#### CITY OF VANCOUVER COMMUNITY SERVICES GROUP

#### DEVELOPMENT PERMIT STAFF COMMITTEE REPORT APRIL 9, 2014

FOR THE DEVELOPMENT PERMIT BOARD MAY 5, 2014

#### 1480 HOWE STREET (COMPLETE APPLICATION) DE417538 - ZONE CD-1 (Pending)

#### **DEVELOPMENT PERMIT STAFF COMMITTEE MEMBERS** Present: Also Present: P. O'Sullivan, Urban Design & Development Planning J. Greer (Chair), Development Services M. Holm, Engineering Services \*A. Molaro, Urban Design & Development Planning \*A. Thompson, Real Estate Services \*B. Mah, Development Services W. Mendes, Social Policy \*B. Badelt, Engineering Services M. So, Development Services \* April 9 DPSC meeting only APPLICANT: PROPERTY OWNER:

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

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

#### EXECUTIVE SUMMARY

• Proposal: To develop a 52-storey mixed use building with a 9-storey podium containing retail, grocery store and fitness centre on portions of the first 6 storeys and a total of 548 residential units over six levels of underground parking with vehicular access from Continental 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. Relationship of the Howe Street frontage to the Public Realm
  - 2. Public Realm grade elevations
  - 3. Depth of retail use on Continental Street
- Urban Design Panel: Support

PO/BM/MS/LH

## 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 52-storey residential tower with 9-storey podium including commercial and residential uses over six levels of underground parking with vehicular access from Continental Street, subject to Council's enactment of the CD-1 By-law and approval of the Form of Development, subject to the following conditions:

- 1.0 Prior to the issuance of the development permit, revised drawings and information shall be submitted to the satisfaction of the Director of Planning, clearly indicating:
  - 1.1 design development to the tower's Howe Street frontage to address the Public Realm at natural grade;

Note to Applicant: Intent is to achieve a contiguous Public Realm at natural grade, to avoid depressed building frontages, and to improve the retail presence. Grade-level residential use may be considered as an alternative to retail use at this location. Refer to additional commentary under Other Issues.

1.2 design development to the Howe Street frontage from mid-block to Pacific Street to strengthen its relationship to the public realm;

Note to Applicant: This can be achieved by:

- providing a minimum 5.5 m (18 ft.) clear width of unobstructed sidewalk;
- deleting the skylight benches and instead incorporating walkable, non-slip skylight glazing into the plane of natural grade; and
- providing an additional entry to the retail (proposed grocery store) with consideration for the access point to relate to an outdoor seating area.
- 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. See Standard Condition A.2.13.

1.4 design development to the loading area on Continental Street to improve the public realm interface;

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 expression and visual presence of the overhead gate are encouraged; and an enhanced ceiling finish should be applied to the loading area.

1.5 design development to the public realm grade elevations to ensure an active, engaged interface between the sidewalk elevations by reducing the depth of the steps required to transition grade changes along Continental Street to a maximum of 0.6 m (2 ft.);

Note to Applicant: Intent is to provide specific guidance to Rezoning Condition 12. 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. See Standard Condition A.2.13.

1.6 design development to provide weather protection at the Residential (Rental), Pool/Bike Storage, Retail / Fitness Centre entries;

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

1.7 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. Visibility into the retail spaces from the outside is to be maintained with storefront glazing remaining free and clear of obstructions.

1.8 design development to significantly increase the depth of the retail unit located between gridlines L' and P' to improve its viability and to enhance its contribution to an active frontage; and

Note to Applicant: The scale of the Commercial Retail Units (CRU) should be increased to a depth of 9.1 m (30 ft.) so that its functionality becomes suitable to serve the outdoor seating area located immediately outside. It is anticipated that increasing the retail depth at this location will require a re-configuration of the loading spaces.

- 1.9 consideration for design development to enhance the pedestrian environment, and to improve the potential for activation through an increase in sidewalk width along the east side of Continental Street.
- 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: Sub-Area A

	PERMITTED (MAXIMUM)	REQUIRED	PROPOSED			
Site Size	-	-	irregular			
Site Area	-	-	4 670 m <sup>2</sup>			
Use <sup>1</sup>	Cultural and Recreational Dwelling Retail		Fitness Centre Dwelling Units in conjunction with Grocery Store Retail Store (including BCLS)			
Family Unit	-	Market25% x 433 units = 10Rental10% x 115 units = 1(two or more bedrooms)	Market         224/433 x 100% = 51.7%           Rental         15/115 x 100% = 13.0%			
Floor Area <sup>2</sup>	55 865.2 m <sup>2</sup>	-	$ \begin{array}{cccc} \mbox{Fitness Centre} & 2 \ 273 \ m^2 \\ \mbox{Grocery Store} & 1 \ 664 \ m^2 \\ \mbox{Retail Store} & 2 \ 210 \ m^2 \\ \mbox{Subtotal} & 6 \ 147 \ m^2 \\ \mbox{Residential (market)} & 41 \ 108 \ m^2 \\ \mbox{Residential (rental)} & 6 \ 428 \ m^2 \\ \mbox{Balcony Overage} & 1 \ 479 \ m^2 \\ \mbox{Total} & 55 \ 162 \ m^2 \\ \end{array} $			
Open Balcony <sup>3</sup>	12% x 47 536 m <sup>2</sup> = 5 704 m <sup>2</sup>	-	Residential (market)6 513 m²Residential (rental)670 m²Total7 183 m²Maximum Balcony(5 704 m²)Balcony Overage1 479 m²			
Height	151.5 m (Top of Roof)	-	Top of Parapet Wall (Tower)154.3 mTop of Roof Slab151.4 m			
Horizontal Angle of Daylight <sup>4</sup>	-	50°/24 m; 70°/24 m	to be determined			
Acoustics	-	report for noise mitigation	acoustics report dated Oct 30, 2013			
Parking⁵	Non-Residential 20 Residential n/a	Non-Residential1Residential34Total35	0 Standard 23			
			Residential (market)Standard266Small Car40Disability8Subtotal314			
			Residential (rental)Standard19Small Car0Disability1Subtotal20			
		<i>Disability</i> Non-Residential 3	Non-Residential27Residential334Total361			
	Small Car (25% max.) 25% x 350 spaces= 87 spaces	Residential20Total23	Small Car43Disability10			

	PERMITTED (MAXIMUM)	REQUIRED	PROPOSED
Loading <sup>6</sup>	-	ClassAClassBClassCFitnessCentren/r11RetailUsesn/r31Residentialn/r33n/rTotaln/r72	Class AClass BClassCFitness Centre00Retail Uses022Residential520Total542
Bicycle Parking <sup>7</sup>	- Vertical Spaces: 30% x 702 = 210 spaces	Class A Class B Fitness Centre 9 30 Retail Uses 8 12 Residential <u>685</u> <u>12</u> Total 702 54 Lockers: 20% x 702 = 141 lockers Electrical Outlets: 1 outlet/2 Class A = 351 outlets	Class AClass BNon-Residential200Residential <u>681</u> 0Total7010Vertical:to be determinedLockers:to be determinedElectrical Outlets:0 outlets
Amenity	929 m <sup>2</sup> (max.)	-	0 m <sup>2</sup>
Unit Area <sup>8</sup>	-	$37 \text{ m}^2 \rightarrow 29.7 \text{ m}^2$	$28.3 \text{ m}^2 \rightarrow 439.2 \text{ m}^2$
Unit Type		-	Rental 94 - studio 6 - one-bedroom <u>15</u> - two-bedroom 115 units Market 78 - studio 131 - one-bedroom 181 - two-bedroom <u>43</u> - three-bedroom <u>433</u> units Total 115 + 433 = 548 units

<sup>1</sup>Note on Use: It is presumed that the retail space located on plan level 02 is intended as a Liquor Store which requires prior licensing approval from Liquor Control and Licensing Branch (LCLB). Standard Condition A.1.7 seeks deletion of this use to avoid any delays in the review of this project.

<sup>2</sup>Note of Floor Area: Figures are from the latest revisions received on March 26, 2014.

<sup>3</sup>Note on Open Balcony: Open balcony area exceeds the maximum allowed with the overage added to the total floor area.

<sup>4</sup>Note on Horizontal Angle of Daylight: Standard Condition A.1.6 seeks compliance with the horizontal angle of daylight for all habitable rooms in dwelling units.

<sup>5</sup>Note on Parking: Balcony overage is not included in the calculation of the required parking. Standard Condition A.1.3 seeks compliance with the required number of parking spaces for the residential use (see Parking Analysis below). Standard Condition A.1.4 seeks compliance with the required number of disability parking spaces. Refer to Engineering Services commentary.

<sup>6</sup>Note on Loading: One Class B loading space is shared with the residential use. Refer to Engineering Services commentary.

<sup>7</sup>Note on Bicycle Parking: Standard Condition A.1.5 seeks compliance with the required number of Class A and Class B bicycle parking spaces.

<sup>8</sup>Note on Unit Area: Pursuant to Section 10.21 (Dwelling Units) of the Zoning and Development By-law, the Director of Planning may permit a unit floor area no less than 29.7 m<sup>2</sup> where the design and location of the units provide satisfactory living accommodations, having regard to the type of occupancy proposed. Standard Condition A.1.2 seeks compliance with the minimum unit floor area.

## • Parking Analysis: 1480 Howe Street and 1461 Granville Street (Sub-Areas A + B)

	FLOOR AREA		PARKING					
	I LOOK AKL	A	Permitted (Maxir	num)	Required		Proposed	
1480 Howe (Sub-Area A)	Fitness Centre Grocery Store Retail Store Subtotal Residential (market) Residential (rental) Balcony Overage Total	$\begin{array}{c} 2\ 273\ m^2\\ 1\ 664\ m^2\\ \underline{2\ 210}\ m^2\\ 6\ 147\ m^2\\ 41\ 108\ m^2\\ 6\ 428\ m^2\\ \underline{1\ 479}\ m^2\\ 55\ 162\ m^2\end{array}$	Non-Residential Residential	20 n/a	Non-Residential Residential Total	16 <u>340</u> 356	Non-Residential Residential Total	27 <u>334</u> 361
1461 Granville (Sub-Area B)	General Office Retail Store Total	3 275 m <sup>2</sup> <u>1 377</u> m <sup>2</sup> 4 652 m <sup>2</sup>	Non-Residential	40	Non-Residential	32	Non-Residential	23
Total*	Fitness Centre General Office Retail Uses Subtotal Residential Total	$\begin{array}{c} 2\ 273\ m^2\\ 3\ 275\ m^2\\ \underline{5\ 251\ m^2}\\ 10\ 799\ m^2\\ \underline{47\ 536\ m^2}\\ 58\ 335\ m^2 \end{array}$	Non-Residential	60	Non-Residential Residential Total	48 <u>340</u> 388	Non-Residential Residential Total	50 <u>334</u> 384

\*No parking spaces shall be required for the first 3 900 m<sup>2</sup> of retail floor area in Sub-Areas A & B combined under Schedule C (draft amendments to the Parking By-law) of the pending CD-1 By-law. Sub-Area B refers to 1461 Granville Street/DE417597.

### • Legal Description

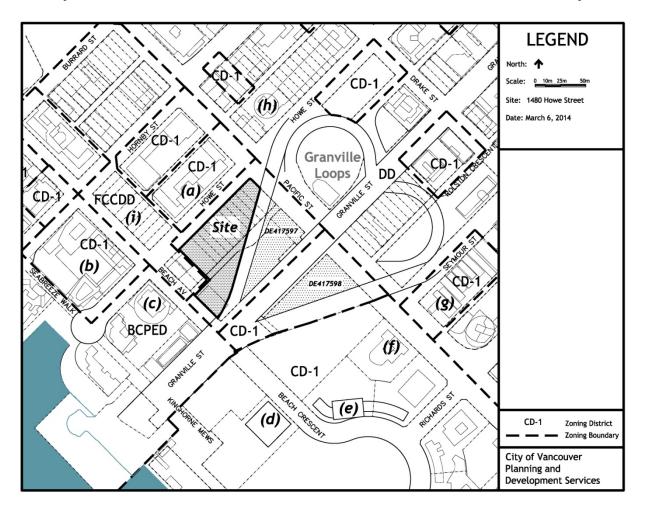
#### • History of Application:

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 Howe Street ramps, bounded by Pacific Street to the north, Howe Street to the west and Beach Avenue to the south.

• 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 Public Hearings on October 24 and 29, 2013. This application is brought to the Development Permit Board as a part of larger development that includes 1461 Granville Street (DE417597) and 1462 Granville Street (DE417598).

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 informed 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)

<u>Use and Density</u>: 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. These changes are sought under Recommended Conditions 1.1, 1.2 and 1.5.

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 (Rezoning Condition 1), in the related reports for 1461 Granville Street (DE 417597) and 1462 Granville Street (DE 417598), 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.

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.

## • Other Issues:

## Howe Street Frontage:

Staff have the following concerns with the proposed depressed Howe Street frontage at the base of the tower (refer to Figure 1):

- the Public Realm is divided by a deep cut into grade which would inhibit free pedestrian movement and access to the retail units;
- the retail presence to the street is diminished by the low ceiling heights and the length and depth of the change in grade;
- the high retaining wall creates a partially-concealed area that may attract after-hours Crime Prevention through Environmental Design (CPTED) concerns; and
- the livability of the 2 bedroom unit adjacent to the Pool/Bike Storage entry is compromised.



Figure 1: As proposed, view of recessed retail presence, looking North on Howe Street

Staff are recommending that the base of the tower address the Public Realm at natural grade. Recognizing that this corner of the site is not ideally suited for retail use and that the proposed lower-level retail spaces are small due to the structural requirements, Staff will consider residential use at this location if a high standard of livability can be demonstrated. (See Recommended Condition 1.1). Refer to Figures 2 and 3.

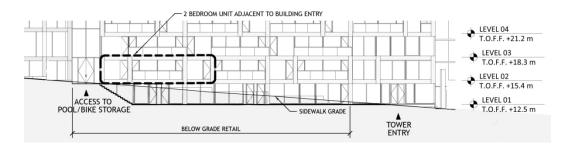


Figure 2: Partial Howe Street Elevation as Proposed in the Development Application: Retail Units are Below Natural Grade.

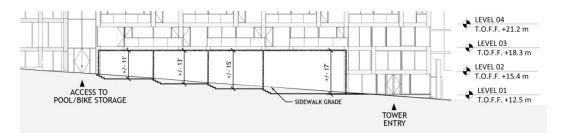


Figure 3: Recommended Howe Street Elevation: Frontage Addresses Natural Grade.

## Retail Depth on Continental Street:

The proposed ground-level retail unit along Continental Street, located to the north of the loading access has been designed with narrow proportions at only 2.8 m (9.33 ft.) deep. Refer to Figure 4. Two structural columns, proposed to be located centrally within that space, would restrict movement of people and goods and would further impair this unit's potential functioning and viability.

The Under the Granville Bridge Neighbourhood Commercial Centre Policies and Guidelines anticipate active frontages and a high quality Public Realm including the outdoor display of goods and sidewalk seating that provides an extension to restaurant and café spaces. Staff are satisfied with the generous size of the proposed level area of the Public Realm outside this particular Commercial Retail Unit (CRU) that is intended for outdoor seating. Recommended Condition 1.8 seeks that this Retail unit be scaled appropriately to serve the outdoor space at this prominent location along this the principal shopping street, as intended by the policy.

A significant increase in CRU depth at this location would necessitate a reconfiguration of the ground - level uses at this portion of the building, including parking and loading access, and back-of-house functions for the large format Retail (food) store.

Consideration will be given to the inclusion of the adjacent site to the southeast in order to better accommodate the loading and parking and also to achieve a viable commercial interface.

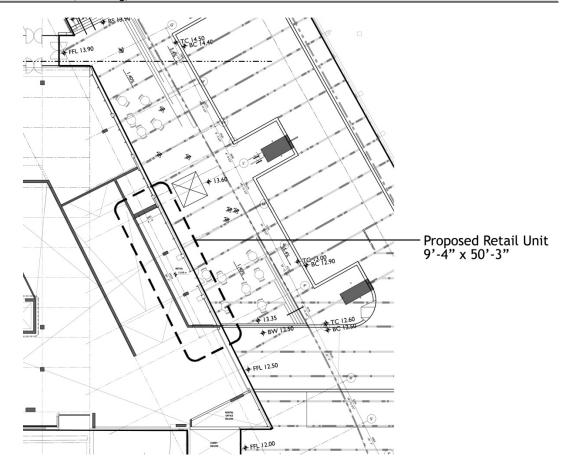


Figure 4: Partial Plan of the interface between a narrow retail unit along Continental Street and the Public Realm

• 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 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%.

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<u>Staff Assessment</u>: 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.

<u>Staff Assessment</u>: 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 Conditions A.1.14 and 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.

<u>Staff Assessment</u>: The condition has been satisfied. Confirmation required that arrangements for public access to the washrooms and storage have been secured. See Standard Conditions A.2.4 and A.2.13.

Rezoning Condition 5: Design development to maintain the high quality materials indicated for the residential tower (zinc cladding, triple glazing, thermally enhanced slab construction and glazed balustrades) and for the internal semi-private courtyards (sandstone paving, ipe wood decking, 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.

<u>Staff Assessment</u>: Staff are satisfied that proposed materials are maintained or substituted with those of a quality consistent with those proposed at the Rezoning stage. The provision of representative details for particular building conditions and material transitions is sought in Standard Condition A.1.18.

Rezoning Condition 6: 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 for the podium building and 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.

<u>Staff Assessment</u>: 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 material transitions is sought in Standard Condition A.1.18.

*Rezoning Condition 11: 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.

<u>Staff Assessment</u>: 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.1.14 seeks the inclusion of this lighting approach into the full drawing set.

Rezoning Condition 12: 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.

<u>Staff Assessment</u>: Three entries along the west side of Continental Street, as proposed, require exterior steps to accommodate grade changes of 0.9 m (3 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. See Recommended Condition 1.5.

Commentary concerning the proposed exterior steps along Howe Street and the below-grade retail units are addressed in Other Issues. See Recommended Condition 1.1.

Rezoning Condition 13: 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 The residential tower also provides weather protection at the main entry.

<u>Staff Assessment</u>: An opaque weather protection canopy has been provided at the building's northerly retail entry. Recommended Condition 1.6 seeks a glazed canopy at this location and additional glazed weather protection at the building's four other major entry points.

Rezoning Condition 14: 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.

<u>Staff Assessment</u>: 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. See Recommended Condition 1.7 and Standard Condition A.1.15.

Rezoning Condition 15: 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.

<u>Staff Assessment</u>: 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 19: 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.

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<u>Staff Assessment</u>: This condition has been partially satisfied. Additional requirements regarding lighting and urban agriculture are requested. Refer to Standard Conditions A.1.14 and A.2.13. Please note that certain elements of the Public Realm may require encroachment agreements due to the higher maintenance requirements.

Rezoning Condition 22: 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.

<u>Staff Assessment</u>: 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 Conditions 1.1, 1.2 and 1.5.

Rezoning Condition 23: 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.

<u>Staff Assessment</u>: This condition has been partially satisfied. Standard Condition A.1.25 requests for additional planters and street furniture details to be provided.

#### • Response to Engineering Rezoning Conditions of Approval:

Rezoning Condition 31: Provision on the Development Permit plans of public realm reflecting the approved geometric designs for Pacific Street, Howe Street, Beach Avenue, Granville Street and for the new diagonal streets under the Granville Bridge ramps.

*Note to applicant: This will include changes based on City-generated plans, including:* 

•deletion of several loading spaces and parking spaces, including spaces too close to intersections for safe maneuvering and in order to facilitate direct pedestrian circulation; and •bicycle facilities on Pacific Street and on the new east diagonal street under the Seymour off-ramp.

Applicant Response: The design team is awaiting delivery of the approved road geometric design from city staff.

<u>Staff Assessment</u>: Staff are currently working with the design team to finalize the geometric design for Pacific Street, Beach Avenue, Granville Street, and the new diagonal streets. Refer to Standard Condition A.2.1.

Rezoning Condition 32: 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.

<u>Staff Assessment</u>: This condition has been partially met. The submission generally meets the highlevel 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.

#### • Response to Social Infrastructure Conditions of Approval:

Rezoning Condition 47: Design development to provide a target of 10 % of the proposed rental units to be suitable for families with children.

Applicant Response: Of the 100 plus rental units provided, 10% will be in the form of two bedroom units. Unit areas will be refined during the course of the application process.

Staff Assessment: There are 10 2-bedroom rental units now in the plans. This condition has been satisfied.

#### • 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 recommends that the features needed to accomplish these points be more completely noted on the drawings in Standard Condition A.1.16, 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.2.7. 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<sup>2</sup>/year for the residential portion and 122 kWhr/m<sup>2</sup>/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.1.17 seeks confirmation that these targets will be maintained. See also the 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.

#### • Conclusion:

The proposal for 1480 Howe Street together with concurrent proposals for 1461 Granville Street and 1462 Granville Street comprise a new neighbourhood commercial centre that demonstrates a significant and recognizable new benchmark for architectural creativity, and an enhanced public realm. The design of the tower exhibits a high degree of architectural ingenuity and resolution and meets the design excellence aspirations of the Higher Building review process.

Staff recommends 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 underbridge 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<sup>™</sup> 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 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 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 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 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.2.7).

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 (refer to Standard Condition A.2.13).

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. 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.2.6).

## NEIGHBOURHOOD ENERGY UTILITY (NEU)

As required under the Rezoning Policy for Sustainable Large Developments, the applicant has provided a Low Carbon Energy Supply Feasibility Screening Study in support of the rezoning application. This study determined that a Neighbourhood Energy System to serve the Downtown South area, including this development, is potentially viable. To further that, Central Heat Distribution Ltd. is actively developing a plan to establish a low-carbon expansion of its system into this area. In accordance with this Neighbourhood Energy opportunity, conditions of development permit are provided to ensure this development is designed to by connectable to the south downtown hot water district energy utility prior to release 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 enactment.

#### CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED)

The proposal's form, materiality and configuration has been generally designed to comply with CPTED requirements. However, two specific concealed areas at the ground level require additional design development to satisfy CPTED concerns. See Recommended Condition 1.1 and Standard Conditions A.1.29 and A.1.30.

### LANDSCAPE

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

#### SOCIAL DEVELOPMENT

#### Play Area and Amenity Rooms

The proposed 52-storey building on this site, include 224 units with two or more bedrooms (51.7% of total units) which may be suitable for families with children. The High Density Housing for Families with Children Guidelines are therefore applicable to plans for this site. Design development is needed to include a multipurpose common amenity room (with kitchenette, storage closet, and accessible washroom equipped with a baby change table.) Ideally this amenity room will be planned to be adjacent to, and directly connected to the outdoor common amenity area on level 7, and will be designed to be large enough to host extended family and/or social gatherings (See Standard Condition A.1.31). Consistent with the guidelines, a common outdoor amenity area on the podium roof (Level 7) and includes an area suitable for children's play activity; with an area for sand play and log features for creative and motor skills developing play.

#### Urban Agriculture

The City of Vancouver Food Policy identifies environmental and social benefits associated with urban agriculture and seeks to encourage opportunities to grow food in the city. The Urban Agriculture Guidelines for the Private Realm encourage edible landscaping and shared gardening opportunities on private land. Plans for 1480 Howe Street incorporate edible landscaping on the common outdoor podium amenity area (Level 7). Design development is needed to the landscape plan to improve the accessibility of the edible landscape-planted areas to enable access to the edible landscaping by residents and to enable a range of urban agriculture activity by residents over time. The infrastructure necessary to support urban agricultural activity by residents, such as tool storage, hosebibs and a potting bench needs to be incorporated into plans (See Standard Condition A.1.32).

Staff encourages further exploration of the Sustainable Food Systems section of the Sustainable Large Development Policy to be incorporated in the design. For further information please refer to the City Website at <u>http://former.vancouver.ca/commsvcs/BYLAWS/bulletin/R019.pdf</u>.

### 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 (3) 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.

<u>Staff Response</u>: 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.

<u>Staff Response</u>: 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 wellconsidered 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.

<u>Staff Response</u>: 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.

<u>Staff Response</u>: The parking provided on site will meet the current City Parking By-law. 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.2.7.

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#### 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

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 10.21 (Dwelling Units) of the Zoning and Development By-law;

Note to Applicant: Floor area of all dwelling units must be at least 37 m<sup>2</sup> (398.3 sq. ft.). The Director of Planning may permit a floor area of a dwelling unit to be no less than 29.7 m<sup>2</sup> (319.7 sq. ft.) where the design and location of the unit provides satisfactory living accommodation. Floor area of small units is measured to the inside of all outer walls. Where unit floor areas are at or close to 29.7 m<sup>2</sup> (319.7 sq. ft.), a unit layout is required demonstrating compliance with the minimum floor area, excluding any storage room. Provide a summary of all dwelling units, including the number, type and floor area at each level and a complete summary in Project Data.

A.1.3 compliance with Section 4.3.6 (Residential Uses including Live-Work - Downtown) of the Parking By-law;

Note to Applicant: A minimum of 388 parking spaces is required with 340 parking spaces for residential use.

A.1.4 compliance with Section 4.8.4 (Required Disability Parking Spaces) of the Parking By-law;

**Note to Applicant:** A total of 23 disability parking spaces is required, three for non-residential uses, five for the rental units and 15 for the market units.

A.1.5 compliance with Section 6.2 (Table or Number of Required Off-Street Bicycle Spaces), Section 6.3 (Class A Bicycle Spaces) and Section 6.4 (Class B Bicycle Spaces) of the Parking By-law;

Note to Applicant: The bicycle summary in Project Data indicates 681 Class A bicycle spaces for residential/rental and 20 Class A bicycle spaces for non-residential (total of 701 Class A bicycle spaces), plan level B2 and B3 indicate a total of only 654 Class A bicycle spaces (195 vertical, 459 horizontal). Provide dimensions on bicycle spaces and maneuvering aisles. Clarify the number of vertical spaces and lockers. Bicycle rooms, compounds or lockers shall be located no lower than the first complete parking level below grade and shall have direct access to the outside, except that a location more than one level below grade may be permitted where an elevator is provided offering direct access to outside. Add note to provide one electrical outlet for every two Class A bicycle spaces. Clarify bicycle storage repair station on plan level B1 - south. Indicate locations and number of Class B bicycle spaces as required. Provide a summary of bicycle spaces at each level with a complete summary in Project Data.

A.1.6 compliance with Section 7.2 (Horizontal Angle of Daylight) of the draft CD-1 By-law for all dwelling units;

**Note to Applicant:** Confirm habitable rooms in all dwelling units have access to natural daylight. Provide privacy screens on balconies between dwelling units.

A.1.7 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 "Retail (BCLS)" and replace with Retail Store on plan level 02. Delete all tables and chairs shown on the Master Site Plan (ground level) - a separate application is required for all outdoor patio seating. The applicant has indicated that there are no longer any roof appurtenances except the elevator overrun and private roof decks. There are no guardrails as the parapet walls are higher than the required height of the guardrails.

A.1.8 updated color-coded FSR drawings to reconcile with the plans and revisions;

Note to Applicant: FSR drawings must be sealed and signed. Format of summary tables should be gross floor area (left side) less all exclusions with resulting net floor area. Balcony exclusion of 12% is based on the total residential floor area (market/rental). Support structures or columns for the building should be included as floor areas, not balcony areas. Provide tabulated summaries of balconies, storage and exterior wall exclusions for each level and complete summaries in Project Data. Floor plans need to be shown at a larger scale for clarity.

There are significant changes noted in the data between the latest FSR drawings (March 28, 2014) and the original set of drawings (December 19, 2013), including a reduction of 12 units in the rental building and 40 units in the tower. FSR drawings and floor plans, including parking plans (where use/rooms are not excluded from floor areas) must be consistent and clearly labeled. It is recommended that the applicant review the data/formatting with the Project Coordinator.

- A.1.9 clarification of all property lines on the parking and floor plans, including setbacks from the property lines;
- A.1.10 detailed and fully dimensioned floor plans with referenced matched lines;

Note to Applicant: Dimensions are also required for storage rooms and balconies.

A.1.11 provision of a minimum of 5.66 m<sup>3</sup> (200 ft.<sup>3)</sup> of storage space for each dwelling unit;

Note to Applicant: Provide a summary of all in-suite storage area and storage locker areas in common storage rooms.

A.1.12 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 Project Data.

A.1.13 provision of a cross section at a scale of 1:50 through Continental Street from building face to building face with continuous dimension strings clearly indicating the widths of sidewalks, roads, and stepped areas within the Public Realm;

Note to Applicant: Intent is to ensure that sufficient widths are maintained for sidewalk at natural grade on the west side of Continental Street.

- A.1.14 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.1.15 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 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.1.17 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.1.18 provision of details incorporated into the full size drawing set of the following conditions;
  - 1:25 typical wall section indicating curtain wall glazing;
  - 1:25 tower façade type details;
  - 1:10 cross-sectional detail of stepped benches clearly indicating the integrated stone; and
  - 1:10 typical floor assembly detail for the tower illustrating the slab construction with notation indicating the capillary mat radiant heating and in-slab radiant heating and cooling ceiling;
- A.1.19 design development to further refine and architecturally integrate rooftop mechanical penthouse, elevator override service volumes, cellular communications equipment, photovoltaic panels and other service equipment including window washing infrastructure to minimize any incursion into the skyline;

Note to Applicant: Complete and coordinated tower elevations and a tower roof plan should be provided at a scale of 1:100. Clearly indicate the dimensions and height of any rooftop mechanical penthouse, elevator override service volumes, photovoltaic panels and other service equipment.

- A.1.20 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.1.21 an acoustical consultant's report shall be submitted which assesses noise impacts on the site and recommends noise mitigation measures in order to achieve noise criteria;
- A.1.22 notation on the plans and elevations of recommended acoustic mitigation features related to noise reduction to nearby open spaces and buildings;
- A.1.23 notation 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";

"The acoustical measures will be incorporated into the final design and construction based on the consultant's recommendations";

"Adequate and effective acoustic separation will be provided between the commercial and residential portions of the building"; 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.1.24 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.1.25 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.1.26 provision of an updated material palette for hardscaping on private property and the public realm;

Note to Applicant: Details should be noted on the drawings, including material, finish, color and brand name (where applicable). A materials board should be provided.

A.1.27 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.1.28 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.1.29 design development to discourage opportunities for mischief at the covered area on the east side of the loading access from Beach Avenue;

**Note to Applicant:** Provision of a lighting strategy that enhances safety and security while minimizing glare for residents of the proposed development and possible future development is required.

A.1.30 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.

#### Standard Social Development Conditions

A.1.31 design development to add a multi-purpose room on Level 7 adjacent to the common outdoor amenity area; and

**Note to Applicant:** A kitchenette storage closet and accessible washroom with a baby change table should be included.

A.1.32 design development to the edible landscaped areas of the common outdoor amenity area on Level 7 to support a range of urban agricultural activity by improving the accessibility of planted areas, and by providing the infrastructure necessary to support urban agricultural activity by residents, such as tool storage, hosebibs and potting benches.

#### 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 to the satisfaction of the General Manager of Engineering services and the Director of Legal Services for the release of 141833M (commercial crossing agreement) prior to building occupancy;

**Note to Applicant:** Arrangements are to be secured prior to issuance of the development permit, with release to occur prior to issuance of an occupancy permit for the site. Provision of a letter of commitment will satisfactorily address this condition at the DP stage.

A.2.4 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.2.5 removal of all loading bays located on the street;

Note to Applicant: Based on the Transportation assessment, these are not required to meet the demand.

- A.2.6 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.2.7 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.2.8 provision of a minimum of 7.3 m (24 ft.) separation between the maneuvering aisles for the main tower to provide continuous two-way flow;

Note to Applicant: Continuous two-way traffic flow is required where 200 or more vehicles are being served. Consider reducing both the parking ramp and maneuvering aisle width to 6.1 m (20 ft.) and providing small car spaces along the east wall. 2.74 m (9 ft.) standard stall widths are required with a 6.1 m (20 ft.) maneuvering aisle. Please contact Rob Waite at 604-873-7217 or Dave Kim at 604-871-6279 of the Neighbourhood Parking and Transportation Branch for more information

A.2.9 provision of painted guide lines for both directions of the 180 degree turns between the ramp and maneuvering aisle for the main tower and reflective markings on the columns located within the maneuvering aisle;

Note to Applicant: Due to the unique maneuvering required between the columns, painted guide lines and gore hatching should be provided to guide drivers around the columns and through the turn. Drawing A0-201 shows a vehicle maneuvering through a column at the north end.

A.2.10 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.2.11 provision of a plan showing the maneuvering for all Class B and Class C vehicles to and from the proposed loading spaces;
- A.2.12 provision of a parking ramp slope not to exceed 12.5%;

**Note to Applicant:** 15% slopes are acceptable on small sites or where 12.5% imposes an extreme hardship. Provide a consistent 12.5% slope rather than a 15% slope with 10% transition ramps.

- 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"
  - 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 (uplighting, 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.2.4.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; and

**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 building's drainage system.

- A.3 Standard Licenses & Inspections (Environmental Contamination Team) Conditions:
- A.3.1 Submission of the following documentation 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;
  - 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), however if there are residential units at grade the remediation of the site to the applicable land use shall be CSR Residential 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 Bylaw or other regulations affecting the development that occurs before the permit is issuable. No permit that contravenes the bylaw 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 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.1.6 Details of swimming pools/hot tubs to be submitted to the Environmental Health Division and Provincial Health Engineer prior to construction;

#### 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 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.2.4 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 12<sup>th</sup> 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.2.5 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 Rezoning Conditions of Approval:

Rezoning Condition 16: 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<sup>®</sup> 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

<u>Staff Assessment</u>: 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.1.16.

Refer to more detailed commentary in the Sustainability section.

Rezoning Condition 17: 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.

<u>Staff Assessment</u>: 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.1.17.

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.

<u>Staff Assessment</u>: 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 CD-1 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.

<u>Staff Assessment</u>: Please refer to Staff assessment of Rezoning 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.

<u>Staff Assessment</u>: 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 gasfired 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.

<u>Staff Assessment</u>: 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.

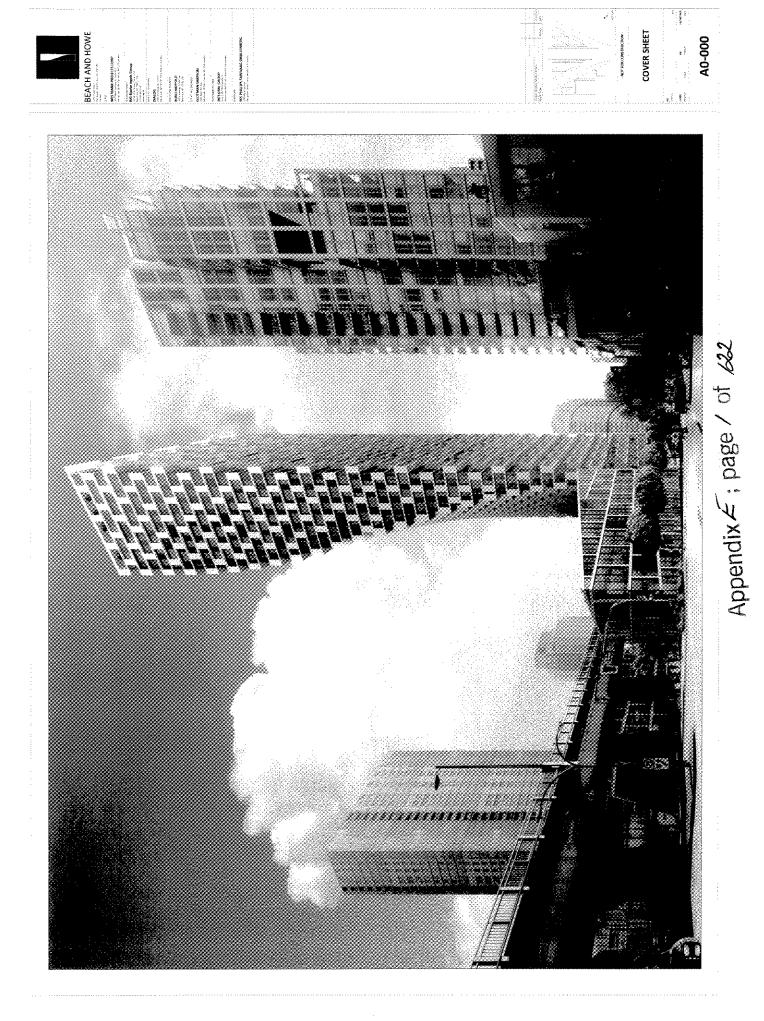
Applicant Response: No heat-producing fireplaces will be installed within residential suites.

