



**To:** Development Permit Panel

**Date:** May 21, 2021

**From:** Wayne Craig  
Director of Development

**File:** DP 18-829228

**Re:** Application by QRD (Hamilton) LP for a Development Permit at 23400, 23440, 23460 and 23500 Gates Avenue

---

### Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of 60 townhouse units at 23400, 23440, 23460 and 23500 Gates Avenue and the surplus portion of the Gates Avenue road allowance on a site zoned "Town Housing - Hamilton (ZT86)"; and
2. Vary the provisions of Richmond Zoning Bylaw 8500 to reduce:
  - a) the minimum front yard setback to Gates Avenue from 4.0 m to 3.4 m; and
  - b) the minimum west side yard setback from 7.5 m to 6.0 m.

A handwritten signature in black ink, appearing to read "Wayne Craig".

Wayne Craig  
Director of Development

WC:el  
Att. 3

## Staff Report

### Origin

QRD (Hamilton) LP (Incorporation number: BC1116515; Director: Matthew Weber, Rajpal Dhaliwal, Harpreet Saran and Richard Lawson) has applied to the City of Richmond for permission to develop 60 townhouse units and a 920.6 m<sup>2</sup> (0.23 acre) city park at 23400, 23440, 23460 and 23500 and a portion of Gates Avenue. The applicant has proposed to purchase the surplus road allowance on Gates Avenue and consolidate it into the development site. The proposed development includes a variety of unit types within the six buildings as follows:

- Four buildings include a total of 48 stacked townhouse units with garages occupying the ground floor. The 48 stacked units include 16 two-bedroom units located on the second floor of the buildings interspersed with 32 three-bedroom units with living space on the second and third floors of the buildings.
- Two buildings with a total of 12 three-storey standard townhouse units with their garages occupying most of the ground floor and living space on the second and third floors that face onto the north-south Strollway.

The site is being rezoned from “Single Detached (RS1/F)” zone to “Town Housing - Hamilton (ZT86)” zone and “School & Institutional Use (SI)” zone for this project under Bylaw 9932 (RZ 17-766714), which received Third Reading following the Public Hearing on July 15, 2019. The site currently contains three single family dwellings and a non-conforming duplex, which will be demolished.

A Servicing Agreement is required as a condition of rezoning adoption and includes, but is not limited to, the following improvements:

#### *Frontage Improvements*

- At the western portion of the site’s frontage, construction of a cul-de-sac, with a 2.0 m (6.6 ft.) wide concrete sidewalk, new curb/gutter and a minimum 7.5 m (24.6 ft.) wide driving surface.
- Along Gates Avenue, from the west property line to western limit of the proposed cul-de-sac, construction of a 2.0 m (6.6 ft.) wide concrete sidewalk, 1.5 m (4.9 ft.) wide treed and grassed boulevard with street lighting, and pavement widening to provide a min. 6.0 m (19.6 ft.) wide driving surface and tie to the existing northern edge of the roadway.
- Along Gates Avenue, east of the cul-de-sac, construction of a new 2.0 m (6.6 ft.) wide concrete sidewalk and sufficient road widening to maintain two-way traffic to the eastern end of Gates Avenue.
- Along the entire east property line of the site extending northward to the Highway 91A pedestrian overpass, repave and widen the existing asphalt walkway within the Highway 91A road allowance to min. 3.0 m wide with pedestrian lighting. (The Ministry of Transportation and Infrastructure has confirmed that it would accept an application from the City to do the work itself under the Servicing Agreement with the developer.)

### *Servicing Works*

- Removal and replacement of approximately 85 m (279 ft.) of the existing 150mm watermain at Gates Avenue with a 300mm diameter main (complete with fire hydrants as per City standards) from the intersection of Gates Avenue and Smith Crescent to the proposed cul-de-sac on Gates Avenue.
- Installation of approximately 80 m (262 ft.) of 600mm storm sewer along Gates Avenue from the proposed cul-de-sac to Smith Crescent.
- Installation of approximately 178 m (584 ft.) of sanitary sewer main from the proposed cul-de-sac on Gates Avenue to the intersection of Willett Avenue and Smith Crescent. Should development proceed prior to the completion of the City Capital Project for the VLA Park sanitary pump station, or should this Capital Project not proceed, the developer will be required to construct the sanitary pump station.
- Placement of the existing private utility overhead lines (e.g. BC Hydro, Telus and Shaw) underground from Smith Crescent to the eastern side of the development site.

### *Parks Works*

- Construction of the East-West and North-South Strollways as per the SA drawings.
- Rehabilitation of the ESA compensation and enhancement area (i.e., proposed city park) by clearing all plants and shrubs which are dominated by Himalayan blackberry. As indicated in the Stage 2 QEP report, these pre-construction works will be supervised by the QEP.
- Improve the habitat value of the ESA compensation and enhancement area by landscaping the area as per the Stage 1 and Stage 2 QEP reports as well as the final ESA landscape plans. The proposed landscaping is designed to provide:
  - summer and winter foraging opportunities for a diverse array of bird species;
  - perching and nesting opportunities by planting of coniferous trees; and
  - thick ground cover placed strategically with large woody debris to make travel corridors for small mammals as well as to retain soil moisture for amphibians and gastropods.
- An ESA landscaping security (based on landscape estimates and monitoring costs, plus a 10% contingency) will be secured as part of the Servicing Agreement application to ensure that the proposed ESA enhancement works are completed, monitored and maintained for three years. If the works are satisfactorily completed, monitored and maintained, the security will be released in stages, with 70% release after substantial completion and 10% releases each year for the three years after substantial completion.

### **Development Information**

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

## Background

Development surrounding the subject site is as follows:

To the North: Across Gates Avenue, single family properties zoned “Single Detached (RS1/F)” and designated “Neighbourhood Residential (Stacked Townhouse 1.0 FAR)” within the Hamilton Area Plan.

To the South: Single family properties zoned “Single Detached (RS1/F)” and designated “Neighbourhood Residential (Stacked Townhouse 1.0 FAR)” within the Hamilton Area Plan.

To the East: Ministry of Transportation road allowance that includes a large grassed area with blackberries and several small trees, a pathway, a highway sound barrier and Highway 91A.

To the West: Single family properties zoned “Single Detached (RS1/F)” and designated “Neighbourhood Residential (Stacked Townhouse 1.0 FAR)” within the Hamilton Area Plan.

## Rezoning and Public Hearing Results

The Public Hearing for the rezoning of this site was held on July 15, 2019. No concern regarding the rezoning application was expressed at the Public Hearing.

## Staff Comments

The proposed scheme of the townhouse development attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan and is generally in compliance with the “Town Housing - Hamilton (ZT86)” zone except for the zoning variances noted below.

## Zoning Compliance/Variiances (staff comments in ***bold italics***)

1) reduce the minimum front yard setback to Gates Avenue from 4.0 m to 3.4 m; and

***This variance is to accommodate the proposed building projections on the second and third floors of Building #6, which fronts Gates Avenue. While this variance was not noted at time of rezoning, staff consider this to be a minor variance and support it based on the following:***

- ***This portion of Gates Avenue will be converted to a Strollway when the site on the north side of Gates Avenue redeveloped. The proposed projects would help creating a more intimate streetscape along the future Strollway.***
- ***The projections do not compromise tree planting opportunity along the site frontage.***
- ***The projections also help providing appropriate building articulation along Gates Avenue and establishing the architectural character of the development proposal.***

- 2) reduce the minimum west side yard setback from 7.5 m to 6.0 m.

