



**To:** Development Permit Panel

**Date:** January 28, 2014

**From:** Wayne Craig  
Director of Development

**File:** DP 13-645286

**Re:** Application by Andrew Cheung Architects Inc. on behalf of 684267 B.C. Ltd for a  
Development Permit at 8151 Anderson Road

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### Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a fifteen (15) storey high-rise building and a six (6) storey mid-rise building to create approximately 111 units, and ground level commercial units at 8151 Anderson Road on a site zoned "Downtown Commercial (CDT1)";
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce the residential parking rate from the standard City wide parking rate to the City Centre Zone 1 parking rate.

  
Wayne Craig  
Director of Development

WC:dn

## Staff Report

### Origin

Andrew Cheung Architects Inc., on behalf of 684267 B.C. Ltd., has applied to the City of Richmond for permission to develop approximately 111 units in a fifteen (15) storey high-rise building and a six (6) storey mid-rise building, as well as ground level commercial units at 8151 Anderson Road on a site zoned "Downtown Commercial (CDT1)". The proposal will also provide eight (8) units that will be secured as affordable housing with a Housing Agreement. The site is currently developed as a low rise commercial building with surface parking and vehicle access to the site via both Anderson Road and Buswell Street.

There is no rezoning associated with the development proposal. The applicant proposes to develop the site in accordance with the site's CDT1 zoning and Urban Core T6 (45m) designation in the City Centre Area Plan (CCAP).

A Servicing Agreement (SA) is required and is discussed in detail in Attachment 6. The scope of the SA includes upgrading the watermain along Anderson Road, extending, upgrading and reconnecting the storm sewer, and either proportionately contributing to a City Capital Project to construct a new gravity sanitary system for the catchment area or undertaking associated works.

### Surrounding Development

The subject site is in the Brighthouse Village in an area designated for high-density, high-rise commercial and mixed-use development under the City Centre Area Plan (CCAP) (Attachment 2). Development surrounding the subject site is as follows:

To the north, a mixed multiple-family residential and commercial high-rise ("Nova") that includes retail along Park Road, and four (4) two-level townhouse units fronting Buswell Street with a layout that supports live/work uses. The site is zoned "Downtown Commercial (CDT1) and designated Urban Core T6 in the CCAP (Brighthouse Village);

To the east, Buswell Street and an existing low-rise multi-family rental complex that consists of four (4) buildings ("Dolphin Square"). The site is zoned "Land Use Contract (LUC) 73" and designated Urban Centre T5 and Park in the CCAP (Brighthouse Village);

To the south, Anderson Road and an existing Petro Canada gas station. The site is zoned "Gas & Service Station Commercial (ZC18) Brighthouse Village (City Centre)" and designated Urban Core T6 in the CCAP (Brighthouse Village); and

To the west, a high-rise residential tower with commercial use along the Anderson Road frontage ("Anderson Building"). The site is zoned "Downtown Commercial (CDT1)" and designated Urban Core T6 in the CCAP (Brighthouse Village).

### Development Information

The proposed development site is located in the Brighthouse Village area of the City Centre (Attachment 2). It abuts Anderson Road to the south, Buswell Street to the east, a city lane to the north and private property to the west. The site is currently developed with a low rise

commercial plaza and associated surface parking with access from both Anderson Road and Buswell Street.

The proposed building integrates a three-storey podium with ground-level commercial space and two levels of screened parking; a three-storey residential volume that intersects the podium and runs parallel to Buswell Street; and a two to twelve-storey stepped tower volume that also intersects the podium but runs perpendicular to Buswell Street.

Pedestrian access is provided to the commercial spaces from both street frontages and to the residential lobby from Buswell Street. Access to the parking, loading and garbage/recycling facilities is provided from the lane. Common outdoor amenity space for the residents is provided at the fourth level, on the southwest portion of the podium adjacent to Anderson Road. Common indoor amenity space is also provided on the fourth level, with direct access to the outdoor amenity space.

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

### **Related Policies and Bylaws**

The applicant is required to comply with City bylaws and policies, including the following. With the exception of the variance noted below, the application complies with the Richmond Zoning Bylaw. In applicable cases, the terms are articulated in the Development Permit Considerations (Attachment 6):

- OCP
- CCAP
- OCP Sustainability Policy
- OCP Crime Prevention Through Environmental Design (CPTED)
- OCP Accessibility Policy
- Flood Plain Designation and Protection (Bylaw 8204)
- OCP Aircraft Noise Sensitive Development (ANSD) Policy
- Affordable Housing Strategy
- Public Art Program (Policy 8703)

### ***OCP/CCAP***

The site is designated “Downtown Mixed Use” in the OCP, which supports the proposed mixed residential and commercial use. The site is located within the Brighthouse Village Plan in an area designated for high-density, high-rise commercial and mixed-use development, which supports the use and density proposed by the subject application.

### ***OCP Sustainability***

- Through the process of design review, the applicant has proposed a site specific geo-exchange system that is supported by Engineering staff. Although other recent development in the City Centre have committed to connect to an existing or a future City Centre District Energy Utility (DEU), the proposed site specific system is supported based on the expected long time line associated with introduction of a City DEU to service this location within the City Centre.

- A ground source heat pump system is proposed, which would provide both heating and cooling that may be operated simultaneously for both the commercial and residential components of the building. Details of the proposed geo-exchange system are attached (Attachment 3).
- In accordance with the CCAP, the proposed development will be constructed to achieve LEED Silver equivalency. The applicant has provided a list of sustainability features that may be incorporated to ensure the development proposal achieves LEED Silver equivalency (Attachment 4). The list includes, but is not limited to the following:
  - On-site geothermal heat exchange facility;
  - Green roofs;
  - Minimum 20% locally sourced materials;
  - Minimum 10% recycled materials;
  - Low VOC emitting materials and low flow toilets, showers and lavatories;
  - Low-E coating of all exterior glazing;
  - Extension of slabs beyond the plane of glazing by 0.5 m (20”) on all sides of the proposed residential tower to minimize solar heat gain on the west and south elevations;
  - Metal panels and 51% perforated metal screens on the south and east façade of the parking podium facilitate natural light and ventilation into the parking garage;
  - LED luminaires with occupancy sensors within the parkade, and photocells to harvest daylight penetrating the perforated metal screen.; and
  - Electric charging plug-ins within enclosed bike rooms and for 20% of required parking stalls in accordance with the OCP.

### ***OCP Accessible Housing***

- The proposed development includes forty seven (47) single storey basic universal housing units that are designed to be easily renovated to accommodate a future resident in a wheelchair. Provided the units incorporate all of the accessibility provisions listed in the Basic Universal Housing Features section of the City’s Zoning Bylaw, a density exclusion of 1.86 m<sup>2</sup> (20 ft<sup>2</sup>) per unit is permitted and has been utilized in the project.
- All of the proposed units incorporate aging in place features to accommodate mobility constraints associated with aging. These features include:
  - stairwell hand rails;
  - lever-type handles for plumbing fixtures and door handles; and
  - solid blocking in washroom walls to facilitate future grab bar installation beside toilets, bathtubs and showers.
- The proposed development would provide barrier-free access to the commercial units, the residential lobby, and to the required indoor and outdoor amenity space.

### ***OCP Crime Prevention Through Environmental Design (CPTED)***

The development proposal incorporates a range of CPTED principles that include but are not limited to the following (Attachment 4):

- The parking structure and the residential lobby are designed to minimize alcoves and hidden corners, and are well illuminated. The interior of the parking structure would be painted white and elevator lobbies and vestibules include glazing in accordance with Building Code requirements;

- Visitor and commercial parking is separated from residential parking and secured with overhead gates;
- Commercial units are accessed both directly from the sidewalk and from a rear access service corridor to provide direct access to the parking and loading area; and
- The proposed site plan and the use of transparent building material at the ground level and between the indoor amenity and the outdoor amenity areas introduce opportunities for passive surveillance.

### ***Flood Management Implementation Strategy***

The development proposal is required to comply with the requirements of the Richmond Flood Plain Designation and Protection Bylaw 8204. In accordance with the Flood Management Strategy, a Flood Indemnity Restrictive Covenant is required prior to issuance of the Development Permit.

### ***OCP Aircraft Noise Sensitive Development (ANSD) Policy***

The subject site is located within an area that permits consideration of all aircraft noise sensitive land use types. However, as the site is affected by OCP Airport Noise Contours, the development is required to register a covenant prior to Development Permit issuance.

### ***Affordable Housing***

- The applicant has applied to take advantage of a provision in the CDT1 zone to increase permitted density from 3.0 FAR to 3.15 FAR by providing a minimum of 5% of the proposed residential floor area as affordable housing units. To secure affordable housing units within the proposed development, the applicant is required to enter into a Housing Agreement prior to issuance of the Development Permit. In order to enter into a Housing Agreement, the Local Government Act, Section 905, requires enactment of a bylaw by the City. A report will be drafted by the Affordable Housing Coordinator, with a bylaw and associated Housing Agreement attached.
- Out of the proposed 111 units, eight (8) units will be secured as affordable housing. The units will be located on the north side of the east-west oriented mid-rise building. The following units have been identified as affordable housing units and details are provided in Attachment 6:
  - Two (2) one bedroom units and one (1) one bedroom and den unit on both the fourth and fifth storey of the building; and
  - One (1) one bedroom unit and one (1) one bedroom and den unit on the sixth storey of the building.
- Typically, a mix of one and two bedroom units are secured for affordable housing within a development. However, in this case, Community Services staff support the typology, size and location of units proposed to be secured as affordable housing units based on consideration of:
  - The size of two bedroom units within the development, many of which are less than the minimum 80 m<sup>2</sup> (860 ft<sup>2</sup>) required by the Affordable Housing Strategy;
  - The size of the one bedroom units proposed to be secured as affordable housing units, which all exceed the minimum 50 m<sup>2</sup> (535 ft<sup>2</sup>) requirement; and
  - The provision of one bedroom and den units that will be rented at the rate applied to a one bedroom unit.

**Public Art**

- As a condition of development permit issuance, the applicant would voluntarily contribute approximately \$87,462.43 (\$0.77/ft<sup>2</sup> per residential buildable square foot, excluding affordable housing, and \$0.44/ft<sup>2</sup> per commercial buildable square foot) towards the City's public art reserve fund. The contribution would be allocated to administration and on-site installation of public art.
- The applicant has submitted a public art plan, which was considered and supported by the Public Art Committee on November 18, 2014. The parking podium façade, which is proposed to be covered in solid and perforated metal panels arranged in a barcode arrangement, has been identified as an opportunity for the integration of a variety of possible art mediums. The parking façade treatment stands on its own as a design element but is expected to be further enhanced with the addition of public art. The process of incorporating art into the parking podium façade will be undertaken in accordance with the Public Art Program (Policy 8703).

**Zoning Compliance/Variances** (staff comments in **bold**)

The applicant requests to vary the provisions of Richmond Zoning Bylaw 8500 to:

- 1) Reduce the residential parking rate from the standard City wide parking rate to the City Centre Zone 1 parking rate.

*(Staff support the proposed variance based on consideration of the subject site's location within the City Centre Zone 1 parking area and proximity to the Canada Line. Consistent with similar past approvals, Transportation staff support the variance subject to the applicant agreeing to:*

1. *Comply with the Affordable Housing Strategy and secure a minimum of five percent (5%) of the total residential floor area as affordable housing units; and*
2. *Provision of transportation improvements to the satisfaction of Transportation staff that contribute toward a transit-oriented environment. Provisions include:*
  - *\$50,000 voluntary contribution to the future upgrading of the Park Road and Buswell Street intersection to include full traffic signalization;*
  - *Upgrading the crosswalks at the Anderson Road and Buswell Street intersection with decorative stamped asphalt treatment to improve pedestrian visibility and safety;*
  - *Continuous weather protection along the street wall; and*
  - *Installation of a minimum of four (4) benches along the site's frontages as shown in the attached landscape plans.*

**Urban Design Response**

The proposed design concept is characterized as "intersecting building volumes" by the applicant and satisfactorily addresses the significant urban design issues identified during the Development Permit application review process. The proposal addresses the urban design objectives of the OCP and CCAP Development Permit Guidelines and the CCAP High Rise Commercial & Mixed Use Sub Area Guidelines.

### ***Advisory Design Panel Comments***

The current proposal incorporates changes that reflect the proposal's consideration by the Advisory Design Panel (ADP) on October 8, 2014. Members of the ADP appreciated many elements of the proposed design and provided suggestions for further design development, in particular, simplification of the overall design, resolution of the intersecting building volumes, and design development of the parking façade treatment. A copy of the relevant excerpt from the ADP Minutes from October 8, 2014 is attached for reference (Attachment 5). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

### ***Conditions of Adjacency***

#### Anderson Road and Buswell Street (south and east)

- The site is bordered by Anderson Road and Buswell Street. Future development of the remainder of the block is anticipated to introduce similar high-rise building forms, which is supported by the CCAP. Across Buswell Street, on the north portion of the block, mid-rise (25 m) high development is anticipated in accordance with the area's designation in the Brighthouse Village plan. The southern portion of the site is designated as park (Attachment 2).
- The proposed development is not expected to significantly affect existing and anticipated development across Anderson Road. The subject site is located on the north side of the street and there would be negligible shadow impacts on properties to the south. The separation provided by the street and building placement minimizes impacts on outlook and privacy.
- The proposed development would not significantly impact the existing development across Buswell Street. Shadowing, although increased, would only occur on parts of the site during the later portions of the day.
- The separation provided by the street would limit resulting outlook and privacy impacts to existing residents on the east side of Buswell Street.
- Significant impacts on the future park across Buswell Street are not anticipated. The tower massing is proposed to be located toward the north side of the subject site, which would preserve daytime sun penetration to the park.
- The proposed landscaped open space on the fourth level of the development and the proposed green roofs on the mid-rise volumes would introduce an attractive outlook for surrounding existing and anticipated future development.

#### Lane (north)

- The site is bordered by an existing City lane to the north, which will be widened in accordance with City Centre lane standards and provide access to all properties on the block. As part of this application, the portion of the lane adjacent to the subject site would be widened and would introduce a sidewalk and overhead lighting.
- The proposed development would have limited impacts on the existing development across the lane ("Nova"). Like the proposed development, the Nova development has a low-rise parking podium with south facing common open space above. Some shadowing of this open space will occur during mid-day at the equinoxes but sun would penetrate into this area until the mid-morning and after the mid-afternoon. The common open space area would not be affected by shadows in the summer.

- The tower component of the existing northern development (“Nova”) is situated toward the northeast corner of the site and is separated from the proposed tower and most of the midrise volumes on the subject site by 38.0 m (125.0 ft.). This exceeds the tower separation suggested by the CCAP.

#### Western Adjacency (west)

- To the west, the site is bordered by an existing “stepped podium and tower” development (“Anderson Building”).
- The tower component of the proposed development is separated from the existing Anderson Building tower by 24.0 m (78.75 ft.). This is consistent with the expectations of the CCAP. Further, the western elevation of the proposed parking podium will not be visible to residents of the Anderson Building (see attached Reference plan).
- The proposed development also addresses adjacency impacts by:
  - Proposing a parking podium that is lower than that of the western adjacent Anderson Building;
  - Increasing the building setback at the fifth level of the building to reduce overlook impacts;
  - Orienting most units toward the north and south to reduce overlook issues; and
  - Enhancing the outlook for residents of the Anderson Building by proposing to introduce a landscaped open space over the parking podium and green roof treatments of the exposed mid-rise rooftops.

#### ***Streetscapes and Lane***

##### Anderson Road and Buswell Street

- The CCAP designates both Anderson Road and Buswell Street pedestrian-oriented retail streets.
- Improvements to the public realm will be undertaken through a series of right of ways, which are located along Buswell Street, the lane, Anderson Road and corners abutting road/lane as discussed in detail in Attachment 6.
- The proposed development contributes to these streets by:
  - Defining the edges with a three to six-storey streetwall;
  - Providing continuous, highly-transparent, commercial space at the ground level to both physically and visually animate the public realm;
  - Incorporating design elements that encourage pedestrian activity including continuous weather protection, street furniture, special paving patterns and landscaping; and
  - Incorporating public art into the parking podium façade. The parking façade is proposed to be covered in a combination of solid and perforated metal panels arranged in a bar code pattern that will create different effects during the day and night.

##### Lane

- Required lane improvements would include discharging the existing right of way and replacing it with an updated utilities and public passage right of way (284728C, 285749C, 265760C, SRW Plan 79051). The right of way area will be dedicated to the City after Provisional Occupancy and/or Final Occupancy and prior to registration of Strata Plans. Transfer of land to the City will be secured by way of an option to dedicate/purchase for a nominal amount (Attachment 6).



- To support connectivity between the street fronting public realm and the lane, as well as to add spatial depth to the streetscape experience, the podium façade, including the glass storefront windows, the parking level metal panels, and the overhead canopy are proposed to wrap the corner from Buswell Street into the lane.
- An existing covenant (AD233647), which permits an awning to encroach above the sidewalk in front of a building would be discharged as a condition of DP issuance.
- Parking, loading, and garbage/recycling is enclosed within the parking podium and screened. Although the western portion of the parking podium façade is relatively unarticulated, the treatment is similar to the Nova development on the north side of the lane and the introduction of a sidewalk and overhead lighting will improve safety and pedestrian amenity.

### ***Site and Functional Planning***

#### **Building Features**

- The site and functional planning is consistent with many developments within the City Centre characterized by:
  - Mixed-use development including commercial spaces along the street frontages;
  - Parking, loading and waste management that is accessed from the lane;
  - Multi-level parking enclosed within a building podium; and
  - Residential uses above the podium level.
- The development proposal includes commercial use and the residential lobby at ground level.
- The residential levels propose a double-loaded corridor layout. This maximizes both outlook and light access for the units. The interior corner unit on level five and level six has somewhat reduced outlook but achieves good southwest light access.
- Common outdoor amenity space of 819 m<sup>2</sup> (8,815 ft<sup>2</sup>), which exceeds the OCP guideline recommendation, is provided on the south side of the development at the podium level to maximize sun access. An outdoor kitchen with barbeque and sink, seating benches, a fire place, and a designated children's play area are features of the outdoor amenity space.
- The adjacent common indoor amenity space is south facing and sited to provide a good visual and physical relationship with the outdoor amenity space. It is also centrally located within the building and within immediate proximity of the elevator core.
- The indoor amenity space, consisting of 180 m<sup>2</sup> (1,937 ft<sup>2</sup>), which exceeds the OCP guideline recommendation, includes a gym and a multi-purpose room that includes a kitchen.
- All units are provided with private outdoor space. On the podium level, the private outdoor space is screened from the common area with planters and soft landscape material.
- Private outdoor spaces range in size from 5.7 m<sup>2</sup> (61 ft<sup>2</sup>) to greater than 9 m<sup>2</sup> (96 ft<sup>2</sup>), which maximize opportunity for active use of balconies. Some units located on the sixth, seventh and ninth storey propose larger private outdoor spaces that are between 20 m<sup>2</sup> (215 ft<sup>2</sup>) and 85 m<sup>2</sup> (915 ft<sup>2</sup>) and include private hose bibs to encourage personal landscaping/gardening activities.
- The proposed functional planning and massing result in building volumes that create significant variation in building heights and setbacks. In addition to minimizing the impacts on development on nearby properties and maximizing the livability, views and sun penetration for the subject development, this arrangement contributes to a more dynamic skyline than a simple podium and tower development.

### Parking & Loading

- The site is located within the City Centre and benefits from being near transportation options that are available to future residents, including access to the Canada Line. As noted earlier, Transportation staff support the proposed variance to allow application of City Centre Zone 1 parking rates at this site, provided that affordable housing units are secured on-site in accordance with the Affordable Housing Strategy and other transportation improvements that support a transit-oriented environment are secured. These include:
  - \$50,000 voluntary contribution to the future upgrading of the Park Road and Buswell Street intersection to include full traffic signalization;
  - Upgrading the crosswalks at the Anderson Road and Buswell Street intersection with decorative stamped asphalt treatment to improve pedestrian visibility and safety;
  - Continuous weather protection along the street wall; and
  - Installation of a minimum of four (4) benches along the site's frontages as shown in the attached landscape plans.
- Resident and commercial/visitor parking is enclosed within a parkade that is accessed via the existing lane. A total of 114 residential stalls and 47 shared visitor/commercial off-street parking stalls are proposed on-site, which exceeds the City Centre Zone 1 parking rate requirement.
- Transportation staff support shared visitor and commercial parking conditional to the terms outlined in Attachment 6.
- The applicant has demonstrated to the satisfaction of Transportation staff that loading vehicles and waste collection vehicles can be accommodated on-site via the existing lane.
- Garbage and recycling is enclosed within the parkade and would be accessed from the loading spaces.
- Both long term and short term bicycle parking is provided on-site and either meets or exceeds the Zoning Bylaw requirement.
- The proposed development provides electric vehicle charging infrastructure in accordance with the OCP (Attachment 1).

### ***Architectural Form and Character***

#### Building Articulation

The proposed development employs a variety of architectural strategies to minimize the building mass, add variety to the building form and character, and achieve a pedestrian scale along the street frontages.

- The proposed “intersecting” building volumes break the overall mass into smaller volumes, creating a less monolithic expression. The various building and façade setbacks also create upper level spatial interest. The applicant has chosen to express the individual building volumes by using different materials, detailing and colors to further differentiate the volumes.
- The proposed ground level consists of glass storefront windows with minimal gray spandrel panels along the street frontages. This treatment extends to the second and third levels around the two-storey residential lobby entry on Buswell Street. The parking podium is clad in a combination of solid metal anodized finish panels and perforated charcoal painted metal screens. The panels are arranged in a barcode pattern and this textured treatment extends along both road frontages and wraps around the Buswell Street/lane corner.

- The proposed north-south oriented mid-rise volume is characterized by painted charcoal concrete walls with reveals, punched windows and balconies, and gray spandrel panels.
- The proposed east-west oriented mid-rise and tower volumes are lighter in colour than the north-south mid-rise volume and are characterized by the generous use of windows with accent blue spandrel panels.
- The tower portion of the proposed development incorporates the strategic use of architectural frames to establish a façade hierarchy and highlight the verticality of the tower on the four elevations. This is particularly effective at breaking up the apparent building mass on the longer north and south elevations.
- The terminus of the tower responds to the CCAP's objective to diversify the skyline. On the Buswell elevation, the window wall treatment at the centre of the tower extends to the maximum permitted building height of 47 m (147 ft.) geodetic and is expressed with a two-storey penthouse element that stands proud of the remainder of the façade. This element also extends west to fully screen rooftop mechanical equipment. On the north, south and west elevations, the aforementioned frames also stand proud of the main building and roofs. Between these, various roof and balcony elements are stepped in plan and elevation.

### ***Landscape Form and Character***

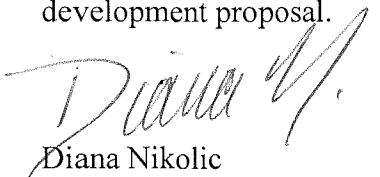
- Within the property lines, the ground level public realm is proposed to be primarily hard surface in response to the commercial uses located at grade, the potential to extend these uses outdoors, and the future urban character of the site. Tan colored concrete pavers are interrupted by complementary 1.5 m (5 ft.) wide tan-coloured concrete bands with planting islands that extend between the sidewalk and the building face. The lobby entrance is punctuated with basalt pavers. Street furniture includes benches and bike racks.
- The proposed podium-level outdoor amenity space includes active and passive areas and is sited to maximize southern exposure. The common space is separated from semi-private patios by a landscaped 45 cm (18") high planter. Proposed hard landscaping elements include an outdoor kitchen with barbeque and sink, seating benches, and a fire place located within proximity of the indoor amenity area, as well as benches throughout the area. A designated children's play area includes a Kompan active climbing structure that is designed to encourage active, imaginative play while retaining a naturalistic appearance that complements the overall landscape design. In addition, rounded granite boulders, in various sizes, are proposed to further encourage active play. A combination of lighting fixtures (downcast wall lights, bollard lighting) are proposed to sensitively illuminate the outdoor amenity area without affecting adjacent residential units. A row of deciduous, columnar Dawyck Beech trees is proposed at the west end of the podium to soften and introduce visual interest to the interface with the existing podium wall of the adjacent Anderson Building.
- The proposed building design maximizes on-site landscaping opportunities and proposes to treat mid-rise rooftops as green roofs. These areas, which total 650 m<sup>2</sup> (6,995 ft<sup>2</sup>), are proposed to be planted with grasses in contrasting colors and punctuated with small flowering trees in Corten steel planters on level six and seven.
- The total landscaped rooftop area, which includes both the outdoor amenity space and mid-rise rooftops, is 1,469 m<sup>2</sup> (15,812 ft<sup>2</sup>).
- The applicant has provided confirmation that there are no bylaw sized trees on the site and that there are no trees on adjacent sites that would be affected by the proposed development.

### **Servicing Agreements/Engineering**

- Engineering issues will be addressed through the required Servicing Agreement (SA), which is discussed in detail in Attachment 6. The scope of the SA includes upgrading the watermain along Anderson Road, extending, upgrading and reconnecting the storm sewer, and either proportionately contributing to a City Capital Project to construct a new gravity sanitary system for the catchment area or undertaking associated works.
- Portions of Buswell Street consist of individual fee simple lots that are currently incorrectly titled to the Province. Real Estate Service staff are in the process of securing City ownership of the lots, which are required to facilitate the 2014 Buswell Street Sanitary Sewer Construction Capital Project. The capital project is required to accommodate demand generated by high density re-development underway in the area. The applicant is responsible for the costs associated with transfer of ownership including survey and plan registration costs for the two (2) Buswell Street parcels located between Park Road and Anderson Road as referenced in Attachment 6.

### **Conclusions**

The proposed development is responsive to the City of Richmond's urban design objectives within the Brighthouse Village of the City Centre. While responding to CCAP urban design objectives, the proposal sets itself apart from existing development in the area by proposing a building design that is characterized by the intersection of building volumes and an unique treatment of the parking podium façade. In addition, the proposal demonstrates a strong commitment to sustainability by committing to introduce an on-site geo-exchange system that would heat and cool the development, and green roof treatment of all exposed mid-rise roof tops that are not used as private patio space. The proposed building design, ground level uses, and public realm design would contribute to the incremental process of strengthening the evolving urban, pedestrian-oriented character within this neighbourhood. Based on the proposal's design response to the objectives of the CCAP and the site context, staff support the proposed development proposal.



Diana Nikolic  
Planner II – Urban Design

DN:rg

Attachment 1: Data Sheet

Attachment 2: Brighthouse Village Specific Land Use Map

Attachment 3: Geo-Exchange System Details (provided by applicant)

Attachment 4: Sustainability and CPTED Provisions List (provided by applicant)

Attachment 5: Advisory Design Panel Minutes & Applicant Responses (inserted in bold italics)

Attachment 6: Development Permit Considerations



**DP 13-645286**

**Attachment 1**

Address: 8151 Anderson Road

Andrew Cheung Architects Inc. on behalf of

Applicant: 684267 B.C. Ltd Owner: 684267 B.C. Ltd., Inc. No. 684267

Planning Area(s): City Centre Area Plan (Brighthouse Village)

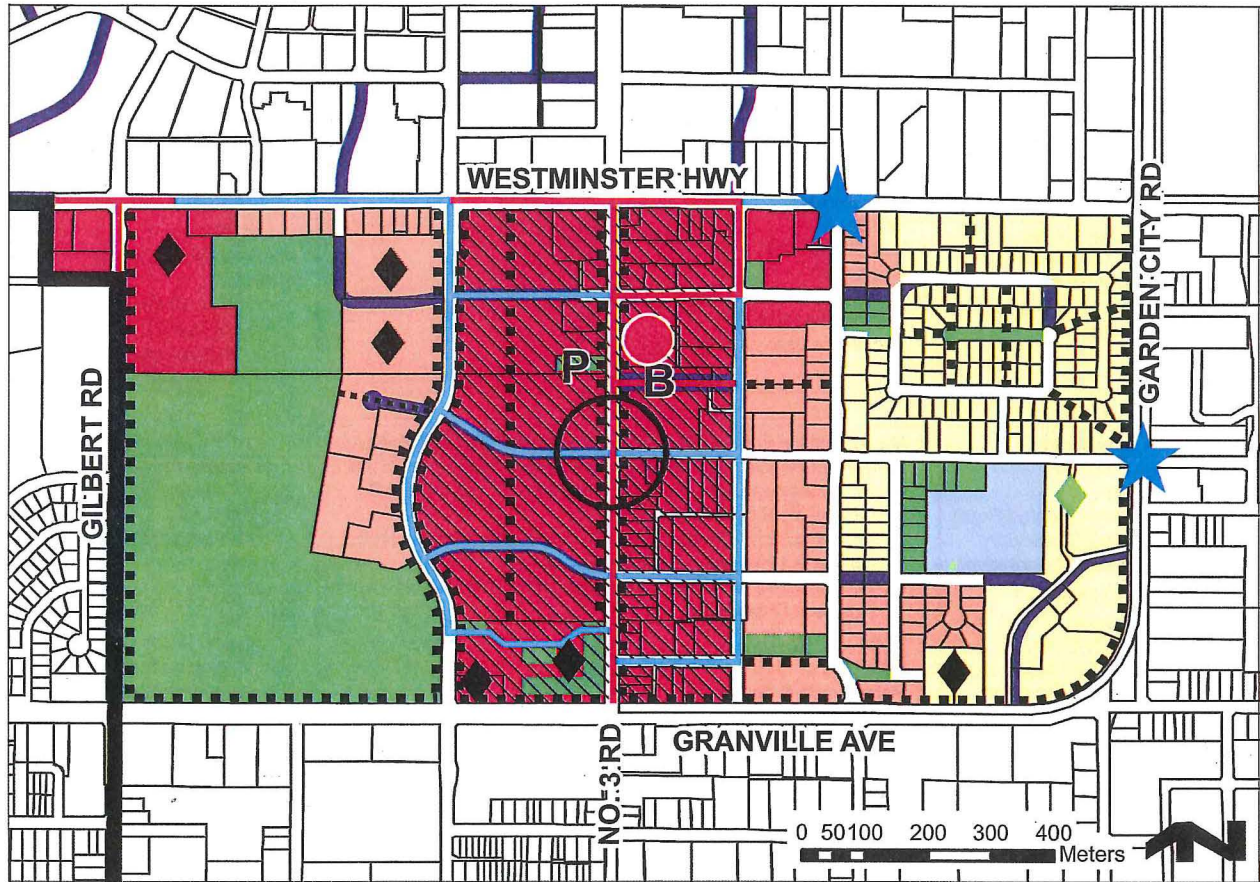
Floor Area Gross: 11041.65 m<sup>2</sup> (118,850 ft<sup>2</sup>) Floor Area Net: 10,192.81 m<sup>2</sup> (109,715 ft.2)

	Existing	Proposed
Site Area:	3,484.4 m <sup>2</sup>	3,484.4 m <sup>2</sup>
Land Uses:	Restaurant, office	Retail commercial, residential
OCP Designation:	Downtown Mixed Use	Downtown Mixed Use
Zoning:	CDT1	CDT1
Number of Units:	site is currently developed as commercial units in a one and two storey building with surface parking	111

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	3.15 provided Affordable Housing is provided in accordance with Council policy	3.142	none permitted
Lot Coverage:	Max. 90%	81.3%	None
Setback – Front Yard and exterior side yard	Anderson Road: 6.0 m, with provisions to reduce to 3.0 m Buswell Street: 6.0 m, with provisions to reduce to 3.0 m	Anderson Road: 3.0 m Buswell Street: 3.0 m	None
Setback – Interior Yard	Min. 0 m	0.1 m	None
Setback – Rear Yard	Min. 0 m if there is a lane	0 m	None
Building Height (m):	Max. 47 m geodetic	46.87 m	None
Lot Size:	No minimum lot width, depth, area	61.44 m x 56.69 m	None

Off-street Parking Spaces – Regular/Commercial:	City Centre Zone 1 Rate: Commercial:3.75/100 m <sup>2</sup> : 45 stalls Visitor: 0.2/unit: 23 stalls (note: commercial and visitor stalls are shared therefore a total of 45 stalls are required) Residential (1.0/unit, AH 0.9/unit): 111(103 regular, 8 AH) Total required: 156	Commercial/visitor shared: 47 (Commercial: 45, Visitor: 23) Residential: 115 Total: 162	City Centre Zone 1 Rate in lieu of compliance with Affordable Housing Strategy and other transportation improvements supported by Transportation staff
Off-street Parking Spaces – Accessible:	2% of total Residential: 3 Visitor/Commercial: 1	Resident: 3 Visitor/commercial:2	None
Total off-street Spaces:	156	162	None
Electric vehicle charging	-20% provided with 120 volt receptacle -Additional 25% predicted for future wiring -Minimum 1 120 volt receptacle for every 10 Class 1 bicycle parking spaces	# 120 volt receptacles:38 # stalls pre-ducted: 46 #120 volt receptacles:16	None
Bike Parking	Class 1: 143 Class 2: 28	Class 1: 151 Class 2: 28	None
Amenity Space – Indoor:	Min. 100 m <sup>2</sup>	180 m <sup>2</sup>	None
Amenity Space – Outdoor:	Min. 666 m <sup>2</sup> (based on 111 units)	819.4 m <sup>2</sup> plus an additional 650 m <sup>2</sup> of green roof area	None

**Specific Land Use Map: Brighthouse Village (2031)**



	General Urban T4 (15m)		School		Proposed Streets
	Urban Centre T5 (25m)		Village Centre Bonus		Pedestrian-Oriented Retail Precincts-High Street & Linkages
	Urban Core T6 (45m)		Institution		Pedestrian-Oriented Retail Precincts-Secondary Retail Streets & Linkages
	Park		Pedestrian Linkages		Canada Line Station
	Park-Configuration & location to be determined		Enhanced Pedestrian & Cyclist Crossing		Village Centre: No. 3 Road & Cook Road Intersection
	Village Centre: No. 3 Road & Cook Road Intersection		Bus Exchange		Transit Plaza



Stantec Consulting Ltd.  
1100 - 111 Dunsmuir Street, Vancouver BC V6B 6A3

October 27, 2014

File:

**Attention: Kassra Tavakoli, MAIBC, AIA**  
ANDREW CHEUNG ARCHITECTS INC.  
Suite 410, 1639 W 2nd Avenue  
Vancouver BC  
V6J 1H3  
Canada

Dear Kassra,

**Reference: Mechanical System for the Tower at 8151 Anderson Rd., Richmond BC**

The following will provide a brief description of the geexchange system planned for the Tower at 8151 Anderson Road in Richmond, BC, to assist in the DP approval process, and relaxation of the DEU Ready Requirement.

