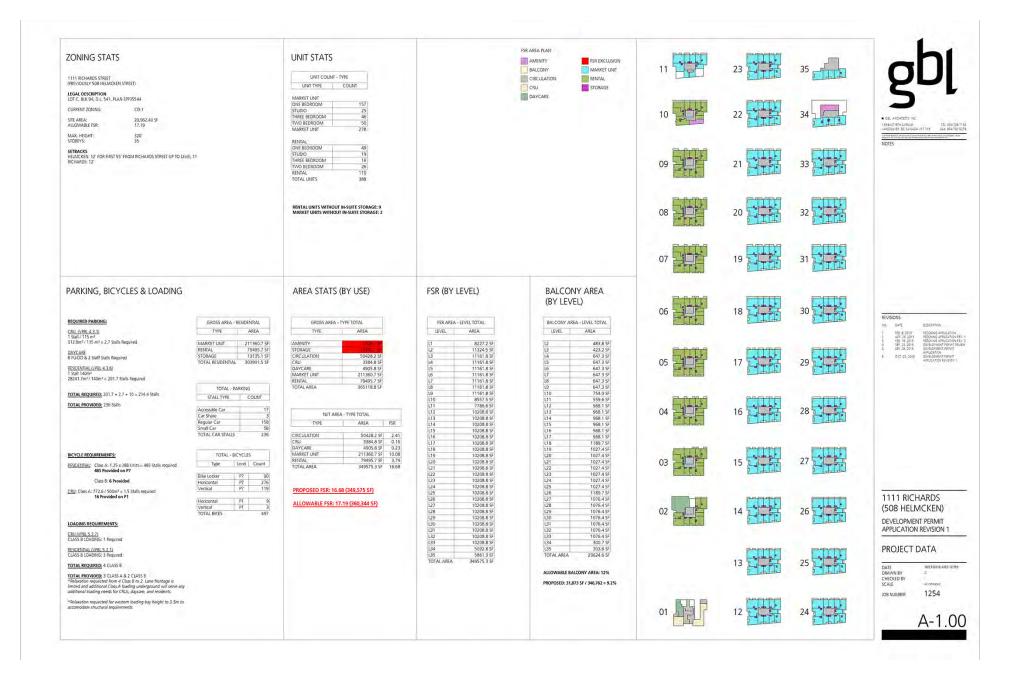


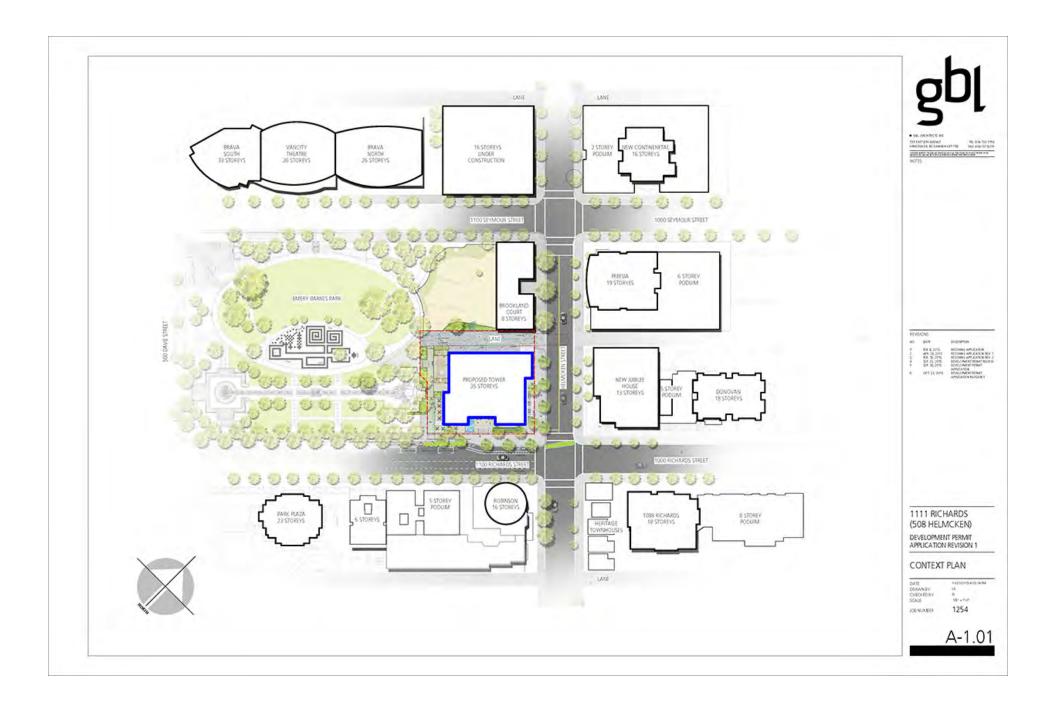


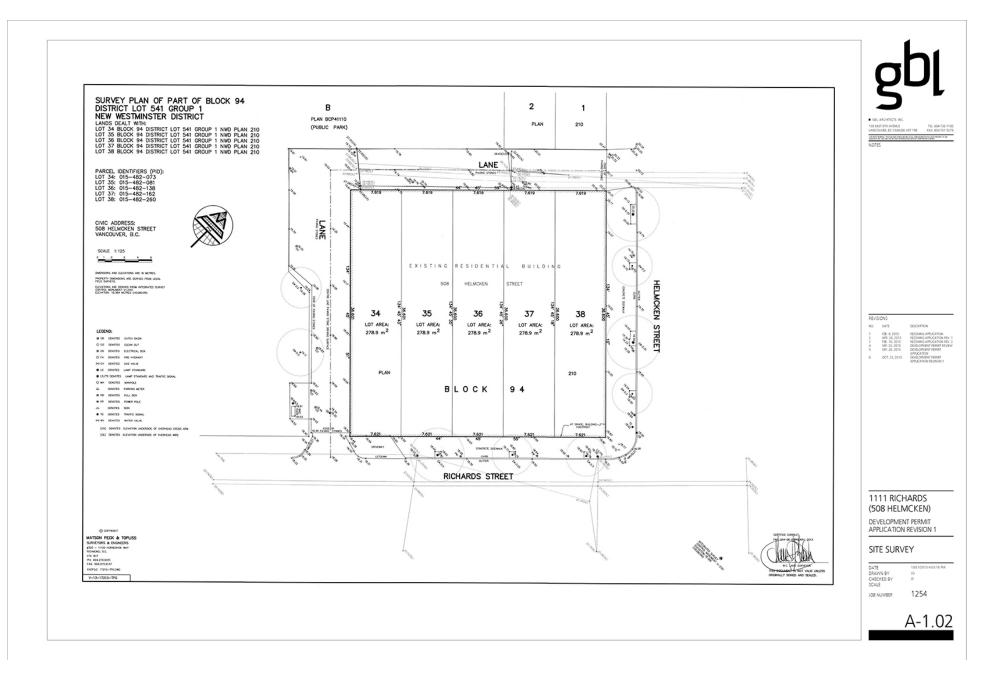
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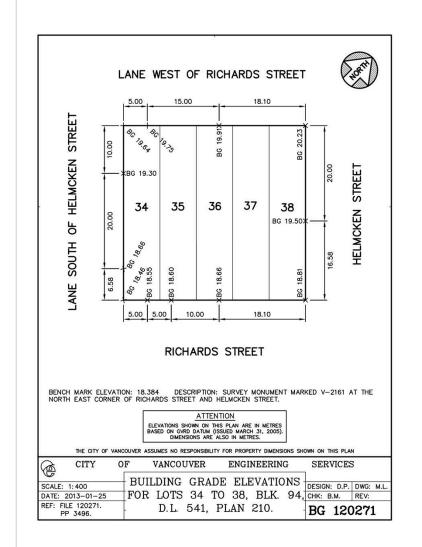
DEVELOPMENT PERMIT APPLICATION, REVISION 1

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A-1.01	CONTEXT PLAN
A-1.02	SITE SURVEY
A-1.03	BUILDING GRADES
A-1.04	VIEW CONES
A-1.05	SHADOW ANALYSIS
A-1.06	RICHARDS STREETSCAPE
A-1.07	HELMCKEN STREETSCAPE
A-1.08	SUSTAINABILITY RATIONALE
A-1.09	DESIGN RATIONALE
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A-3.05	RICHARDS STREET ELEVATION
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A-3.07	SEYMOUR STREET ELEVATION
A-3.08	EMERY BARNES PARK ELEVATION
A-4.01	SECTIONS
A-4.02	SECTIONS
A-8.01	LEVEL 1 FSR
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A-8.04	LEVEL 10 FSR
A-8.05	LEVEL 11 FSR
A-8.06	LEVELS 12-33 FSR
A-8.08	LEVEL 34 FSR
A-8.09	LEVEL 35 FSR
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BUILDING GRADES

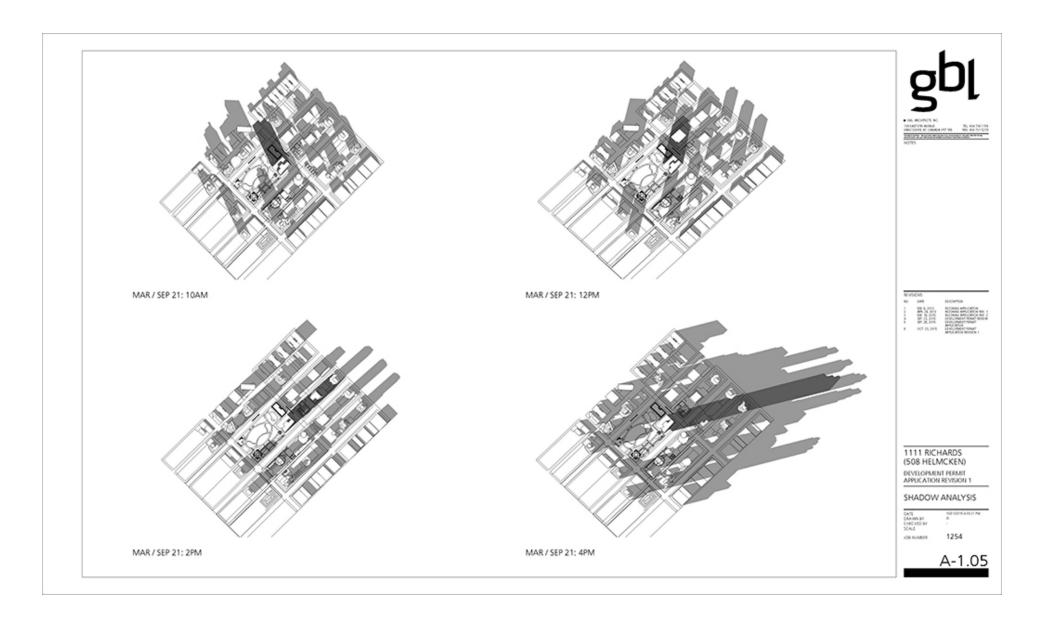
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I. EMERY BARNES PARK

2. EXISTING BUILDING ON PROPOSED SITE - RICHARDS STREET



3. VIEW UP HELMCKEN STREET, SITE ON LEFT



5. VIEW TO SITE FROM DAVIE ST/RICHARDS INTERSECTION



4. RICHARDS STREET CONTINUED



6. VIEW TO SITE FROM DAVIE ST THROUGH EMERY BARNES PARK VIEW LOCATIONS





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RICHARDS STREETSCAPE

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3. EXISTING SITE AND LANE



5. VIEW TO SITE LOOKING SOUTH ALONG HELMCKEN ST

4. BROOKLAND COURT ON HELMCKEN ST



VIEW LOCATIONS

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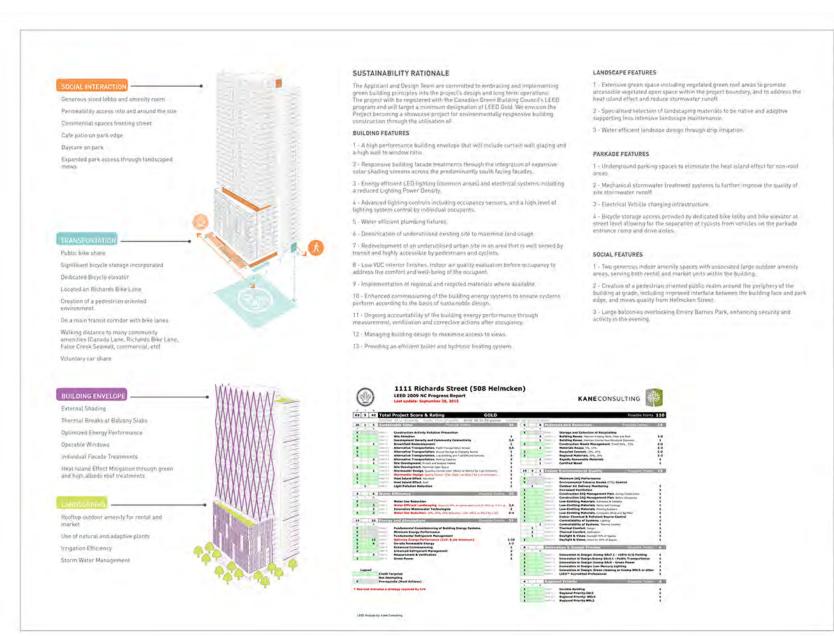
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SUSTAINABILITY RATIONALE

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SITE CONTEXT

The side is tocated at the western corner of Richards and Helmicken Street positioned at the convergence of shree surrounding contextual zones. EMERY BANNES PARK Tlarks the western edge of the side, providing a large public green space and unobstructed views to the side from Davie Street. The URBAN GRID of Helmicken and Richards streets front the southern and eastern edges of the side, distinguished by the Richards Bilke Lane, future Helmicken Greenway, and the neighbouring eight storey heritage Brookkand Court. On a larger scale, the surrounding VALETOWN SVILINE provides a variety of architectural styles and residential tower expressions. Establishing a building form and character that appropriately responds to all three of these unique contexts is the foundation of the proposed tower's conceptual dissign.



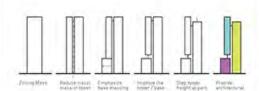
1. EMERY BARNES PARK 2. URBAN DRID

3. YALETOWN SKYLINE

BUILDING MASSING

Starting with the approved rezoning massing, the building concept has been re-evaluated from its most basic form. By taking into consideration commants from the City stalt; public, and previous Urban Design Panel, we were able to establish a massing concept that is much more responsive to the surrounding context and presents the desiryty on this site in a catalogous, liter factore.

The most basic geature of this approach was to visually bisest the tower with a necessed spine. From there, we bumped out the base to emphysize a volume at a similar scale to the neighbouring Brookland Court. An undereut is then provided between the tower and base to further the distinction between the two. The volume closest to the park is stepped down two stormys to reduce the height along the park edge. This results in three volumes that can each take on a distinct character in response to the context that is shaping it.



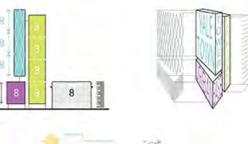
PROPORTION & ARTICULATION

The three volumes are further scaled through a consistent proportion of eight sterays that is derived from the height of Brookland Court, maintaining a consistent scale throughout the entire building composition. Each volume is uniquely modulated in response to one of the three contextual zones.

The URBAN BASE is eight storeys in height to match Brookland Court. The main façade consists of glazing and store ganets, white an outer screen of vertical aluminum lins creates a volume that feets more uniformly solid — particularly when viewed from the street at oblique angles. The rhythm of limit is shifted at levels five and eight, aligning with the midgeloit of the window beys and cornice line in Brookland Court.

The PARK TOWER is 32 storeys of devellings wrapped in balconies to provide large private outdoor space directly adjacent to public park. At the base of this volume, a Montessori School projects out – providing an active edge with children during the day and serving as a backlit. Tahitern: along the park edge in the evening. The balconies are broken into four modules of edgeh. The bottom modules has the smallest amount of balcony frontage to minimize overtook to the adjacent building. Each module progressively increases going up, as the views increase and overtook issues decrease.

Finally, the YALETOWN TOWER – at 24 storego – sofs above the base and grojects up to the underside of the view zone. It is clad in thermally superiod curtain wall glazing and shrouded in a diamond patterned solar-lattice. The diamond shape provides for uniform shading agoing from the southeast to scathwest facades and gives this volume a unique identity as it relates to the vertical expréssion of the Uthan Blaze and horsontal expréssion of the Uthan Blaze an





LANDSCAPE

Helmcken Streetscap

The Helimcken streetscape responds to the guidelines for Downstown South with a doubte row of red misple trees to match the proposed new afreet frees, on the north-side of the Bock. All street trees will be newly planted to achieve the intended double row canopy. These will be planted in the Downstown South grates and surrounneling details within a poured concrete violevals. South practs are surrounneling details within a poured concrete violevals. South building settled to a full take station on the development after within a building settleds to a void conflictis with movement on the guide sideways.

Richards Streetscape

The Richards streetscape also conforms to the Downtown South guidelines with a double now of newly planted red maple Irees. The adjacent entries to the market and rehals apartments are located on a dexix a few steps up Irom the street and flanked on both sides by water features and planters. A ramp access is provided from the corner. The southern of the two water features also privides an access and accounts buffer or the outdoor engine terrace of the residurant flant occupies the southwest corner of the building. The activity on the access reuse along the south value of the building. Bechards Street and the access reuse along the south value of the building.

Southside Interface to the Park

The south edge of the development site of a service lane paved with concretepavers that also fermithe surface of the author eating path for the restaurant. The east section of the service (and is configured to maintain access for the Vancouver Park Board to a small pump building within the park with a moveable bolland to prevent use by other vehicles.

West of the park maintenance access the service lane is designed for pedestrian access to the park for building relatents and for the Montesson Preschool. The preschool will have a covered and fenced outdoor playspace next to its indoor facilities with a galed access from the lane.

Westside Mews

The eastern edge of the development site is a paved mews featuring a herringbane pattern in a lively mis of concrete colours. The mews functions for access by whole los for the underground parking entrance hard felt-inckenstreed and two losating bays to the south. It also will be shared with pedeatrians; cyclists, garbage trucks, park service varieties, and Mandy Darf service for Brookland Court.