*This variance is to accommodate*

- *covered porches on the ground floor and balconies on the 2<sup>nd</sup> floor, where the supporting columns are set back 6.01 m to 6.54 m from the west property line;*
- *second floor building projections at 7.0 m from the west property line; and*
- *third floor building projections at 6.39 m from the west property line.*

*While this variance was not noted at time of rezoning, staff support it based on the following:*

- *While the proposed balconies and porches front the west side lot line of the development site, these amenities project into the private outdoor space in front of each of the units fronting the North-South Strollway along the west property line. These balconies and porches will enhance passive surveillance opportunity along the Strollway.*
- *The balconies on the second floor will be located approximately 6.0 m to 6.5 m from the property line. Trees and shrubs are also proposed along the Strollway to provide privacy screening.*
- *The second and third floor projections do not compromise tree planting opportunity along the North-South Strollway. The projections also help provide appropriate building articulation along the Strollway and establishing the architectural character of the development proposal.*
- *The reduced setback at 6.0 m is generous and larger than a typical side yard setback required under the City's standard single-detached and townhouse residential zones.*

*Environmentally Sensitive Area*

The ESA approach was identified through the Rezoning process. The OCP designates 966.2 m<sup>2</sup> (10,400 ft<sup>2</sup>) of the south-east corner of the subject site as an ESA Development Permit Area. As part of the Development Permit Area guidelines, the City requires that a developer engage a Qualified Environmental Professional (QEP) to undertake an assessment to ground truth the generalized ESA mapping and classifications in the OCP. In the QEP assessment for the project, the QEP and surveyor have confirmed that there is actually 886.6 m<sup>2</sup> (9,543 ft<sup>2</sup>) of on-site ESA located within the larger mapped ESA area in the southeast corner of the site (see DP Plan #21). The QEP has assessed the value of the vegetation within the ESA and along with information from the arborist and summarized below.

Key finding of the QEP include:

- Himalayan blackberry dominates all other vegetation, with native plants essentially being absent in the designated ESA.
- There is little to no natural large woody debris which would provide, if present, important habitat, for small mammals and amphibians.
- Of the 11 trees identified by the project arborist located within the existing mapped ESA, nine trees in poor condition are recommended to be removed. One tree in good condition and one tree in poor condition near the eastern edge of the site are proposed to be preserved as recommended by the project arborist.

On the basis of this work and through discussions with City staff, the QEP proposes a re-shaped ESA enhancement and compensation area of 905.7 m<sup>2</sup> (9,749 ft<sup>2</sup>) along the eastern side of the site (see DP Plan #21). This ESA area will be included within the proposed 920.6 m<sup>2</sup> (0.23 acre) City park (see DP Plan #22).

Key elements of the proposed ESA enhancement landscape plans and QEP reports include:

- The proposed ESA compensation and enhancement area will provide improved habitat value compared to the existing mapped ESA and contribute to the City's Ecological Network.
- Rehabilitation of the area by clearing all plants and shrubs which are dominated by Himalayan blackberry.
- There will be preservation of 17 existing trees within the new ESA compensation area that includes 14 Spruce trees, two Mountain Ash trees and an English Oak tree. Of these trees, 15 trees in good condition are located outside of the existing mapped ESA and within the proposed new ESA compensation area located to the north in the proposed park. The remaining two trees to be preserved include the above-noted trees within the existing mapped ESA.
- Planting of a further native 17 deciduous trees, 16 coniferous trees, 688 native shrubs and ground covers/grasses.
- Placement of large woody debris (from removal of the trees within the development site) to create additional habitat.

There will also be the requirement for a three-year monitoring and maintenance plan after the habitat enhancement and compensation work is completed as recommended by the QEP.

The proposed ESA compensation and enhancement plan has been accepted on the above basis and given that:

- The area is larger in than the existing surveyed 887 m<sup>2</sup> (9,543 ft<sup>2</sup>) ESA area.
- It creates a multi-structured, species-rich link that will provide year-round foraging opportunities for a wide variety of bird species, small mammals and amphibians.
- Allows for enhanced long-term stewardship of the area with City ownership as a park.
- There is an opportunity for the extension of this enhanced ESA corridor onto adjacent ESA area on the property to the south at such time that it may be developed for stacked townhouses.

A final ESA landscape plan and a Stage 2 QEP Report have been prepared to the satisfaction of the Director, Parks Services and the Director of Development and are to be included within the Servicing Agreement.

### *Proposed Park*

As discussed above, the applicant has agreed to transfer a 920.6 m<sup>2</sup> (0.23 acre) lot for a City park, and which includes the proposed 905.7 m<sup>2</sup> (9,749 ft<sup>2</sup>) ESA enhancement/compensation areas and the East-West Strollway running along the southern edge of the site. While this provision of park land is not a requirement under the Area Plan or OCP, the applicant and City

staff agreed that the ESA could be well managed by the City and would augment the semi-natural adjacent area within the Highway 91A road allowance which collectively form part of the City's Ecological Network. There will be no Development Cost Charge (DCC) credits available to the developer for the transfer of the park lot or its improvement.

#### *Contribution for Off-Site Habitat Enhancement*

The applicant has also agreed to make a contribution of \$61,000 to the City to undertake a Capital Project for habitat enhancement on City lands forming part of the Ecological Network within the Hamilton Area. Potential sites include the Queen Canal Corridor and Hamilton Highway Park on the east side of Highway 91A. This contribution has been secured at the Rezoning stage.

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

The Advisory Design Panel (ADP) has reviewed the project and supports it. A copy of the relevant excerpt from the Advisory Design Panel Minutes from Wednesday November 20, 2019 is attached for reference (Attachment 2). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '***bold italics***'.

#### **Analysis**

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

- The subject site and surrounding properties to the north, south and west are all designated for "Neighbourhood Residential (Stacked Townhouse 1.0 FAR)" within the Hamilton Area Plan.
- Along Gates Avenue, to the east of the new cul-de-sac, the current paved road surface will be maintained in the interim to provide access to the existing three residential lots on the north side of Gates Avenue. At such time these lots are redeveloped for stacked townhouses, this eastern section of Gates Avenue will be converted to a Strollway that connects to the existing north-south pathway within the Highway 91A road allowance to the east.
- There will also be a north-south Strollway within a 3.0 m (9.8 ft.) wide SRW to be registered on Title of the development site that will provide public pedestrian access along the western side of the site and that ultimately will provide a connection between Gates Avenue and Gilley Road when the properties to the south are developed.
- There also will be an east-west Strollway along the southern edge of the site within a 3.5 m (11.5 ft.) wide SRW to be registered on Title that will ultimately provide a connection between the existing north-south pathway within the Highway 91A road allowance and Smith Crescent.
- These SRWs provide for public pedestrian access as part of the Strollway network within the Hamilton Area Plan, will be widened when stacked townhouse developments are constructed to the west and south, and will be maintained by the subject developments.
- The proposal satisfies the Hamilton Area Plan's vision while being sympathetic to the adjacent single-family homes. The proposed townhouse clusters have a minimum of 3.0 m and 2.5 m setback to the Strollway SRWs along the west and south sides of the site, respectively. When these SRW widths are taken into account, the buildings will have a total of 6.0 m setback to the west and south property lines.

- The east side yard setback to the proposed City park will be 2.0 m (6.5 ft.). The proposed park/ESA area to the east of the site provides a buffer between the proposed townhouse development and Highway 91.
- A retaining wall (up to approximately 0.85 m high) will be installed on the subject site, along the west and south property lines, in order to allow the Strollways to be constructed at approx. 1.0 m geodetic, which would match the sidewalk grade along Gates Avenue.
- A line of temporary privacy fence (ranges from 1.35 m to 1.8 m tall) will be installed on top of the retaining wall along the west and south property lines. The overall fence height (fence + retaining wall) will comply with the fence height limitations of 2.0 m, as per the zoning bylaw. This privacy fence will be removed when adjacent sites are redeveloped and the Strollways are widened.
- Perimeter drainage will be required as part of the Building Permit to ensure storm water is managed and addressed through the development and will not impact the neighbouring properties.

### ***Urban Design and Site Planning***

- The vehicle and the main pedestrian access for the proposed development is to be provided by the project driveway leading from a new cul-de-sac on Gates Avenue.
- The site layout includes 60 townhouse units in six clusters. The units are laid out along the main north-south drive aisle and two short east-west drive aisles.
- The townhouse clusters are oriented in a grid pattern and multiple pedestrian pathways create a fine-grained network of pedestrian connections. The proposed building length follows the recommendation of creating short blocks. The two clusters with standard townhouse units along the west property line of the site have six units in each cluster. The remaining four clusters on the east side of the property have 12 units in each cluster; but the overall length of each cluster is similar to a building cluster with eight standard townhouse units. This design meet the objectives of the Development Permit Guidelines.
- The Strollways along the south and west sides of the site are provided as set out the proposed amendment to the Hamilton Area Plan with these Strollways providing additional public pedestrian access to future developments to the west and south and the surrounding public streets. The Strollway along the west side of the development site is included within a 3.0 m (9.8 ft.) wide SRW. The Strollway along the south side of the site is included within a 3.5 m (11.5 ft.) wide SRW to allow for additional landscaping being accommodated within the Strollway corridor and for tree preservation on the adjacent lot to the south.
- There will be a central mews of 10.29 m (33.7 ft.) in width that includes the 6.03 m (19.7 ft.) wide common outdoor amenity area with outdoor seating and play equipment located between the two central stacked townhouse clusters.
- The overall size of the proposed outdoor amenity spaces exceeds the minimum identified under the Development Permit Guidelines. The locations and sizes of the outdoor amenity spaces are appropriate in providing open landscape and amenity spaces convenient to all units.
- A mailbox kiosk will be provided at the pedestrian entrance off the Strollway along the west property line, and will be incorporated into the design of Building 1.