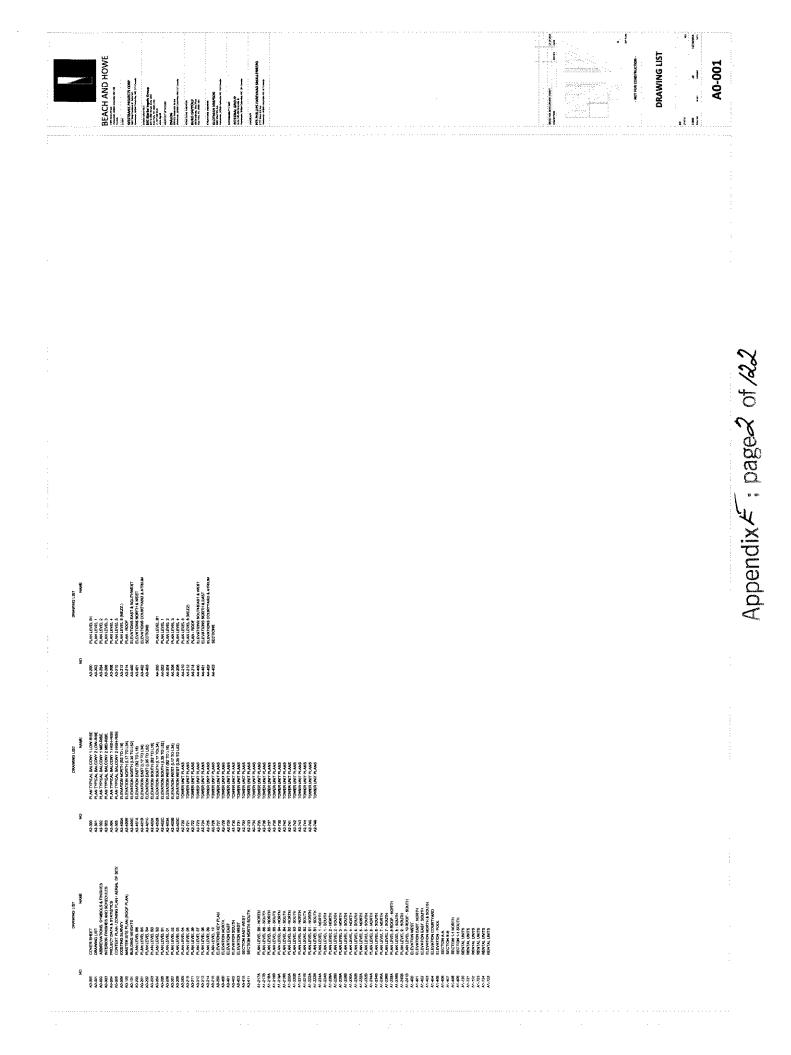
<u>Staff Assessment</u>: No heat producing fireplaces are proposed within residential suites. The engineer of record will be required to certify at the time of building permit application, and prior to the release of building permit, that this and other detailed design provisions have been met.

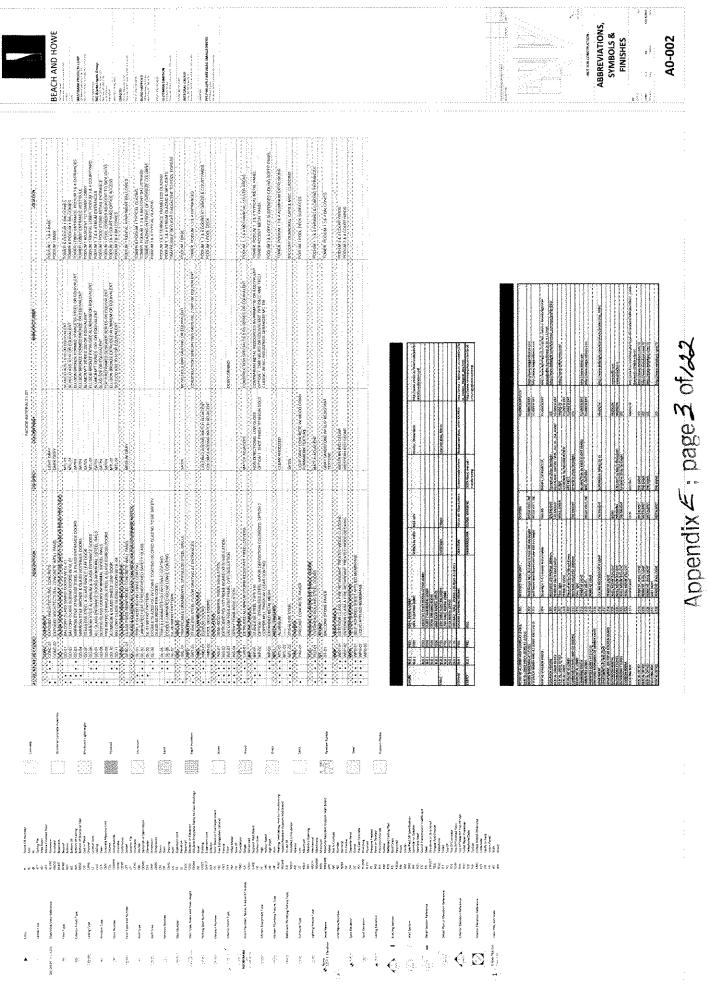
Rezoning Condition 46: Detailed design of the HVAC and mechanical heating system, including any provisions for waste heat recovery and reuse, must be acceptable to the General Manager of Engineering Services.

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.

<u>Staff Assessment</u>: 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.

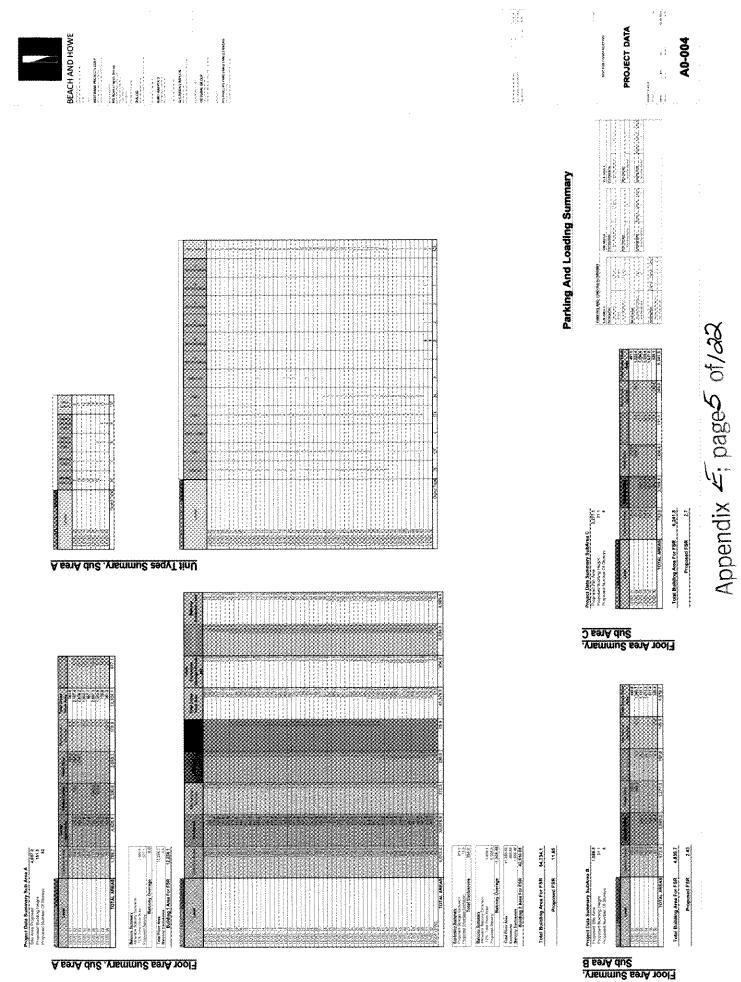




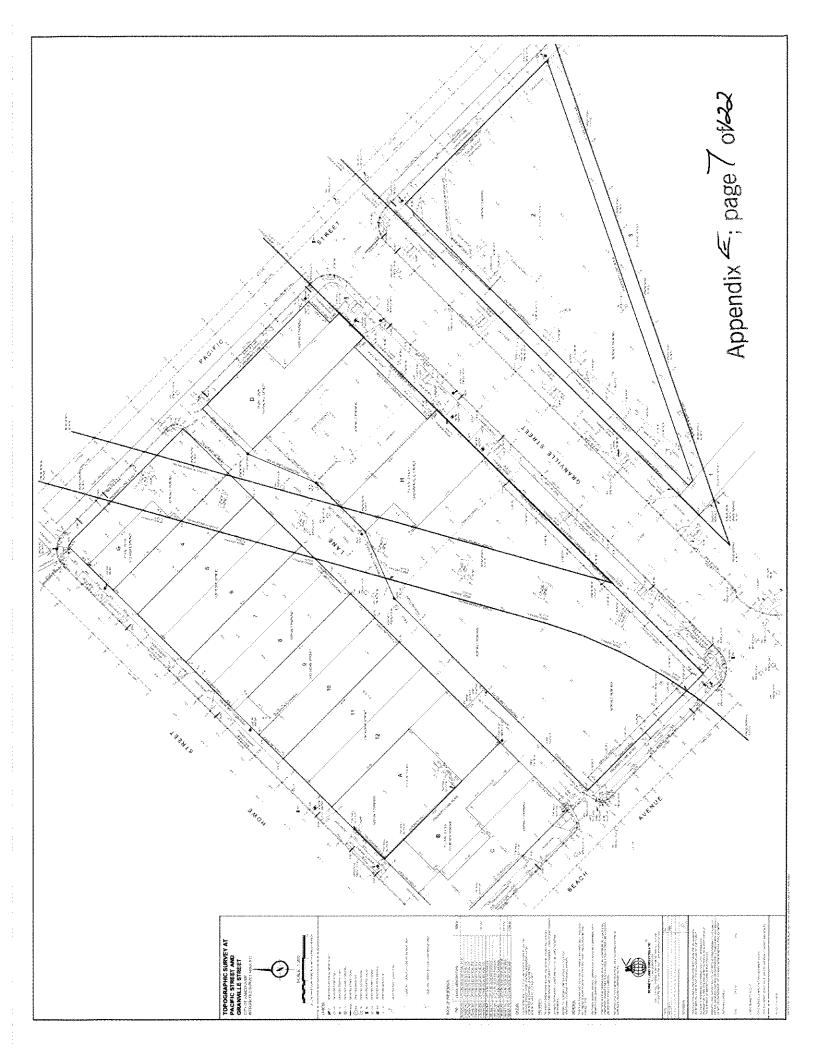


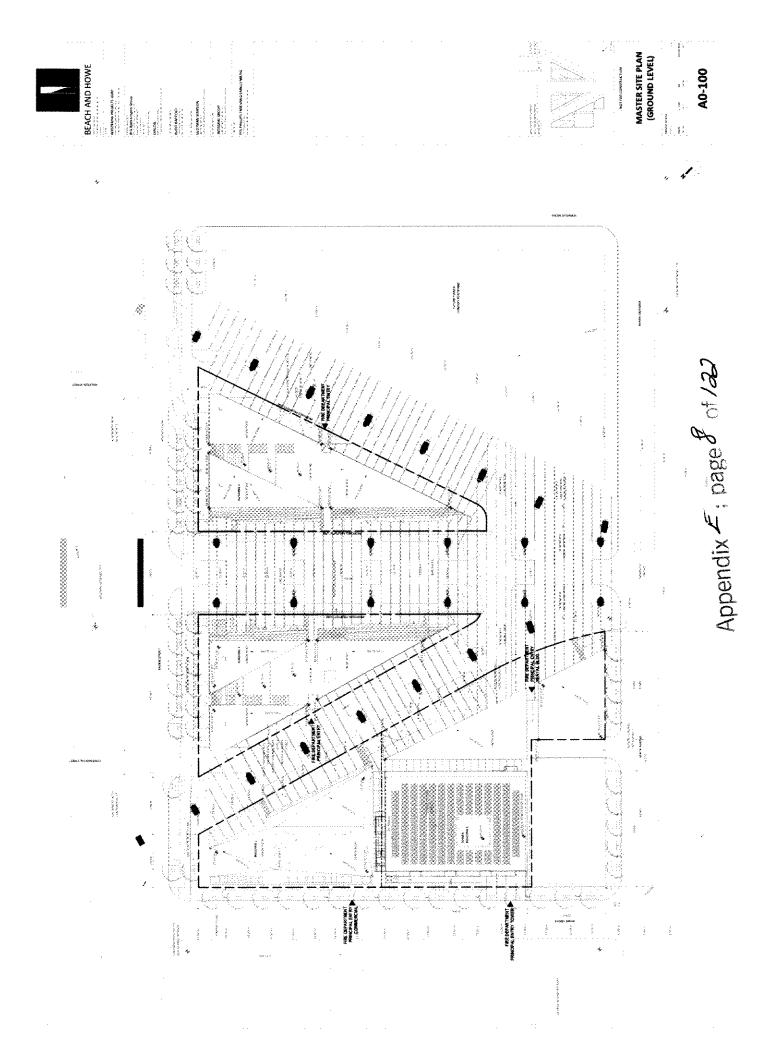
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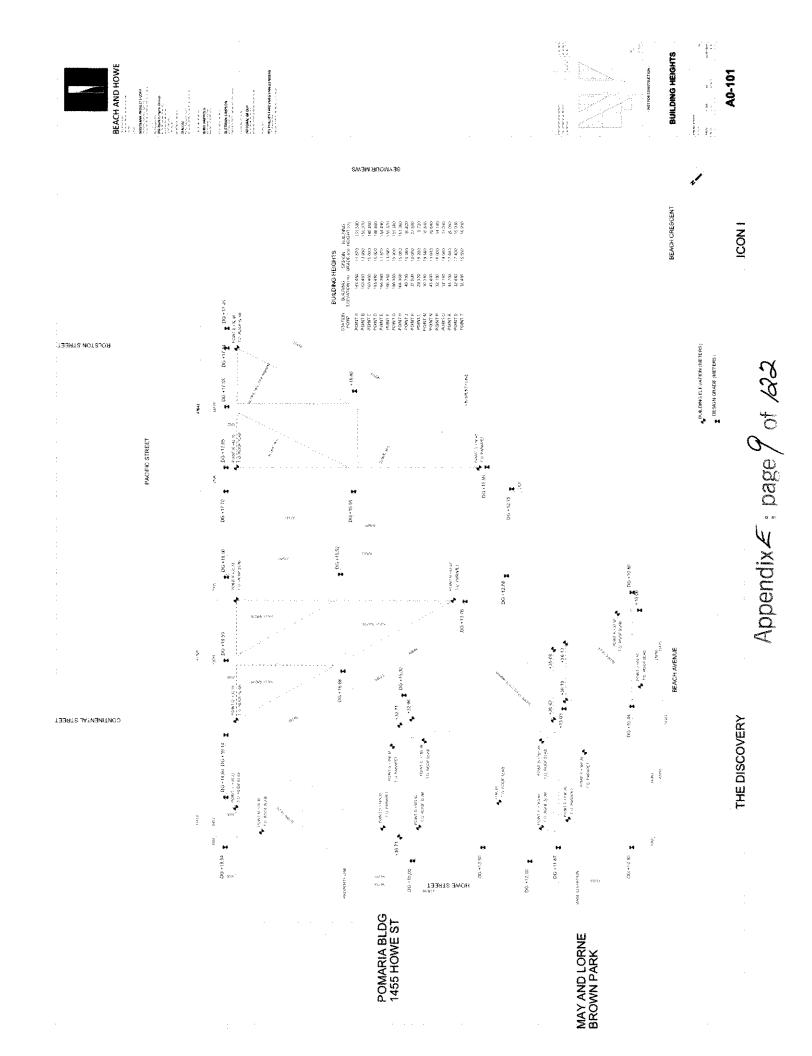
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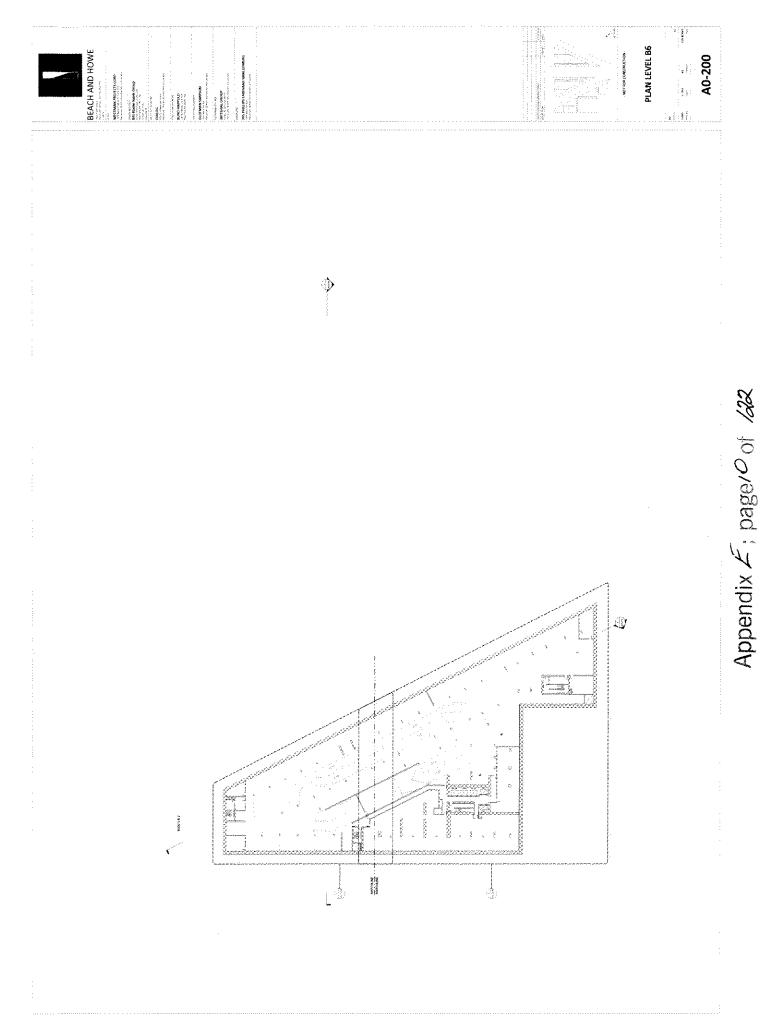




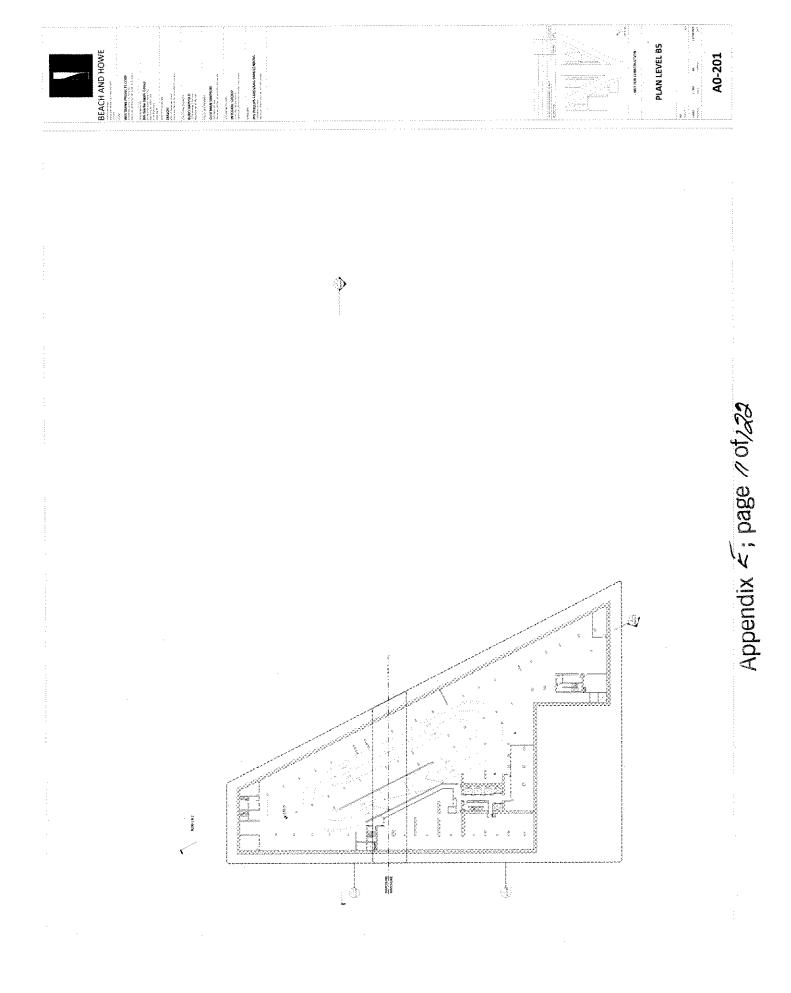


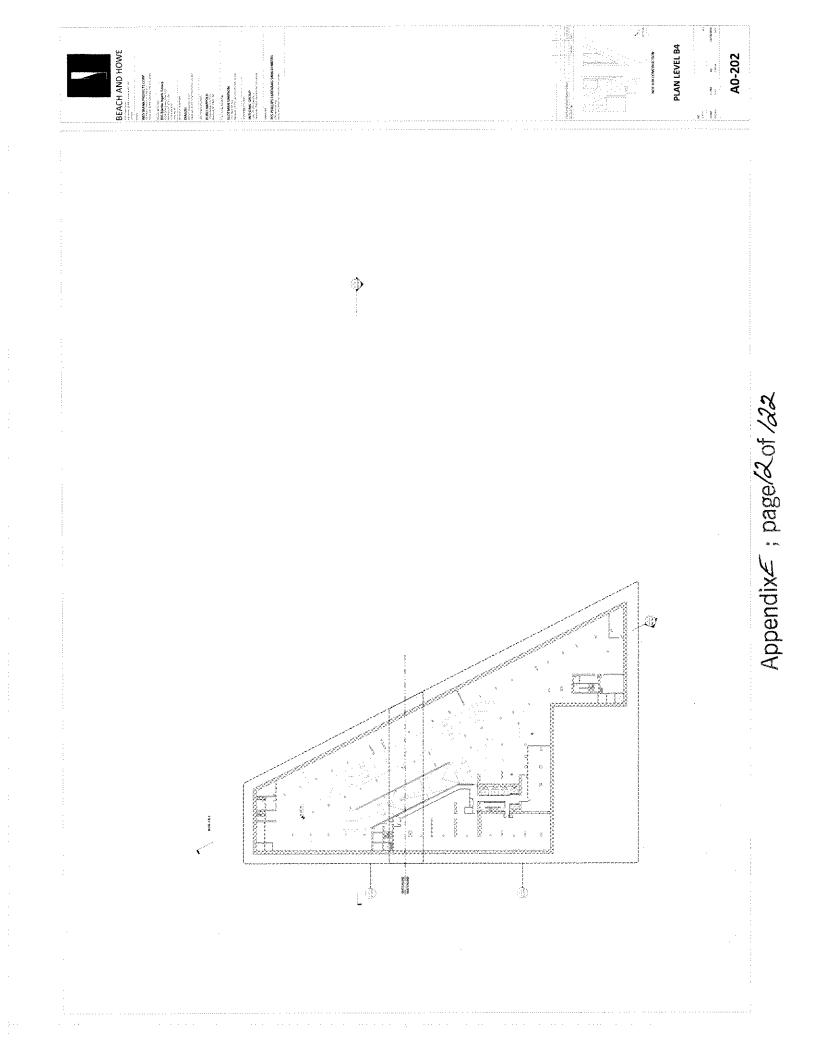


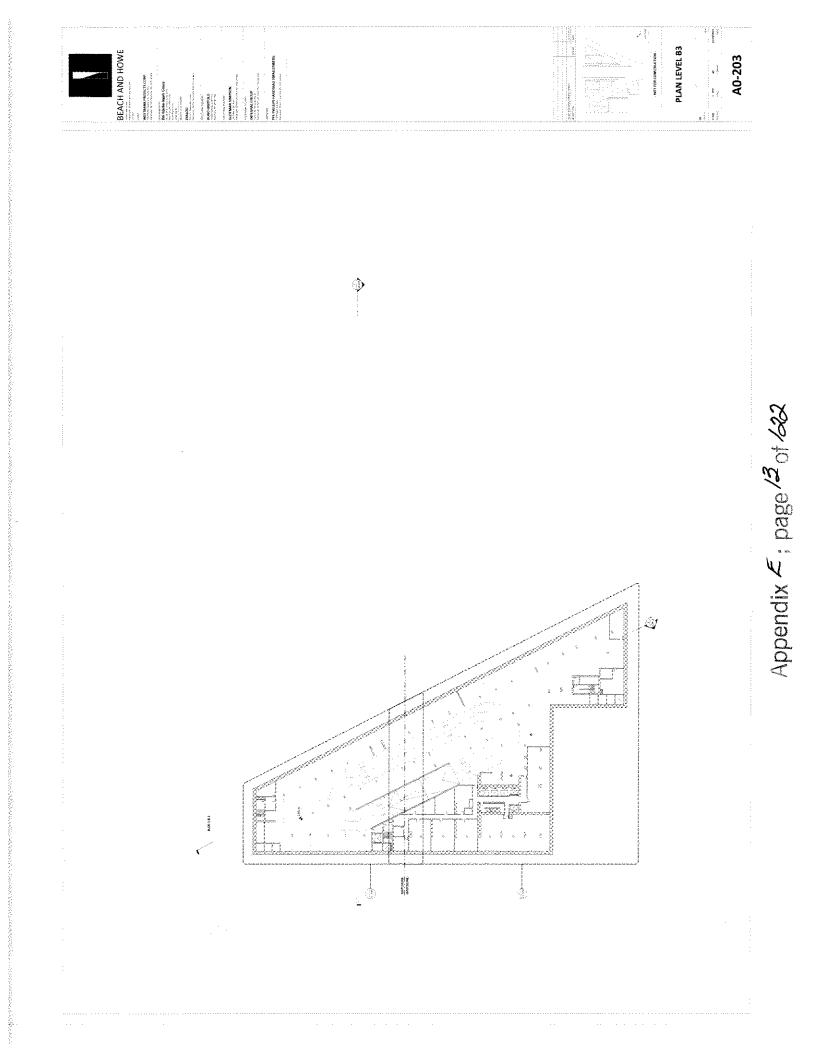


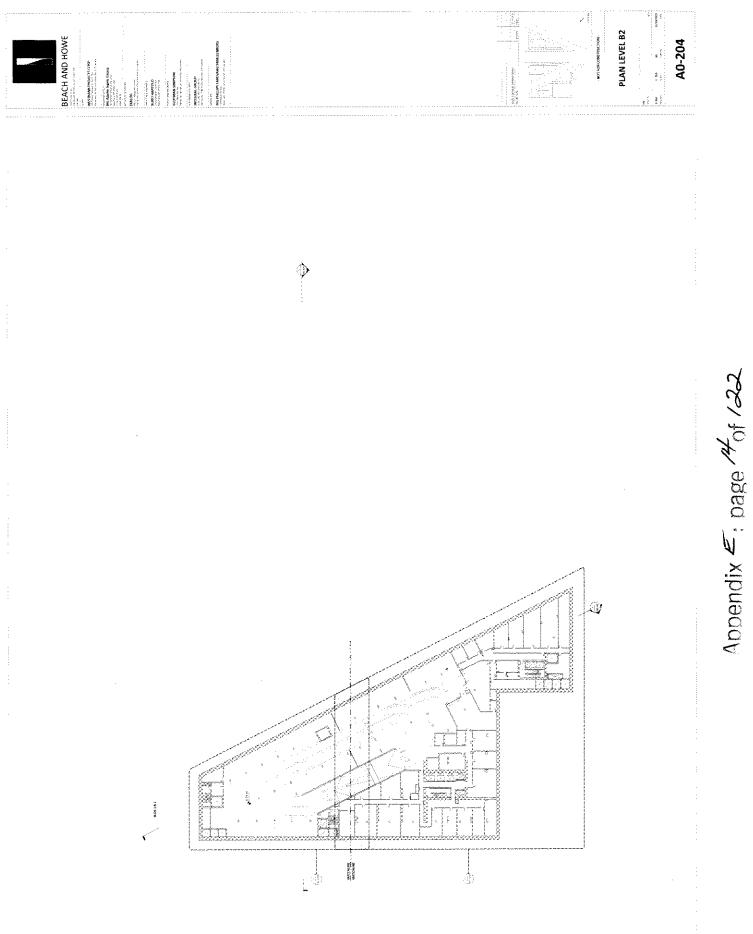


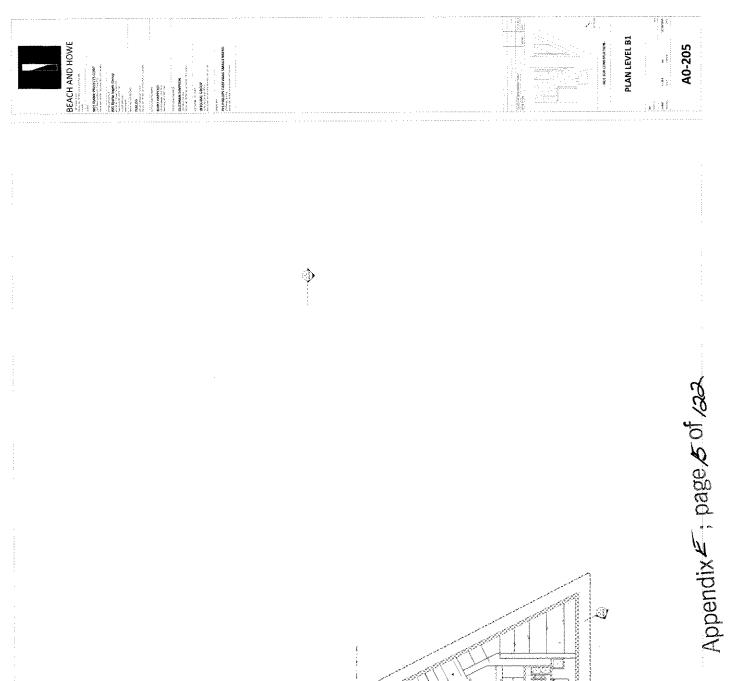
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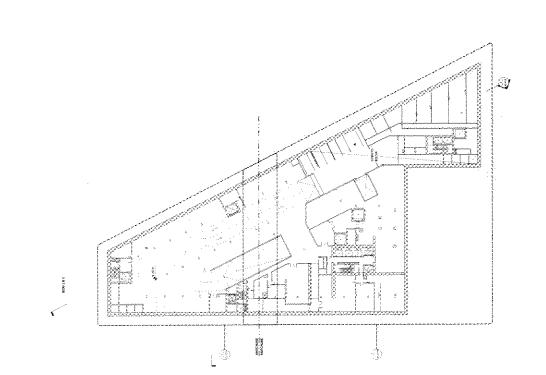