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DEVELOPMENT PERMIT APPLICATION REVISION 1

DESIGN RATIONALE

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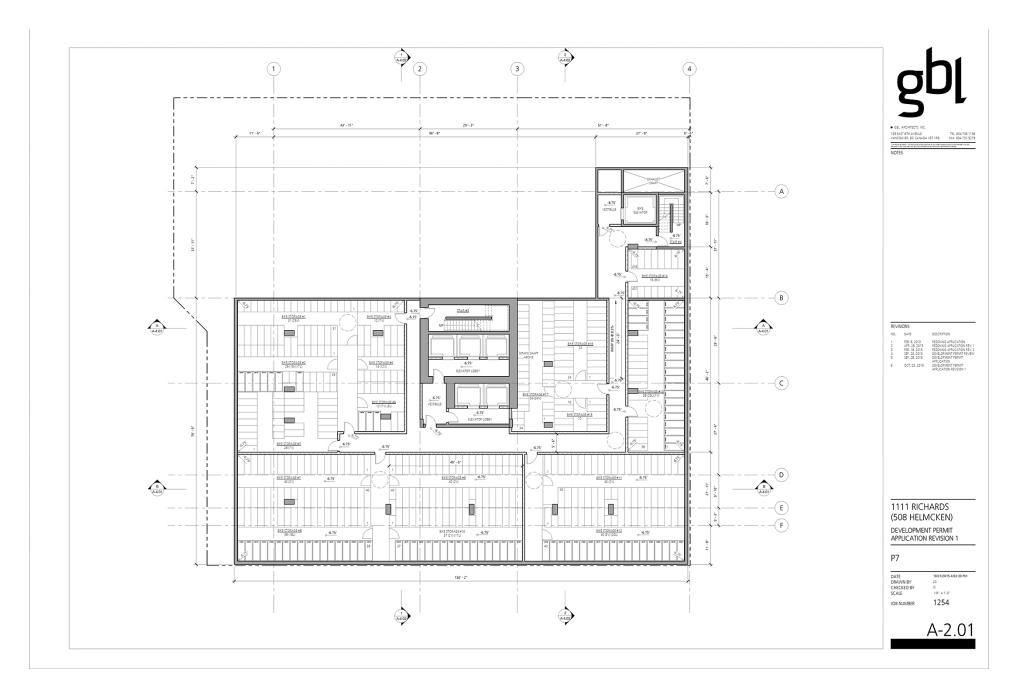
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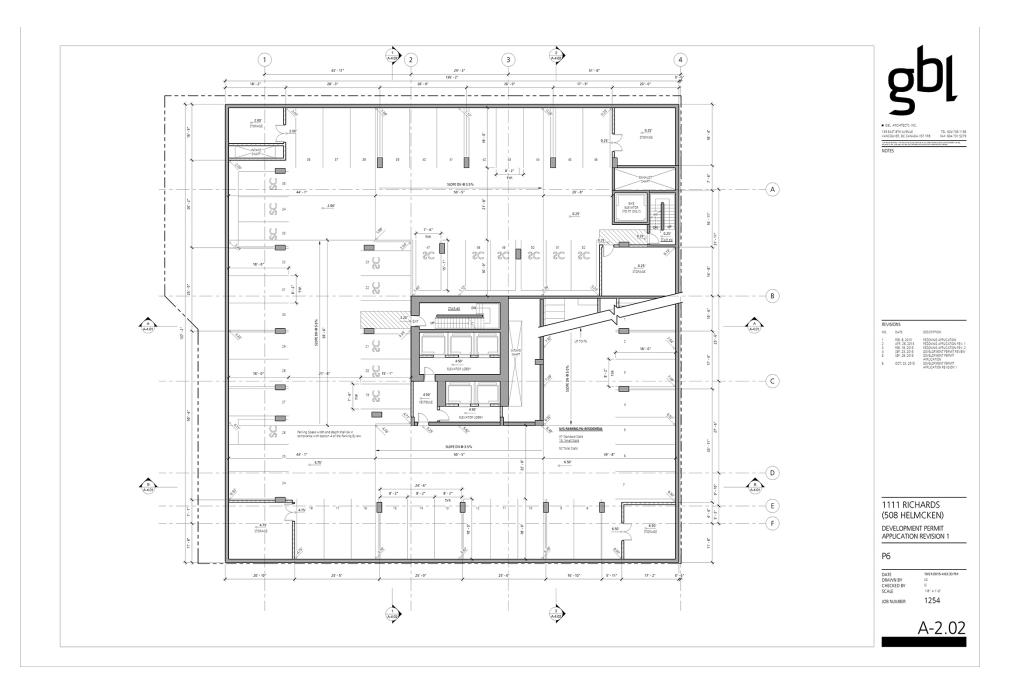
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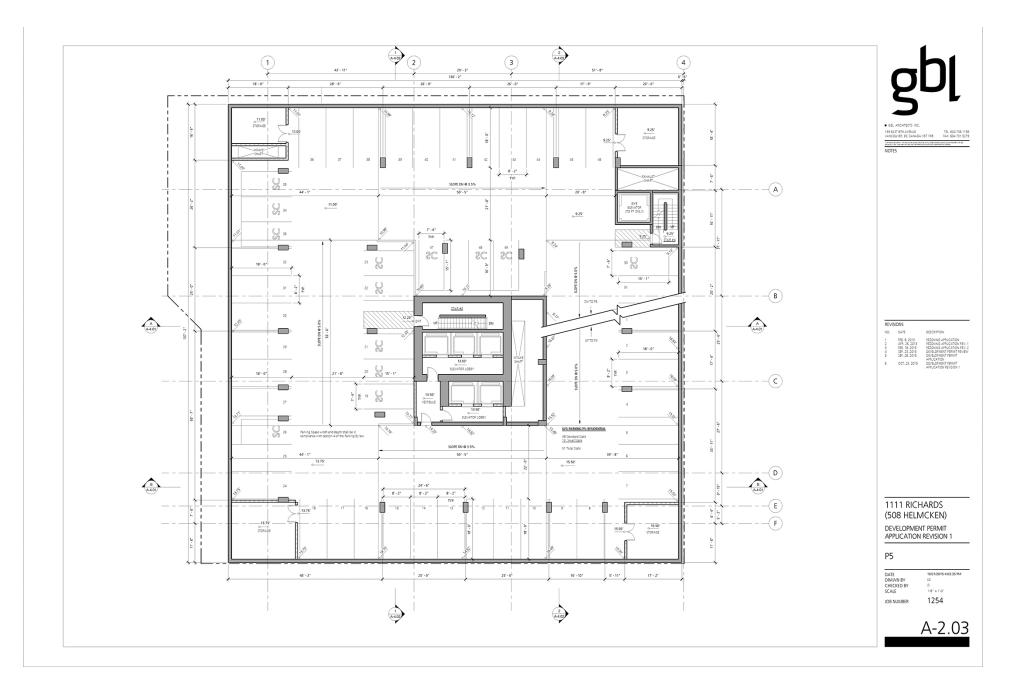
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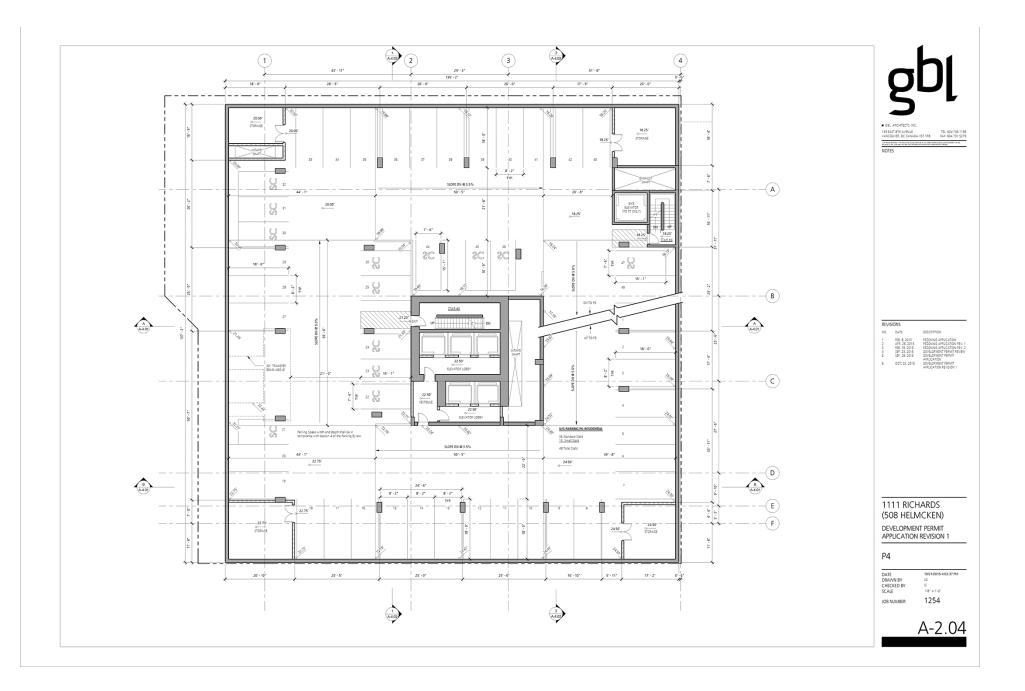
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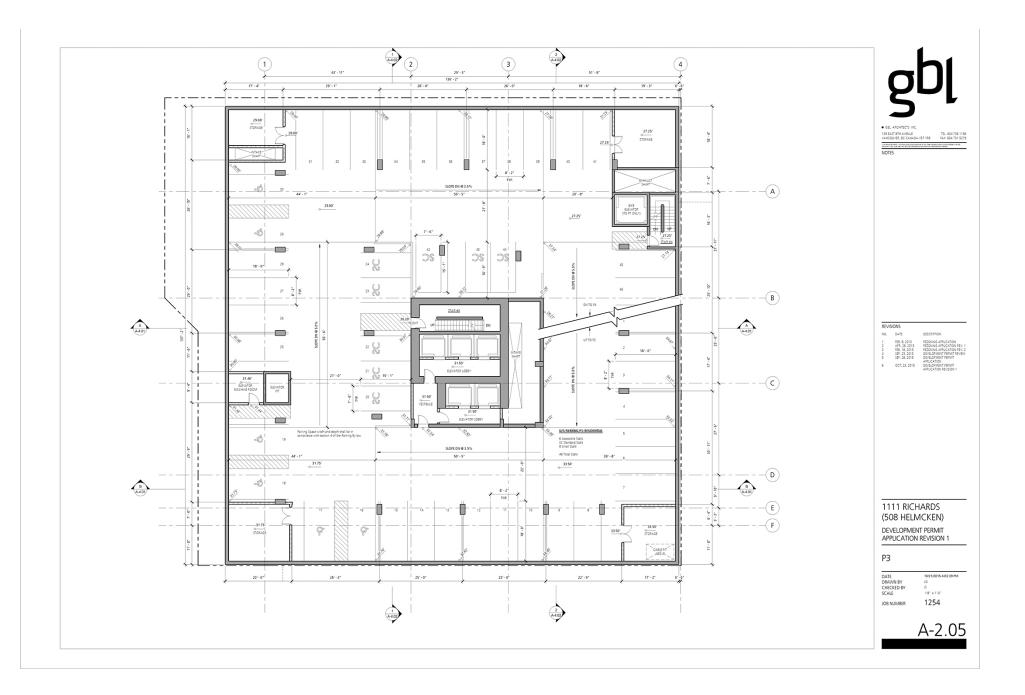
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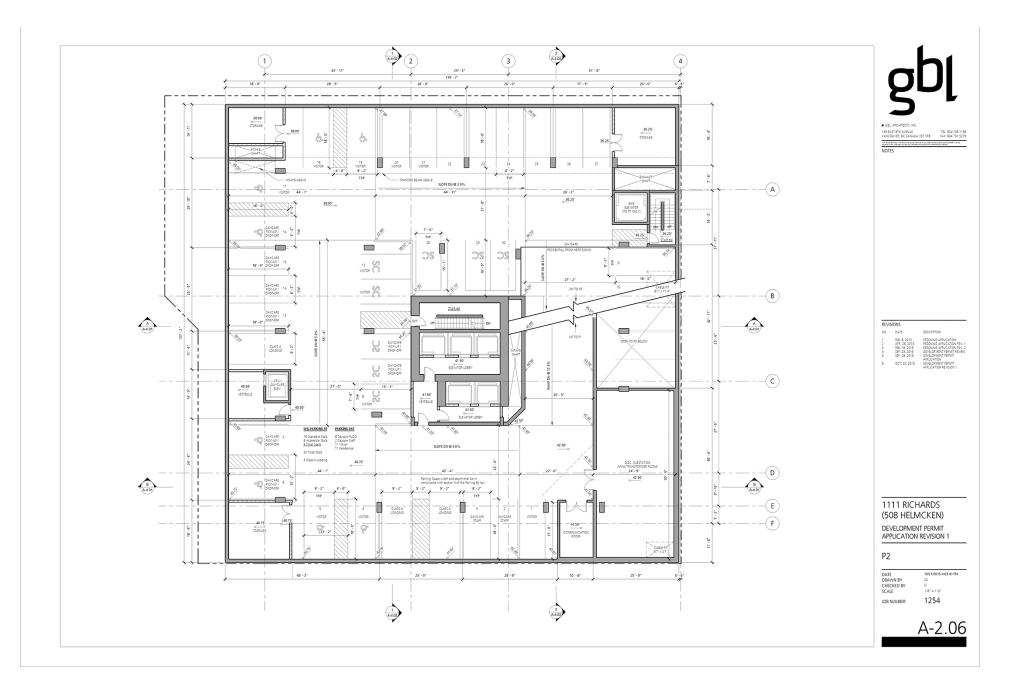


