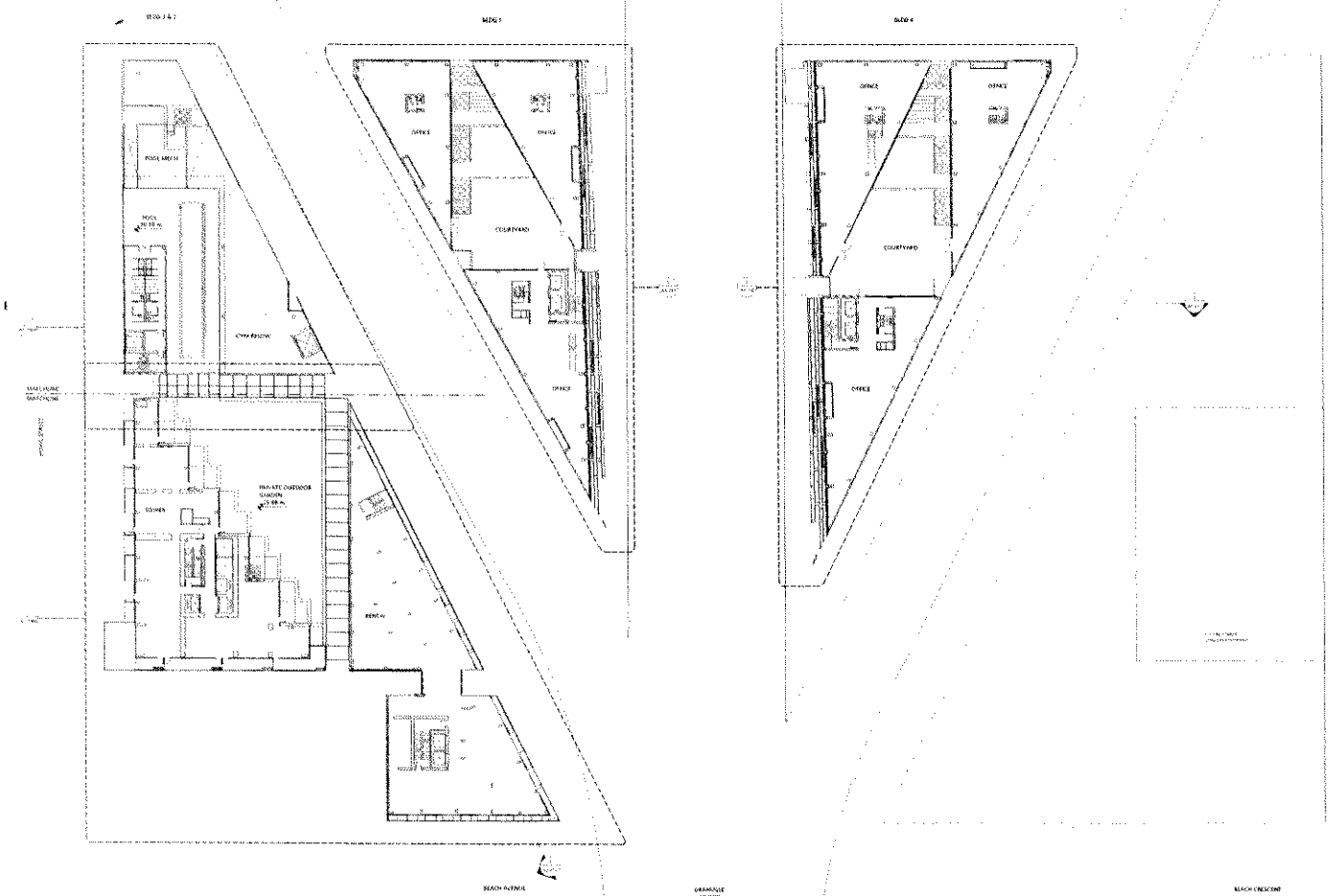


BEACH AND HOWE

NOT FOR CONSTRUCTION

PLAN LEVEL 06

A0-211



BEACH AND HOWE

WESTBANK PROJECTS CORP

DIALOG

BUNT&LAPPOLD

GLOTMAN SIMPSON

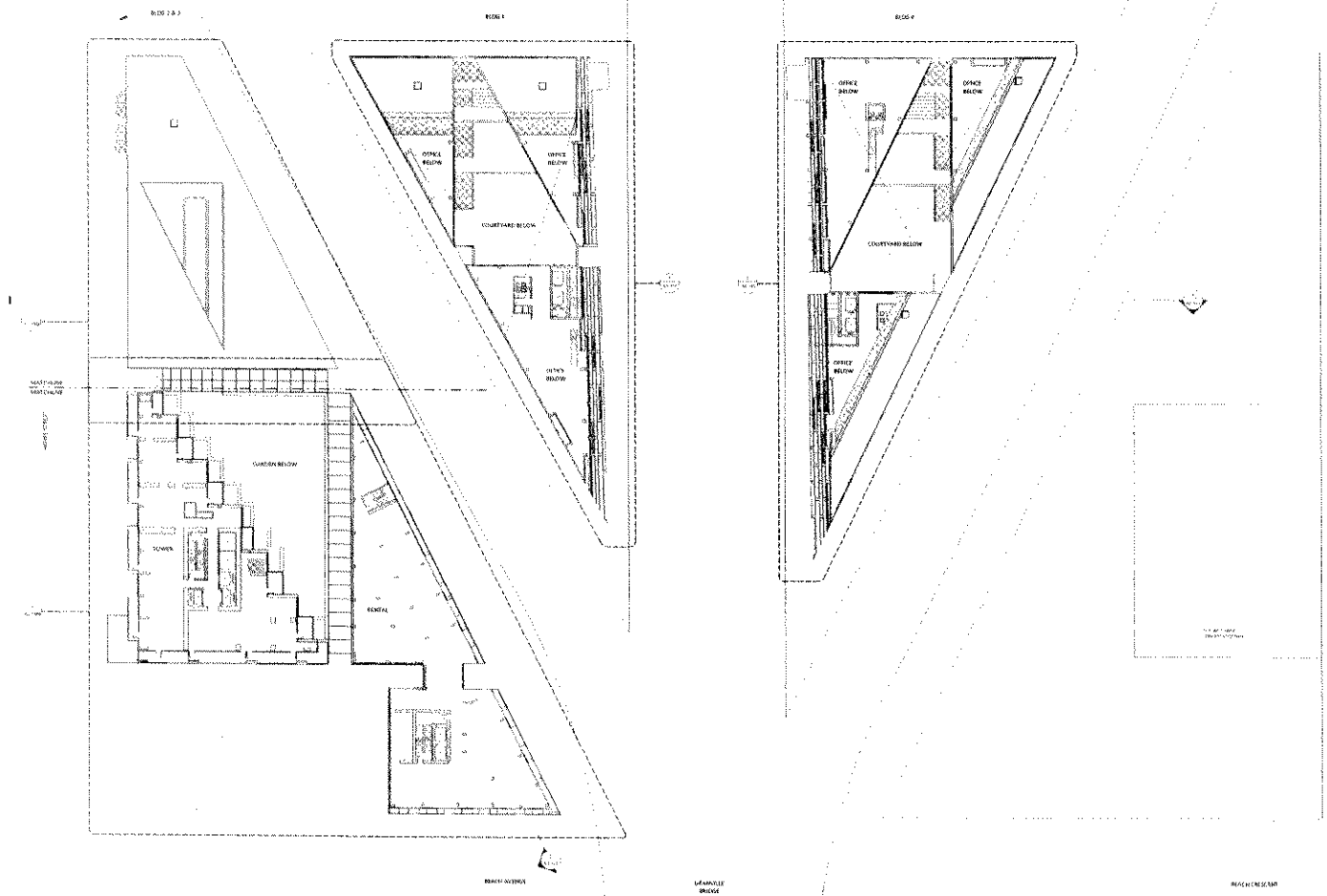
INTEGRAL GROUP

PFS PHILLIPS FARKVANG SMALLENBERG

NOT FOR CONSTRUCTION

PLAN LEVEL 07

A0-212



BEACH AND HOWE

WESTBANK PROJECTS CORP

Bell Pacific Ingram Group

DIALOG

BUNTING

GLOTMAN SIMPSON

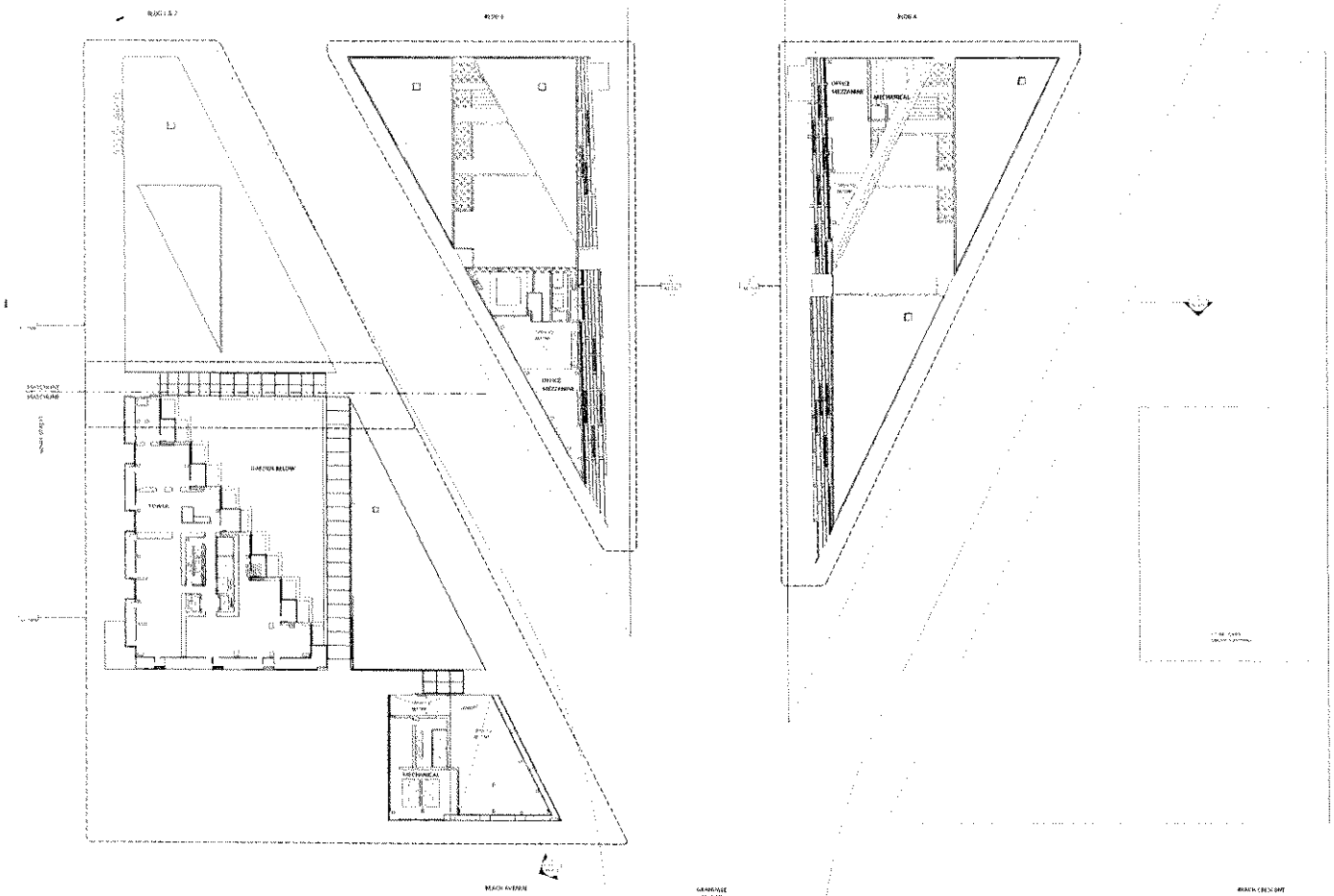
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

PLAN LEVEL 08

A0-213



BEACH AND HOWE

WESTMARK PROJECTS CORP

RFG Rancher Imperio Group

DIALOG

BUNO HAPPOLD

GLOTMAN SIMPSON

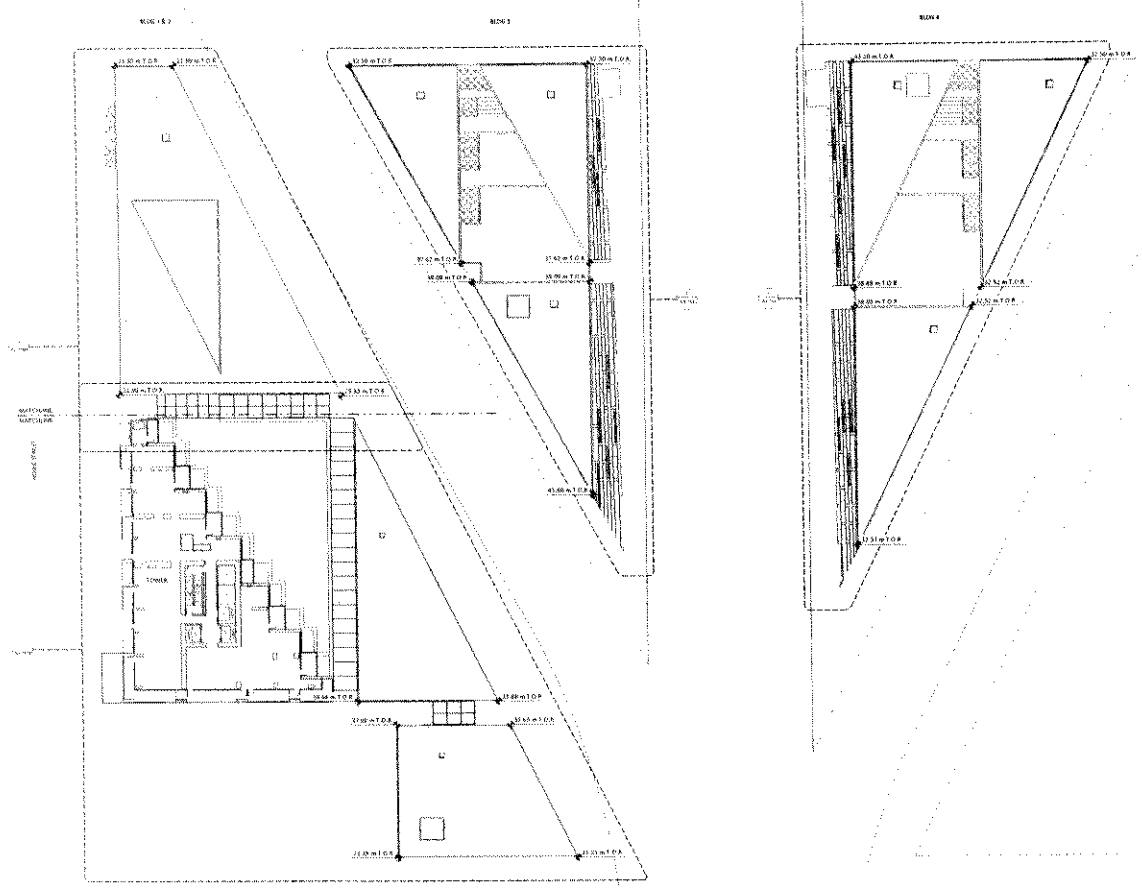
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN LEVEL 09