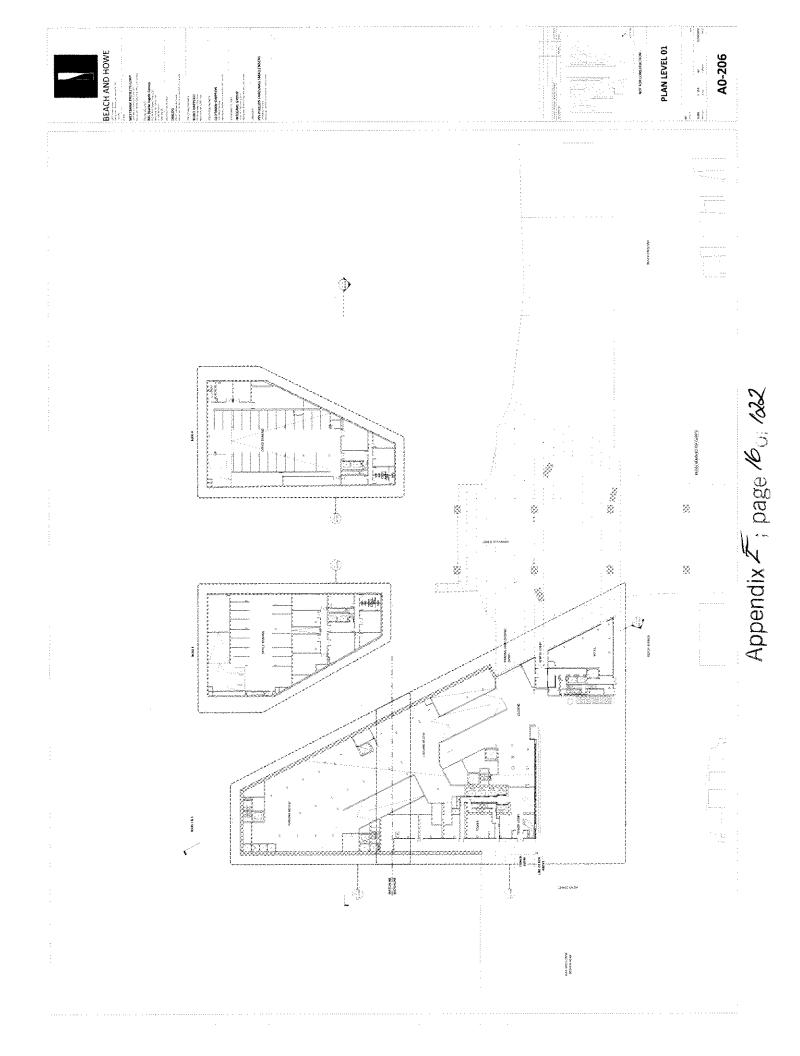


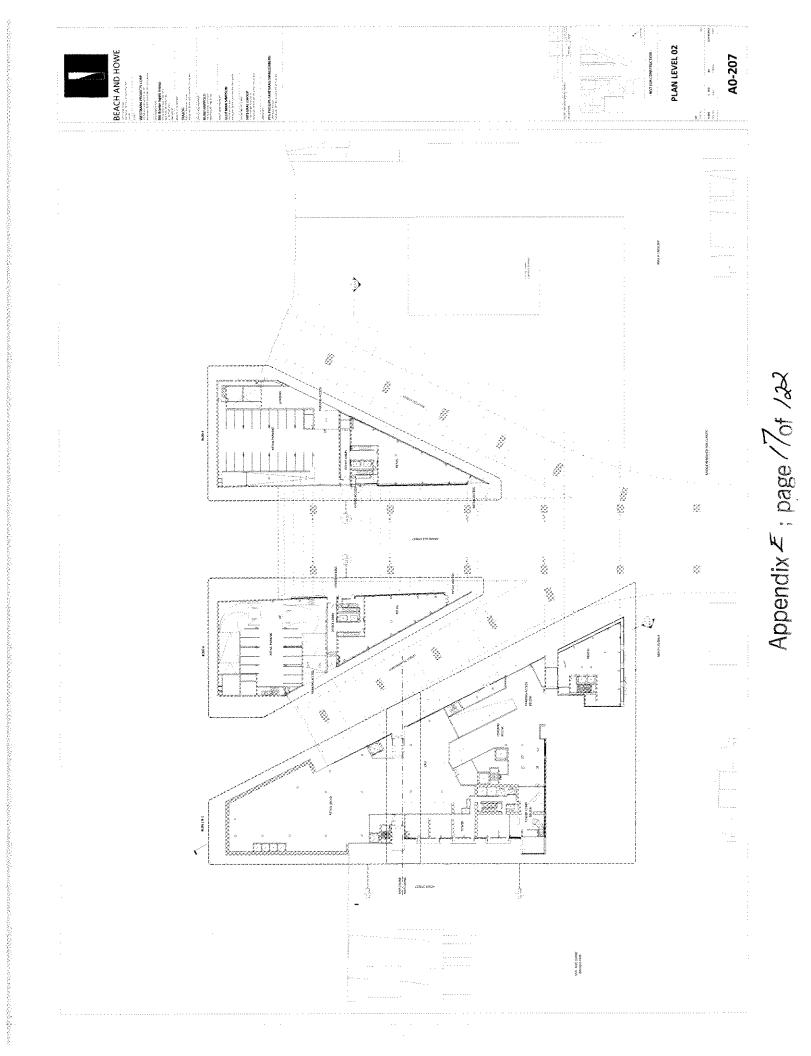


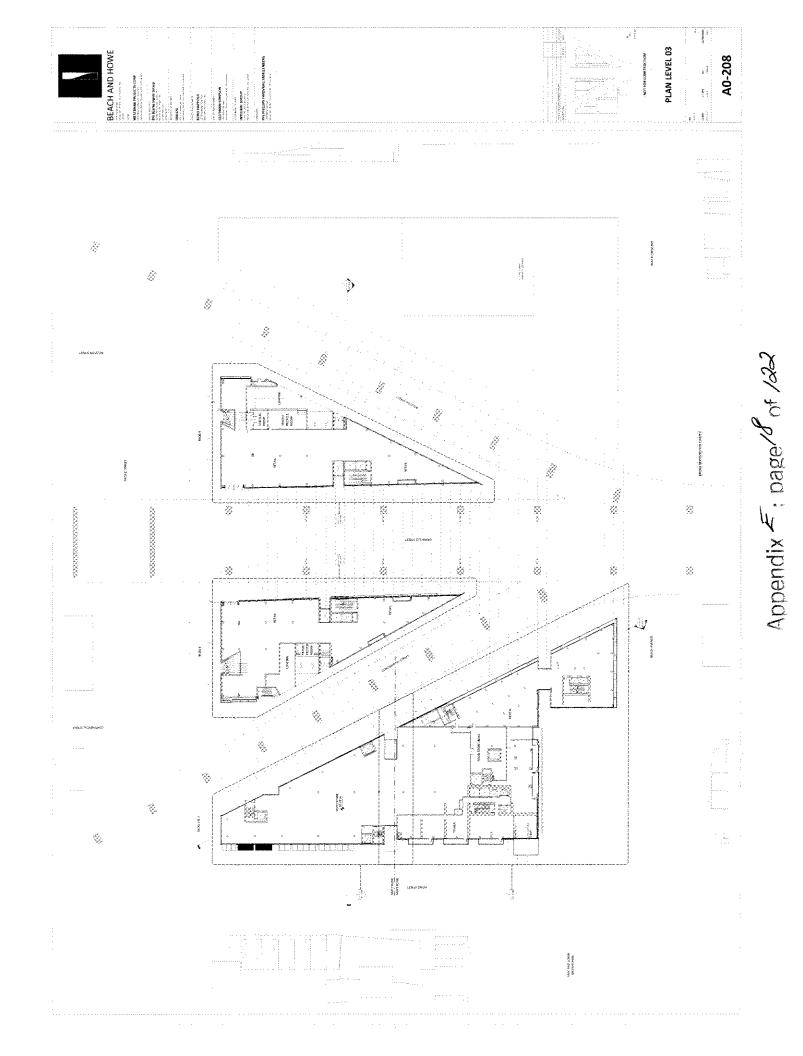




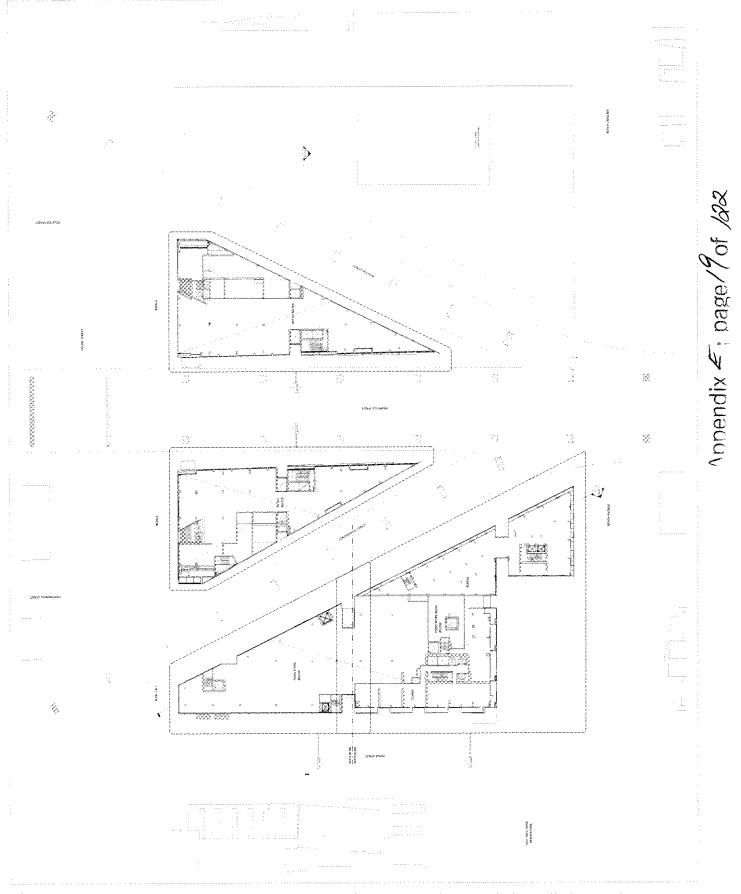


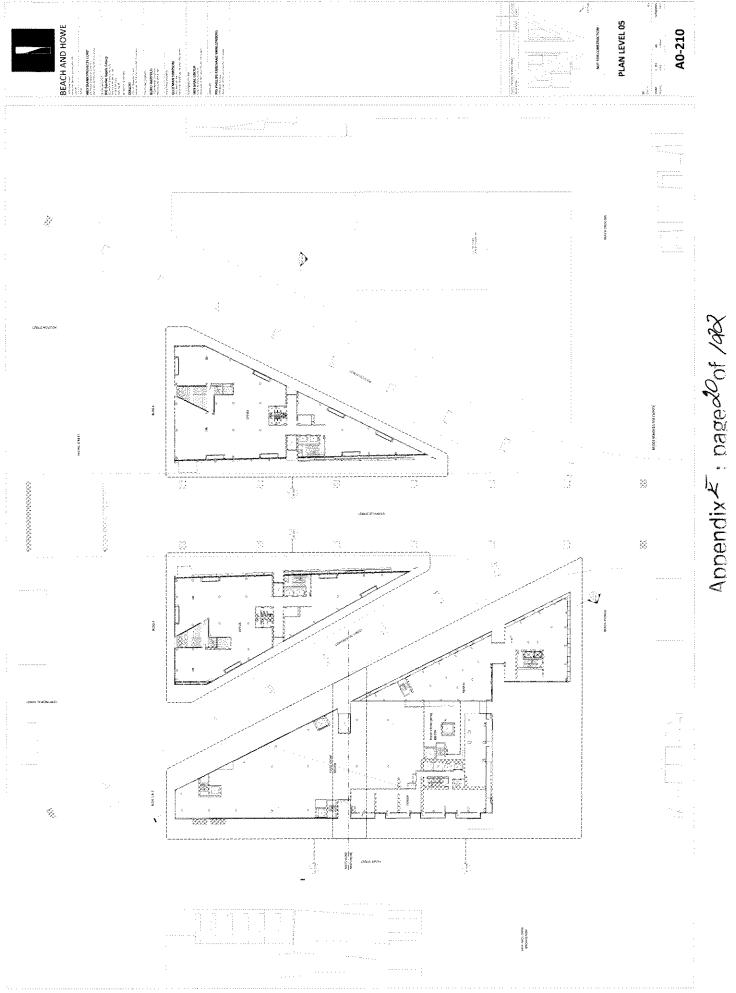


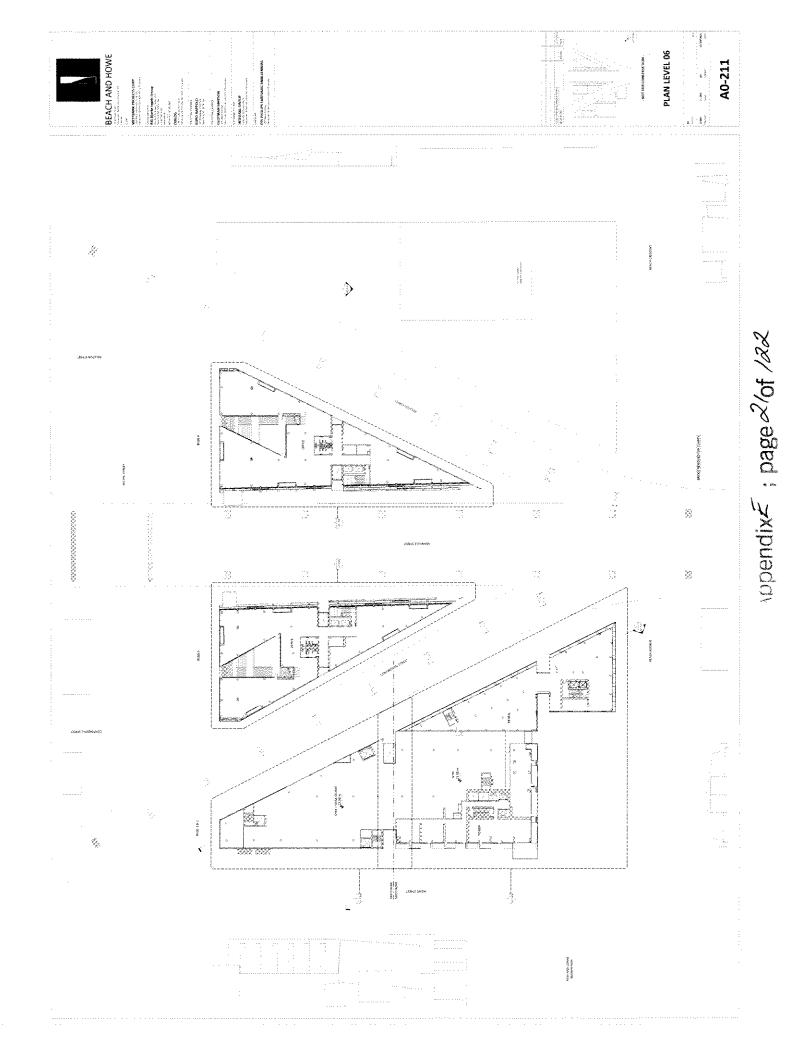


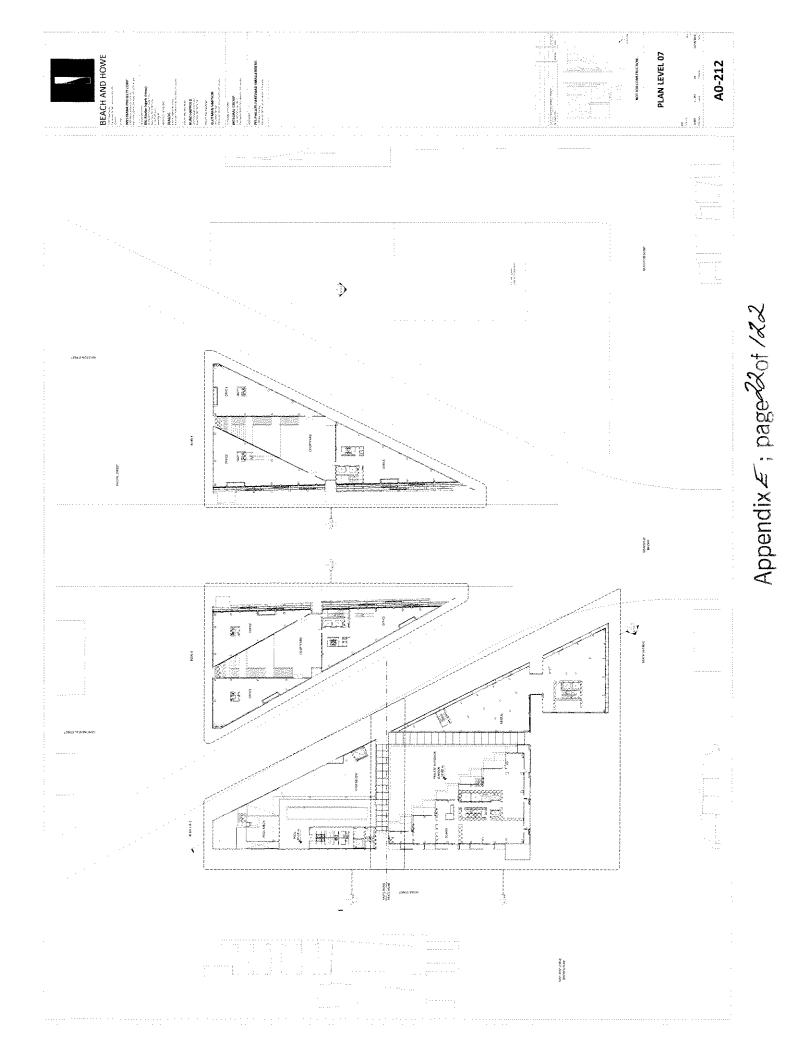


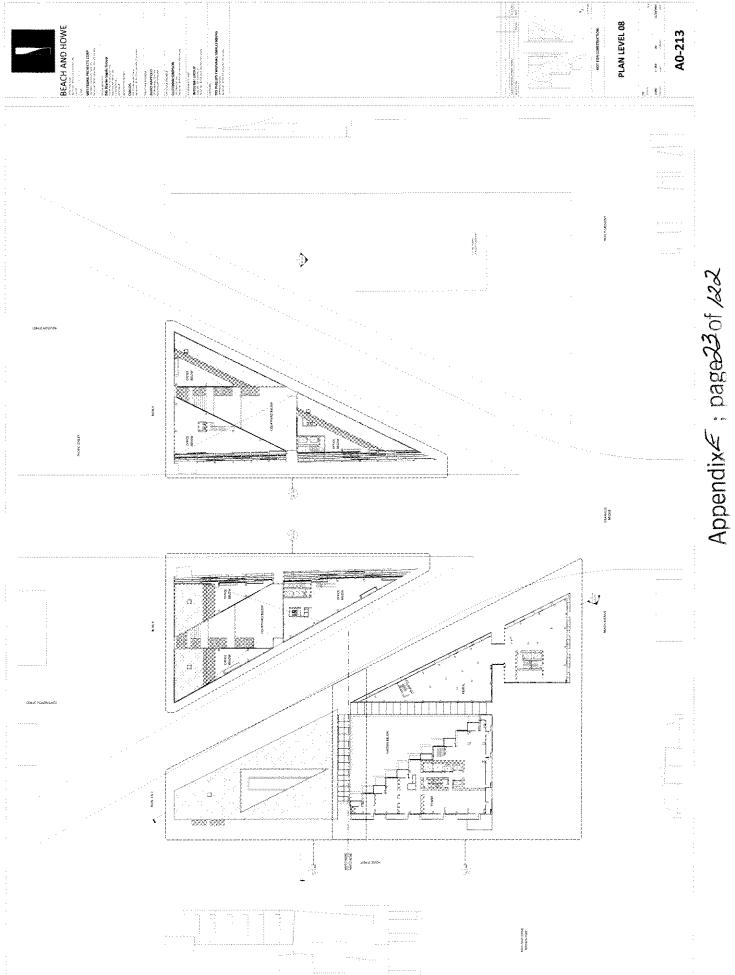


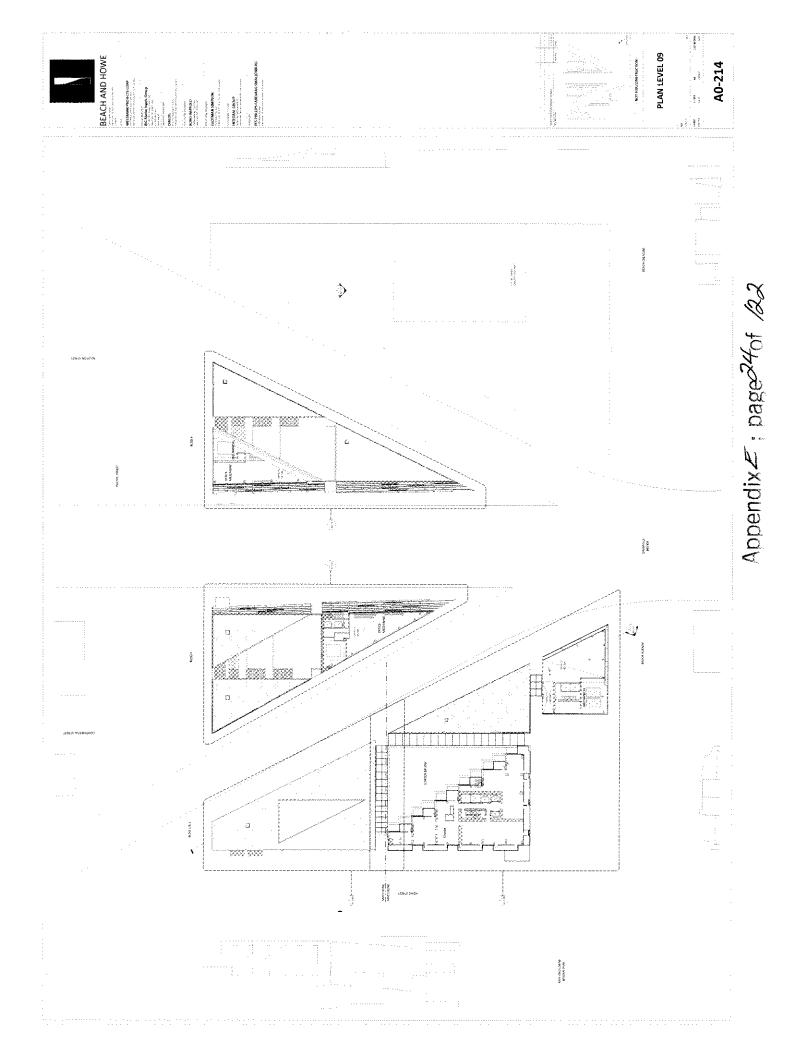






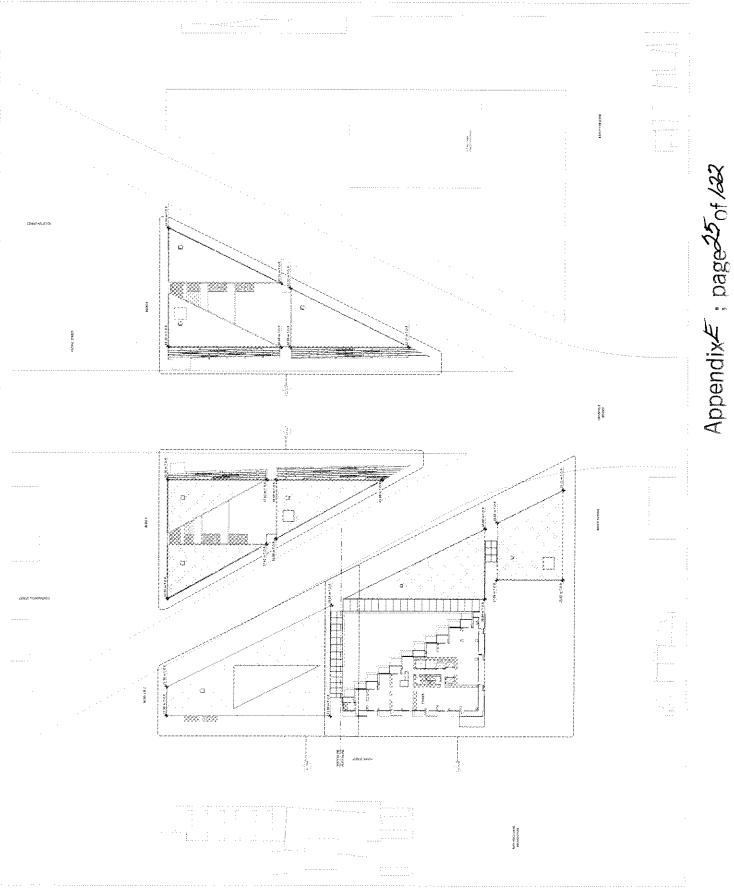




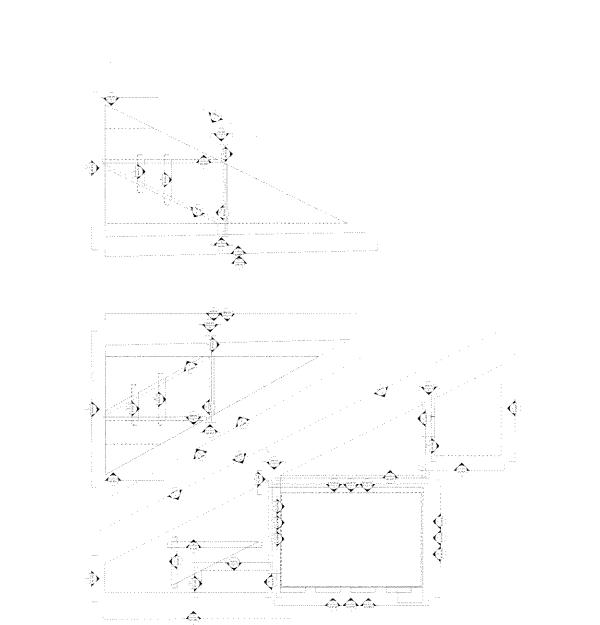






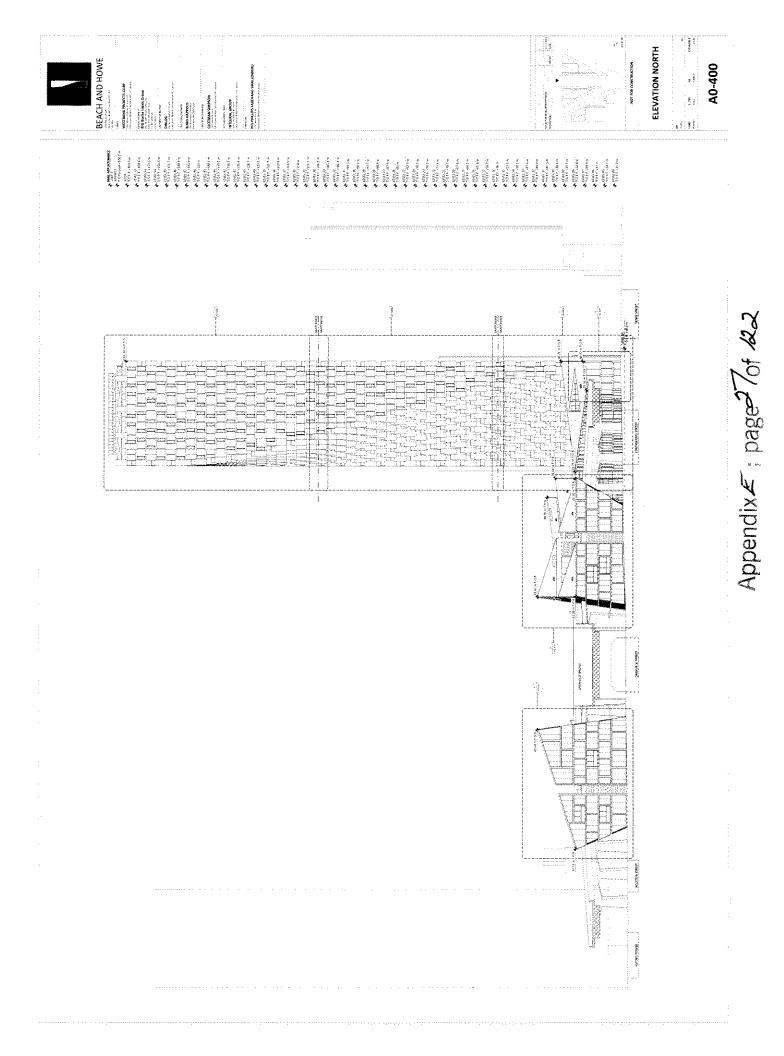


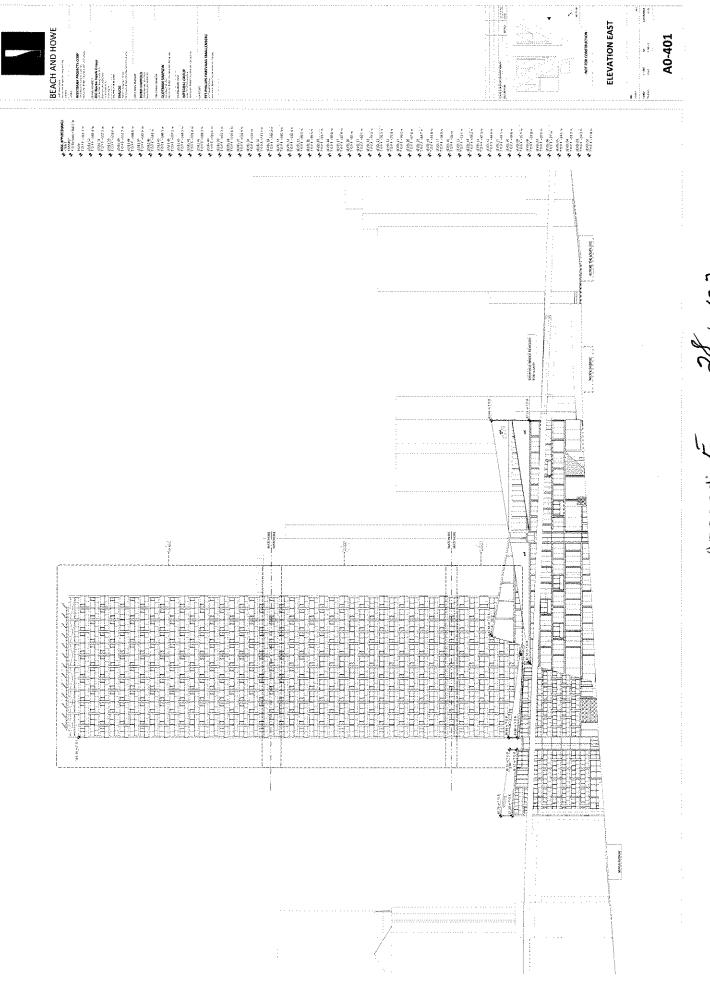




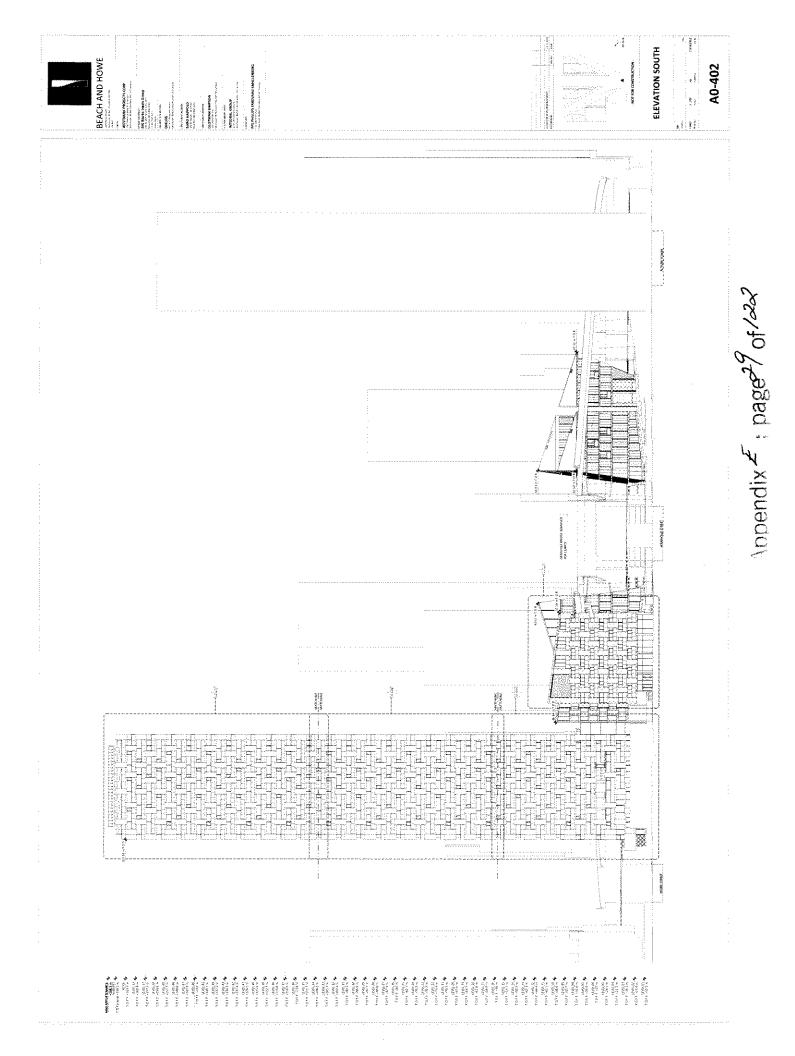
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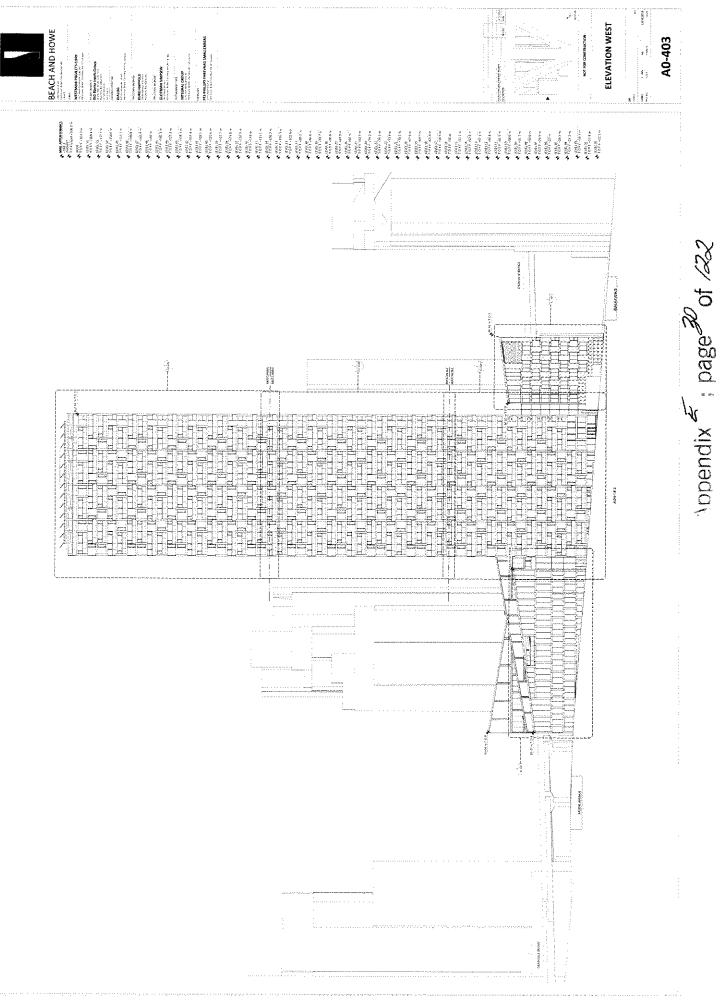
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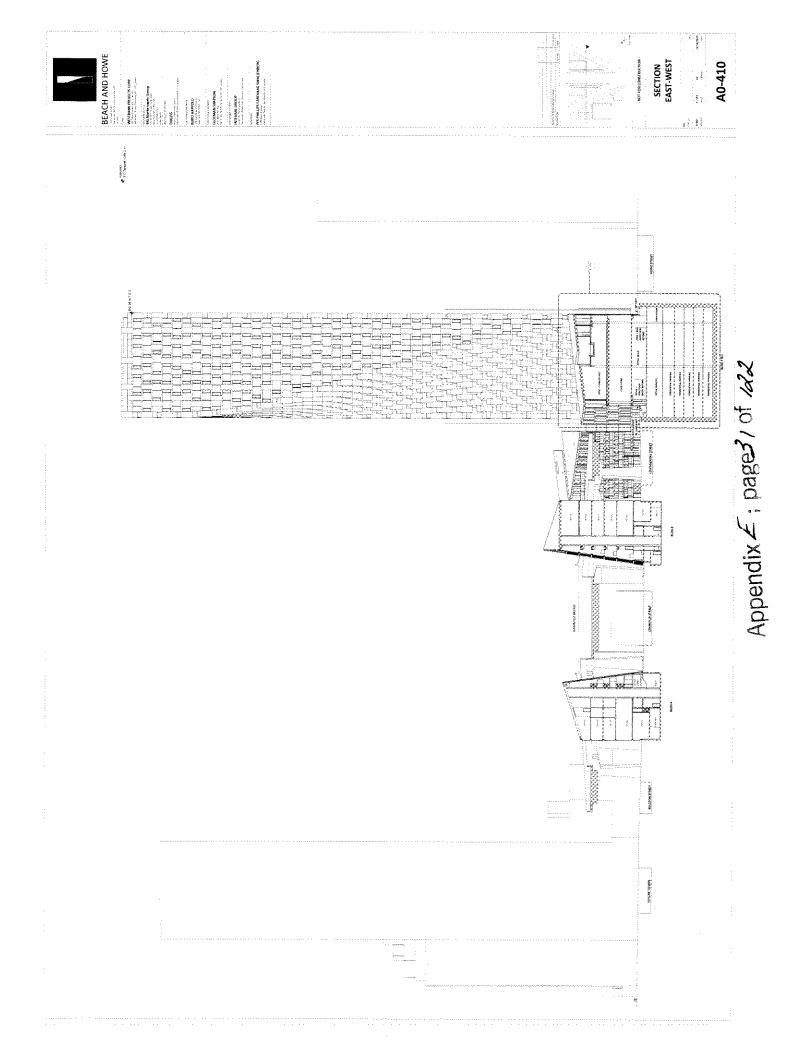


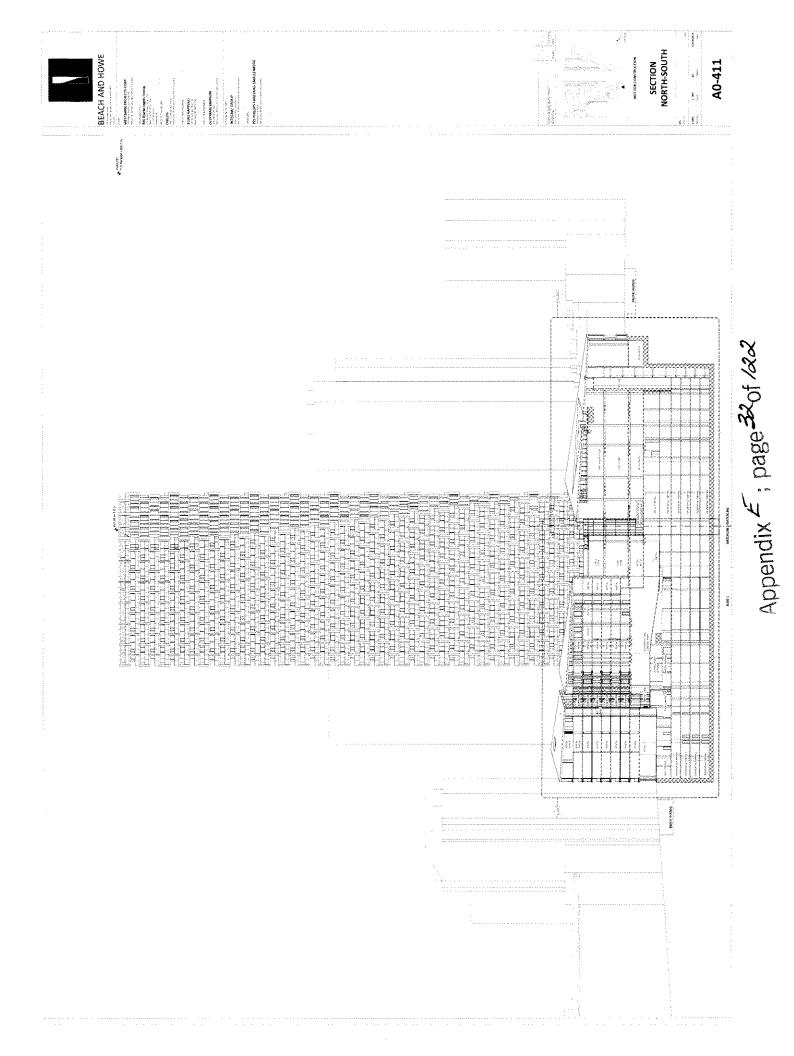


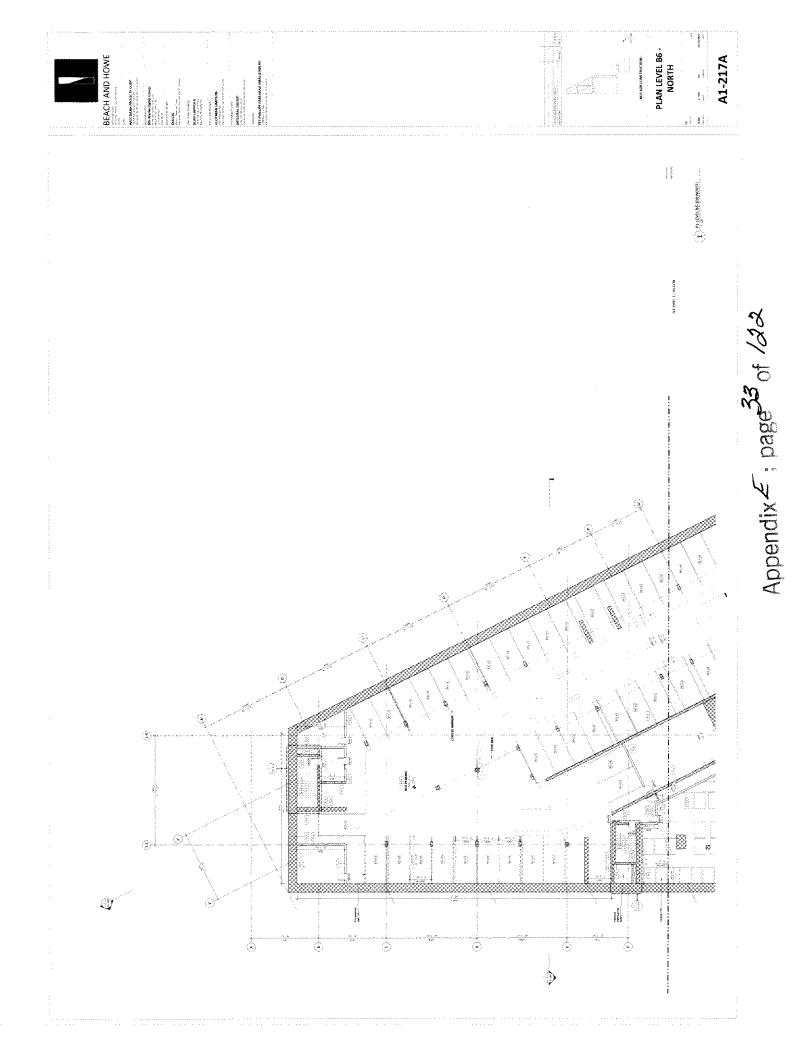
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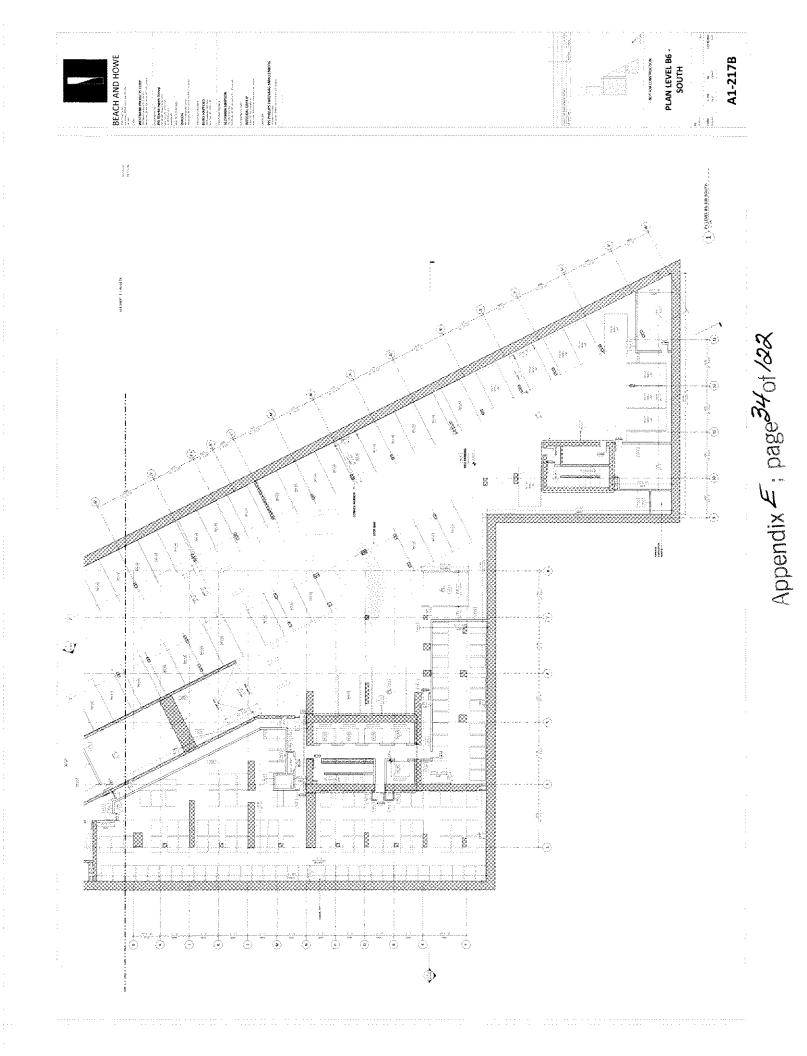