- No enclosure housing garbage, recycling and organics storage bins is being proposed as the applicant is opting for door-to-door collection. Garages have been configured to accommodate various collection containers outside of the required parking area within the garage. The internal drive aisles have been designed to provide sufficient turning radius for various collection vehicles.
- Public art was assessed at the Rezoning stage a voluntary contribution to the City's Public Art Reserve fund in the amount of \$67,500.00 has been secured at Rezoning in response to the City's Public Art Program.
- There will be a total of 108 residential and eleven visitor parking spaces within the proposed development. The proposed number of parking spaces is consistent with the Zoning Bylaw 8500 requirements subject to the provision of Transportation Demand Measures (TDM) to the satisfaction of the City. The applicant will be required to provide TDM measures to widen the existing asphalt walkway within the Highway 91A road allowance to a min. 3.0 m (9.8 ft.) width along the eastern side of the site north to the Highway 91A pedestrian overpass and install pedestrian lighting along this pathway.
- The proposal will feature 12 side-by-side double car garages (24 spaces), 16 single car garages, four surface parking spaces and 32 tandem double car garages (64 spaces) for residential parking. The number of parking spaces in a tandem arrangement (i.e., 60% of total residential parking spaces proposed) is consistent with the tandem parking provision included in the "Town Housing - Hamilton (ZT86)" zone (i.e. maximum 67%). A restrictive covenant to prohibit the conversion of the tandem garage area into habitable space has been secured at rezoning.
- Both internal and external bicycle parking spaces have been incorporated into the proposal and are in compliance with the Zoning Bylaw requirements.
- All units have a private outdoor space that meets the Development Permit Guidelines, except for eight of the C units. These units face onto the central open space and will have a small front yard on the ground level plus a balcony on the second floor. While these units will have smaller private outdoor spaces, staff support the proposal of a smaller private outdoor space for these eight units on the bases that:
  - these are smaller two-bedroom units;
  - the configuration of the ground floor patio would still accommodate a small table and chair, as well as planting areas;
  - the proposed balcony on the second floor will be located adjacent to the living area and provide space for outdoor seating;
  - activities that need more space, such as child play, can take place in the shared open space located directly in front of these units; and
  - the overall size of the proposed outdoor amenity spaces exceeds the minimum requirements.

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

- The townhouse units are designed with front yards and front doors facing onto Gates Avenue, the two Strollways and the central mews. A pedestrian scale is generally achieved along Gates Avenue, the two Strollways and the central mews through the inclusion of the use of individual unit entrances, front porches, variation in building projections, recesses, varying material/colour combinations and landscape features.
- The two buildings with standard townhouse units along the west property line of the site have a typical building height of three storeys. The remaining four stacked-unit buildings on the east side of the site have three storeys and a roof deck with stairway rooms/penthouses.
- All buildings are modern-style with similar materials and colours. Hardie lap siding and EIFS stucco are the dominant materials on the elevations while brick veneer is used as an accent material on the ground floor of Buildings #3 to #6. The proposed building materials (stucco, horizontal siding, brick, wood trims, etc.) are generally consistent with the Development Permit Guidelines in the Hamilton Area Plan.
- The color palette consists mostly of a variety of grey tones with bays in a light colour to enhance the building form and character. Entre doors are to be painted in multiple accent colours in order to add interest and individuality.
- The first habitable level of the buildings is at the 3.5m Flood Construction Level (just below the second system floor of the buildings). Thus, the ground level of the townhouses is comprised of garages and entry foyers only.
- The impact of blank garage doors has been mitigated with panel patterned doors, transom windows, and planting islands along the drive aisles.
- There is a sound barrier and large grassed area located within the Highway 91A road allowance adjacent to the proposed development. Nevertheless, to address the road traffic noise from the highway, the project acoustical engineer confirmed that the proposed development is designed to meet the CMHC guidelines for interior noise levels and the ASHRAE 55-2004 standard for “Thermal Environmental Conditions for Human Occupancy” standard for interior living spaces.

### ***Tree Preservation***

- Tree preservation was reviewed at the rezoning stage:
  - 17 trees located within the proposed park / ESA area will be retained due to their good condition and being located within a large contiguous park / ESA area that supports tree preservation; a Tree Survival Security of \$90,000.00 has been secured at Rezoning;
  - Six trees located on the property to the south which are to be maintained and protected;
  - Four trees located on the properties to the west (4620 and 4640 Smith Crescent) are identified for removal. Consent letters from the property owners on the proposed tree removals are on file. Replacement trees are to be planted on the subject development site.
  - All 24 bylaw-sized trees on the townhouse development site and two bylaw-sized trees in the proposed park / ESA area were identified for removal due to poor health as well as the nature of the peat soils in the area and required filling of the site.

- Based on the 2:1 tree replacement ratio goal stated in the Official Community Plan (OCP), 60 replacement trees are required for the removal of 30 trees. The applicant is proposing to plant 58 replacement trees on the townhouse site, including 12 coniferous and 46 deciduous trees, as well as 33 native trees in the proposed park / ESA area, including 16 coniferous and 17 deciduous trees.

### ***Landscape Design and Open Space Design***

- This site offers great pedestrian permeability by providing walkways along all edges of the development and east-west through the centre.
- The Strollways along the west and south property lines will provide block permeability as future sites are developed.
- A 75 m long open space runs east-west through the development is proposed. This space links to the Strollway along the west property line. At this node, there is a tot play area featuring a sand box, talk tubes, play panels, a chalk board, and stepping stumps.
- A gathering area is also proposed at this node with the covered mail kiosk and benches in separated alcoves.
- The main open space is located between the two central stacked townhouse clusters, featuring stepping rocks, a climbing/sliding structure, a large lawn area and a wooden deck with patio furniture.
- The internal common driveways include permeable pavers at key locations and gentle meanders with clusters of adjacent landscaping to soften the appearance of the driveways throughout the development.
- Private yards fronting Gates Avenue and the two Strollways will feature a small covered patio and a landscaped area with trees, shrubs and lawn that create a comfortable and personal space. Various shrubs and ground covers have been selected to ensure the landscape treatment remains interesting throughout the year.
- The roof decks are designed as a flex space to be customized by individual residents.
- A permanent irrigation system is proposed on the townhouse development site to ensure continued maintenance of live landscaping. A temporary irrigation system is proposed in the park lot during the three year planting monitoring period.
- In order to ensure that the proposed landscaping works are completed, the applicant is required to provide a landscape security of \$418,961.42 in association with the Development Permit.
- Indoor amenity space is not proposed on-site. A \$215,797.00 cash-in-lieu contribution has been secured as a condition of rezoning approval, consistent with the Official Community Plan (OCP).

### ***Crime Prevention Through Environmental Design***

- The development has been designed with street-oriented townhouses that provide surveillance of Gates Avenue and the Strollways.
- All entrances are visible and overlooked by pedestrians or by neighbour's windows.
- Plantings near residential entries are low to maximize views.

- Low fencing are designed to encourage interaction between neighbours and foster a sense of community.
- Building mounted lighting will be installed along the drive aisles, along the north-south utility path along the east property line, and at unit entries to provide adequate outdoor security illumination; all building mounted lighting will be downward focused.
- Overhead pedestrian lights and bollard accent lights at unit entries will be installed along the Strollways; the lighting are designed to enhance security and visibility along the Strollways as well as to avoid “light-spill” onto adjoining properties.