A0-214

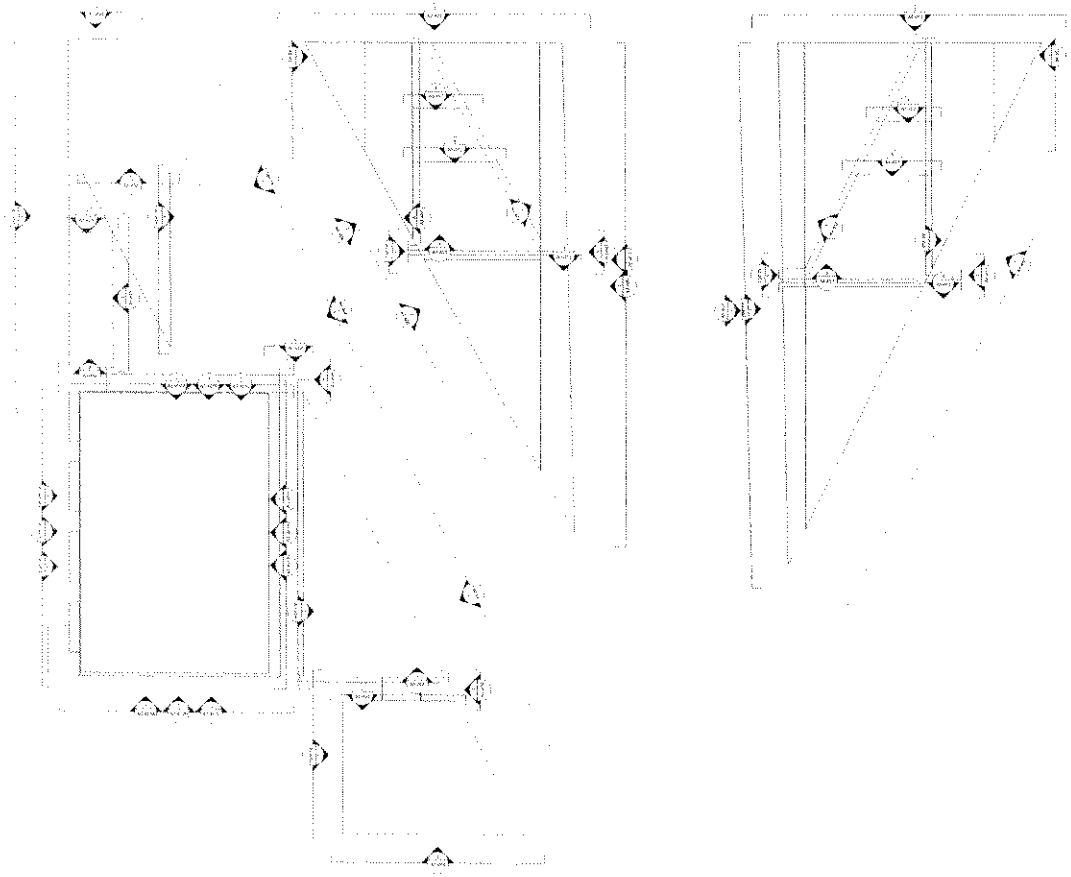


BEACH AND HOWE

NOT FOR CONSTRUCTION

PLAN LEVEL 10

A0-215

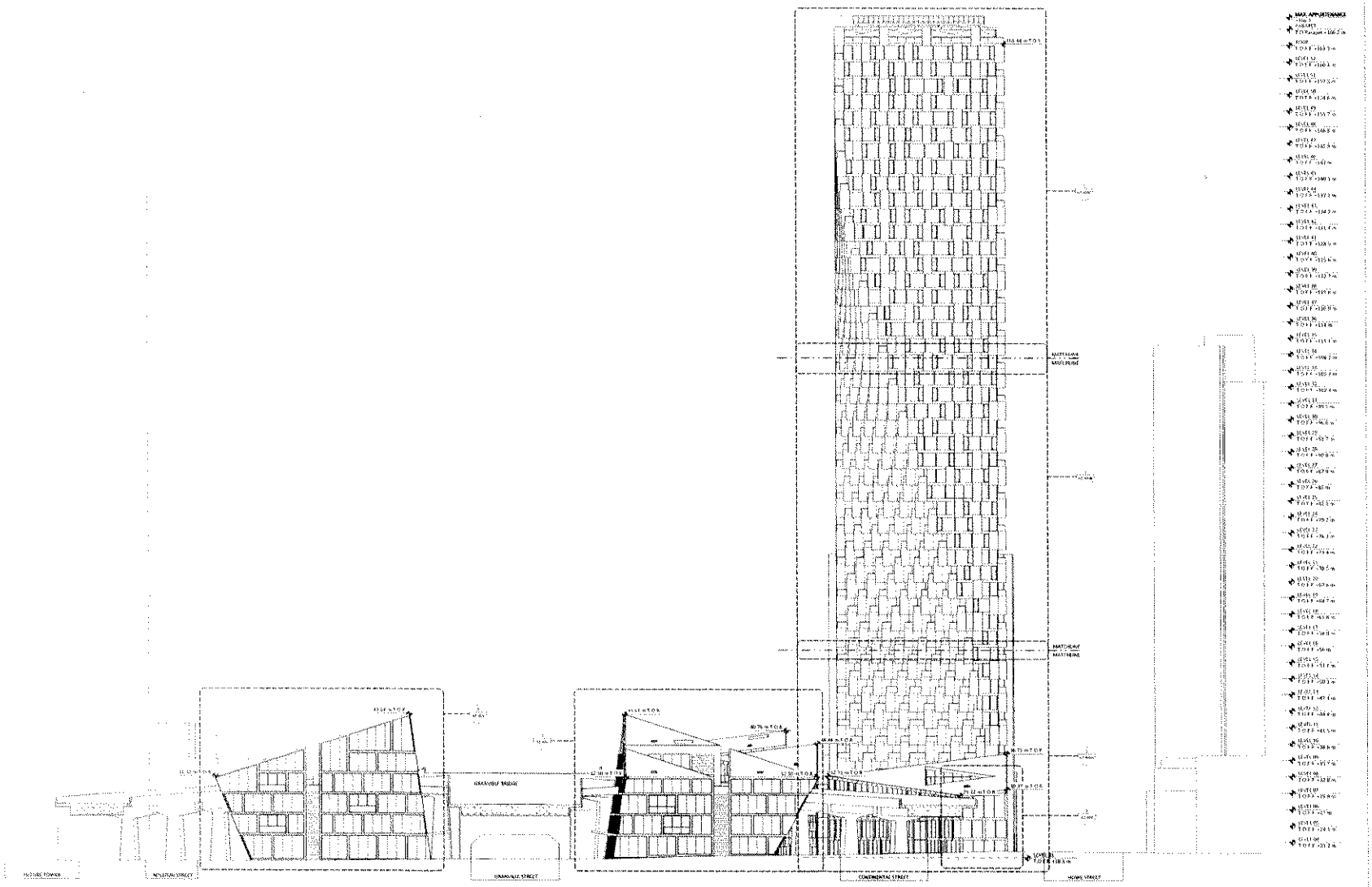


BEACH AND HOWE

NOT FOR CONSTRUCTION

ELEVATIONS KEY PLAN

A0-250

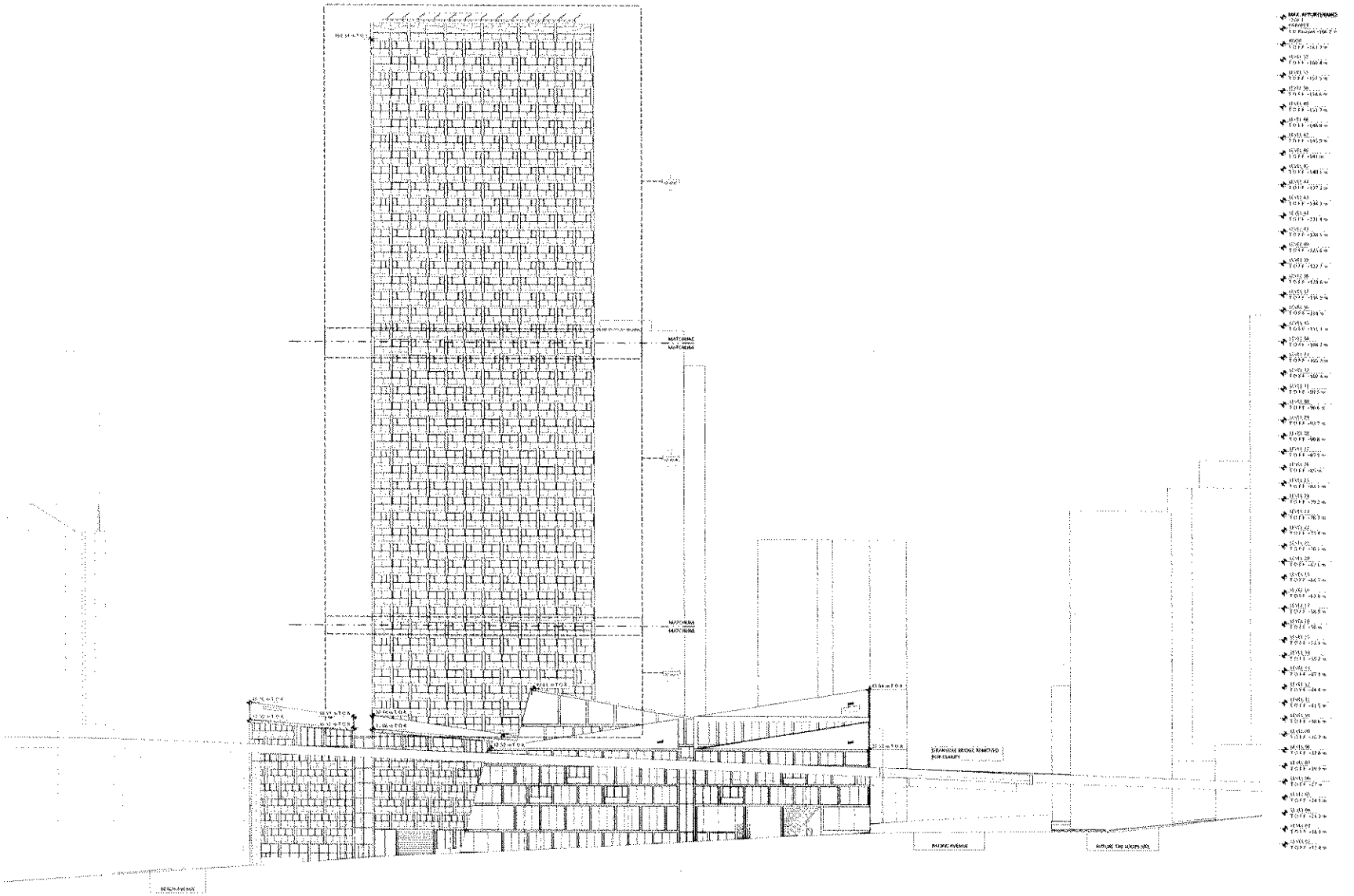


BEACH AND HOWE

NOT FOR CONSTRUCTION

ELEVATION NORTH

A0-400



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BUNO MAPPOSO

GLOTMAN SIMPSON

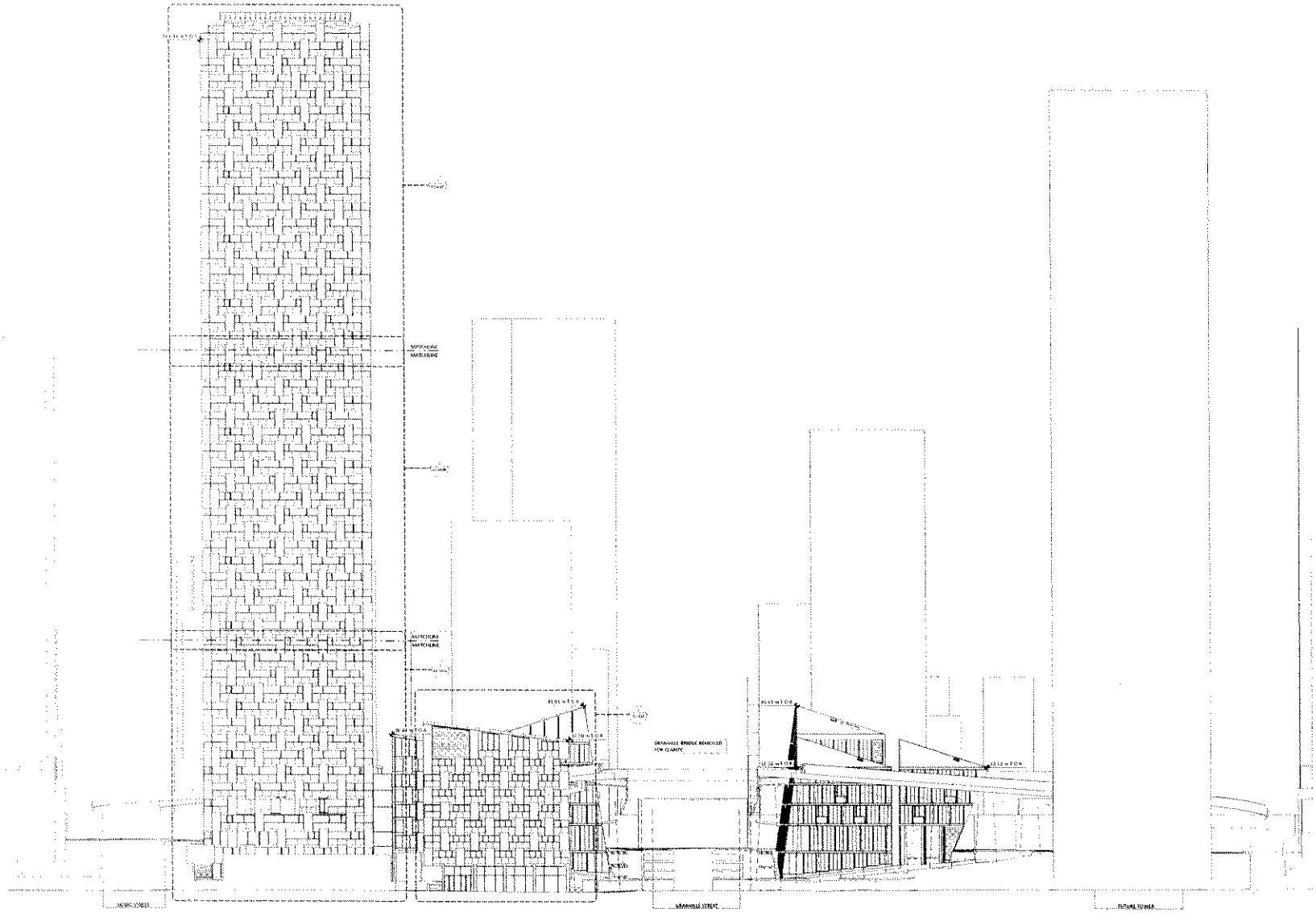
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