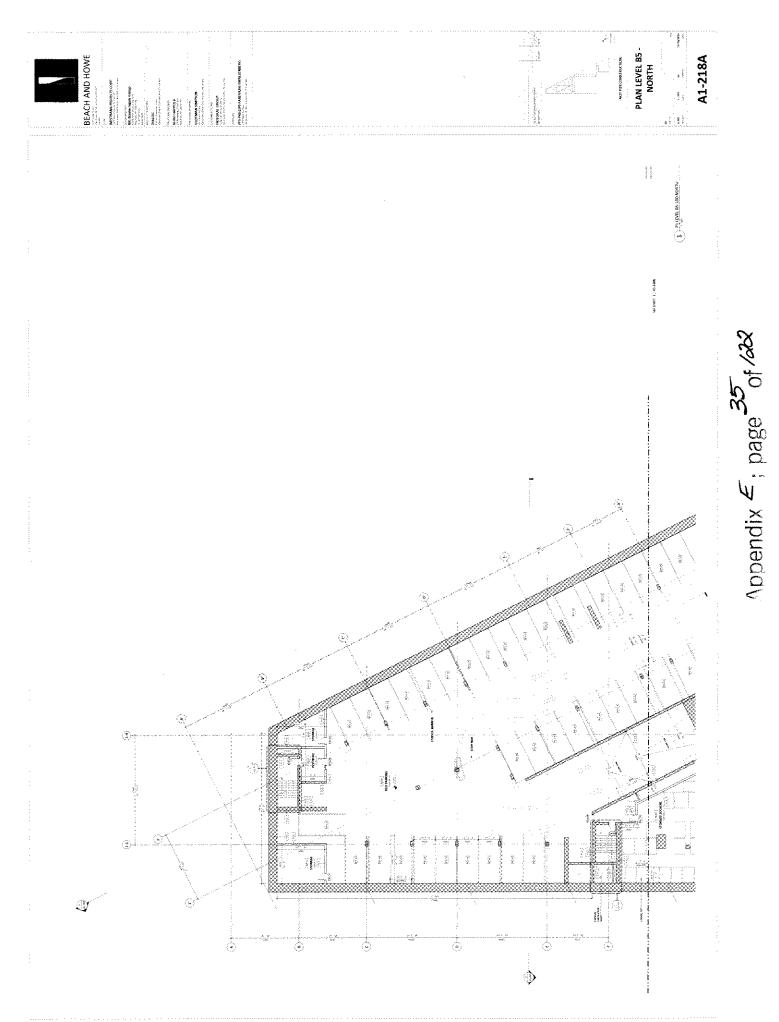




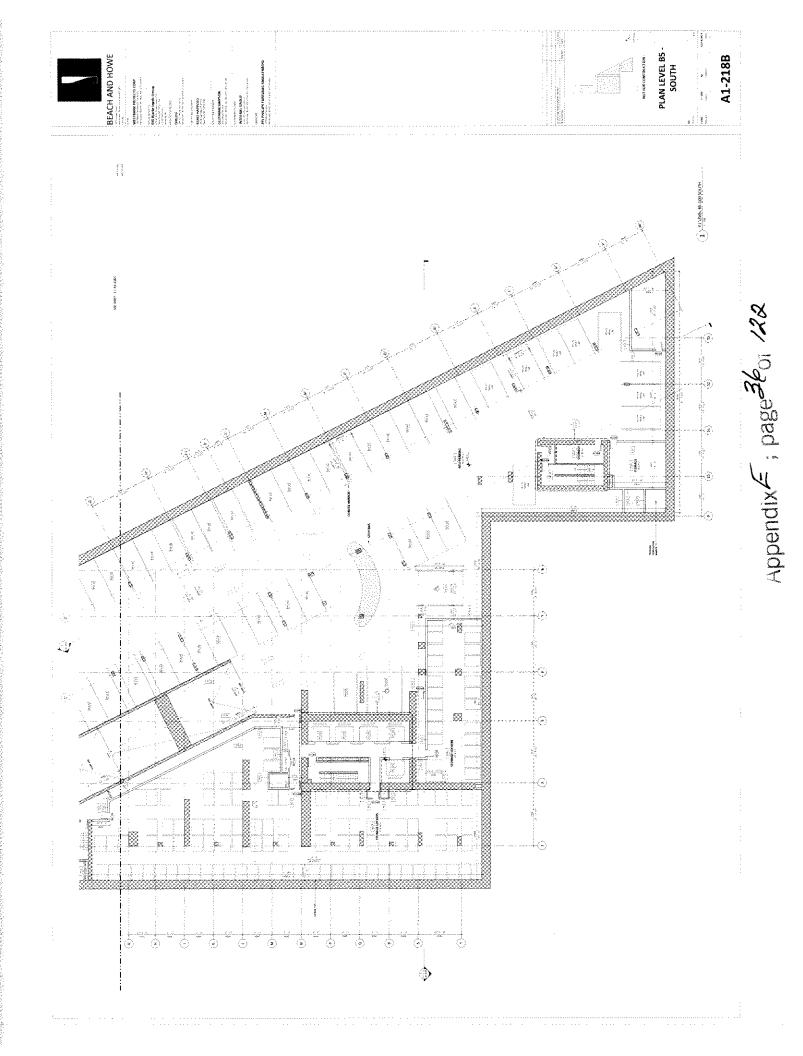


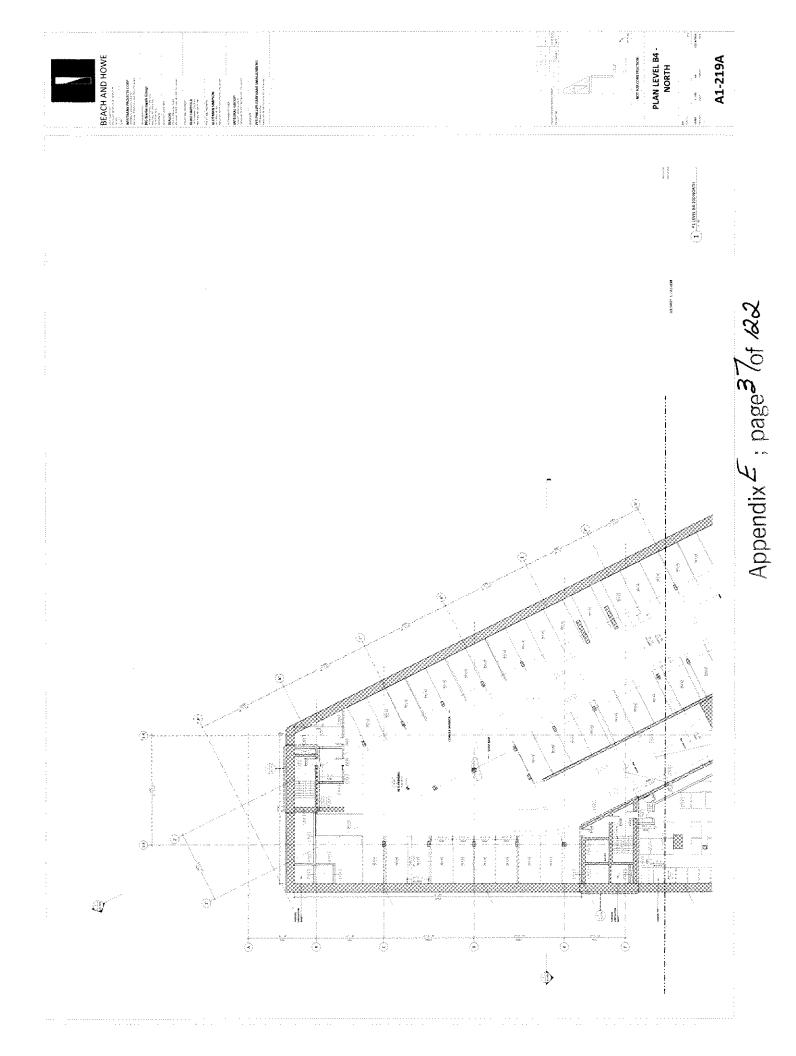


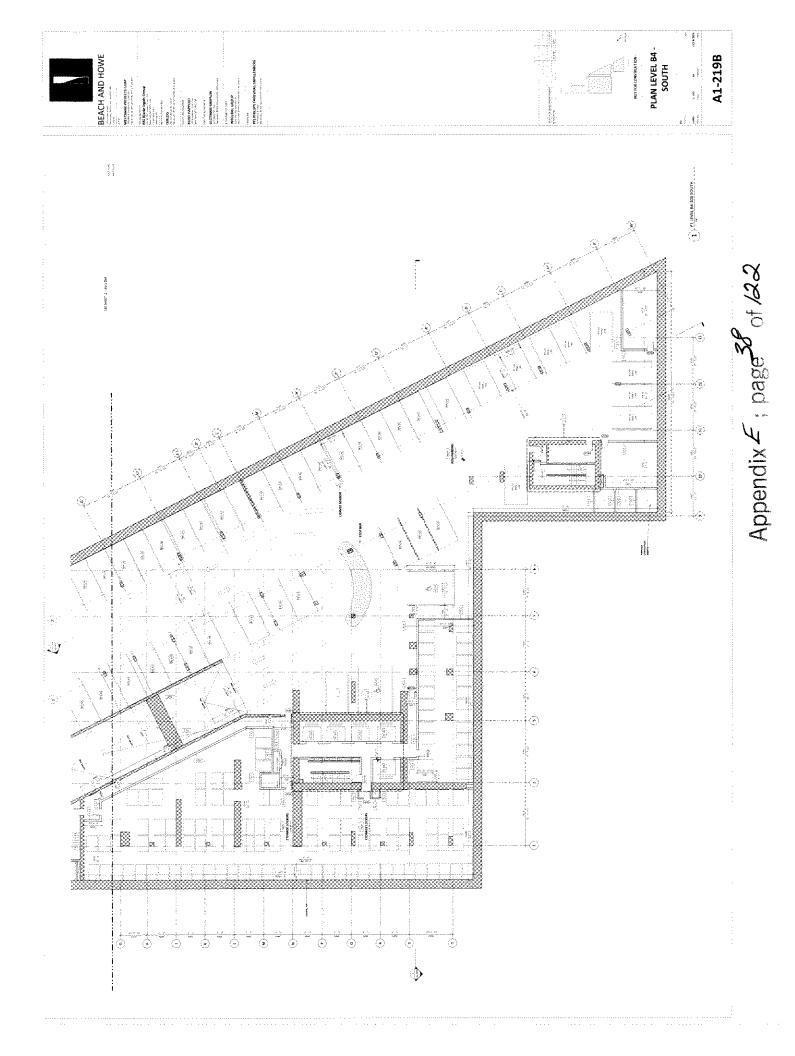


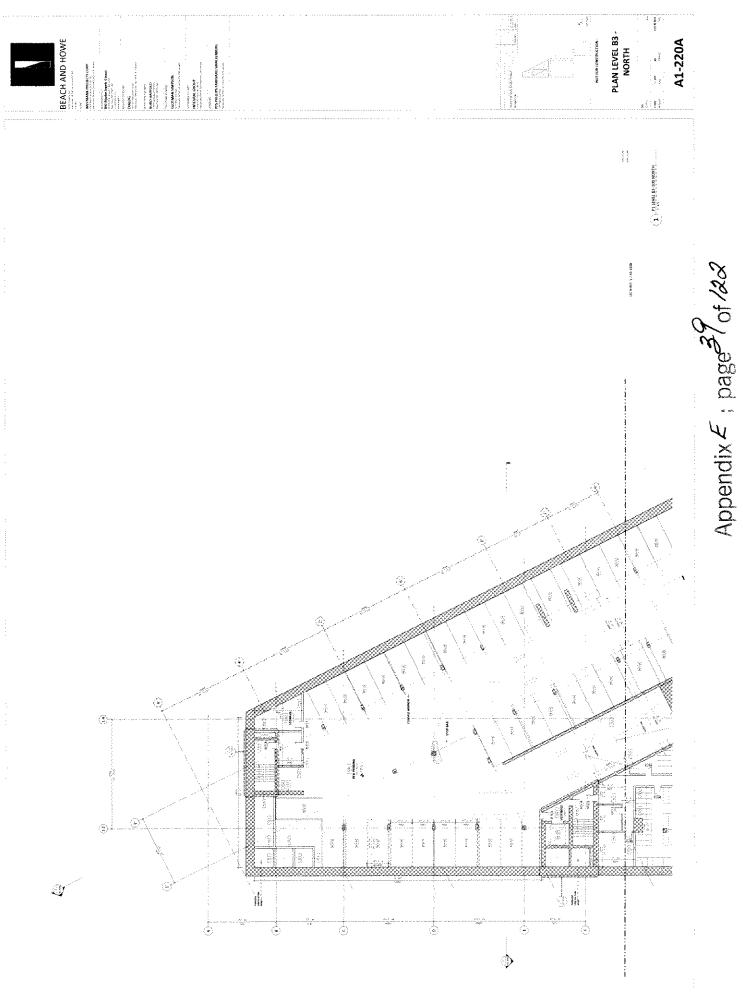


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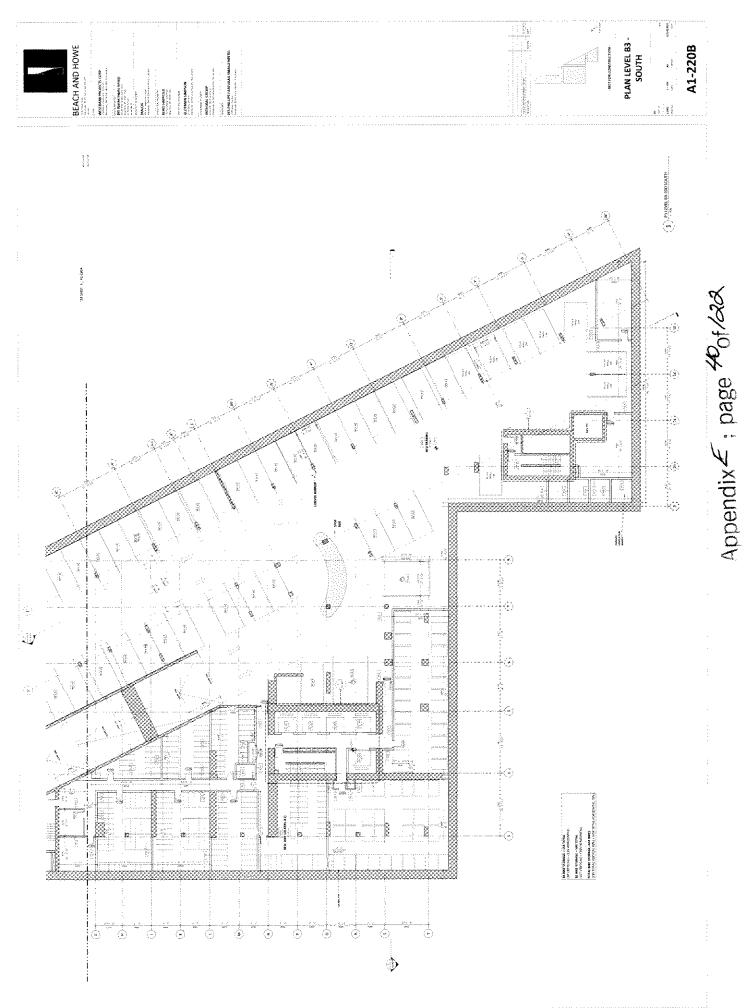






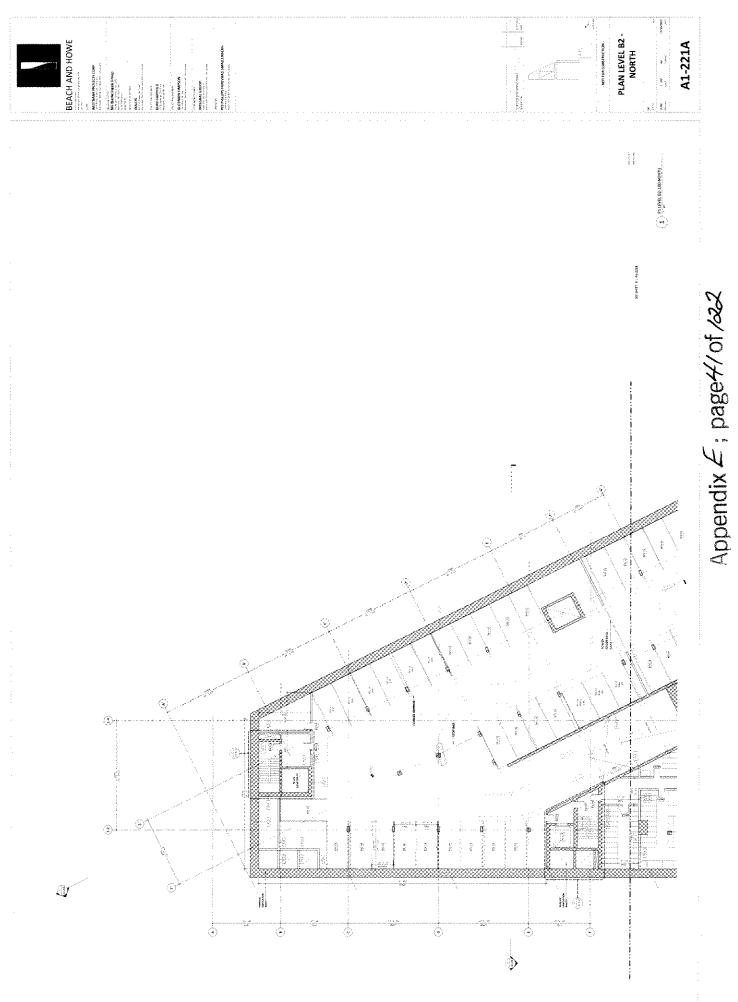


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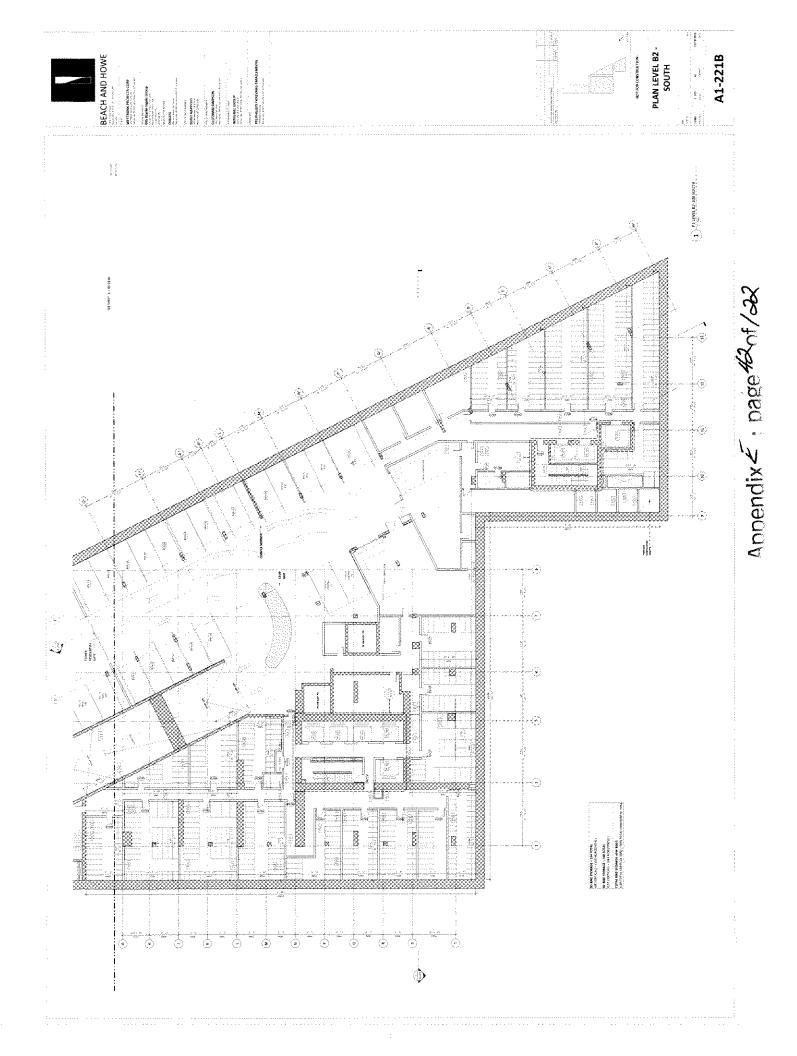


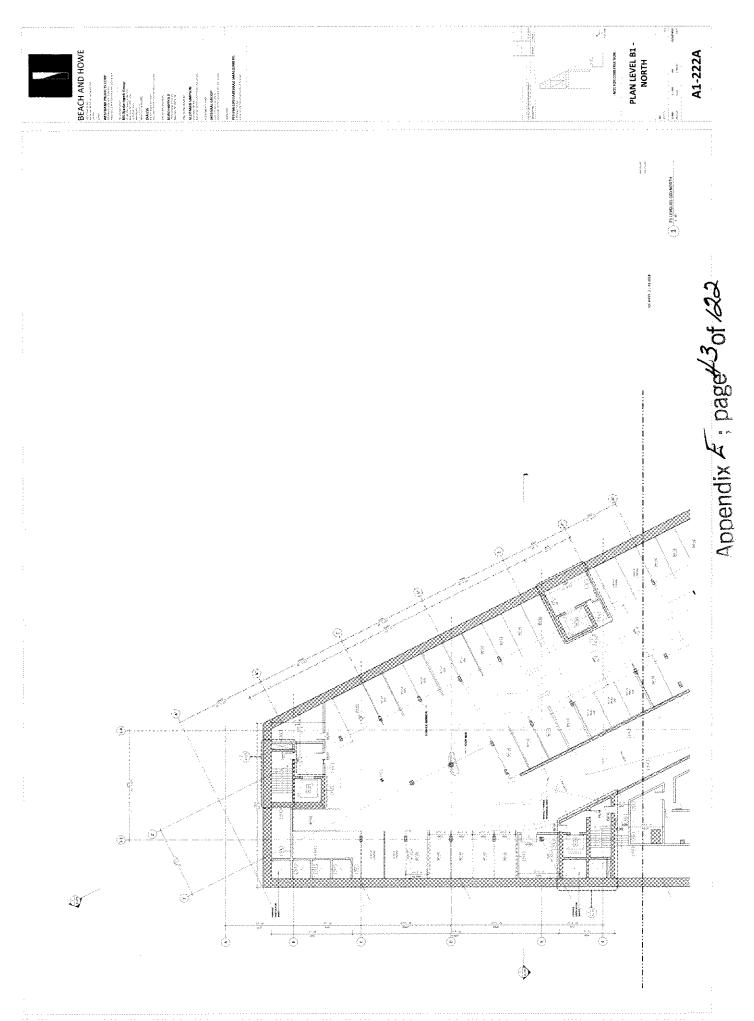
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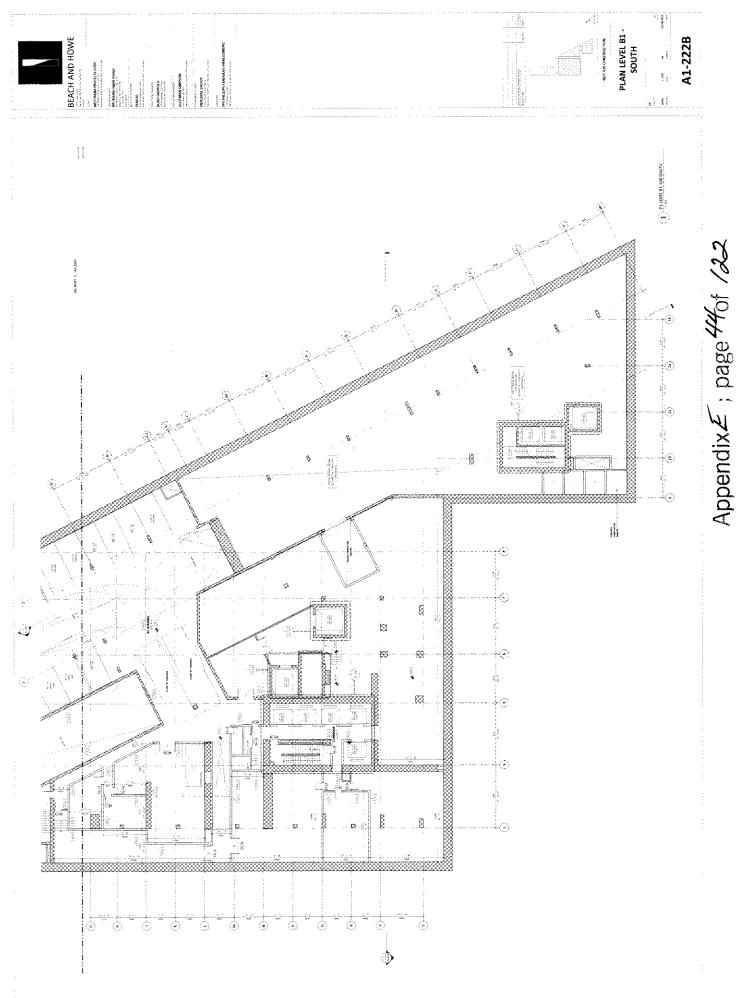


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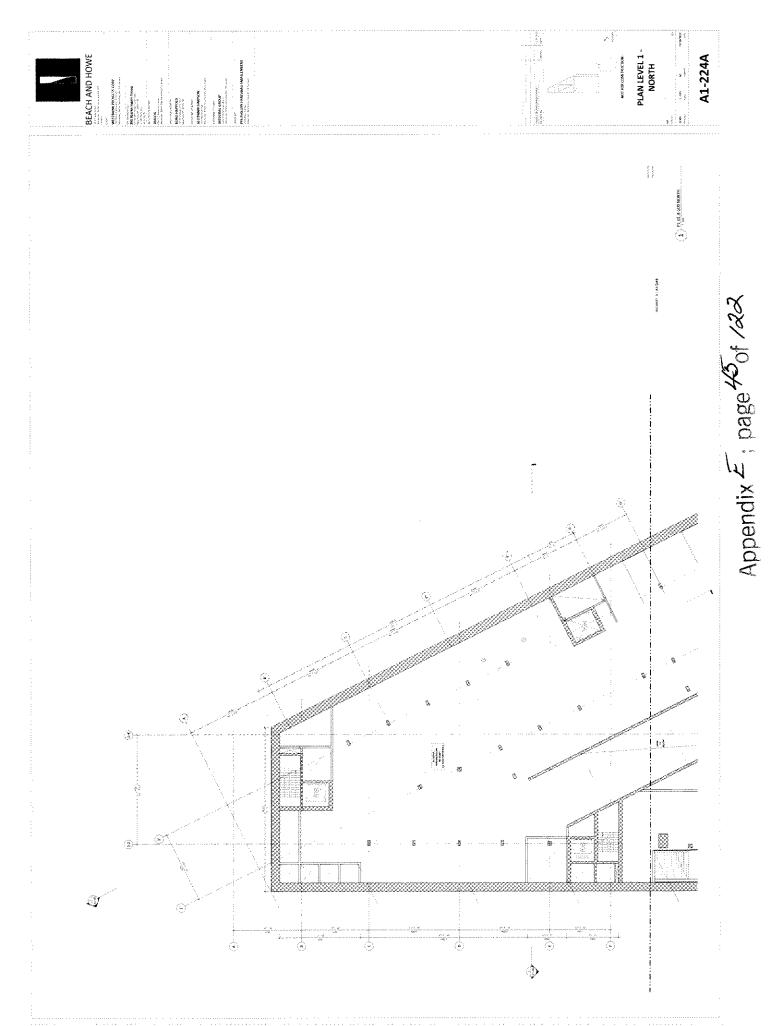




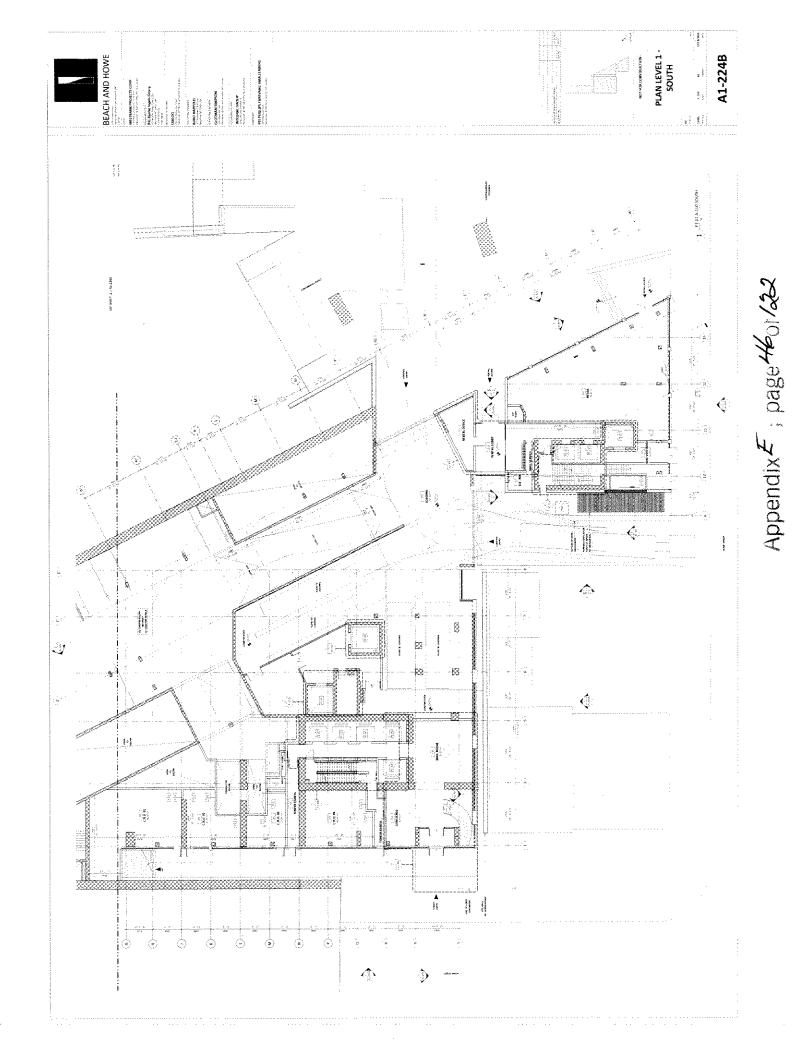
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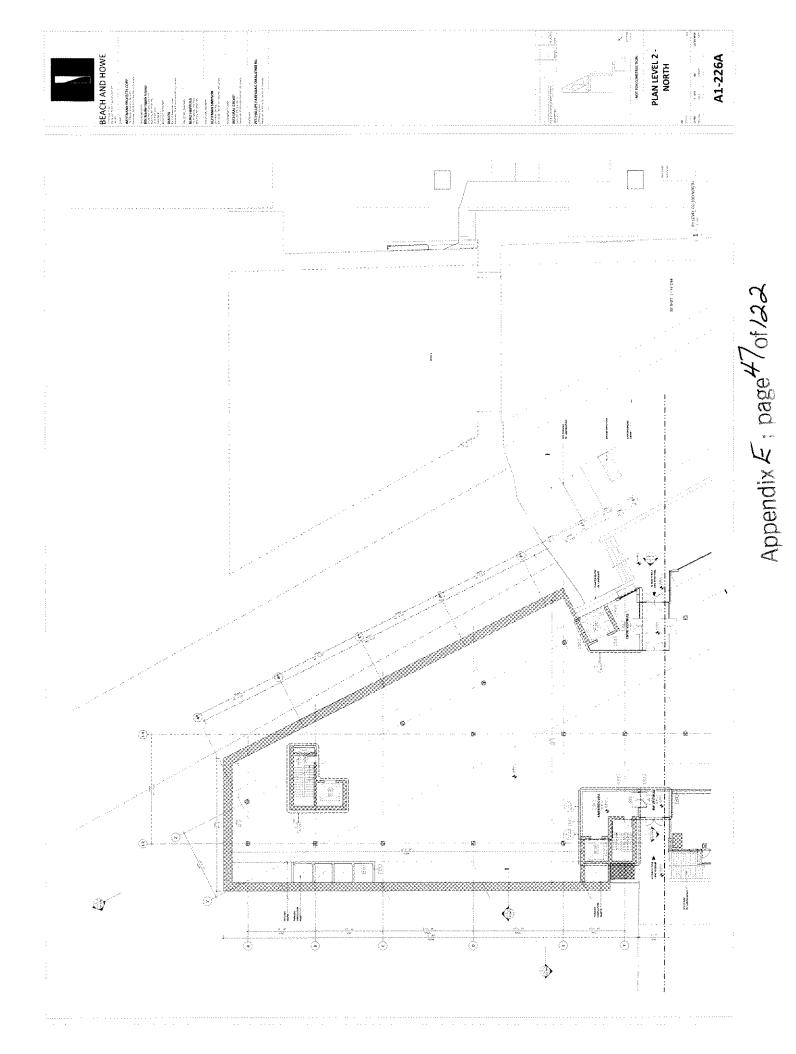