The mechanical system planned for at 8151 Anderson Road will include:

- o Air handling units with hydronic coils and four pipe fan coil units (in residences) to provide heating and cooling.
- o Central heat pump system which will allow simultaneous heating and cooling.
- o Geexchange field (ground loops) for a ground source heat pump system.
- o Peaking and backup hot water boiler system.
- o Place to connect a cooling system backup cooling tower.

Both the commercial and the residential components of the building will require, and are planned to include, mechanical cooling. Once the required refrigeration equipment (chillers or heat pumps) is available in a building, it makes technical sense to use the equipment efficiently, and include the heat recovery concepts. The system naturally fitting with these principles is the geexchange system, also referred to as geothermal system, or a ground source heat pump system.

The geexchange systems use ground as a heat source when net heating is required, and also as a heat sink when net cooling is required. This constitutes the renewable energy component for the use by the building. The mechanical system uses a heat pump to facilitate the transfer of heat from a low temperature source to a higher temperature sink (load).

For the component of simultaneous heating and cooling demand in the building (between different zones), the heat pump system allows heat recovery, i.e. the use of heat recovered from the zone requiring cooling, which is rejecting heat and which would otherwise need to be rejected to the outside, for heating in zones that require heat. The building only requires the heat





October 27, 2014  
Kassra Tavakoli, MAIBC. AIA  
Page 2 of 2

**Reference: Mechanical System for the Tower at 8151 Andreson Rd., Richmond BC**

from a supplemental source for the balance of heat required which is not covered by the heat pump system (heating season), and for component of heat requiring higher temperatures than what the heat pump system provides (such as domestic water heating). When excess heat is available, it is rejected (deposited) into the ground (cooling season). Through the mechanism of the daily or seasonal heat storage, the heat from the building is recovered and reused.

Heat pumps in geoexchange systems achieve a coefficient of performance (COP) of 2.5 to 4.5, i.e. for every unit of electric energy input for the heat pump compressors, the machine provides 2.5 to 4.5 units of heat. Combined with simultaneous cooling, the combined COP-s of over 6 can be achieved. This efficiency is the basis of the economical operation of the building, and the economy for the building occupants.

The supplemental heat is provided, typically, from a heating system with boilers. This is a peaking system which provides for the high peak heating demand load during short duration load peaks, as well as the component of heat requiring higher temperatures than what the heat pump system provides (such as domestic water heating); it also serves as a backup system for the building heat, in case the heat pump system is down or unavailable. While this system needs to be sized for the peak load, the use, and the energy consumption from this system is small.

The system will be sized to meet cooling demand, and up to 80% of the peak heating load (in compliance with the recommendations of the CSA 448 Standard (Design and installation of earth energy systems). The boiler backup system will provide higher temperature domestic water heating, peaking heat and backup service for the heating heat pump system.

The system and the sizing is still in the preliminary evaluation stage; the preliminary sizing will follow conceptual design stage.

Please call with any questions or suggestions.

Regards,

**STANTEC CONSULTING LTD.**

A handwritten signature in black ink, appearing to read 'Dejan Radolcic'.

Dejan Radolcic, P.Eng., LEED AP  
Associate  
Phone: (604) 696-8075  
Fax: (604) 696-8100  
dejan.radolcic@stantec.com

c. File, Stantec: M Dhont

Sep. 24th 2014

## ***Sustainable Features***

### **8151 Anderson Rd. : Residential tower with grade oriented retail.**

The following is a list of some of the sustainable related aspects and features included in this development design:

- The site is centrally located and close to transit, schools, shopping and parks.
- The building uses concrete construction for longer life span.
- In response to the CCAP requirement this project will comply with LEED Silver (equivalency) or better, paying particular attention to features significant to Richmond (e.g., green roofs, Geothermal energy, storm water management and quality). Applicant will submit a LEED scoreboard confirming that the subject development will achieve between 50 and 60 points (Silver equivalency) prior to issuance of a Development Permit.
- The building will have it's own Geothermal Heat Exchange facility onsite, and will be heated and cooled using an efficient hydronic system.
- At least 20% of the materials will be locally sourced and at least 10% of the materials used in the building will be recycled materials.
- Low VOC emitting materials and low flow toilets, showers and lavatories will be used in the building.
- The building aims to achieve at least 23% savings in energy consumption and a 10% in energy cost savings. All exterior glazing will have low 'e' coatings.
- Extended slabs beyond the plane of glazing by 0.5M on all sides of tower residential levels provide additional shading against solar heat gains on the West and South facing elevations.
- "In-set" balconies ensure a better weather protection for outdoor experience of residents, and help provide better resistance against solar heat gains for units facing East, South and West directions.
- Building design incorporates continuous overhangs along both sidewalks to improve usage and durability of the materials for a better lifespan of building elements.
- Large areas of non-roof (green /sod roofs) at levels 4, 6, and 7 with some tree shading on landscaped roof areas will help the heat island effect and contribute to additional insulation value and help reduce energy loss.
- All landscaping on roof are based on low maintenance planting/landscape materials, and are irrigated with a highly efficient irrigation system (smart irrigation controllers, moisture sensors and other devices that will help avoid over-watering). Climate-tolerant plants and diversity of species will contribute to reduce water consumption.
- Accessible roof decks have pre-cast pavers or similar sustainable materials.
- Semi open facade with precast panels and perforated metal screen provided on South and East sides of parking podium will provide natural light and ventilation to the parking garage and reduce dependency on artificial lighting and mechanical ventilation.
- Electric charging plug provisions are provided in enclosed bike storage rooms and for 20% of the required parking stalls.
- All units are provided with open balconies or landscape treated roof decks.
- Balconies have glazed guards to allow visibility.

- All bedrooms and living rooms have large glazed windows to allow maximum natural light and provide a lively atmosphere. All habitable rooms are provided with windows that open to allow natural/ventilation.

- Glazed windows and other exterior wall assemblies will have adequate acoustic performance as required by building code and regulations.

- Consideration will be given to sustainable fit and finish of the building including energy star appliances, lighting fixtures and other electrical appurtenances used throughout the building, as well as reduced allergen carpeting/ finishing materials.

## ***Crime Prevention Through Environmental Design (CPTED)***

The proposed development includes the following CPTED features:

- Further setbacks creating wider sidewalk with residential units cantilevering over parts of the sidewalk, providing “watchful” residents’ eyes on the public realm and the sidewalk.

- Double height (23’ high) entry alcove with fully glazed wall facing Buswell street provides ample lighting & visibility at entry point.

- Security features in the building lobby to limit access.

- Full street length of retail at grade fronting both streets, with secured rear access to parking and building services.

- Single vehicular access point to the parkade via a recessed entry gate with full security system, with a secondary residential parking gate on 2nd level to limit visitor access to private parking.

- Sliding gate at the lane to close off the loading / garbage removal bay when not in use.

- Parkade lighting with available day time daylight through parkade facade opening, with interior parkade walls and columns painted white to increase visibility.

- Glazing in all vestibule doors and enclosed corridors.

- Additional safety windows on side walls of vestibules in parkade for more view angles.

- Secured garbage rooms with access that is located close to the elevator lobby.

- Secured bike storage rooms located on parking floor perimeter with daylight and ventilation.

- Secure rooftop common outdoor amenity area with children’s play area located in the mid section. Direct access and views provided to the outdoor amenity room from both indoor amenity rooms . Overlooking views of the outdoor amenity room from residential units adjacent and above.

Excerpt from the Minutes from  
**The Advisory Design Panel Meeting**

Wednesday, October 8, 2014 – 4:00 p.m.  
Rm. M.1.003  
Richmond City Hall

6. **DP 13-645286 – 116 APARTMENT UNITS AND GROUND LEVEL RETAIL**

APPLICANT: Andrew Chung Architects Inc.

PROPERTY LOCATION: 8151 Anderson Road

**Applicant's Presentation**

Architect Kassra Tavakoli, Andrew Cheung Architects Inc., and Landscape Architect Alain Lamontage, Durante Kreuk Ltd., presented the project and answered queries from the Panel on behalf of the applicant.

**Panel Discussion**

*Comments from the Panel were as follows:*

- project is nicely done; applicant has done the right moves; size of the floor plate appears appropriate; appreciate the elongated form of the tower as opposed to a square;

*Acknowledged*

- three main volumes of the building appear to be a strong part of the concept of the project; however, it is diluted by the mid-rise “knuckle” at the east elevation (Buswell); consider eliminating this piece to simplify the forms; lost density could possibly be accommodated by the adjacent low-rise form;

*We have chosen to maintain this form, as it is an integral part of the stepping tower. This portion extends the tower's shape and language of materials immediately over the main residential entry, making an important connection.*

- simplify the building residential lobby entry at the east elevation as it currently appears messy;

*We have simplified the main entry and eliminated the asymmetrical canopy which extended over it.*

- screening mechanism for the parking garage appears solid; consider other more appropriate and contemporary methods;

*We have changed the extent of the parking garage façade and reduced the solid sections in favour of more open mix of solid vs. translucent. The parking façade is currently being considered as an area of interest for the public art implementation and is therefore subject to being further improved by application of some form of art to be determined through the appropriate process.*

- the project has many good elements; appreciate the clarity of the four-storey volume; however, agree with the previous comment regarding the mid-rise “knuckle” at the east elevation and consideration of its elimination;

*Acknowledged, see comments above.*

- architectural renderings of the parking garage screening presented by the applicant do not appear to reflect the project’s concept;

*Acknowledged*

- the proposed tower is well done and nicely articulated;

*Acknowledged, we have maintained the tower unchanged.*

- appreciate the simple treatment of the parking garage which effectively covers the parking; lighting at night will animate the façade;

*Acknowledged*

- agree with the comment on the mid-rise form that projects out at the east elevation and consideration of its elimination;

*See comments above.*

- consider removing the bike room interruption in the parking façade on the south elevation (Anderson) to make the pattern of interlocking volumes more successful;

*The bike room projection has been eliminated as suggested. The building overhang is now only on level 4 where the residential block overhangs the parking structure.*

- appreciate the lay-out of the tower and mid-rise forms; will maximize the views of the green spaces;
- locating public art on the building façade above eye level may not be advisable as it cannot be experienced by pedestrians at street level;

*We have since had the public art plan presented to the Richmond Public Art Advisory Committee who is in support of the proposal, giving it merit on its visibility from a distance among other things.*

- appreciate how the massing has been broken down; parkade wall appears blank; consider utilizing it as canvass for public art; look forward to seeing the project’s public art plan;

*See comments above*

- consider introducing natural lighting to the parkade wall along Anderson Road;  
*Acknowledged. Design has changed and majority of parking façade along Buswell now receives similar treatment as on Anderson Road.*
- site planning is good; stepping of volumes is an interesting approach to a corner site;  
*Stepping approach has been largely maintained in a revised configuration.*
- agree with previous comment regarding the tower form getting lost in the lower portion which projects out along Buswell Street; needs to be “cleaned up” and refined to maintain the purity of the tower form;  
*We have revised the projections, eliminating the smaller single projection of the parking volume at Buswell Street. The “projection” has been extended to both sides of the entry hence marking the entrance as a recess.*
- does not agree with the orientation of the tower; investigate shading of north-facing units;  
*All towers suffer from the same issue as their north facing units receive less light. We have tried to improve this by having a mid-rise section with more units with east, south and west exposures than north.*
- retail frontages are handled well; transparency of a large corner retail element works well; however, this character is not carried through the Buswell Street elevation; canopy above the left-over retail spaces appears heavy; consider transitioning back to the typical glazed canopy in order not to conflict with the entry to the residential lobby;  
*As noted in previous comments, the canopy over the main entry has been revised, and the canopy over the north retail unit along Buswell Street has been changed to a glazed canopy.*
- proposed parkade screening element along levels two and three fronting Anderson Road appears monolithic; concern on (i) how it will be executed, (ii) how it will interface with the public realm and (iii) how it will evolve into a public art piece;  
*The monolithic appearance of the parkade screen along those levels is largely an artefact of the renderings. Regardless, we have revised the proportion between the solid precast concrete panels and the translucent metal screens which make the gap between them to be at least half open. The public art integration with this façade will depend to some degree on the artist selected and the artwork that is ultimately accepted by the selection committee. However, we are confident and convinced that this dynamic pattern of precast vs. metal screen panels is a bold and interesting design for screening above grade parking on its own, without the application of any art work.*
- levels two and three along Buswell Street lacks transparency and visual interest; need further attention and treatment;

*As noted above, we have extended the parking façade treatment facing Anderson Road further into the Buswell Street frontage. The remaining portions of parkade along Buswell Street are now faced with a curtainwall system with colored spandrel panels near the main entry at Buswell Street.*

- monolithic parkade wall along Anderson Road needs to be broken up;  
*Acknowledged, The proportions of solid to open has been changed in favor of more open (translucent/perforated metal screen) façade.*
- appreciate the provision of a number of wheelchair accessible residential units;  
*Acknowledged*
- consider reducing the curb to enhance the accessibility to public areas;  
*Acknowledged. Details will reflect.*
- incorporate pocket doors in lieu of hinged doors in bedrooms and dens; will create extra floor space and provide more access to residents;  
*Acknowledged. Level 4 plan reflects this change.*
- applicant is encouraged to consider going for a LEED Silver certification, rather than equivalency, for the project as it will add value to the project;  
*Acknowledged. Currently seeking LEED consultants to join the design team*
- appreciate the proposed on-site geo-exchange system; look at the technical aspects, e.g. reading/metering the residential and retail units;  
*Acknowledged*
- ensure that the proposed louvers for ventilation of retail units will achieve maximum efficiency during the base building construction stage;  
*Acknowledged*
- a radius corner as opposed to a square corner is more inviting in a prominent corner such as the Anderson Road and Buswell Street corner;  
*We have chosen to maintain the square corner in a slightly revised plan with different (reduced) setbacks. The weather protection is now continuous and turns the corner with retail façade.*
- need to have universal access in the public areas of the project;  
*Acknowledged. See landscape plans*
- privacy walls appear heavy; consider incorporating planting;  
*Acknowledged*
- consider introduction of trellis structure(s) on the landscaped podium to address overlook into semi-private and private areas of the courtyard level;  
*Acknowledged*

- consolidate tree planting along the edge of the green roof and patios on levels 6 and 7 to provide shading; soil volumes are a concern for trees on the roof decks in 4x4 planters; planting shown on roofs that can only be accessed by hatch and ladder is a concern; maintenance of plant materials using this type of access can be challenging; growing medium volumes should comply with current arboricultural and urban forestry guidelines for urban trees;

*Landscape architects have considered the above comments and have revised the tree planters on the green roof, providing fewer trees with larger planters allowing for more substantial root ball.*

- planting list is only “suggested”; a complete plant list is required as part of the submission;

*Acknowledged*

- articulation of retail spaces is not clear on the drawings; signage is lacking;

*Retail signage is designed to be located only in a linear “band” above the retail doors, and below the glass weather protection canopy. Notes have been added to the elevation drawings demarcating this signage band.*

- building massing responds to the contextual massing; appreciate the south-facing outdoor amenity space and its interface with the indoor amenity space;

*Acknowledged*

- information regarding the opportunity and potential to incorporate public art on the exterior parkade wall is lacking; and

*We are currently in the process of further defining the direction in which the public art is to follow in order to integrate with the parkade wall.*

- consider use of clear glass versus opaque glass for enclosed bike locker areas.

*The window wall/curtain wall system has been eliminated from the bike rooms. The bike storage rooms are now designed to fill the space between the parked cars and the parkade’s exterior walls.*

## **Panel Decision**

It was moved and seconded

*That DP 13-645286 be supported to move forward to the Development Permit Panel subject to the applicant giving consideration to the comments of the Panel.*

**CARRIED**

Opposed: Paul Goodwin





**Address:** 8151 Anderson Road

**File No.:** DP 13-645286

**Prior to approval of the Development Permit, the developer is required to complete the following:**

1. Registration of a 1.1 m wide public rights of passage right of way along the length of the site's Buswell Street frontage to accommodate frontage upgrades. Upgrades include a 2.0 m wide sidewalk at the back of the new statutory right of way, the remaining area to the existing west curb of Buswell Street, which is to be landscaped boulevard consistent with the frontage improvements in the SA (SA 09-486006) for 8160 Park Road. The developer is responsible for construction; the City is responsible for maintenance of hard surfaces and infrastructure, and accepts liability for areas that it maintains.
2. Discharge of the existing Statutory Right of Way (284728C, 285749C and 285760C (SRW Plan 79051)) along the site's northern frontage.
3. Registration of 3.0 m wide public rights of passage right of way along the length of the site's northern frontage that abuts the existing lane and includes an Option to Purchase/Dedicate the right of way area in favor of the City for nominal consideration. The owner agrees to, at the owner's expense, prepare and register the necessary dedication plans. The right of way is to accommodate utilities and lane upgrades in accordance with City Centre standards. The developer is responsible for construction; the City is responsible for maintenance of hard surfaces and infrastructure, and accepts liability for areas that it maintains.
4. Registration of a Section 219 Covenant(s) providing for no Stratification (Subdivision by way of Strata Plan) and no occupancy of lands until the right of way area described in #3 has been transferred to or dedicated to the City.
5. 4.0 m x 4.0 m corner cut secured with a statutory right of way for public rights of passage at the intersection of Anderson Road and Buswell Street. The developer is responsible for construction; the City is responsible for maintenance of hard surfaces and accepts liability for areas that it maintains.
6. 3.0 m x 3.0 m corner cut secured with a statutory right of way for public rights of passage at the intersection of the lane and Buswell Street. The developer is responsible for construction; the City is responsible for maintenance of hard surfaces and accepts liability for areas that it maintains. Any non-permanent encroachment (e.g. removable canopy) into the statutory right of way is accommodated by an unregistered letter agreement. Any non-permanent encroachment into City lane is accommodated by a license agreement, which is not registered but would include obligation to remove the encroachment on notice by the City, and a letter of credit to cover potential future costs (repair, removal, etc.) may be required.
7. 1.5 m x 9.0 m statutory right of way on the Buswell Street frontage for the purposes of a concrete bus pad. The developer is responsible for construction; the City is responsible for maintenance of the hard surface and accepts liability for areas that it maintains.
8. Receipt of a Letter of Credit for landscaping in the amount of \$486,131.25.
9. Registration of an aircraft noise sensitive use covenant on title.
10. Registration of a covenant on title that identifies the building as a mixed use building.

12. Registration of a flood indemnity covenant on title identifying a minimum habitable elevation of 2.9 m GSC, or at least 0.3 m above the highest elevation of the crown of any adjacent parcel, or as exempted by Section 4.3(a) of Flood Plain Designation and Protection Bylaw No. 8204.
13. Registration of a legal agreement on title stipulating that the development is subject to potential impacts due to other development that may be approved within the City Centre including without limitation, loss of views in any direction, increased shading, increased overlook and reduced privacy, increased ambient noise and increased levels of night-time ambient light, and require that the owner provide written notification of this through the disclosure statement to all initial purchasers, and erect signage in the initial sales centre advising purchasers of the potential for these impacts.
14. Registration of a legal agreement on title stipulating that 47 shared commercial and visitor parking stalls, will be located on parkade levels 1 and 2. The minimum number of parking stalls provided must be the greater of the two individual uses. The agreement must specify the parking spaces remain unassigned, visitor parking is accessible 24 hours a day and commercial parking is available during standard business operating hours. This legal agreement is subject to the approval of the Director of Transportation.
15. Registration of a legal agreement on title stipulating provisions that secure:
  - a) A minimum of 20% of parking stalls are provided with a 120 volt receptacle to accommodate electric vehicle charging equipment;
  - b) A minimum of 25% of parking stalls are constructed to accommodate the future installation of electric vehicle charging equipment (e.g. pre-ducted for future wiring);
  - c) A minimum of one 120 volt receptacle is provided to accommodate electric charging equipment for every 10 Class 1 bike parking spaces.
16. Discharge of covenant AD233647, which allows an awning to extend above the sidewalk in front of the building.
17. City acceptance of the developer's offer to voluntarily contribute \$50,000 to the future upgrading of the Park Road and Buswell Street intersection to include full traffic signalization.
18. City acceptance of the developer's offer to voluntarily contribute \$87,462.43 (\$0.77/ft<sup>2</sup> per residential buildable square foot, excluding affordable housing, and \$0.44/ft<sup>2</sup> per commercial buildable square foot) to the City's public art fund.
19. Registration of the City's standard Housing Agreement to secure eight (8) affordable housing units, the combined habitable floor area of which shall comprise at least 5% of the subject development's total residential building area. Occupants of the affordable housing units subject to the Housing Agreement shall enjoy full and unlimited access to and use of all on-site indoor and outdoor amenity spaces. The terms of the Housing Agreements shall indicate that they apply in perpetuity and provide

Unit Type	Number of Units	Minimum Unit Area	Maximum Monthly Unit Rent**	Total Maximum Household Income**	Unit Location	Unit Numbers
1 bedroom	5	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$950	\$38,000 of less	Building level 4,5,6	507, 510, 608, 611, 705
1 bedroom & den	3	50 m <sup>2</sup> (535 ft <sup>2</sup> )	\$950	\$38,000 of less	Building level 4,5,6	511, 612, 708

\*\* May be adjusted periodically as provided for under adopted City policy.

20. Complete an acoustical and mechanical report and provide recommendations prepared by an appropriate registered professional, which demonstrates that the interior noise levels and noise mitigation standards comply with the City's Official Community Plan and Noise Bylaw requirements. The standard required for air conditioning systems and their alternatives (e.g. ground source heat pumps, heat exchangers and acoustic ducting) is the ASHRAE 55-2004 "Thermal Environmental

Conditions for Human Occupancy” standard and subsequent updates as they may occur. Maximum interior noise levels (decibels) within the dwelling units must achieve CMHC standards follows:

Portions of Dwelling Units	Noise Levels (decibels)
Bedrooms	35 decibels
Living, dining, recreation rooms	40 decibels
Kitchen, bathrooms, hallways, and utility rooms	45 decibels

21. Owner’s written commitment to use a geo-exchange system to supply space heating, cooling and domestic hot water to the building, including the following terms and conditions:
- a) No building permit will be issued for this development unless the building is designed to use a geo-exchange system for space heating, cooling and domestic hot water and the owner has provided an energy modelling report satisfactory to the Director of Engineering;
  - b) The following is required prior to issuance of a Building Permit:
    - The City receives an energy modeling report showing:
      - Space heating, cooling and domestic hot water heating peak loads and hour by hour consumption, and
      - Percentage of annual space heating, cooling and domestic hot water requirements supplied by the geo-exchange system.
    - The City receives for review mechanical, plumbing and architectural drawings (in PDF format) showing that a building mechanical system is designed to utilize the geo-exchange system for not less than 70% of all the annual space heating, cooling and domestic hot water heating for a building as determined in the energy modeling report.

**Prior to Building Permit Issuance, the developer must complete the following requirements:**

1. Enter into a Servicing Agreement\* for the design and construction of the following works, which include but may not be limited to:

Water:

*Anderson Road*

- Using the OCP Model, there is 137 L/s available at 20 psi residual. The proposed development requires a minimum fire flow of 220 L/s. The developer is required to submit fire flow calculations that are signed and sealed by a professional engineer based on F.U.S. or ISO to confirm that there is adequate available flow.
- The developer is required to upgrade the existing 150 mm asbestos cement watermain along the Anderson Road frontage to the greater of a 200 mm watermain or as required by the OCP, in accordance with city requirements. If adequate flow is not available, the upgrade will need to extend beyond the frontage to achieve minimum requirements.
- The City may opt to extend the works beyond the frontage thru a cost share, subject to available funding.
- Additional fire hydrants are required to achieve a minimum 74 m spacing.

*Buswell Street*

Since there is no watermain along this frontage, the developer’s consultant is responsible to ensure adequate fire hydrants are available to service the development site. Approval may be required from the Richmond Fire Department. Written confirmation (signed and sealed) is required from the developer’s consultant.

Storm:

Storm analysis and upgrades are not required; however, the developer is required to complete the following frontage works:

*Anderson Road*

- Extend the 600 mm diameter storm sewer, to be constructed via SA 12-626904, along the centre of the roadway from the east property line of 8111 Granville Avenue to Buswell Street and connect to the existing storm sewer system on Buswell Street with a manhole.
- Remove/abandon existing storm sewer system and re-connect existing services that are in line with the proposed storm sewer construction.

*Buswell Street*

- Upgrade the existing storm sewer along the frontage to a minimum 600 mm from existing manhole STMH6253 (Anderson Road) to the north property line of the development site.
- Reconnect existing services that are in line with the proposed storm sewer construction.

Sanitary:

Under the OCP scenario the Richmond Centre Pump Station does not have adequate capacity to service the existing catchment area. The City has proposed to modify the catchment area and redirect flows from several properties to the Buswell Pump Station. This will require construction of a new gravity sanitary system. Each development site will be responsible, at a minimum, for their frontage.

The City is proposing to construct the required gravity sewer system as a Capital Project. If the City Capital Project proceeds prior to the development site requiring servicing, then the developer is required to provide a contribution in the amount of \$130,000 (to be deposited into the account 2253-10-000-14913) and connect the service to Buswell Street.

If the development site requires servicing prior to the City Capital Project, then the developer is required to design and construct the gravity sanitary sewer along both frontages (Anderson Road and Buswell Street) and connect service to existing manhole SMH55048, which is located in the lane, 21 west of the east property line of the development site. The City may opt to extend the works on Anderson Road west of the development site through a cost share arrangement, subject to available funding.

Frontage Upgrades:

- Anderson Road: a 2.0 m wide sidewalk at the back of the new statutory right of way, remaining area to existing south curb of Anderson Road to be hardscaped boulevard. Works are to be consistent with Park Road frontage details for SA 09-486006 for 8160 Park Road.
- Buswell Street: 2.0 m wide sidewalk at the back of the new statutory right of way, remaining area to existing west curb of Buswell Street is to be landscaped boulevard. Works are to be consistent with frontage details for SA 09-486006 for 8160 Park Road.
- Lane upgrades to City Centre standards.
- Upgrade the crosswalks (three (3) in total) at the Anderson Road and Buswell Street intersection with decorative stamped asphalt treatment to improve the safety and visibility of pedestrian use.

Additional Requirements:

- The developer is responsible for the installation of pre-ducting for private utilities along Anderson Road and Buswell Street frontage and coordination required with the Private Utility Companies. The developer must contact Private Utility companies to determine what equipment will be required (vistas, kiosks, transformers, etc.) and where they can be located. Such equipment is not permitted to be located in the City street. The developer is encouraged to investigate whether it can be located within the building, so that it is not visible from the fronting streets.

- Additional legal agreements, as determined via the subject development's Servicing Agreement (s) and/or Development Permit(s), and or building Permit(s) to the satisfaction of the Director of Engineering may be required, including , but no limited to site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-lading, ground densification or other activities that may result in settlement, displacement, subsidence, damage, or nuisance to City and private utility infrastructure.
  - Existing City infrastructure (fire hydrant, parking meter, street lighting, etc.) may need to be relocated at the developer's cost to accommodate frontage improvements.
  - Engineering recommends that the ultimate lane works be within a dedicated lane along the development site frontage.
  - Portions of Buswell Street consist of individual fee simple lots that are currently incorrectly titled to the Province. Real Estate Service staff are in the process of securing City ownership of the lots, which are required to facilitate the 2014 Buswell Street Sanitary Sewer Construction Capital Project. The capital project is required to accommodate demand generated by high density re-development in the area. The applicant is responsible for the costs associated with transfer of ownership including survey preparation (\$3,008.25) and plan registration costs for the following lots:
    - Northern lot:  
PID: 003-717-534  
SEC 9 BLK4N RG6W PL 7312 Parcel B, Subsidy Lot 18, BYLAW 55878
    - Southern lot:  
PID: n/a  
1 SEC 9 BLK4N RG6W PL 7557 Suburban Block 10,6.
2. Submission of a Construction Parking and Traffic Management Plan to the Transportation Division. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
  3. Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Development Permit processes.
  4. Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Division at 604-276-4285.