### ***Sustainability***

- At the rezoning stage, the applicant committed to achieving an EnerGuide rating of 82 for the proposed town houses and to pre-ducting all units for solar hot water heating. The proposal meets the grandfathering provisions for Energy Step Code approved by Council.
- A Certified Energy Advisor has confirmed that the proposed townhouse units will be designed to achieve an EnerGuide rating of 82. The report prepared by the Energy Advisor is on file and will be utilized through the Building Permit review process to ensure these measures are incorporated in the Permit drawings.
- Air source heat pumps will be mounted to the roofs of Buildings #1 to #2, and to the rooftops & balconies of Buildings # 3 to #6. Heat pumps on both the balconies and the roof deck will be screened from street view by the parapet wall.
- In accordance with the Hamilton Area Plan, the applicant has also committed, at the rezoning stage, to achieving Leadership in Energy and Environmental Design (LEED) Silver equivalency. A Certified LEED consultant has confirmed that the proposed townhouse units will be designed to achieve silver rating. The Multifamily Sustainability Scorecard (Attachment 3) provided by the LEED consultant is on file and will be utilized through the Building Permit review process to ensure the proposed sustainable strategies are incorporated in the Permit drawings.
- Climate-based automatic irrigation controls will be installed to minimize the use of water on site.
- Pre-ducting within buildings is proposed for future solar energy options.
- The following sustainability features are being proposed in response to Section 13.4.4 Rainwater Management Landscape Elements of the Hamilton Area Plan:
  - reduced driveway width on east-west drive aisles to increase planting opportunities;
  - permeable paving to improve infiltration for ground water recharge and natural watering of trees;
  - native species only in the proposed park / ESA area to be transferred to the city for conservation/environmental purposes.

### ***Accessible Housing***

- The proposed development includes ten convertible units that are designed with the potential to be easily renovated to accommodate a future resident in a wheelchair.
  - the potential conversion of two of the units (i.e., the A4 units) will require installation of a vertical lift in the stacked storage space (which has been dimensioned to allow for this) in the future, if desired; and

- the potential conversion of eight of the units (i.e., the A2 units) will require installation of a chair lift (where the staircase has been dimensioned to accommodate this) in the future, if desired.
- 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.

## Conclusions

As the proposed development would meet applicable policies and Development Permit Guidelines, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.



Edwin Lee  
Planner 2

EL:cas

Attachment 1: Development Application Data Sheet

Attachment 2: Excerpt from Advisory Design Panel Meeting Minutes (November 20, 2019)

Attachment 3: Multifamily Sustainability Scorecard

The following are to be met prior to forwarding this application to Council for approval:

- Receipt of a Letter-of-Credit for landscaping in the amount of \$418,961.42 (landscape estimates plus a 10% contingency cost).

Prior to future Building Permit issuance, the developer is required to complete the following:

- The applicant is required to obtain a Building Permit for any construction hoarding associated with the proposed development. If construction hoarding is required to temporarily occupy a street, or any part thereof, or occupy the air space above a street or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. *For further information on the Building Permit, please contact Building Approvals Department at 604-276-4285.*
- Submission of a construction traffic and parking management plan to the satisfaction of the City's Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>).
- If applicable, payment of latecomer agreement charges, plus applicable interest associated with eligible latecomer works.



**DP 18-829228**

**Attachment 1**

Address: 23400, 23440, 23460 and 23500 Gates Avenue

Applicant: QRD (Hamilton) LP

Owner: 1116515 BC Ltd.

Planning Area(s): Hamilton

Floor Area Gross: 10,314 m<sup>2</sup>

Floor Area Net: 6,939.5 m<sup>2</sup>

	Existing	Proposed
<b>Site Area:</b>	8,248.2 m <sup>2</sup>	7,327.6 m <sup>2</sup>
<b>Land Uses:</b>	Single Family Dwellings and a Non-Conforming Duplex	Townhouses
<b>OCP Designation:</b>	NRES – Neighbourhood Residential	No Change
<b>Area Plan Designation:</b>	Neighbourhood Residential (Stacked Townhouse 1.0 FAR)	No Change
<b>Zoning:</b>	“Single Detached (RS1/F)”	“Town Housing (ZT86) – Hamilton” and “School & Institutional Use (SI)”
<b>Number of Units:</b>	5 units	60 units
<b>Other Designations:</b>	ESA	No Change

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 1.0	0.96	none permitted
Lot Coverage:	Max. 45%	44.3%	none
Setback – Front Yard:	Min. 4.0 m	3.4 m	<b>Variance Requested</b>
Setback – East Side Yard:	Min. 2.0 m	2.0 m	none
Setback – West Side Yard:	Min. 7.5 m	6.0 m	<b>Variance Requested</b>
Setback – Rear Yard:	Min. 6.0 m	6.0 m	none
Height (m):	Max. 12 m	11.8 m	none
Lot Dimensions (m):	Min. Width: 75.0 m Min. Depth: 85.0 m	Width: 78.6 m Depth: 91.5 m	none
Off-street Parking Spaces – Regular:	120 or 108 with TDM	108 with TDM	none
Off-street Parking Spaces – Visitor:	12 or 11 with TDM	11 with TDM	none
Off-street Parking Spaces – Total:	132 or 119 with TDM	119 with TDM	none

Tandem Parking Spaces:	Max. 67% of proposed parking spaces (119 x Max. 67% = 79)	64	none
Small Car Parking Spaces	Max. 50% when 31 or more spaces are provided on-site (119 x Max. 50% = 59)	16	none
Handicap Parking Spaces:	Min. 2% when 11 or more spaces are required (119 x 2% = 3 spaces)	3	none
Bicycle Parking Spaces – Class 1 / Class 2:	1.25 (Class 1) and 0.2 (Class 2) per unit	1.46 (Class 1) and 0.2 (Class 2) per unit	none
Off-street Parking Spaces – Total:	75 (Class 1) and 12 (Class 2)	88 (Class 1) and 12 (Class 2)	none
Amenity Space – Indoor:	Min. 100 m <sup>2</sup> or Cash-In-Lieu	Cash-In-Lieu Contribution	none
Amenity Space – Outdoor:	Min. 360 m <sup>2</sup>	374.7 m <sup>2</sup>	none

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

Wednesday, November 20, 2019 – 4:00 p.m.  
Rm. M.1.003  
Richmond City Hall

**Panel Discussion**

*Comments from Panel members were as follows:*

- consider installing sliding doors in lieu of inward-swinging doors for the washrooms of all convertible units and units with aging-in-place features;

*Pocket Doors have been added to bathrooms and powder rooms in all Convertible Units.*

- reconsider the use of a stair lift in convertible units as it would require the installation of one wheelchair or walker on each floor; not convenient for people with disabilities; consider installing a vertical lift in convertible units;

*Future Lift provisions have been implemented for Units A2 & A4.*

*Please note: the Panel Member did not ask for a lift in every unit, but suggested to add lifts in some units.*

- consider a white or light colour for the wayfinding post to enhance its visibility;
- appreciate the applicant contributing the City's Public Art Fund; however, the applicant is encouraged to incorporate public art into the project as it would benefit the project and the public realm;

*The post has been changed to silver for better visibility.*  
*At this time, a public art installation is not planned as we feel a contribution to the Art Fund will be more useful.*

- appreciate the proposed signage at the entrances to the Strollways; however, the gateway character of the entries could be further enhanced; consider introducing additional landscape features to announce the entries to the Strollways and enhance their public character; also consider installing additional low-level lighting along the Strollways to address potential CPTED concerns;

*A paver node has been introduced at both ends of the concrete strollway, and enlarged at the entrance to the amenity space, to enhance the entries. The main west and south strollways have overhead pedestrian scale lighting that addresses all lighting concerns. The east walkway is lite with low level bollard lighting to identify the walkway without disturbing the adjacent ESA area.*



- appreciate the different surface paving treatments on the site; however, consider delineating areas along the internal drive aisle for pedestrian circulation and crossings, e.g. through introducing different paving treatment in terms of colour and texture or painted lines;

*This has been considered but is not going to be implemented in this project. There is a strong series of walkways throughout the project. We believe the nature of this development and in-road paver bands will provide the necessary cues to ensure motorists respect the quiet and slow nature of the internal road.*

- consider introducing additional colours or cladding on townhouse building facades facing the street and the Strollways to visually break down the building mass to pedestrian scale and provide visual interest to pedestrians;