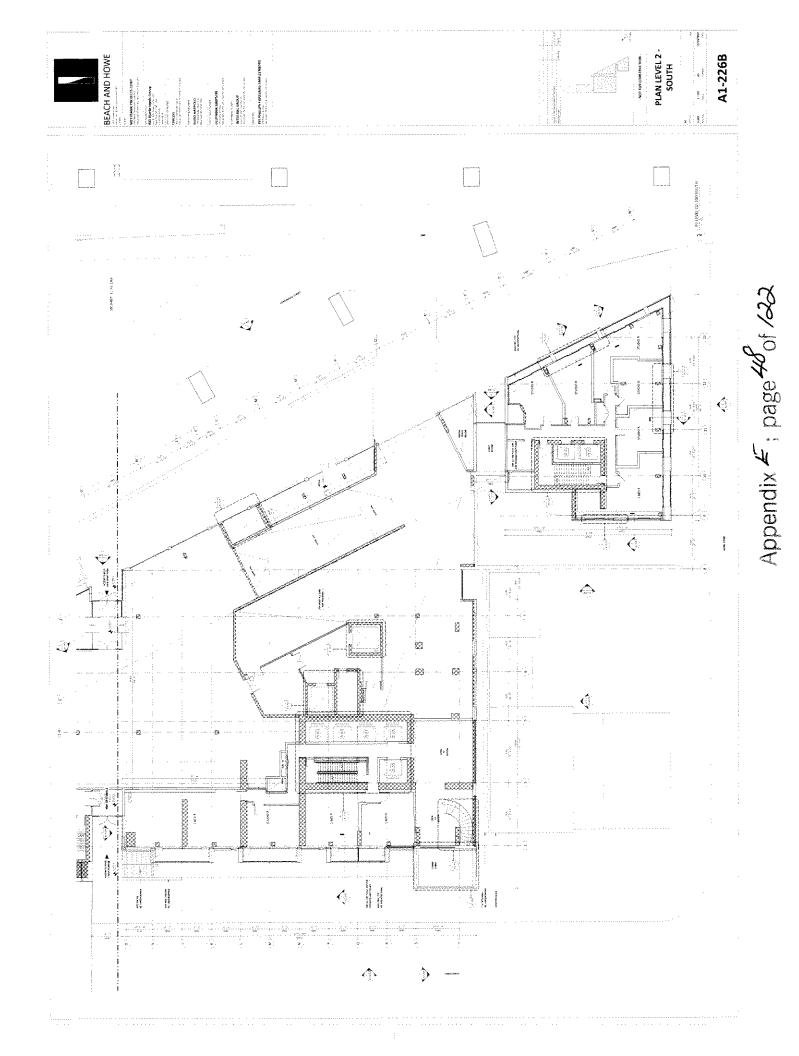
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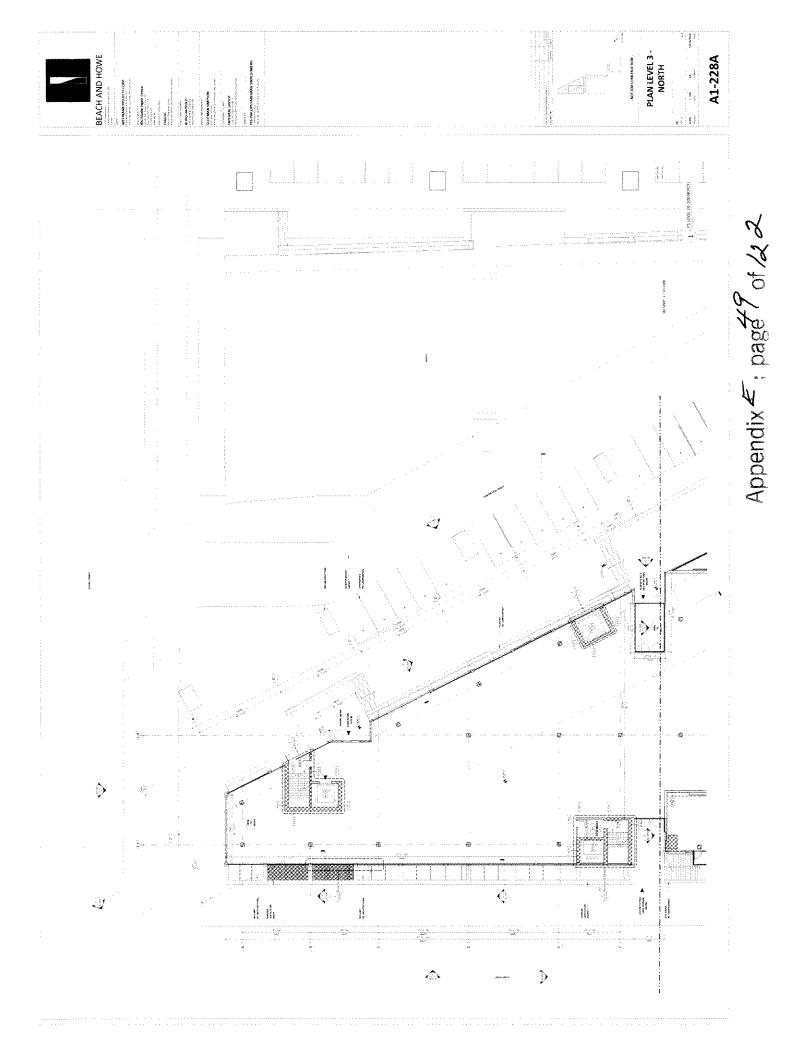


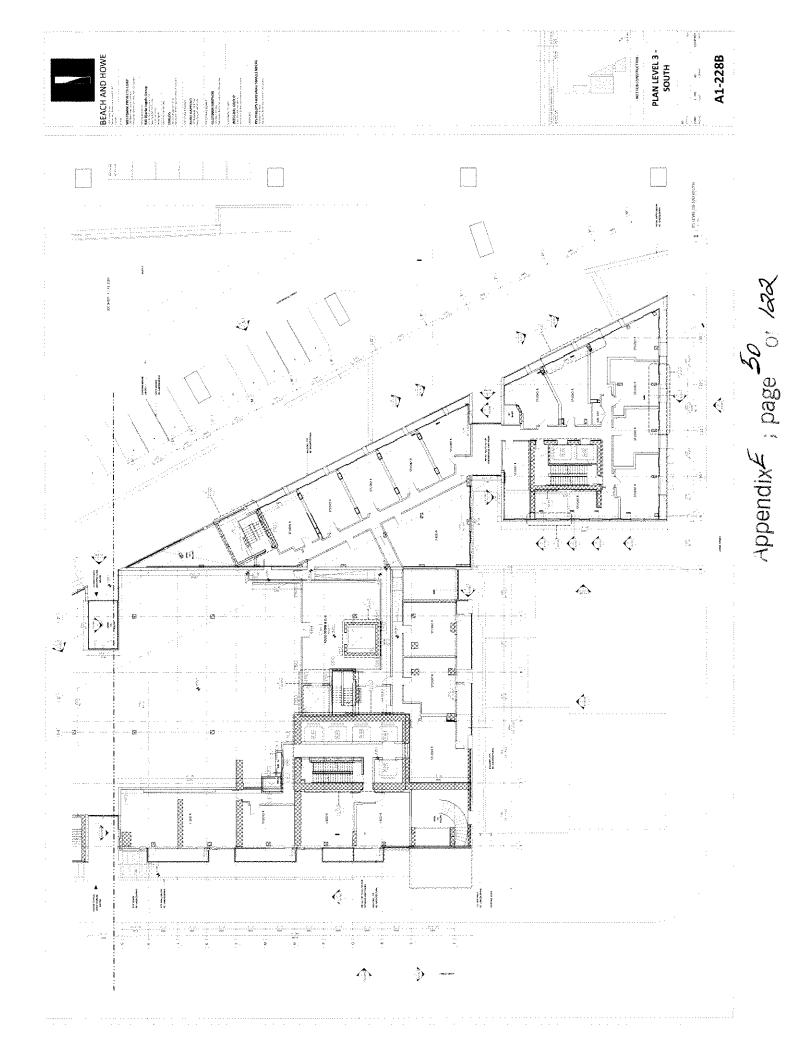
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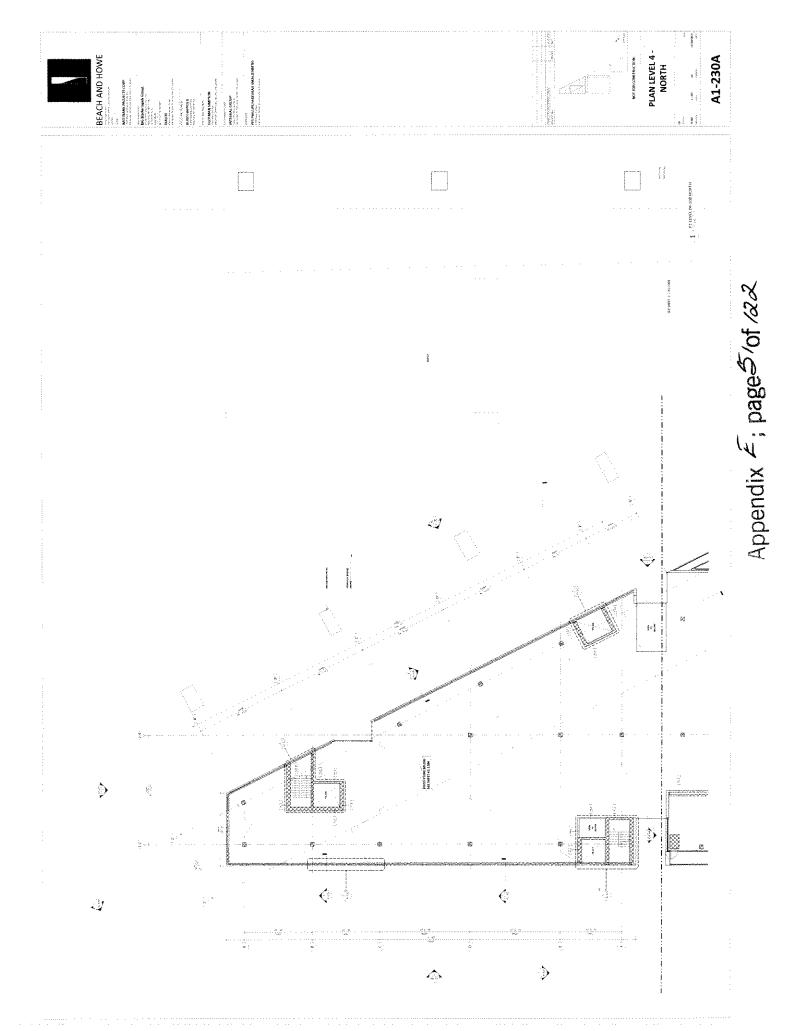


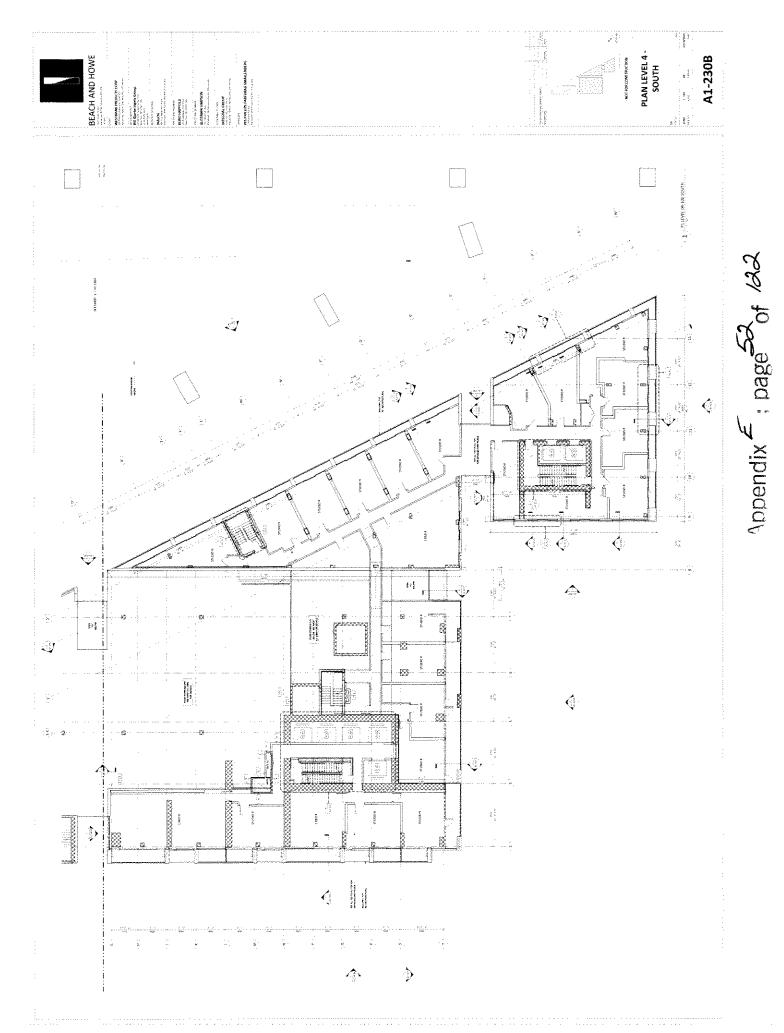


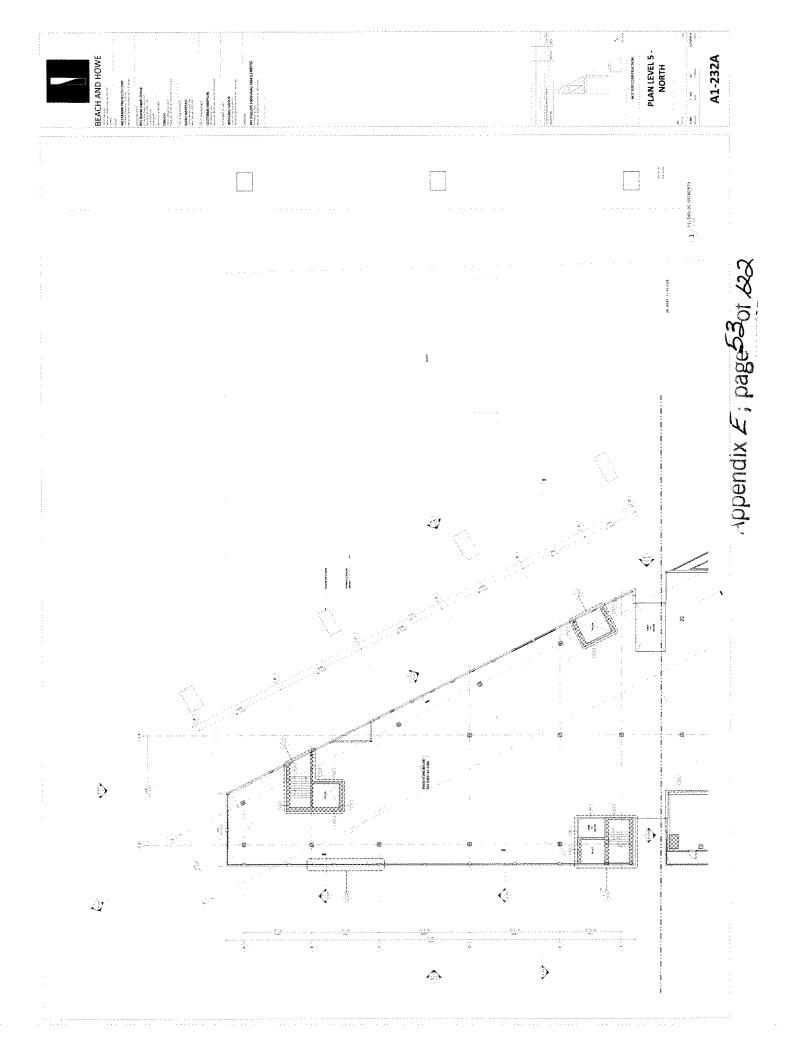


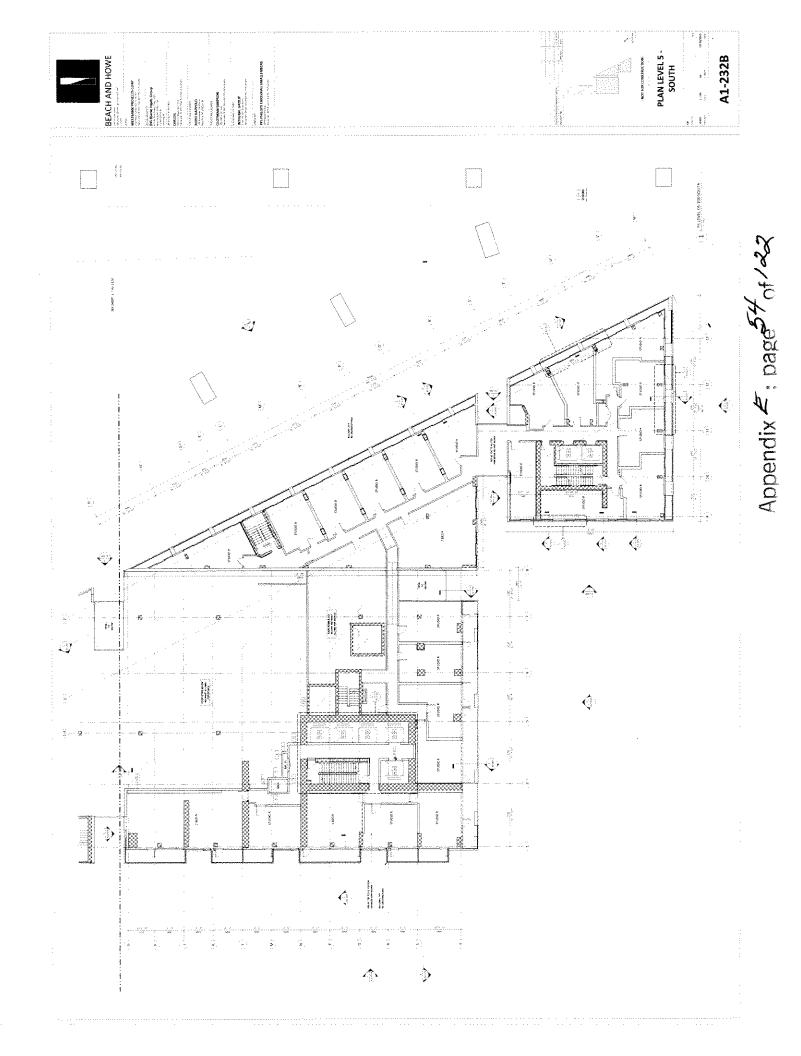


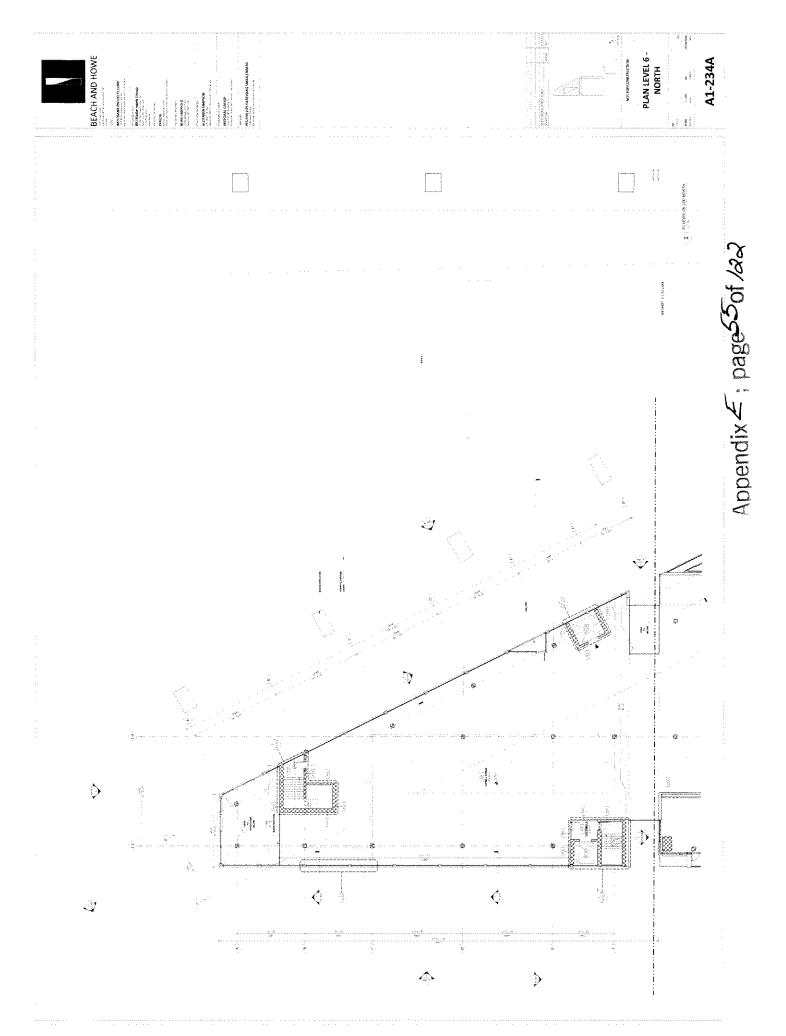


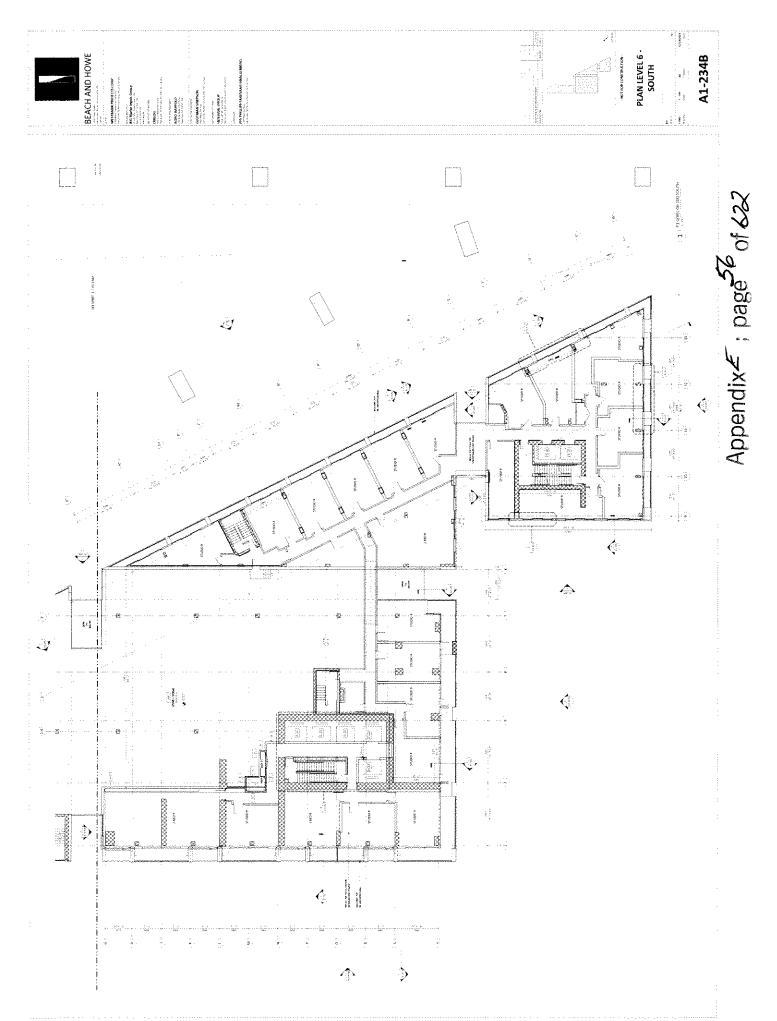




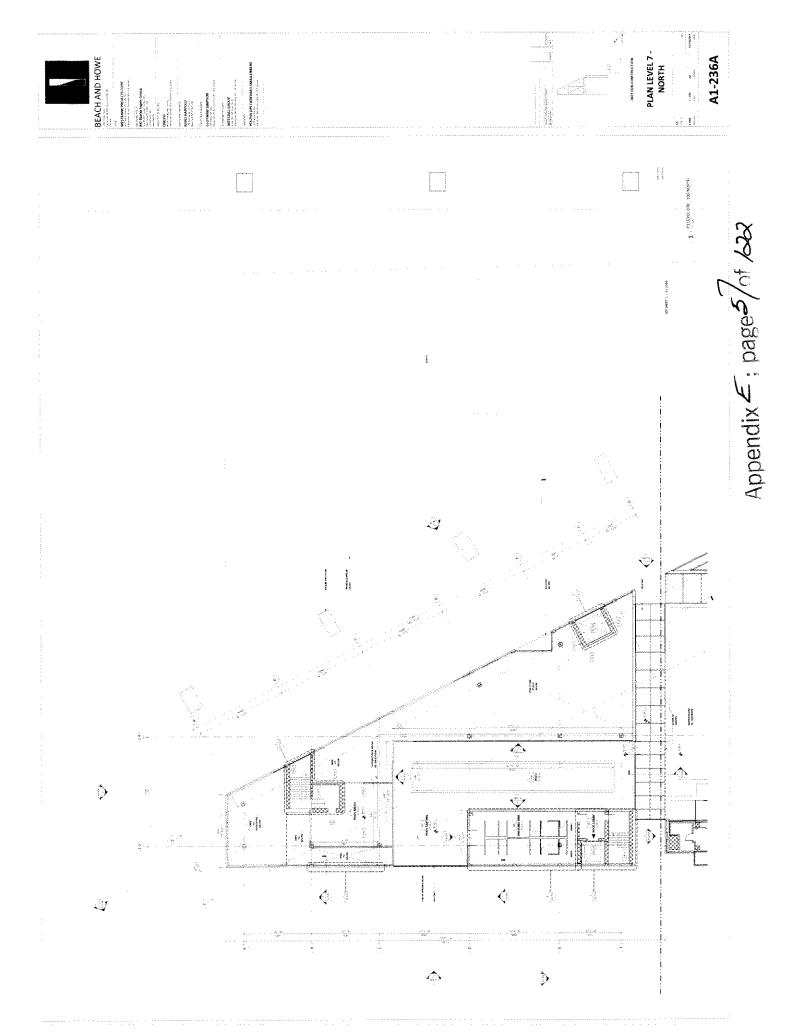


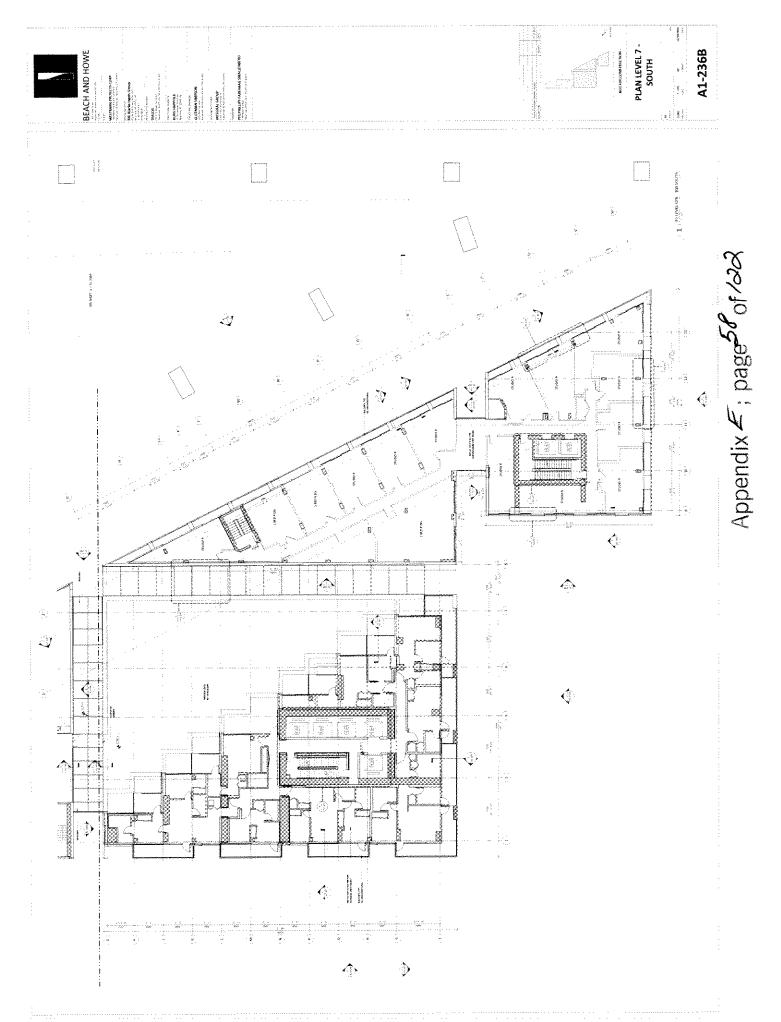


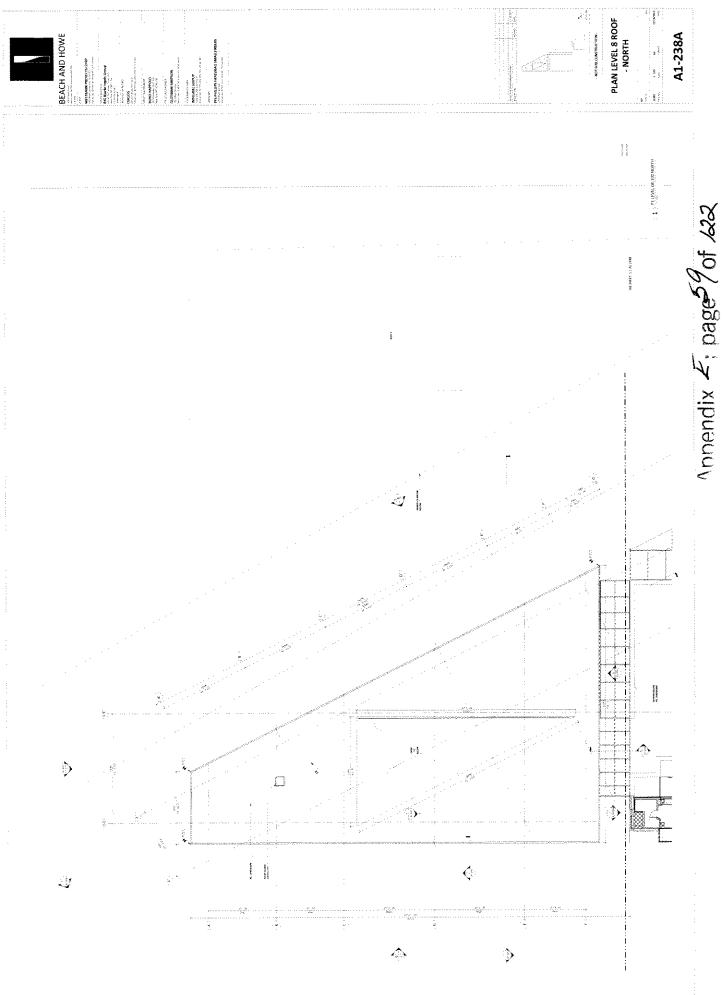


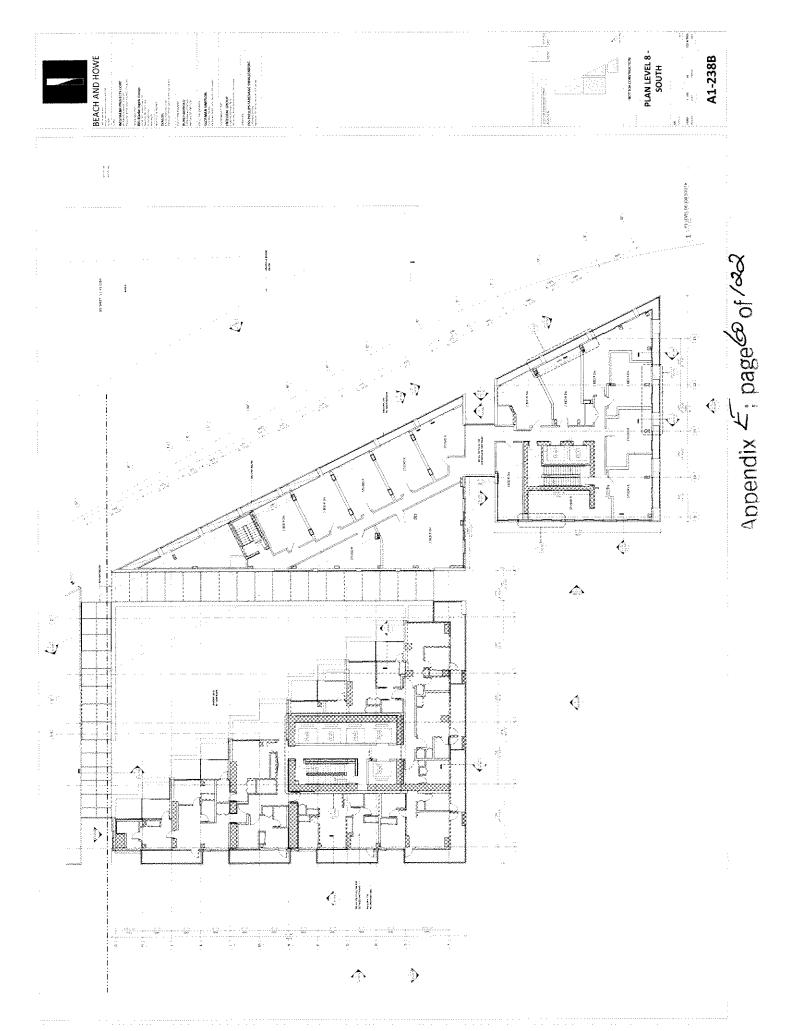


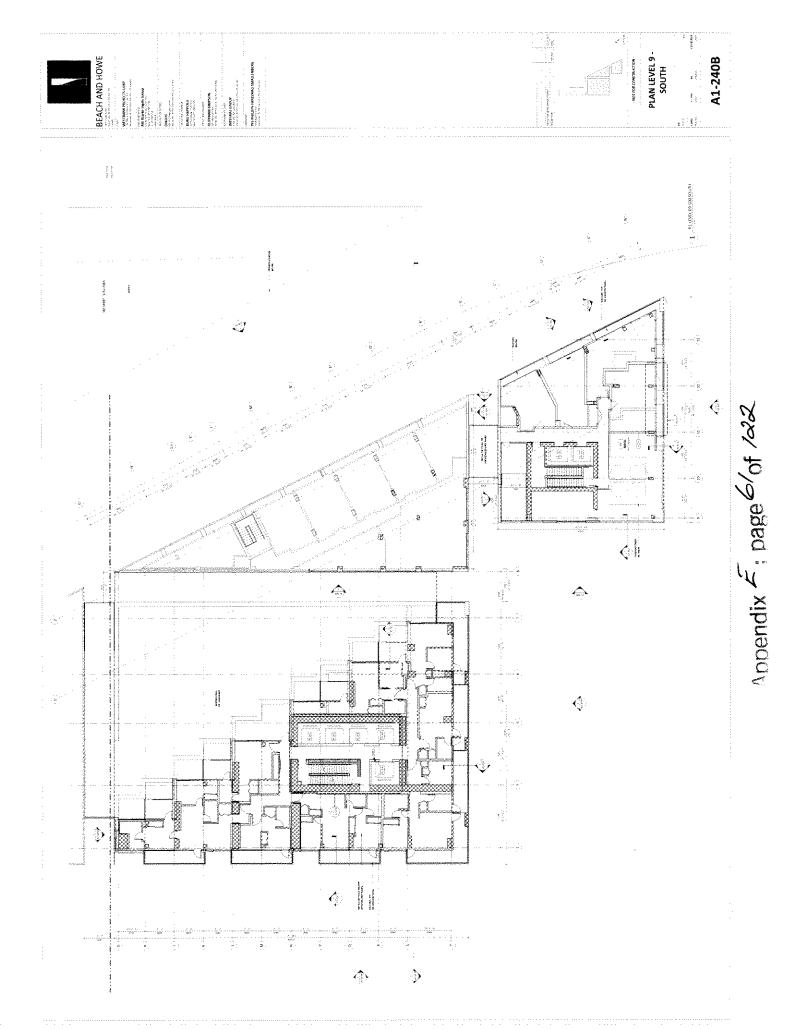
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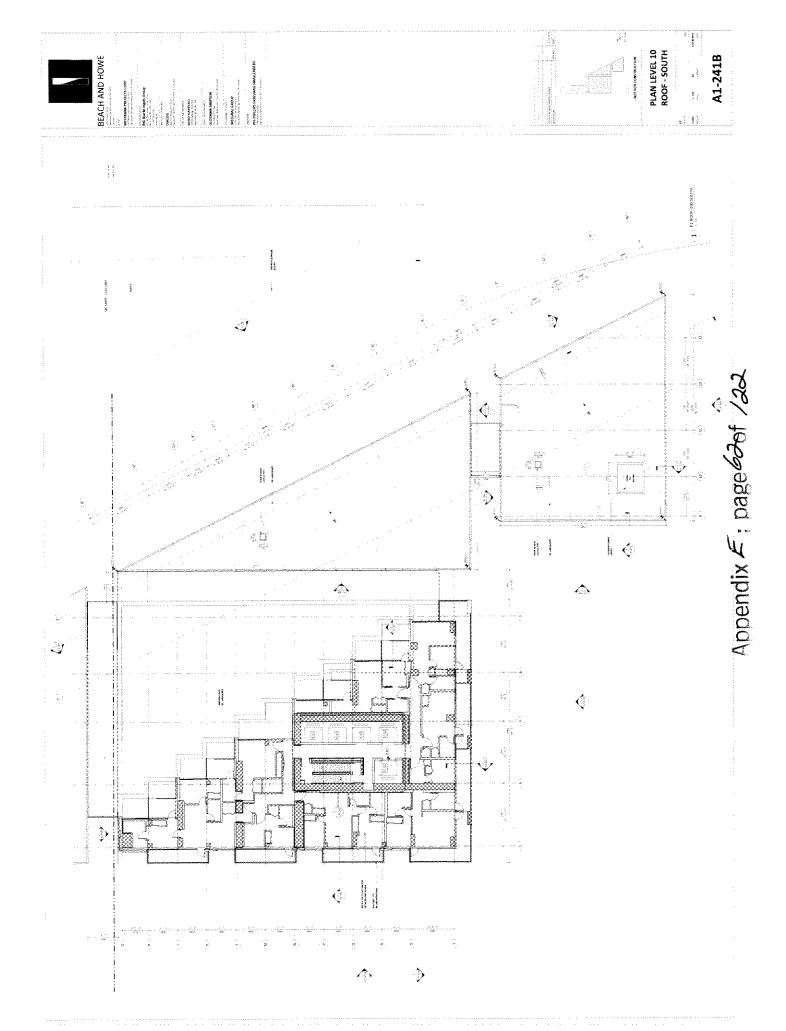