**Note:**

- \* This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act. All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.  
The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.
- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contains prohibitions on the removal or disturbance of both birds and their

nesses. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

---

Signed (original on file)

---

Date



No. DP 13-645286

To the Holder: Andrew Cheung Architects Inc.  
Property Address: 8151 Anderson Road  
Address: Suite 410 1639 West 2nd Avenue  
Vancouver BC  
V6J 1H3

---

1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
3. The "Richmond Zoning Bylaw 8500" is hereby varied to:
  - a) Reduce the residential parking rate from the standard City wide parking rate to the City Centre Zone 1 parking rate.
4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #18 attached hereto.
5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$486,131.25 to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

**Development Permit**  
**No. DP 13-645286**

To the Holder: Andrew Cheung Architects Inc.  
Property Address: 8151 Anderson Road  
Address: Suite 410 1639 West 2nd Avenue  
Vancouver BC  
V6J 1H3

---

8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.  
This Permit is not a Building Permit.

AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE  
DAY OF , .

DELIVERED THIS DAY OF , .

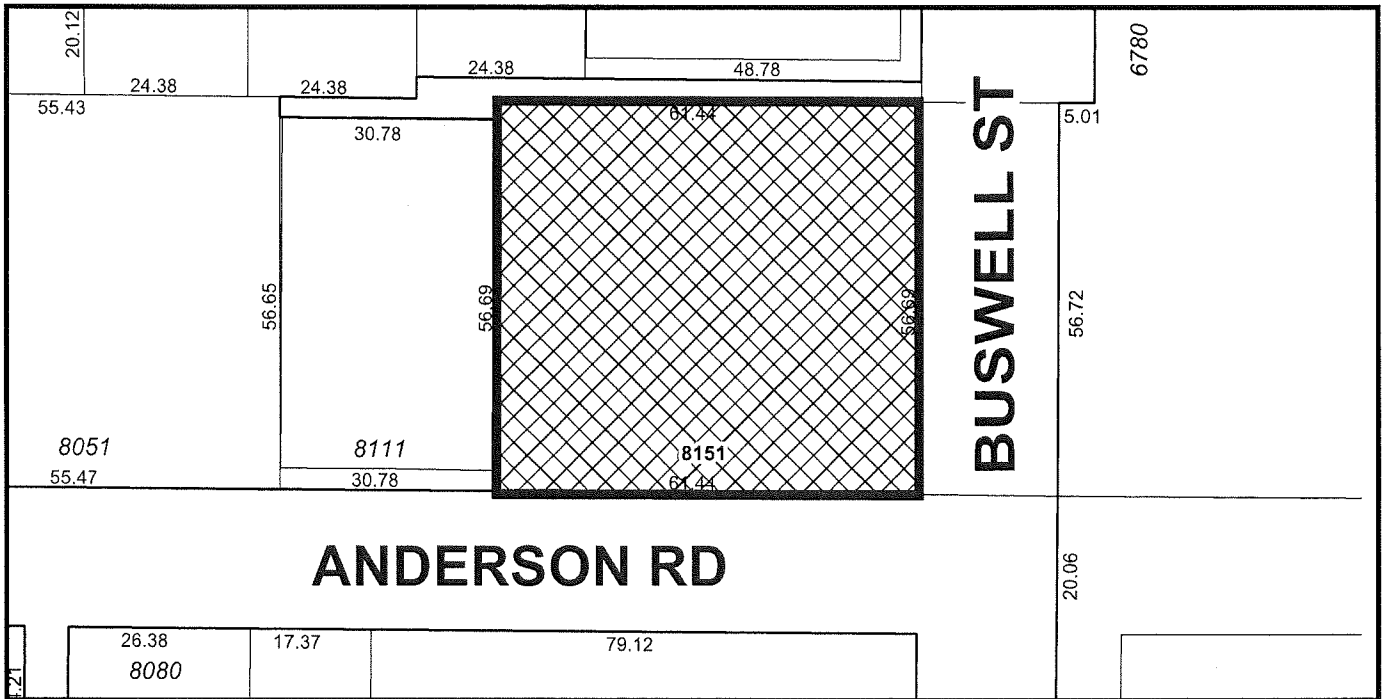
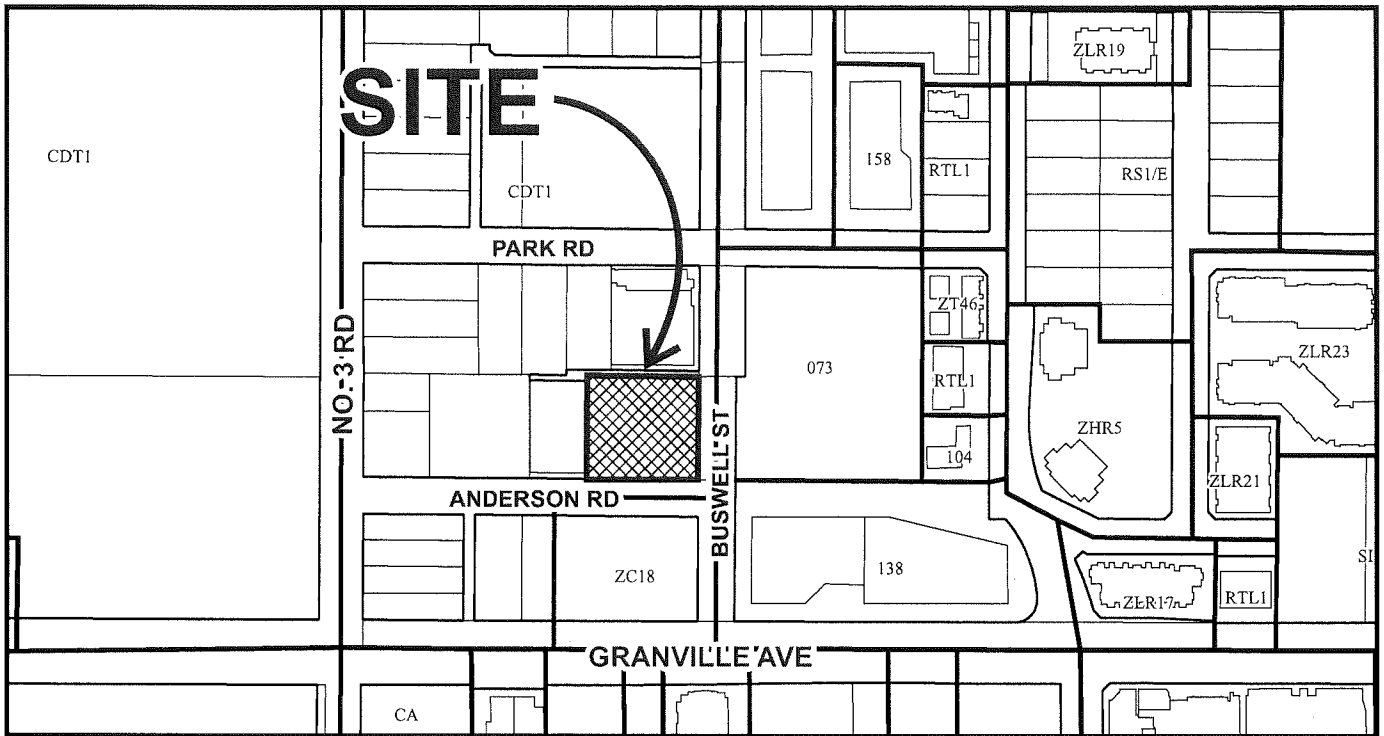
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MAYOR





# City of Richmond



## DP 13-645286

Original Date: 02/01/15

Revision Date: 02/02/15

Note: Dimensions are in METRES



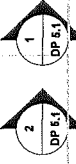
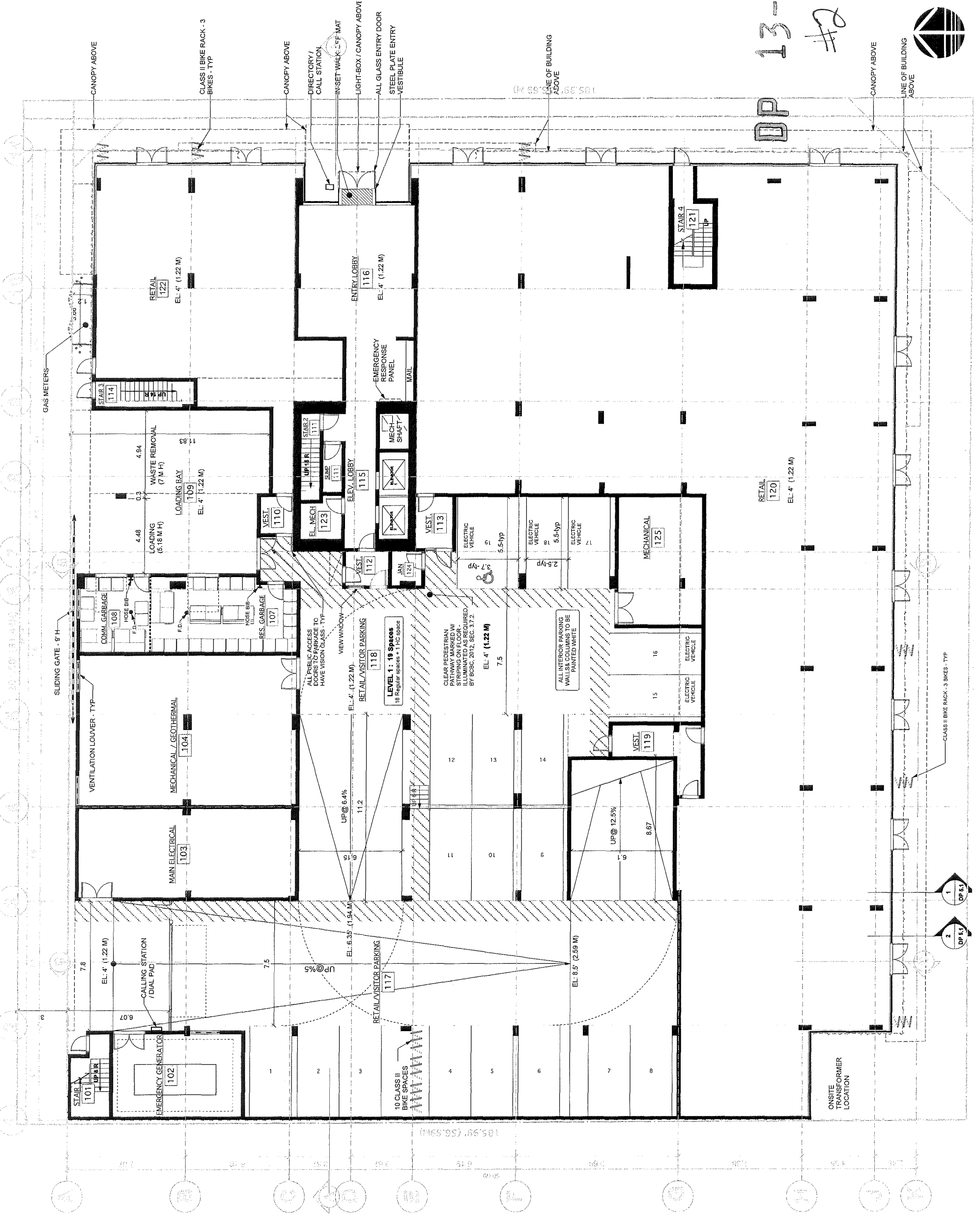
NOTES	<p>revisions</p> <p>SEP. 4, 2013 ISSUED FOR DP          JUL. 18, 2014 ISSUED FOR DP          SEP. 24, 2014 ISSUED FOR DP          DEC. 16, 2014 ISSUED FOR DP          DEC. 16, 2014 ISSUED FOR DP          JAN. 29, 2015 ISSUED FOR DP</p>	<p>consultants</p>
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**ANDREW CHEUNG ARCHITECTS INC.**

13-64529 #2  
 DP 13-64529 #2

<p>Project  <b>8151 ANDERSON ROAD          RICHMOND</b></p>	<p>File Name  <b>LEVEL 1 PLAN</b></p>	<p>Scale  <b>1:100</b></p>	<p>Drawing Number  <b>DP 2.1</b></p>
<p>Project Number  <b>21212</b></p>	<p>Date  <b>FEB 10 2015</b></p>	<p>Drawn          SI</p>	<p>Checked          BC</p>

This drawing was created using an AutoCAD Macro. © 2005



notes

date	revisions
SEP. 4, 2013	ISSUED FOR DP
JUL. 18, 2014	ISSUED FOR DP
SEP. 24, 2014	ISSUED FOR DP
DEC. 8, 2014	ISSUED FOR DP
DEC. 16, 2014	ISSUED FOR DP
JAN. 29, 2015	ISSUED FOR DP

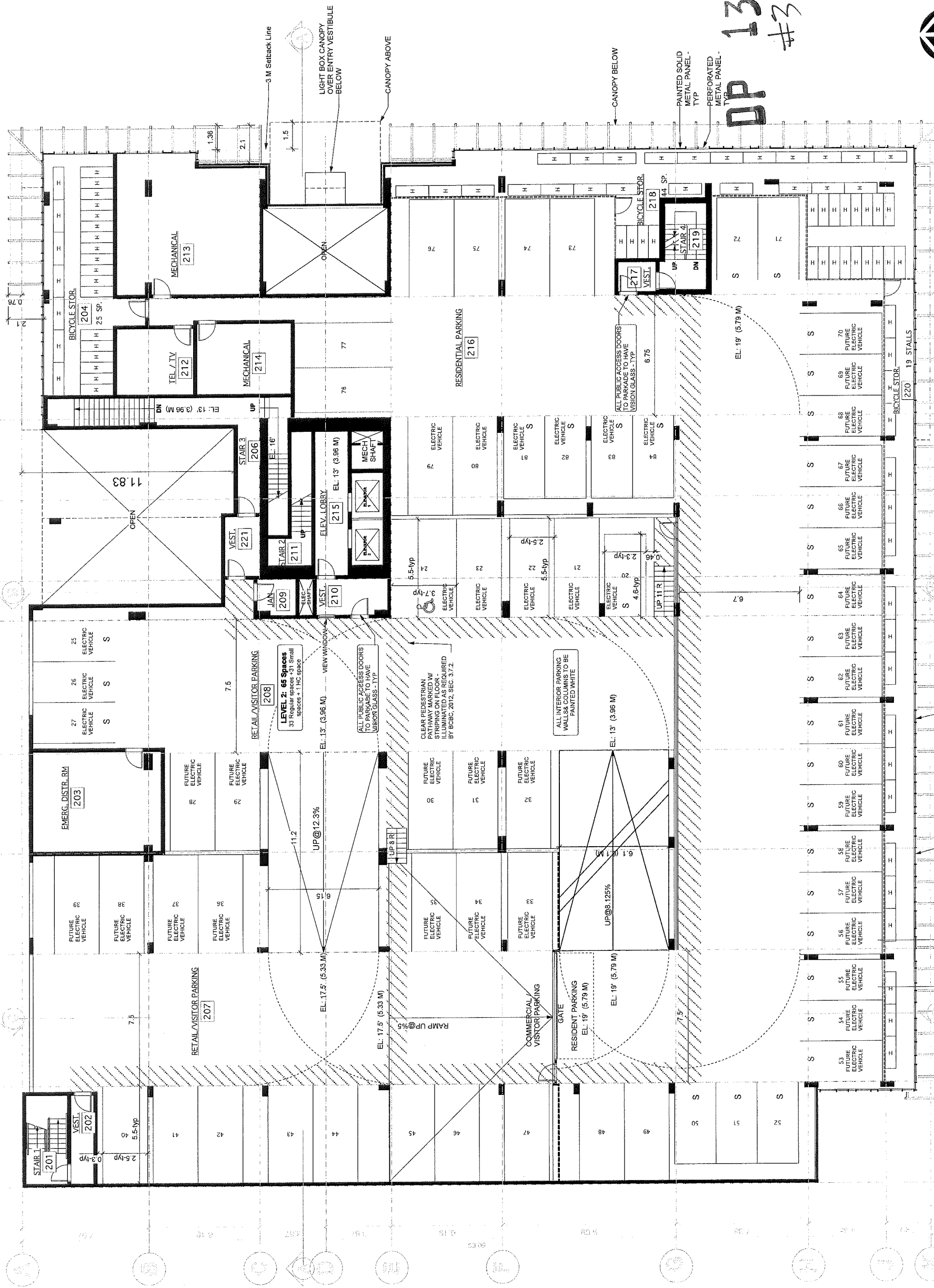
consultants

**13-64 ARCHITECTURE INC.**  
 1639 West 2nd Ave  
 Richmond, B.C. V6J 1R3  
 TEL: (604) 685-2088  
 FAX: (604) 685-1889

**FEB 10 2015**

**DP #3**

Project		21212	
Project number	21212	Scale	1:100
Drawn	si	Checked	da
Project		LEVEL 2 PLAN	
Drawing number		DP 2.2	



PERFORATED METAL PANEL - TYP

SOLID METAL PANEL - TYP

1 DP 5.1

2 DP 5.1

notes

date	revisions
SEP. 4, 2013	ISSUED FOR DP
SEP. 18, 2014	ISSUED FOR DP
SEP. 24, 2014	ISSUED FOR DP
DEC. 8, 2014	ISSUED FOR DP
DEC. 16, 2014	ISSUED FOR DP
JAN. 29, 2015	ISSUED FOR DP

consultants

JAN 29 2015

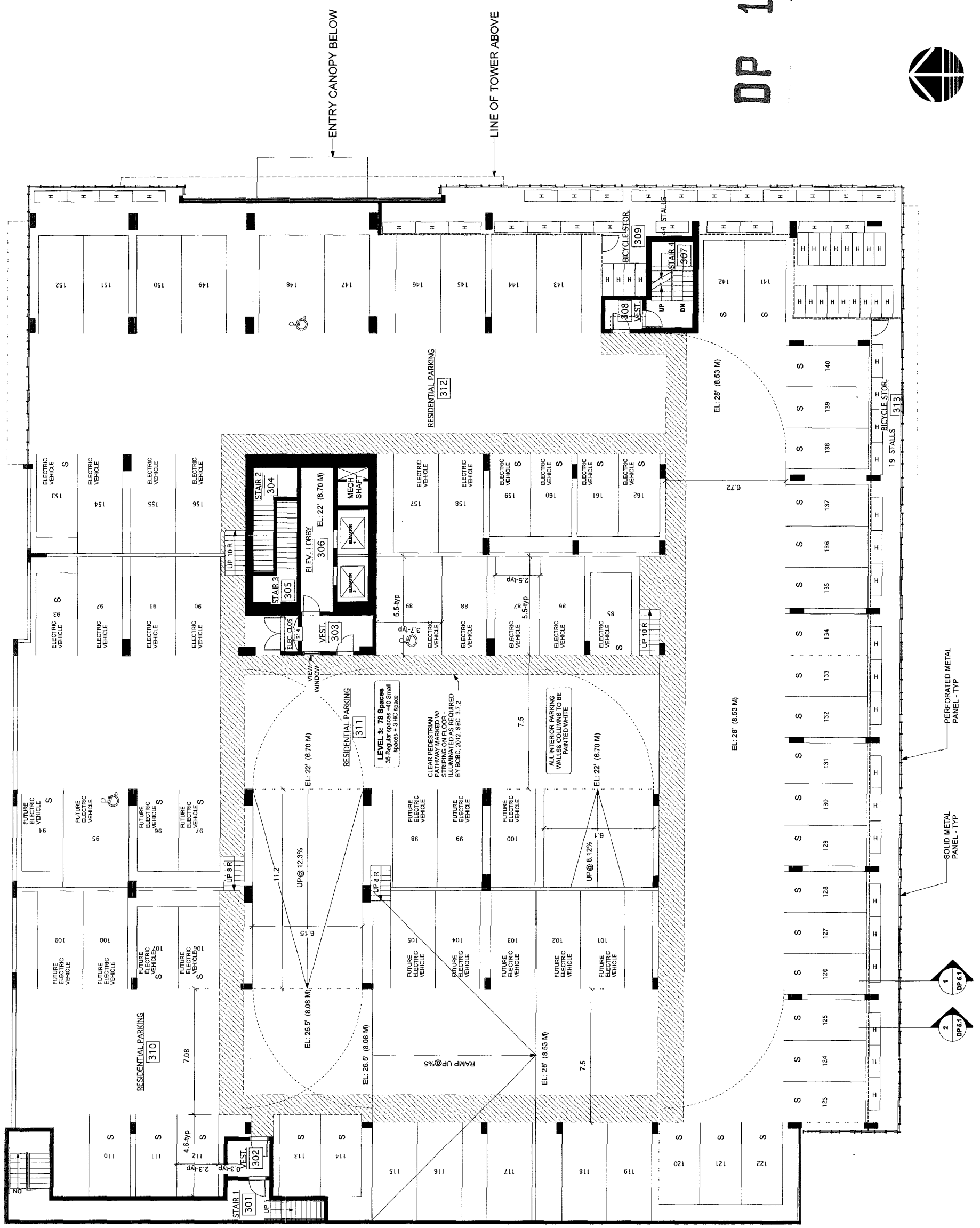
ANDREW CHEUNG  
ARCHITECTS INC.

DP 13-645286  
#4

164 West 27th Ave  
Vancouver, B.C.  
V6P 4R1

tel (604) 685-2088  
fax (604) 685-1889

project <b>8151 ANDERSON ROAD RICHMOND</b>	
title <b>LEVEL 3 PLAN</b>	
project number <b>21212</b>	file name
drawn sl	checked ac
scale <b>1:100</b>	drawing number <b>DP 2.3</b>



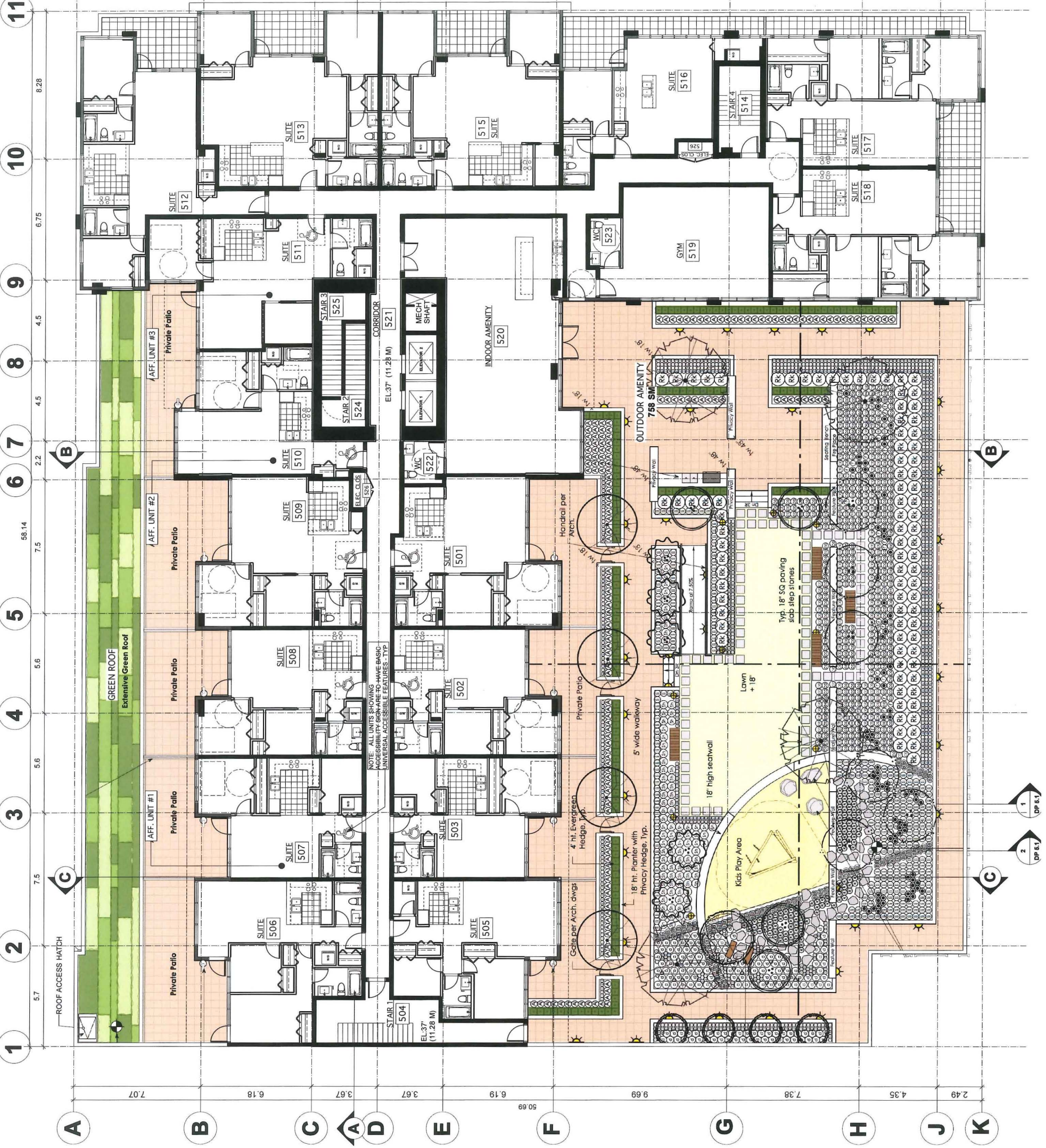
This drawing was created using the AutoCAD software.



NOTES	revisions	CONSULTANTS
	SEP. 4, 2013 ISSUED FOR DP JUL. 18, 2014 ISSUED FOR DP MAY 15, 2014 ISSUED FOR DP DEC. 8, 2014 ISSUED FOR DP DEC. 16, 2014 ISSUED FOR DP JAN. 29, 2015 ISSUED FOR DP	JAN 29 2015

**ANDREW CHEUNG ARCHITECTS INC.**  
 155 West 2nd Ave  
 Vancouver, B.C. V6B 1H3  
 Tel: (604) 685-2088  
 Fax: (604) 685-1889

PROJECT	8151 ANDERSON ROAD RICHMOND
DATE	LEVEL 4 PLAN
PROJECT NUMBER	21212
DRAWN BY	SI
CHECKED BY	BC
SCALE	1:100
DRAWING NUMBER	DP 2.4



**Accessibility and Aging-in-Place Features:**  
(Typical, all floors)

- All universally accessible suites (marked with accessibility symbol @ their entries on the plans) to comply with the requirements of City of Richmond Zoning Bylaw, section 4.16.
- All units in the project are to have "Aging in place features as indicated in City of Richmond CCAP.
- All main doors to the entry of the tower and the common use facilities provided with automatic door opening devices or designed to address accessibility requirements. Bathrooms in the common amenity spaces are designed to be accessible.
- Common corridors are minimum 1220 mm wide and a minimum 1500 mm turning radius is provided at dead ends and other required areas.
- Common use areas and affordable (accessible) housing units designed to facilitate ready access from the road and the on-site parking area, and for use/occupancy by a person with disability. The elevators are located on an accessible path.
- Switch controls, electrical panels and intercom buttons shall be at a maximum height of 1220 mm and the electrical / telephone / cable outlets will at least be 450 mm from the floor surface.
- Thermostats and other controls, located between 900 — 1350 mm from the floor surface and provided with a clear space of 750 mm for access.
- The accessible bedrooms are designed such that they can accommodate a twin size bed and have a 1500 mm turning diameter clearance on one side of the bed.
- All bathrooms and powder rooms are provided with reinforced backing for future grab bars at vaner closets, tub/shower locations. (Aging in place requirement)
- All stairs to have hand rails as required by City of Richmond OCP (Aging in place requirement)
- All door handles and plumbing fixtures are to have 'lever' type handles (Aging in place requirement)

**DP 13-645286**  
 #5

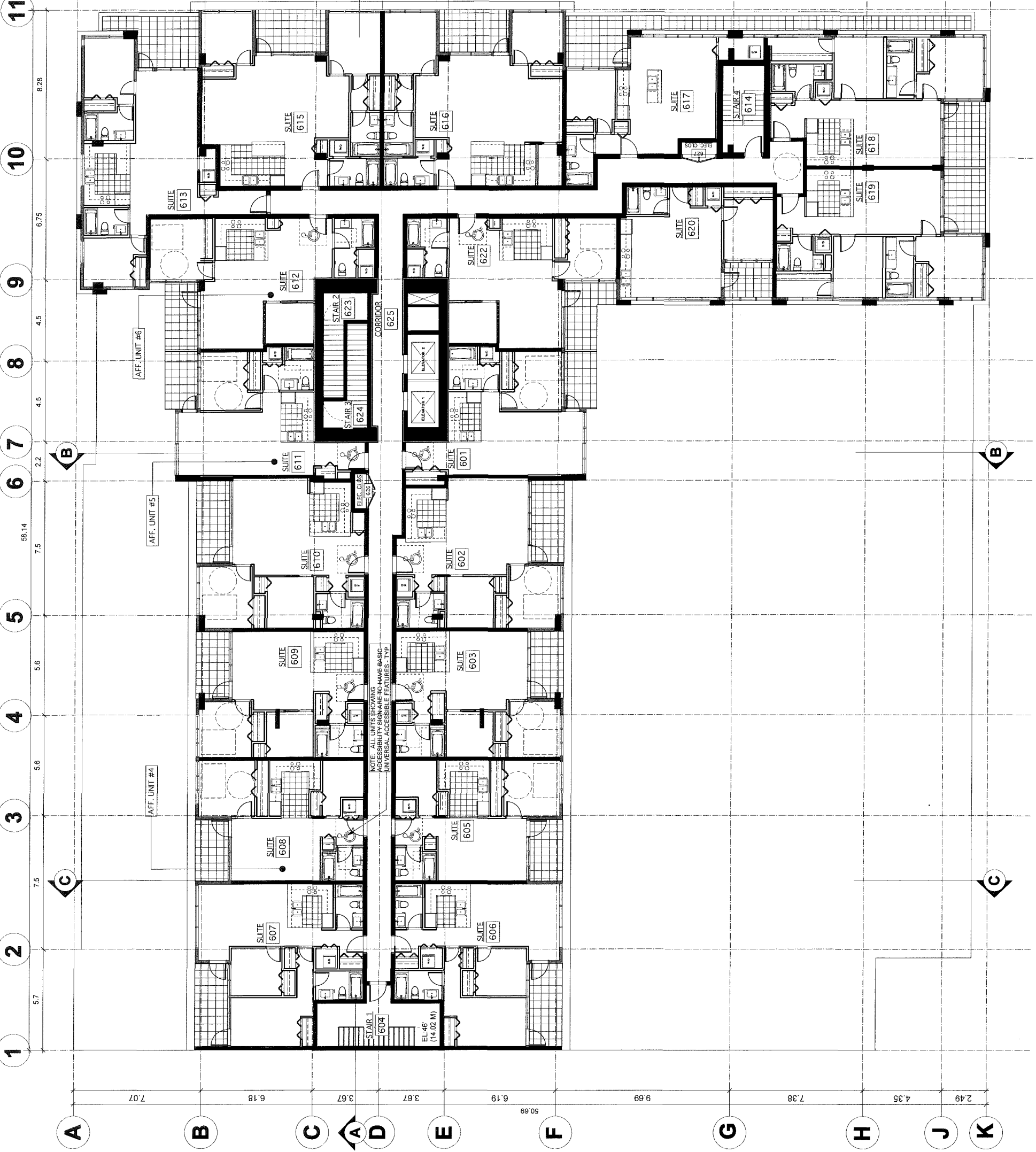
notes date revisions SEP. 24, 2014 ISSUED FOR DP DEC. 8, 2014 ISSUED FOR DP DEC. 16, 2014 ISSUED FOR DP JAN. 29, 2015 ISSUED FOR DP	consultants <b>JAN 29 2015</b>
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ANDREW CHEUNG  
ARCHITECTS INC.