ELEVATION EAST

A0-401

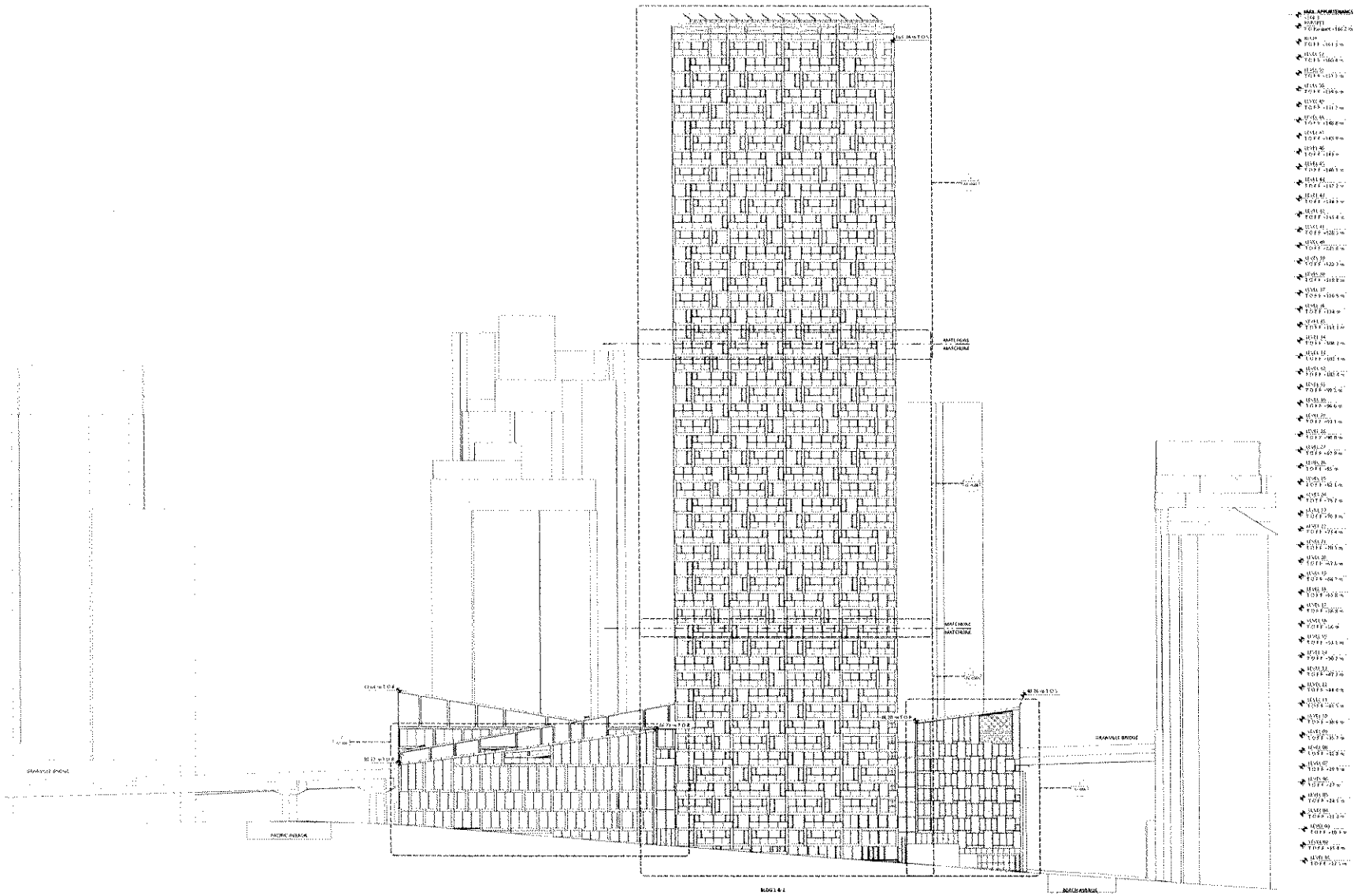


BEACH AND HOWE

NOT FOR CONSTRUCTION

ELEVATION SOUTH

A0-402



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

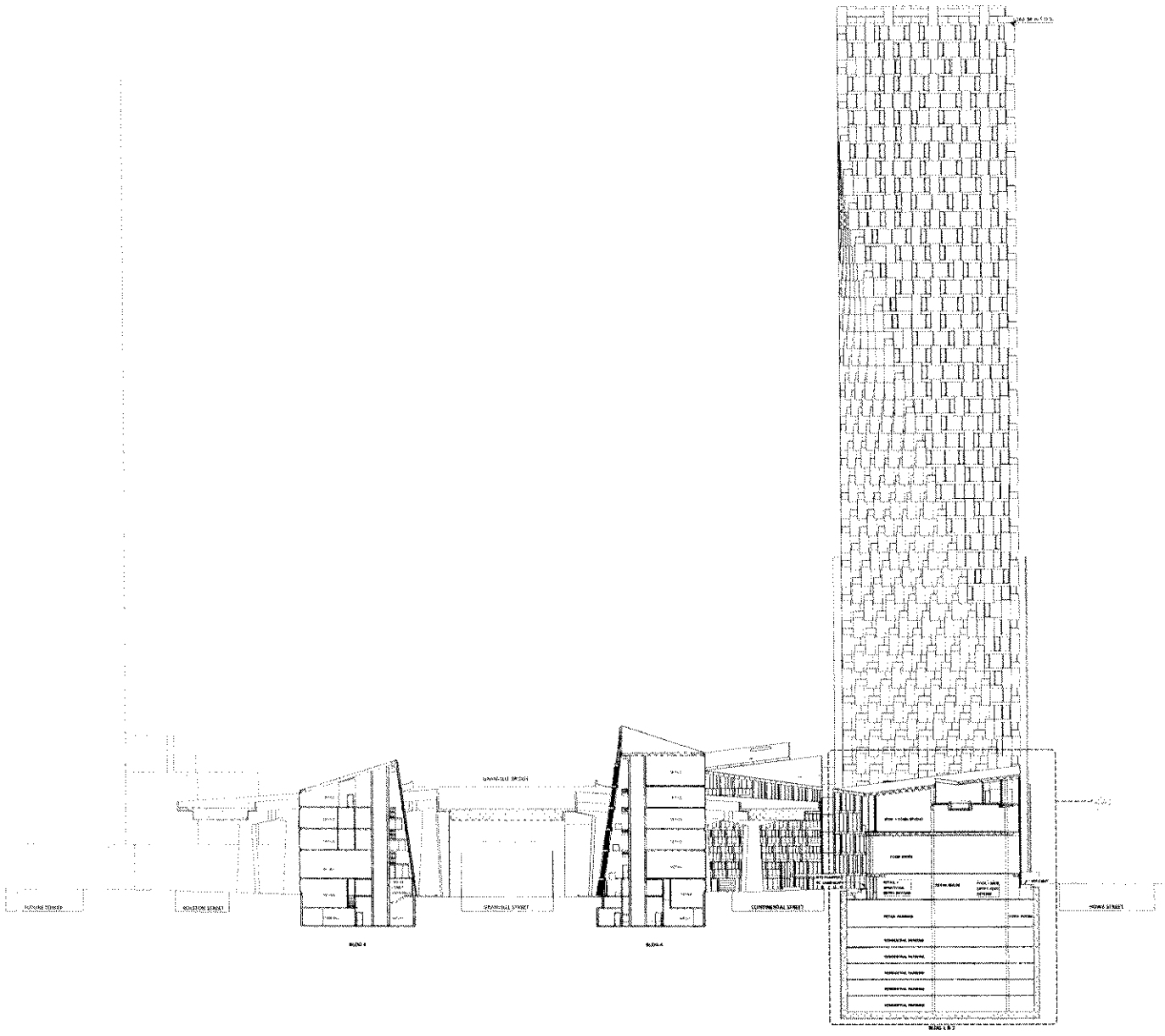
DIALOG

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

ELEVATION WEST

A0-403

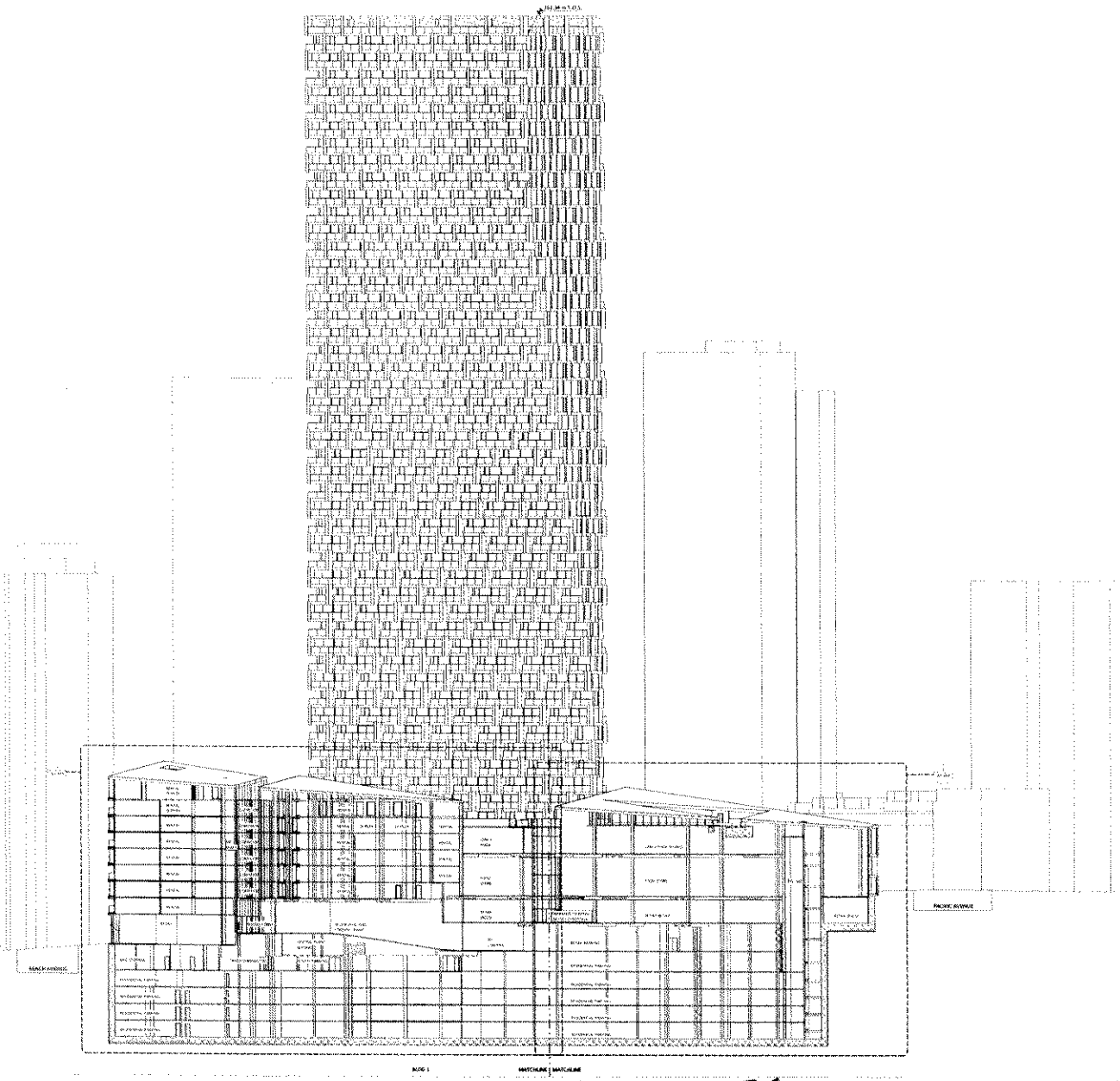


BEACH AND HOWE

NOT FOR CONSTRUCTION

SECTION EAST-WEST

A0-410



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