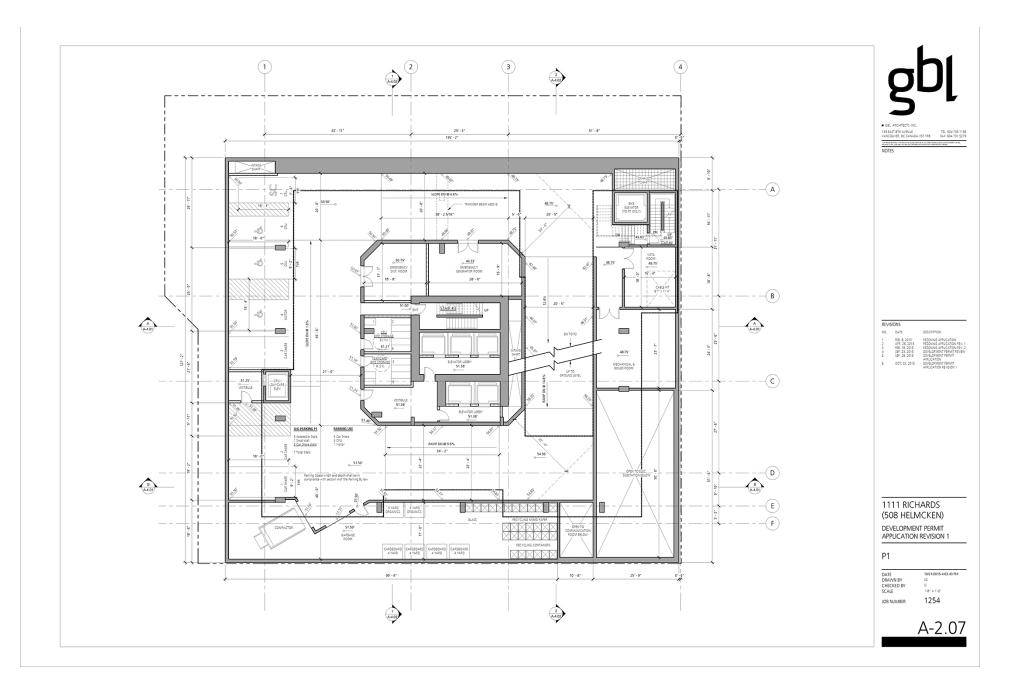


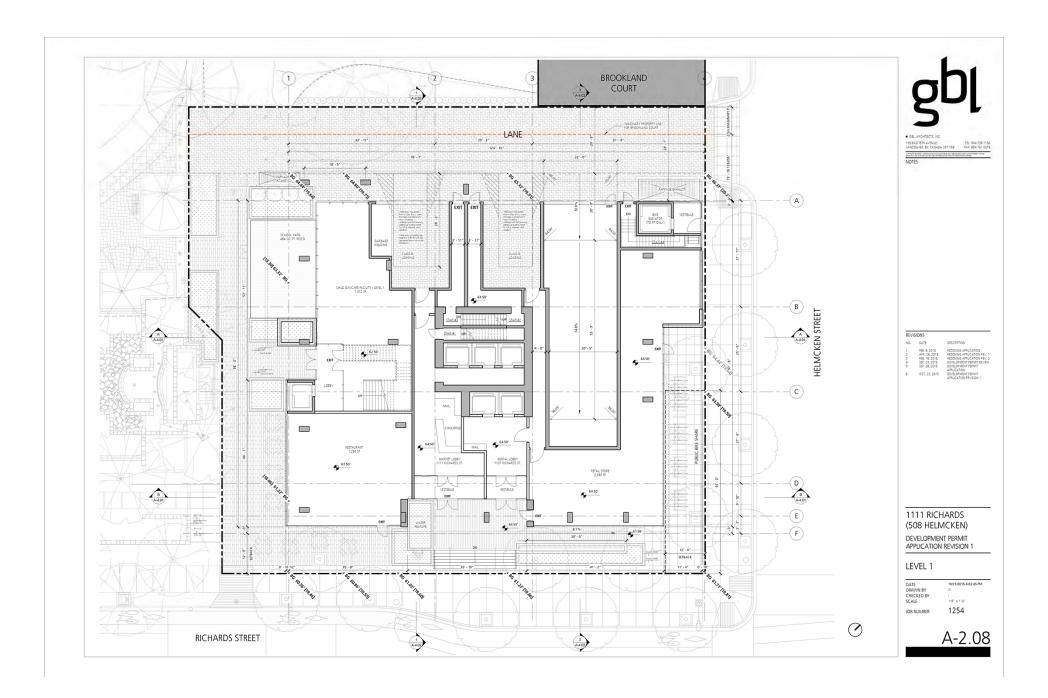


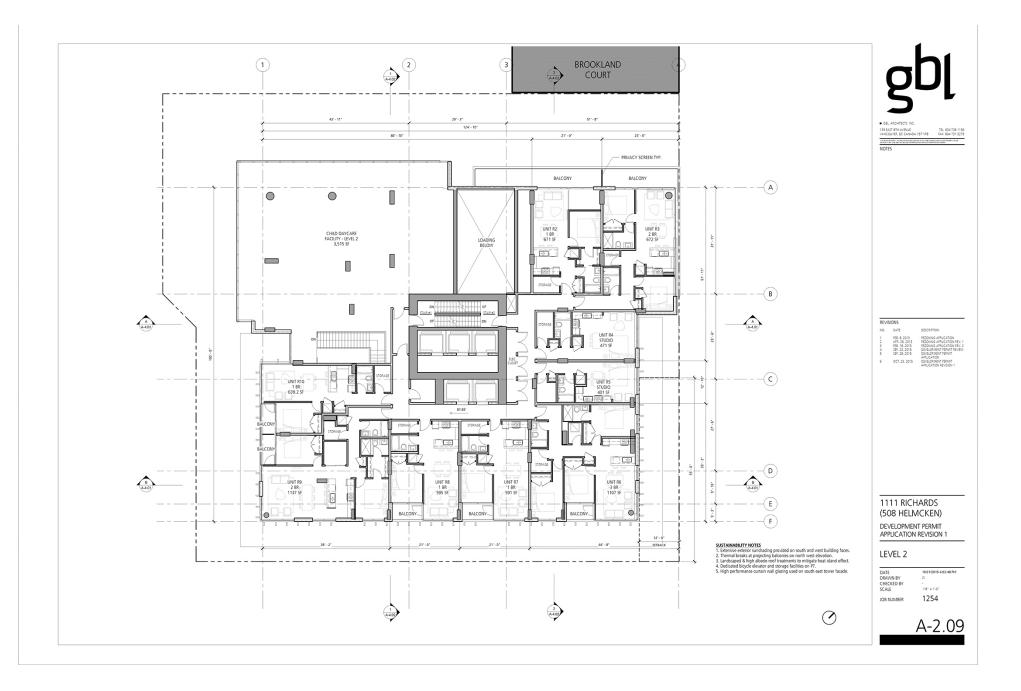


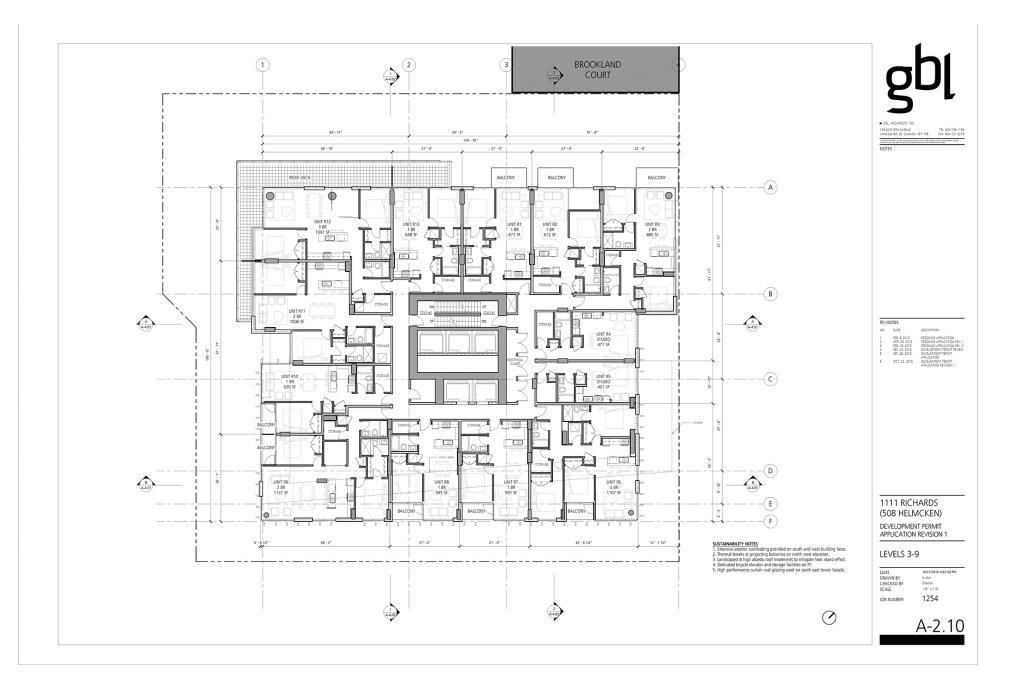


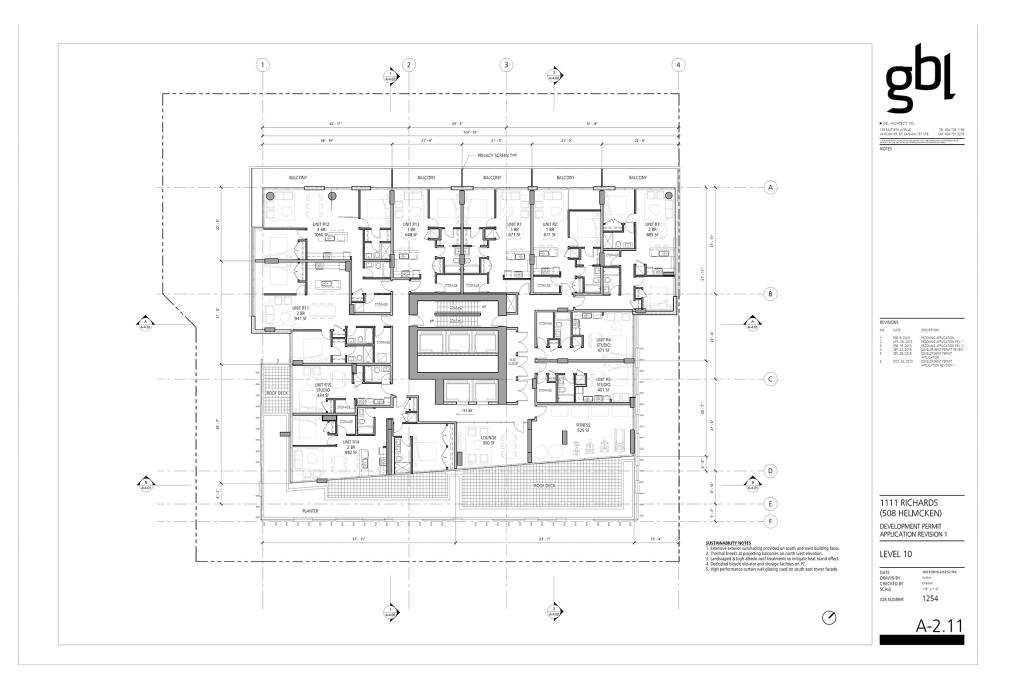


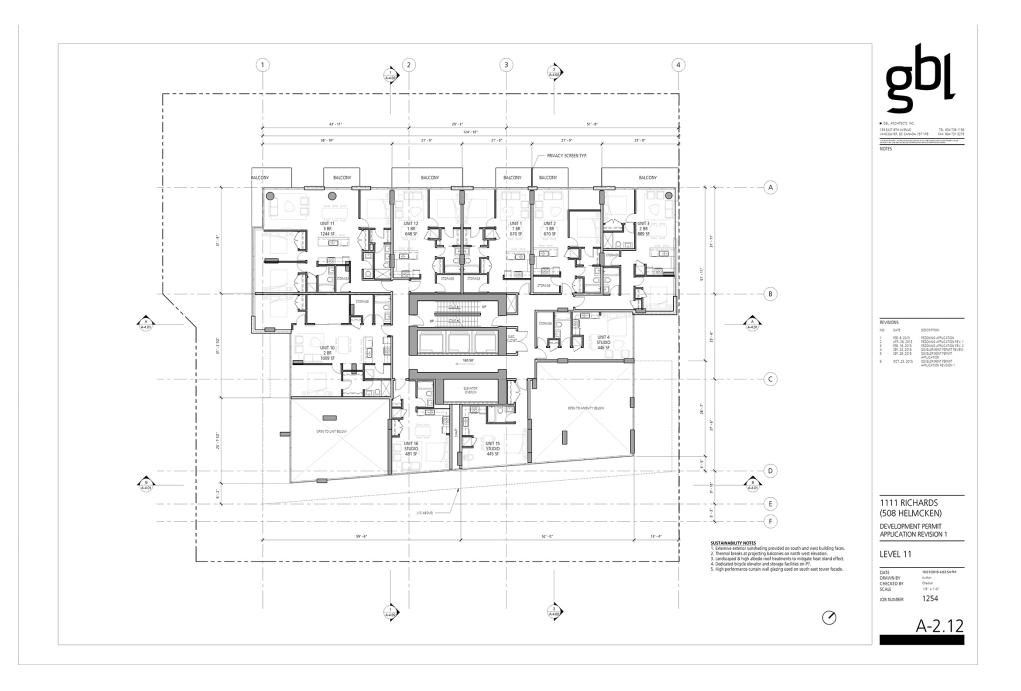


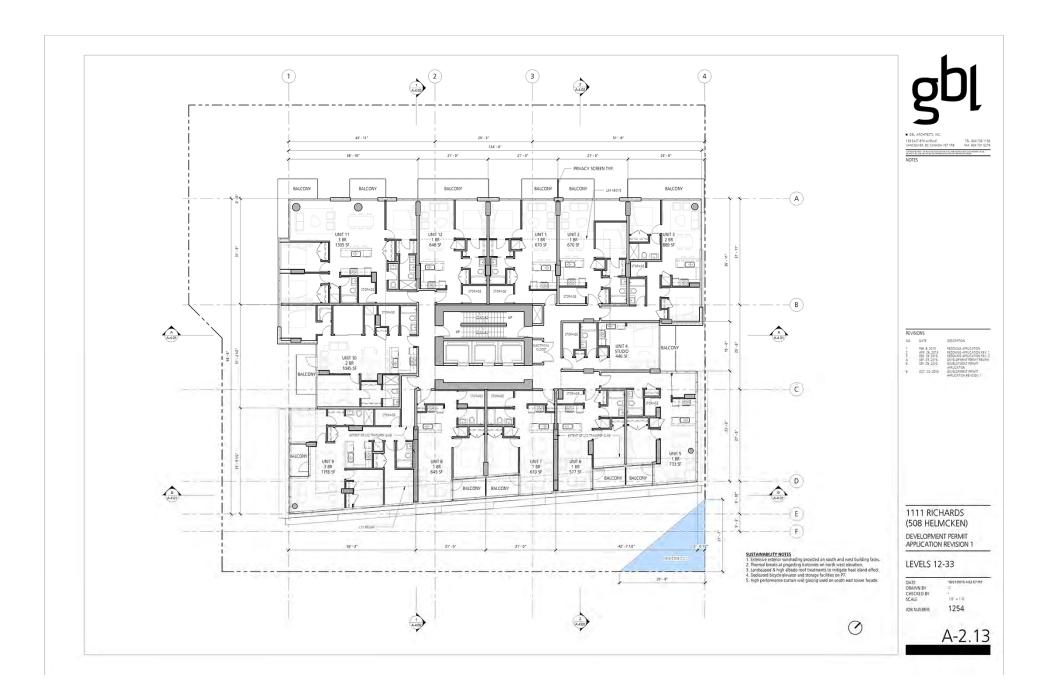


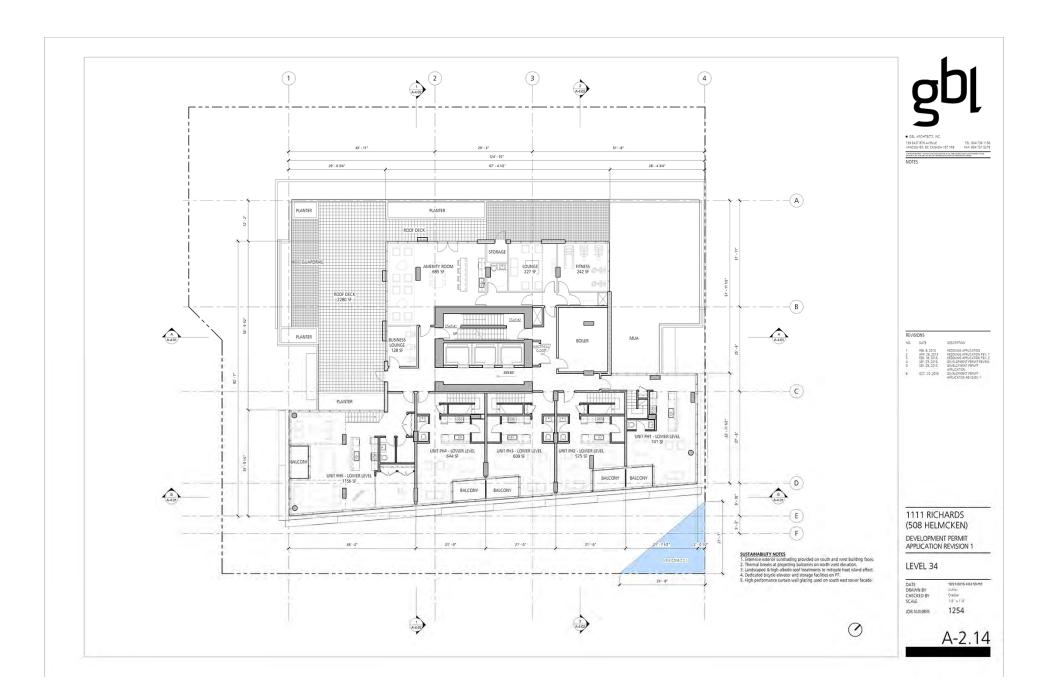


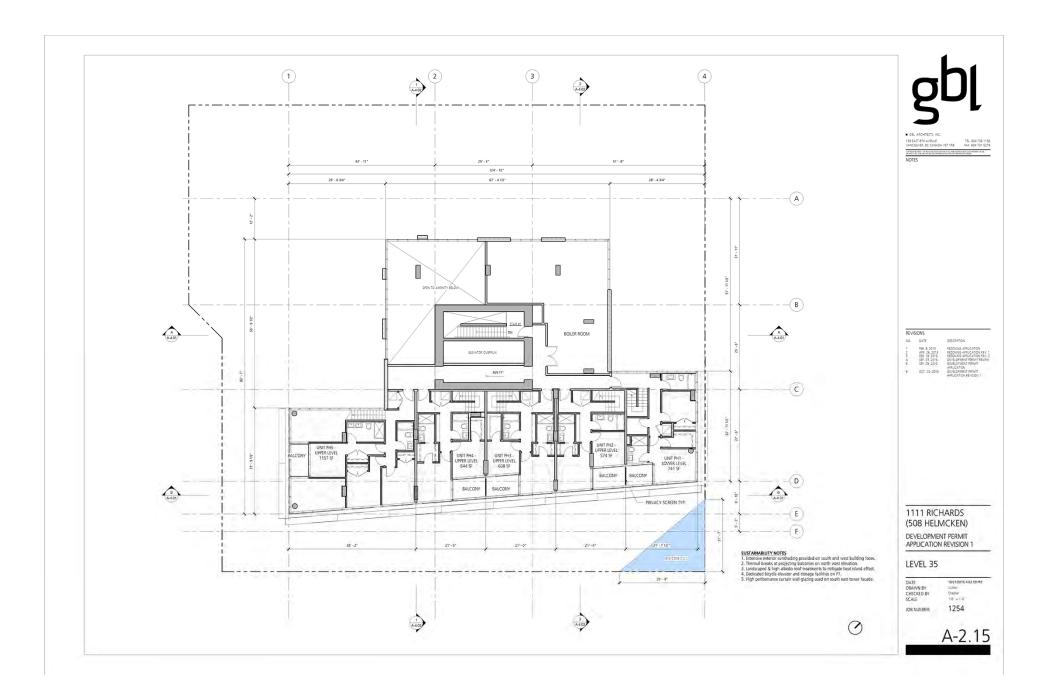


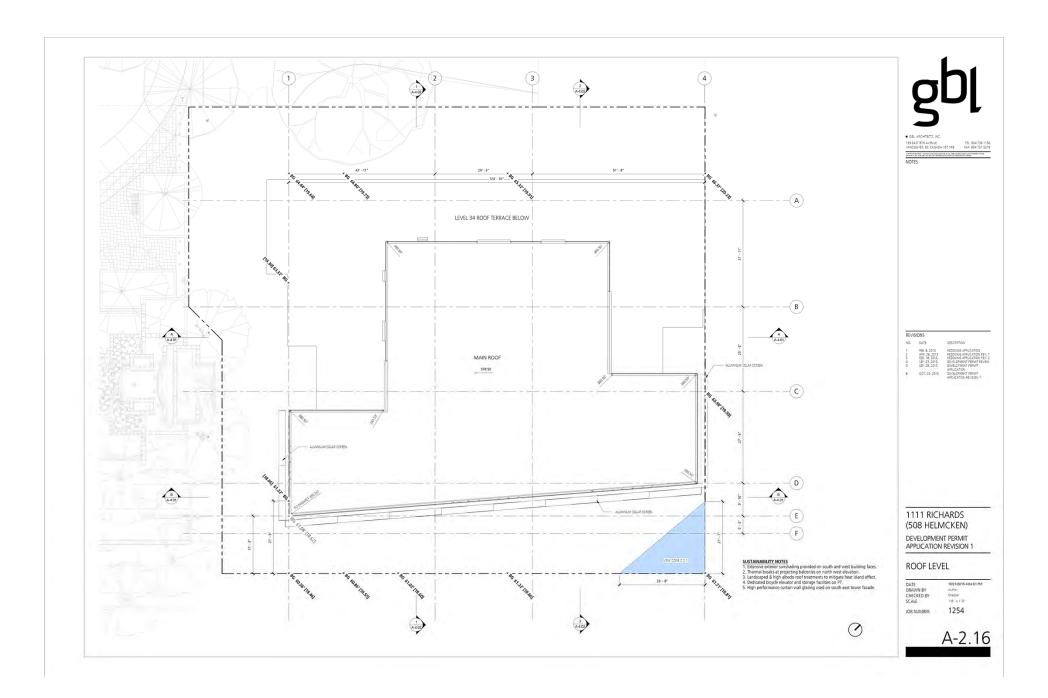


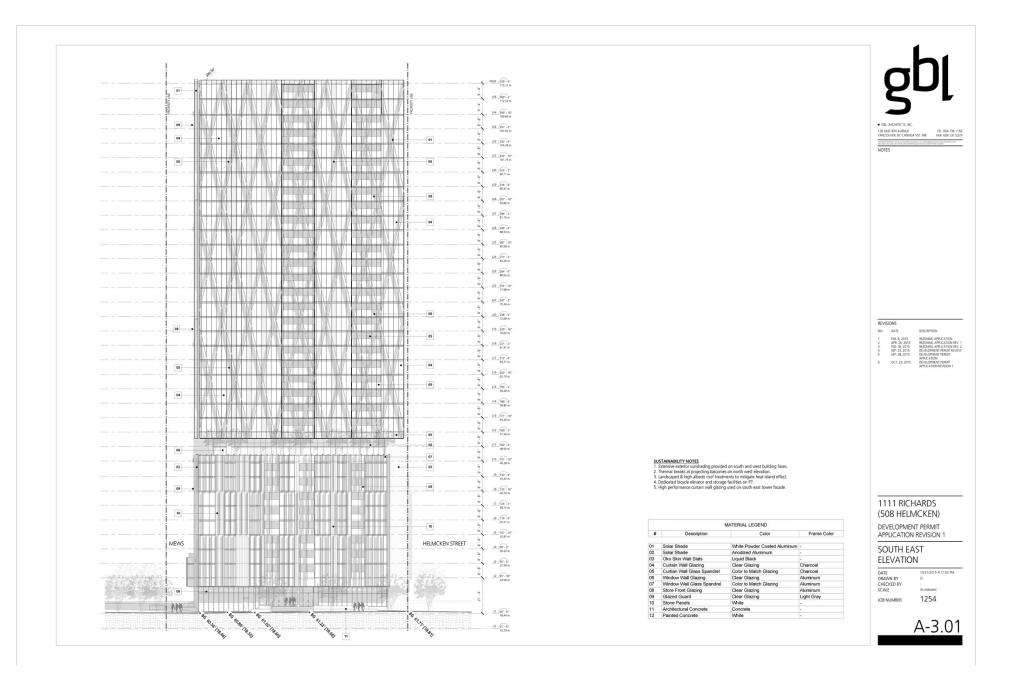


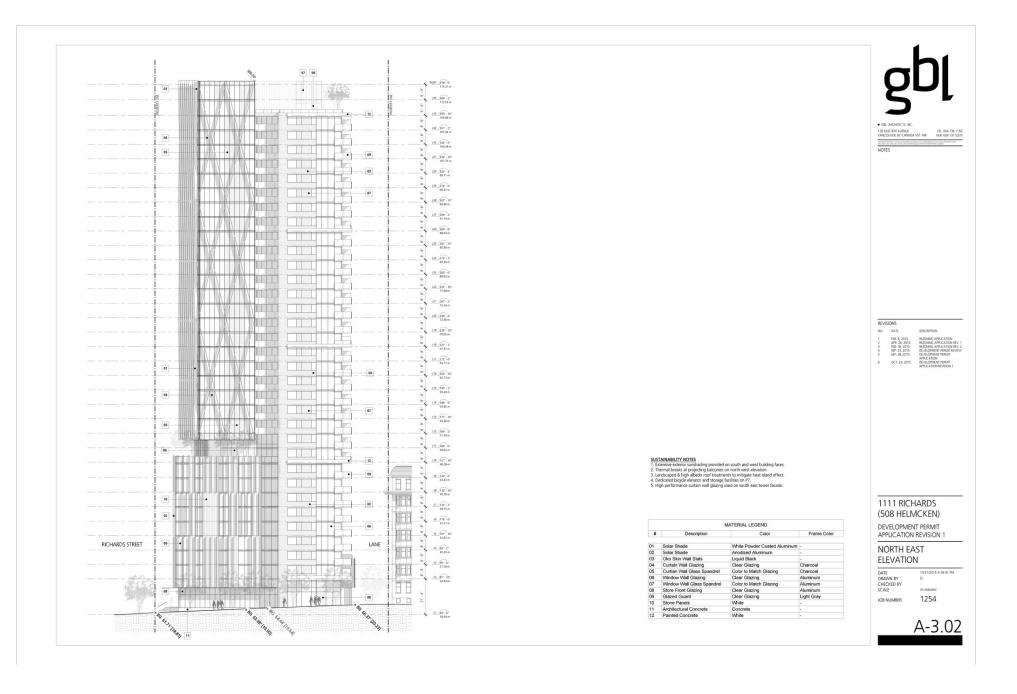


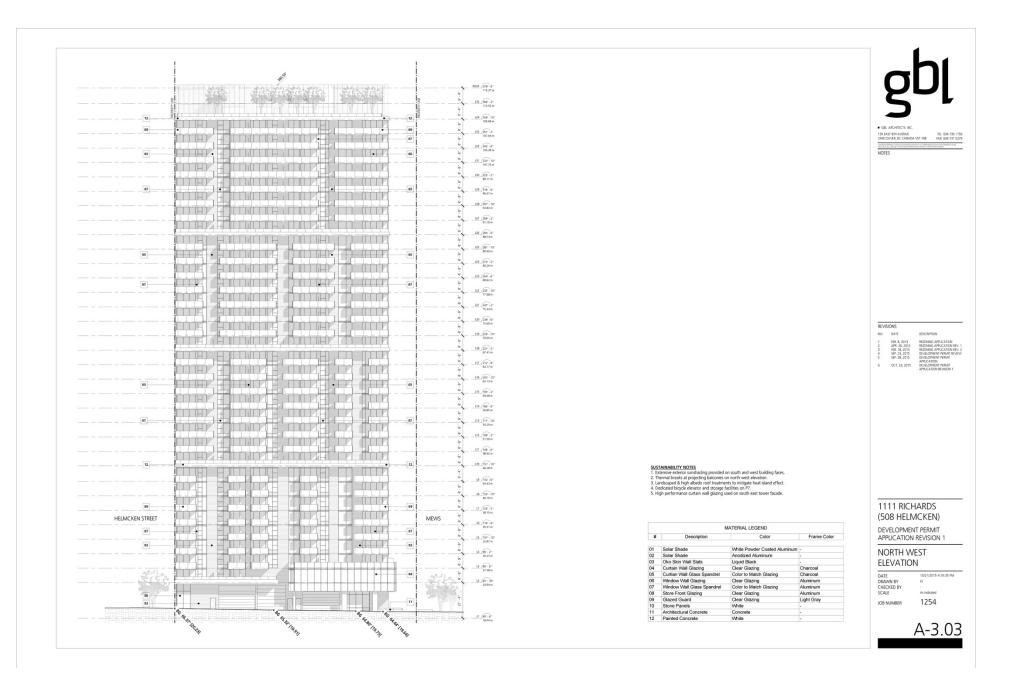


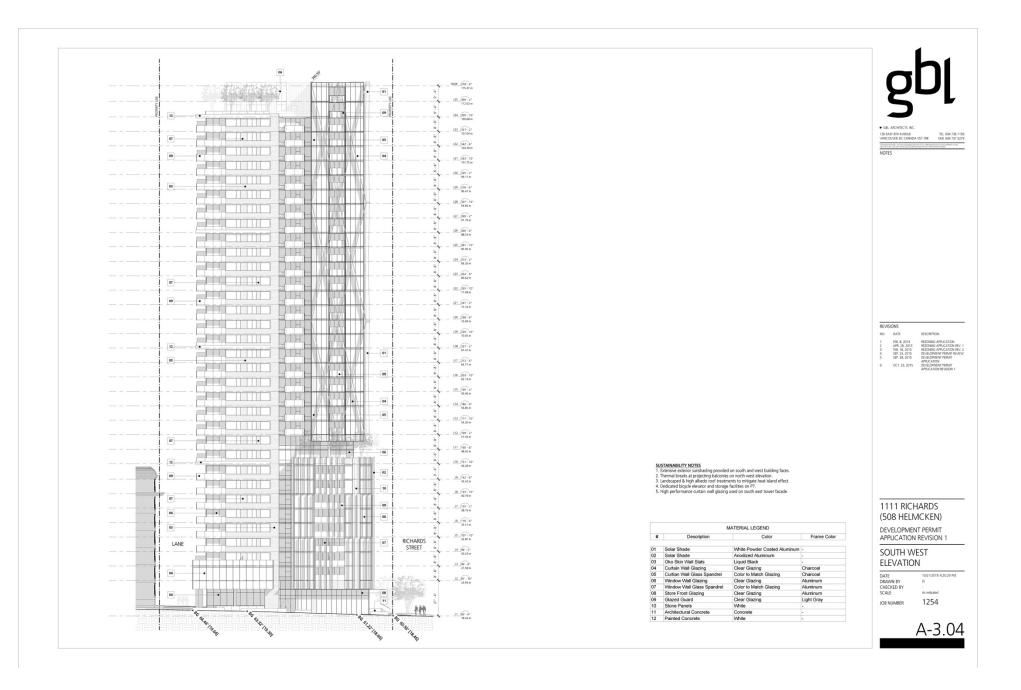