DP 13-645-06  
#6

project <b>8151 ANDERSON ROAD RICHMOND</b>	
title <b>LEVEL 5 PLAN</b>	
project number 21212	title name LEVEL 5 PLAN
drawing S	checked AC
scale 1:100	drawing number <b>DP 2.5</b>

NOTE:  
Refer to DP-2.4 for notes for Accessibility  
and Aging-in-Place Features.



NOTES	REVISIONS DATE SEP. 24, 2014 ISSUED FOR DP DEC. 8, 2014 ISSUED FOR DP DEC. 16, 2014 ISSUED FOR DP JAN. 29, 2015 ISSUED FOR DP	CONSULTANTS <b>JAN 29 2015</b>
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**ANDREW CHEUNG ARCHITECTS INC.**  
 Suite 101  
 105 West 2nd Street  
 Vancouver, B.C.  
 #7  
 DP 13-645286  
 Tel: (604) 685-2088  
 Fax: (604) 685-1889

PROJECT <b>8151 ANDERSON ROAD          RICHMOND</b>	TITLE <b>LEVEL 6 PLAN</b>
PROJECT NUMBER <b>21212</b>	FILE NAME <b>21212</b>
DRAWN BY <b>SI</b>	CHECKED BY <b>AC</b>
SCALE <b>1:100</b>	DRAWING NUMBER <b>DP 2.6</b>

NOTE:  
 Refer to DP-2.4 for notes for Accessibility  
 and Aging-in-Place Features.





NOTES	revisions	CONSULTANTS
	date SEP. 4, 2013 ISSUED FOR DP SEP. 14, 2014 ISSUED FOR DP SEP. 14, 2014 ISSUED FOR DP DEC. 8, 2014 ISSUED FOR DP DEC. 16, 2014 ISSUED FOR DP JAN. 29, 2015 ISSUED FOR DP	JAN 29 2015

ANDREW CHEUNG ARCHITECTS INC.  
 Suite 410  
 1639 West 2nd Ave  
 Vancouver, B.C.  
 V6J 1H3  
 tel (604) 685-2088  
 fax (604) 685-1889

#8  
 13-645286

PROJECT		8151 ANDERSON ROAD RICHMOND	
TITLE		LEVEL 7 PLAN	
PROJECT NUMBER	FILE NAME	CHECKED	SCALE
21212		AC	1:100
DRAWN	DRAWING NUMBER	DRAWING NUMBER	
SI	DP 2.7		



DP  
 Extensive green roof with contrasting colour vegetation

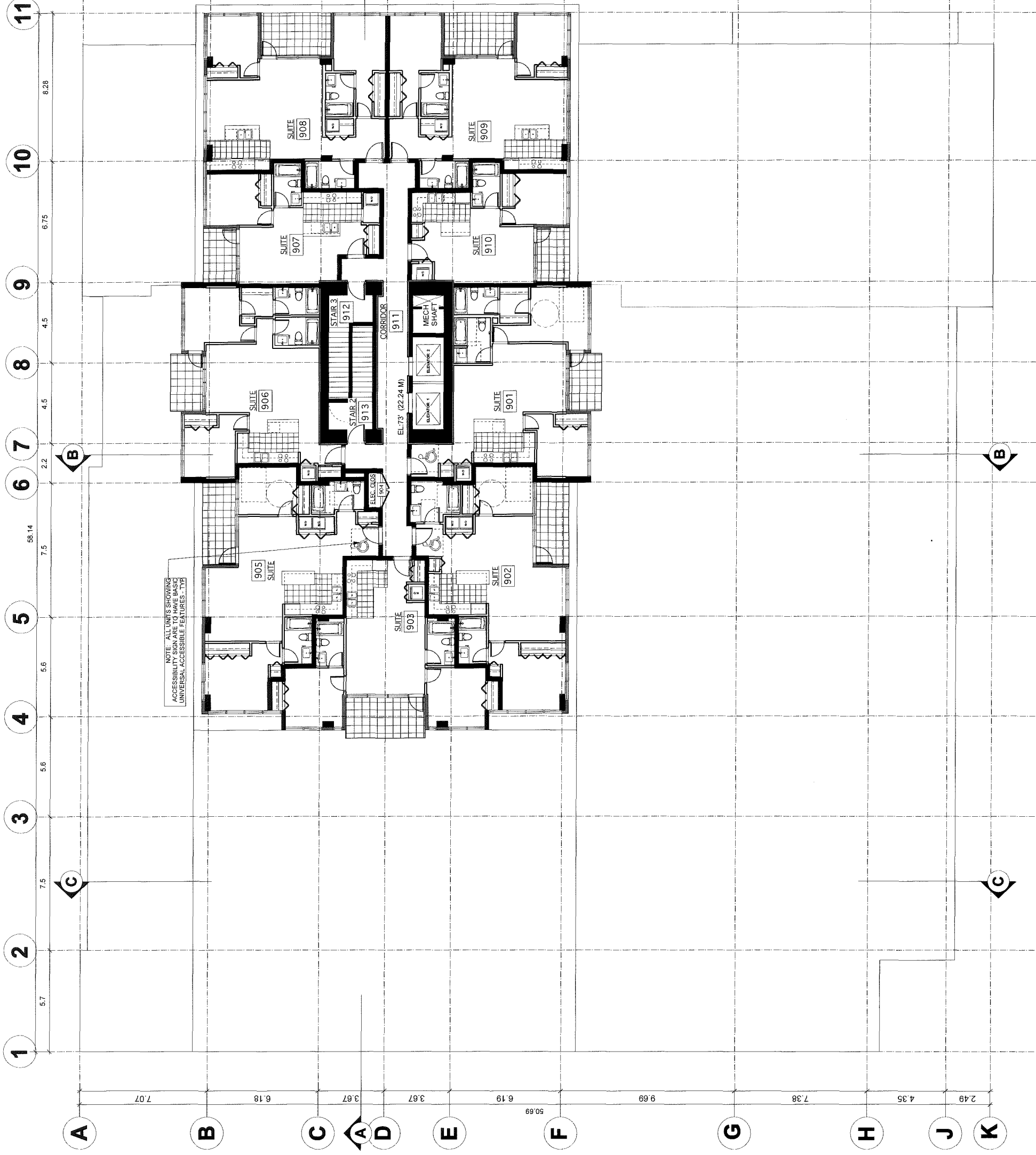


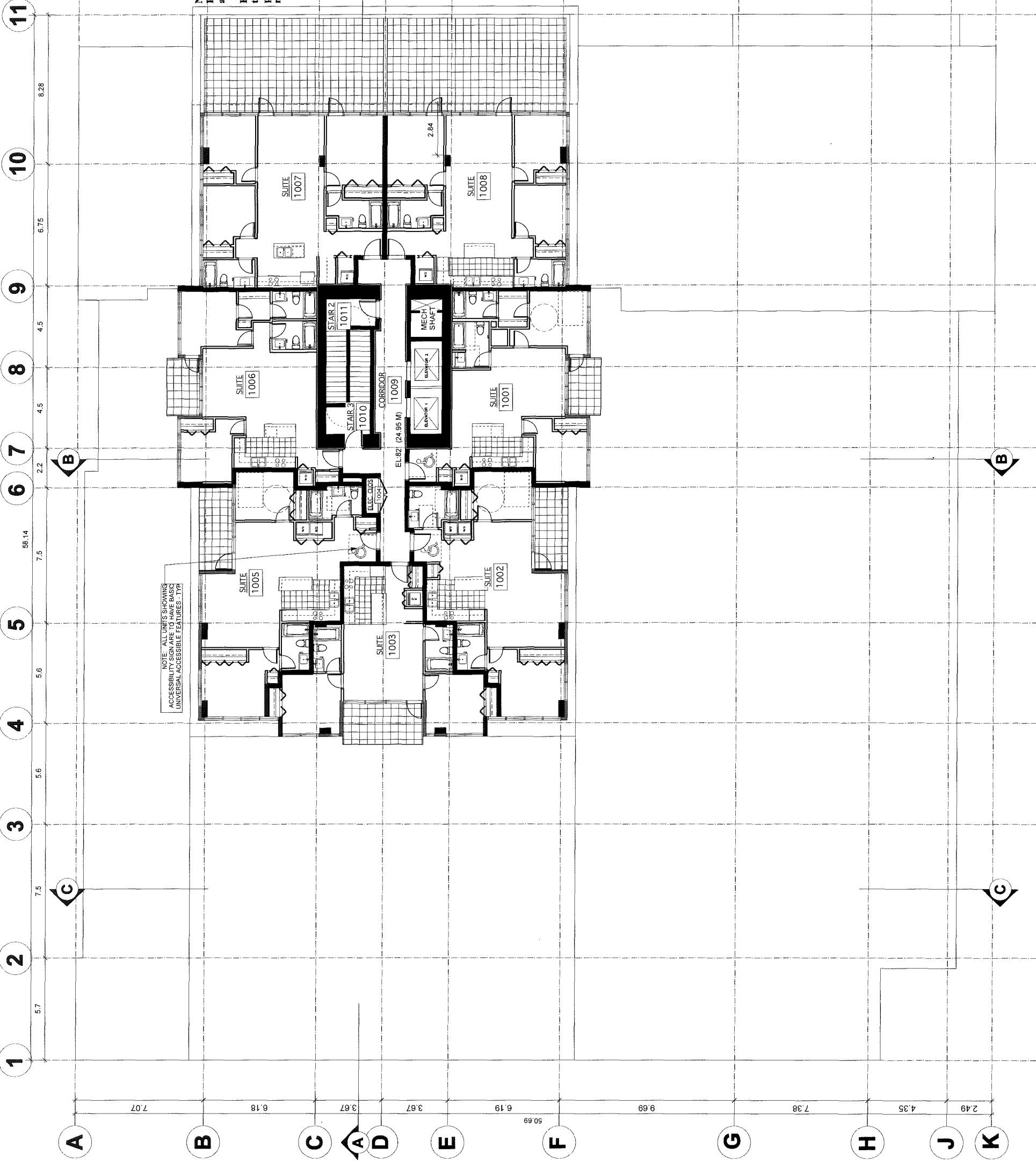
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ANDREW CHEUNG  
ARCHITECTS INC.

DP 13-645209  
#9  
style 410  
1636 west 2nd ave  
vancouver b.c  
v6g 1h3  
tel (604) 685-2088  
fax (604) 685-1889

PROJECT <b>8151 ANDERSON ROAD RICHMOND</b>	
DATE <b>LEVEL 8 PLAN</b>	
PROJECT NUMBER <b>21212</b>	DATE 1/29/15
DRAWN BY <b>SI</b>	CHECKED BY <b>ac</b>
SCALE <b>1:100</b>	DRAWING NUMBER <b>DP 2.8</b>





notes	revisions	consultants
	SEP. 4, 2013 ISSUED FOR DP SEP. 11, 2013 ISSUED FOR DP SEP. 24, 2014 ISSUED FOR DP DEC. 8, 2014 ISSUED FOR DP DEC. 16, 2014 ISSUED FOR DP JAN. 29, 2015 ISSUED FOR DP	JAN 29 2015

**ANDREW CHEUNG ARCHITECTS INC.**  
 1635 WEST 2<sup>ND</sup> AVE. VANCOUVER, B.C. V6 1Y6  
 tel (604) 685-2088 #10  
 fax (604) 685-1889

**DP 13-642286**

<b>PROJECT</b> 8151 ANDERSON ROAD RICHMOND	
<b>TITLE</b> LEVEL 9 PLAN	
<b>PROJECT NUMBER</b> 21212	<b>FILE NAME</b> 21212
<b>DRAWN</b> SI	<b>CHECKED</b> AC
<b>SCALE</b> 1:100	<b>DRAWING NUMBER</b> DP 2.9



notes

revisions

SEP. 4, 2013 ISSUED FOR DP  
 JUL. 18, 2014 ISSUED FOR DP  
 SEP. 24, 2014 ISSUED FOR DP  
 DEC. 16, 2014 ISSUED FOR DP  
 DEC. 16, 2014 ISSUED FOR DP  
 JAN. 29, 2015 ISSUED FOR DP

consultants

JAN 29 2015

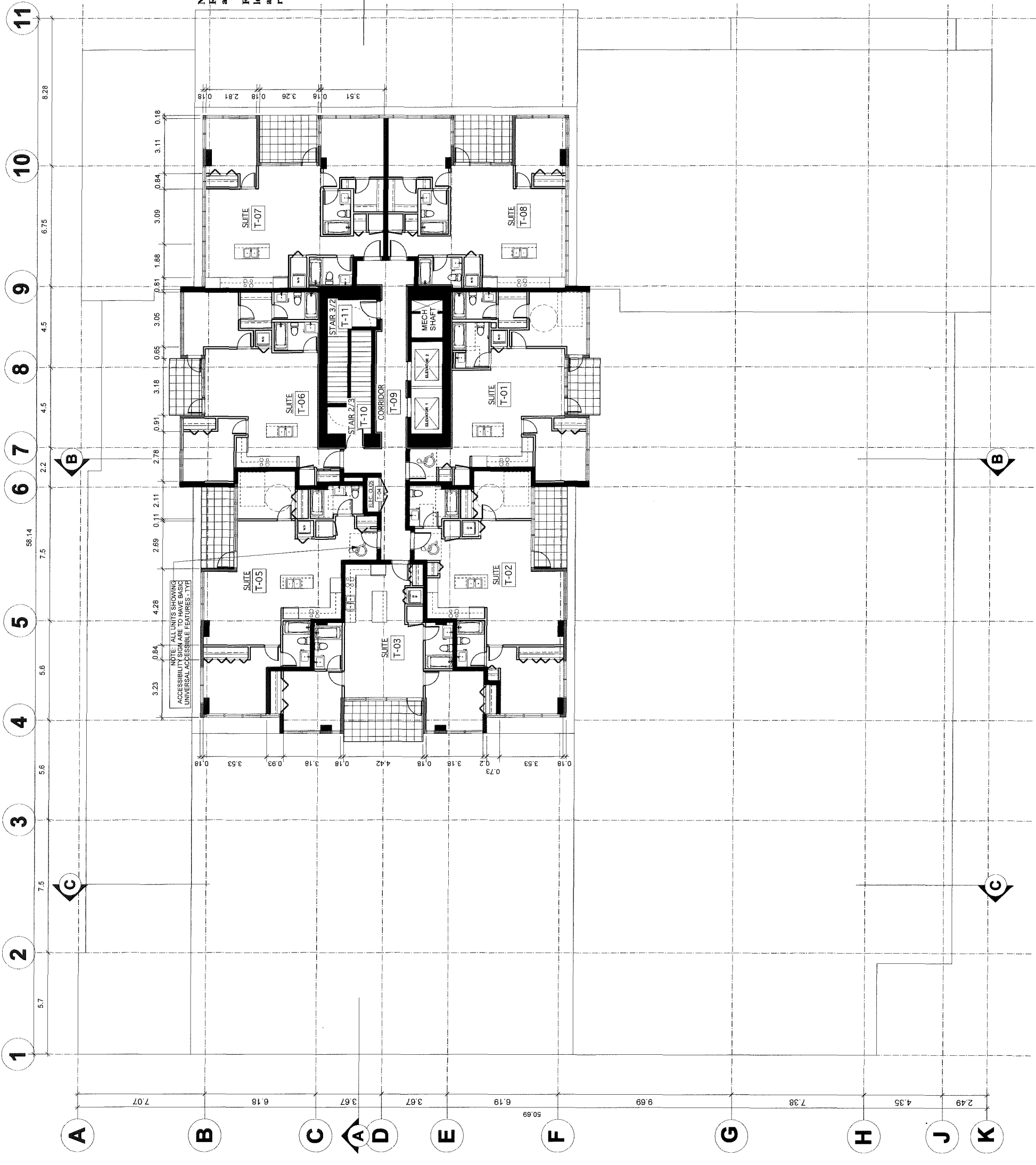
ANDREW CHEUNG  
 ARCHITECTS INC.

DP 13-645286  
 #11

PROJECT <b>8151 ANDERSON ROAD RICHMOND</b>	
SHEET <b>LEVEL 10-14 PLANS</b>	
PROJECT NUMBER <b>21212</b>	SHEET NAME
DRAWN SI	CHECKED AC
SCALE 1:100	DRAWING NUMBER <b>DP 2.10</b>

The drawing was created using Auto-MechCAD software.

**NOTE:**  
 Refer to DP-2.4 for notes for Accessibility and Aging-in-Place Features.  
 Floor plan on these levels have an area of less than 650 SM (Above 25 M, Geodetic) as per City of Richmond OCP/CCAP requirements.



NOTES	<p>DATE</p> <p>SEP. 4, 2013 ISSUED FOR DP</p> <p>SEP. 11, 2013 ISSUED FOR DP</p> <p>SEP. 24, 2014 ISSUED FOR DP</p> <p>DEC. 8, 2014 ISSUED FOR DP</p> <p>DEC. 16, 2014 ISSUED FOR DP</p> <p>JAN. 29, 2015 ISSUED FOR DP</p>	<p>REVISIONS</p>
CONSULTANTS	<p><b>JAN 29 2015</b></p>	

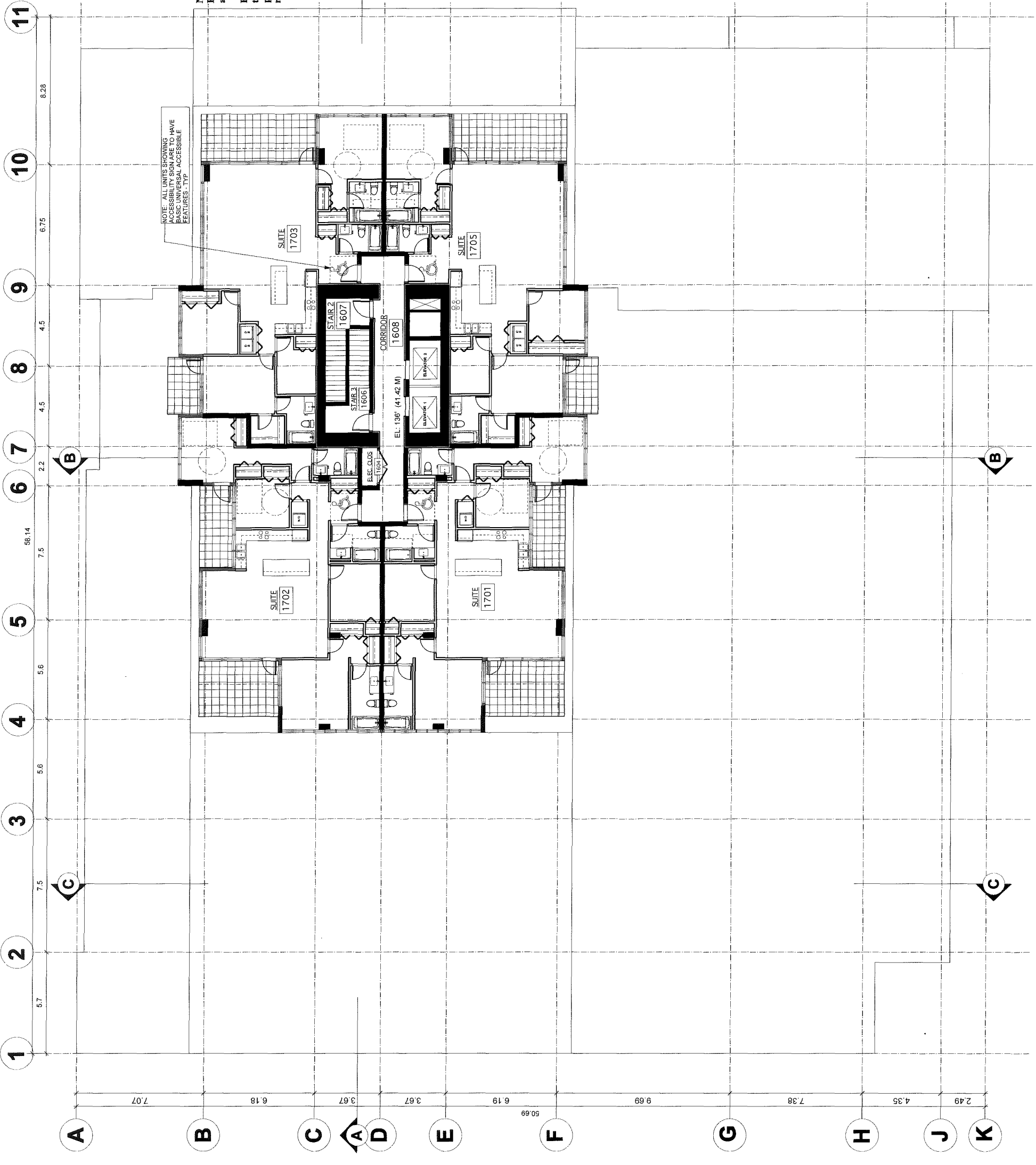
**ANDREW CHEUNG ARCHITECTS INC.**  
 1695 WESTING AVE. VANCOUVER, B.C. V6J 1T3  
 tel (604) 685-2068 fax (604) 685-1889

**DP 13-645206**  
 #12

PROJECT	8151 ANDERSON ROAD RICHMOND		
DATE	LEVEL 15 PLAN		
PROJECT NUMBER	21212	DRAWN BY	SI
DATE	ac	CHECKED BY	ac
SCALE	1:100	DRAWING NUMBER	DP 2.11

**NOTE:**  
 Refer to DP-2.4 for notes for Accessibility and Aging-in-Place Features.  
 Floor plan on this level has an area of less than 650 SM (Above 25 M, Geodetic), as per City of Richmond OCP/CCAP requirements.

NOTE: ALL UNITS REGARDING ACCESSIBILITY SHALL HAVE BASIC UNIVERSAL ACCESSIBLE FEATURES. TYP



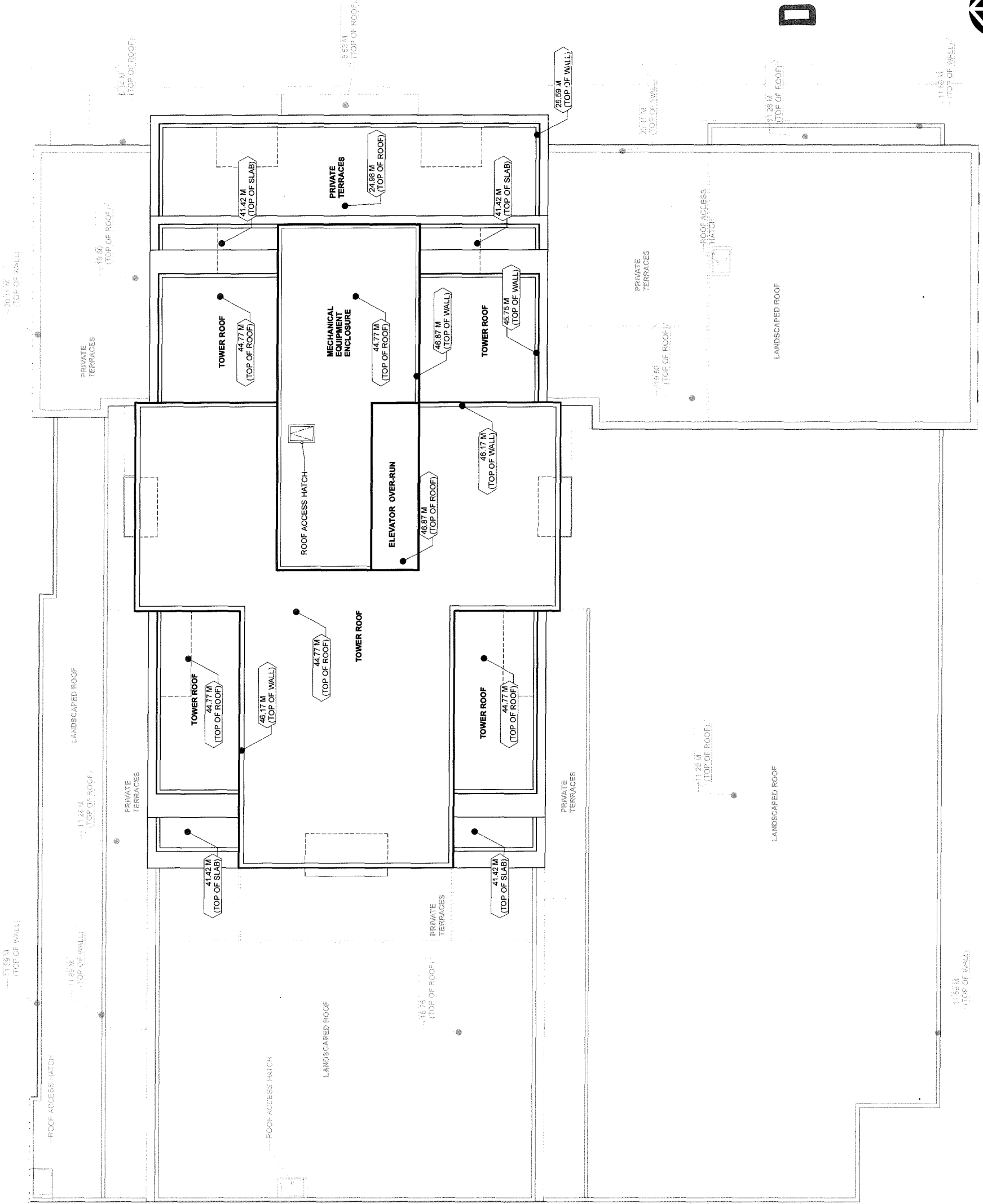
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		consultants <p style="text-align: center; font-size: 24px; font-weight: bold;">JAN 29 2015</p>

ANDREW CHEUNG  
 ARCHITECTS INC.  
 168 West 2nd Ave.  
 Vancouver, B.C.  
 V6J 1H3  
 Tel: (604) 685-2988  
 Fax: (604) 685-1888

13-64286  
 #13

DP

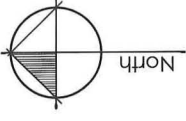
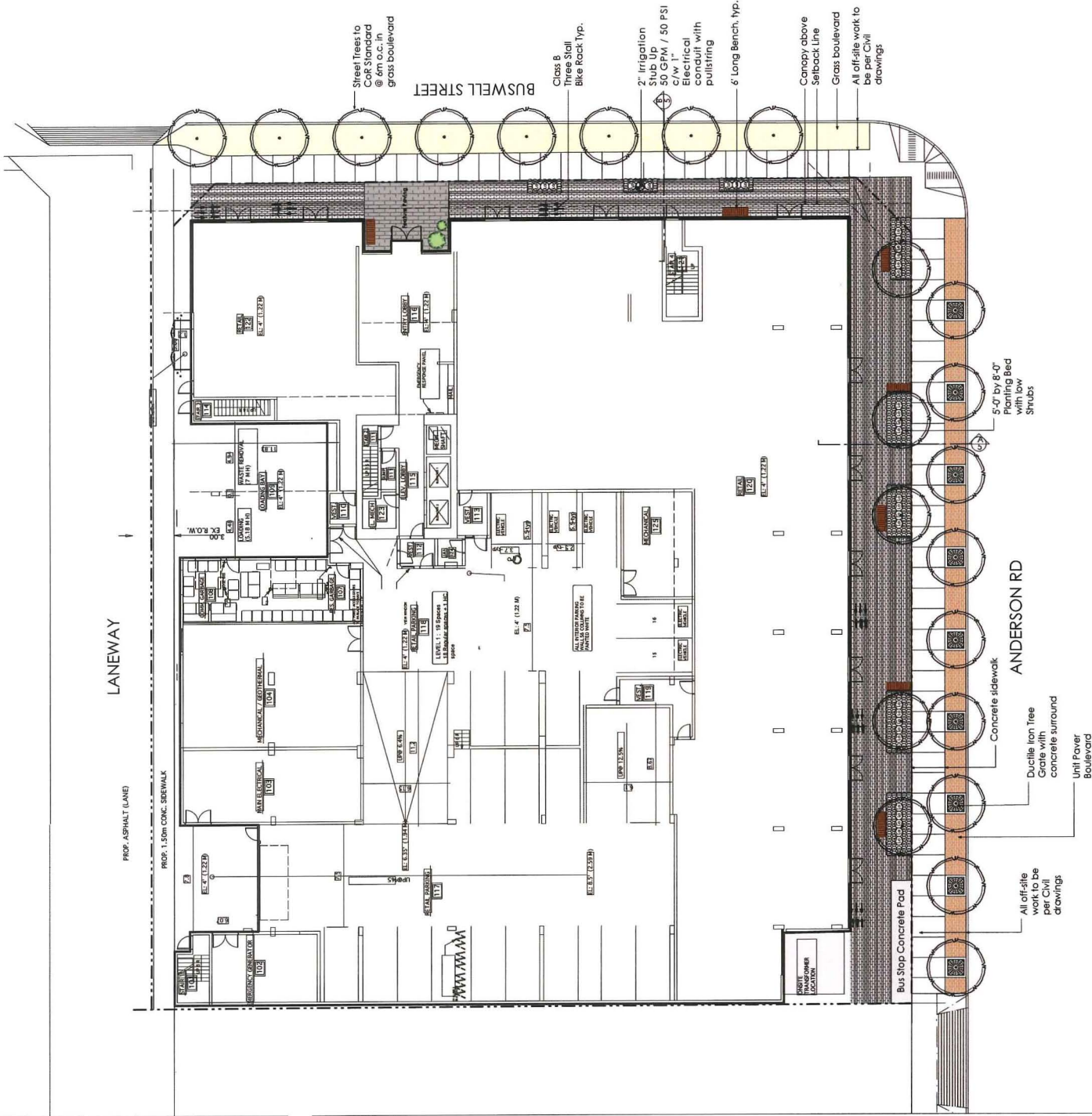
Project <b>8151 ANDERSON ROAD          RICHMOND</b>	
Title <b>ROOF PLAN</b>	
project number <b>21212</b>	file name
drawn si	checked ac
scale 1:100	
drawing number <b>DP 2.12</b>	



MATERIALS LEGEND	Graphic	Description
		City Concrete sidewalk on Grade. City of Richmond Standards with saw cut pattern as shown.
		Concrete tile pavers. Size 9"x6"x3" Standard. Colour: Tan. Pattern: Staggered Running Bond.
		Essex Powers. Tumbled finish, locally sourced. Available from Bedrock. (604-941-7783)
		Hydropressed Concrete Pavers. Size 9"x6"x3" Standard. Colour: Desert Sand; Finish: Nevada.
		Hydropressed Concrete Paver Stepping Stones. Colour: Natural; Finish: Nevada.
		Sodded lawn.
		Bench: Herpo by Landscape Forms. 180cm x 45cm with 30cm arms. WPC/BOARD.
		Six tall bike rack. Model: Landscape Forms Ring. Finish: Powder Coat. Mounting: Surface.