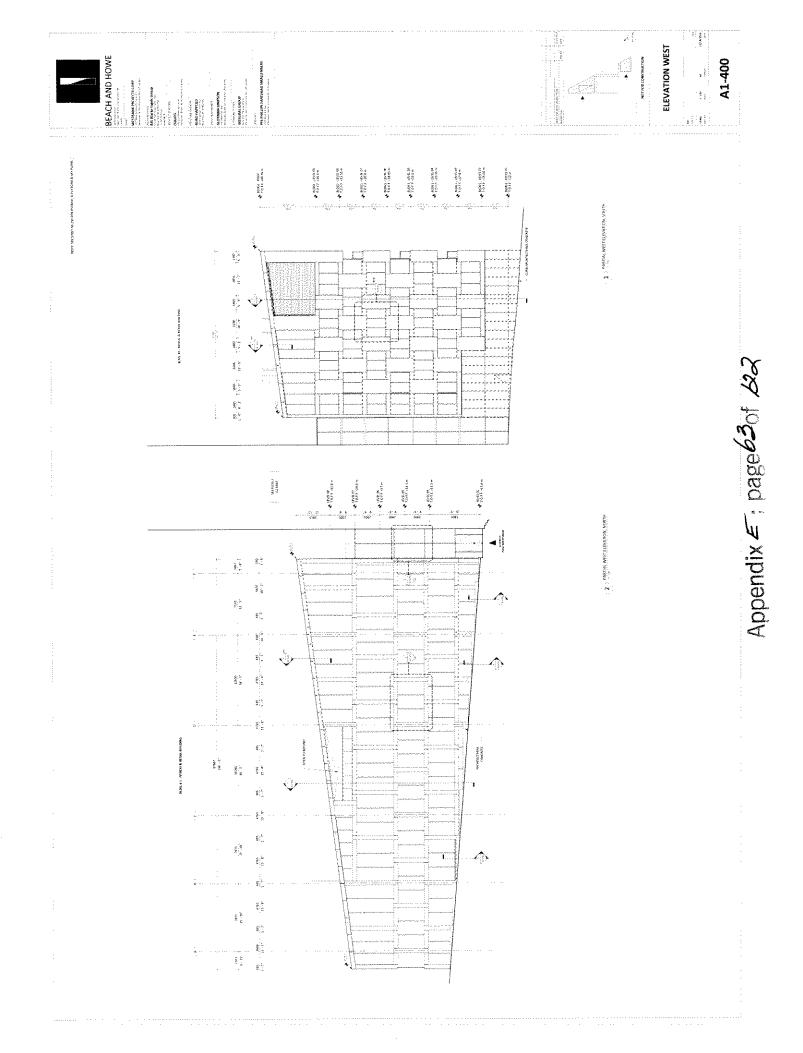


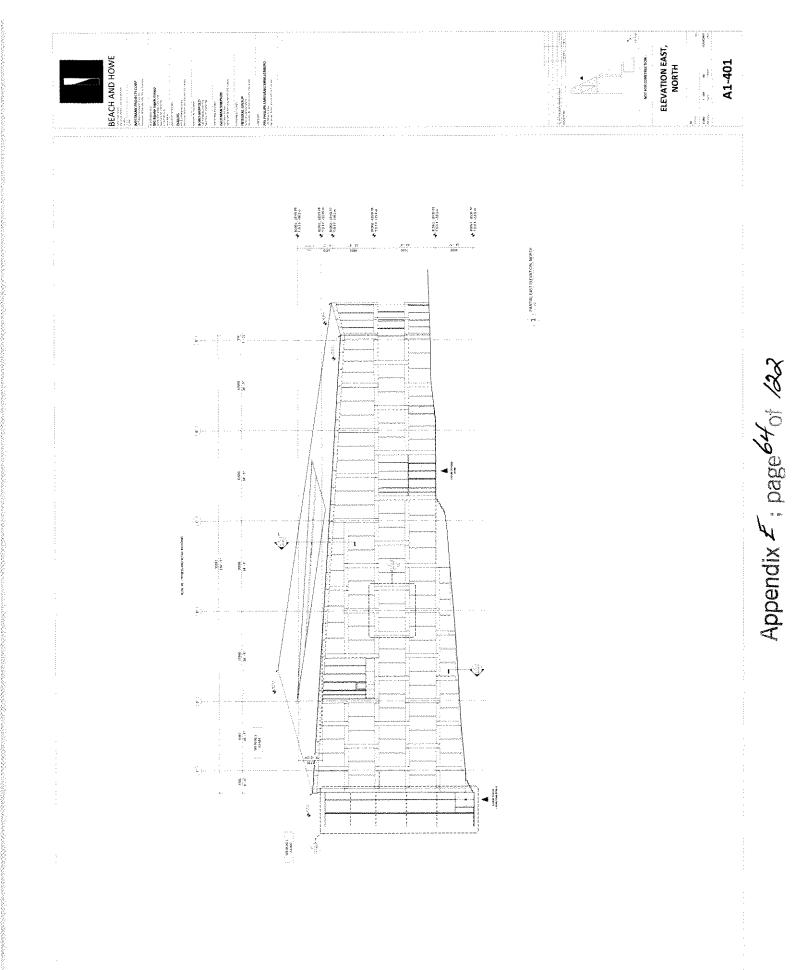


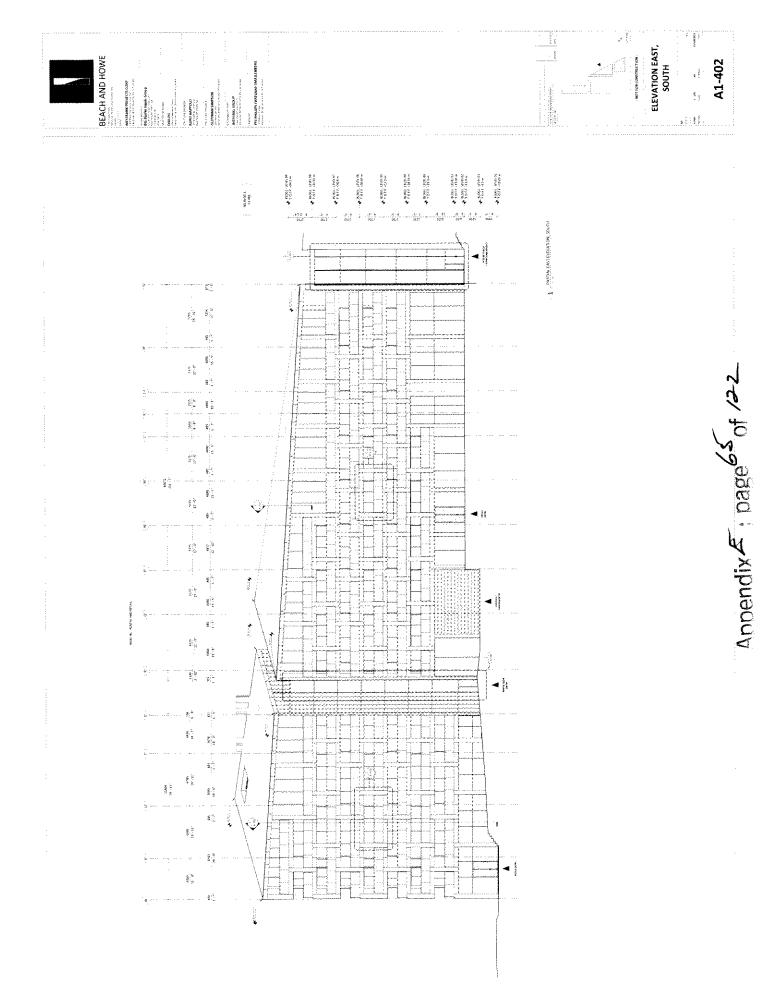


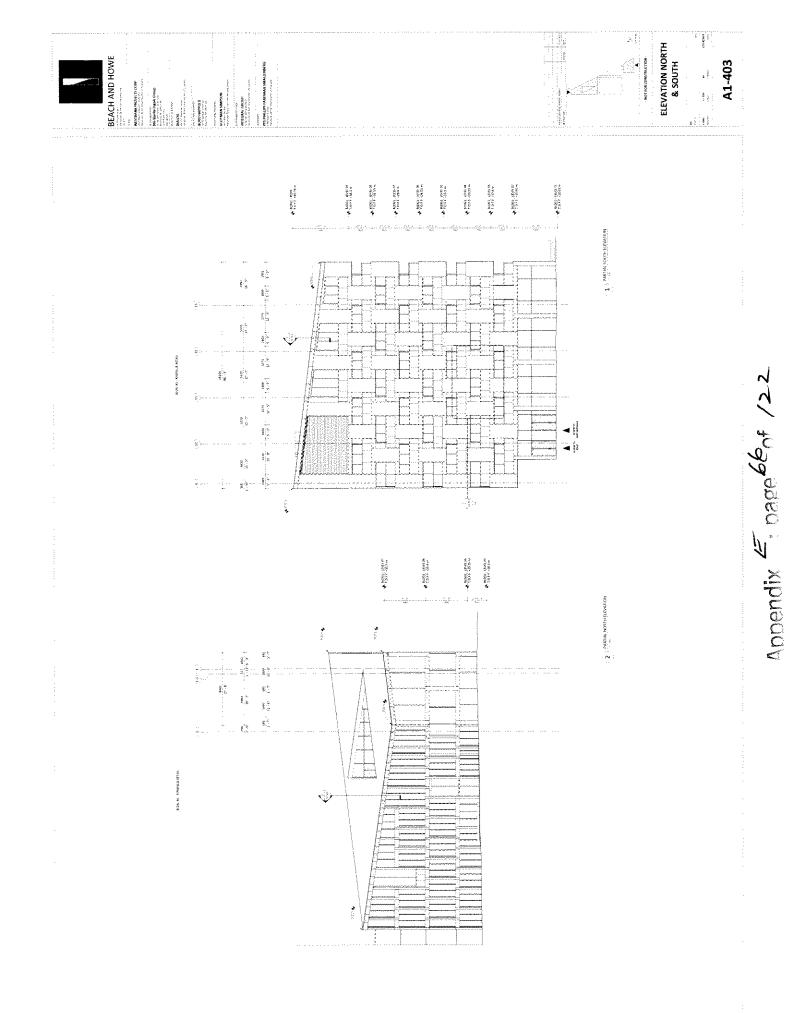
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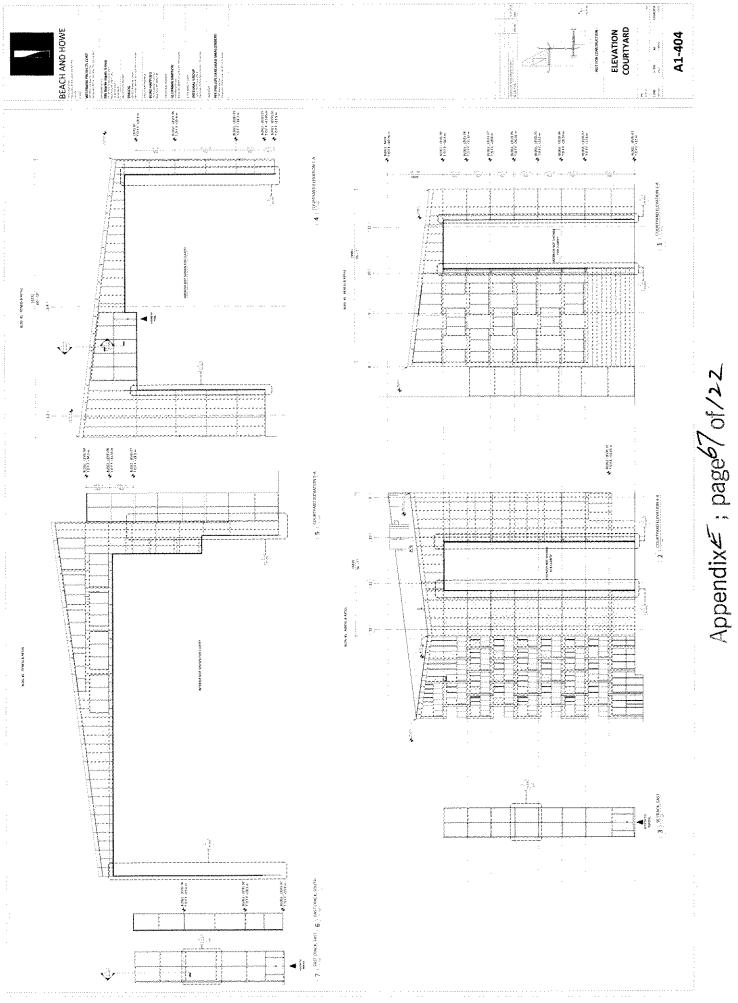








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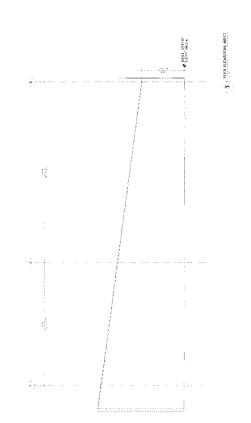


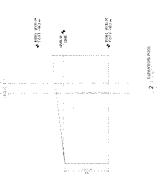


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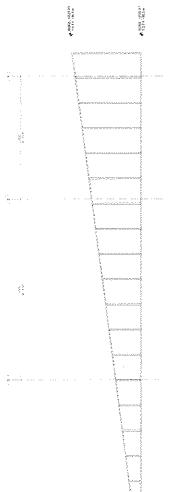
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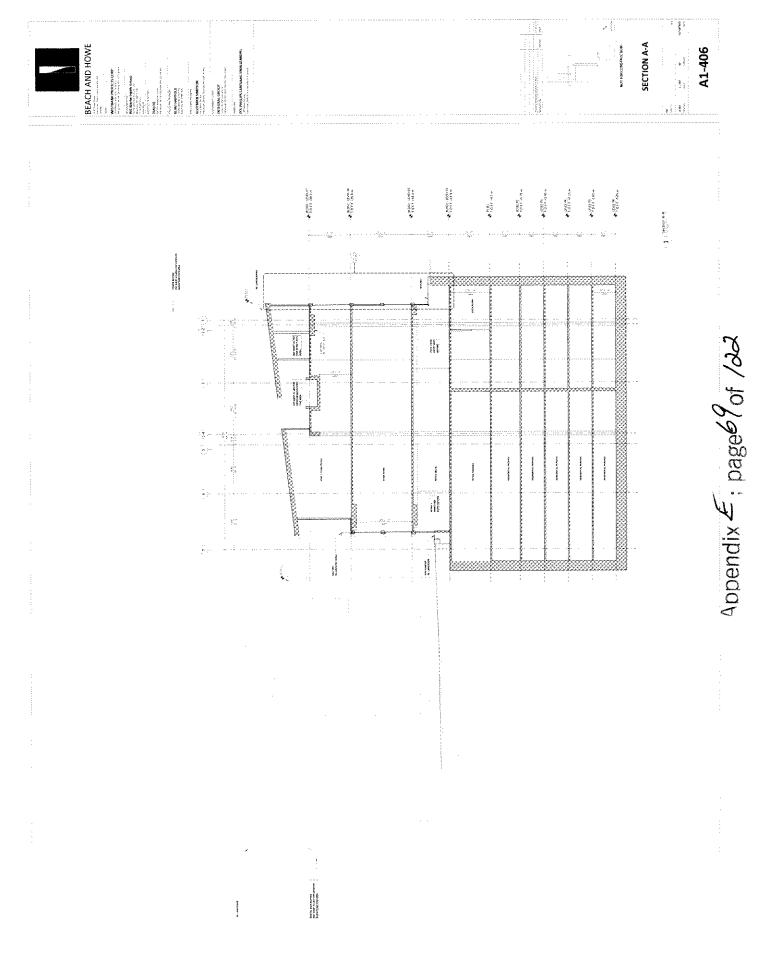


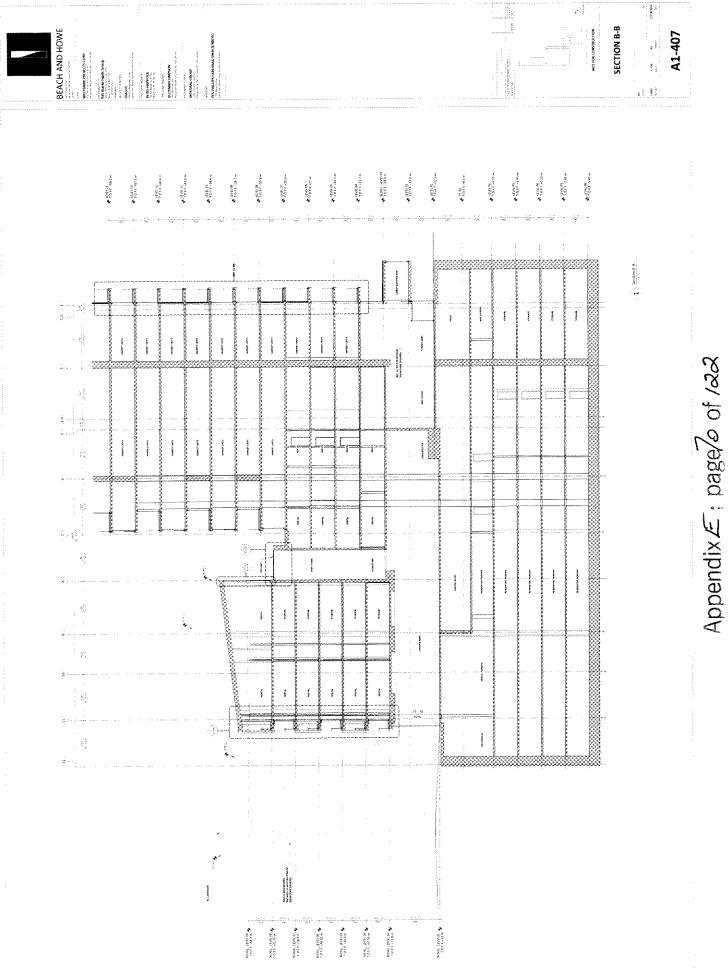


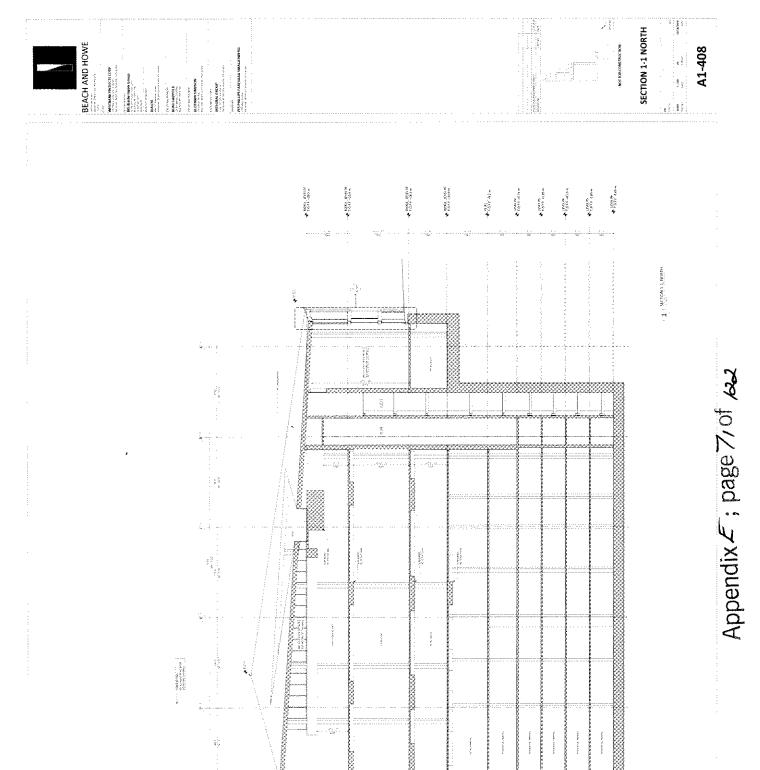












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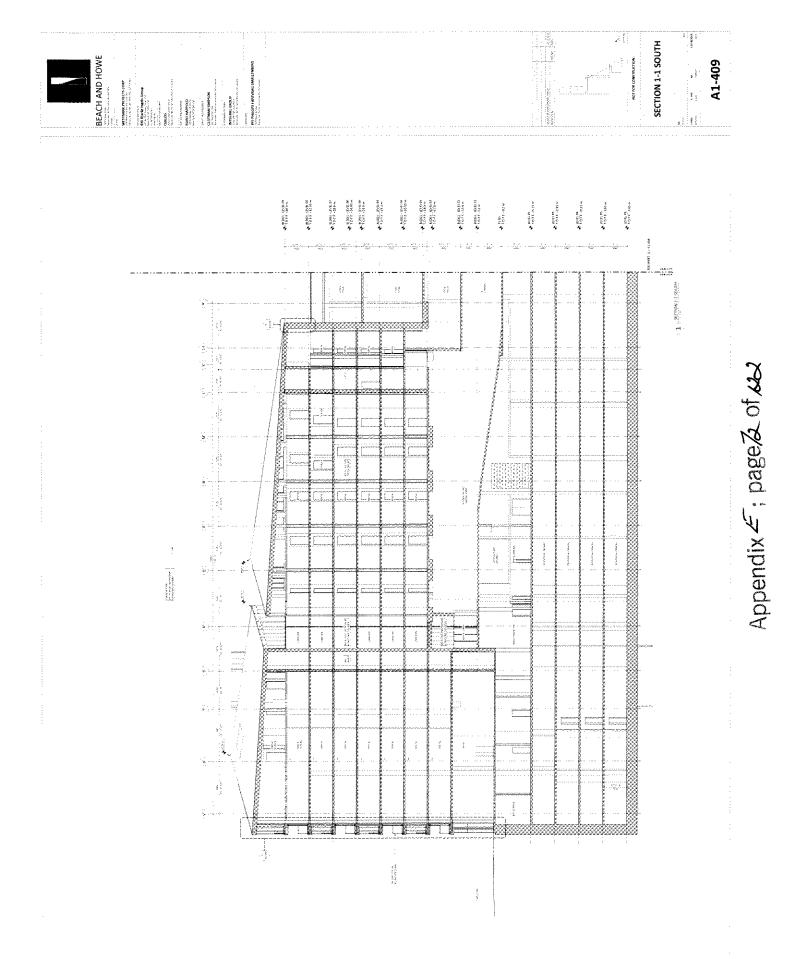
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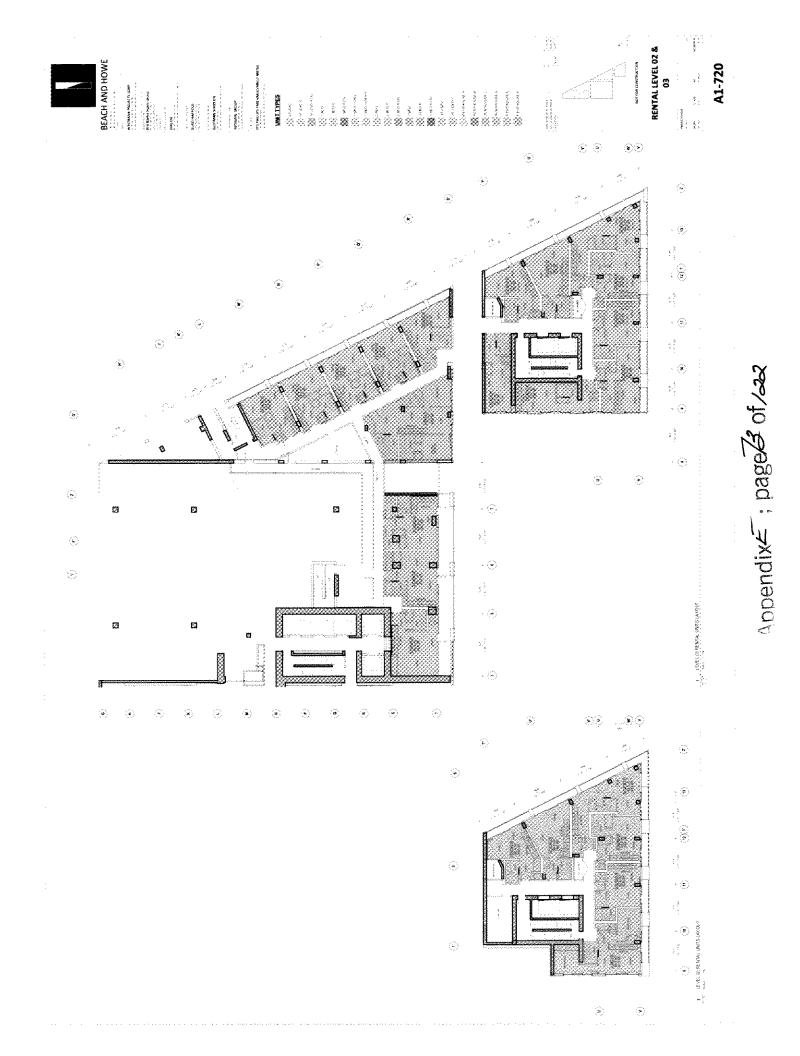
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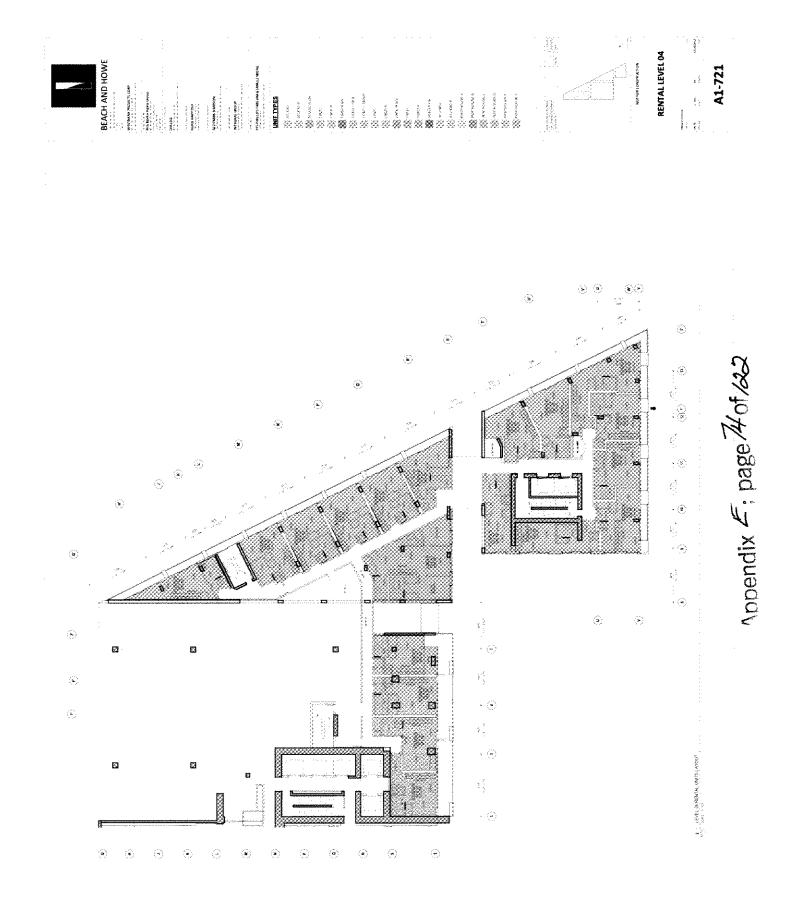
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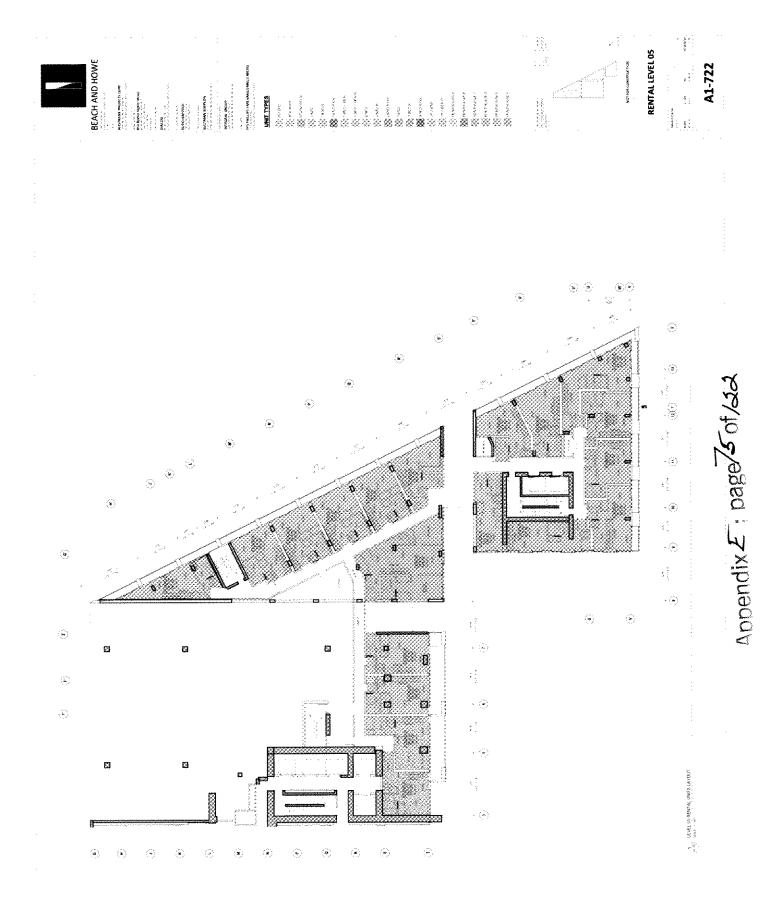
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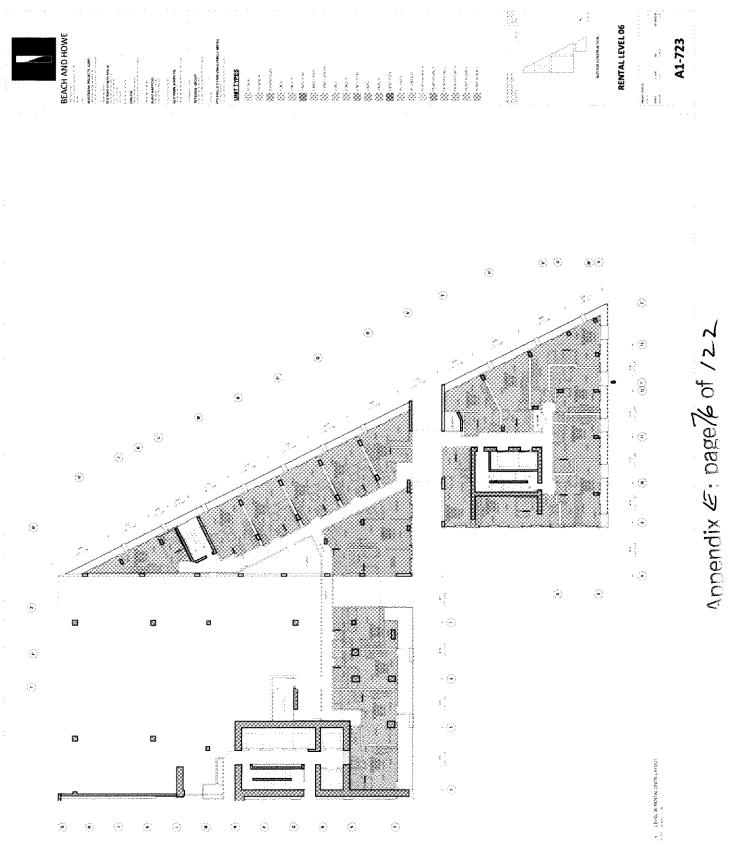


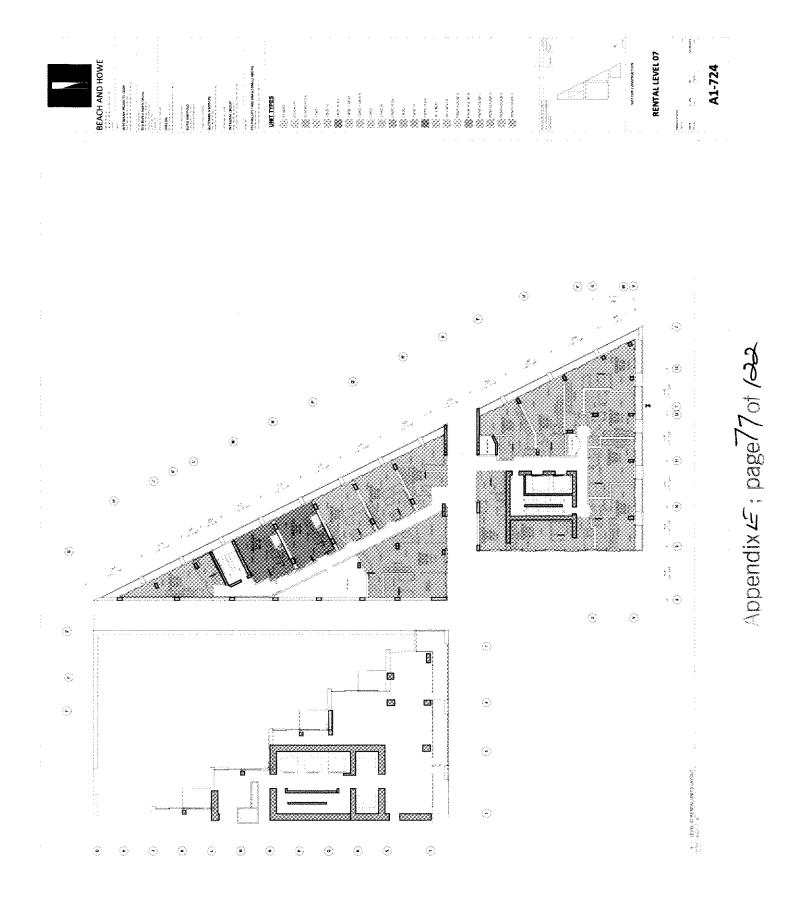
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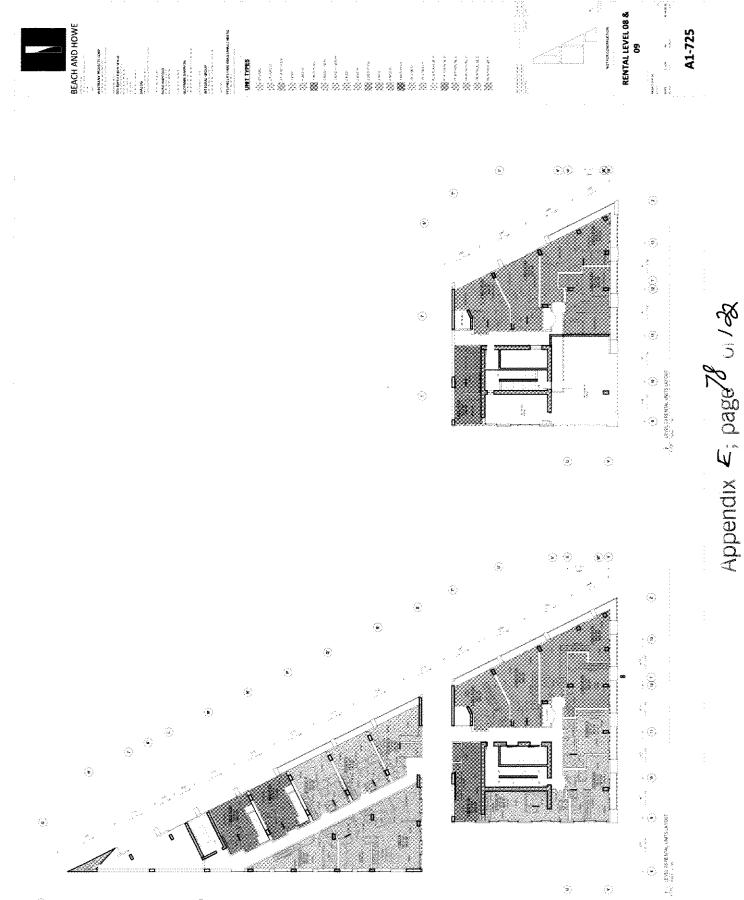