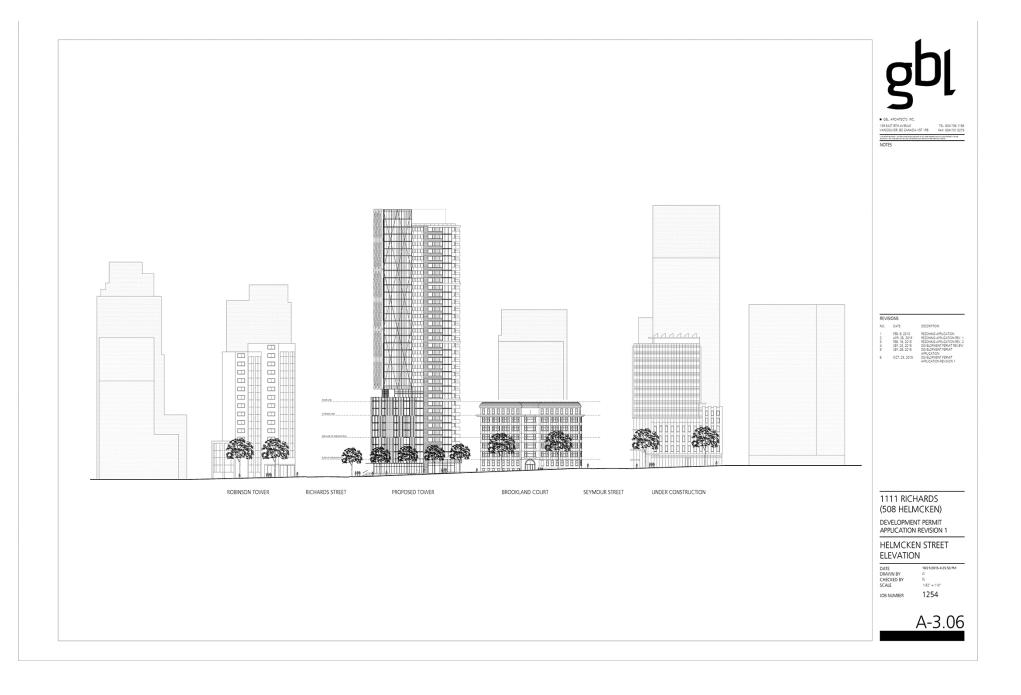






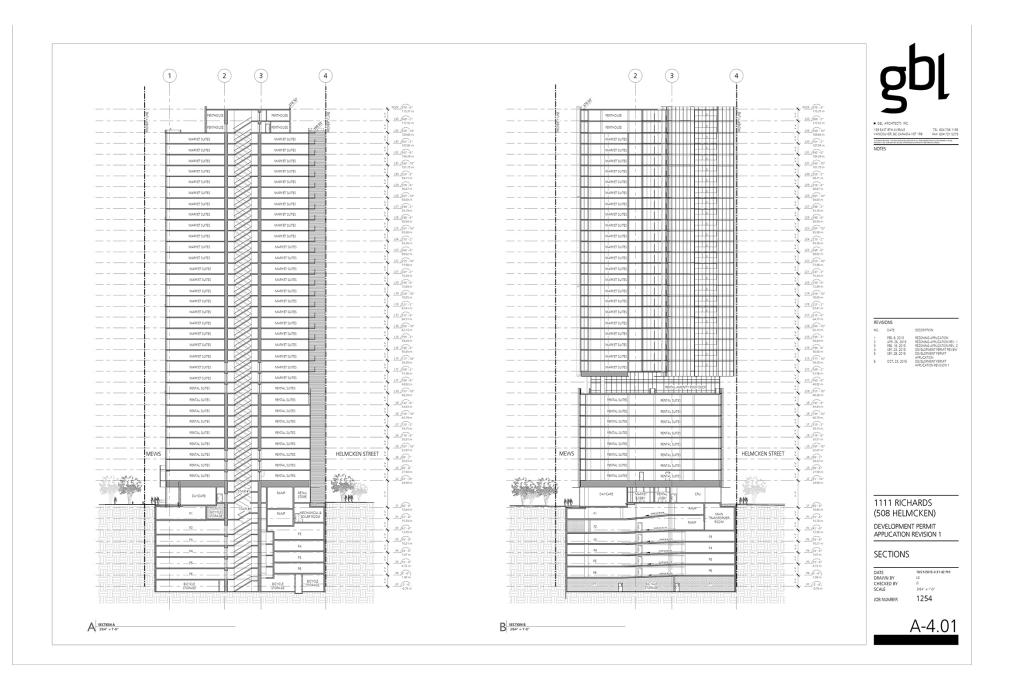


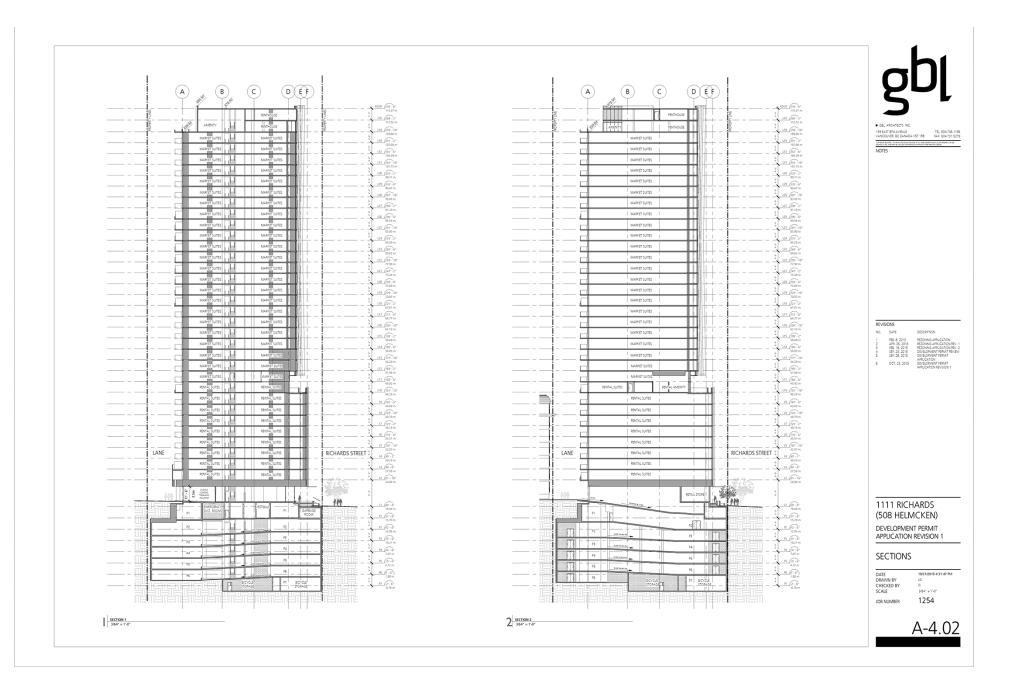


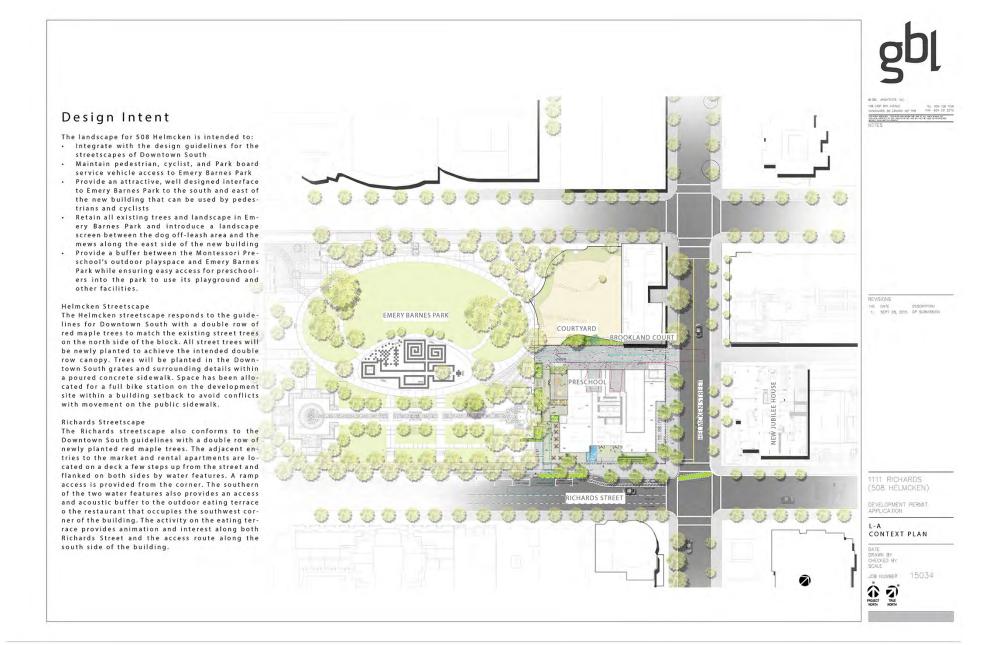


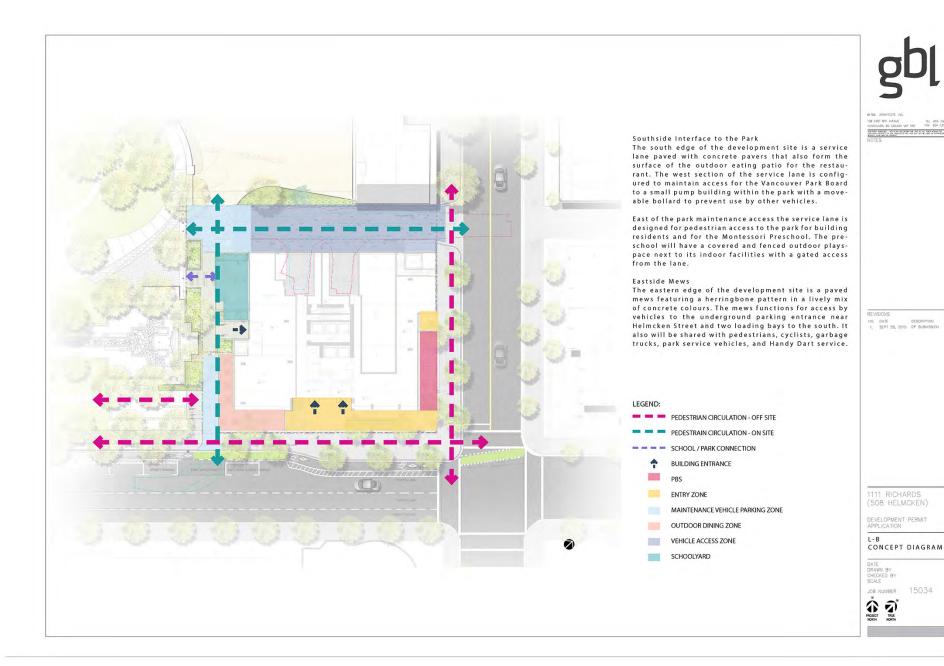






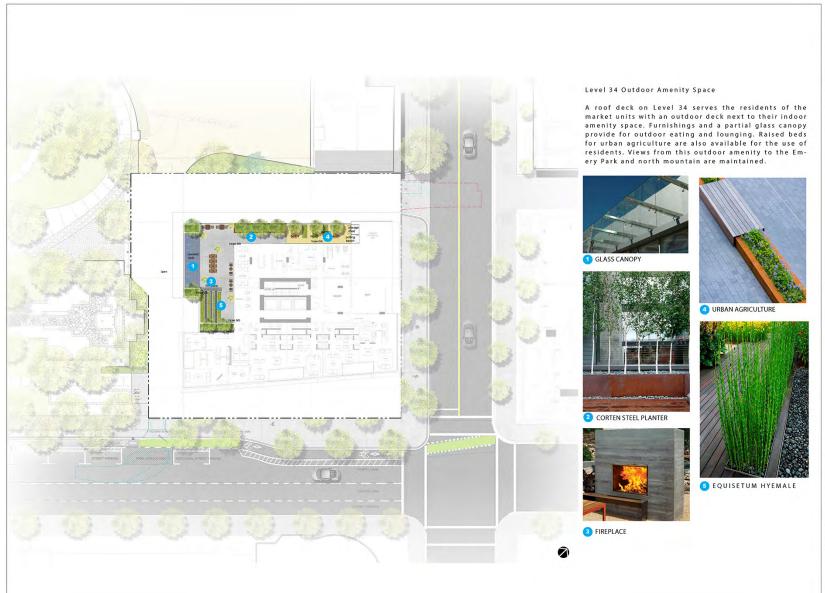












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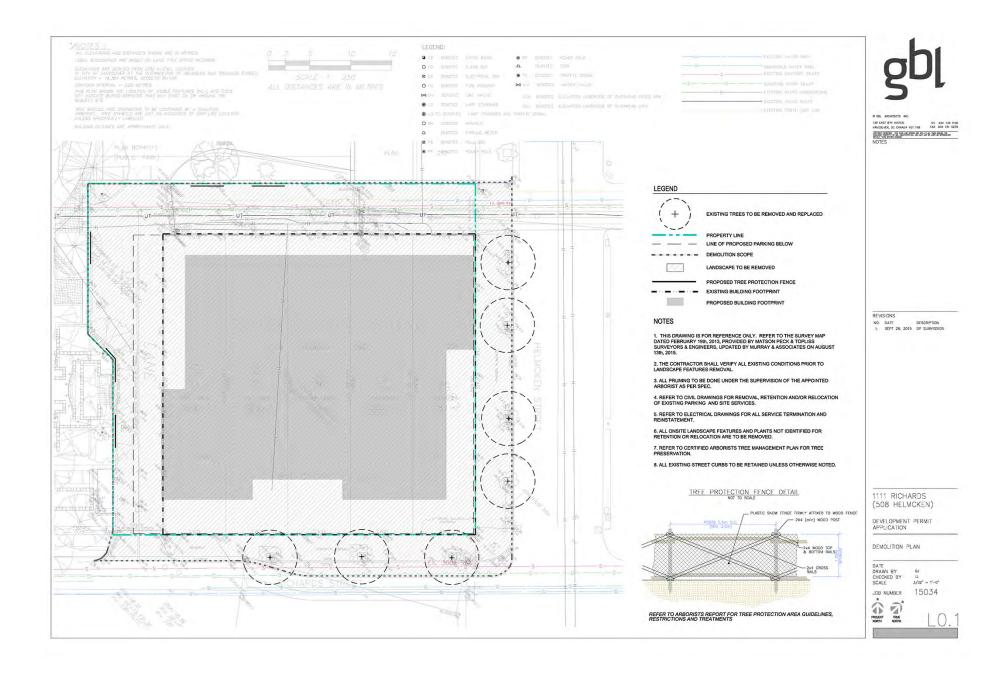
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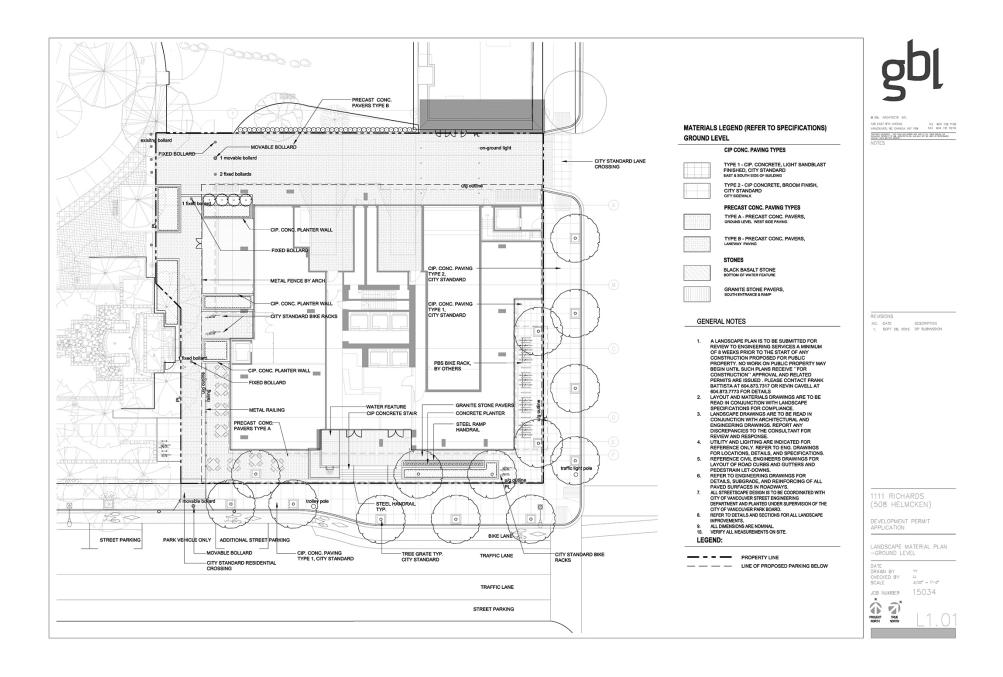
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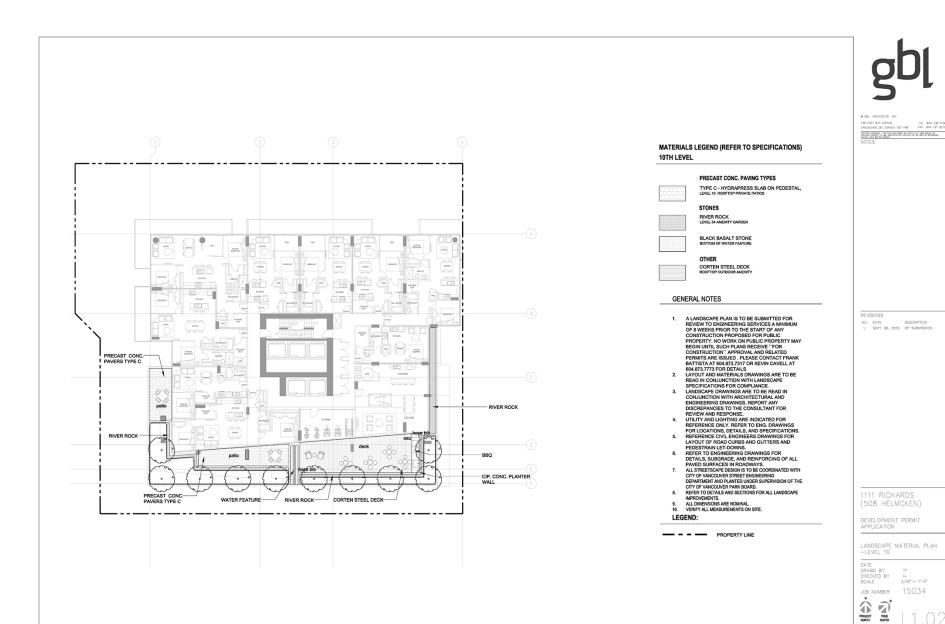