EURO HAPPOLD

GLOTMAN SIMPSON

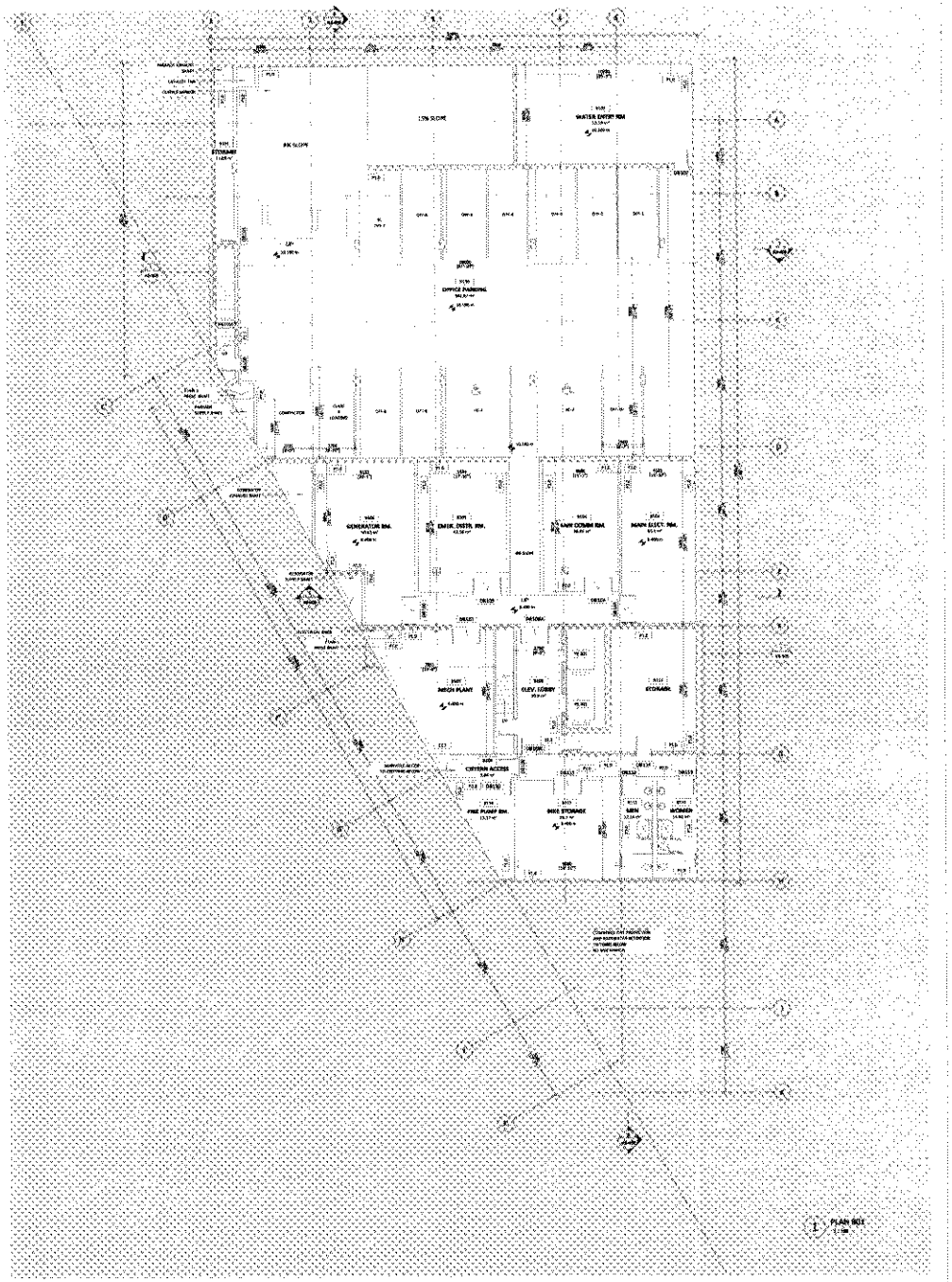
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

SECTION NORTH-SOUTH

A0-411

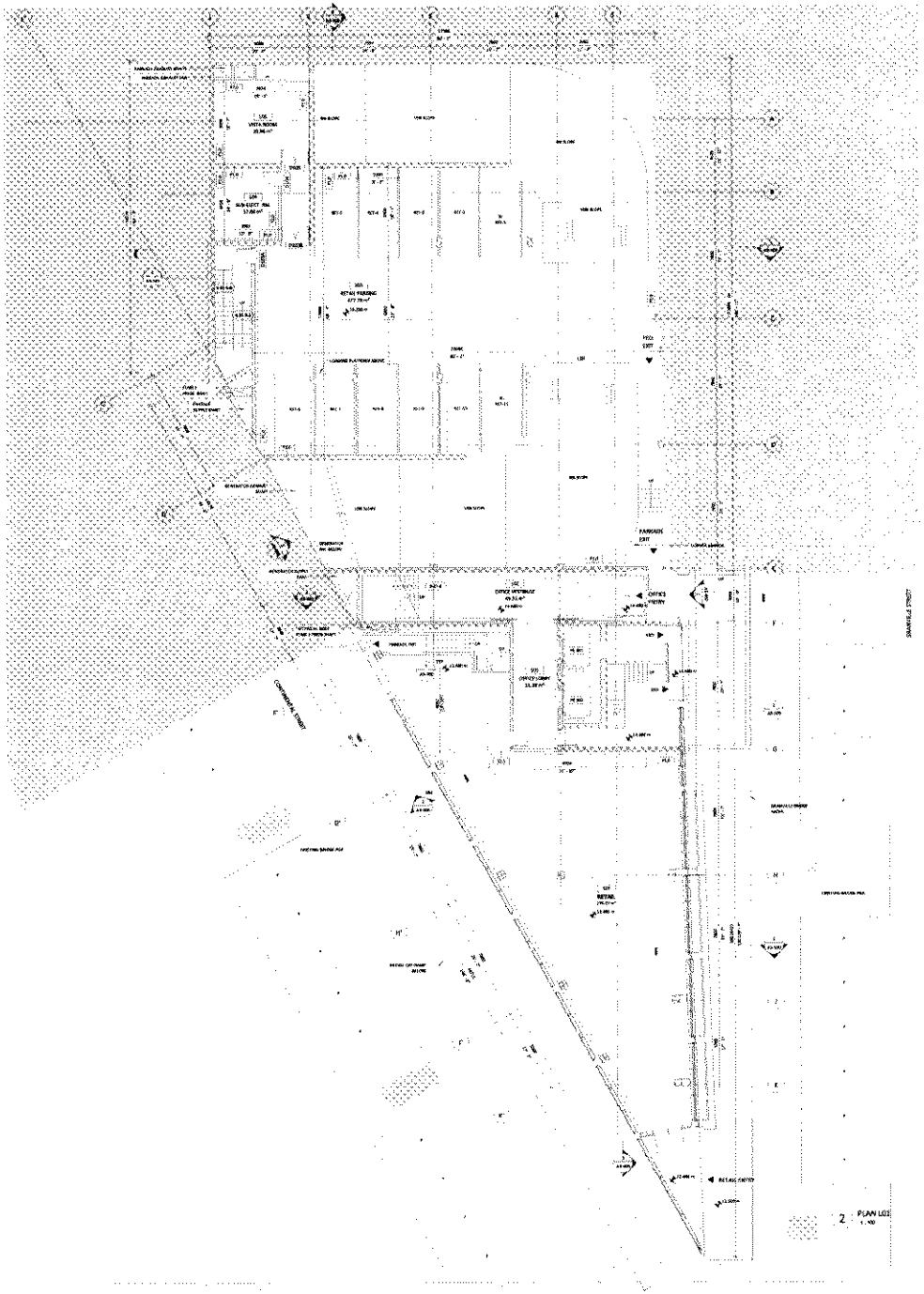


BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PLAN LEVEL B1

A3-200



BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

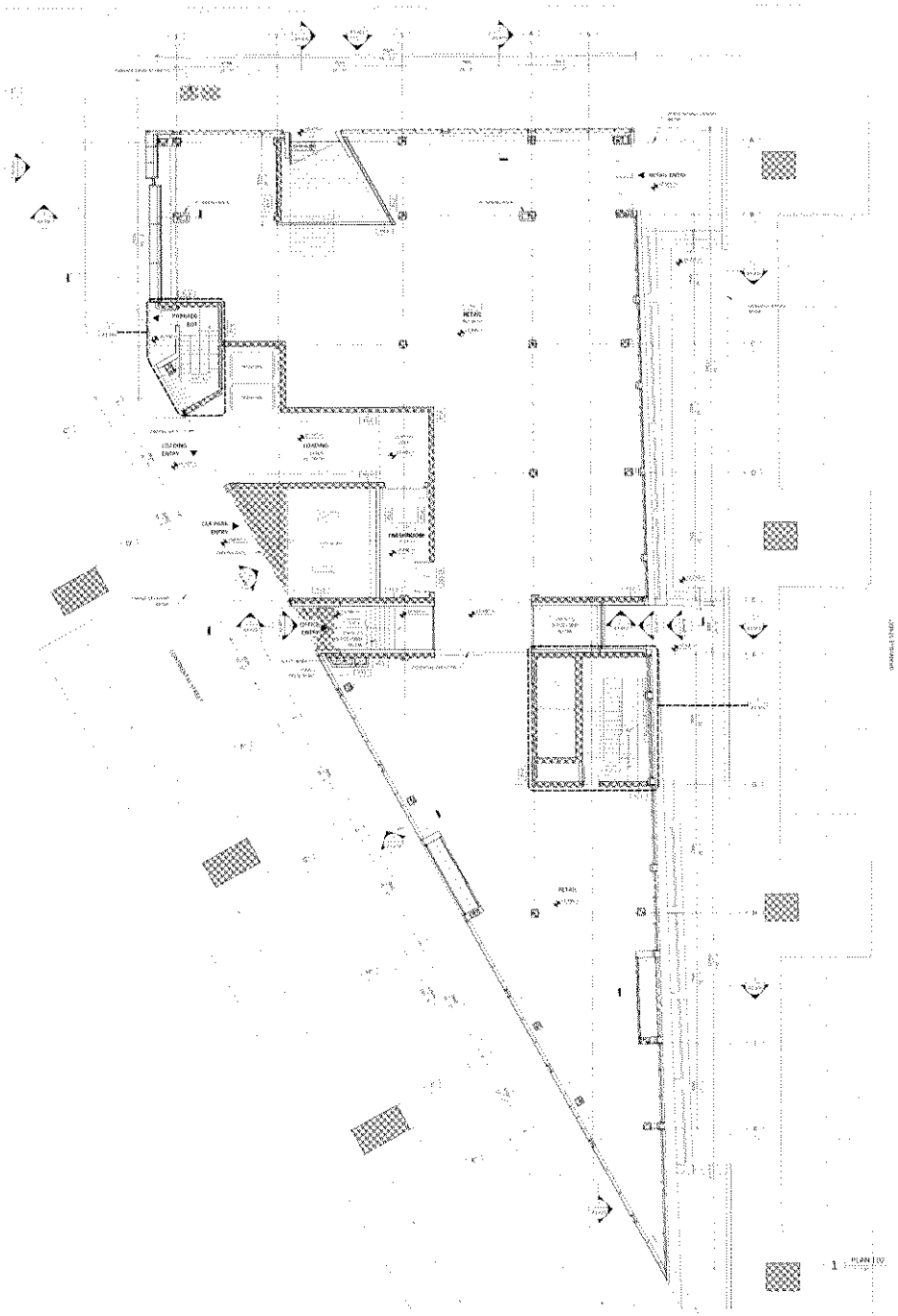
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN LEVEL 1