PLANT LIST				
SYM	QUANT.	BOTANICAL NAMES	COMMON NAME	SIZESPACING/COMMENTS
<b>TREES</b>				
4		Acer chinatum	Vine Maple	2.5m Ht.
7		Acer palmatum	Japanese maple	2.5m Ht.
5		Amelanchier alnifolia	Service berry	2.5. Ht.
1		Cercis canadensis	Eastern Redbud	6cm cal.
4		Fagus sylvatica 'Dawyck'	Dawyck Beech	5cm cal.
4		Prunus x yedoensis	Yoshino Cherry	1.8m Ht. standard
19		Syrax japonica	Japanese Snowball	6cm cal.
17			Street Tree TBD by City of Richmond	
<b>SHRUBS</b>				
A	167	Azalea 'Gumpo White'	Gumpo White Azalea	#2 pot 1'3" o.c.
B	120	Buxus microphylla 'Green Gem'	Japanese Box	#2 pot 1'0" o.c.
d	152	Dryopteris erythrosora	Autum Fern	#1 pot 1'4" o.c.
l	473	Lilijurt	Lilijurt	#1 pot 1'2" o.c.
Lo	86	Lonicera japonica	Box-leaved Honeysuckle	#2 pot 2' o.c.
La	86	Lonicera japonica	Box-leaved Honeysuckle	#2 pot 2' o.c.
Sh	96	Sarcococca humilis	Dwarf Sweetbox	#2 pot 1.5' o.c.
Sh	164	Taxus media 'Hickel'	B&B	1.2m Ht. 1'3" o.c.
<b>GRASSES AND PERENNIALS</b>				
k	126	Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	#1 pot 1'0" o.c.
o	85	Echinacea purpurea	Purple Coneflower	#1 pot 1'0" o.c.
i	1050	Iberis sempervirens	Evergreen candytuft	#1 pot 8" o.c.
pa	26	Perovskia atriplicifolia	Russian Sage	#1 pot 1'0" o.c.
r	25	Rudbeckia fulgida	Black-eyed Susan	#1 pot 1'0" o.c.
<b>PREVEGETATED EXTENSIVE GREEN ROOF PLANTINGS</b>				
		Sedum album 'Green Ice'		
		Sedum pachycladus		
		Sedum reflexum 'Spring Green'		
		Sedum evergreen		
		Sedum rupestris 'Angelina'		
		Sedum ibotarium 'Weihenstephaner Gold'		

- Green Roof Maintenance**
- Proposed green roof is a sedum carpet with 3" of growing medium (detail provided).
  - The green roof area is to be irrigated with an automatic irrigation system.
  - Access is provided by roof hatch from the mechanical room and by external built in ladder.
  - Access is provided by roof hatch from the mechanical room and by external built in ladder.
  - Pavers are used to create a pattern and to provide maintenance access.
  - Typically, the green roof will require weeding (2-3 times per year), and light fertilization is helpful.



06 Jan 27-15 Re-issued for DP  
 07 Dec 04-14 Re-issued for DP  
 05 Sept 24-14 Re-issued for DP  
 04 Jul 18-14 Re-issued for DP  
 03 May 06-14 Re-issued for DP  
 02 Sept 04-13 Issued for DP  
 01 Aug. 07-13 Issued for Review  
 no.: | date: | Item:



Project:  
**8151 Anderson Road**

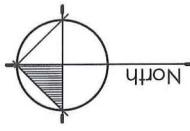
**JAN 29 2015**

Drawn by: EN/KL  
 Checked by: AL  
 Date: August 07, 2013  
 Scale: 1/16" = 1'-0"  
 Drawing Title:

**DP 13**  
**Ground Level Landscape Plan**  
**286**

#14a

Project No.:  
**13048**  
 Sheet No.:



no.	date	Item
01	Aug. 07-13	Issued for Review
02	Sept. 04-13	Issued for DP
03	May 06-14	Re-issued for DP
04	July 18-14	Re-issued for DP
05	Sept. 24-14	Re-issued for DP
06	Oct. 21-14	Issued for City Review
07	Dec. 04-14	Re-issued for DP
08	Dec. 16-14	Re-issued for DP
09	Jan. 29-15	Re-issued for DP

Durante Kreuk Ltd.  
 100 West 5th Avenue  
 Vancouver BC V6L 1N5  
 T: 604.684.4811  
 F: 604.684.0577  
 www.dki.bc.ca

Project: **8151 Anderson Road**  
 Drawing Title: **Level 5 Landscape Plan**

**JAN 29 2015**

Drawn by:	EN / KL
Checked by:	AL
Date:	August 07, 2013
Scale:	1/8" = 1'-0"

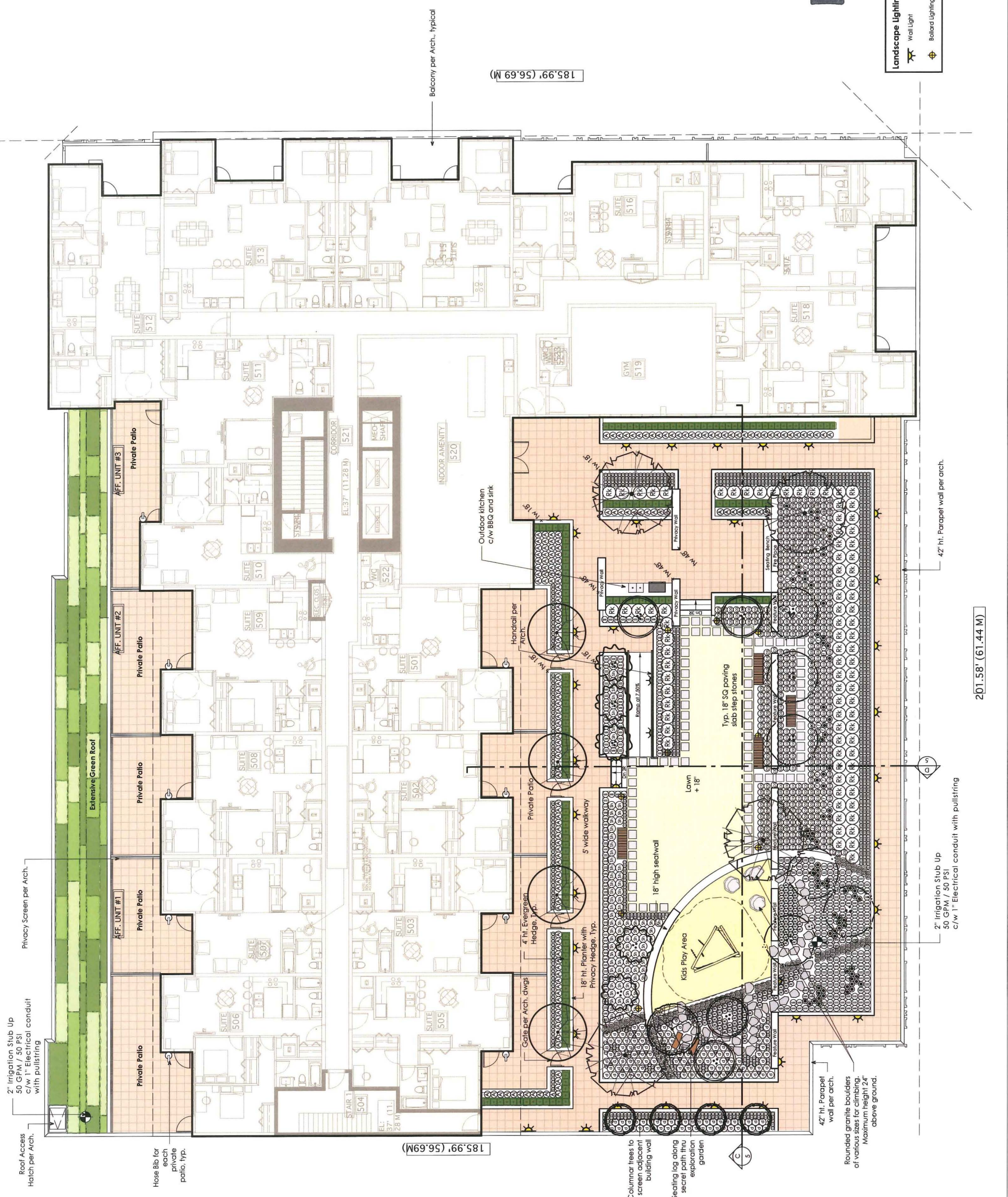
Drawing Title: **Level 5 Landscape Plan**  
**DP 13-05286**

**#146**

Project No.: **13048**  
 Sheet No.:

**Landscape Lighting Legend**

	Wall Light
	Bollard Lighting



Balcony per Arch., typical

185.99' (56.69 M)

201.58' (61.44 M)

42' ht. Parapet wall per arch.

2" Irrigation Stub Up  
50 GPM / 50 PSI  
c/w 1" Electrical conduit with pullstring

42" ht. Parapet wall per arch.  
Rounded granite boulders of various sizes for climbing. Maximum height 24" above ground.

Columnar trees to screen adjacent building wall  
Sealing log along secret path thru explanation garden

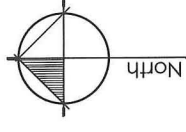
2" Irrigation Stub Up  
50 GPM / 50 PSI  
c/w 1" Electrical conduit with pullstring

Privacy Screen per Arch.

Hose Bib for each private patio, typ.

185.99' (56.69 M)





no.	date:	item:
08	Jan 29-15	Re-issued for DP
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06	Dec 04-14	Re-issued for DP
05	Sept 24-14	Re-issued for DP
04	July 18-14	Re-issued for DP
03	May 06-14	Re-issued for DP
02	Sept. 04-13	Issued for DP
01	Aug. 07-13	Issued for Review

Revisions:

Durante Kreuk Ltd.  
 100-1527 West 4th Avenue  
 Vancouver BC V6L 1N5  
 t: 604 684 4811  
 f: 604 684 0577  
 www.dki.bc.ca

Project:

8151 Anderson Road

JAN 29 2015

Drawn by: EN

Checked by: AL

Date: August 07, 2013

Scale: 1/8" = 1'-0"

Drawing Title:

Level 6 & 7  
 Landscape Plan  
 13-045286

#14C

Project No.:

13048

Sheet No.:

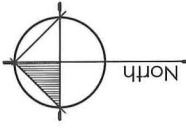
L-3 of 7



DP

13

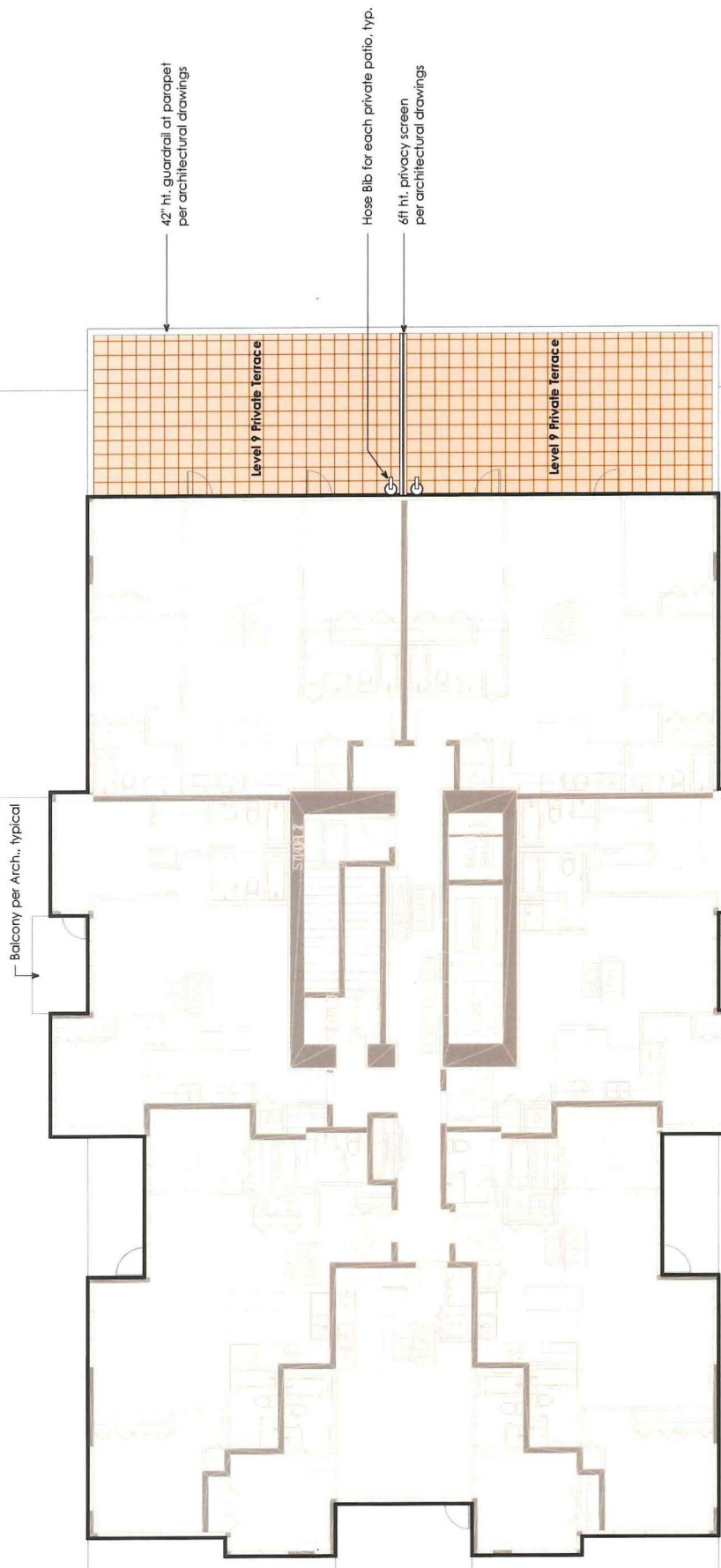
645286



no.	date:	Item:
08	Jan 29-15	Re-issued for DP
07	Dec 16-14	Re-issued for DP
06	Dec 04-14	Re-issued for DP
05	Sept 24-14	Re-issued for DP
04	July 18-14	Re-issued for DP
03	May 06-14	Re-issued for DP
02	Sept. 04-13	Issued for DP
01	Aug. 07-13	Issued for Review

Revisions:

**pk**  
 Durante Kreuk Ltd  
 102 - 1637 West 5th Avenue  
 Vancouver BC V6J 1N5  
 T: 604.684.4611  
 F: 604.684.0577  
 www.dki.bc.ca



Project:

**8151 Anderson Road**

**JAN 29 2015**

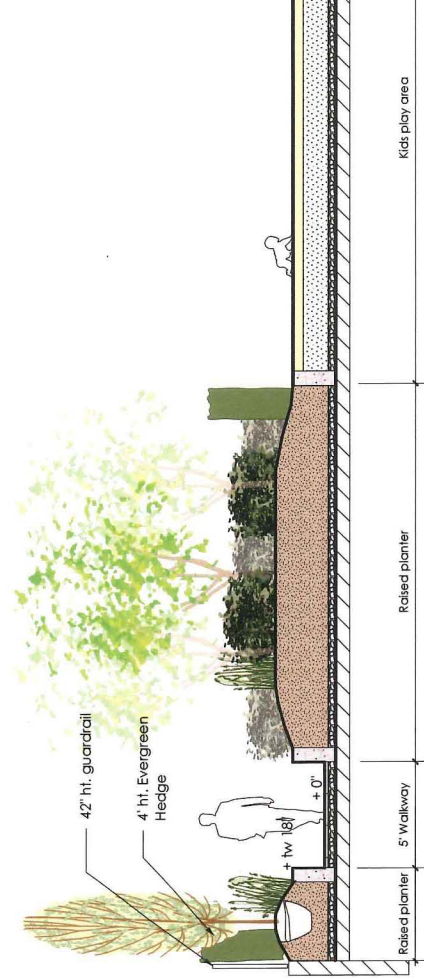
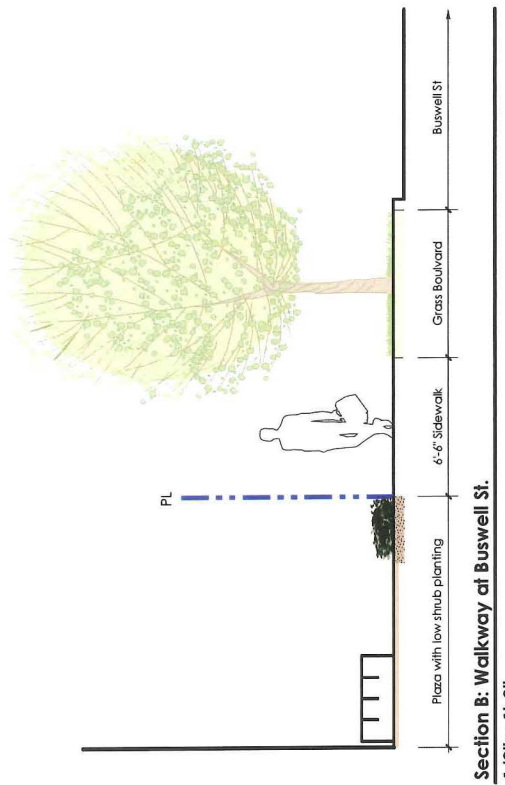
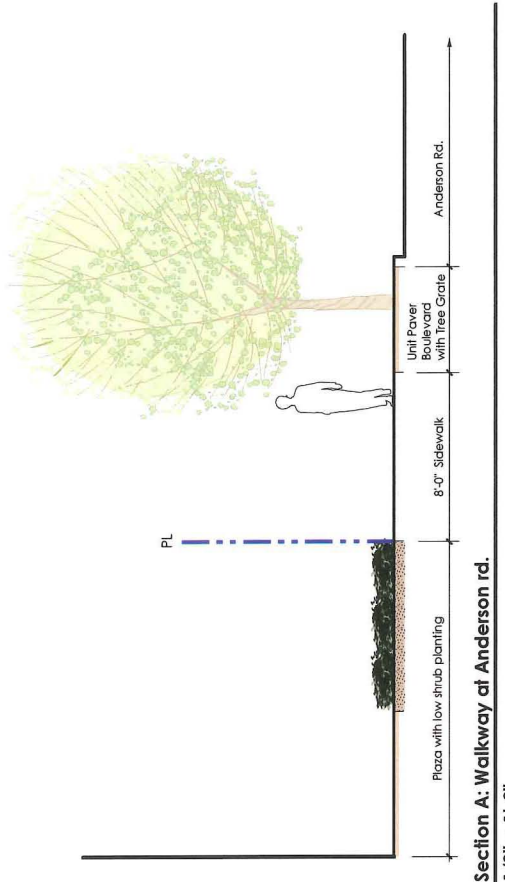
Drawn by:	EN
Checked by:	AL
Date:	August 07, 2013
Scale:	1/8" = 1'-0"
Drawing Title:	

**Level 9**  
**Landscape Plan**  
**DP 13-645286**

**#14d**

Project No.:  
**13048**

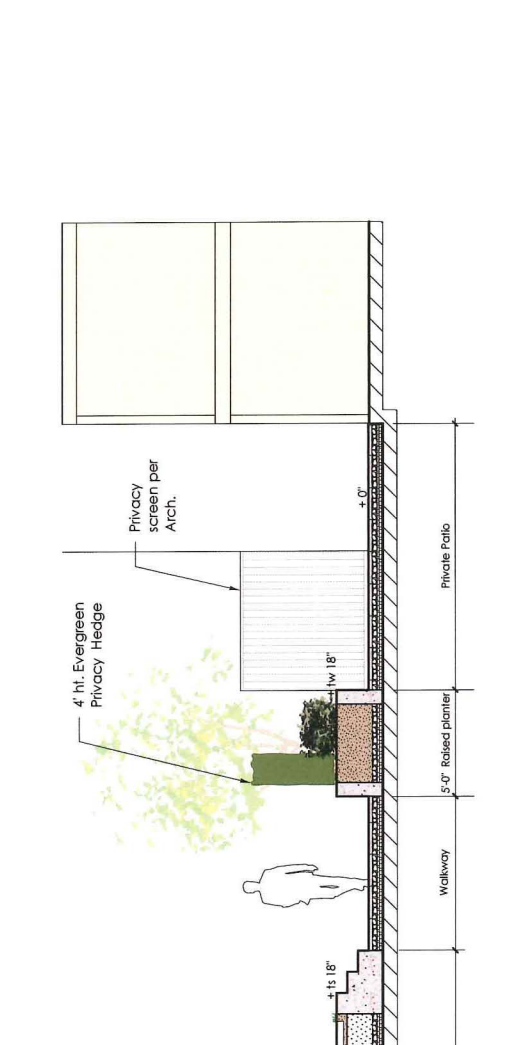
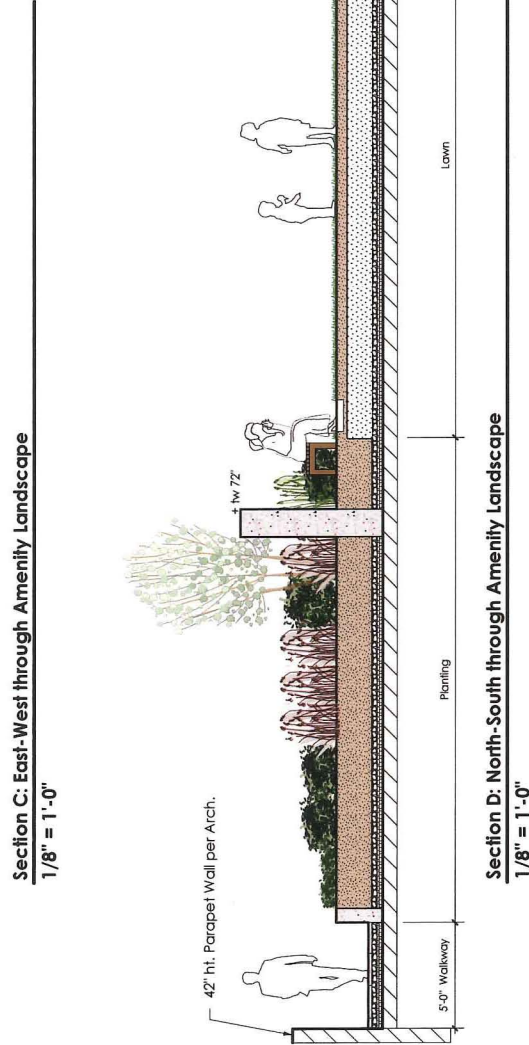
Sheet No.:



Revisions:

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07	Dec 15-14	Re-issued for DP
06	Dec 04-14	Re-issued for DP
05	Sept 24-14	Re-issued for DP
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01	Aug. 07-13	Issued for Review
no.:	date:	item:

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1000 West Broadway  
Vancouver BC V6J 1N5  
T: 604.684.4811  
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Project: **8151 Anderson Road**

**JAN 29 2015**

Drawn by: EN  
Checked by: AL  
Date: August 07, 2013  
Scale: 1/4" = 1'-0"  
Drawing Title: **Landscape Sections**

**DP 13-645286**

#14e

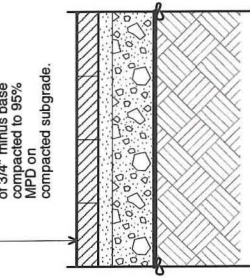
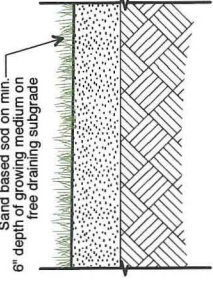
Project No.: 13048  
Sheet No.: L-5 of 7

**Note:** Control Joint: Sawcut min. 3/4" deep. Provide every 1.5m, unless otherwise indicated. Score control joint on sidewalk at Maple Street and Laneway to City of Vancouver Standard.

**Note:** Typical Expansion Joint: Fibreboard material w/ Sealant, as per Specification. Place at all locations where sidewalk meets stairs, mezzanines with walls or stairs. Provide at minimum every 6m unless otherwise shown on Layout Plan.

**Note:** Pavers as required to maintain pattern/layout as shown on Layout Plans. All pavers to be cut with Concrete Stone Saw, no guillotine cuts will be allowed.

**Note:** Soil: Pavers thicker than that with a sand base and/or with mesh will be rejected, and the Specified sod re-installed at contractor's expense.



LD-1 4" Wide Concrete Band Paving - On Grade  
Scale 1" = 1'-0"

LD-2 Typical Unit Paver Detail - On Grade  
Scale 1" = 1'-0"

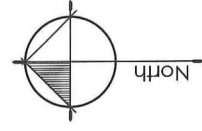
LD-3 Sodded Lawn - On Grade  
Scale 1" = 1'-0"

**KOMPAN Product Info**

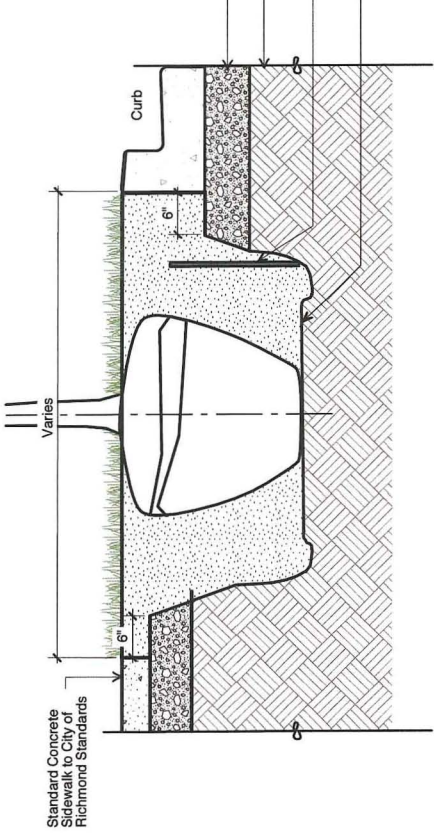
**PARKOUR 002 - NR0852**

Category	Level	Level	Level
Accessible Ground Level Play Types	2	2	2
Accessible Elevated Level Play Types	3	2	2
Accessible Activities	0	3	2
Enhanced Activities	0	0	0
Present	0	0	0
Required	0	0	0

Best User Age: 6+ years  
Footings to ground posts  
Surface installation also available  
Technical information available at [kompan.com](http://kompan.com)



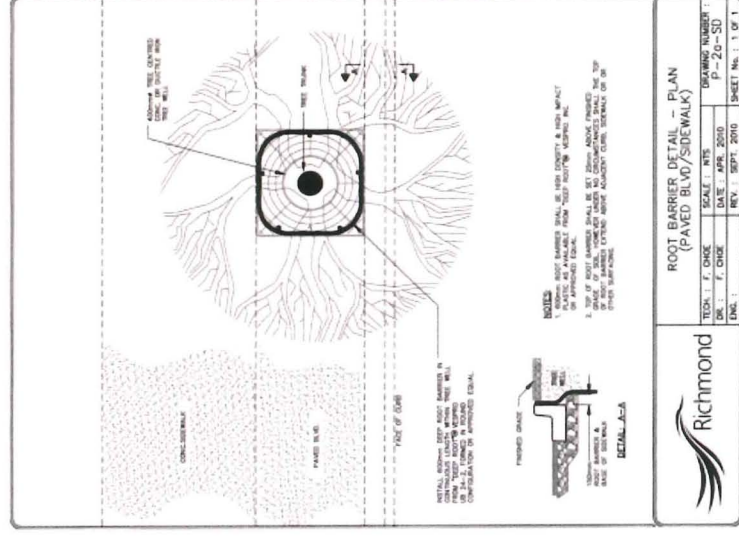
**General Planting Notes:**  
1. Do not cut Tree Leader.  
2. Protect tree from damage during planning. Ensure rootball protected from Sun, Frost or Dessication.  
3. Ensure tree location does not conflict with Underground Services. "Call before digging".  
4. Ensure top of rootball is at or slightly above Finished Grade. Remove top 1/3 of burlap from rootball and tie from bottom to top of rootball. (ensure wire basket filling loops and top row of basket). Remove any soil on top of "original" rootball.



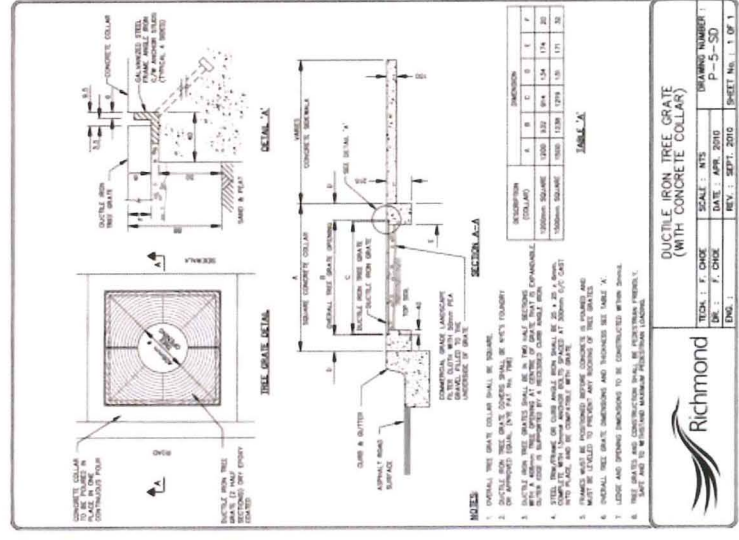
LD-4 Typical City of Richmond Tree Boulevard Planting  
Scale 1" = 1'-0"

Fully compacted base  
Fully compacted subgrade  
Root barrier  
Bottom of pit compact subgrade under rootball only to prevent settlement - min. 95% S.P.D.