*The buildings themselves already have a pedestrian scale: all 3 storeys allow contact and overview between the inside and the walkway, the balconies, bays and posts provide a varied façade and the yards on the ground floor contribute to a lively edge of the walkway.*

*We believe our building and landscape design provide an interesting, comfortable, and safe environment for pedestrians, which is, in our understanding, the ultimate goal of creating buildings and environments with a “pedestrian scale”.*

*We also believe we do fulfil the request to use bays and materials to break down the building massing.*

- *Ground floors are clad in a darker coloured horizontal siding to emphasise the base of the townhouses.*
- *The main colour and material of the upper floors is a lighter coloured stucco with a rough finish.*
- *The upper floors are broken up by multiple bays, some of them in a contrasting white colour.*
- *We don't believe adding a 4th type of material or colour would significantly change the perceived scale of the building.*
- *In addition to the materials and bays, other elements such as columns and deliberately placed downspouts provide further vertical articulation and visual breaks, creating interesting and rhythmic, yet unobtrusive building elevations, which provide the perfect backdrop to the life that happens in the yards and along the strollways.*

- appreciate the contemporary design of the proposed townhouse development;  
*Noted*
- the applicant is advised to review the proposed number of visitor parking stalls to ensure adequacy during high demand hours;  
*The number of visitor stalls are in accordance with the zoning bylaw.*

- B1, B2 and D1 units that are not south-facing could benefit from more daylight penetration on the ground floor; consider increasing the size of windows on the main floor; also consider installing operable skylight directly above the family room to provide ventilation and daylighting on the upper floor;  
*We have incorporated large 4'x4' skylights over the family rooms of the interior units in Buildings 3-6 (the exterior units already receive daylight from the windows). In addition we introduced 2x4 operable skylights to the third floors of Buildings 1-2. We consider the window sizes of the ground and main floor adequate.*
- extensive use of hardie siding materials in the buildings is noted; consider increasing the use of brick to provide a sense of scale, texture and refinement to the development, especially for buildings along the main north-south driveway while maintaining the building's contemporary character;  
*Brick was added on buildings 3-6 on the ground floor elevations facing the internal driveway, satisfying the request from the panel member for brick facing the driveway. The design of buildings 1 & 2 is not ideally suited for the addition of another type of material. The elevations facing the internal road already have 3 different types of materials in 3 different colours. We don't believe adding a 4th type of material would improve the appearance.*
- agree with the applicant that a cooling system is required for the proposed development due to highway noise;  
*Noted*
- the applicant has the option to locate the outdoor units for the heat pumps on the rooftop;  
*We have added Heat Pumps to the roofs of Bldgs 1-2 and to the rooftops & balconies' of Bldgs 3-6. Heat pumps on both the balconies and the roof deck will be screened from street view by the parapet wall. The heat pumps on the C-Unit balconies are located so that an open balcony door will screen the unit from view. We reviewed the option of providing a permanent screen, however, due to air flow requirements of these units, screens can only be placed with a certain distance to the unit. Therefore such a screen would have reduced the usable space of the balcony. We don't see a need for a screen around the rooftop units, as these roof decks are large enough to place seating areas out of sight of the heat pump.*
- the applicant needs to review the drainage system for the townhouse buildings considering the technical constraints and the buildings' insulation requirements; consider how snow melting will be addressed in the design; consider ventilated roof requirements;  
*The roofs have been designed with positive draining to the exterior and we have eliminated central roof low area that originally required mid roof drains.*
- concerned about the lack of daylighting on the tight spaces between buildings along the main north-south driveway; consider design development, e.g. minimizing the width of the projecting bay to allow more daylighting into the buildings;  
*The distance between the buildings on either side of the north-south roadway is almost 13m. In those few instances where a bay is opposite another bay the distances is almost 11m. We consider this an adequate distance between buildings. Upon review of the shadow analysis we determined that a reducing the width of the bays would not increase the amount of daylight in the homes.*

- support the Panel comment to consider increasing the use of brick in the façades of townhouse units, especially those facing the main north-south driveway;  
*We have increase the brick cladding at ground level. See reply above.*
- consider introducing a different colour for certain portions of the dark trim on top of the buildings' exterior walls to break and minimize the amount of striping on the trim and provide further articulation to the exterior walls;  
*We have adjusted the sizes and colours of trim to reduce the appearance of striping and to better accentuate the visual massing and the articulation of the exterior features.*
- the glazing is organized and formal except for the end units, which appear random; consider organizing those windows through articulating the planes, joining the windows by different colour or tonal treatments;
- *Windows have been reorganized on the end Units to give more of a conformed appearance. The fact that the stair is located along the exterior wall made it challenging to fully align all windows. We explored the idea of using different coloured panels, however we decided it did not fit with the rest of the development.*
- consider installing a bench in the second play area; and  
*Two benches have been place facing each other in the centre of the common green area. This is so parents can observe their children at play, or friends can meet and converse.*
- proposed landscape treatment around the wooden deck on the outdoor amenity area appears stark with just one shade tree and a row of shrubs along one edge; consider introducing additional landscape treatment and another bench to make the deck more inviting to residents.  
*An additional row of planting has been added to buffer the deck from the open lawn. The patio furniture will be comfortable and loose for moving and reorganizing as required.*



Environmental Project Checklist Prepared by:  
**C. Lorenzen & Associates Ltd.**  
 LEED Built Green & Energy Consultants



Preliminary Project Checklist  
 2560 Hamilton - Richmond

Yes ? No

March 19, 2021

<b>54</b>	<b>12</b>	<b>18</b>	<b>Project Totals (pre-certification estimates)</b>	<b>110 Possible Points</b>
-----------	-----------	-----------	-----------------------------------------------------	----------------------------

Certified 40-49 points Silver 50-59 points Gold 60-79 points Platinum 80 points and above

Yes ? No

<b>14</b>	<b>4</b>	<b>3</b>	<b>Sustainable Sites</b>	<b>26 Points</b>
-----------	----------	----------	--------------------------	------------------

✓					Prereq 1 <b>Construction Activity Pollution Prevention</b>	Required
1					Credit 1 <b>Site Selection</b>	1
2	1	2			Credit 2 <b>Development Density and Community Connectivity</b>	3, 5
			1		Credit 3 <b>Brownfield Redevelopment</b>	1
	1				Credit 4.1 <b>Alternative Transportation: Public Transportation Access</b>	3, 6
1					Credit 4.2 <b>Alternative Transportation: Bicycle Storage &amp; Changing Rooms</b>	1
3					Credit 4.3 <b>Alternative Transportation: Low-Emitting &amp; Fuel-Efficient Vehicles</b>	3
2					Credit 4.4 <b>Alternative Transportation: Parking Capacity</b>	2
	1				Credit 5.1 <b>Site Development: Protect and Restore habitat</b>	1
1					Credit 5.2 <b>Site Development: Maximize Open Space</b>	1
1					Credit 6.1 <b>Stormwater Design: Quantity Control</b>	1
1					Credit 6.2 <b>Stormwater Design: Quality Control</b>	1
1					Credit 7.1 <b>Heat Island Effect: Non-Roof</b>	1
1					Credit 7.2 <b>Heat Island Effect: Roof</b>	1
	1				Credit 8 <b>Light Pollution Reduction</b>	1

Yes ? No

<b>6</b>	<b>1</b>	<b>4</b>	<b>Water Efficiency</b>	<b>10 Points</b>
----------	----------	----------	-------------------------	------------------

✓					Prereq 1 <b>Water Use Reduction</b>	Required
3		2			Credit 1 <b>Water Efficient Landscaping</b>	2, 4
		2			Credit 2 <b>Innovative Wastewater Technologies</b>	2
3	1				Credit 3 <b>Water Use Reduction</b>	2 - 4

Yes ? No

<b>11</b>	<b>3</b>	<b>2</b>	<b>Energy &amp; Atmosphere</b>	<b>35 Points</b>
-----------	----------	----------	--------------------------------	------------------

✓					Prereq 1 <b>Fundamental Commissioning of Building Energy Systems</b>	Required
✓					Prereq 2 <b>Minimum Energy Performance</b>	Required
✓					Prereq 3 <b>Fundamental Refrigerant Management</b>	Required
7					Credit 1 <b>Optimize Energy Performance</b>	1 - 19
		1			Credit 2 <b>On-Site Renewable Energy</b>	1 - 7
		1			Credit 3 <b>Enhanced Commissioning</b>	2
2					Credit 4 <b>Enhanced Refrigerant Management</b>	2
	3				<b>Measurement and Verification</b>	3
2					Credit 6 <b>Green Power</b>	2