A3-202

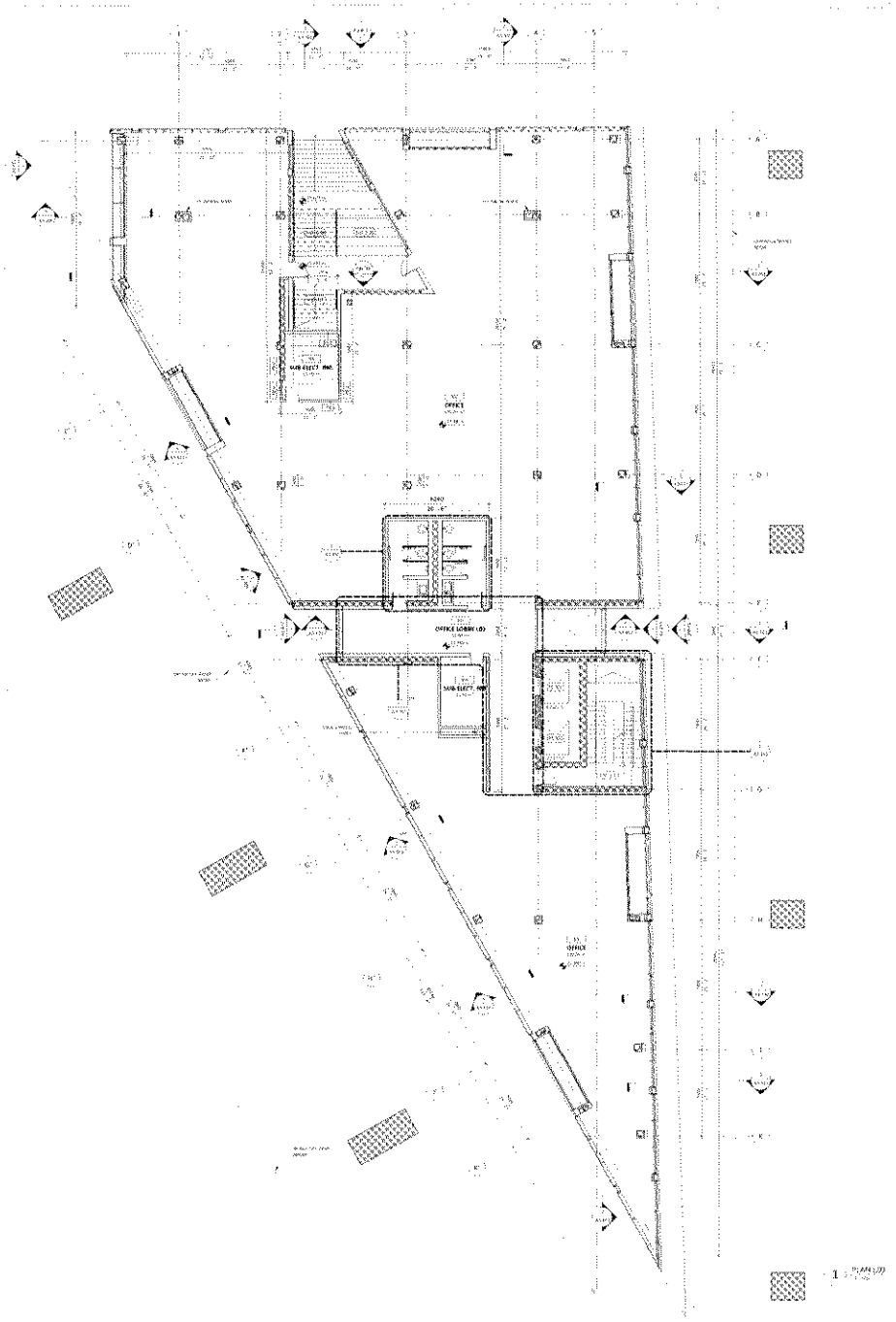


BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PLAN LEVEL 2

A3-204

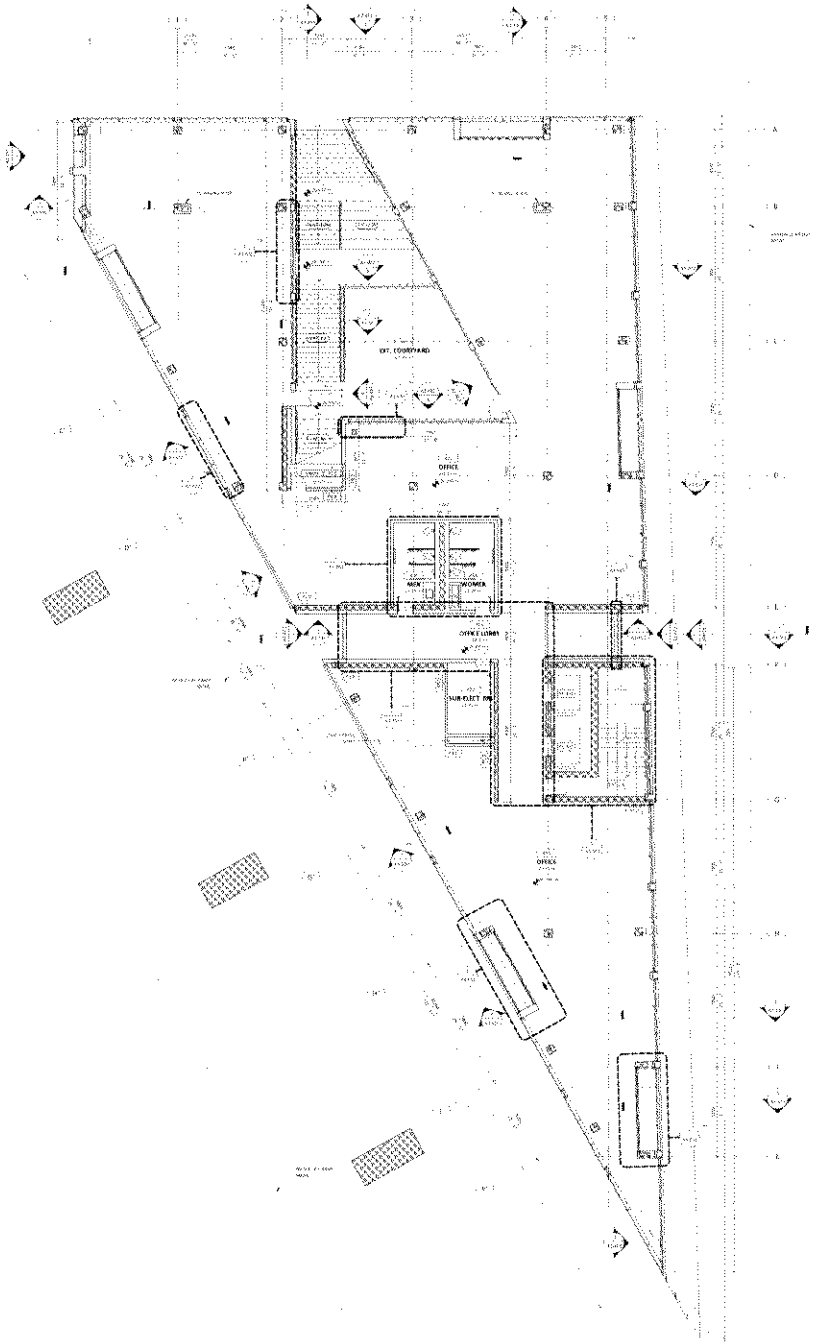


BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PLAN LEVEL 3

A3-206



1 PLAN LEVEL 4

BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DIALOG

RAND HARWOOD

VLADIMIR SIMPSON

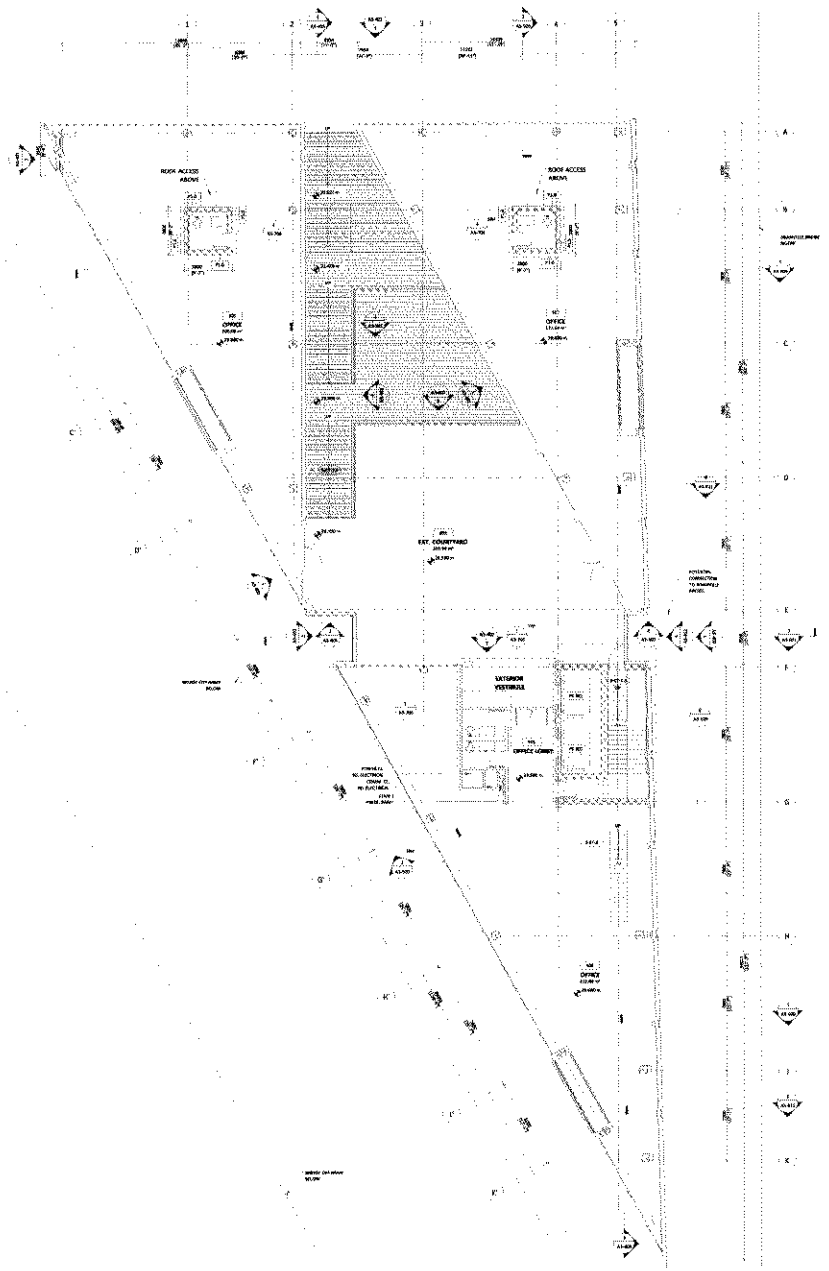
INTEGRAL GROUP

PFS PHILLIPS FARKAVAS SPHAETA BRCHS

- NOT FOR CONSTRUCTION -

PLAN LEVEL 4

A3-208



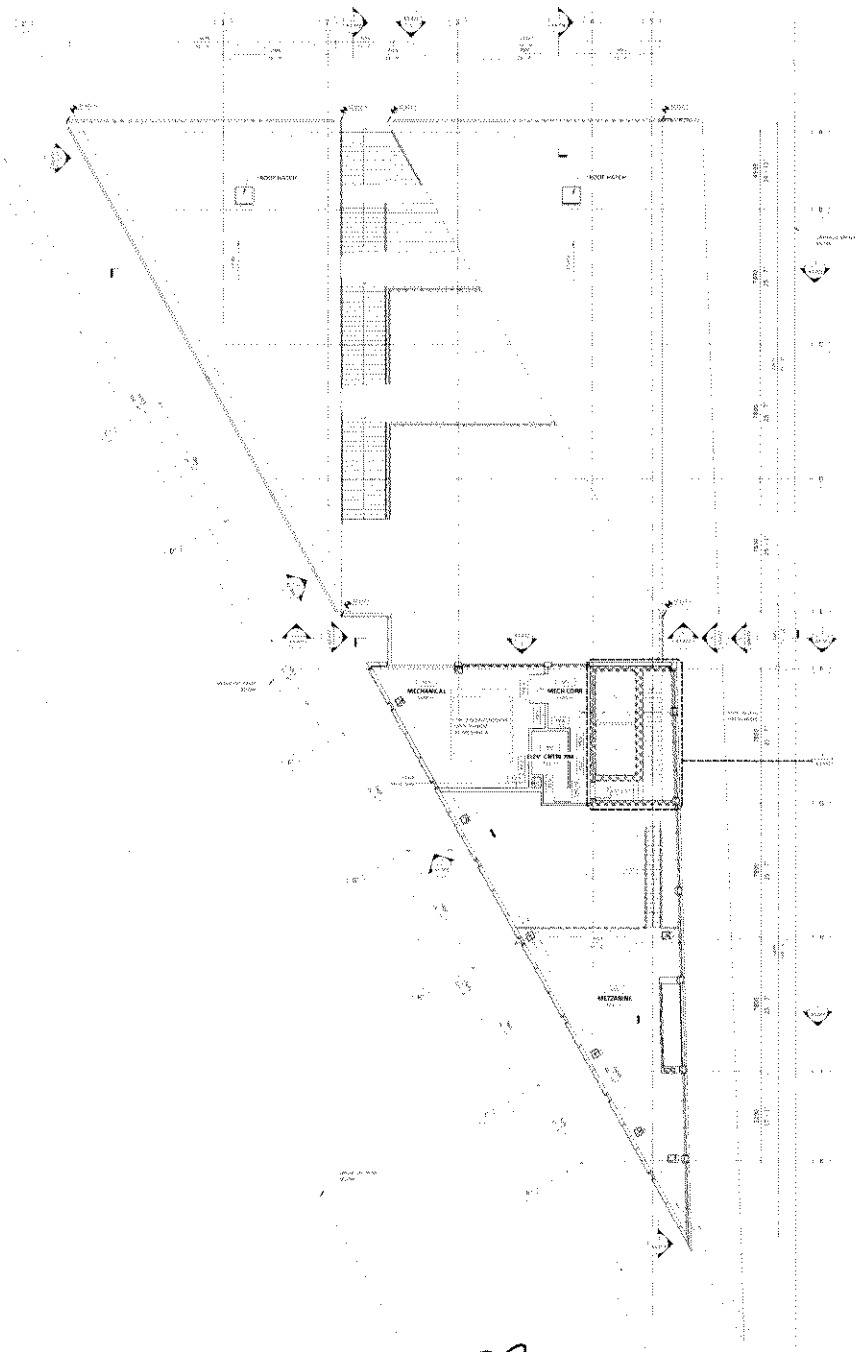
1 : PLAN L05

BEACH AND HOWE

- NOT FOR CONSTRUCTION -

PLAN LEVEL 5

A3-210



1 PLAN LOR

BEACH AND HOWE

WESTBANK PROJECTS CORP.

RWI Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

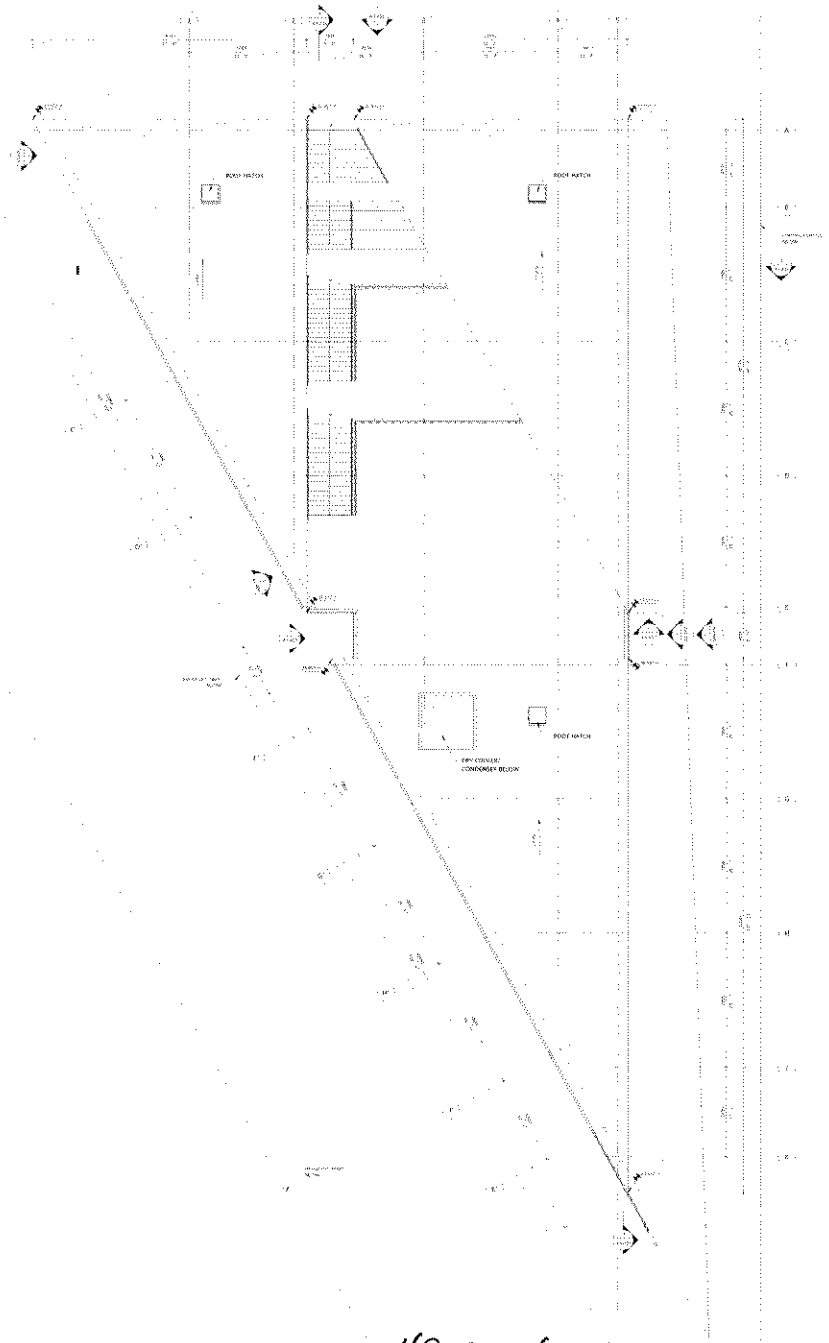
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

PLAN LEVEL 6 (MEZZ.)