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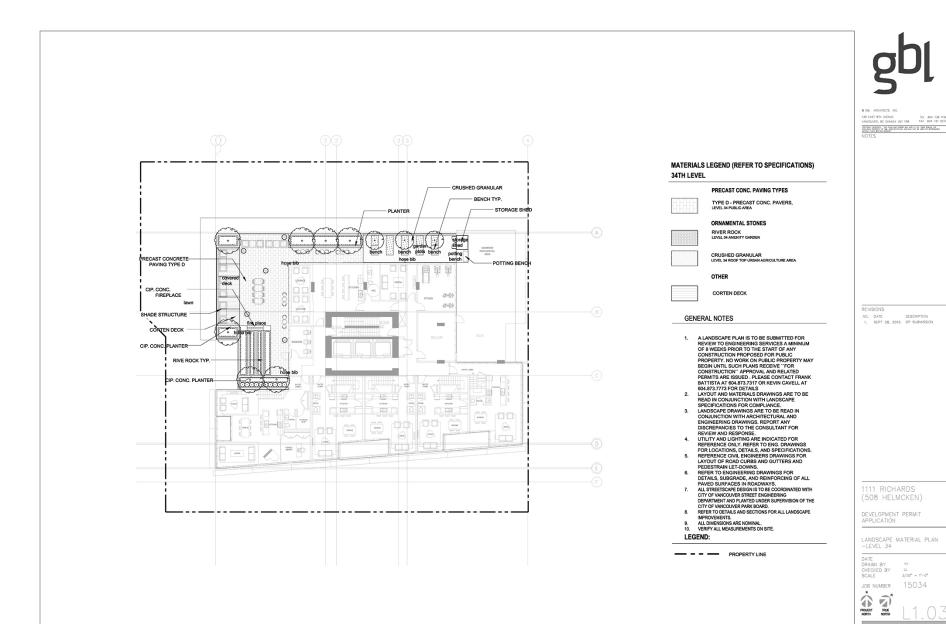
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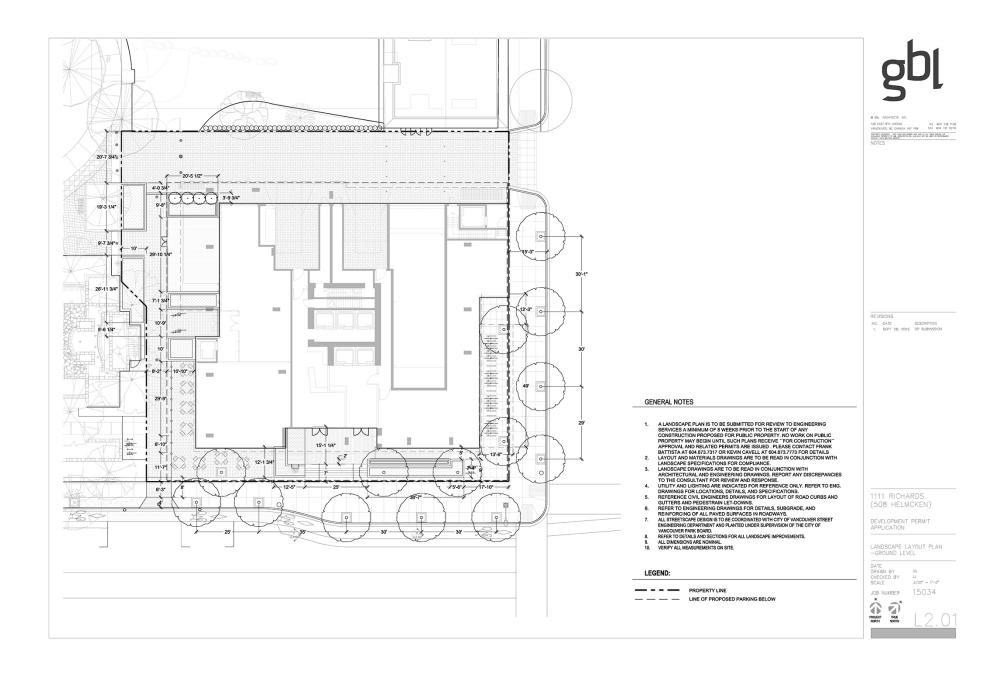


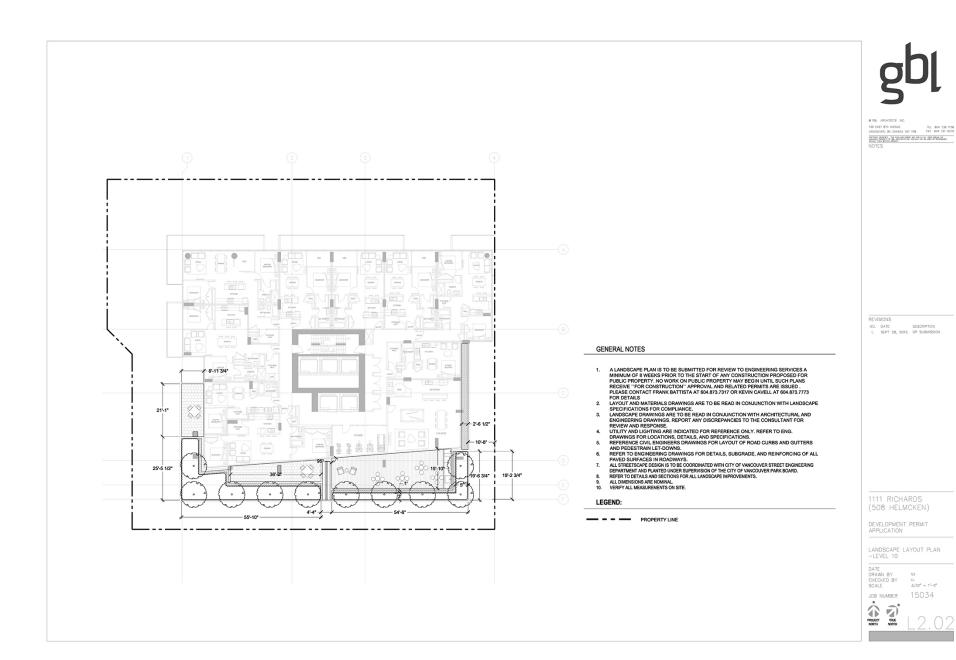


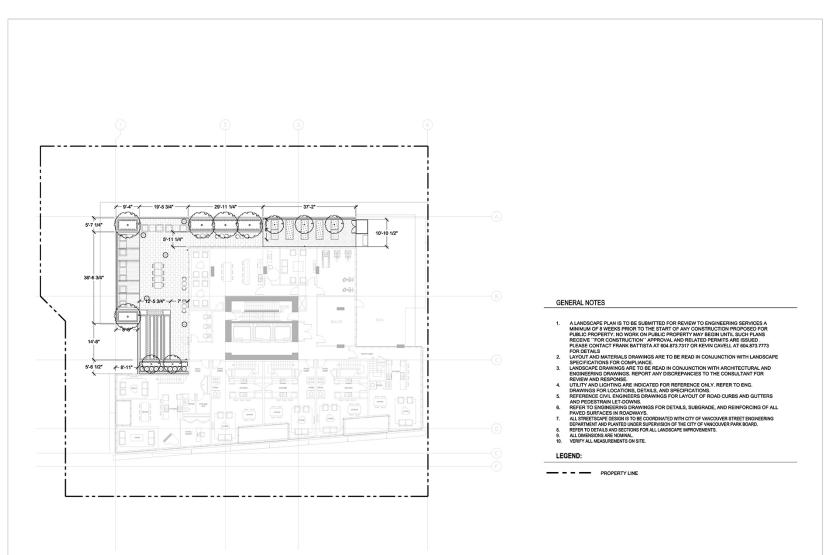












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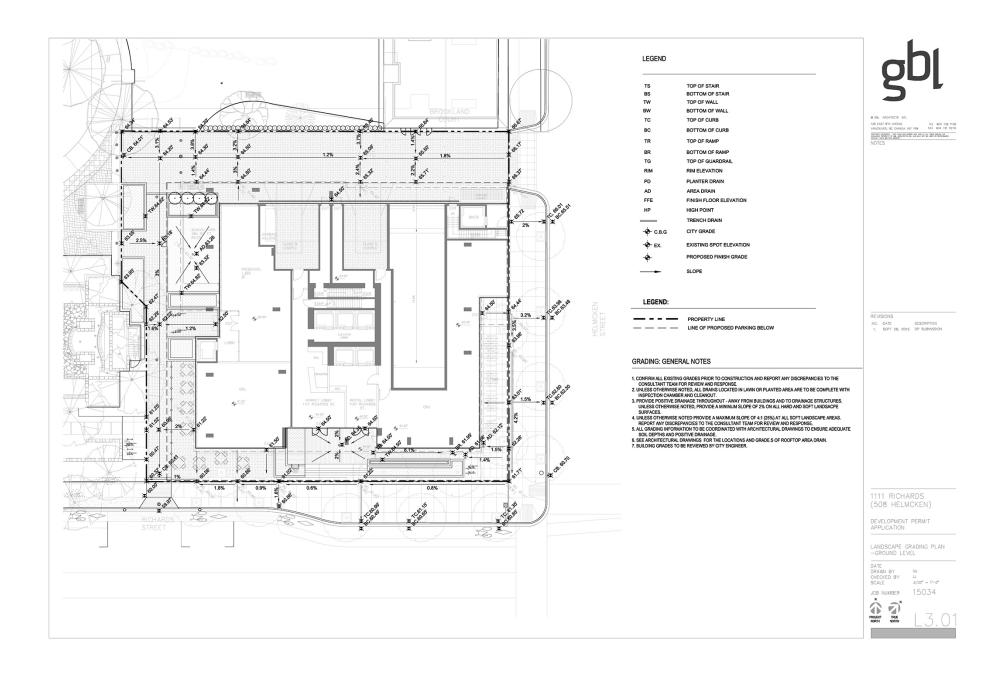
LANDSCAPE LAYOUT PLAN
-LEVEL 34

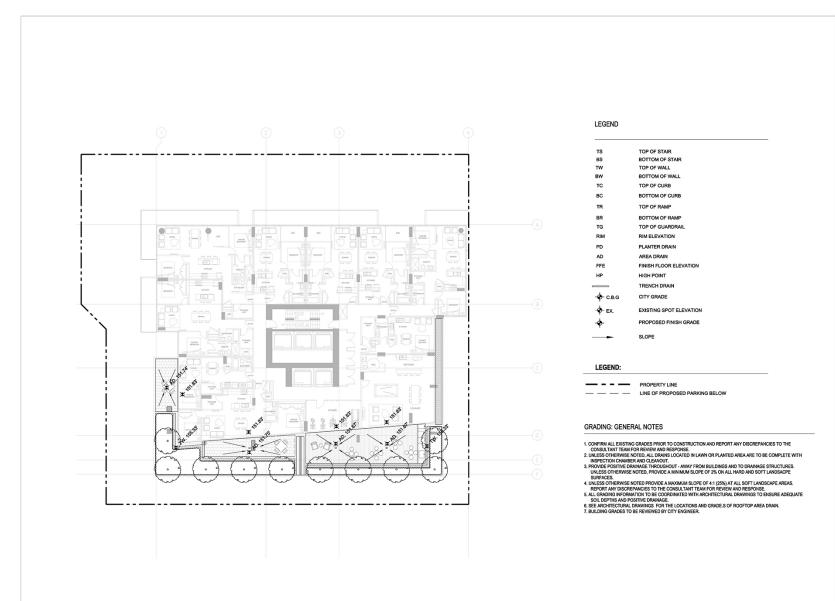
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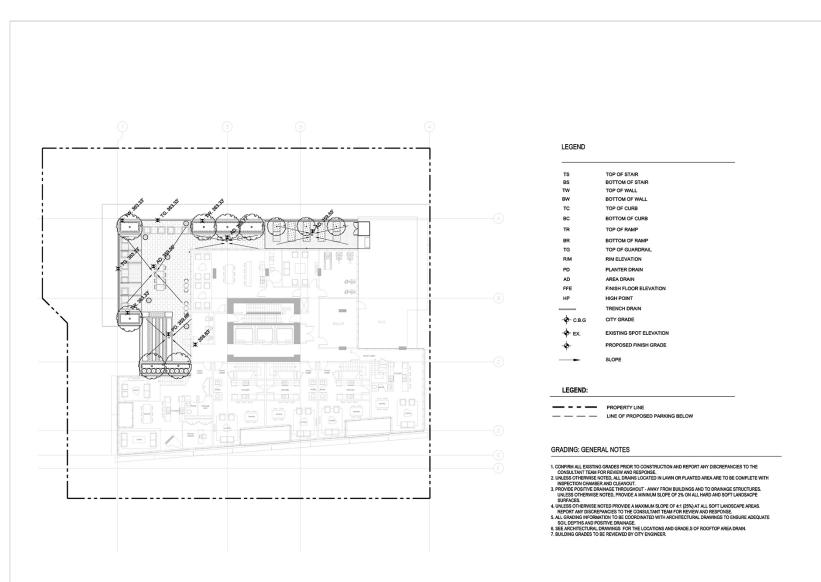
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LANDSCAPE GRADING PLAN -LEVEL 10