# ATTACHMENT 3

Yes ? No

<b>6</b>	<b>2</b>	<b>3</b>	<b>Materials &amp; Resources</b>	<b>14 Points</b>
----------	----------	----------	----------------------------------	------------------

✓						Required
			1		Prereq 1 <b>Storage and Collection of Recyclables</b>	
			1		Credit 1.1 <b>Building Reuse: Maintain Existing Walls, Floors, and Roof</b>	1 - 3
			1		Credit 1.2 <b>Building Reuse: Maintain Interior Non-Structural Elements</b>	1
2					Credit 2 <b>Construction Waste Management</b>	1 - 2
			1		Credit 3 <b>Materials Reuse</b>	1 - 2
2					Credit 4 <b>Recycled Content</b>	1 - 2
2					Credit 5 <b>Regional Materials</b>	1 - 2
	1				Credit 6 <b>Rapidly Renewable Materials</b>	1
	1				Credit 7 <b>Certified Wood</b>	1

Yes ? No

<b>9</b>	<b>0</b>	<b>6</b>	<b>Indoor Environmental Quality</b>	<b>15 Points</b>
----------	----------	----------	-------------------------------------	------------------

✓						Required
✓					Prereq 2 <b>Environmental Tobacco Smoke (ETS) Control</b>	Required
			1		Credit 1 <b>Outdoor Air Delivery Monitoring</b>	1
			1		Credit 2 <b>Increased Ventilation</b>	1
1					Credit 3.1 <b>Construction IAQ Management Plan: During Construction</b>	1
1					Credit 3.2 <b>Construction IAQ Management Plan: Before Occupancy</b>	1
1					Credit 4.1 <b>Low-Emitting Materials: Adhesives and Sealants</b>	1
1					Credit 4.2 <b>Low-Emitting Materials: Paints and Coatings</b>	1
1					Credit 4.3 <b>Low-Emitting Materials: Flooring Systems</b>	1
1					Credit 4.4 <b>Low-Emitting Materials: Composite Wood and Agrifibre Products</b>	1
			1		Credit 5 <b>Indoor Chemical and Pollutant Source Control</b>	1
1					Credit 6.1 <b>Controllability of System: Lighting</b>	1
1					Credit 6.2 <b>Controllability of System: Thermal Comfort</b>	1
1					Credit 7.1 <b>Thermal Comfort: Design</b>	1
			1		Credit 7.2 <b>Thermal Comfort: Verification</b>	1
			1		Credit 8.1 <b>Daylight and Views: Daylight</b>	1
			1		Credit 8.2 <b>Daylight and Views: Views</b>	1

Yes ? No

<b>5</b>	<b>1</b>	<b>0</b>	<b>Innovation in Design</b>	<b>6 Points</b>
----------	----------	----------	-----------------------------	-----------------

1						1
	1				Credit 1.1 <b>Innovation in Design - Providing an Online Owner's Manual</b>	
1					Credit 1.2 <b>Innovation in Design - SSc 4.1 Public Transportation Access</b>	1
1					Credit 1.3 <b>Innovation in Design - SSc 7.1 Heat Island Effect Non-Roof</b>	1
1					Credit 1.4 <b>Innovation in Design - MRc5.2 Regional Materials</b>	1
1					Credit 1.5 <b>Innovation in Design - EAc 6 Green Power</b>	1
1					Credit 2 <b>LEED® Accredited Professional</b>	1

Yes ? No

<b>3</b>	<b>1</b>	<b>0</b>	<b>Regional Priority</b>	<b>4 Points</b>
----------	----------	----------	--------------------------	-----------------

1						1
	1				Credit 1 <b>Durable Building</b>	
1					Credit 2.1 <b>Regional Priority Credit</b>	1
1					Credit 2.2 <b>Regional Priority Credit - Water Use Reduction (greater than 35%)</b>	1
1					Credit 2.3 <b>Regional Priority Credit - Construction Waste Management (greater than 75%)</b>	1



No. DP 18-829228

To the Holder: QRD (Hamilton) LP  
Property Address: 23400, 23440, 23460 and 23500 Gates Avenue  
Address: 102 – 5489 Byrne Road  
Burnaby, BC V5J 3J1

---

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 reduce:
  - a) the minimum front yard setback to Gates Avenue from 4.0 m to 3.4 m; and
  - b) the minimum west side yard setback from 7.5 m to 6.0 m..
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 #46 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 \$418,961.42 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 18-829228**

To the Holder: QRD (Hamilton) LP  
Property Address: 23400, 23440, 23460 and 23500 Gates Avenue  
Address: 102 – 5489 Byrne Road  
Burnaby, BC V5J 3J1

---

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.  
DAY OF

ISSUED BY THE COUNCIL THE

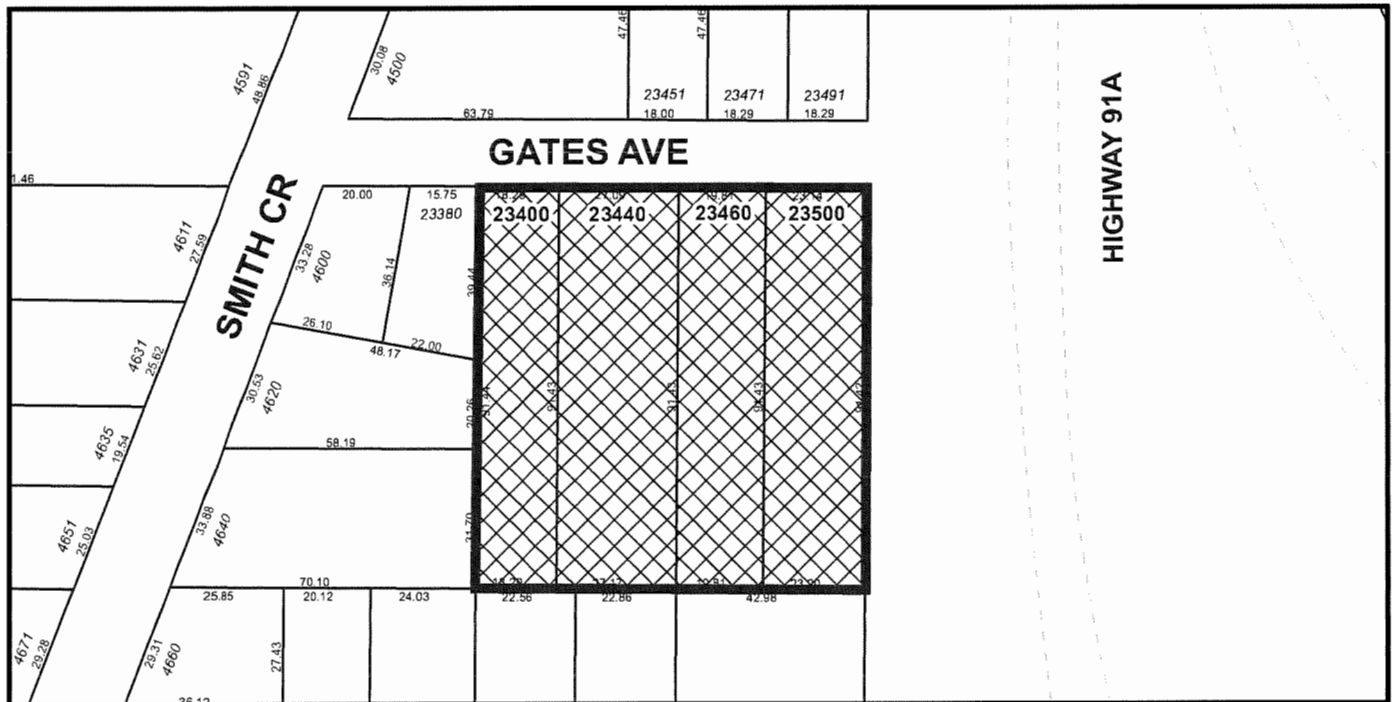
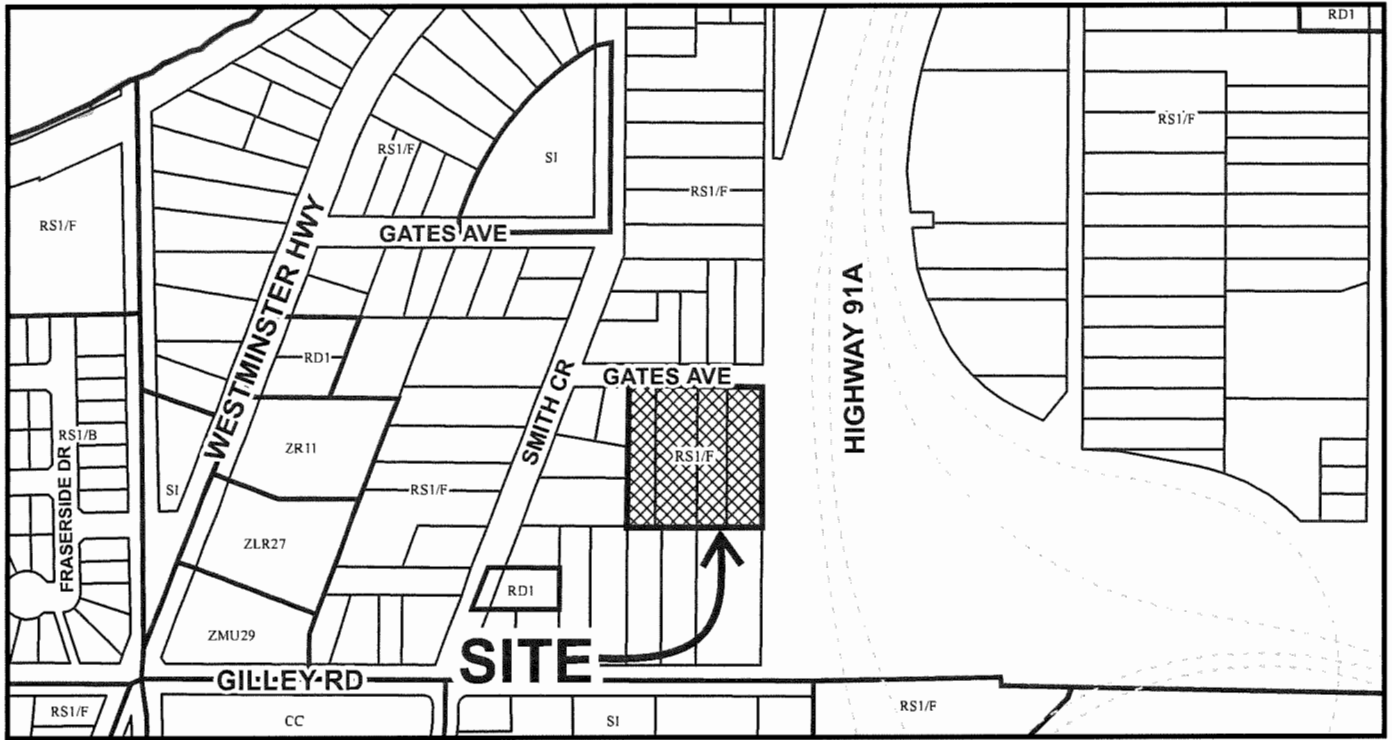
DELIVERED THIS DAY OF