A3-212



1 : PLAN ROOF

BEACH AND HOWE

WESTBANK PROJECTS CORP

BIG Bjarke Ingels Group

DOUGS

BURO HAPPOLD

GLOTMAN SIMPSON

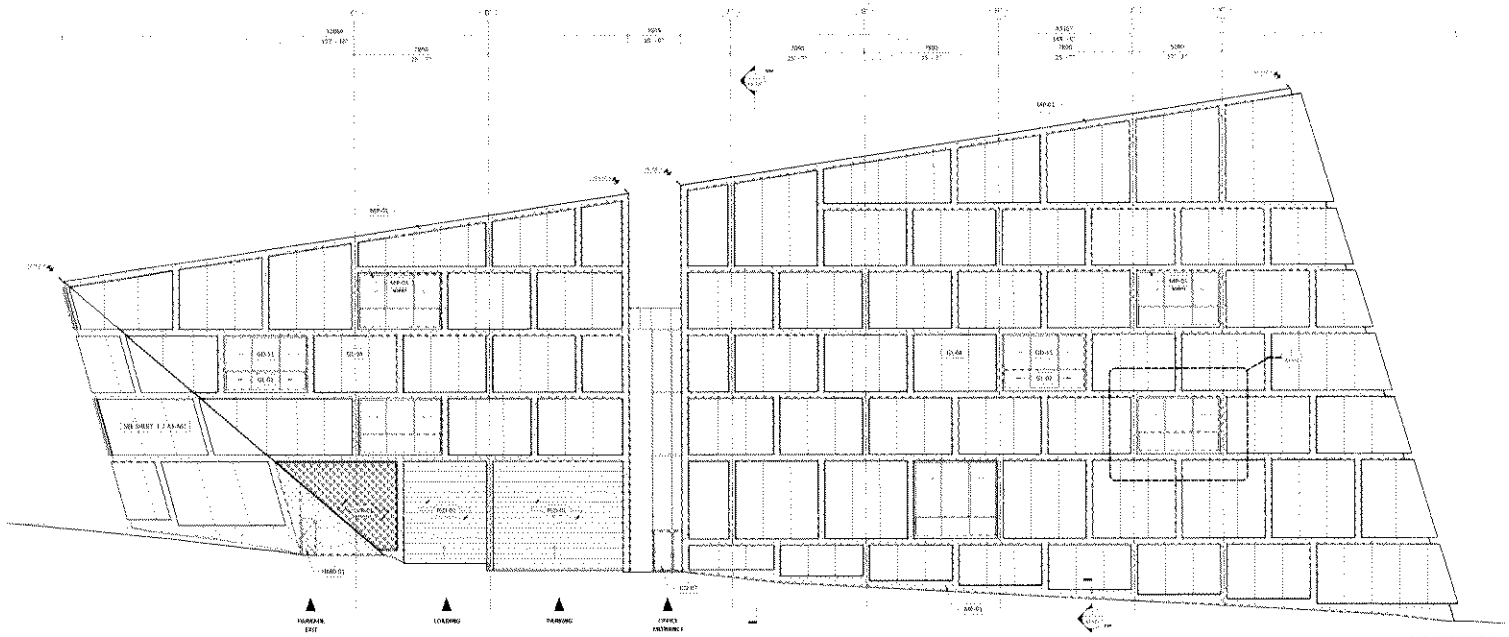
INTEGRAL GROUP

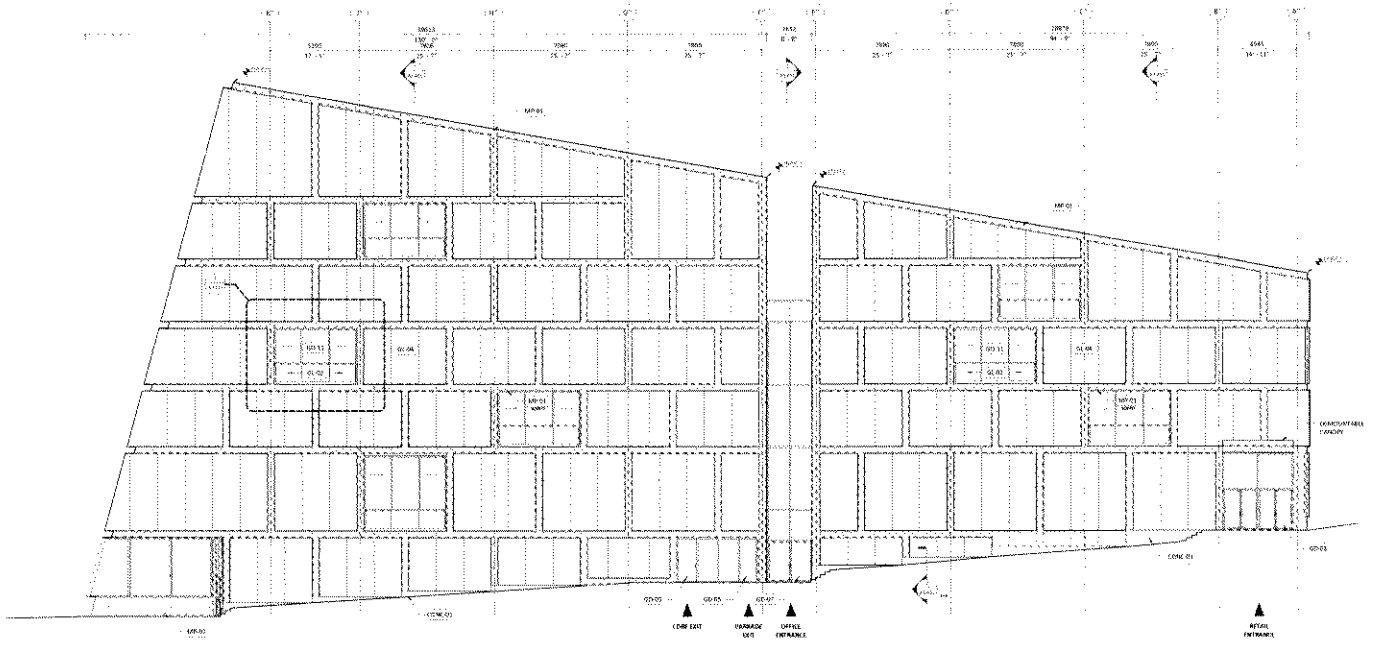
PFS PHILLIPS FAREVAAG SMALLENBERG

- NOT FOR CONSTRUCTION -

PLAN - ROOF

A3-214





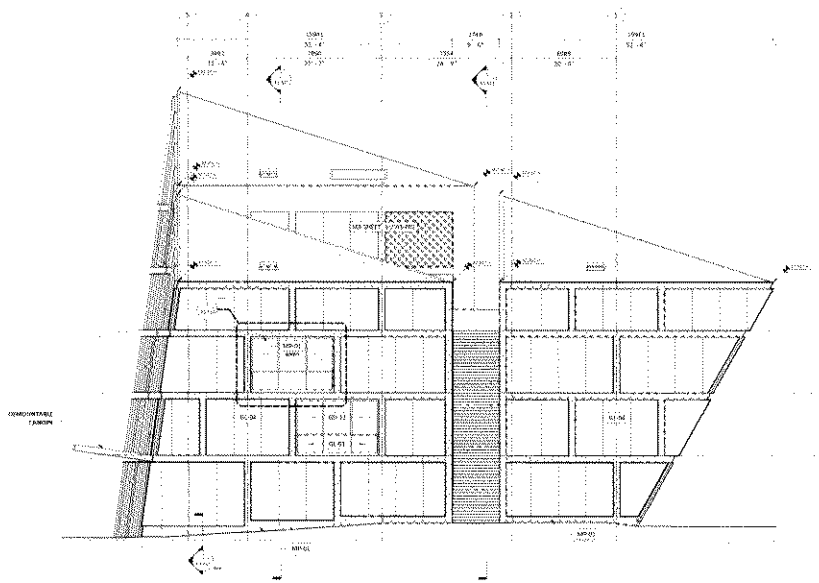
BEACH AND HOWE

- NOT FOR CONSTRUCTION -

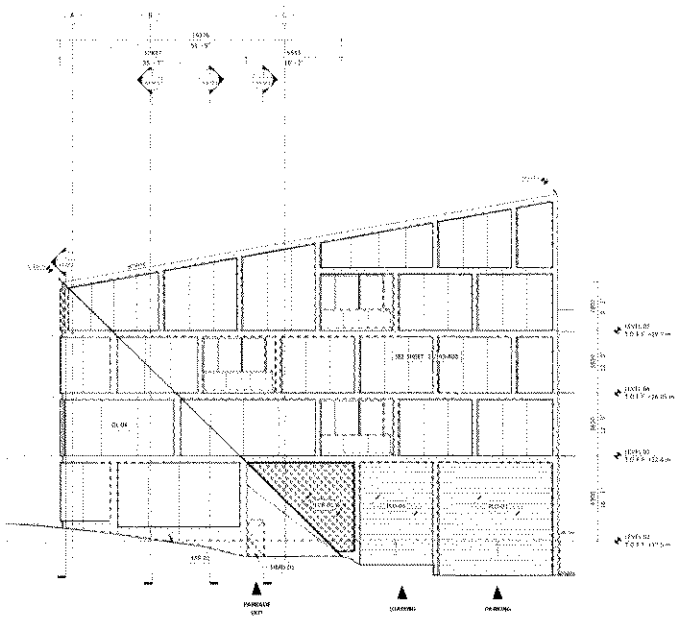
ELEVATIONS EAST & SOUTHWEST

A3-400

SEE A0.200 FOR CONTEXT ELEVATIONS KEY PLAN



2 NORTH ELEVATION



1 WEST ELEVATION

BEACH AND HOWE

WESTBANK PROJECTS CORP

BAG Blanke Ingold Group

PARKERS

BURO HAPPOLD

GLOTMAN SIMPSON

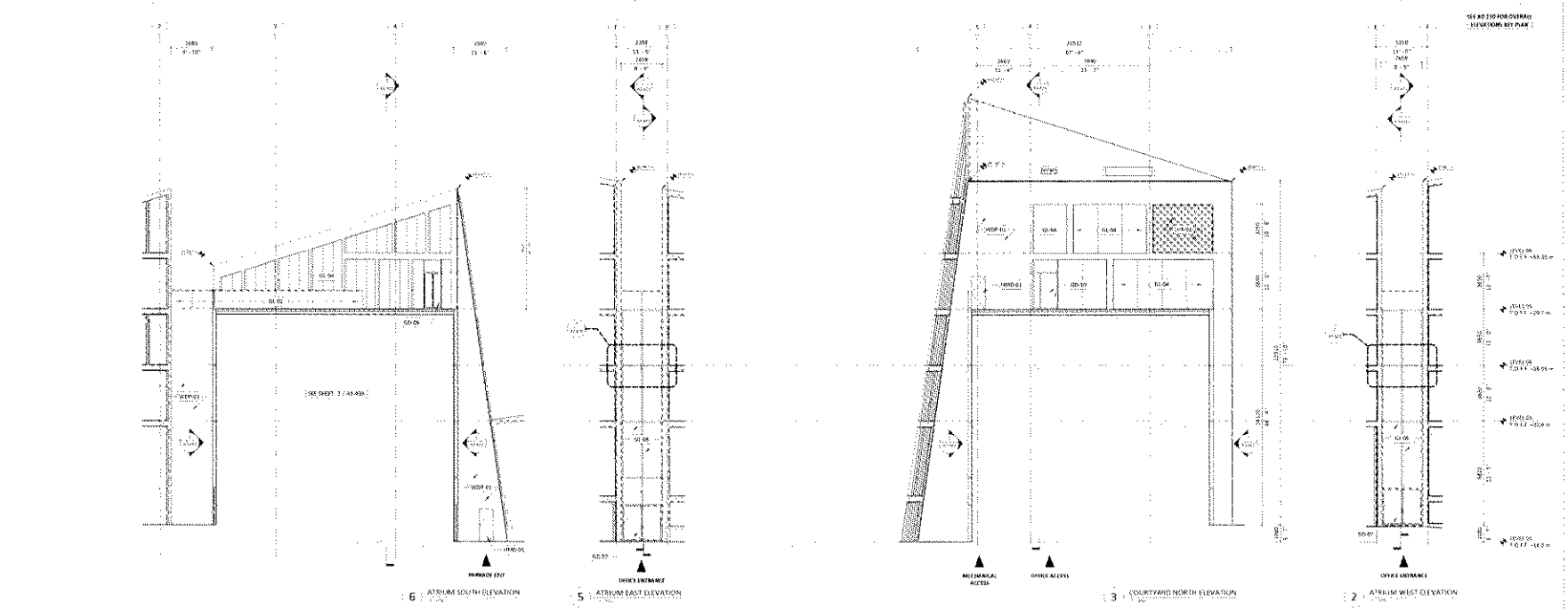
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