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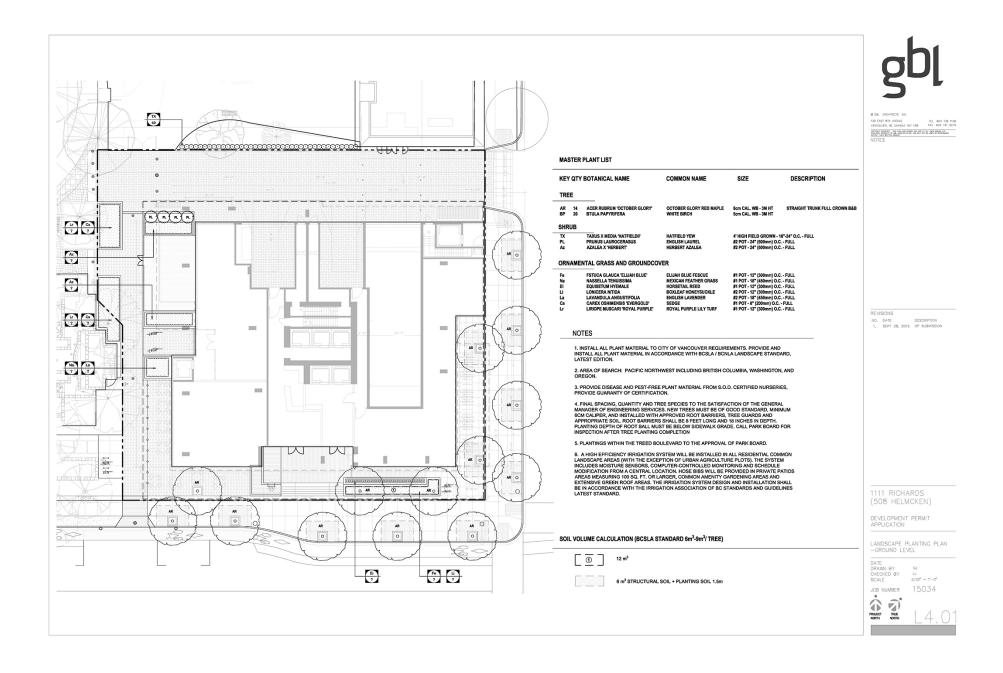
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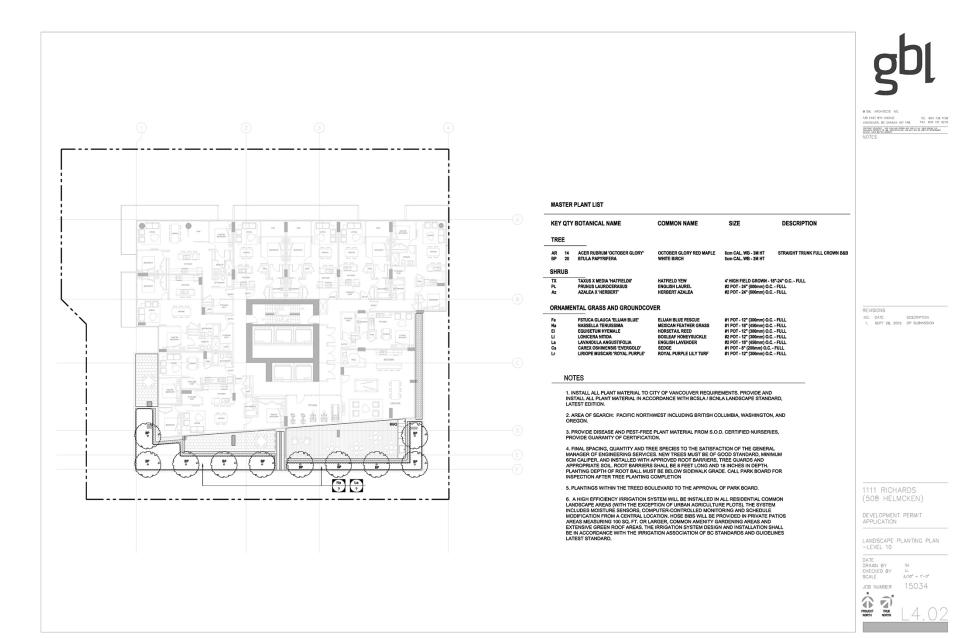
DEVELOPMENT PERMIT APPLICATION

LANDSCAPE LAYOUT PLAN
-LEVEL 34

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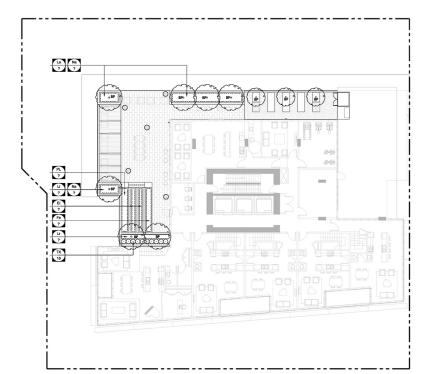








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KEY QTY BOTANICAL NAME			COMMON NAME	SIZE	DESCRIPTION
TREE					
AR BP	14 20	ACER RUBRUM 'OCTOBER GLORY' BTULA PAPYRIFERA	OCTOBER GLORY RED MAPLE WHITE BIRCH	8cm CAL. WB - 3M HT 5cm CAL. WB - 3M HT	STRAIGHT TRUNK FULL CROWN B&E
SHR	UB				
TX	X TAXUS X MEDIA 'HATFIELDII'		HATFIELD YEW	4" HIGH FIELD GROWN - 18"-24" O.C FULL	
PL		PRUNUS LAUROCERASUS	ENGLISH LAUREL	#2 POT - 24" (600mm) O.C FULL	
Az	AZALEA X 'HERBERT'		HERBERT AZALEA	#2 POT - 24" (600mm) O.C FULL	
ORN	IAME	NTAL GRASS AND GROUNDCO	VER		
Fe		FSTUCA GLAUCA 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	#1 POT - 12" (300mm) O.	C FULL
		NASSELLA TENUISSIMA	MEXICAN FEATHER GRASS	#1 POT - 18" (450mm) O.	C FULL
Na		EQUISETUM HYEMALE	HORSETAIL REED	#1 POT - 12" (300mm) O.	CFULL
Na Ei		LONICERA NITIDA	BOXLEAF HONEYSUCKLE	#2 POT - 12" (300mm) O.	C FULL
El		LAVANDULA ANGUSTIFOLIA	ENGLISH LAVENDER	#2 POT - 18" (450mm) O.	G FULL
EI Li		LAVANDULA ANGUSTIFOLIA CAREX OSHIMENSIS 'EVERGOLD'	ENGLISH LAVENDER SEDGE	#1 POT - 8" (200mm) O.	

NOTES

- 1. INSTALL ALL PLANT MATERIAL TO CITY OF VANCOUVER REQUIREMENTS. PROVIDE AND INSTALL ALL PLANT MATERIAL IN ACCORDANCE WITH BCSLA / BCNLA LANDSCAPE STANDARD, LATEST EDITION.
- 2. AREA OF SEARCH: PACIFIC NORTHWEST INCLUDING BRITISH COLUMBIA, WASHINGTON, AND OREGON.
- 3. PROVIDE DISEASE AND PEST-FREE PLANT MATERIAL FROM S.O.D. CERTIFIED NURSERIES, PROVIDE GUARANTY OF CERTIFICATION.
- 4. FINAL SPACING, QUANTITY AND TREE SPECIES TO THE SATISFACTION OF THE GENERAL MANAGER OF ENGINEERING SERVICES. NEW TREES MUST BE OF GOOD STANDARD, MINIMUM GON CALIFER, AND INSTALLED WITH APPROVED ROOT BARRIERS, TREE GUARDS AND APPROPRIATE SOIL, ROOT BARRIERS SHALL BE 8 FEET LONG AND 18 INCHES IN DEPTH. PLANTING DEPTH OF ROOT BALL MUST BE BELOW SIDEWALK GRADE. CALL PARK BOARD FOR INSPECTION AFTER TREE PLANTING COMPLETION.
- 5. PLANTINGS WITHIN THE TREED BOULEVARD TO THE APPROVAL OF PARK BOARD.
- 6. A HIGH EFFICIENCY IRRIGATION SYSTEM WILL BE INSTALLED IN ALL RESIDENTIAL COMMON LANDSCAPE AREAS WITH THE EXCEPTION OF URBAN AGRICULTURE PLOTS, THE SYSTEM INCLUDES MIGHTHE SENDONS, COMPUTER CONTROLLED MONITORING AND SCHEDEN OF A COMPUTER CONTROLLED MONITORING AND SCHEDEN FOR A COMPUTER CONTROLLED MONITORING AND SCHEDEN FOR THIS AREAS MEASURING 109 SQ. FT. OR LARGER, COMMON AMENITY GARDENING AREAS AND EXTENSIVE GREEN ROOF AREAS. THE RIRIGATION SYSTEM DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE IRRIGATION ASSOCIATION OF BC STANDARDS AND GUIDELINES LATEST STANDARD.

REVISIONS

NO. DATE DESCRIPTION

1. SEPT 28, 2015 DP SUBMISSION

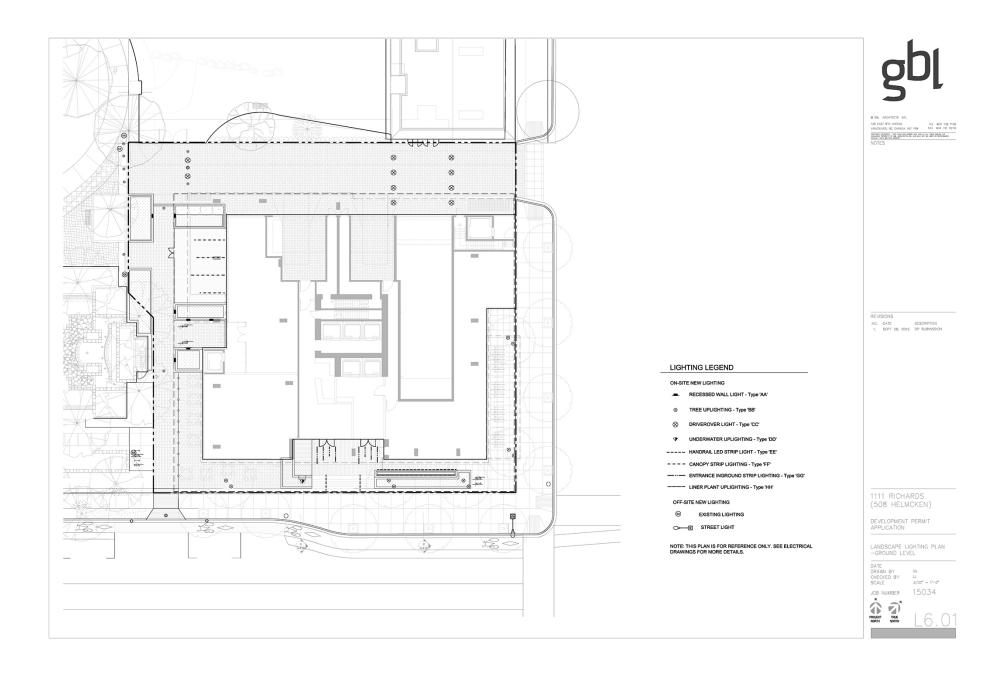
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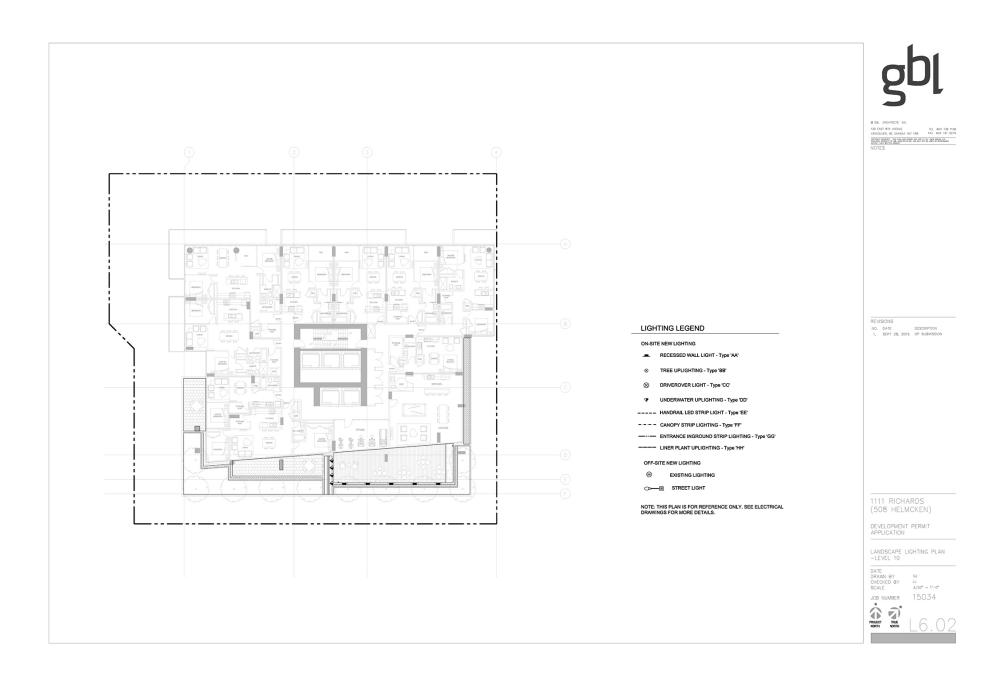
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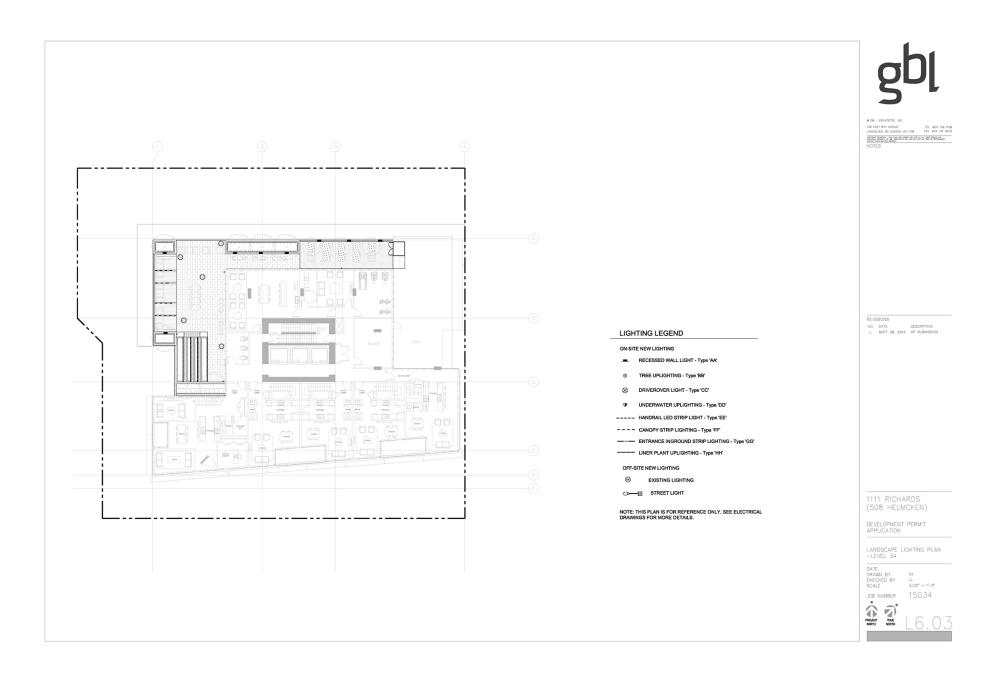
LANDSCAPE PLANTING PLAN
-LEVEL 34

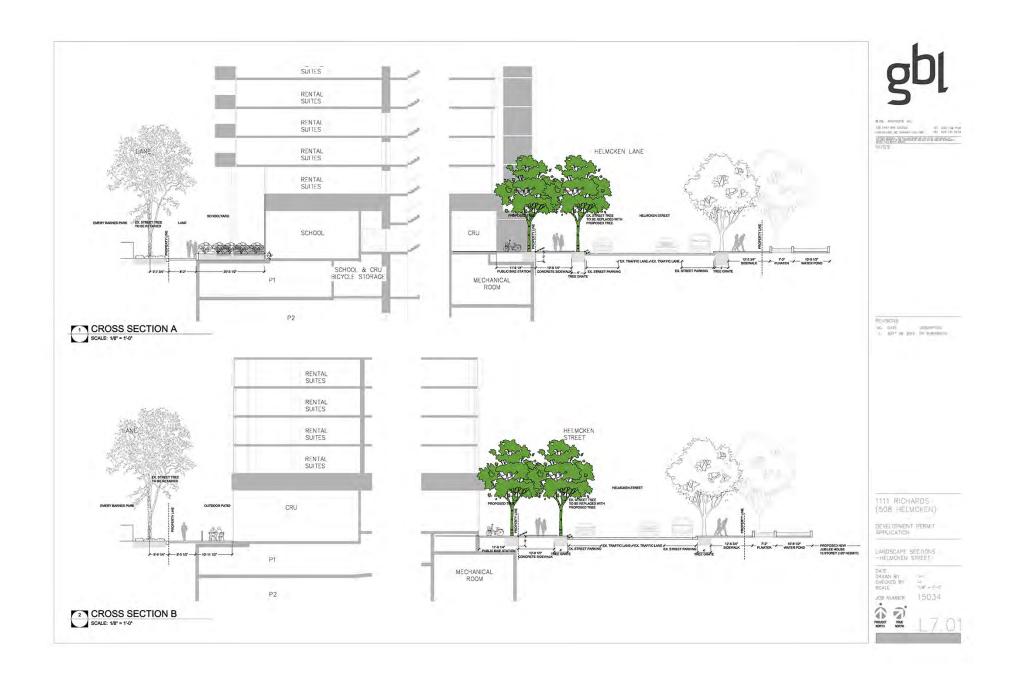
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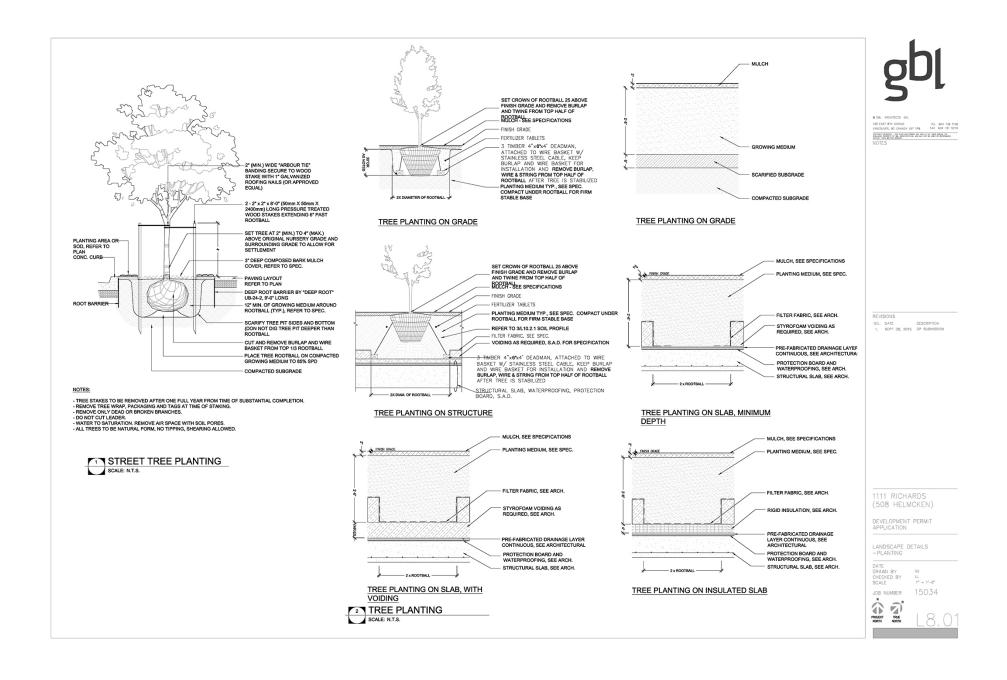