---

MAYOR



# City of Richmond



## DP 18-829228

Original Date: 08/23/18

Revision Date:

Note: Dimensions are in METRES





## TABLE OF CONTENTS

PLAN 00	AREA PLAN
PLAN 1	SITE PLAN
PLAN 1B	OPEN SPACE CALCULATION
PLAN 1C	SITE COVERAGE
PLAN 1D	SITE COVERAGE
PLAN 1E	FIRE FIGHTING PLAN
PLAN 2	PARKING PLAN
PLAN 3	LANDSCAPE PLAN (see separate set)
PLAN 4-6	ELEVATIONS
PLAN 7-12	FLOOR PLANS
PLAN 13-19	FAR CALCULATION
PLAN 20-21	CONVERTIBLE UNIT PLANS
PLAN 22	STREETSCAPE & YARDSCAPE
PLAN 23-24	SITE SECTIONS
PLAN 25	SHADOW ANALYSIS
PLAN 26-30	PERSPECTIVES
PLAN 31	MATERIAL SHEET

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHORITY OF ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**23400, 23440, 23460, & 23500 GATES AVENUE  
RICHMOND**

MAY 21, 2021

**DP 18-829228 PLAN #.1.D**

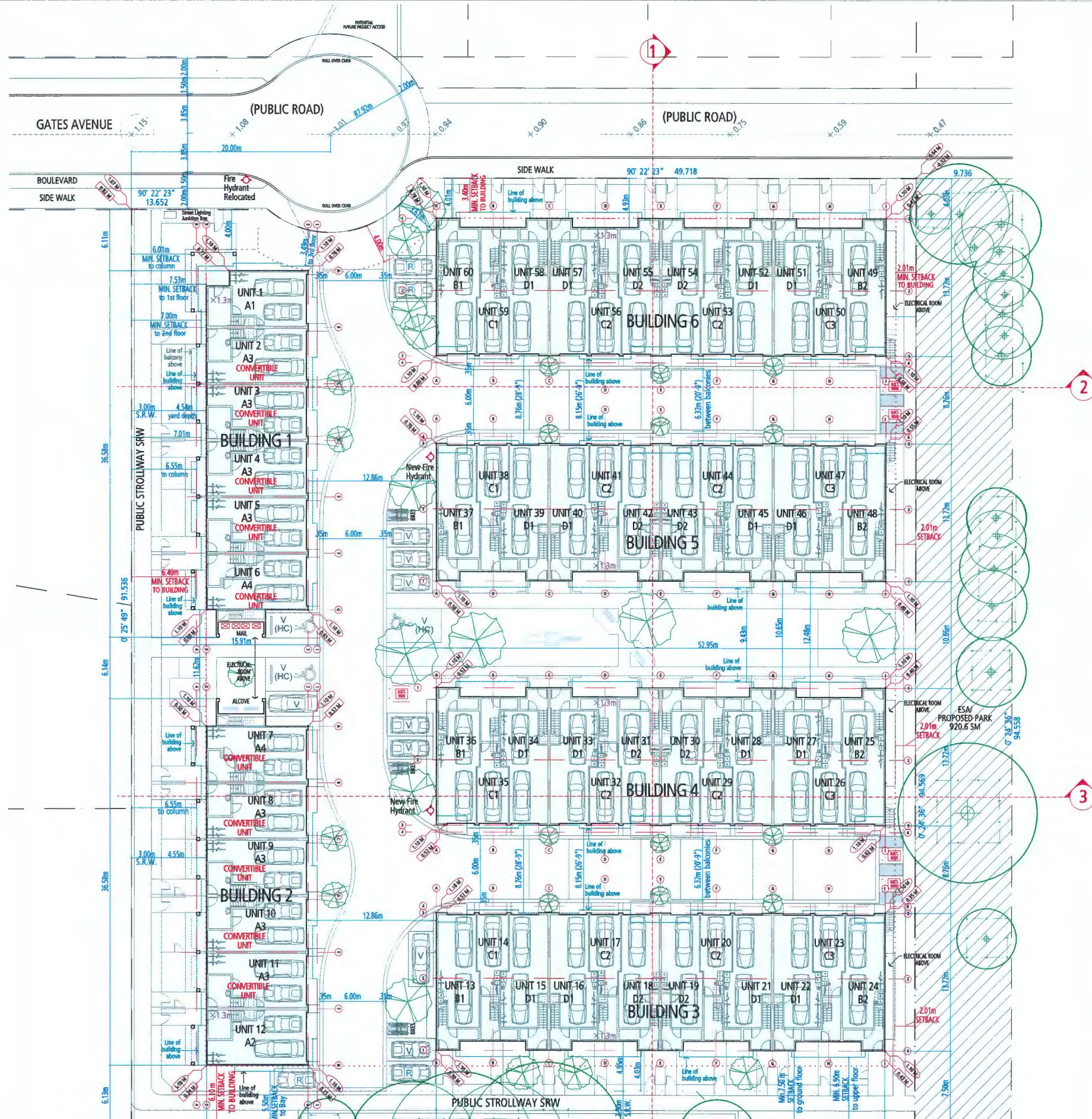


DP18-829228  
MAY 10, 2021



MAY 21, 2021

# DP 18-829228 PLAN # 2



## SITE DATA

GROSS SITE AREA	8248.2 SM
ESA DEDICATION	920.6 SM
NET SITE AREA	7,327.6 SM
UNIT COUNT	60 UNITS
DENSITY (UPH)	81.8
GROSS FLOOR AREA	10,329 SM
NET FLOOR AREA	7,059 SM
DENSITY (FAR)	0.963
DENSITY (FAR) INCLUDING ESA	0.856
STACK TOWNHOMES	(48/60) 80%
OPEN SPACE REQUIRED	360 SM
OPEN SPACE PROVIDED	361 SM
PLAYGROUND SPACE REQUIRED	180 SM
PLAYGROUND SPACE PROVIDED	197 SM
GARBAGE/RECYCLING	DOOR-TO-DOOR PICKUP