NOT FOR CONSTRUCTION

ELEVATIONS NORTH & WEST

A3-401

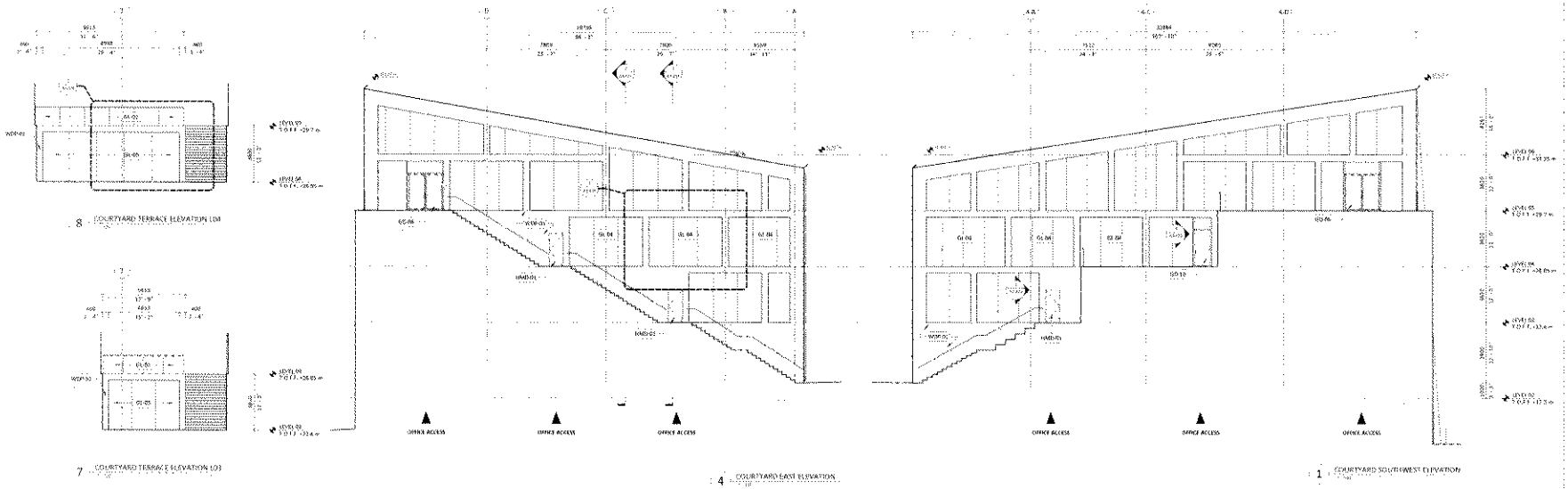


6 : ATRIUM SOUTH ELEVATION

5 : ATRIUM EAST ELEVATION

3 : COURTYARD NORTH ELEVATION

2 : ATRIUM WEST ELEVATION



8 : COURTYARD TERRACE ELEVATION L04

7 : COURTYARD TERRACE ELEVATION L03

4 : COURTYARD EAST ELEVATION

1 : COURTYARD SOUTHWEST ELEVATION

BEACH AND HOWE

WESTBANK PROJECTS CORP

Bjarke Ingels Group

DIALOG

BURO HAPPOLD

GLOTMAN SIMPSON

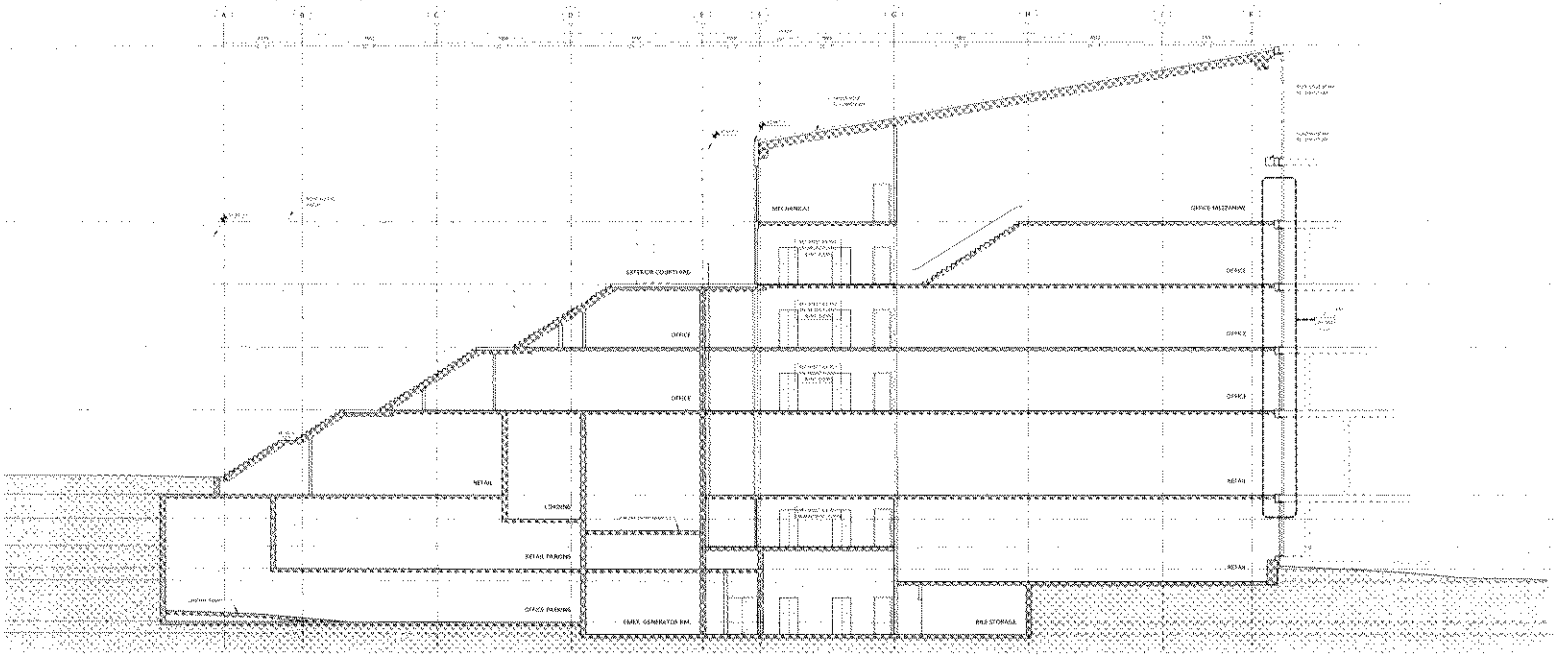
INTEGRAL GROUP

PFS PHILLIPS FAREVAAG SMALLENBERG

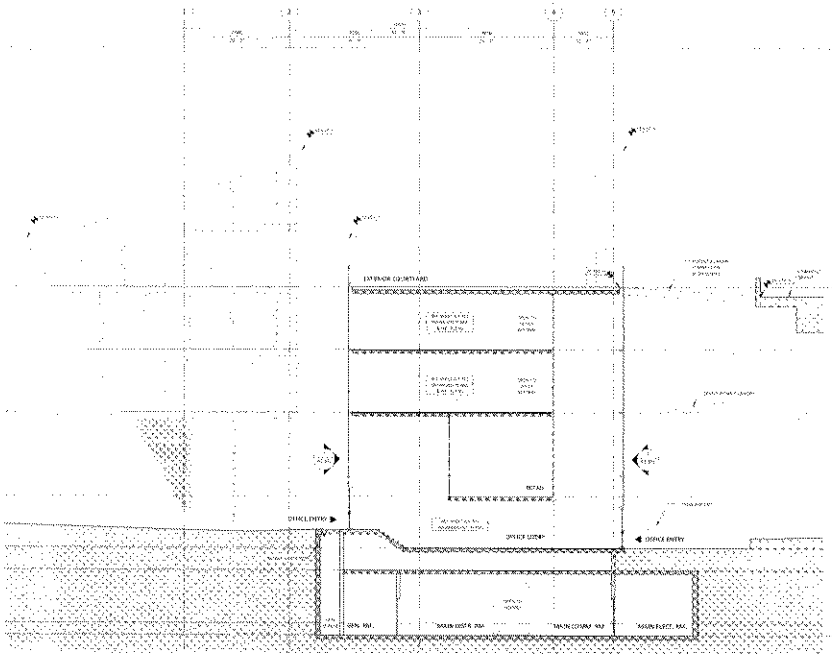
NOT FOR CONSTRUCTION

ELEVATIONS COURTYARD & ATRIUM

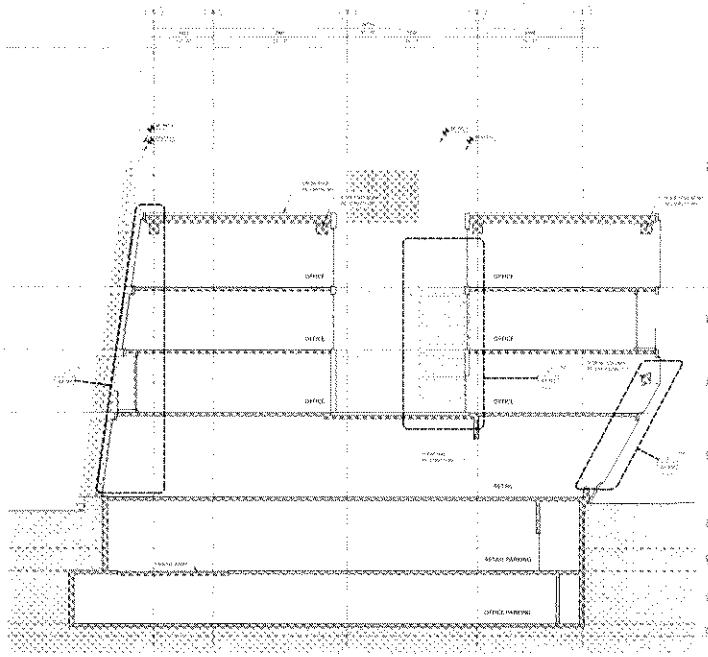
A3-402



3 NORTH-SOUTH SECTION LOOKING EAST



2 EAST-WEST SECTION LOOKING NORTH



1 EAST-WEST SECTION LOOKING SOUTH

BEACH AND HOWE

WESTBANK PROJECTS CORP

GM Bjarke Ingels Group

DIALOG

EURO MAPPED

GLOTMAN SIMPSON

INTEGRAL GROUP

PPS PHILLIPS FARKVAAG SMARJENBERG

NOT FOR CONSTRUCTION

SECTIONS

A3-403

REZONING RATIONALE

THIS SECTION OF THE REZONING APPLICATION OUTLINES THE SPECIFIC DESIGN RESPONSE OF THE APPLICATION TO THE TWO MOST IMPORTANT POLICY DOCUMENTS AFFECTING THIS SPECIFIC SITE; THE UNDER THE GRANVILLE BRIDGE NEIGHBOURHOOD COMMERCIAL CENTRE (UGBNCC) POLICIES AND GUIDELINES AND THE GENERAL POLICY FOR HIGHER BUILDINGS (GPHB). THE EXISTING SITE ZONING (BCPED - BC PLACE / EXPO DISTRICT WEST OF GRANVILLE AND FCCDD - FALSE CREEK COMPREHENSIVE DEVELOPMENT DISTRICT EAST OF GRANVILLE) ARE BOTH LONG OUTDATED ZONINGS WITH RESPECT TO THIS SITE, AND SO DO NOT PROVIDE USEFUL COMPARATIVE INFORMATION FOR THIS APPLICATION.

RESPONSE TO:
UNDER THE GRANVILLE BRIDGE NEIGHBOURHOOD COMMERCIAL CENTRE POLICIES AND GUILDELINES

THE CITY OF VANCOUVER'S VISION FOR THE NEIGHBOURHOOD UNDERNEATH THE GRANVILLE BRIDGE FOLDS TWO IDEAS TOGETHER. THE FIRST IDEA IS A PLACE FOR NEIGHBOURHOOD SHOPPING, WITH APPROPRIATE LOCAL RETAIL USES. THE SECOND IS A DRAMATIC AND VIBRANT PUBLIC REALM THAT IS RESPONSIVE TO THE OPPORTUNITIES CREATED BY THE BRIDGE STRUCTURE.
BY INCORPORATING A FOODSTORE, DRUG STORE, LIQUOR STORE, RESTAURANTS, A BANK AND SMALLER SCALE RETAIL THIS PROJECT PROVIDES A COMPLETE NEIGHBOURHOOD DESTINATION, WITH ALL KEY BASICS IN A SINGLE LOCATION.
BY PROPOSING A DISTINCTIVE, HARDSCAPE DOMINATED AND FLEXIBLE PUBLIC REALM THAT INCLUDES BOTH A CURBLESS, FLEXIBLE GROUND PLANE FOR IMAGINATIVE EVENTS, AND CONTRASTING SMALLER SCALE PASSAGES AND TWO UNIQUE TRIANGULAR COURTYARDS, THE PROJECT PROPOSES A TRULY URBAN AND MEMORABLE SET OF LINKED PUBLIC SPACES.

SPECIFIC RESPONSES:

- LAND USE AND DENSITY

THE APPLICATION INCLUDES THE GROCERY STORE, SMALL SCALE CRU'S AND RESTAURANTS RECOMMENDED IN THE UGBNCC POLICIES. THE ADDITION OF A DRUGSTORE, BANK, AND LIQUOR STORE ENHANCES THE EFFECTIVENESS AS A LOCAL SHOPPING DESTINATION. OFFICES ARE LOCATED ON UPPER FLOORS, AS REQUESTED. NO NON SUPPORTED USES (AUTO CENTRED OR RESIDENTIAL) ARE LOCATED ON THE TWO TRIANGULAR PARCELS COVERED BY THE GUIDELINES.
THE UGBNCC POLICIES NOTE THAT THE GROCERY STORE SHOULD BE TO THE EAST OF GRANVILLE STREET. THE OPPORTUNITY FOR A MUCH LARGER STORE ON THE ASSOCIATED WESTERN PARCEL ENHANCES THE RETAIL DRAW, RELATIVE TO A SMALLER STORE THAT COULD BE BUILT ON THE EAST PARCEL. ACTIVE FRONTAGES
ARE CREATED NOT ONLY ON GRANVILLE STREET, BUT ON KEY SECTIONS OF ROLSTON AND CONTINENTAL STREETS AS WELL. THE CURBLESS PUBLIC REALM, LIKE ON GRANVILLE ISLAND, CREATES OPPORTUNITIES FOR ON STREET GOODS DISPLAY AND OUTDOOR SEATING.
THE UGBNCC POLICIES NOTE THAT "THE ZONING SHALL NOT HAVE A PREDETERMINED FSR". THE PROPOSAL HAS A GREATER COMMERCIAL FLOOR AREA THAN ENVISIONED IN THE GUIDELINES BECAUSE OF THE INCLUSION OF THE WESTERN PARCEL FACING ON HOWE STREET AND A DESIRE TO PROVIDE A MORE COMPLETE NEIGHBOURHOOD RETAIL PACKAGE.