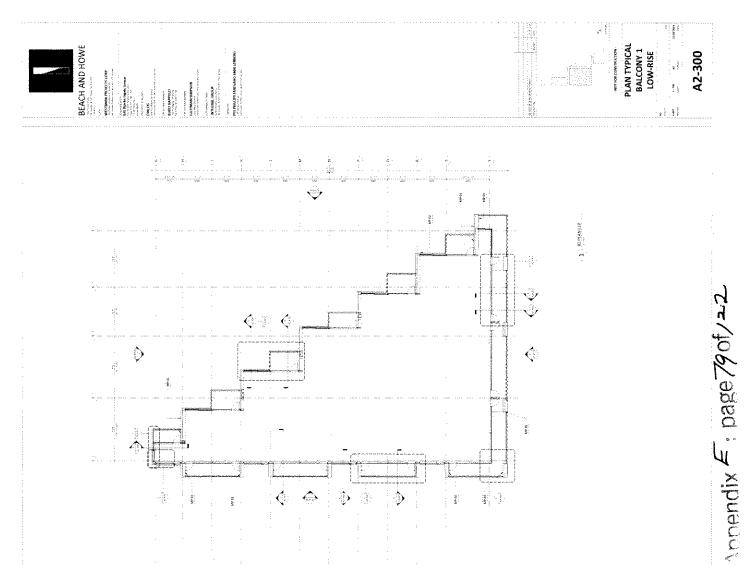


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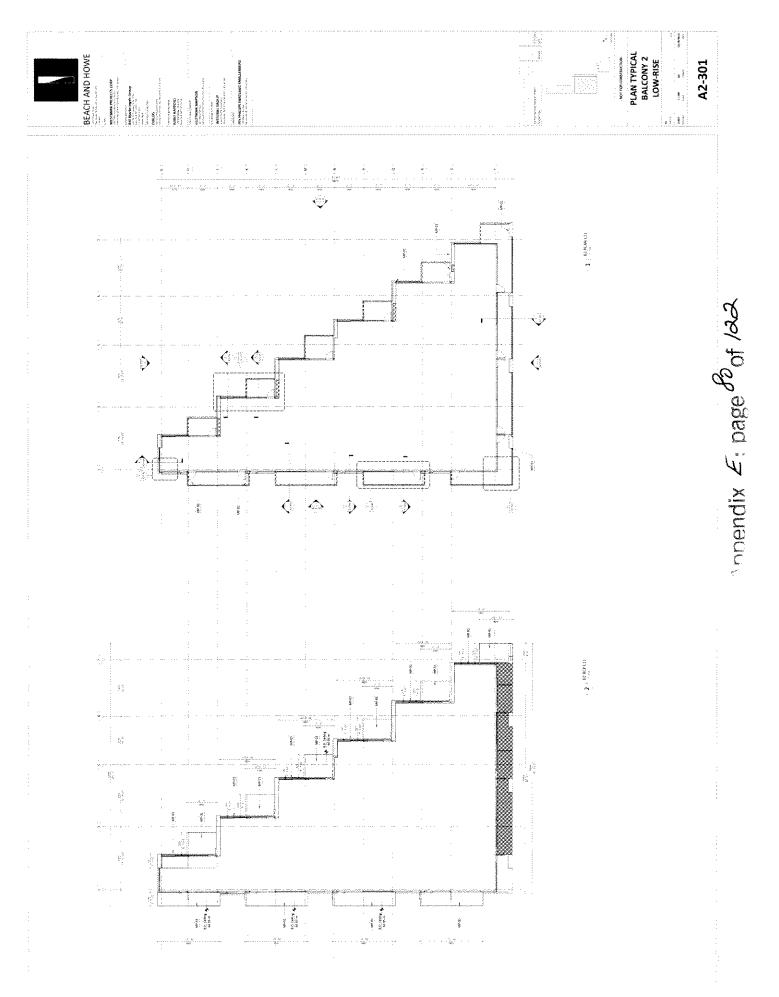
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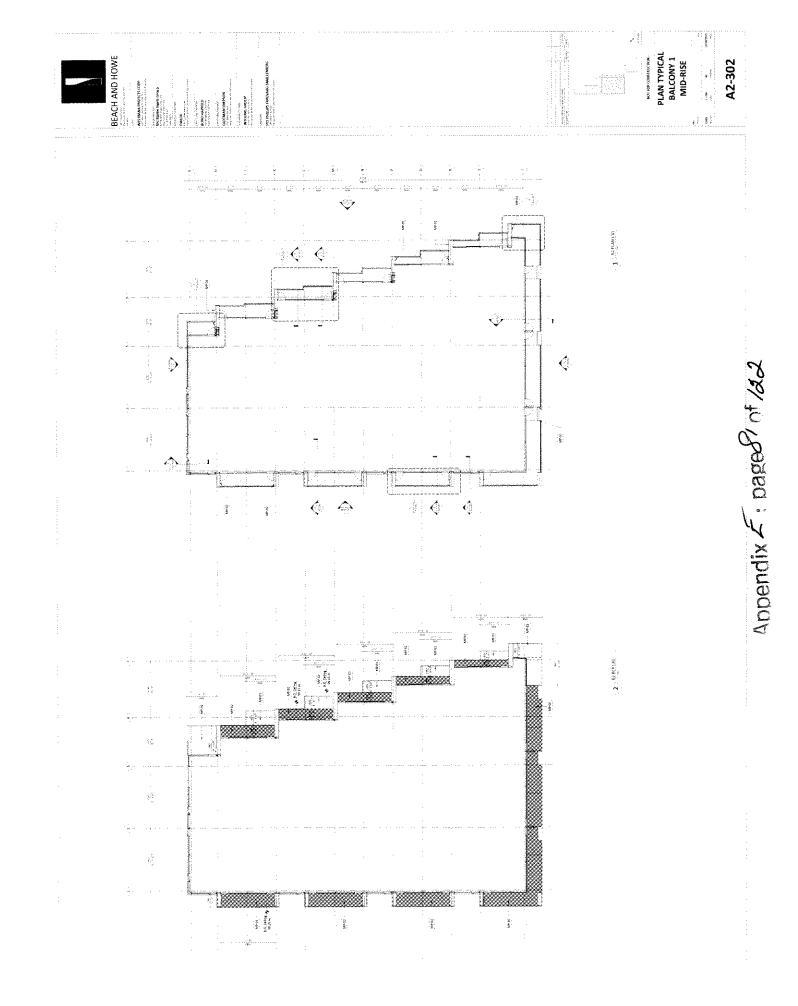
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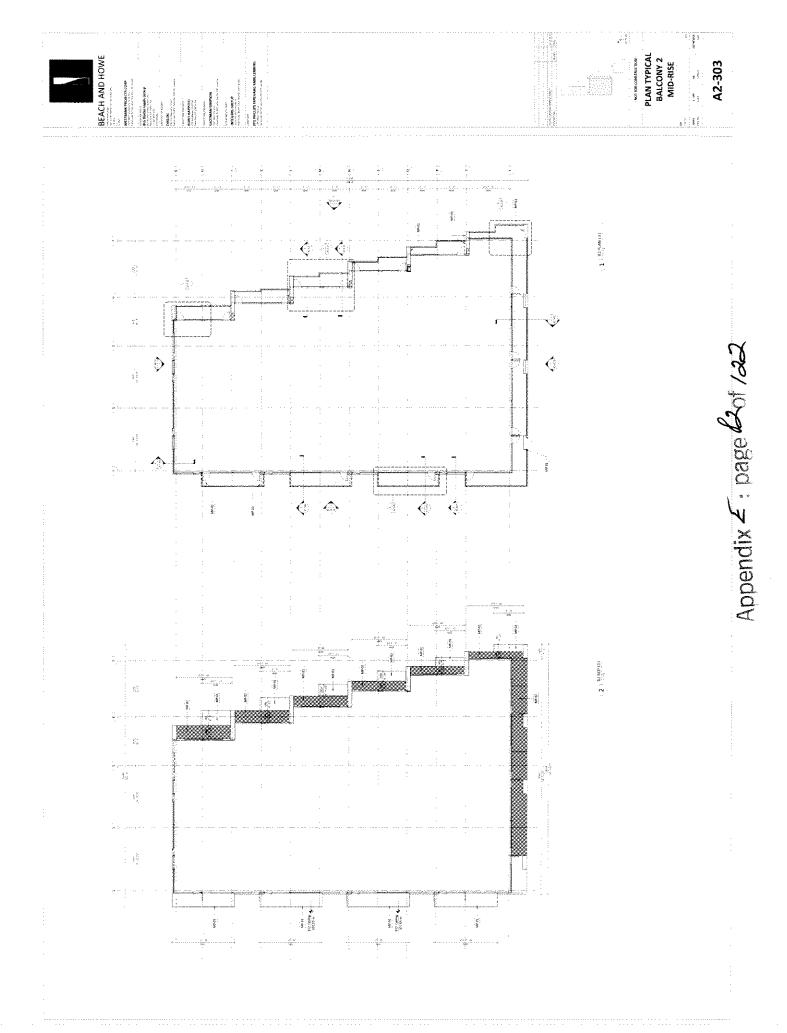
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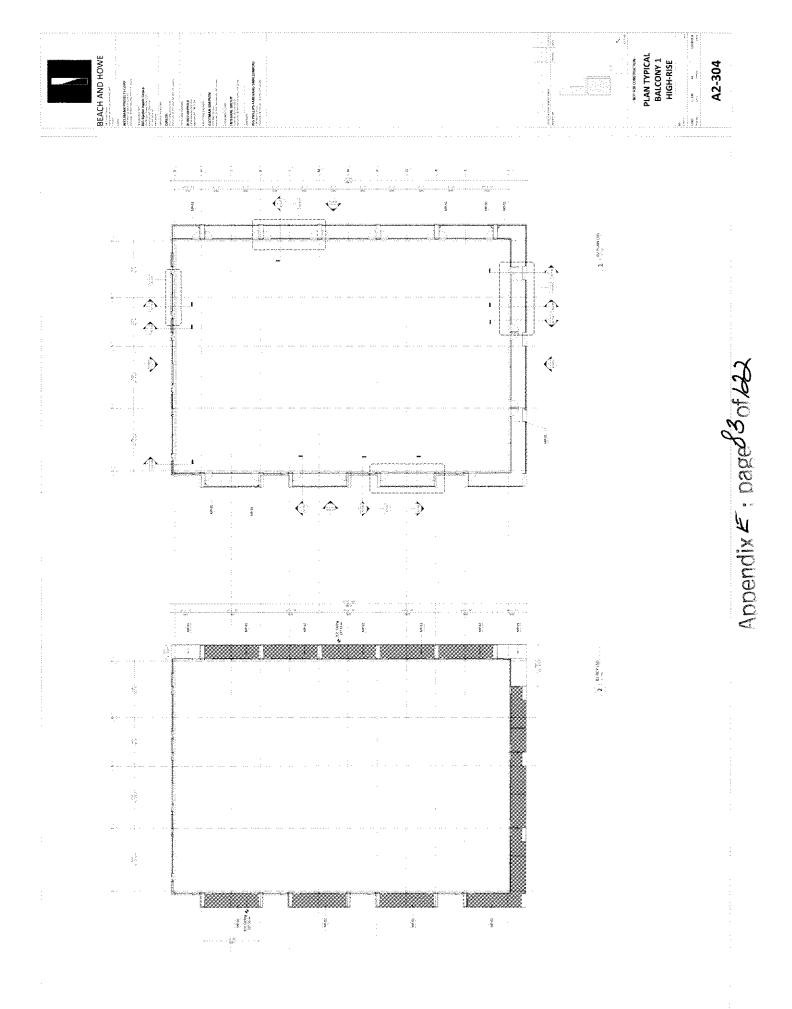
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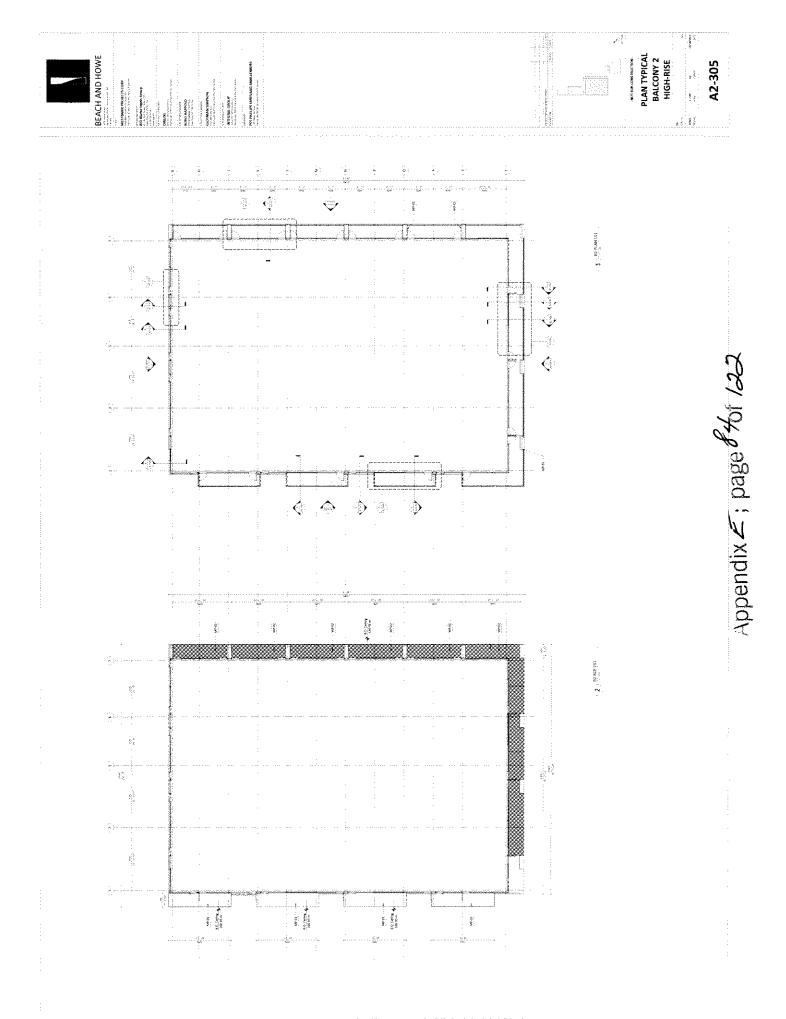
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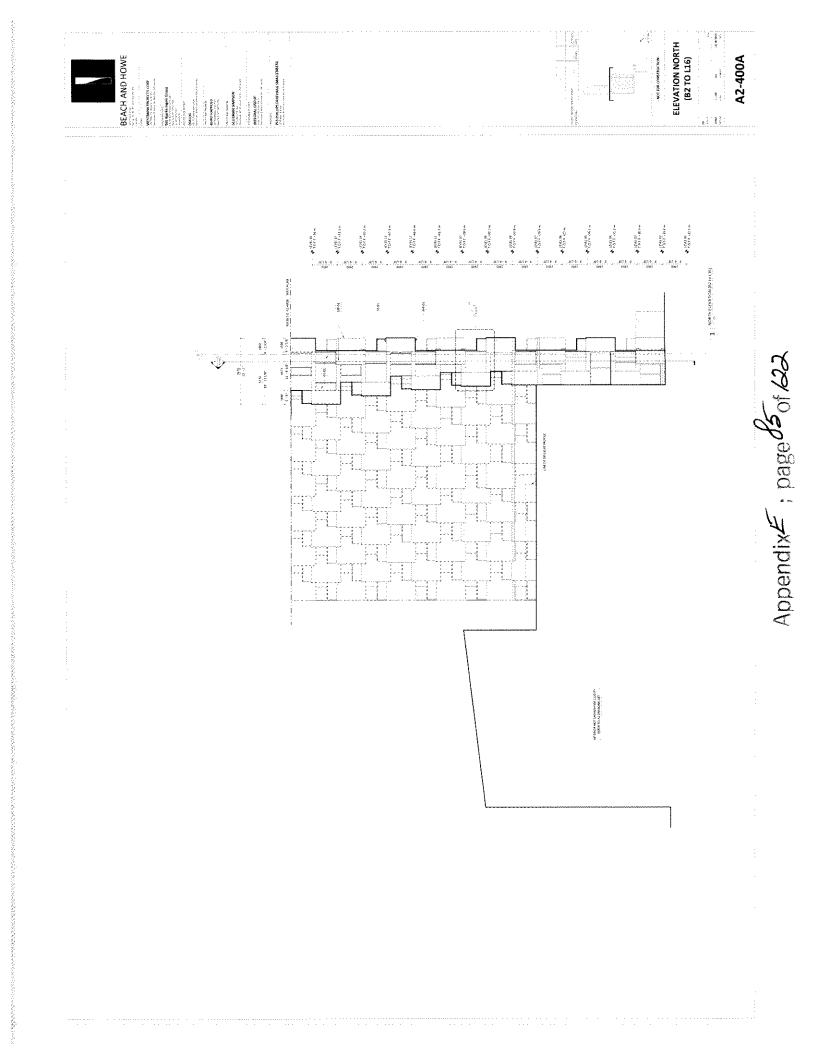


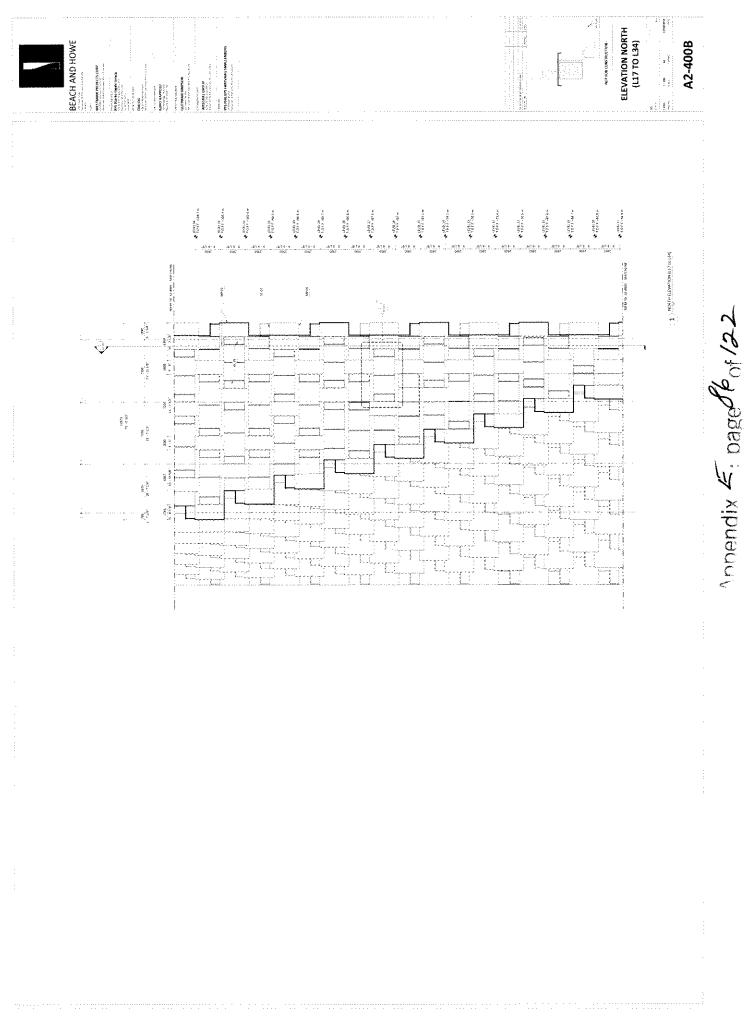


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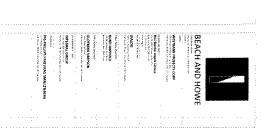


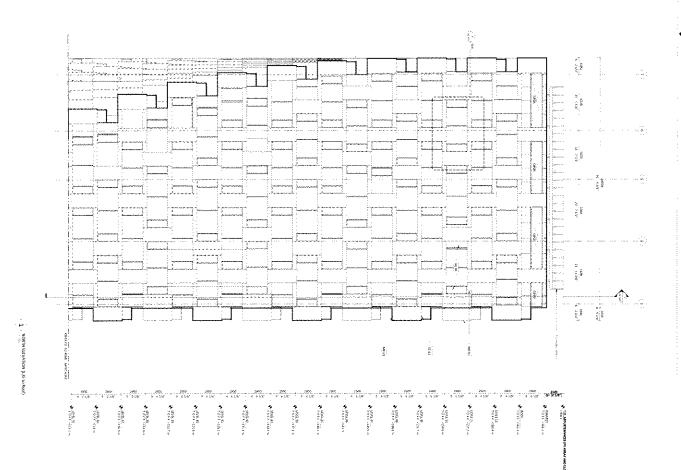


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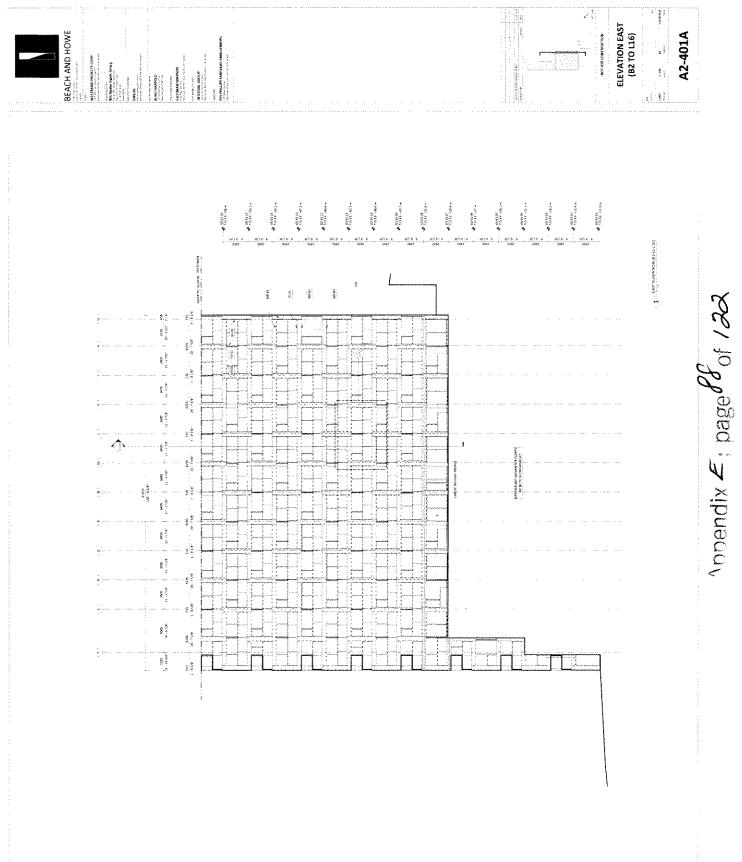
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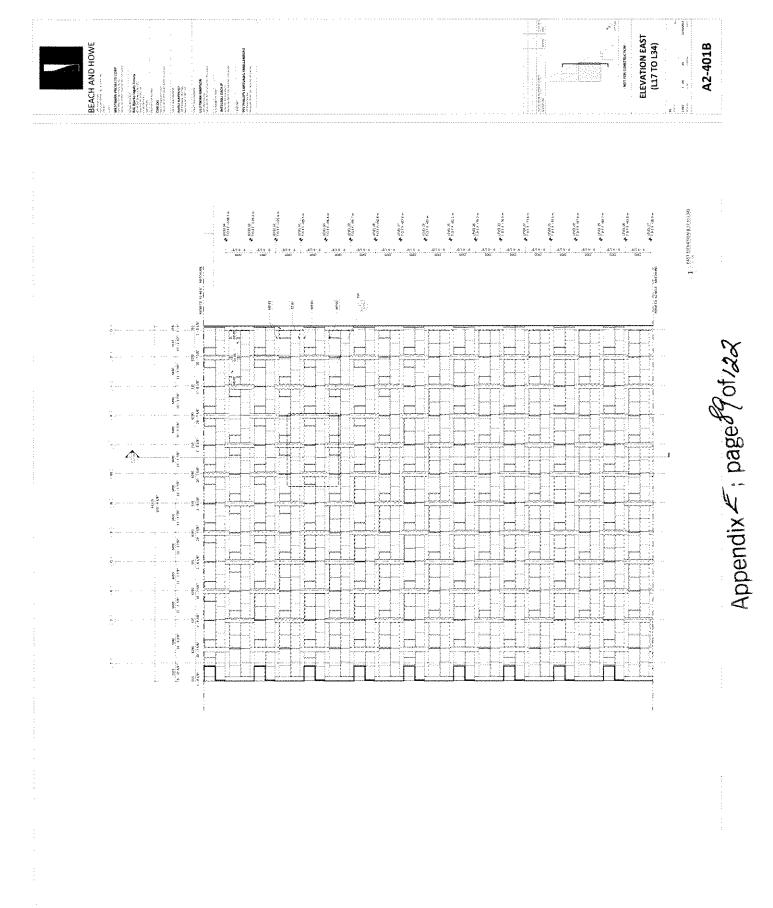
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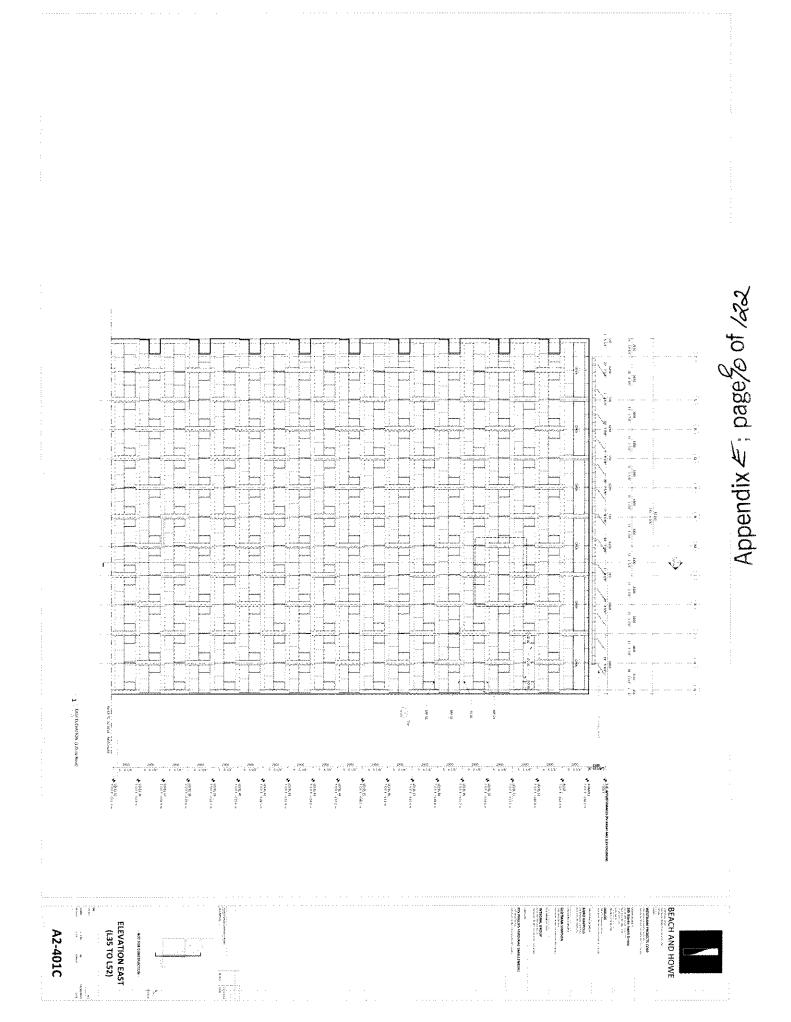


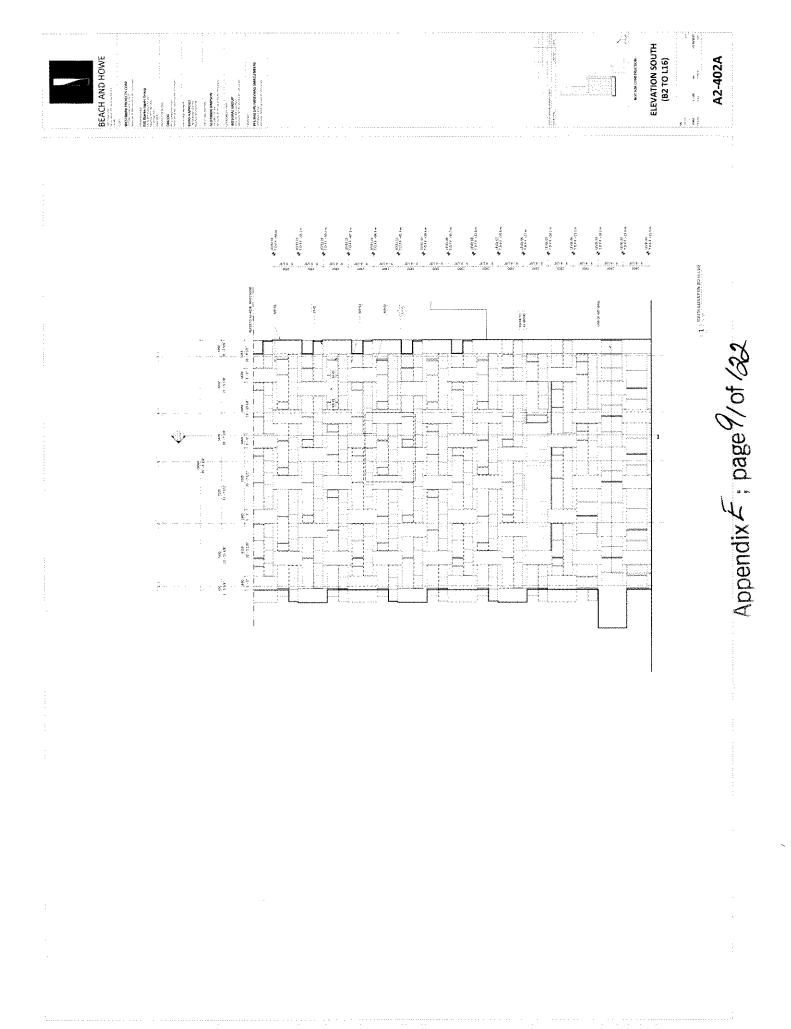
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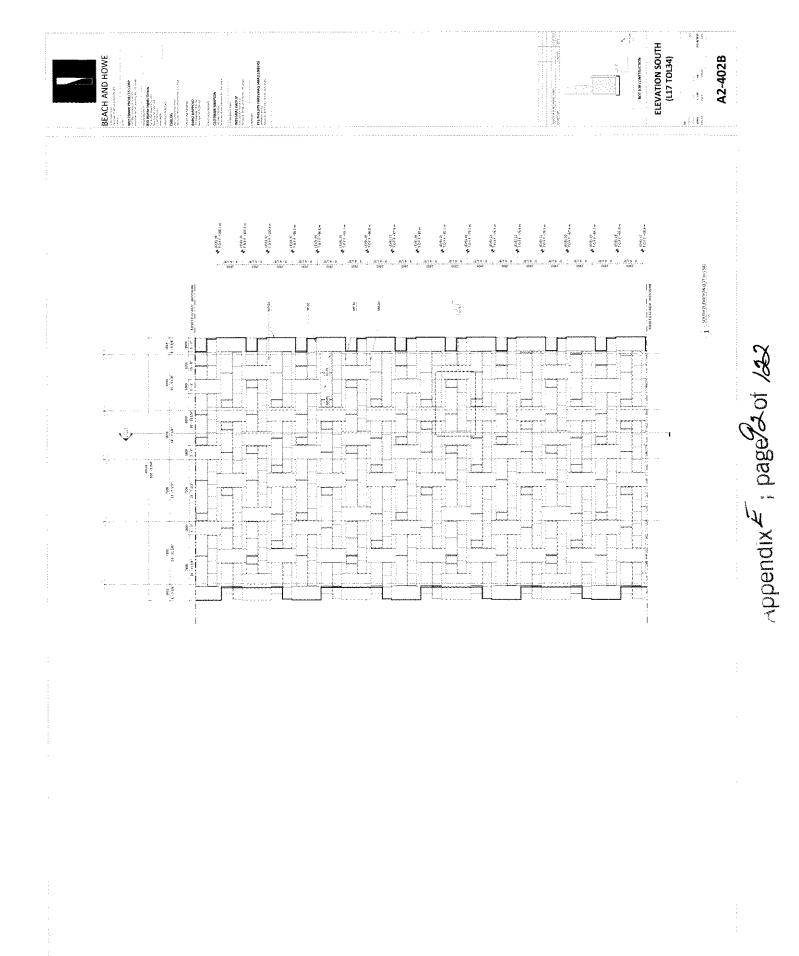


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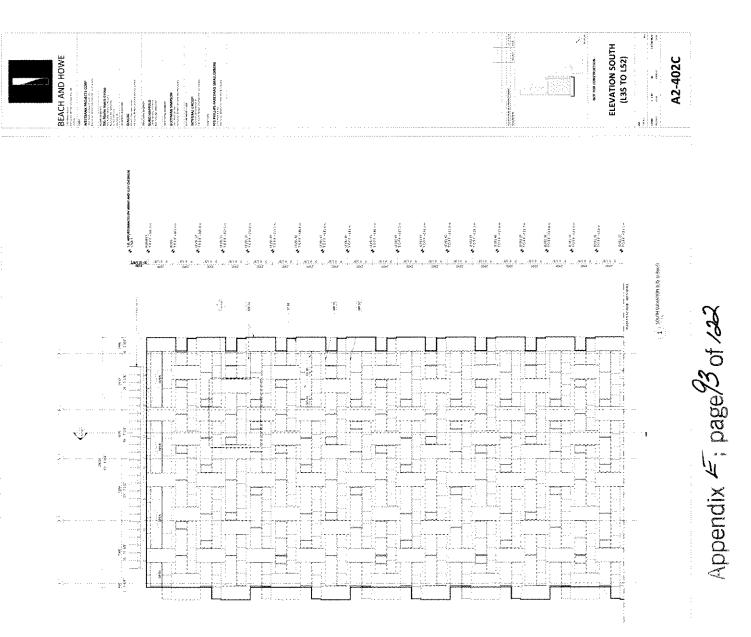


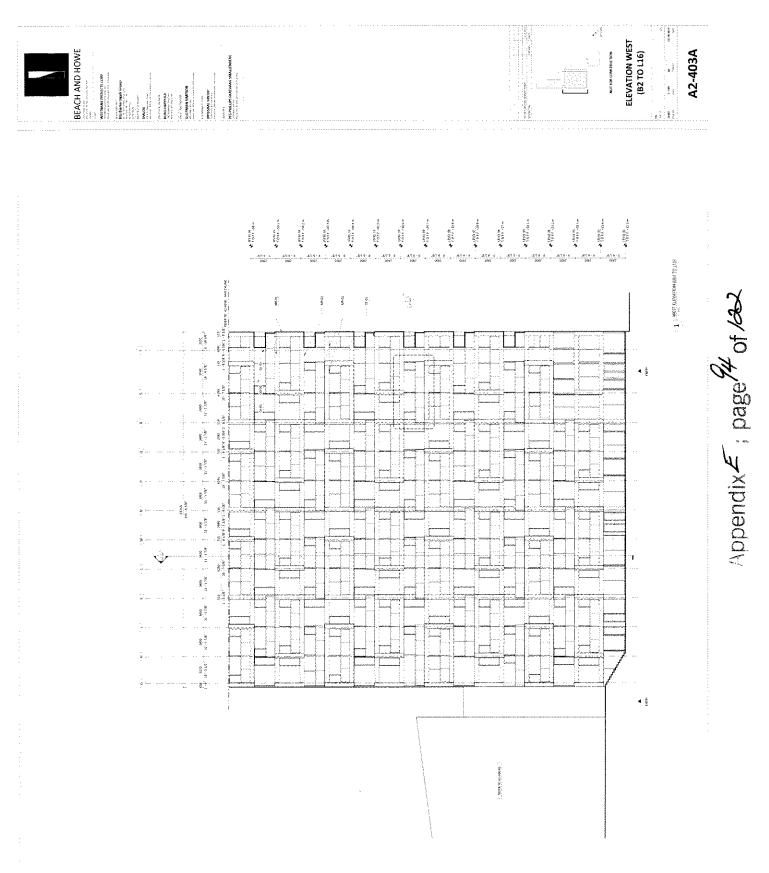


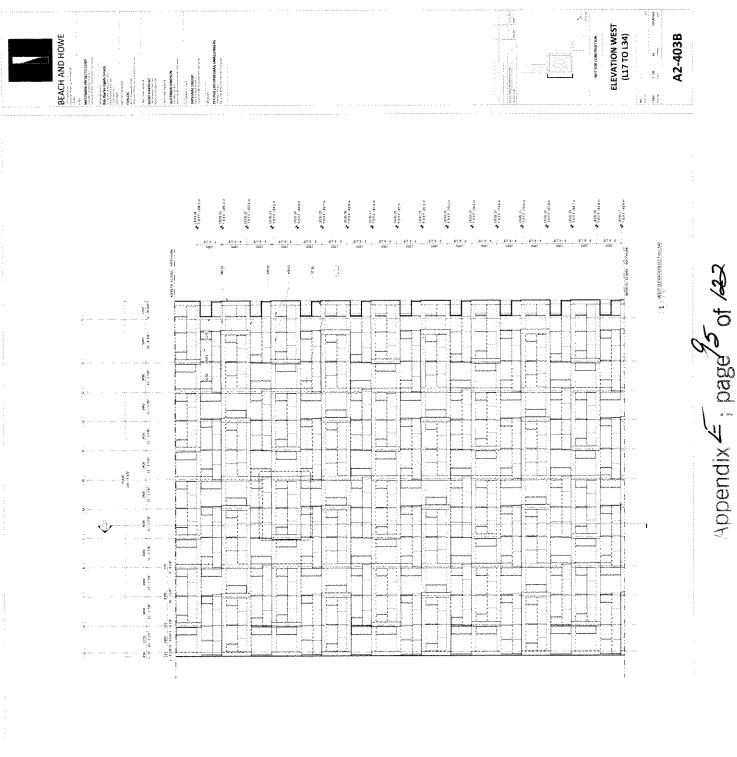
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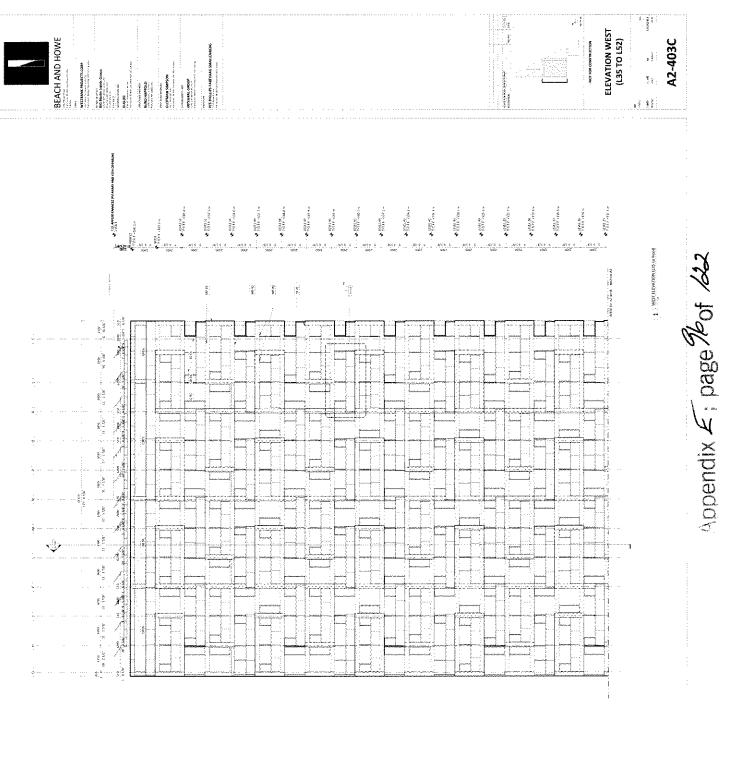