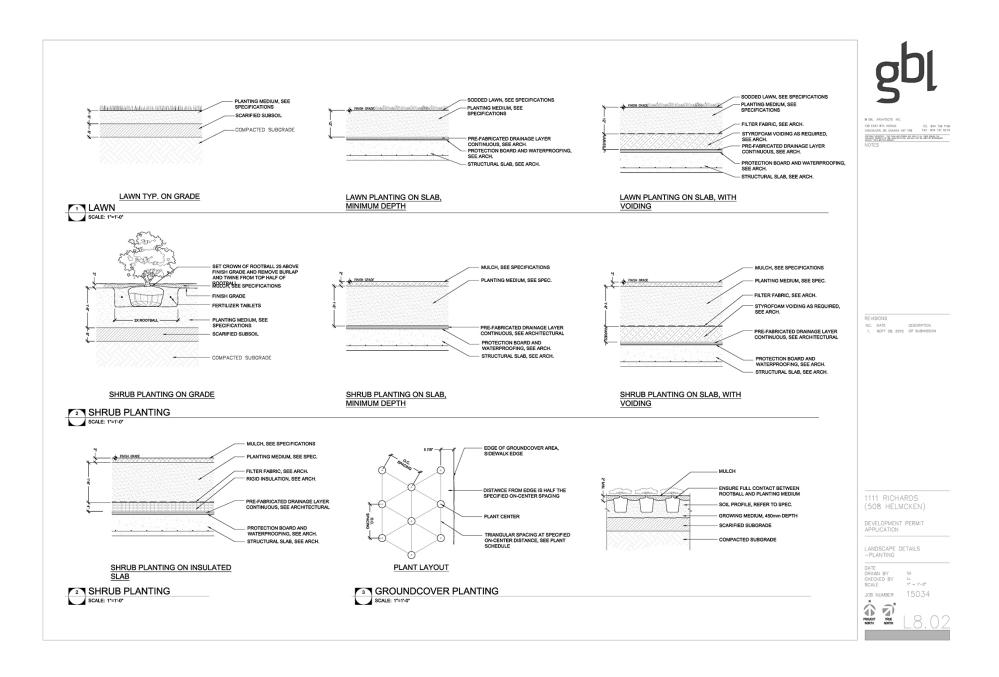


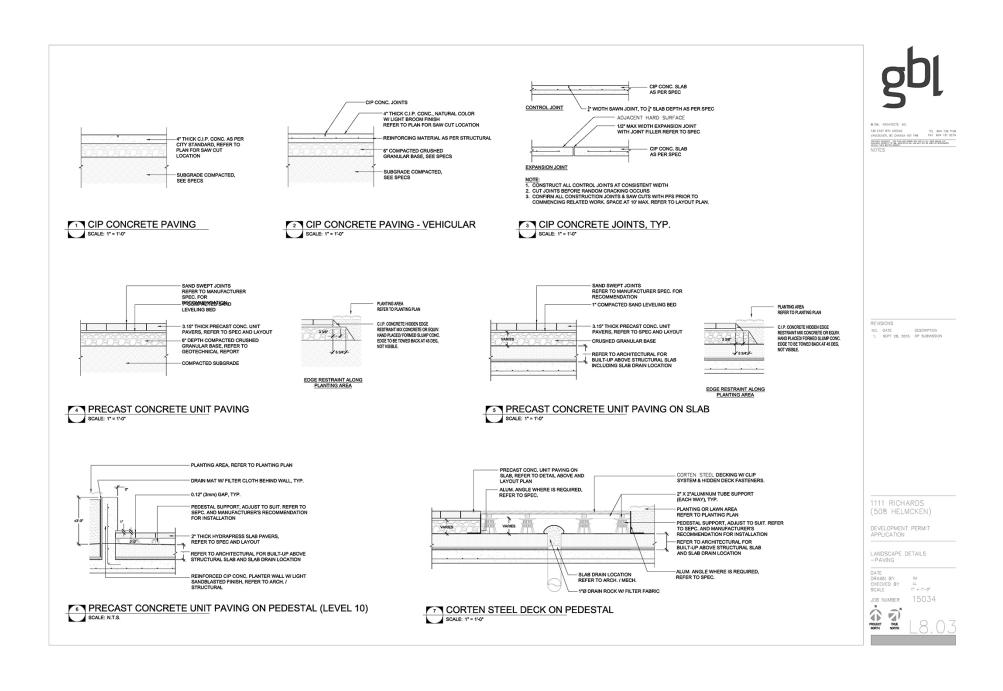


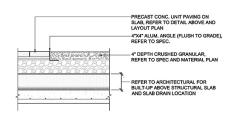






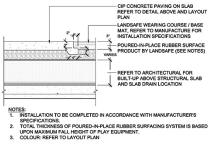




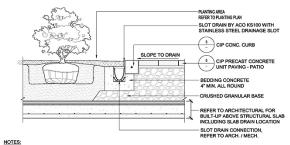


CRUSHED GRANULAR ON SLAB

SCALE: 1" = 1'-0"

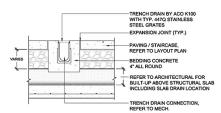


RUBBERIZED PLAYGROUND SURFACE SCALE: 1" = 1'-0"



- 1. SPECIFIC SITE CONDITIONS MAY REQUIRE AN INCREASE IN THE CONCRETE ENCASEMENT DIMENSIONS AND/OR SPECIFIC STEE CONTITIONS MAY REQUIRE AN INCREASE IN THE CONCRETE ENCASEMENT DIMENSIONS AND/OR
 REINFORCEMENT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CONCRETE ENCASEMENT SO DESIGNED
 FOR THE APPLICATION. A MINIMUM CONCRETE STEENITH OF ZSMPA IS RECOMMENDED. THE CONCRETE SHOULD BE
 VIBBATED TO LEMINATE AIR FORCETS. ENGINEERING ADVICE MAY BE REQUIRED.
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 THE PAYER COURSE ADJACENT TO THE BRICKSLOT MUST BE THILLY BONDED TO THE CONCRETE ENCASEMENT.





NOTES:

- A MINIMUM CONCRETE STRENGTH OF 25MPa IS RECOMMENDED FOR TRENCH DRAIN ONLY. THE CONCRETE SHOULD BE VIRRATED TO ELIMINATE AIR POCKETS.

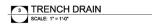
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 EXPANSION AND CRACK CONTROL JOINTS ARE RECOMMENDED TO PROTECT THE CHANNEL AND THE CONCRETE SURROWNO.

 CHANNEL AND THE CONCRETE SURROWNO.

 THE CRATECT DRENCH DRAINGE SYSTEM SHALL BE ACO KLASSIKDRAIN K100 SYSTEM AS MANUFACTURED BY ACO POLYCRETE PTY LTD.

 MANUFACTURED BY ACO POLYCRETE PTY LTD.





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REVISIONS

1111 RICHARDS (508 HELMCKEN)

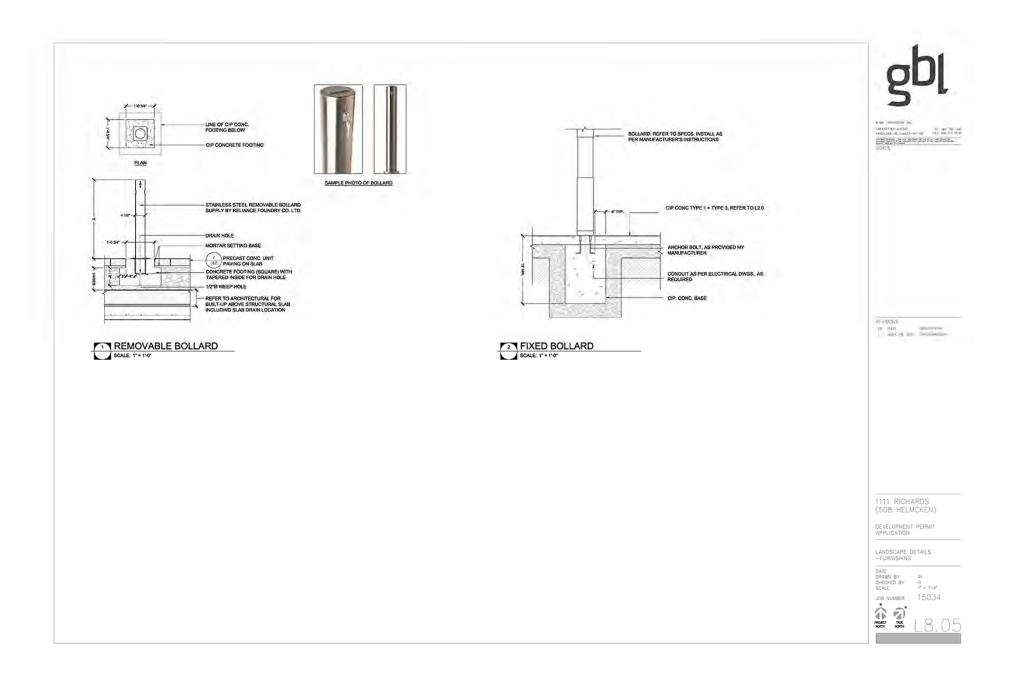
DEVELOPMENT PERMIT APPLICATION

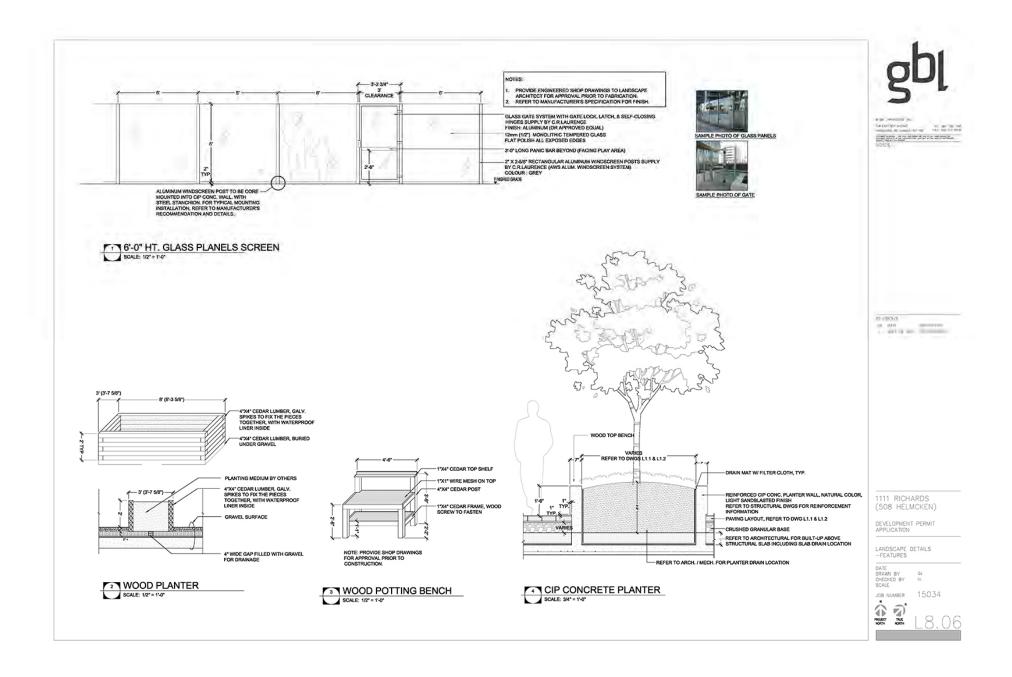
LANDSCAPE DETAILS -PAVING

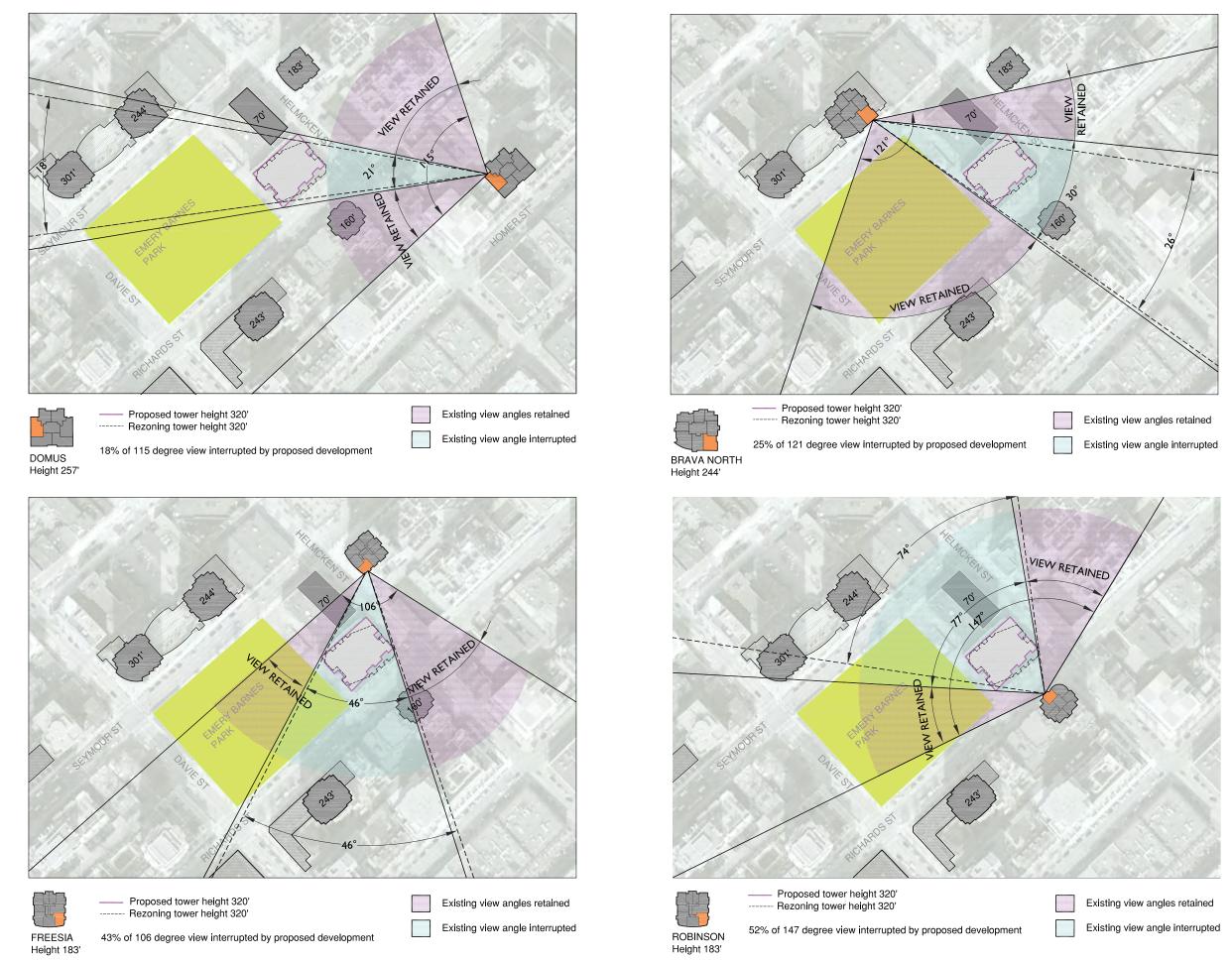
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Appendix E - Page 1 of 2









Appendix F - Page 1 of 1

1111 RICHARDS (508 HELMCKEN) DESIGN RATIONALE

SITE CONTEXT

The site is located at the western corner of Richards and Helmcken Street – positioned at the convergence of three surrounding contextual zones. EMERY BARNES PARK flanks the western edge of the site, providing a large public green space and unobstructed views to the site from Davie Street. The URBAN GRID of Helmcken and Richards streets front the southern and eastern edges of the site, distinguished by the Richards Bike Lane, future Helmcken Greenway, and the neighbouring eight storey heritage Brookland Court. On a larger scale, the surrounding YALETOWN SKYLINE provides a variety of architectural styles and residential tower expressions. Establishing a building form and character that appropriately responds to all three of these unique contexts is the foundation of the proposed tower's conceptual design.

BUILDING MASSING

Starting with the approved rezoning massing, the building concept has been reevaluated from its most basic form. By taking into consideration comments from the City staff, public, and previous Urban Design Panel, we were able to establish a massing concept that is much more responsive to the surrounding context and presents the density on this site in a scaled-down, finer texture.

The most basic gesture of this approach was to visually bisect the tower with a recessed spine. From there, we bumped out the base to emphasize a volume at a similar scale to the neighbouring Brookland Court. An undercut is then provided between the tower and base to further the distinction between the two. The volume closest to the park is stepped down two storeys to reduce the height along the park edge. This results in three volumes that can each take on a distinct character in response to the context that is shaping it.

PROPORTION & ARTICULATION

The three volumes are further scaled through a consistent proportion of eight storeys that is derived from the height of Brookland Court, maintaining a consistent scale throughout the entire building composition. Each volume is uniquely modulated in response to one of the three contextual zones.

The URBAN BASE is eight storeys in height to match Brookland Court. The main façade consists of glazing and stone panels, while an outer screen of vertical aluminum fins creates a volume that feels more uniformly solid - particularly when

viewed from the street at oblique angles. The rhythm of fins is shifted at levels five and eight, aligning with the midpoint of the window bays and cornice line in Brookland Court.

The PARK TOWER is 32 storeys of dwellings wrapped in balconies to provide large private outdoor space directly adjacent to public park. At the base of this volume, a Montessori School projects out – providing an active edge with children during the day and serving as a backlit "lantern" along the park edge in the evening. The balconies are broken into four modules of eight. The bottom module has the smallest amount of balcony frontage to minimize overlook to the adjacent building. Each module progressively increases going up, as the views increase and overlook issues decrease.

Finally, the YALETOWN TOWER – at 24 storeys – sits above the base and projects up to the underside of the view cone. It is clad in thermally superior curtain wall glazing and shrouded in a diamond patterned solar lattice. The diamond shape provides for uniform shading going from the southeast to southwest facades and gives this volume a unique identity as it relates to the vertical expression of the Urban Base and horizontal expression of the Park Tower. The eight storey module is continued here by repeating the diamond pattern three times over the 24 storeys.

LANDSCAPE

Design Intent

The landscape for 508 Helmcken is intended to:

- Integrate with the design guidelines for the streetscapes of Downtown South
- Maintain pedestrian, cyclist, and Park board service vehicle access to Emery Barnes Park
- Provide an attractive, well designed interface to Emery Barnes Park to the west,
 south and east of the new building that can be used by pedestrians and cyclists
- Retain all existing trees and landscape in Emery Barnes Park and introduce a landscape screen between the dog off-leash area and the mews along the east side of the new building
- Provide a buffer between the Montessori Preschool's outdoor playspace and Emery Barnes Park while ensuring easy access for preschoolers into the park to use its playground and other facilities.

Helmcken Streetscape

The Helmcken streetscape responds to the guidelines for Downtown South with a double row of red maple trees to match the proposed new street trees on the north side of the block. All street trees will be newly planted to achieve the intended double row canopy. Trees will be planted in the Downtown South grates and surrounding details within a poured concrete sidewalk. Space has been allocated for a full bike station on the development site within a building setback to avoid conflicts with movement on the public sidewalk.

Richards Streetscape

The Richards streetscape also conforms to the Downtown South guidelines with a double row of newly planted red maple trees. The adjacent entries to the market and rental apartments are located on a deck a few steps up from the street and flanked on both sides by water features and planters. A ramp access is provided from the corner. The southern of the two water features also provides an access and acoustic buffer to the outdoor eating terrace of the restaurant that occupies the southwest corner of the building. The activity on the eating terrace provides animation and interest along both Richards Street and the access route along the south side of the building.

Southside Interface to the Park

The south edge of the development site is a service lane paved with concrete pavers that also form the surface of the outdoor eating patio for the restaurant. The east section of the service lane is configured to maintain access for the Vancouver Park Board to a small pump building within the park with a moveable bollard to prevent use by other vehicles.