- BUILT FORM, MASSING AND CHARACTER

THIS SECTION OF THE UGBNCC POLICIES OUTLINES THE REQUIRED CLEARANCES FOR BRIDGE MAINTENANCE, THE IMPORTANCE OF CREATING A GRANVILLE STREET URBAN ROOM, THE IMPORTANCE OF ALLOWING THE CONTINUITY OF THE "GREAT STREET" STRATEGY ALONG THE SOUTH EDGE OF PACIFIC, AND THE IMPORTANCE OF SPACE FOR SEASONAL STRUCTURES. THIS PROJECT WILL MEET ALL THE NECESSARY SETBACKS AND OTHER REQUIREMENTS FOR BRIDGE MAINTENANCE ACCESS,
AND FOLLOWS ALL THE BUILD TO LINE STRATEGIES RECOMMENDED IN THE UGBNCC POLICIES. THE PROJECT WILL ALSO ALLOW SUFFICIENT NORTH PROPERTY LINE SETBACK TO PERMIT THE "GREAT STREET" SECTION CONTINUITY. LASTLY, WE HAVE ALLOWED SPACE FOR, AND ENVISION FREQUENT USE OF SEASONAL STRUCTURES FOR DAY TO DAY USE AND SPECIAL EVENTS.
IN TERMS OF BUILDING HEIGHT, THE PROPOSED STRATEGY OF ALLOWING THE GREEN ROOF TOPPED DISTINCTIVE TRIANGULAR FORMS TO POP OUT ABOVE THE BRIDGE DECK ENHANCES THE CITY SUPPORTED STRATEGY OF CREATING A GRANVILLE GATEWAY.
THIS SECTION OF THE UGBNCC POLICIES ALSO OUTLINES THE IMPORTANCE OF CREATING ACTIVE STREET EDGES ON GRANVILLE. TO RESPOND TO THIS, WE HAVE LOCATED THE MAJOR IMPEDIMENTS TO ACTIVE EDGE CONTINUITY, THE LOADING DOCKS, ON ROLSTON AND CONTINENTAL, ALLOWING FULL RETAIL CONTINUITY ON GRANVILLE STREET.
THIS SECTION ALSO OUTLINES THE DESIRE FOR AN "INDUSTRIAL" ARCHITECTURAL CHARACTER, WITH AN EMPHASIS ON TRANSPARENCY- ESPECIALLY AT GRADE. IT ALSO NOTES "MASSING AND BUILDING FORM SHOULD BE RECTILINEAR AND SIMPLE AS A STRATEGY TO COMBINE INDIVIDUAL SITES INTO A MORE COHESIVE, IDENTIFIABLE PRECINCT CHARACTER." OUR PROJECT PROPOSES A COMBINATION OF SIMPLE WALL PLANES AND GEOMETRIES THAT ARE RESPONSIVE TO THE TRIANGULAR SITE, ENHANCED BY DRAMATIC TRANSPARENCY TO THE LIFE OF THE BUILDING. THIS OVERALL STRATEGY WILL CREATE A COMBINATION OF AN ARCHITECTURALLY UNIQUE NEIGHBOURHOOD, THAT RESPONDS TO THE EXTRA LARGE SCALE OF THE BRIDGE STRUCTURE WITH CLEAN LINED, RICH BUT NOT OVER ARTICULATED FORMS, AND SUBSTANTIAL TRANSPARENCY TO EXPOSE THE LIFE WITHIN THE BUILDINGS.
SUPPORTED BUILDING MATERIALS INCLUDE CONTEMPORARY METAL CLADDING SYSTEMS; HEAVY TIMBER STRUCTURAL ELEMENTS; GLASS AND STEEL; BRICK; AND ARCHITECTURAL CONCRETE. WE PROPOSE USING ALL OF THESE EXCEPT FOR BRICK AND HEAVY TIMBER.
THE ROOF OF PARCELS 2 AND 3 WILL BE LANDSCAPED WITH GREEN ROOF TREATMENT, IN ACCORDANCE WITH THE GUIDELINES. THE UGBNCC POLICIES SUGGEST LOADING AND RECYCLING AREAS SHOULD BE SCREENED. THIS WILL BE TRUE FOR, AND /OR THEY WILL USED AS OPPORTUNITIES TO ENHANCE INTEREST WITH ACTIVITY AND COLOUR.

- MOVEMENT AND INFRASTRUCTURE

THE REZONING DESIGN RESPONSE TO PARKING AND LOADING IS COMPLEX, AND HAS BEEN DISCUSSED EXTENSIVELY WITH THE CITY. THE MOST SUBSTANTIVE DIFFERENCE FROM THE MOVEMENT, PARKING AND LOADING STRATEGY OUTLINED IN THE UGBNCC POLICIES IS OUR INTENT TO HAVE ROLSTON AND CONTINENTAL STREETS BOTH TWO WAY. THIS WILL SLOW TRAFFIC, ALLOW RIGHT-ANGLED PARKING, AND, MOST IMPORTANTLY, CREATE ROUTE FLEXIBILITY IN ORDER TO REDUCE THE CHALLENGES OF CLOSING GRANVILLE STREET FOR

EVENTS.
WITH RESPECT TO STREET PARKING LOCATIONS AND LOADING BAY LOCATIONS THE PROJECT CONFORMS TO THE GUIDELINES FOR PARCEL 2 AND 3. PARCEL 1 LOADING IS OFF OF CONTINENTAL STREET - A SUPERIOR LOCATION TO HOWE STREET.
FOR A MUCH MORE EXTENSIVE DISCUSSION OF TRAFFIC AND TRANSPORTATION ISSUES PLEASE SEE THE TRAFFIC AND TRANSPORTATION SECTION (7) OF THE DOCUMENT AND THE SEPARATE BUNT AND ASSOCIATES REPORT.
THE DESIGN OF UTILITIES WILL ADHERE TO THE UGBNCC POLICIES.

- PUBLIC REALM TREATMENT

THE UGBNCC POLICIES ARE NOT PRESCRIPTIVE WITH RESPECT TO THE PUBLIC REALM DESIGN (EXCEPT FOR LIGHTING), NOTING ONLY THE IMPORTANCE OF A COHESIVE URBAN (HARDSCAPE) STRATEGY, QUALITY MATERIALITY, AND FLEXIBILITY FOR EVENTS.
THE PUBLIC REALM DESIGN OF BEACH AND HOWE MEETS AND EXCEEDS THE INTENTIONS OF THE UGBNCC POLICIES. IN PARTICULAR, THE GRANVILLE ISLAND LIKE CURBLESS PAVING TREATMENT AND OUR AGENDA TO BUILD IN A DRAMATIC DEGREE OF FLEXIBILITY FOR GRANVILLE STREET WILL CREATE A UNIQUE ENVIRONMENT THAT HAS THE POTENTIAL TO ANCHOR A COHESIVE SENSE OF URBAN PLACE THAT COULD STRETCH SOUTH TO FALSE CREEK IN FUTURE.
WE SEE DRAMATIC AND FLEXIBLE LIGHTING AS CENTRAL TO THE SUCCESS OF THE PROJECT. THE UGBNCC POLICIES ARE PRECISE WITH RESPECT TO LIGHTING, BUT WE BELIEVE THAT THE DISTINCTIVE ARCHITECTURAL CHARACTER PROPOSED BY THIS APPLICATION, AND THE RAPID TECHNOLOGICAL CHANGES IN LIGHTING
POSSIBILITIES MEANS THAT THE LIGHTING STRATEGY PROPOSED IN THE UGBNCC POLICIES SHOULD BE REVISITED. THE AGENDA OF THE DESIGN TEAM IS TO DO THIS DESIGN WORK AS PART OF THE DEVELOPMENT PERMIT PHASE.
FOR A MORE EXTENSIVE DISCUSSION OF PUBLIC REALM ISSUES INCLUDING LANDSCAPE DESIGN PLEASE SEE THE PUBLIC REALM SECTION (2.3) OF THE DOCUMENT.

- ENVIRONMENT

THE PROJECT IS FAR MORE AMBITIOUS FROM A SUSTAINABILITY PERSPECTIVE THAN OUTLINED IN THE UGBNCC POLICIES. FOR A MORE EXTENSIVE DISCUSSION OF SUSTAINABILITY ISSUES INCLUDING LANDSCAPE DESIGN PLEASE SEE THE SUSTAINABILITY SECTION (3) OF THE DOCUMENT AND THE NOTES BELOW WITH RESPECT TO THE RESPONSE TO THE MORE AMBITIOUS TALL BUILDING SUSTAINABILITY GOALS.

RESPONSE TO:
GENERAL POLICY FOR HIGHER BUILDING

THE CITY OF VANCOUVER'S VISION FOR THE REMAINING FEW TALL BUILDING SITES IN THE DOWNTOWN CORE IS THAT OF INVIGORATING ARCHITECTURAL EXCELLENCE FUSED WITH A COMPREHENSIVE, ADVANCED SUSTAINABILITY STRATEGY. THIS PARTICULAR SITE ALSO HAS A KEY GATEWAY ROLE.
OUR PROJECT THEREFORE PROPOSES THE MOST DISTINCTIVE TOWER FORM IN THE CITY. ONE THAT IS BOTH RESPONSIVE TO THE UNIQUE SITE CONDITIONS CREATED BY THE GRANVILLE BRIDGE AND ARCHITECTURALLY APPROPIATE FOR A PROMINENT GATEWAY SITE. IN TERMS OF SUSTAINABILITY, WE PROPOSE ONLY THE SECOND APPLICATION OF LEED NEIGHBOURHOOD DEVELOPMENT IN THE CITY - AN UNUSUAL DOWNTOWN OPPORTUNITY TO MOVE BEYOND GREEN BUILDINGS INTO GREEN NEIGHBOURHOODS.

SPECIFIC RESPONSES:

- BUILDING HEIGHT

THE 496'-9" HEIGHT PROPOSED IS HIGHER THAN THE 425' STATED IN THE GPHB. HOWEVER, THE GPHB RECOGNIZES THAT THIS GATEWAY SITUATION COULD ACCOMMODATE A HIGHER HEIGHT BY ITS USE OF THE WORDS "GENERAL HEIGHT OF HIGHER BUILDING", SUBJECT TO URBAN DESIGN, SHADOW AND ARCHITECTURAL
ANALYSIS. STAFF REQUESTED THAT THE TEAM INVESTIGATE 3 HEIGHTS: 425 FT, 450 FT AND 470 FT. THE APPLICANTS PROPOSED A HEIGHT OF 497 FT. THE DOCUMENT CONTAINS MULTIPLE RENDERINGS AND COMPARATIVE ELEVATIONS THAT CLEARLY DEMONSTRATE THE ABILITY OF THE SITE TO ACCOMMODATE A 496'-9" TALL TOWER, AND THAT SUCH A TOWER PROPORTION SUPPORTS THE OVERALL AGENDA OF ARCHITECTURAL EXCELLENCE.
THE SITE ITSELF IS CHALLENGING GIVEN ITS TRIANGULAR SHAPE AND THE REQUIRED 30 M BRIDGE SETBACK, WHILE FORM AND CHARACTER ARE DERIVED FROM THE SITE'S LOCATION AND PHYSICAL CONSTRAINTS. THE TOWER SIZE AND HEIGHT RESPONDS TO THE KEY CHALLENGE OF THE SITE FROM A DEVELOPMENT PERSPECTIVE- THE ABILITY TO ACHIEVE THE NECESSARY DENSITY TO MAKE THE PROJECT FEASIBLE AND VIABLE. INNOVATIVE DESIGN WAS NECESSARY TO GET THE DENSITY WHICH LED TO THE FORM OF THE BUILDING STARTING FROM A TRIANGULAR SHAPE AT THE BASE TO A RECTANGULAR SHAPE AT THE TOP. INEFFICIENT TRIANGULAR LOWER FLOOR PLATES ARE COMPENSATED FOR BY EFFICIENT UPPER FLOOR PLATES.
ACCORDINGLY, THE HEIGHT IS DRIVEN BY THE NEED TO ACHIEVE A CERTAIN DENSITY BUT, THE RESULTANT HEIGHT IS A FUNCTION OF THE DESIGN, AND NOT THE DRIVER OF THE DESIGN.

- CREATIVITY AND EXCELLENCE

THE TOWER AT BEACH AND HOWE COMBINES AN EXTRAORDINARY ARCHITECTURAL FORM AND EXPRESSION WITH AN EXTRAORDINARY STRUCTURAL SOLUTION. CITY OF VANCOUVER DESIGN HAS TOO OFTEN LIMITED ITSELF TO ARCHITECTURAL "EXPRESSION" AT THE COST OF ARCHITECTURAL INVENTION. THE TOWER AT BEACH AND HOWE WILL BE THE MOST DISTINCTIVE FORM OF ANY TOWER IN THE CITY OF VANCOUVER, AND THAT FORM IS GENERATED BY A THOUGHTFUL AND SPECIFIC RESPONSE TO A PARTICULAR SITE.

- LEADERSHIP AND ADVANCES IN SUSTAINABLE DESIGN AND ENERGY CONSUMPTION / ADVANCING THE CITY'S CARBON NEUTRAL OBJECTIVES

IN TERMS OF SUSTAINABILITY THE MOST AMBITIOUS ASPECT OF THIS SCHEME IS TO INTEGRATE MULTIPLE BUILDINGS IN A GREEN NEIGHBOURHOOD. AS NOTED, WE PROPOSE TO APPLY FOR LEED ND PLATINUM AND WE ARE TARGETING LEED PLATINUM FOR THE TOWER AS WELL, ALTHOUGH THIS IS NOT YET CERTAIN TO BE ACHIEVABLE. THIS WILL INVOLVE MULTIPLE DETAILED EXPLORATIONS. THESE INCLUDE THE INVESTIGATION OF DISTRICT ENERGY POSSIBILITIES, TRANSFER OF ENERGY BETWEEN COOLING DOMINATED COMMERCIAL SPACES AND HEATING DOMINATED RESIDENTIAL SPACES, GEOTHERMAL ENERGY AND ADVANCED ENVELOPE DESIGN.
THE PROJECT WILL MEET AND EXCEED THE REQUIREMENTS IN THE GPHB.
SEE ALSO THE SUSTAINABILITY SECTION (3) OF THE DOCUMENT

- ENHANCED DESIGN REVIEW

IN ADDITION TO THE ADVANCED DESIGN REVIEW PROCESS OUTLINED IN THE GPHB, WESTBANK HAS SPONSORED A FREE PUBLIC LECTURE IN APRIL BY BJARKE INGELS AND A FOLLOW UP PANEL DISCUSSION FOCUSING ON THE OPPORTUNITY FOR THIS PROJECT BECOMING A NEW BENCHMARK FOR ARCHITECTURAL AND URBAN DESIGN EXCELLENCE IN THE CITY OF VANCOUVER. OUR AGENDA IS TO USE THIS PROJECT AS AN EXEMPLARY EXAMPLE OF RAISING THE DESIGN BAR IN OUR CITY.

- COMMUNITY BENEFITS / PUBLIC REALM

BEACH AND HOWE WILL MEET OR EXCEED ALL THE PUBLIC REALM AND SIGNAGE DESIGN REQUIREMENTS OF THE GPHB.
SPECIFIC COMMUNITY BENEFITS INCLUDE THE PROVISION OF RENTAL HOUSING, AND THE PUBLIC REALM IMPROVEMENTS. HOWEVER, WE FIRMLY BELIEVE THAT THE GREATEST COMMUNITY BENEFIT OF THIS PROJECT IS TO ACT AS AN INSPIRING EXAMPLE OF ARCHITECTURAL EXCELLENCE ANCHORED IN A UNIQUE URBAN PUBLIC REALM- AN OUTSTANDING DEMONSTRATION THAT VANCOUVER CAN BE A "CITY BY DESIGN" AND A "CITY OF DESIGN".