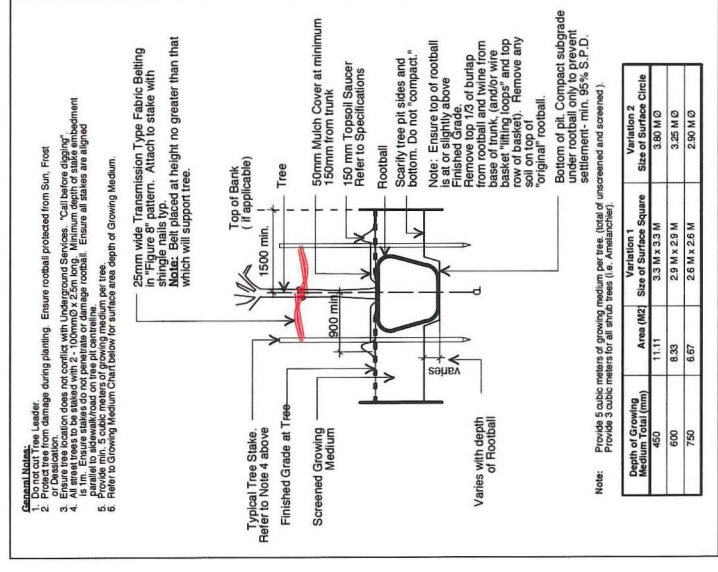
LD-5 Play Equipment at Kid's Play Area  
NTS



LD-6 City of Richmond Root Barrier Detail  
NTS



LD-7 City of Richmond Ductile Iron Grate Detail  
NTS



LD-8 Typical Tree Planting Detail  
NTS

**Project:** 8151 Anderson Road

**Date:** JAN 29 2015

**Drawn by:** SF

**Checked by:** AL

**Date:** May 01, 2014

**Scale:** As Noted

**Drawing Title:** Landscape Details

**Project No.:** 13048

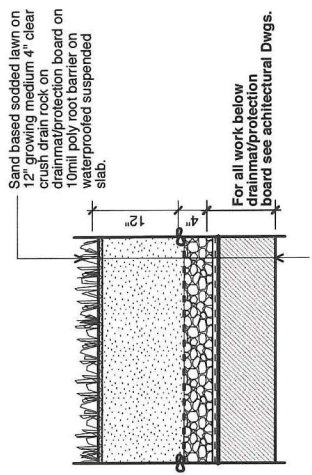
**Sheet No.:** DP 13-645286 #14f

**Revisions:**

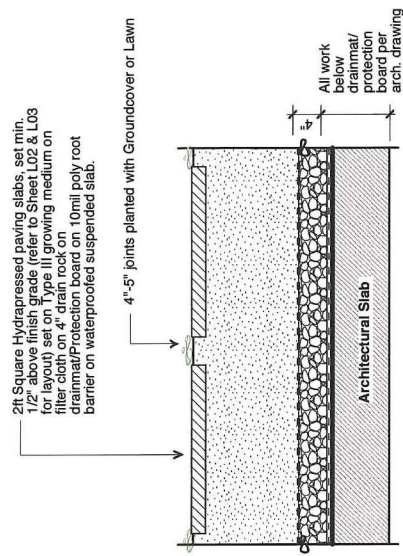
no.	date:	item:
08	Jan 27-15	Re-issued for DP
07	Dec 16-14	Re-issued for DP
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03	May 06-14	Re-issued for DP
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01	Aug 07-13	Issued for Review

**Revisions:**

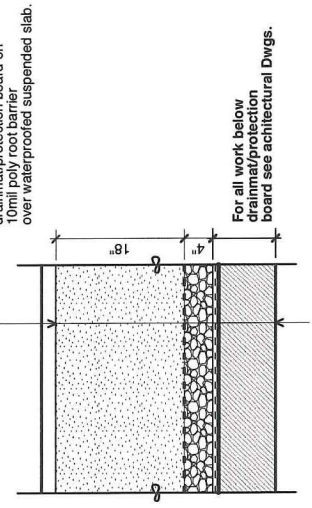
Durante Kreuk Ltd.  
102 - 1637 West 5th Avenue  
Vancouver BC V6J 1N5  
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www.dk.bc.ca



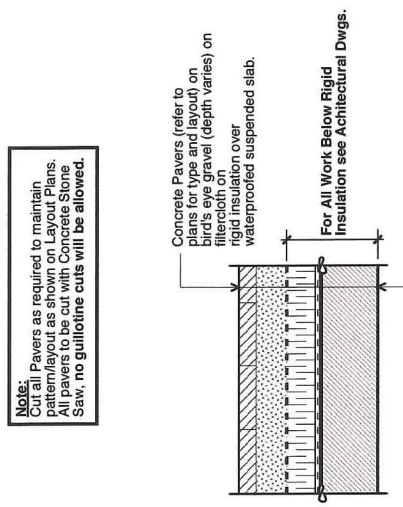
LD-1 Sodded Lawn on Slab  
Scale 1" = 1'-0"



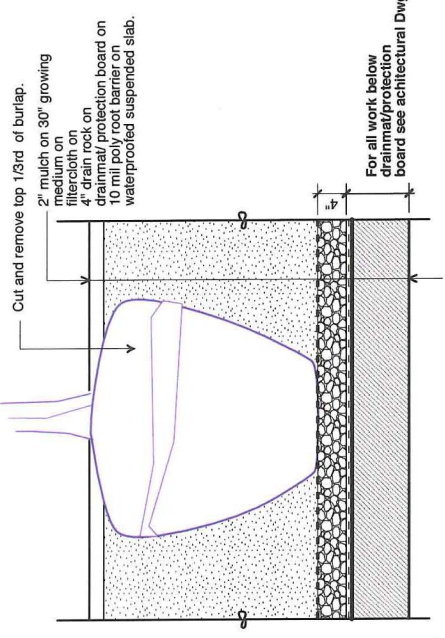
LD-5 Natural Stepping Stones with Planted Joints  
Scale 1" = 1'-0"



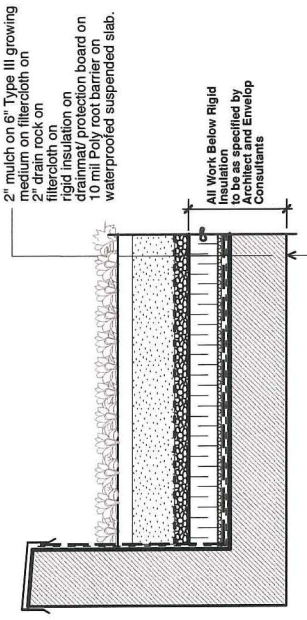
LD-2 Shrub Planting on Slab - Over Parkade  
Scale 1" = 1'-0"



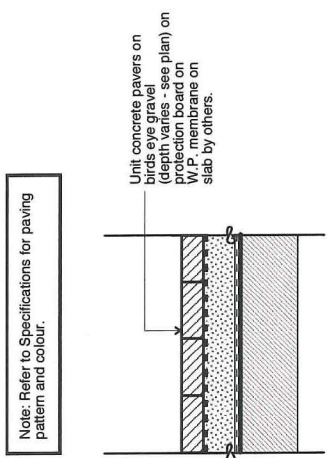
LD-6 Hydropressed Concrete Paving Slab on Inverted Roof Slab  
Scale 1" = 1'-0"



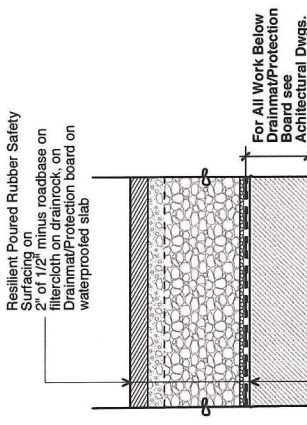
LD-3 Typical Tree Planting on Slab - Over Parkade  
Scale 1" = 1'-0"



LD-7 Low Soil Planter on Slab - Inverted Roof  
Scale 1" = 1'-0"

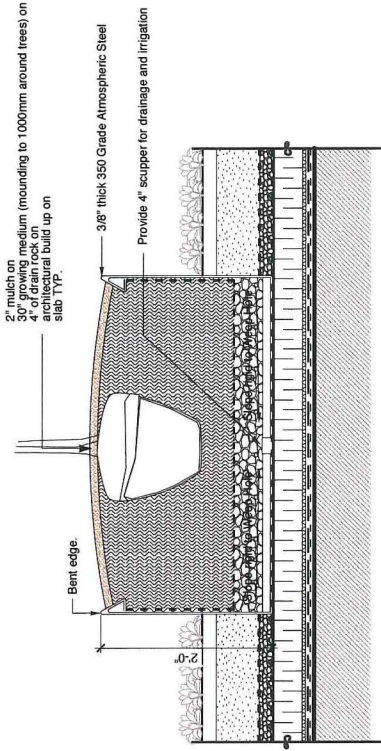


LD-4 Unit Concrete Pavers on Slab  
Scale 1" = 1'-0"

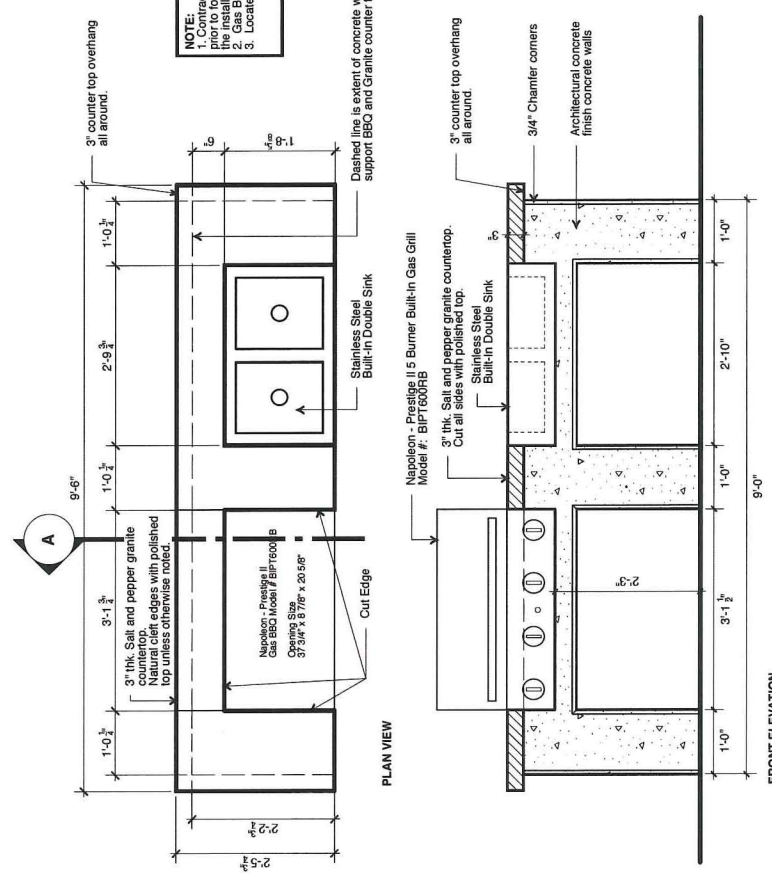


LD-8 Resilient Rubber Tile Safety Surfacing - on Slab  
Scale 1" = 1'-0"

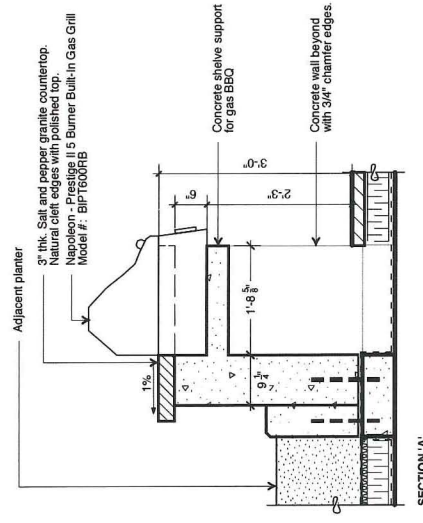
**Typical Metalwork Notes:**  
1. Submit shop drawings for all metalwork FOR REVIEW AND APPROVAL PRIOR TO ASSEMBLY in accordance with Section 05500.  
2. All metalwork shall be galvanized steel with a minimum of 100% zinc coating.  
3. Metal Planter to be all-weld construction. Ensure all weld faces are ground smooth.



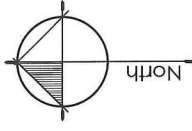
LD-9 Atmospheric Steel Planters with Trees  
Scale 1" = 1'-0"



LD-10 Outdoor Kitchen with Gas BBQ  
Scale 3/4" = 1'-0"



SECTION 'A'



Revisions:

08	Jan 27-15	Re-issued for DP
07	Dec 16-14	Re-issued for DP
06	Dec 04-14	Re-issued for DP
05	Sept 24-14	Re-issued for DP
04	July 18-14	Re-issued for DP
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01	Aug. 07-13	Issued for Review
no.:   date:		Item:



Project: **8151 Anderson Road**  
Date: **JAN 29 2015**

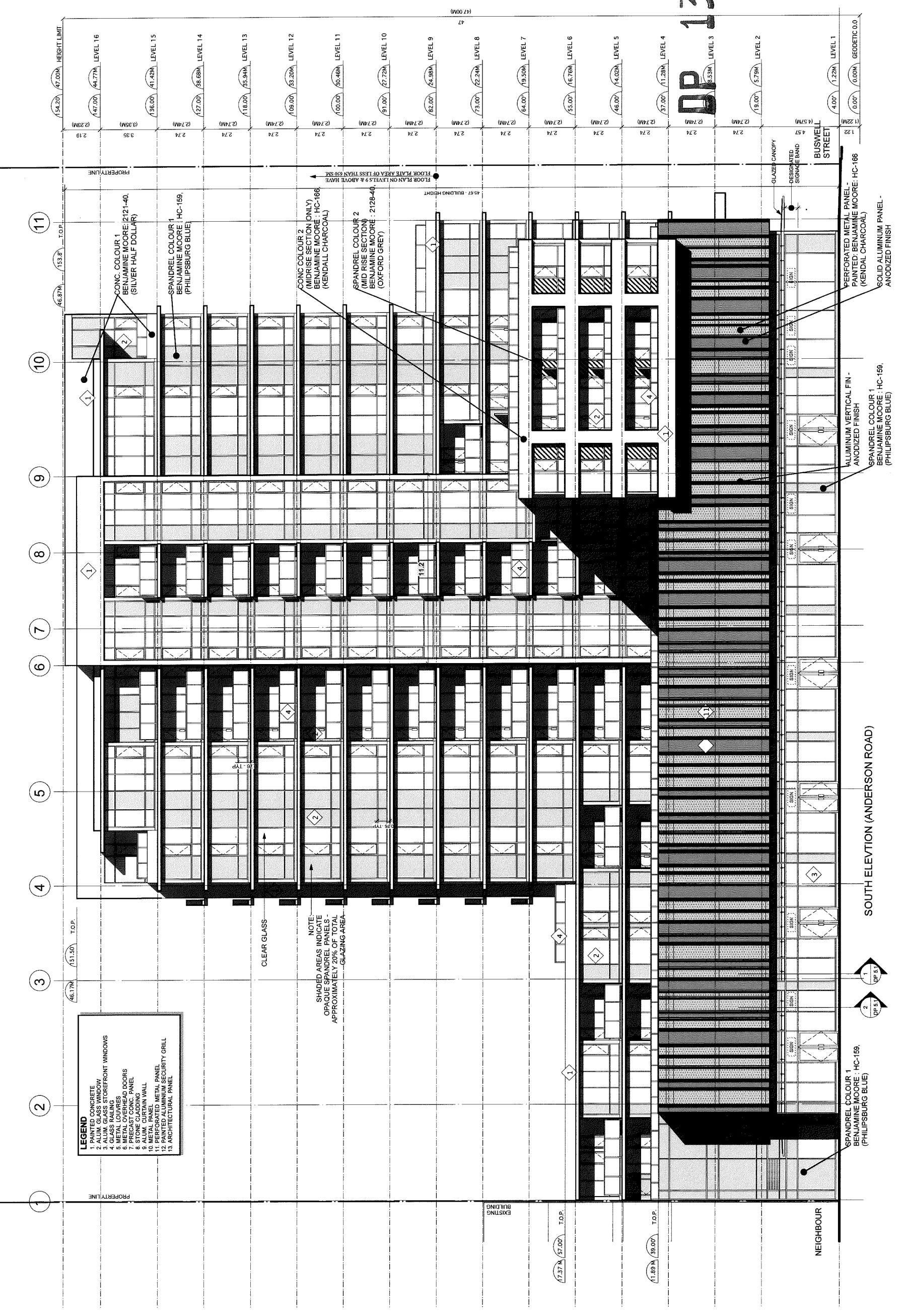
Drawn by: SF  
Checked by: AL  
Date: May 01, 2014  
Scale: As Noted  
Drawing Title: **Landscape Details**  
Project No.: **13048**  
Sheet No.: **#14**

DP 13-645286

NOISE	DATE	REVISIONS
	SEP 4, 2013	ISSUED FOR DP
	JUL 18, 2014	ISSUED FOR DP
	SEP 24, 2014	ISSUED FOR DP
	DEC 8, 2014	ISSUED FOR DP
	JAN 29, 2015	ISSUED FOR DP
	CONSULTANTS	
<b>JAN 29 2015</b>		

ANDREW CHEUNG ARCHITECTS INC.  
 Suite 100  
 645-2786  
 Vancouver, B.C.  
 V6J 1H3  
 Tel: (604) 685-2088  
 Fax: (604) 685-1889

PROJECT		8151 ANDERSON ROAD RICHMOND
SOUTH ELEVATION - ANDERSON ROAD		
PROJECT NUMBER	21212	REV. NUMBER
DESIGNED BY	AC	SCALE
CHECKED BY		1 : 100
DRAWING NUMBER		
<small>Do not alter, trace, copy, reproduce or disseminate this drawing without the written consent of Andrew Cheung Architects Inc. All rights reserved. This drawing is the property of Andrew Cheung Architects Inc. and shall remain the property of Andrew Cheung Architects Inc. at all times.</small>		<b>DP 3.1</b>



DP 13-645286

#15

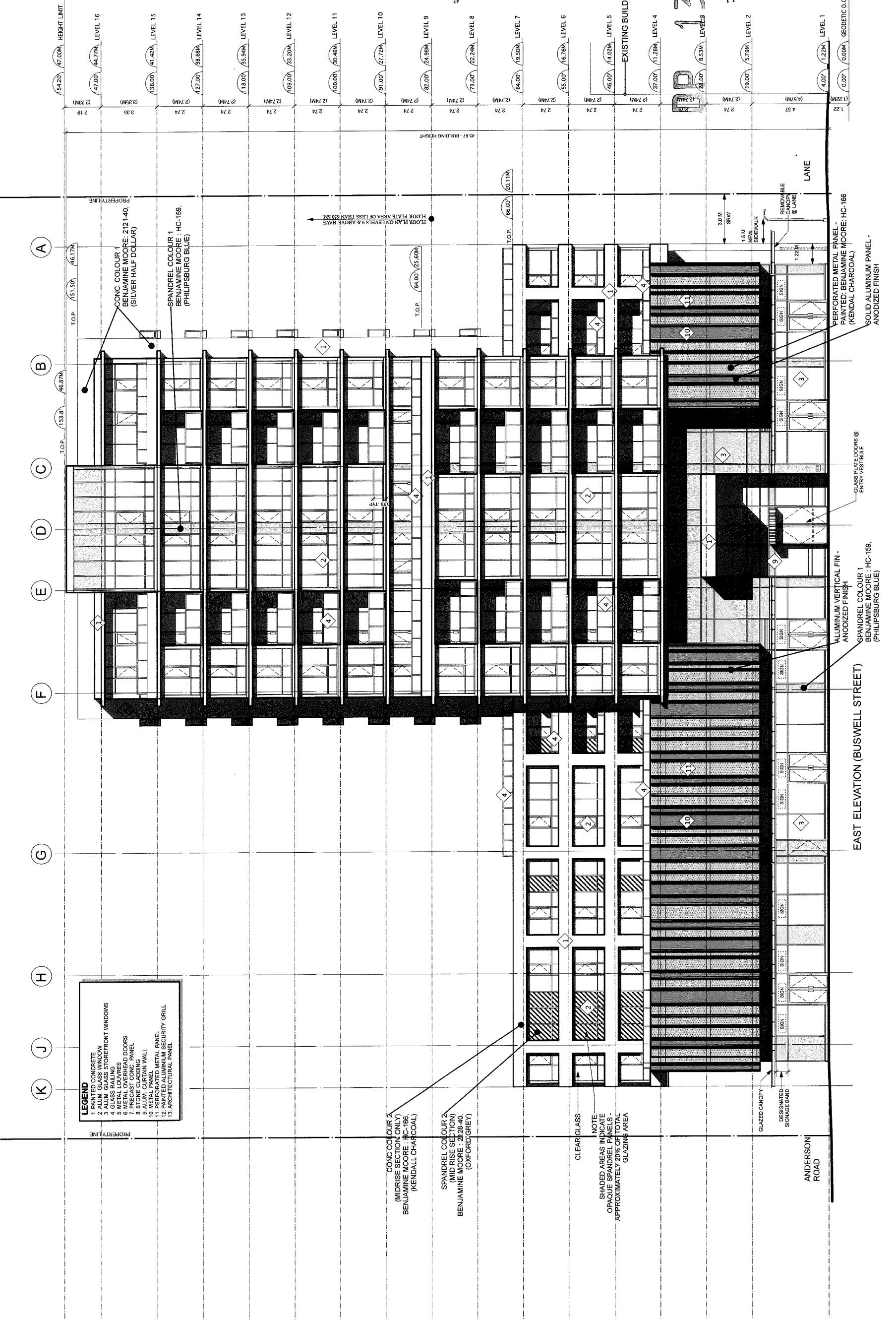
This drawing was created using an Apple Macintosh computer.

DATE	REVISIONS
SEP 4, 2013	ISSUED FOR DP
JUL 18, 2014	ISSUED FOR DP
SEP 24, 2014	ISSUED FOR DP
DEC 8, 2014	ISSUED FOR DP
JAN 28, 2015	ISSUED FOR DP

CONSULTANTS  
**JAN 29 2015**

**ANDREW CHEUNG ARCHITECTS INC.**  
 suite 410  
 3650 west 2nd ave  
 Vancouver, BC V6L 1H6  
 tel (604) 685-2088  
 fax (604) 685-1889

PROJECT <b>8151 ANDERSON ROAD RICHMOND</b>	FILE NAME <b>EAST ELEVATION - BUSWELL STREET</b>
PROJECT NUMBER <b>21212</b>	CHECKED BY <b>AC</b>
DRAWN BY <b>AC</b>	SCALE <b>1 : 100</b>
DRAWING NUMBER <b>DP 3.2</b>	



**LEGEND**

1. CONCRETE
2. ALUM. GLASS WINDOW
3. ALUM. GLASS STOREFRONT WINDOWS
4. GLASS RAILING
5. METAL LOUVRES
6. GLASS DOORS
7. PRECAST CONC. PANEL
8. STONE CLADDING
9. ALUM. CURTAIN WALL
10. PERFORATED METAL PANEL
11. PAINTED ALUMINUM SECURITY GRILL
12. ARCHITECTURAL PANEL

CONC COLOUR 1  
 (MIDRISE SECTION ONLY)  
 BENJAMINE MOORE : HC-166,  
 (KENDALL CHARCOAL)

SPANDREL COLOUR 2  
 (MIDRISE SECTION)  
 BENJAMINE MOORE : 2128-40,  
 (OXFORD GREY)

CLEAR GLASS  
 NOTE:  
 SHADED AREAS INDICATE  
 OPAQUE SPANDREL PANELS -  
 APPROXIMATELY 20% OF TOTAL  
 GLAZING AREA

GLAZED CANOPY  
 DESIGNATED  
 SIGNAGE BAND

ANDERSON ROAD

EAST ELEVATION (BUSWELL STREET)

ALUMINUM VERTICAL FIN -  
 ANODIZED FINISH  
 SPANDREL COLOUR 1  
 BENJAMINE MOORE : HC-169,  
 (PHILIPSBURG BLUE)

GLASS PLATE DOORS @  
 ENTRY VESTIBULE

PERFORATED METAL PANEL -  
 PAINTED: BENJAMINE MOORE: HC-166  
 (KENDALL CHARCOAL)  
 SOLID ALUMINUM PANEL -  
 ANODIZED FINISH

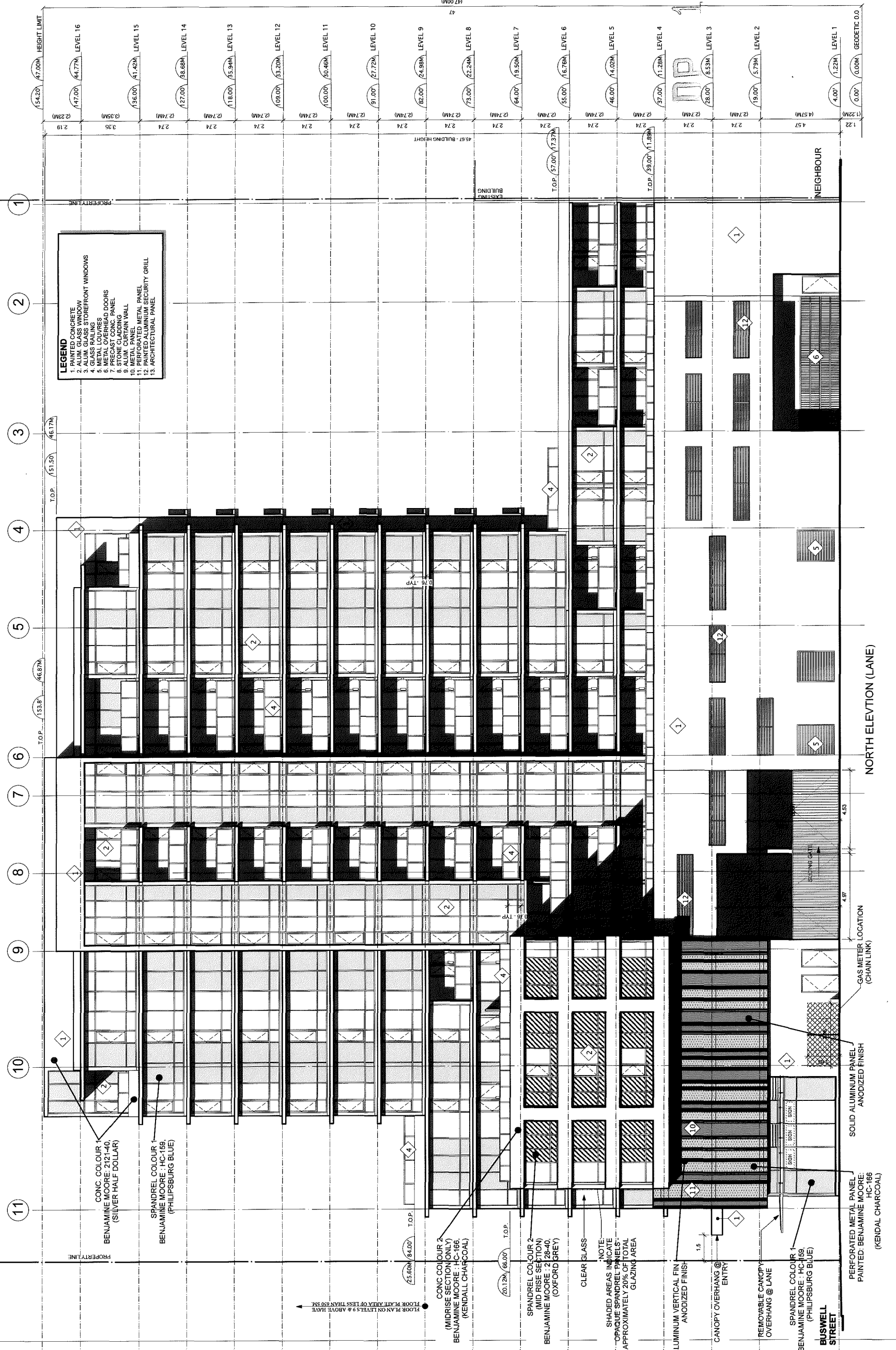
rooms

DATE	REVISIONS
SEP 4, 2013	ISSUED FOR DP
JUL 18, 2014	ISSUED FOR DP
SEP 24, 2014	ISSUED FOR DP
DEC 8, 2014	ISSUED FOR DP
JAN 28, 2015	ISSUED FOR DP

consultants  
**JAN 29 2015**

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 Suite 410  
 365 West 2nd Ave.  
 Vancouver, B.C.  
 V6J 1H5  
 Tel: (604) 685-2088  
 Fax: (604) 685-1889

Project	8151 ANDERSON ROAD RICHMOND
File Name	NORTH ELEVATION - LANE
Project Number	21212
Drawn by	at
Checked by	bc
Scale	1 : 100
Drawing Number	DP 3.3



The drawings are created using AutoCAD software.



DATE	REVISIONS
SEP 4, 2013	ISSUED FOR DP
JUL 15, 2014	ISSUED FOR DP
SEP 24, 2014	ISSUED FOR DP
DEC 8, 2014	ISSUED FOR DP
JAN 29, 2015	ISSUED FOR DP

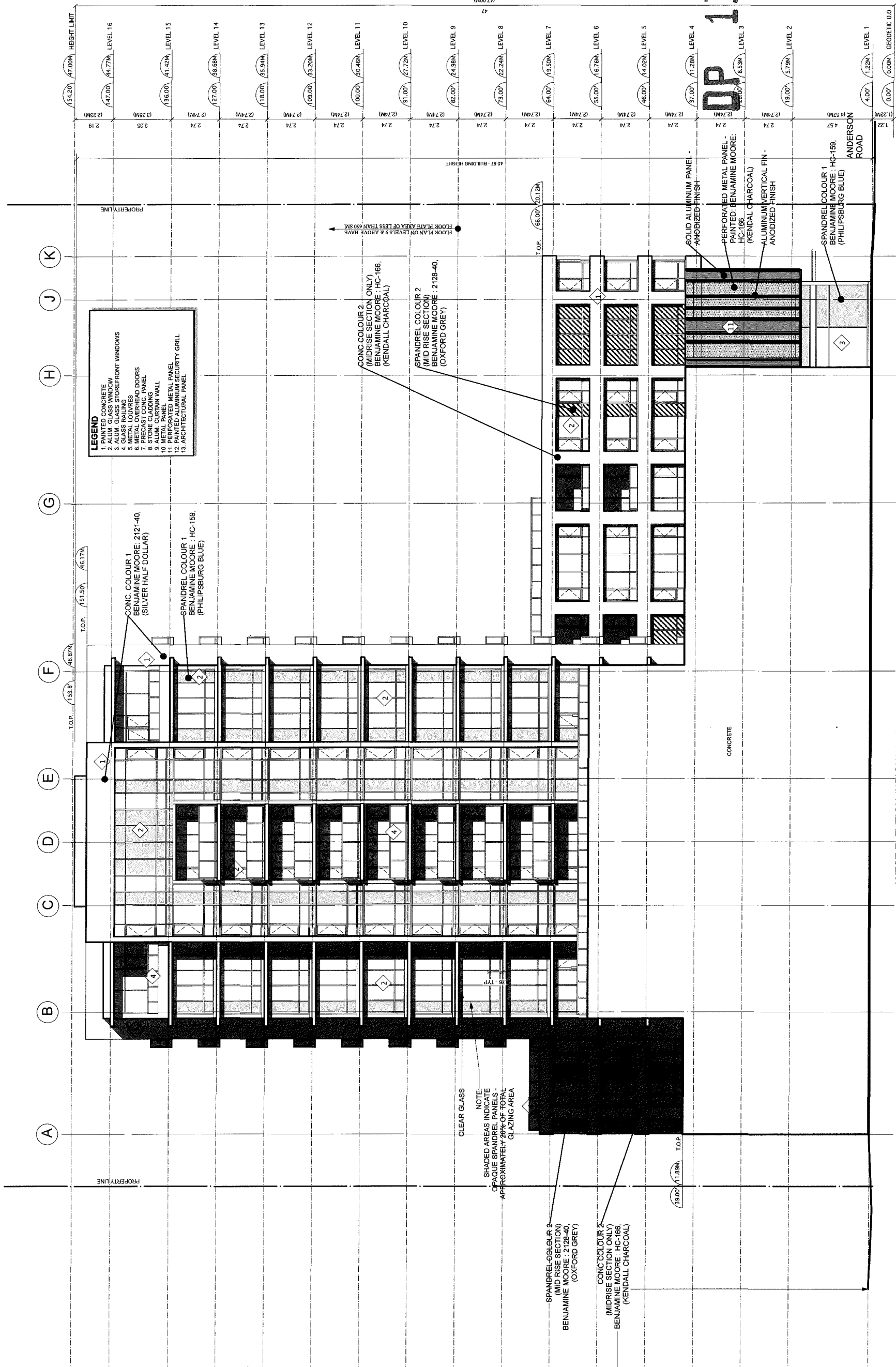
CONSULTANTS

**JAN 29 2015**

**ANDREW CHEUNG ARCHITECTS INC.**  
 1639 West 2nd Ave.  
 Vancouver, B.C.  
 V6J 1V3  
 Tel: (604) 685-2088  
 Fax: (604) 685-1889

PROJECT	8151 ANDERSON ROAD RICHMOND
THE	WEST ELEVATION - NEIGHBOUR
PROJECT NUMBER	21212
DATE	
CHECKED BY	AC
SCALE	1 : 100
DRAWING NUMBER	DP 3.4

This drawing was created using an Apple Macintosh computer.