West of the park maintenance access the service lane is designed for pedestrian access to the park for building residents and for the Montessori Preschool. The preschool will have a covered and fenced outdoor playspace next to its indoor facilities with a gated access from the lane.

Westside Mews

The eastern edge of the development site is a paved mews featuring a herringbone pattern in a lively mix of concrete colours. The mews functions for access by vehicles to the underground parking entrance near Helmcken Street and two loading bays to

the south. It also will be shared with pedestrians, cyclists, garbage trucks, park service vehicles, and Handy Dart service for Brookland Court.

Level 10 Outdoor Amenity Space

An outdoor area on Level 10 provides an outdoor deck next to the amenity space for rental tenants. A row of trees wraps around these outdoor spaces as a feature of the building façade at Level 10. The amenity space deck is on the north half of this roof area. It is designed with corten steel paving, moveable outdoor tables and chairs, and a barbeque. The trees are planted within a strip of planter around the outer edges. A water feature is designed to mediate between the amenity deck and the adjacent patio as a visual and acoustic buffer.

Level 34 Outdoor Amenity Space

A roof deck on Level 34 serves the residents of the market units with an outdoor deck next to their indoor amenity space. Furnishings and a partial glass canopy provide for outdoor eating and lounging. Raised beds for urban agriculture are also available for the use of residents. Views from this outdoor amenity to the Emery Park and north mountain are maintained.

Nighttime Lighting Concept

The lighting concept offers a number of features to provide visual interest and assist wayfinding at night, including:

- Uplighting of the street trees that are located on private property
- Recessed lights in the handrails, retaining walls, and ground plane around the entrances to the building
- Underwater lighting within the water features
- Lighting within the canopy over the preschool playspace
- Recessed lights designed to be driven over within the paving of the mews to alert users to the location of the underground parking ramp and the intersection with the east-west service lane.

On the upper decks, lighting is used to illuminate the central water feature on Level 10. Recessed wall lights, uplighting of the building walls, and lights within the overhead canopy on Level 34 are used to delineate the edges of the amenity decks and provide ambient lighting for night use.

508 Helmcken Conditions of Approval

Urban Design Tower

 Design development to accommodate the Downtown South public realm setbacks and hard and soft landscape treatment, extending at least 16.8 m (55 ft.) from the corner of Richards Street.

Note to applicant: Intent is to provide room for the characteristic street interface for this neighbourhood, which includes a double row of street trees, and to ensure sufficient pedestrian-oriented space on both sides of this significant location on the intersection of two bikeways and two vehicle roadways. See also Landscape conditions regarding a more active character for the exterior design. See Downtown South design guidelines.

RESPONSE: Building has been setback as noted. Double row of street trees shown in landscape plans.

2. Design development to the upper portion of the tower to enhance its architectural contribution to the city skyline, and to visually distinguish the uppermost floors from the rest of the building.

Note to applicant: As this proposal is designed to just under the view cone line, the top of the tower will be readily visible from distant locations. Further design development should consider reducing the height of some portions of the perimeter to be notably lower than others, by setting back or terracing the upper floors, or some combination thereof. Consideration should be given to massing changes that will also reduce the length of shadowing and the apparent height as seen from the park. Note that service equipment including window washing apparatus, cell towers or antennae cannot extend into the view cone.

RESPONSE: Tower massing has been re-designed with extra consideration given to step the top. The tower face fronting Richards is 35 storeys while the tower face fronting the park drops down to 33 storeys.

 Design development to reduce the apparent visual mass of the tower through exterior design, composition, and finishes.

Note to applicant: Consider the use of graduated changes to balconies, colours and materials in the vertical axis, or similar visual effects to support the vertical massing elements proposed and to reduce the apparent size of the floor plates.

RESPONSE: The building concept has been completely revised and now proposes a "three building scheme." Each building responds separately to the three unique site contexts - Emery Barnes Park, the urban grid and public realm, and the Yaletown skyline. The overall building composition integrates these three elements to create a much more layered and rich massing.

 Consideration to locate residents' bulk storage below grade, to limit the size of the tower.

Base

 Provision of commercial space on grade on Richards Street and facing onto Emery Barnes Park.

Note to applicant: Intent is to create a more active space that can serve the general public, and to maximize the opportunity of this corner that is unique in terms of sunlight and expected pedestrian traffic. This can be accomplished by replacing the proposed townhouses on Richards Street with commercial retail space. The commercial space should be designed to accommodate food service or a small restaurant, with provision for outdoor patio space on the site.

RESPONSE: Commercial space has been provided at grade, fronting Helmcken, Richards, and the park. Patio space provided along park edge.

 Substantial reduction in the amount of private entrance and lobby space occupying the building along the ground floor, especially at the intersection of Richards and Helmcken streets.

Note to applicant: Intent is to limit the amount of passive circulation space located adjacent to the public realm interface, to allow more active uses to face the sidewalk.

RESPONSE: There are now separate lobbies for the market and rental directly adjacent to each other and fronting Richards Street. This allows for a more compact lobby area and opens up the corner of Richards and Helmcken for commercial use.

7. Design development to provide variety and interest to the architectural expression of the building with high quality durable materials that will contribute to the character and quality of the area.

Note to applicant: A high quality development that establishes a robust compatible character with the existing neighbourhood fabric is sought.

RESPONSE: The building concept has been completely revised and now proposes a "three building scheme." Each building responds separately to the three unique site contexts - Emery Barnes Park, the urban grid and public realm, and the Yaletown skyline. The overall building composition integrates these three elements to create a much more layered and rich massing.

8. Design development to the ground-oriented storefront, display and weather protection to ensure variety and pedestrian interest in the expression of tenancies along the street frontages.

Note to applicant: Continuous weather protection should be provided.

RESPONSE: Continuous canopy shown along commercial and lobby

frontages. The restaurant and retail store frontages feature a prominently glazed envelope that will allow future tenants to create a unique frontage and identity.

9. Provision of a signage strategy to ensure a well-conceived approach to announcing the various tenancies.

Note to applicant: Strategy should confirm signage hierarchy, location and type in a separate package from the drawing set, provided for reference. Back-lit box signs are not supported. The strategy should demonstrate a fine-grained and creative approach that reflects this unique location.

RESPONSE: Coordination is on-going with a public art consultant and future tenants to fully integrate the signage, canopies, and public art features along the ground floor frontages. A separate package will be submitted with further development of these details.

Sustainability

10. Identification on the plans and elevations of the built elements contributing to the building's sustainability performance as required by the Green Buildings Policy for Rezonings, including at a minimum 63 points in the LEED® rating system, 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.

RESPONSE: Sustainability features have been noted. Separate sheet included with more elaborate sustainability rationale and updated LEED checklist.

Crime Prevention Through Environmental Design (CPTED)

- 11. Design development to respond to CPTED principles, having particular regards for:
 - (a) theft in the underground parking;
 - (b) residential 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.

RESPONSE: Car share, CRU, and daycare stalls have been located at P1 and P2 with a separate secured access to the residential parking below. All elevator lobbies will be secured with high visibility. Market and rental mailboxes are set away from the main entry while highly visible to traffic to and from elevators. The ground level in particular has been kept as open and simple as possible to enhance sightlines and clearly delineate public from private.

Landscape

12. Design development to Helmcken Street and Richards Street to provide a high quality public realm that includes the Downtown South/ New Yaletown design standards and a double row of street trees at grade (applicable to building setback portions only).

Note to applicant: The water feature, as proposed, should be deleted. The underground slab at or near the property lines to angle down to provide contiguous soil volumes for the inside row of trees or landscaping on private property.

RESPONSE (PFS): The water feature at the corner of Helmcken Street and Richards Street has been deleted. Underground slab has been stepped down to provide contiguous soil volumes for the inside row of trees and landscape. Water feature at Richards lobby entrance was provided to enhance entry and create a high quality public realm. See landscape plan L1.01 and sections L7.02.

13. Further design development to the south and west side of the building (at grade) to respond to the anticipated programming opportunities, the park context, circulation, ownership and demarcation of property lines.

Note to applicant: In addition to activities associated with the site, the west lane and possibly a portion of the south edge should be open and accessible for pedestrians on- and off-site, including circulation to and from the park to the adjoining street. For the northern portion of the west lane, pedestrian safety and traffic calming measures need to be considered. The relationship to the park requires improvement. The area south of the bollards in the west lane and the connections to the park should be pedestrian oriented, enhanced with special paving, layered planting and trees. The south side perimeter should be pedestrian oriented and relate to the specific programming of the adjacent uses, including the school. There is an opportunity for café seating and a patio that takes advantage of the adjacent park amenity. Careful attention will be needed to ensure that the overall approach to edge definition between the public park, Richards Street and private property is consistent with the intended use while clearly demarcating ownership. Incorporate additional planting where circulation is not necessary. Landscape materials should be informed by, and compliment, the park. Provision of enlarged details and a maintenance plan to ensure the success of the proposed trees shown on the high rise balconies.

Note to Applicant: While the provision of permanent landscaping on patios and planters is supported, there are concerns about the limitations of soil volume related to the size of planters and lack of

access to the patios for periodic maintenance. Further details of the proposal need to be provided.

RESPONSE (PFS): Requirements have been met. The west lane and south lane were designed to be open and accessible for park users. Based on the on-site meeting with City staffs, Fixed and movable bollards were located carefully to allow Park maintenance truck to access and temporarily park at the south end of the west lane and east end of the south lane adjacent to the pump room. A safe access protected by two fixed bollards connects the schoolyard to the park to take advantage of the park amenity. Park interface is defined by the special paving and additional planting. The restaurant's outdoor patio is defined by rail and small planters at the south side to ensure Park vehicle can access the pump room anytime. See L.c diagram plan.

14. Provision of enlarged details and a maintenance plan to ensure the success of the proposed trees shown on the high rise balconies.

Note to Applicant: While the provision of permanent landscaping on patios and planters is supported, there are concerns about the limitations of soil volume related to the size of planters and lack of access to the patios for periodic maintenance. Further details of the proposal need to be provided.

RESPONSE (PFS): The proposed trees located on the high rise private units' balconies on the rezoning application drawings have been removed. Only level 10 and level 34 amenity levels have trees planted in planter. There is no maintenance access issue. Enlarged details are provided in the drawing set. See L1.02, L1.03 and L8.05.

15. Site utilities and vents to be located on private property and integrated discreetly into the building, avoiding landscaped and common areas.

RESPONSE (PFS): Vents and site utilities have been located on the west lane to avoid impacts to landscaped and common areas. See landscape plan L.01.

- 16. At time of development permit application, the following:
 - (a) Provision of a detailed Landscape Plan illustrating soft and hard landscape treatment.

Note to applicant: The Landscape plan should include a planting plan listing common and botanical name, size and quantity of all existing/ proposed plant material. Plant material should be clearly illustrated on the Landscape Plan and keyed to the Plant List. Illustrate and clarify all outdoor surface/paving materials, site furniture, bicycle racks, lighting, trash receptacles, hose bibs, signs, retaining wall treatment, anti-skateboard guards (where applicable), parking vents, at-grade utilities, and public realm (building edge to the curb, street trees, lamp posts, fire hydrants, sidewalk treatment).

RESPONSE (PFS): See landscape planting plans L4.01-4.03, material plan L1.01-1.03 and lighting plans L6.01-6.03.

(b) Provision of a Tree Plan, including a strategy to retain/protect existing street trees and trees in the park.

Note to applicant: On busy commercial streets, site security fencing and construction staging may serve as tree protection. Existing street trees should be retained within the public realm. In the event that street trees require removal, new street trees must be provided. Contact Eileen Curran, Streets Engineering (604.871.6131) and Park Board (604.257.8587) for street tree information. New street tree planting should include 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 6cm caliper, and installed with approved root barriers, tree guards and appropriate soil. Root barriers shall be 8 feet long and 18 inches in depth. Planting depth of root ball must be below sidewalk grade. Call Park Board for inspection after tree planting completion".

RESPONSE (PFS): See Landscape Demolition plan L0.1, arborist's report and tree management plan. New street trees were proposed to replace the existing street trees based on the arborist's report. The required notation has been added to the planting plan L4.01-4.03.

(c) Provision of large-scale sections [typical] through the landscaped areas, including the ground-oriented residential interface, the slab-patio-planter relationship, the double row of street trees, the lane interface, common areas and upper storey planters.

Note to applicant: The sections should include the planter materials, tree canopy, tree stem, outline of the root ball, voiding, built up membrane and dimensions.

RESPONSE (PFS): The proposed ground-oriented residential units shown on the rezoning plan have been deleted. The sections for the street interface and the lane interface are on L7.01-7.02. The planting and planter details are on L8.01-8.05.

(d) Provision of spot elevations to all outdoor areas (including top/ bottom walls), including off-site context spot elevations in proximity (such as the park, public sidewalks, inner boulevards and lanes).

RESPONSE (PFS): Spot elevations are provided to all outdoor areas. See grading plan L3.01-L3.03.

17. Provision of adequate soil volumes and depths for planting on slabs and in planters.

Note to applicant: To ensure the long term viability of planting in non-continuous growing medium, soil depths must meet or exceed BCLNA planting standards. At the edges, new slabs should angle down to provide deeper soils.

RESPONSE (PFS): Underground slab has been stepped down to

provide contiguous soil volumes for the inside row of trees and landscape. The volume of planting medium has been calculated to meet BCSLA/BCLNA recommended soil volume. See 17.01-7.02 for sections and L4.01 for soil volume calculation.

18. Provision of an efficient irrigation system for all common outdoor planters (existing and new) and individual hose bibs to be provided for all patios of m 9.3 m² (100 sq. ft.) or greater in size. Specification notes and irrigation symbols to should be added to the drawing.

RESPONSE (PFS): Hose bibs have been added to the Level 10 and 34 plans, see L1.02-1.03. An irrigation note has been added to the planting plan L4.01-4.03.

Engineering

19. Compliance with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services.

Note to applicant: The following items are required to meet provisions of the Parking By-law and the Parking and Loading Design Supplement:

- (a) Provision of an Operations and Passenger Loading Management Plan, to the satisfaction of the Director of Planning in consultation with the General Manager of Engineering Services, from the operator of the proposed Montessori School which addresses but is not limited to how and where school children will be picked up and dropped off, where parents arriving by bike will unload their children including designated school drop-off spaces and expected pick up and drop off times.
- (b) Provision of on-site passenger loading spaces for use by the Montessori School, to the satisfaction of the General Manager of Engineering Services.

Note to Applicant: Consideration should be given to the provision of wider passenger loading spaces to facilitate faster and easier vehicle manoeuvring into and out of the space and reduced delays for residents who must drive past these spaces to exit.

RESPONSE: 8 pick-up/drop-off spaces for the Montessori school have been provided directly adjacent to the elevator on P2.

- (c) The following are related to the parking ramp:
 - i. Provide design elevations on both sides of the parking ramp at all break points and clarification of the length of ramp at the specified slope.

RESPONSE: Slopes and dimensions are shown.

ii. Modify the parking entry ramp, to the satisfaction of the General Manager of Engineering Services, to provide adequate space for independent vehicle access to and from the parking ramp into the lane.

Note to Applicant: A corner-cut for the outbound vehicle will be required. Please clearly show turning swaths of vehicles indicating independent two-way access.

RESPONSE: Ramp has been re-designed to allow for adequate maneuvering space.

iii. Provision of overhead doors at the rear of each loading space to ensure ease of furniture or goods movement particularly for the northerly loading space.

Note to applicant: Consideration to provide additional height and depth for the loading spaces beyond by-law obligations to accommodate SU9 vehicles is recommended.

RESPONSE: Loading has been re-designed to provide more direct access with oversized doors to both the market and rental lobbies.

iv. Provision of 2.7 m x 2.7 m (approximately 9 ft. X 9 ft.) corner cuts to enable unimpeded movement of two vehicles to pass one another through right angled turns in the parkade where 200 or more vehicles are served.

RESPONSE: 9 ft. x 9ft. corner cuts provided at P1 and P2 prior to entering secure residential parking.

v. Clarify the proposed Class A bicycle spaces for the school and clearly identify them as being for the school and ensure they are located on the P1 parking level.

RESPONSE: Separate bicycle storage rooms have been provided for the CRU and Montessori school at P1.

- (d) The following comments are related to the operation of the closed lane and are intended to ensure the closed portion of lane provides the operational needs of all users.
 - i. Provide an appropriate number and type of bollards located to allow convenient pedestrian and cycling access through the bollards while limiting vehicular access to only those permitted beyond them. Note that the bollards should be located further south to ensure access to and from the loading bays. Please show turning swaths for vehicles using the loading bays.

RESPONSE: Six fixed telescoping bollards have been provided between west lane to the pump station to ensure the safe access to the park. Two movable bollards (one at west lane and one at Richards Street) are provided for the maintenance vehicle access from west lane and Richards Street. See L.b site plan.

ii. Provide detailed technical information about the proposed telescoping bollards in the lane and make arrangements to the satisfaction of the General Manager of Engineering Services and Director of Legal Services for their maintenance, repair and operation.

Note to applicant: Provide clarification on how the bollards will function, i.e., are they intended to be operated manually? The provision of lockable flip-down and/or removable bollards may be required as telescoping bollards may impact underground utilities.

RESPONSE: Telescoping removable bollards with locks have been provided. See landscape detail drawings L8.04.

iii. Redesign of the on-site garbage room is required; access is not possible as shown.

Note to applicant: Please provide written confirmation that a waste hauler can access and pick up from the garbage storage location. Pick up operations should not rely on bins being stored on the street or lane for pick up; bins are to be returned to storage areas immediately after emptying.

RESPONSE: Garbage room has been re-located on P1 for easier access. Garbage holding area provided along lane.

(e) The following note is to be placed on the landscape and site plans: This plan is Not For Construction of any public property facilities. A minimum of 8 weeks prior to the start of any construction on public property a landscape plan must be submitted to Engineering Services for review. No work on public property may begin until such 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.

RESPONSE: Note has been placed on the landscape and site plans L1.01.

- (f) Requirements regarding the proposed sub-ground parking structures below sewers infrastructure in the lane West of Richards are as follows:
 - No sewer pipes should sit directly on top of the parking structure roof.
 - ii. There must be suitable protection in the roof structure to ensure that groundwater from the trench zone (or from leaky pipe joints) does not penetrate the roof.
 - iii. The pipe(s) must also be located in suitable aggregate backfill with adequate clearance between pipe and roof to allow the City to safely excavate and replace/repair in the future without undue risk of damaging the roof. The minimum adequate clearance is 300 mm from the outside bell invert of the lowest pipe to the nearest development structural boundary. Provision of a sacrificial concrete slab is recommended between the parkade structure and

the utilities.

RESPONSE: Acknowledged by design team.

Social Infrastructure

 Design development to ensure that a minimum of 25 percent of the proposed rental units be designed to be suitable for families with children.

RESPONSE: 42 out of 110 (38%) rental units are two and three bedroom.

21. Design development of the second-floor indoor amenity room to include a kitchenette and storage space, and accessible WC with change table.

RESPONSE: Amenity spaces have been re-located to level 10 for rental and level 34 for market. Both areas incorporate kitchenette and an accessible WC with change table.

22. Design development of outdoor amenity at rooftop level to include shared garden plots, tool storage, a potting bench, a compost bin for yard waste, and hose-bib.

RESPONSE: Required amenities have been provided at rooftop level, see L1.03 and detail L8.05.