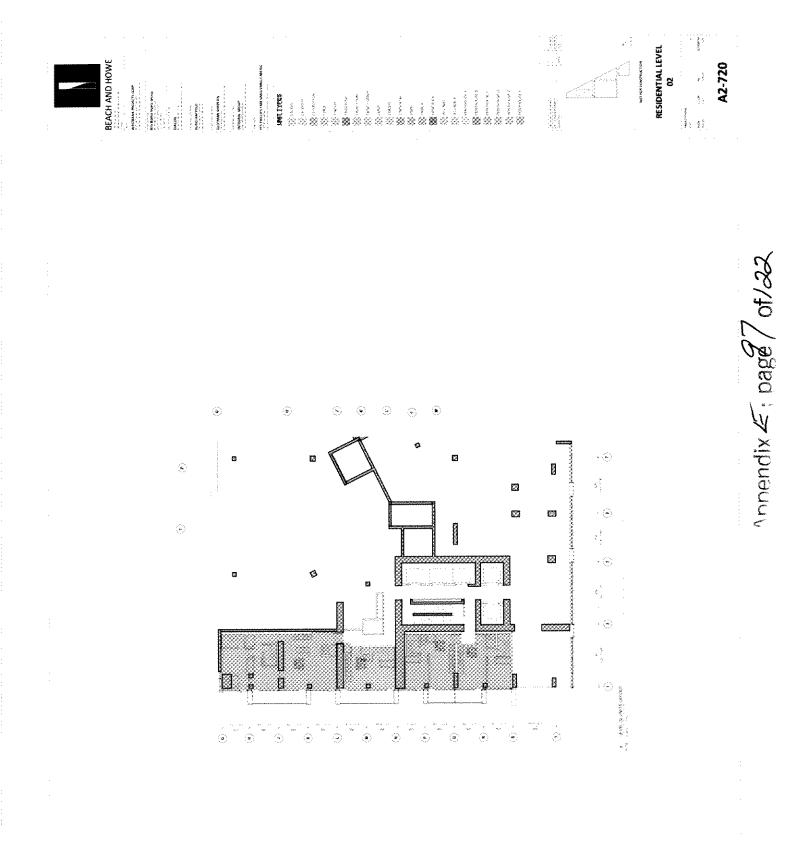
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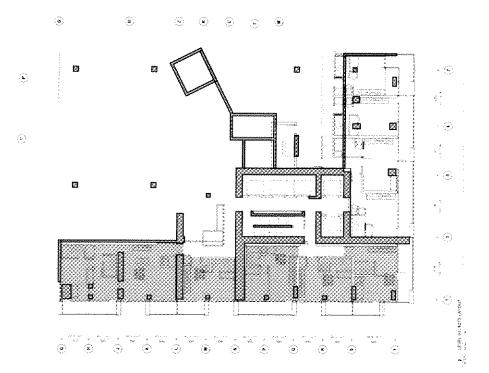


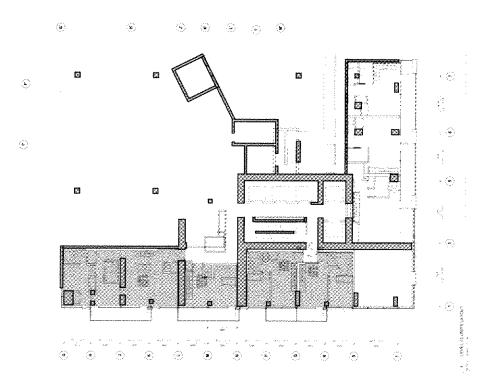


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RESIDENTIAL LEVEL 03 & LEVEL 04

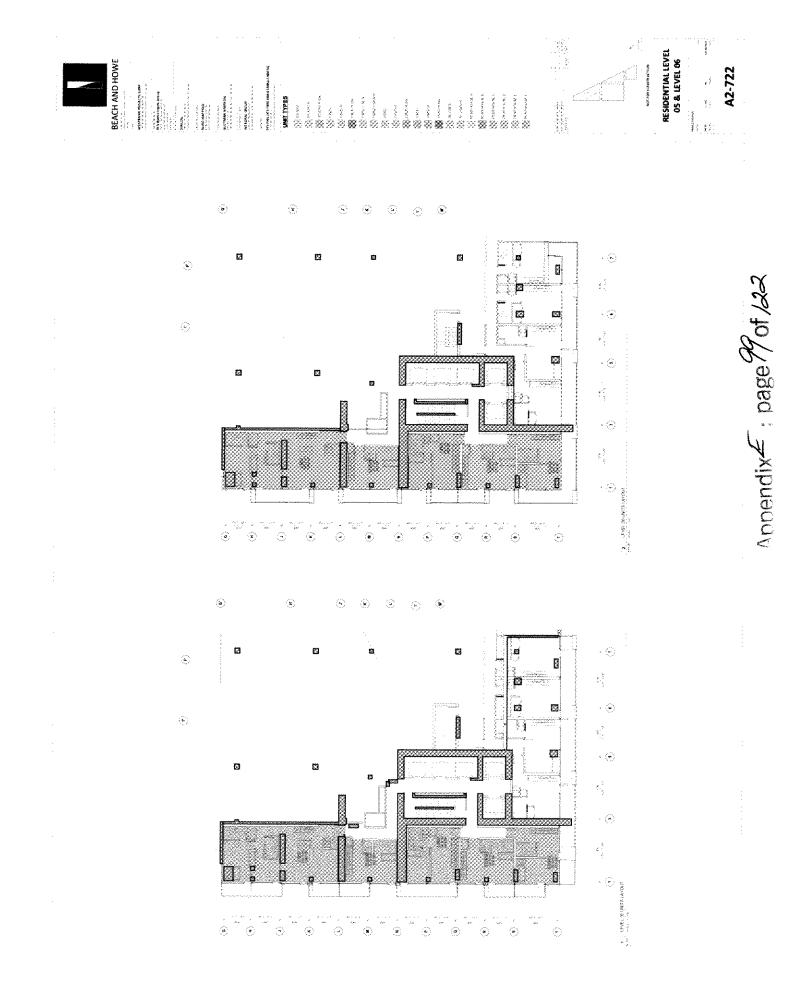
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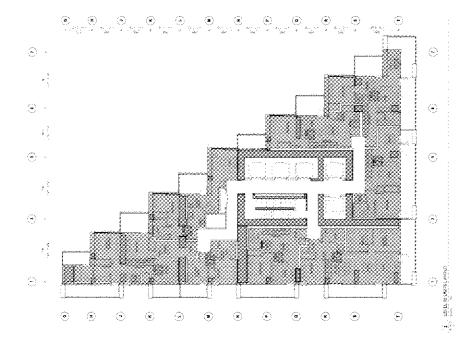
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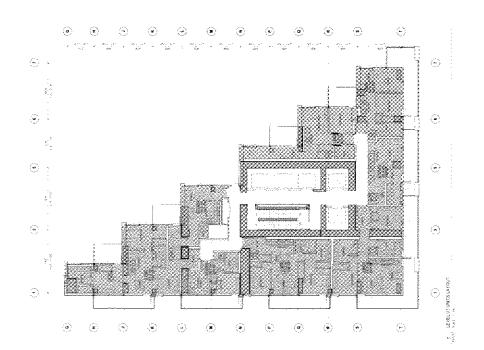
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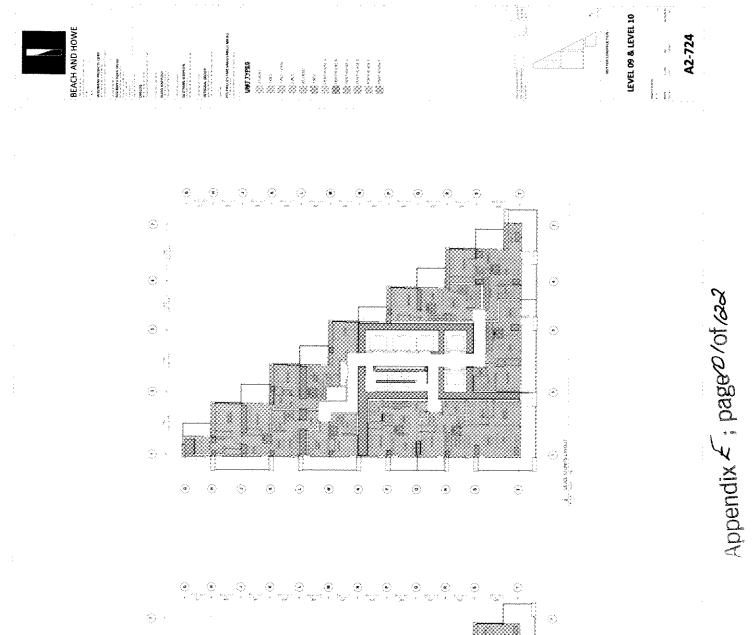


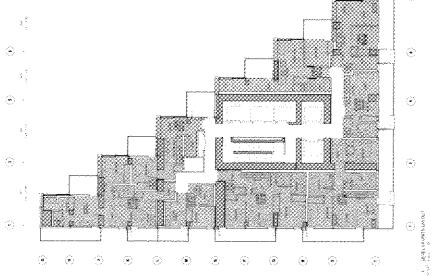




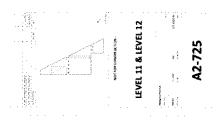


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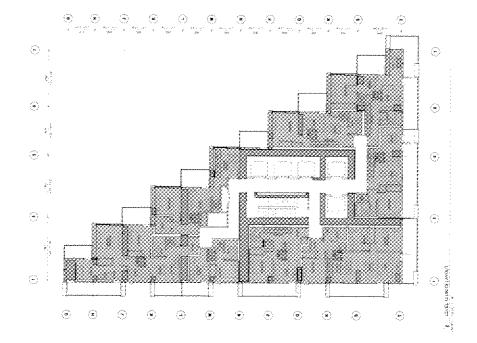


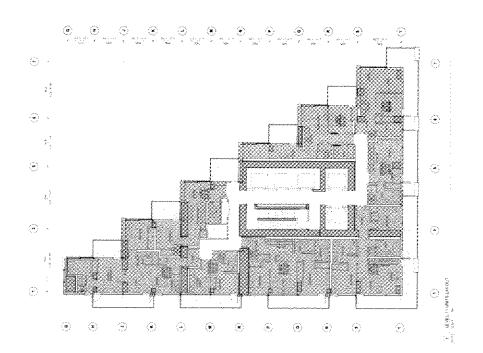






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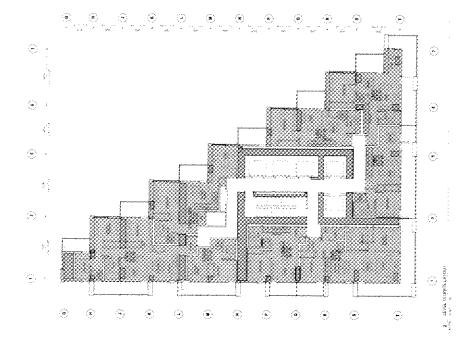


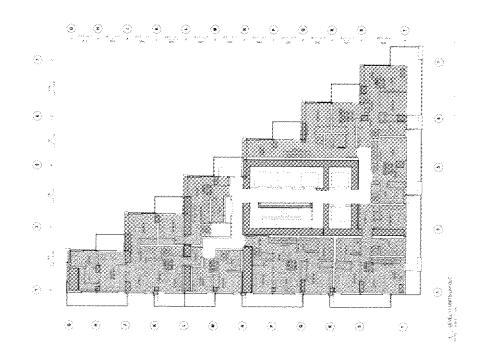




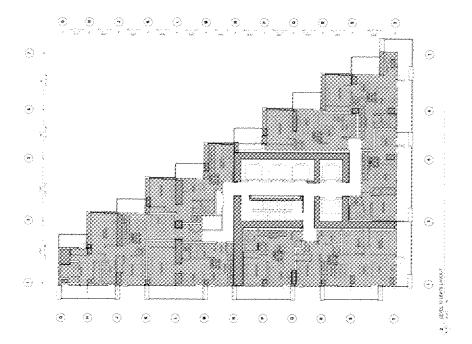


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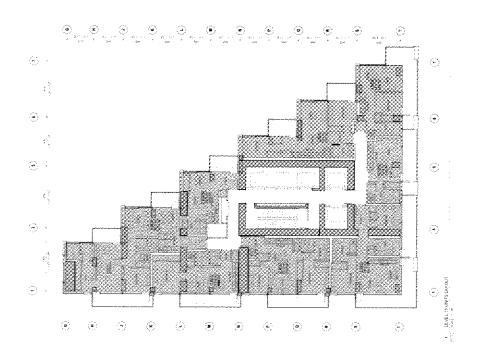
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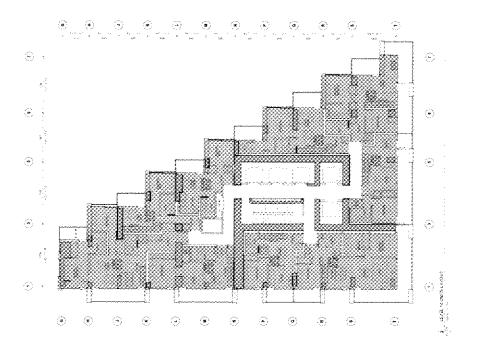
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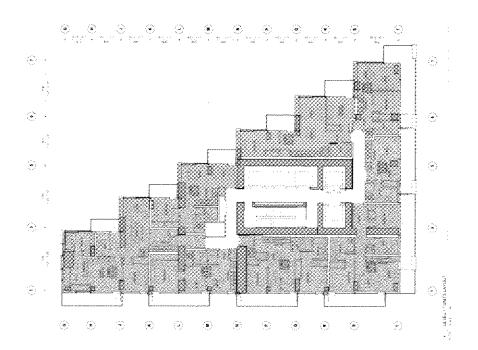
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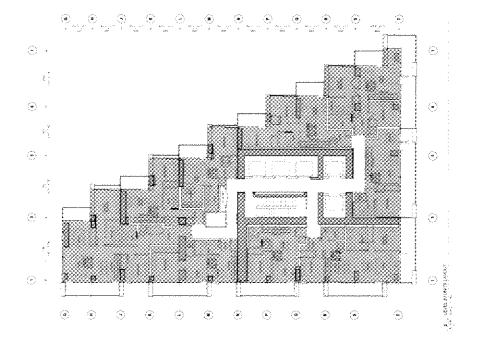
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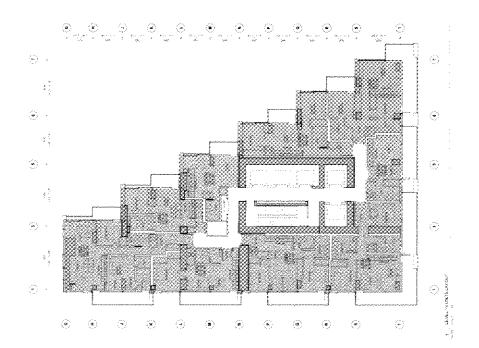
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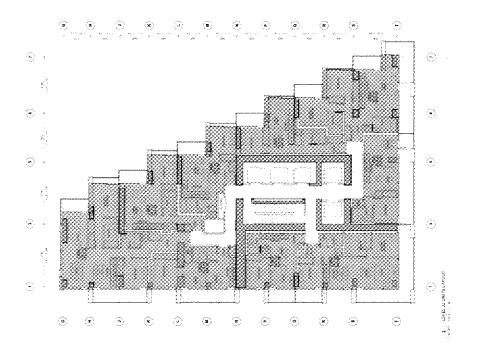
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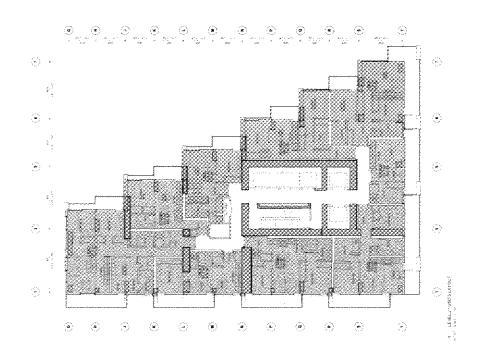
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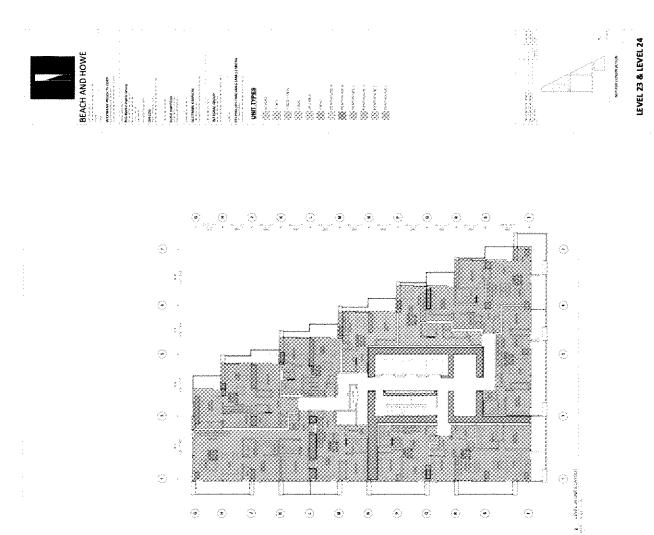
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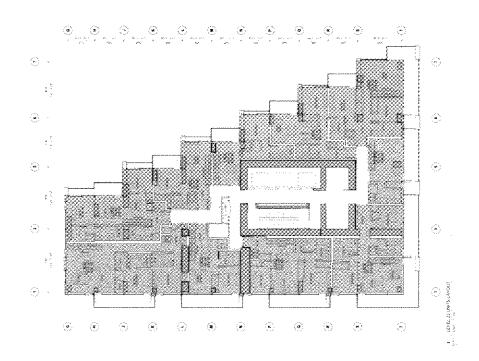
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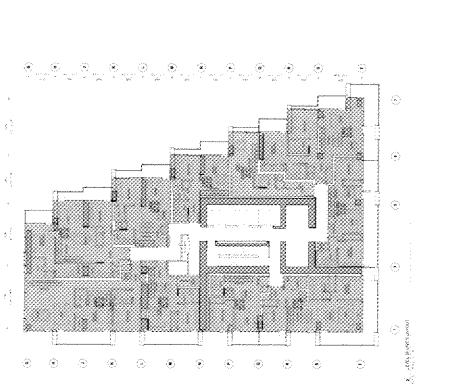
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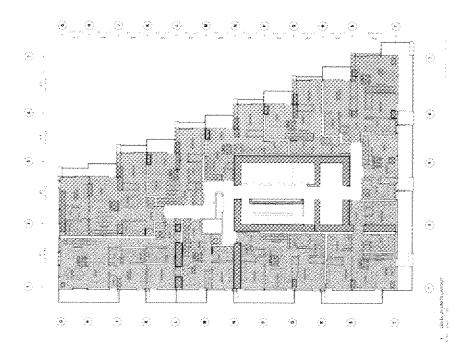
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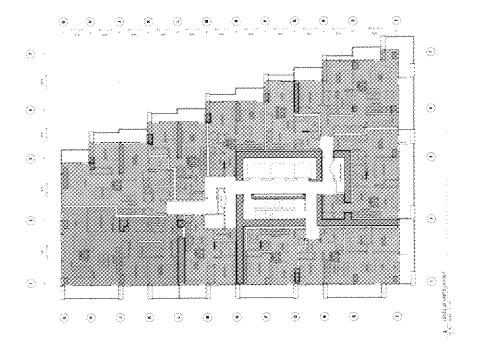
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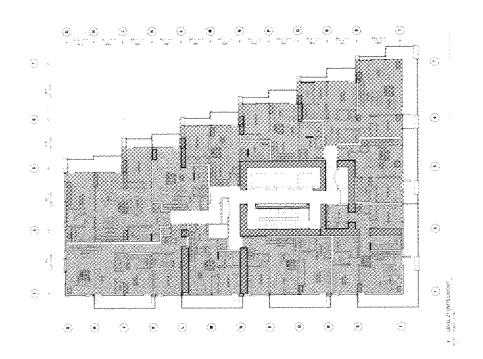
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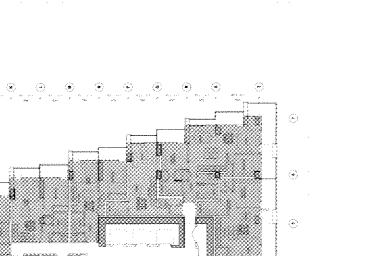
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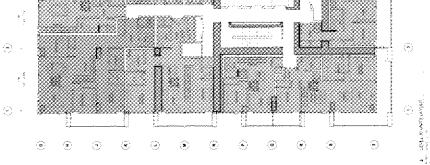
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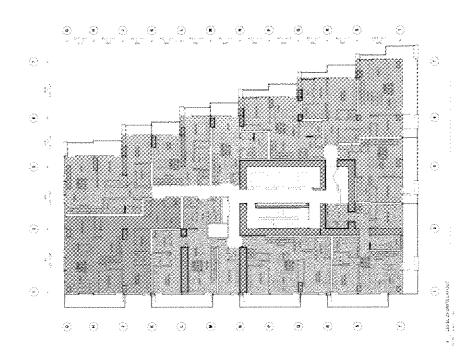
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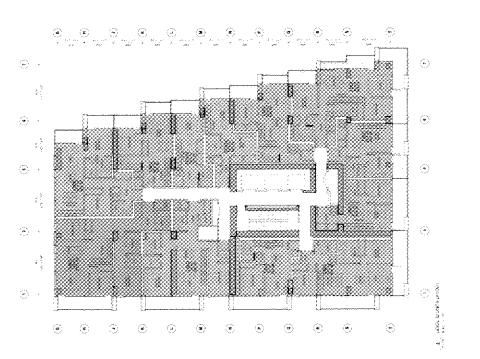
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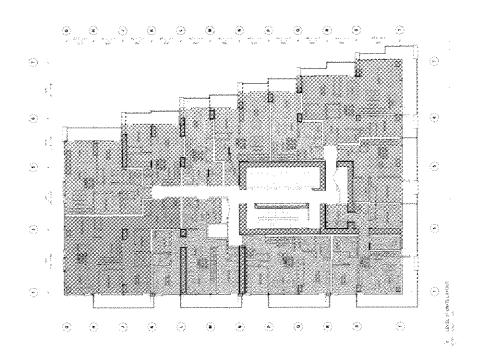


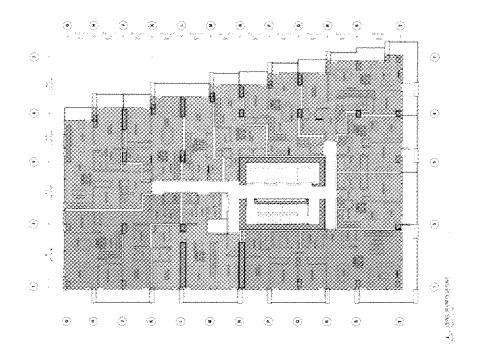
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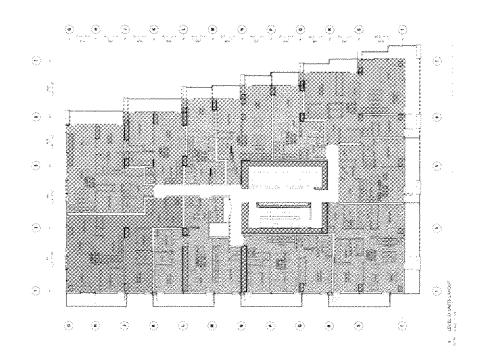
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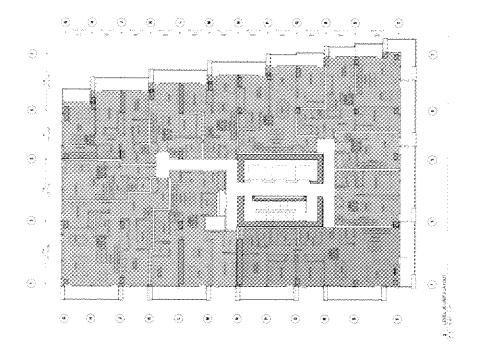
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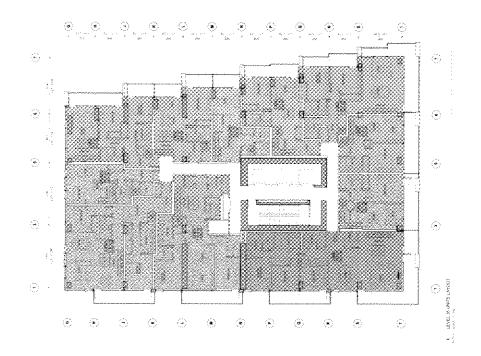
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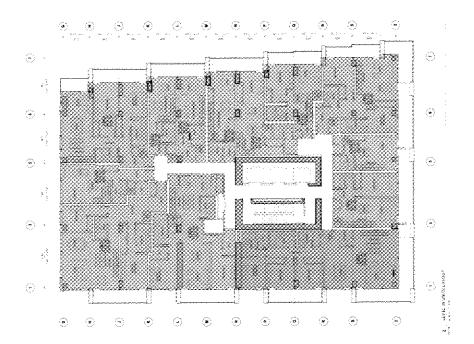
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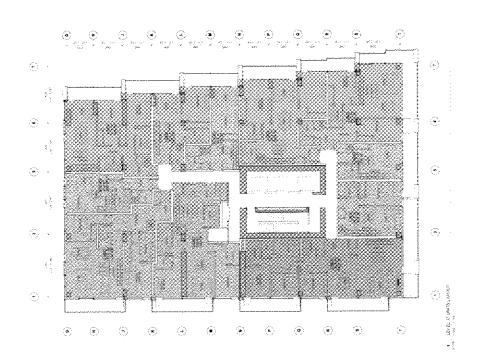
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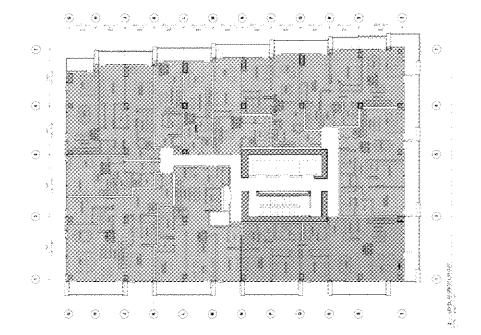
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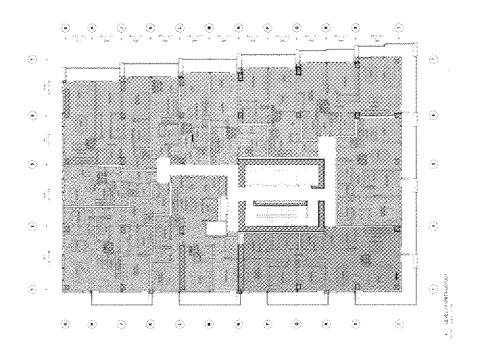
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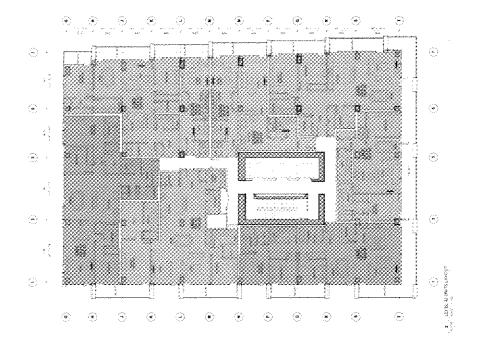
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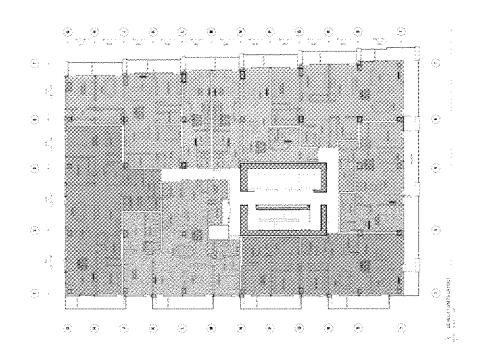


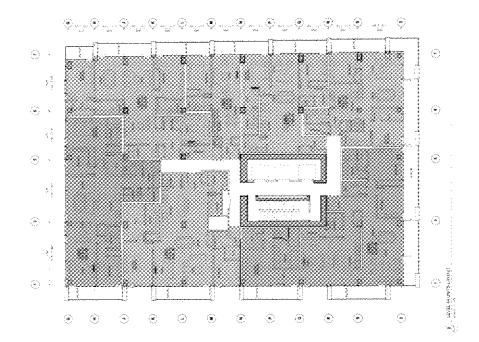


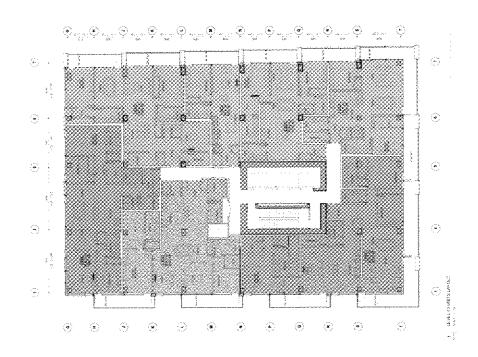


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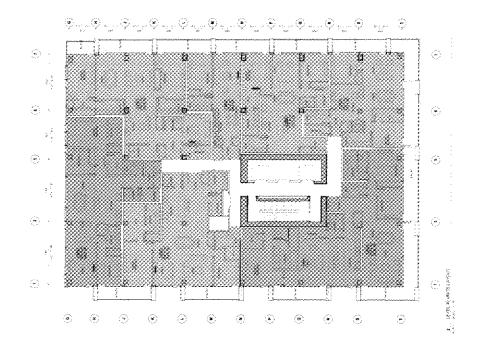


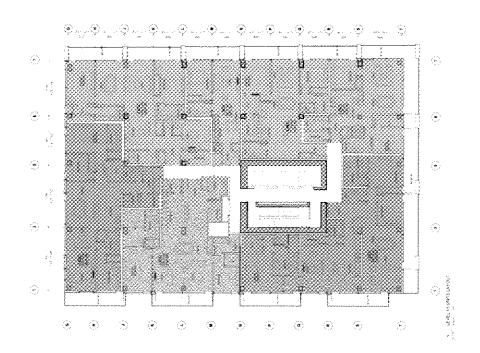
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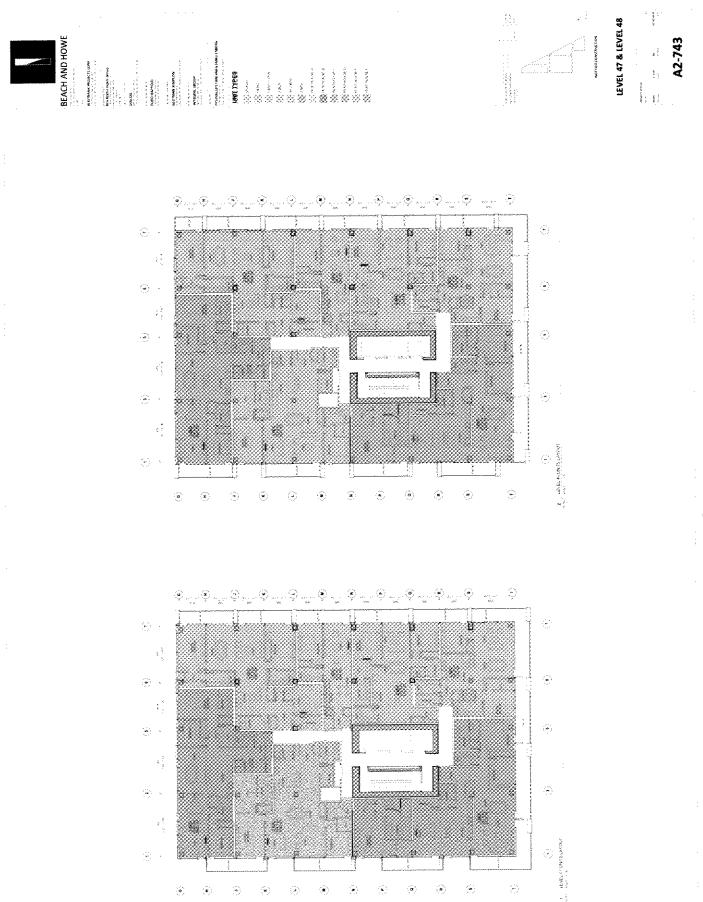
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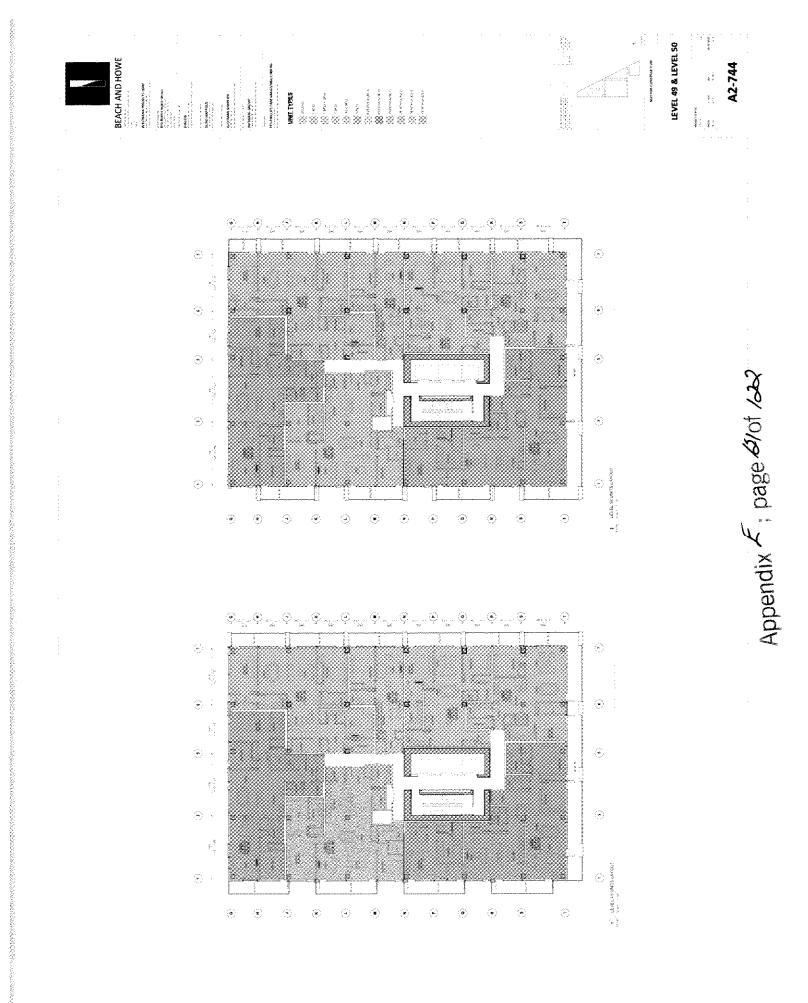
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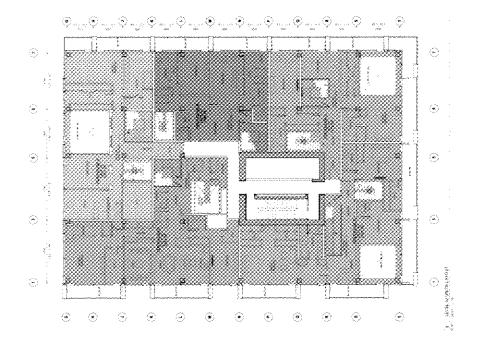
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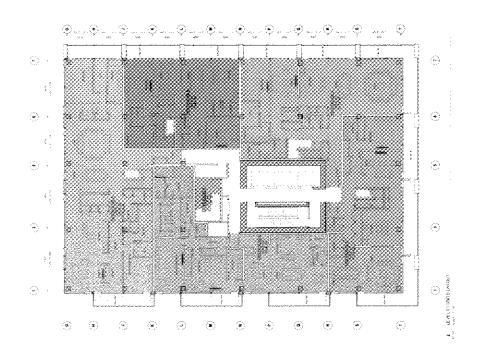
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## **REZONING RATIONALE**

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 COURT YARDS, 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 SWALLER 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 DRAWATIC 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 SYSTEMS; HEAVY TIMBER STRUCTURAL ELEMENTS; GLASS 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

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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.

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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 DOWINATED 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".