**LEGEND**

1. PAINTED CONCRETE
2. ALUM. CURTAIN WALL
3. ALUM. GLASS STOREFRONT WINDOWS
4. GLASS RAILING
5. METAL LOUVRES
6. METAL DOORS
7. PRECAST CONG. PANEL
8. STONE CLADDING
9. ALUM. CURTAIN WALL
10. PERFORATED METAL PANEL
11. PAINTED ALUMINUM SECURITY GRILL
12. ARCHITECTURAL PANEL
13. ARCHITECTURAL PANEL

HEIGHT LIMIT	LEVEL	HEIGHT
154.20	LEVEL 16	47.00M
147.00	LEVEL 15	44.77M
136.00	LEVEL 14	41.42M
127.00	LEVEL 13	38.08M
118.00	LEVEL 12	34.74M
109.00	LEVEL 11	31.40M
100.00	LEVEL 10	28.06M
91.00	LEVEL 9	24.72M
82.00	LEVEL 8	21.38M
73.00	LEVEL 7	18.04M
64.00	LEVEL 6	14.70M
55.00	LEVEL 5	11.36M
46.00	LEVEL 4	8.02M
37.00	LEVEL 3	4.68M
28.00	LEVEL 2	1.34M
19.00	LEVEL 1	0.00M
4.00	GEODETIC O.D.	0.00M

WEST ELEVATION (NEIGHBOUR)

**DP 13-043286**  
 #18

**8151 ANDERSON RD, RICHMOND, BC  
15 STORY, MIXED USE BUILDING**

PROJECT DATA:	
1. CIVIC ADDRESS:	8151 ANDERSON ROAD, RICHMOND, B.C.
2. LEGAL DESCRIPTION:	A SEC 9 BLK 4N R6W PL 6789 (J96195E)
3. ZONING CLASSIFICATION:	CDT-1
4. SITE AREA:	3484.4 m <sup>2</sup>
5. FLOOR AREA RATIO (F.A.R.):	
Allowable F.A.R.:	3.15
3.0 (base) + 0.15 (aff. housing) =	
Proposed F.A.R.:	
2.831 (9,864.1 m <sup>2</sup> Res.) + 0.338 (1,176.7 m <sup>2</sup> Comm.) = 0.027 (94.9 m <sup>2</sup> BUHU) = 3.142	
6. AFFORDABLE HOUSING:	
Req'd Aff. Housing : 0.05 x 9,864.1 SM = 493.2 SM	
Proposed Aff. Housing: 8 Units, 506.4 SM	
7. BASIC UNIVERSAL HOUSING UNITS (BUHU):	
Req'd BUHU: (0.05 x 103 Res. Units) + (1 x 8 Aff. Housing Units) = 6 + 8 = 14	
Proposed BUHU = 55	
8. AGING IN PLACE FEATURES:	
Proposed: 100%	111
9. SITE COVERAGE:	
Allow. Lot Coverage: 90%	
Proposed: 2,815 m <sup>2</sup> (Coverage) / 3,464 m <sup>2</sup> (Lot Area) =	81.3 %
10. CAR PARKING:	
Resident parking required (1 x 103 units) + (0.9 x 8 AFF.H. Units) =	111
Visitor parking required (0.2 x 111 units) =	23
Retail parking required on first 2 floors: (1177 / 100 X 3.75) =	45
Total parking required* : 111 + 45 =	156
Total parking provided :	162
LEVEL 1: 0 Small + 18 Standard + 1 Accessible = 19	
LEVEL 2: 31 Small + 33 Standard + 1 Accessible = 65	
LEVEL 3: 40 Small + 35 Standard + 3 Accessible = 78	
Totals: 71 Small + 86 Standard + 5 Accessible = 162	
* 12 visitor parking spaces are shared with retail parking, hence not counted towards total.	
11. BICYCLE PARKING:	
Class I Req'd: [111 Res. X 1.25] + [(1,177 M <sup>2</sup> Retail/100) X 0.27] =	143
Class I provided: (88 on Level 2 + 63 on Level 3, all horizontal stalls) =	151
Class II Req'd: [111 Res. X 0.2] + [(1,177 M <sup>2</sup> Retail/100) X 0.4] =	28
Class II provided:	28
12. LOADING / GARBAGE REMOVAL:	
RESIDENTIAL (7.13.6.1): 111 Units:	1 Medium (SU-9)
COMMERCIAL (7.13.6.2): Gross Area = 1,176.7 SM	1 Medium (SU-9)
(One loading bay shared by garbage/recycling removal bay)	

**PROJECT DATA**

8151 Anderson Rd.	1 BR AREA	1+ DEN AREA	2 BR AREA	3 BR AREA	CIRC. AREA	RETAIL AREA	NET RES. AREA	GROSS RES. AREA	AFF. H. AREA	Univ. Access BUHU	BIKE C-1	BIKE C-2	CAR C-2	TOTALS (\$M)
Level 1	0	0	0	0	0	158.25	1176.7	0	158.25	0	0	28	19	1334.99
Level 2	0	0	0	0	0	0	0	0	0	0	0	88	65	0
Level 3	0	0	0	0	0	0	0	0	0	0	0	63	78	0
Level 4	2	118.12	8	516	6	494.65	0	1128.67	1261.65	3	190	8	0	1261.65
Level 5	4	227.4	8	519	7	567.4	0	1313.97	1439.82	3	190	10	0	1439.82
Level 6	4	217.86	2	140.59	8	671.0	0	1029.45	1120.59	2	126	6	0	1120.59
Level 7	0	0	0	3	249	4	444.31	48.59	693.21	0	0	2	0	741.8
Level 8	2	96.54	0	0	7	583.0	0	49.87	731.21	0	0	3	0	731.21
Level 9	0	0	0	5	417.28	2	195.30	36.76	612.56	0	0	3	0	649.34
Level 10	0	0	0	7	598.41	0	34.84	0	598.41	0	0	3	0	633.25
Level 11	0	0	0	7	598.41	0	34.84	0	598.41	0	0	3	0	633.25
Level 12	0	0	0	7	598.41	0	34.84	0	598.41	0	0	3	0	633.25
Level 13	0	0	0	7	598.41	0	34.84	0	598.41	0	0	3	0	633.25
Level 14	0	0	0	7	598.41	0	34.84	0	598.41	0	0	3	0	633.25
Level 15	0	0	0	0	0	4	564.64	31.36	564.64	0	0	4	0	596
Site Area														3484.4
Total Unit Count	12	18	71	10					8	51				111
Net Res. Area									9016.11					9016.11
Gross Res. Area									9864.91					9864.91
Gross Total Area	661.92	1175.59	5974.35	1204.25	848.8	1176.7								11041.65
FAR Calculation	(3.0 Base) + (0.15 Affordable Housing) = 3.15 x (Site Area: 3,464.4) = 10,915.3 SM													
Allowable Area (With BUHU Density Exclusion)	(51 Basic Universally Accessible Units x 1.66 SM / Unit = 84.9 SM)													
Affordable Housing	(0.05 x Gross Residential Area = 0.05 x 9,864 SM = 493.2 SM)													
Parking Req'd by 7.7.2.1)	(103 Res. Units x 1.5 = 154.5) + (8 Aff. Units x 0.9 = 7.2) + (1176 sm Comm. x 3.75 = 45) = 208													
Parking by City Centre Zone 1	*111 Units x 0.2 = 22.2 + 23 Residential Visitor parking to be shared with Commercial													
Total Parking Provided	(103 Res. Units x 1.0 = 103) + (8 Aff. Units x 0.9 = 7.2) + (8) + (1200 sm Comm. x 3.75 = 45) = 156													
Electric Vehicle (EV) parking stalls	*23 Res. visitor spaces shared with retail parking													
Future EV parking stalls	*required: 20 % of 156 = 32 total ... provided: 5 on Ground level + 14 on 2nd floor + 19 on 3rd floor = 38 total													
Total Bike - Class I	*required: 25 % of 156 = 39 total ... provided: 30 on 2nd floor + 16 on 3rd floor = 46 total													
Total Bike - Class II	(111 Res. Units x 1.25 = 138.75) + (1176 SM Retail / 100 = 12) x 0.27 = 3.18 = 0 = 143													
	(111 Res. Units x 0.2 = 22.2) + (1177 SM Retail / 100 = 12) x 0.4 = 4.7 = 28													

revisions

date	revisions
SEP. 4, 2013	ISSUED FOR DP
JUL. 18, 2014	ISSUED FOR DP
SEP. 24, 2014	ISSUED FOR DP
DEC. 8, 2014	ISSUED FOR DP
DEC. 16, 2014	ISSUED FOR DP
JAN. 29, 2015	ISSUED FOR DP

consultants

**JAN 29 2015**

ANDREW CHEUNG ARCHITECTS INC.

**DP 13-645086**

reference

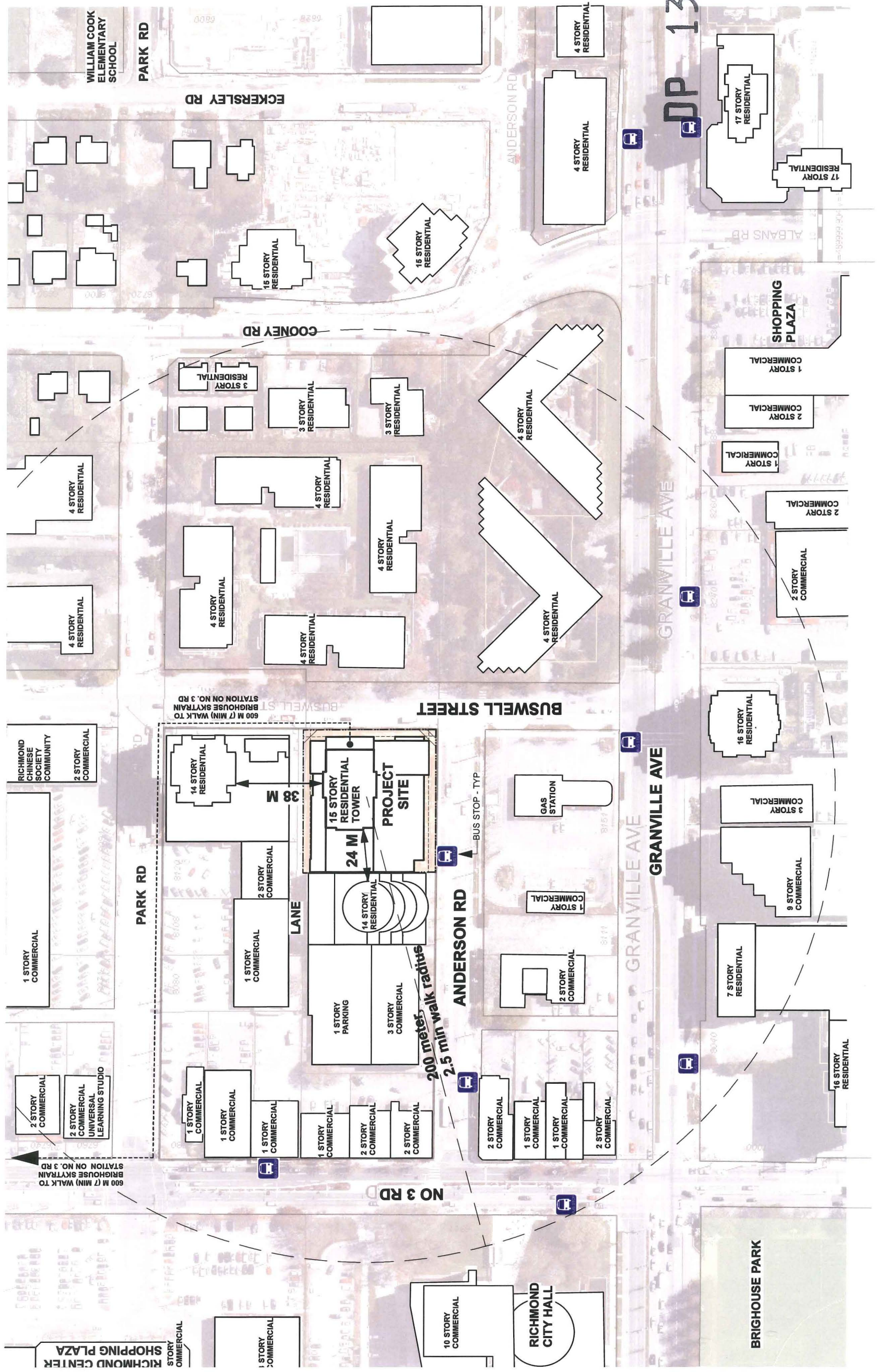
PROJECT DATA

PROJECT number	21212
PROJECT name	8151 ANDERSON ROAD RICHMOND
drawn by	si
checked by	ac
scale	NA
drawing number	DP 1.1

revisions	date	revisions
	SEP. 4, 2013	ISSUED FOR DP
	SEP. 19, 2013	ISSUED FOR DP
	SEP. 26, 2014	ISSUED FOR DP
	DEC. 8, 2014	ISSUED FOR DP
	DEC. 16, 2014	ISSUED FOR DP
	JAN. 29, 2015	ISSUED FOR DP
consultants	<p style="text-align: center;"><b>JAN 29 2015</b></p>	

**ANDREW CHEUNG ARCHITECTS INC.**  
 suite 410  
 1839 west 2nd ave.  
 vancouver bc  
 v6z 1r3  
 (604) 685-5088  
 fax (604) 685-1888

project	8151 ANDERSON ROAD RICHMOND
file	CONTEXT PLAN
project number	21212
drawn	si
checked	ac
scale	1:750
drawing number	<b>DP 1.2</b>



**DP 13-645286**  
*reference*

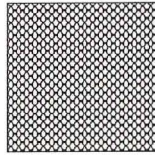
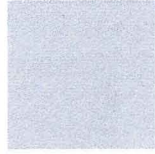
# MATERIAL BOARD



1 WINDOW GLASS  
FLOAT GLASS  
COLOUR: GREY

3 CONC @ MIDRISE /  
PERFORATED METAL  
SCREEN @ PARKADE  
COLOUR: KENDALL CHARCOAL  
BENJAMIN MOORE: HC-166

5 SPANDREL GLASS PANEL 1  
- TOWER & ABOVE ENTRY  
LOBBY AREAS.  
COLOUR: PHILIPSBURG BLUE  
BENJAMIN MOORE HC-159

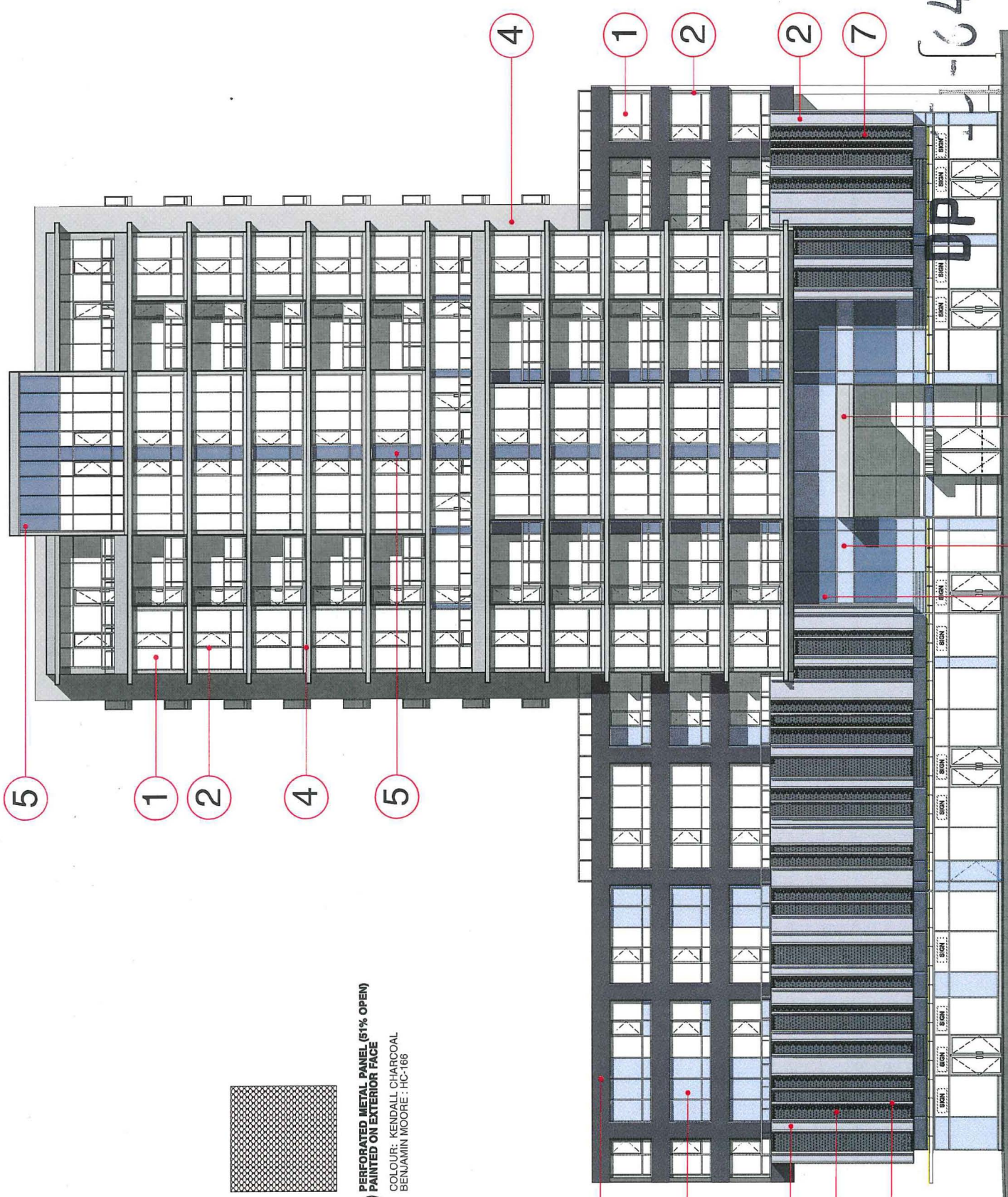


2 WINDOW MULLION/  
SOLID METAL PANEL  
COLOUR: STANDARD SILVER  
STARLINE WDW GX2000-D1010

4 CONC. @ HIGHRISE /LANE  
CONC. CANOPY @ ENTRY  
COLOUR: SILVER HALF DOLLAR  
BENJAMIN MOORE 2121-40

6 SPANDREL GLASS PANEL 2  
- MIDRISE & RETAIL AREAS  
COLOUR: OXFORD GREY  
BENJAMIN MOORE 2128-40

7 PERFORATED METAL PANEL (51% OPEN)  
PAINTED ON EXTERIOR FACE  
COLOUR: KENDALL CHARCOAL  
BENJAMIN MOORE: HC-166



645286  
reference

EAST ELEVATION (BUSWELL STREET)

## DP 9.1 - MATERIAL BOARD

8151 ANDERSON ROAD, RICHMOND, B.C.

East Elevation (Buswell Street)

ANDREW CHEUNG ARCHITECTS INC.

#410, 1639 WEST 2ND AVE.  
VANCOUVER, B.C. V6J 1H3  
TEL: 604 685-2088, FAX: 604-685-1889

FEB 04 2015

notes

DATE	REVISIONS
SEP 4, 2013	ISSUED FOR DP
JUL 18, 2014	ISSUED FOR DP
SEP 24, 2014	ISSUED FOR DP
DEC 8, 2014	ISSUED FOR DP
JAN 29, 2015	ISSUED FOR DP

comments

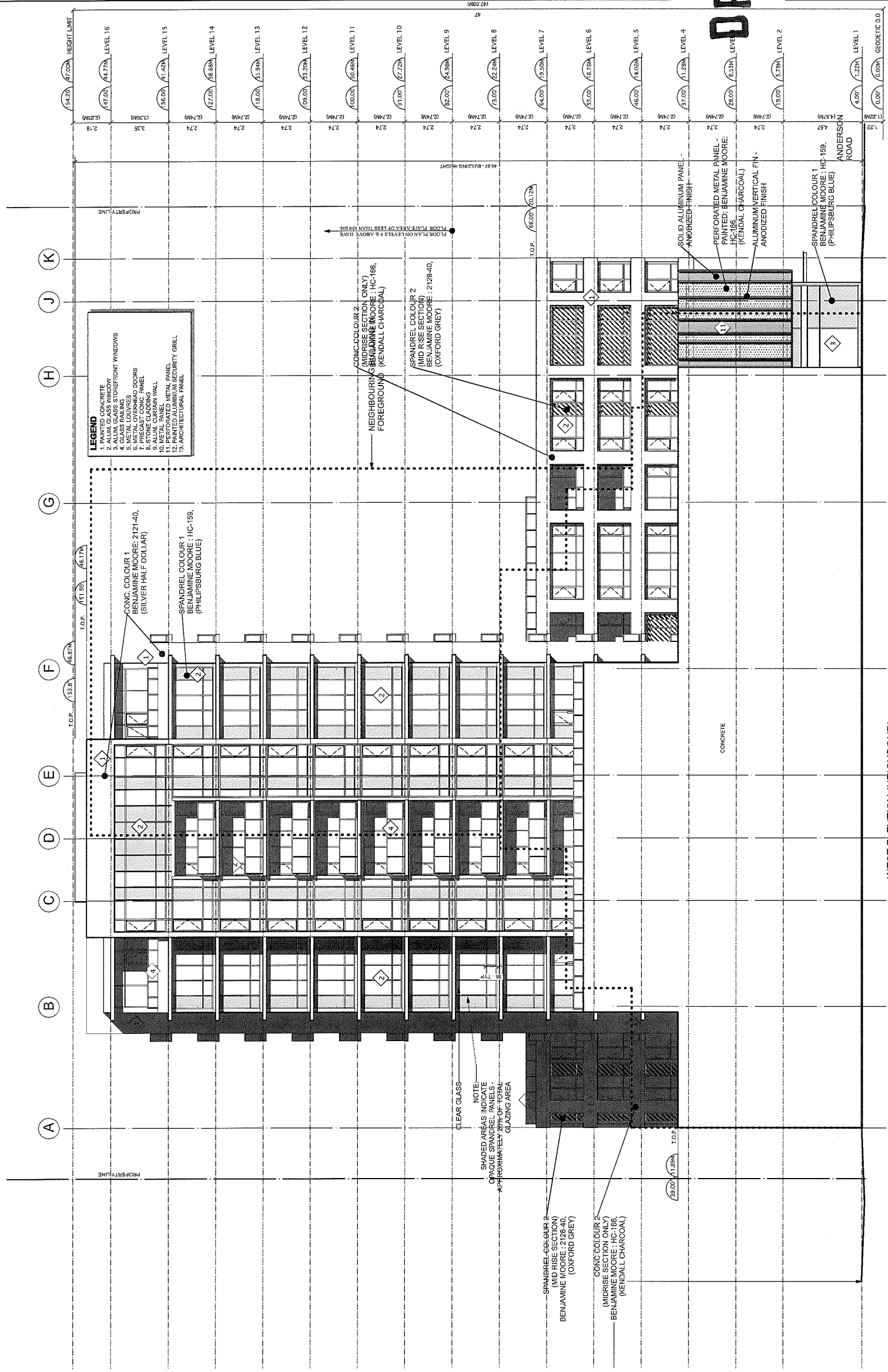
ANDREW CHIRUNG ARCHITECTS INC.

DP 136645286

reference

PROJECT	8151 ANDERSON ROAD RICHMOND
TYPE	WEST ELEVATION - NEIGHBOUR
PROJECT NUMBER	21212
CHECKED BY	
SCALE	1 : 100
DRAWING NUMBER	DP 3.4

FEB 03 2015



THE SHEET IS TO BE USED IN CONJUNCTION WITH THE OTHER SHEETS OF THIS SET.

NOTES

REVISIONS

APR. 16, 2014 ISSUED FOR DP  
 JUL. 18, 2014 ISSUED FOR DP  
 SEP. 24, 2014 ISSUED FOR DP  
 DEC. 16, 2014 ISSUED FOR DP  
 JAN. 29, 2015 ISSUED FOR DP

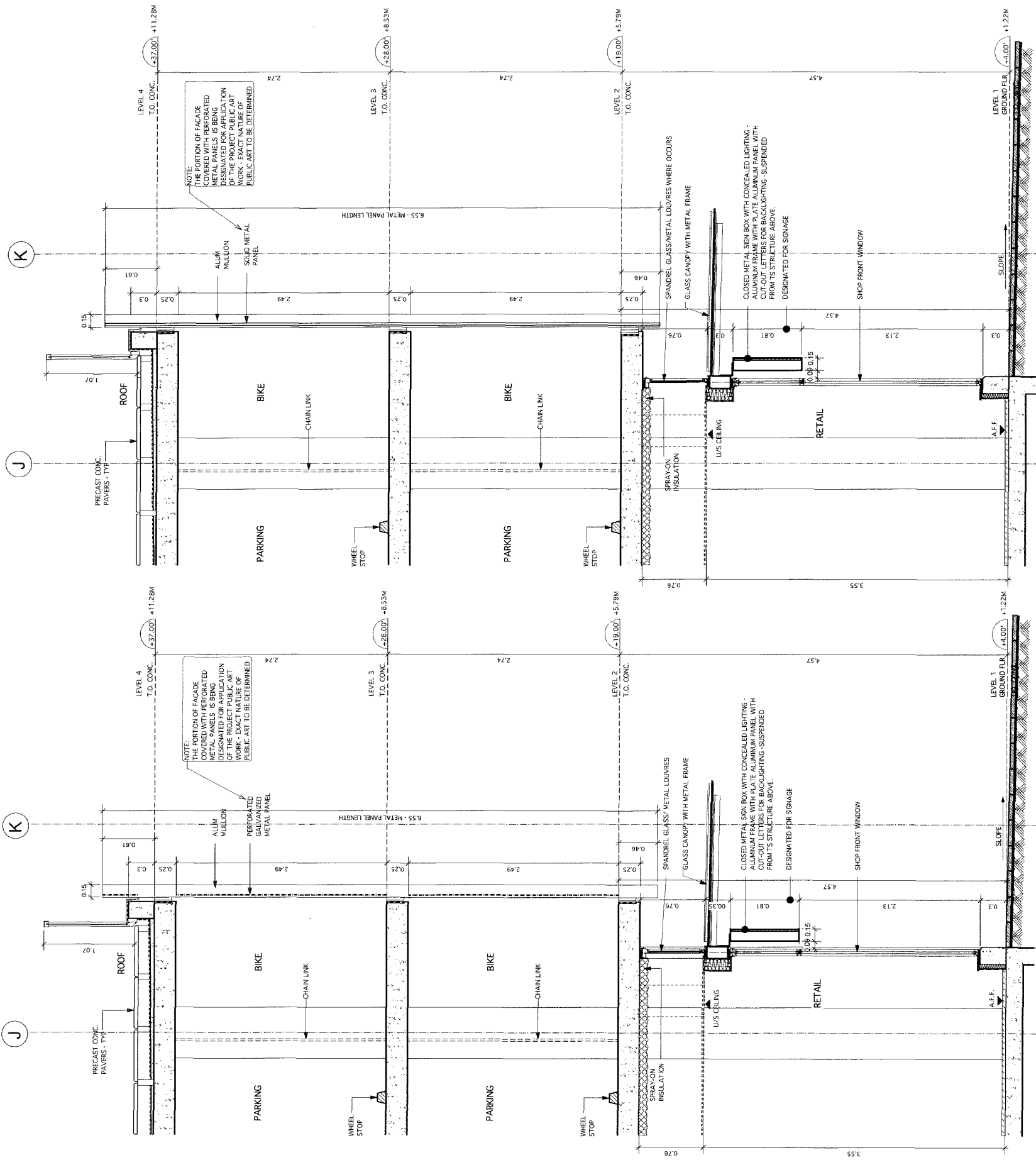
CONSULTANTS

JAN 29 2015

**ANDREW CHEUNG ARCHITECTS INC**  
 185 West 4th Ave, v6j 1h3  
 Vancouver, B.C.  
 TEL (604) 685-2088  
 FAX (604) 685-1888

**DP 15-645286**  
*reference*

PROJECT <b>8151 ANDERSON ROAD RICHMOND</b>	
TITLE <b>WALL SECTION</b>	
PROJECT NUMBER <b>21212</b>	FILE NAME
DRAWN BY <b>J</b>	CHECKED BY <b>AC</b>
SCALE <b>1:25</b>	DRAWING NUMBER <b>DP 5.1</b>



1 WALL SECTION 1

2 WALL SECTION 2

A 4.3

A 4.3

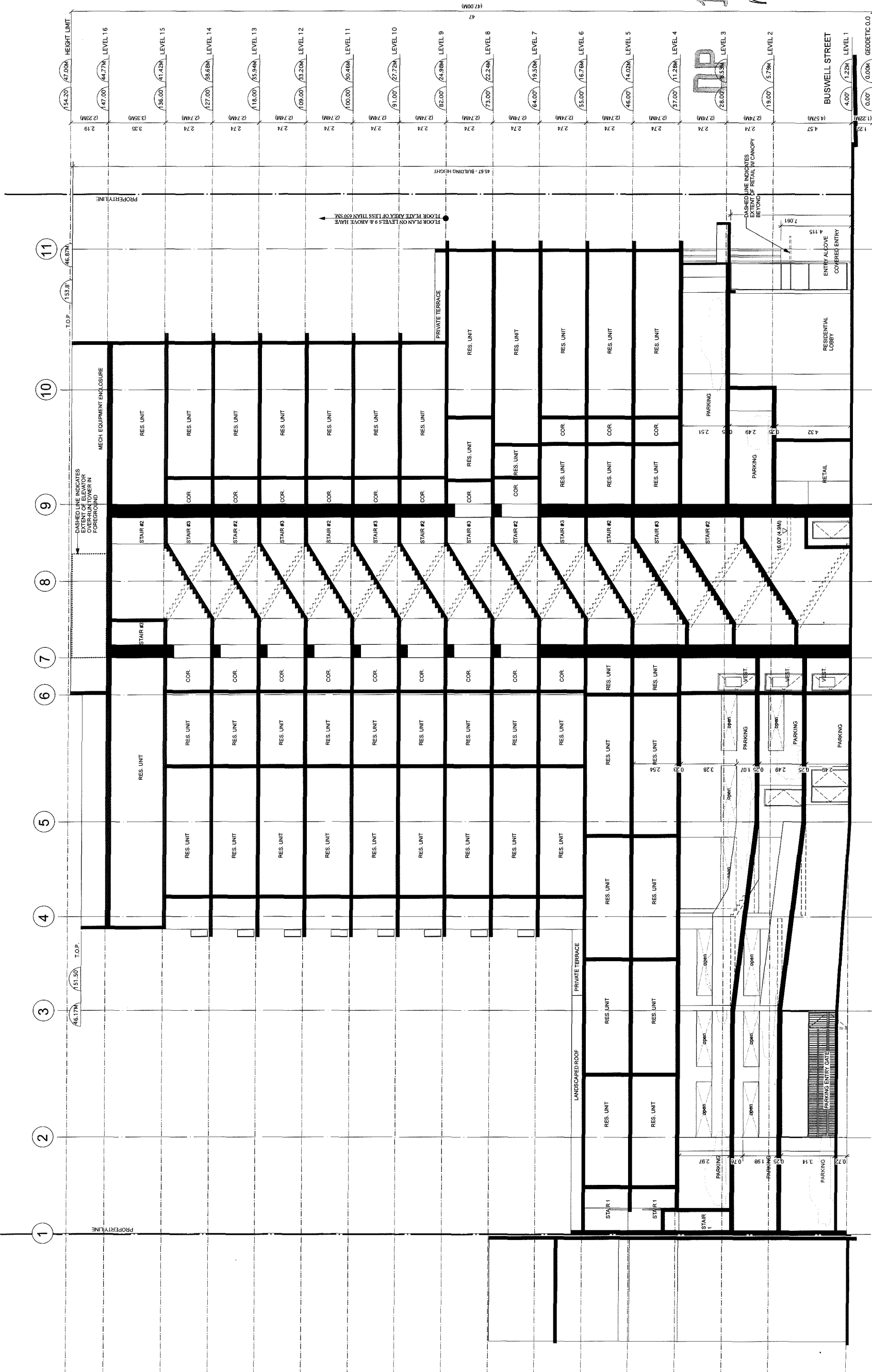
notes
REVISIONS SEP 4, 2013 ISSUED FOR DP JUL 18, 2014 ISSUED FOR DP SEP 24, 2014 ISSUED FOR DP DEC 8, 2014 ISSUED FOR DP JAN 28, 2015 ISSUED FOR DP

CONSULTANTS	<b>JAN 29 2015</b>
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 13-643286  
 685-2088  
 685-1889  
 685-1889  
 685-1889

PROJECT	8151 ANDERSON ROAD RICHMOND
SECTION	SECTION A
DATE	
PROJECT NUMBER	21212
DATE	
CHECKED BY	
SCALE	1 : 100
DRAWING NUMBER	DP 4.1

The drawing was created using an Apple Macintosh computer.



SECTION A - A

NOTES

revisions

SEP 4, 2013	ISSUED FOR DP
JUL 18, 2014	ISSUED FOR DP
SEP 24, 2014	ISSUED FOR DP
DEC 8, 2014	ISSUED FOR DP
JAN 29, 2015	ISSUED FOR DP

consultants

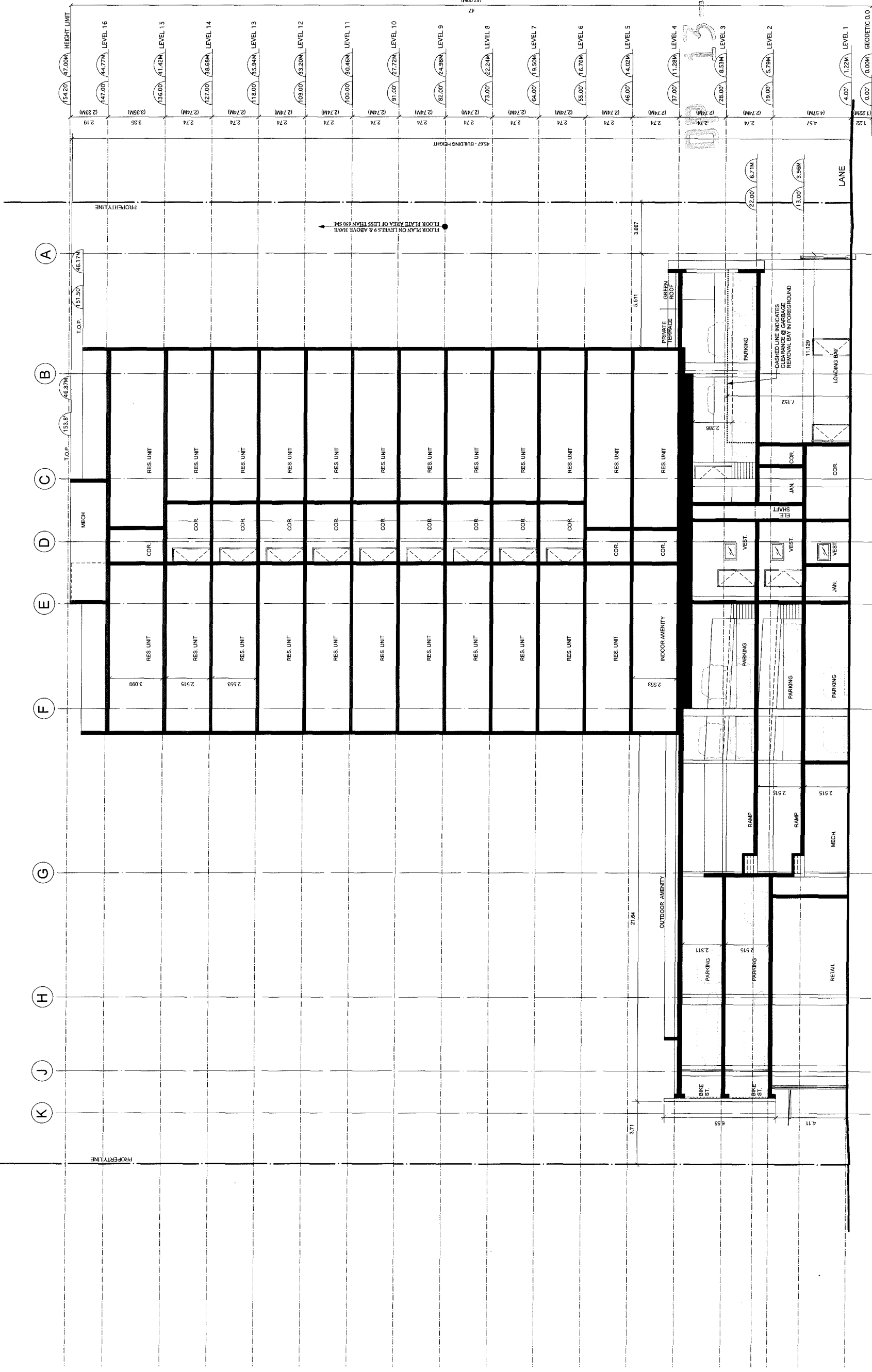
JAN 29 2015

**ANDREW CHUNG**  
64 ARCHITECTS INC  
1630 Wisconsin Ave, Suite 410  
Washington, D.C. 20004  
Tel: (202) 855-2088  
Fax: (202) 855-1888

*reference*

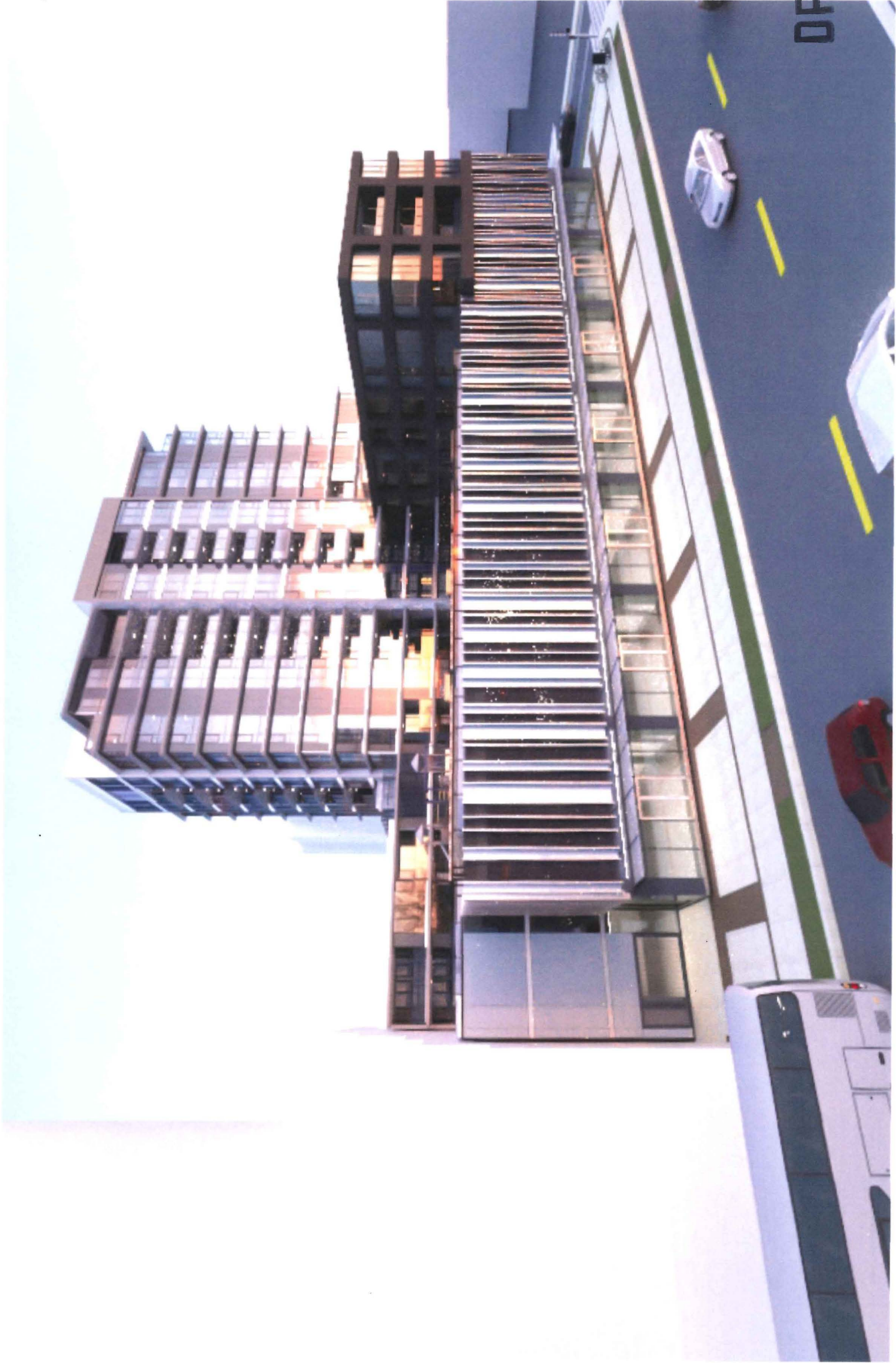
Project		8151 ANDERSON ROAD RICHMOND	
Section		SECTION B	
Project number	21212	Rev. name	
Scale	1 : 100	Drawing number	DP 4.2

This drawing was created using AutoCAD software.



SECTION B - B





DP

VIEW FROM ANDERSON ROAD

<p>revisions</p> <p>date</p> <p>SEP 4, 2013 ISSUED FOR DP</p> <p>JUL 18, 2014 RE-ISSUED FOR DP</p> <p>JAN 29, 2015 RE-ISSUED FOR DP</p>		<p>CONSULTANTS</p> <p><b>JAN 29 2015</b></p>
---	--	--

ANDREW CHEUNG  
 ARCHITECTS INC  
 13-645286  
*reference*

<p>project</p> <p><b>8151 ANDERSON ROAD RICHMOND</b></p>	<p>title</p> <p><b>3D PERSPECTIVE VIEWS ANDERSON ROAD</b></p>
<p>project number</p> <p><b>21212</b></p>	<p>sheet number</p> <p><b>DP 6.1</b></p>
<p>drawn</p> <p>checked</p> <p>scale</p> <p><b>N. T. S.</b></p>	<p>drawing number</p> <p><b>DP 6.1</b></p>

This drawing was created using AutoCAD software.



VIEW FROM CORNER OF BUSWELL STREET AND ANDERSON ROAD

NO.005	
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revisions	
SEP. 4, 2013	ISSUED FOR DP
JUL. 18, 2014	RE-ISSUED FOR UP
JAN. 29, 2015	RE-ISSUED FOR DP

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**ANDREW CHEUNG ARCHITECTS INC.**  
 suite 410  
 639 west 2nd ave.  
 vancouver, b.c.  
 v6j 1h3  
*reference*  
 tel: (604) 685-2088  
 fax: (604) 685-1889

project	8151 ANDERSON ROAD RICHMOND		
file	3D PERSPECTIVE VIEWS - CORNER OF BUSWELL STREET AND ANDERSON ROAD		
project number	file name	scale	drawing number
21212		N. T. S.	<b>DP 6.2</b>
drawn	checked	by	

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CORNER OF BUSWELL STREET AND LANE VIEW

DP

13-64520

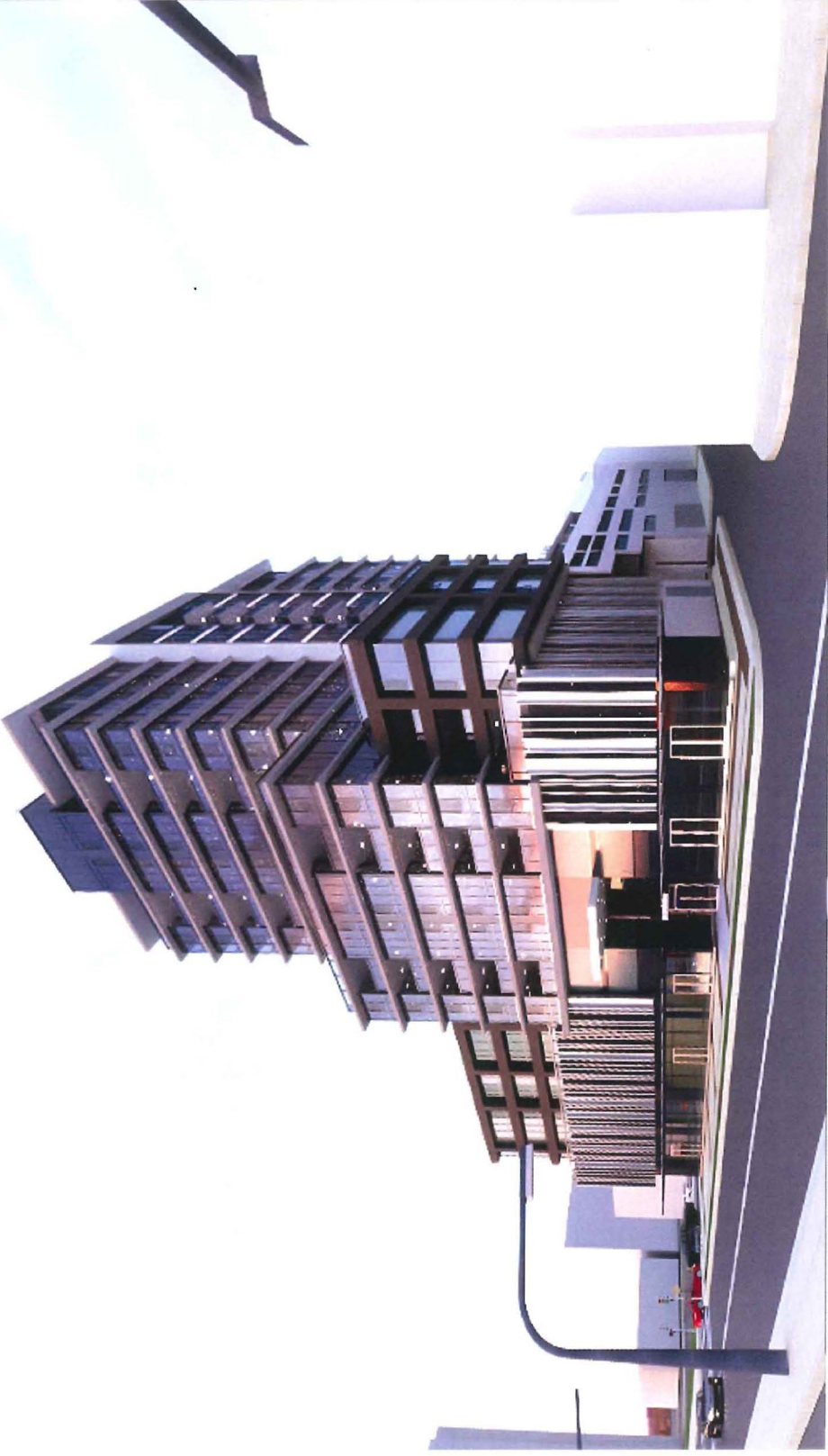
REFERENCE

ANDREW CHEUNG  
ARCHITECTS INC.

1639 West 29th Ave.  
Vancouver, B.C.  
V6J 1H3  
Tel: (604) 685-2088  
Fax: (604) 685-1889

<p>NOTES</p>	<p>REVISIONS</p> <p>DATE                      ISSUED FOR DP</p> <p>SEP. 18, 2013                      RE ISSUED FOR DP</p> <p>JUL. 18, 2014                      RE ISSUED FOR DP</p> <p>JAN. 29, 2015                      RE ISSUED FOR DP</p>	<p>CONSULTANTS</p> <p style="text-align: center; font-size: 1.2em;"><b>JAN 29 2015</b></p>
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PROJECT		8151 ANDERSON ROAD RICHMOND	
TITLE		3D PERSPECTIVE VIEWS - BUSWELL STREET AND LANE VIEW	
PROJECT NUMBER	FILE NAME		
21212			
DRAWN BY	CHECKED BY	SCALE	N. T. S.
		DRAWING NUMBER	
		DP 6.3	



STREET LEVEL VIEW - BUSWELL AND LANE



RESIDENTIAL ENTRANCE VIEW

<small>NOTES</small>	<small>REVISIONS</small> SEP. 4, 2013 ISSUED FOR DP JUL. 18, 2014 RE-ISSUED FOR DP JAN. 29, 2015 RE-ISSUED FOR DP	<small>CONSULTANTS</small>  <b>JAN 29 2015</b>
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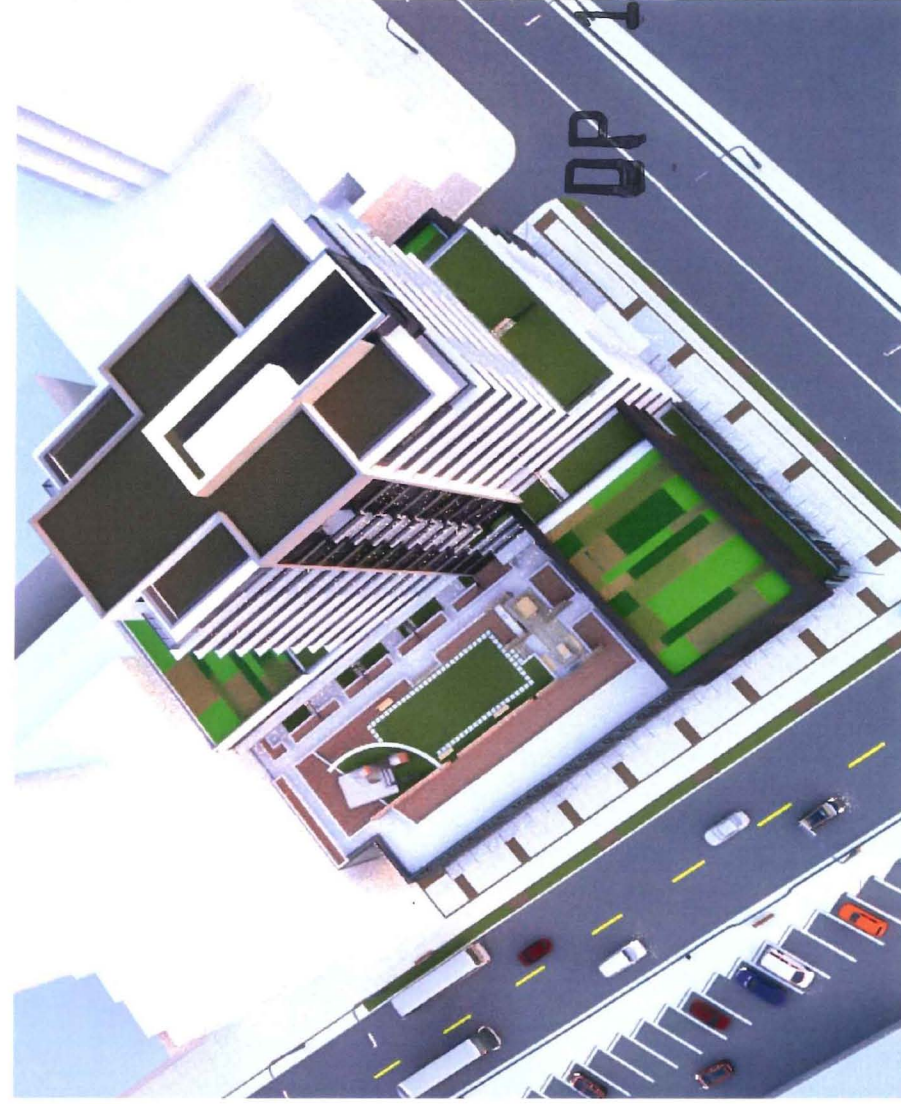
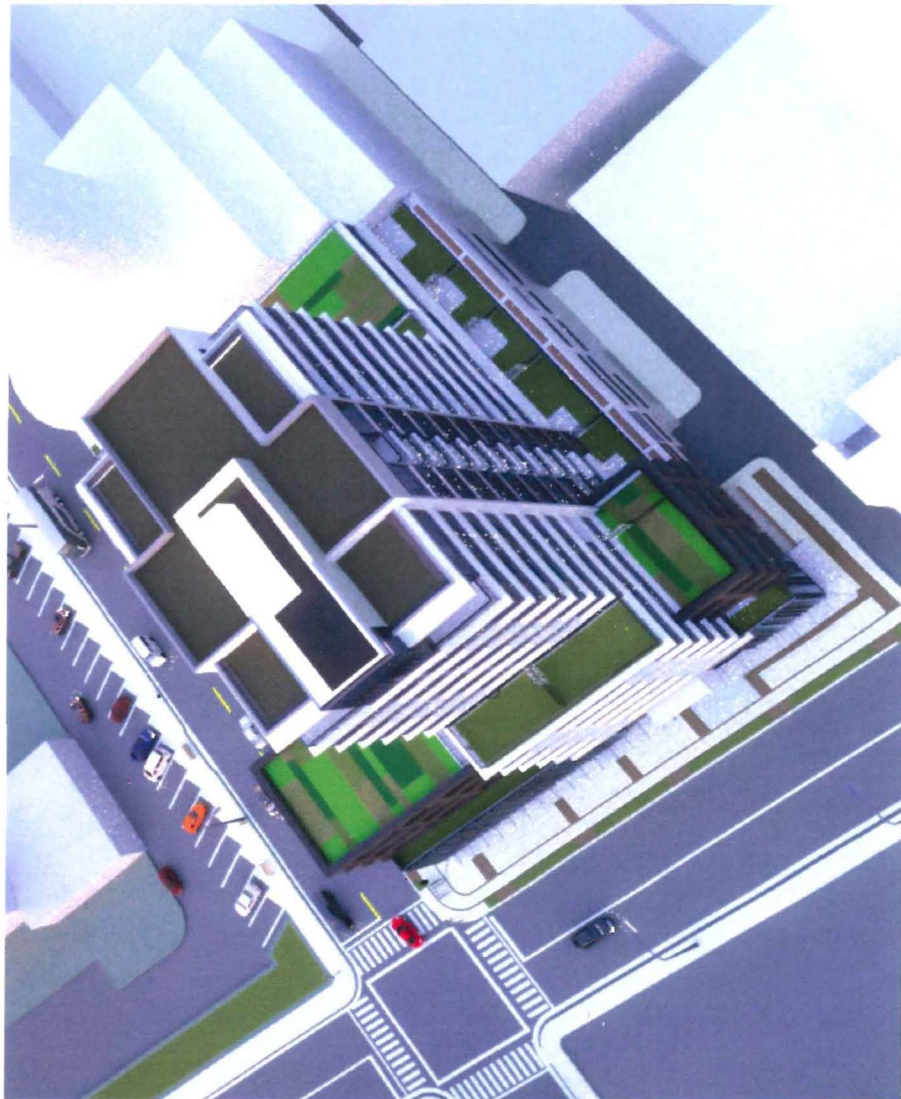
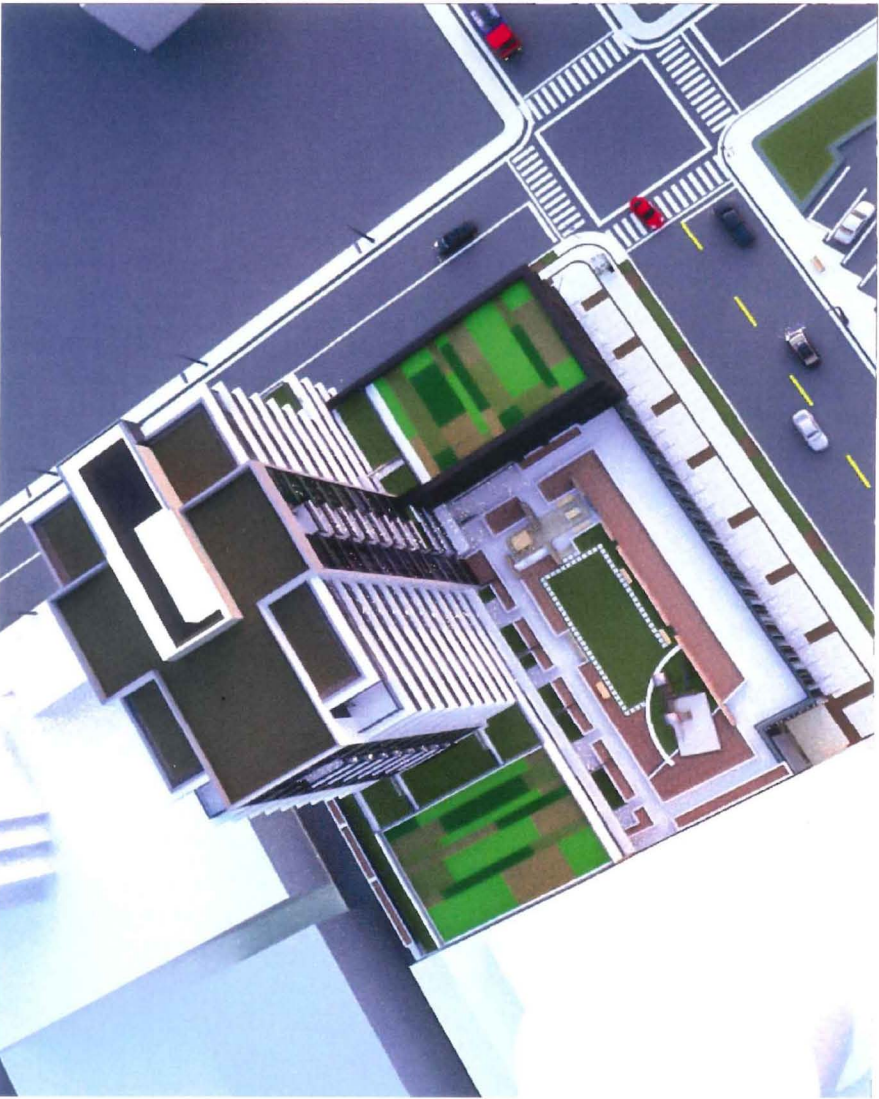
**ANDREW CHEUNG  
ARCHITECTS INC.**

suite 410  
1639 west 2nd ave.  
vancouver, b.c.  
v6j 1h3  
(604) 685-2088  
fax: (604) 685-1889

DP 13-64520  
 REFERENCE

<small>PROJECT NUMBER</small>		<small>SCALE</small>		<small>drawing number</small>
21212		N. T. S.		<b>DP 6.4</b>
<small>8151 ANDERSON ROAD RICHMOND</small>				
<small>3D PERSPECTIVE VIEWS - BUSWELL STREET LEVEL VIEW AND RESIDENTIAL ENTRANCE</small>				
<small>8151 ANDERSON ROAD RICHMOND</small>				

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OVERHEAD PERSPECTIVE VIEWS

100484

DATE	REVISORS	ISSUED FOR
SEP. 4, 2013		ISSUED FOR DP
JUL. 18, 2014		RE-ISSUED FOR DP
JAN. 29, 2015		RE-ISSUED FOR DP

CONSULTANTS

JAN 29 2015

ANDREW CHEUNG  
ARCHITECTS INC.

13-645206  
REFERENCE

Unit 410  
1600 Alexander Ave.  
Vancouver, B.C.  
V6J 3H3  
Tel: (604) 685-2088  
Fax: (604) 685-1889

Project	8151 ANDERSON ROAD RICHMOND
Title	3D PERSPECTIVE VIEWS - OVERHEAD VIEWS
Project Number	21212
Drawn	at
Checked	at
Scale	N. T. S.
Drawing Number	DP 6.5

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notes

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 SEP. 1, 2013 ISSUED FOR DP  
 JUL. 18, 2014 RE ISSUED FOR UP  
 JAN. 29, 2015 RE ISSUED FOR DP

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JAN 29 2015

ANDREW CHEUNG  
 ARCHITECTS INC.  
 6452 80th Ave. N.E.  
 Redmond, WA 98073  
 (206) 885-2088  
 (206) 885-1889

reference

PROJECT		8151 ANDERSON ROAD RICHMOND	
TITLE		3D PERSPECTIVE VIEWS - CLOSE-UP OF PARKADE PANELS	
PROJECT NUMBER	FILE NAME	DATE	DRAWING NUMBER
21212			DP 6.6
DRAWN BY	CHECKED BY	SCALE	
		N.T.S.	



STREET VIEW SHOWING PANELS DETAIL

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