VARIANCES	Proposed
Front Yard Setback	3.4 m
Side Yard Setback (west)	6.4 m
Visitor Parking	6 small spaces

**PROVISION OF ACCESSIBILITY FEATURES "AGING-IN-PLACE" REQUIREMENTS ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening
- 3'-0" swinging door spec.
- Door from garage to living area minimum 2'-10" (swinging door spec.)

10 Convertible Units are proposed for this project.

Flood Plain Level	3.5 m
Ground Floor Slab Elevation	1.3 m
Highest Point in Crown of Road	1.15 m
Average Site Grade	1.08 m

### Average Site Grade Calculation

Site	1.07 m
	1.07 m
	1.11 m
	0.64 m
Bldg 1	1.1 m
	1.1 m
	1.1 m
	1.1 m
Bldg 2	1.1 m
	1.1 m
	1.1 m
	1.1 m
Bldg 3	1.1 m
	1.1 m
	1.1 m
	1.1 m
Bldg 4	1.1 m
	1.1 m
	1.1 m
	1.1 m
Bldg 5	1.1 m
	1.1 m
	1.1 m
	1.1 m
Bldg 6	1.1 m
	1.1 m
	1.1 m
	1.1 m
Average	1.08 m

**LEGEND**

<span style="border: 1px solid black; padding: 2px;">EL</span>	Existing Grade Elevation
<span style="border: 1px solid red; padding: 2px;">EL</span>	Finished Grade Elevation
×1.3m	Ground Floor Slab Elevation

## CODE ANALYSIS - PART 9 BLDG. 1,2 Project: #1825 Gates Ave.

BCBC REF. Division A 1.3.3.3 (1)(e)	CODE INFORMATION
Applicable code	British Columbia Building Code 2018
Major occupancy	Group C
Building area (Permitted - 800m <sup>2</sup> )	(Proposed) 437.4 m <sup>2</sup>
Building height	3 Storeys
Streets faced	1 Street
Floor FRR*	1 hr
Roof FRR	1 hr
Load bearing wall FRR	1 hr
Sprinkler system required	N/A
Construction type (Permitted - combustib/noncombustible)	(Proposed) combustible
Fire alarm required	N/A
Standpipes required	N/A
Separation of residential suites	1 Hour

\* Fire Resistance Rating

## CODE ANALYSIS - PART 3 BLDG. 3,4,5 & 6 Project: #1825 Gates Ave.

BCBC REF. 3.2.2.52	CODE INFORMATION
Applicable code	British Columbia Building Code 2018
Major occupancy	Group C
Building area (Permitted - 800m <sup>2</sup> )	(Proposed) 863.8 m <sup>2</sup>
Building height	3 Storeys
Streets faced	1 Street
Floor FRR*	1 hr
Roof FRR	1 hr
Load bearing wall FRR	1 hr
Sprinkler system required	N/A
Construction type (Permitted - combustib/noncombustible)	(Proposed) combustible
Fire alarm required	N/A
Standpipes required	N/A
Separation of residential suites	1 Hour

\* Fire Resistance Rating



23400 - 23500

# GATES AVENUE

for

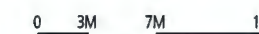


THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEIBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## SITE PLAN

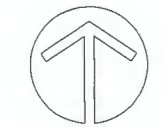
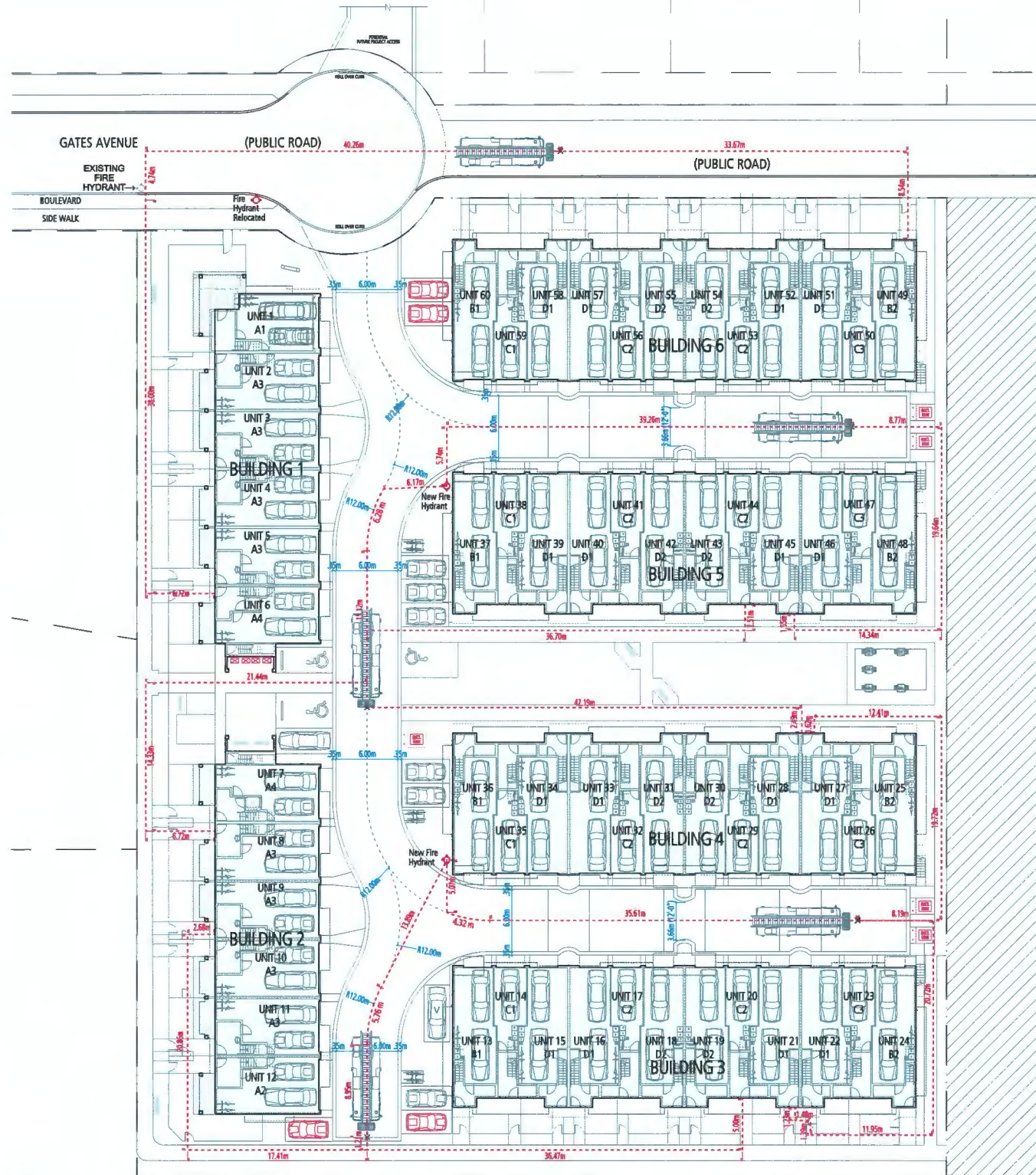
SCALE: 1 : 200



DP18-829228  
MAY 21, 2021



PLAN 1



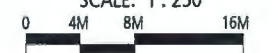
23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL, AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**FIRE FIGHTING PLAN**  
SCALE: 1:250

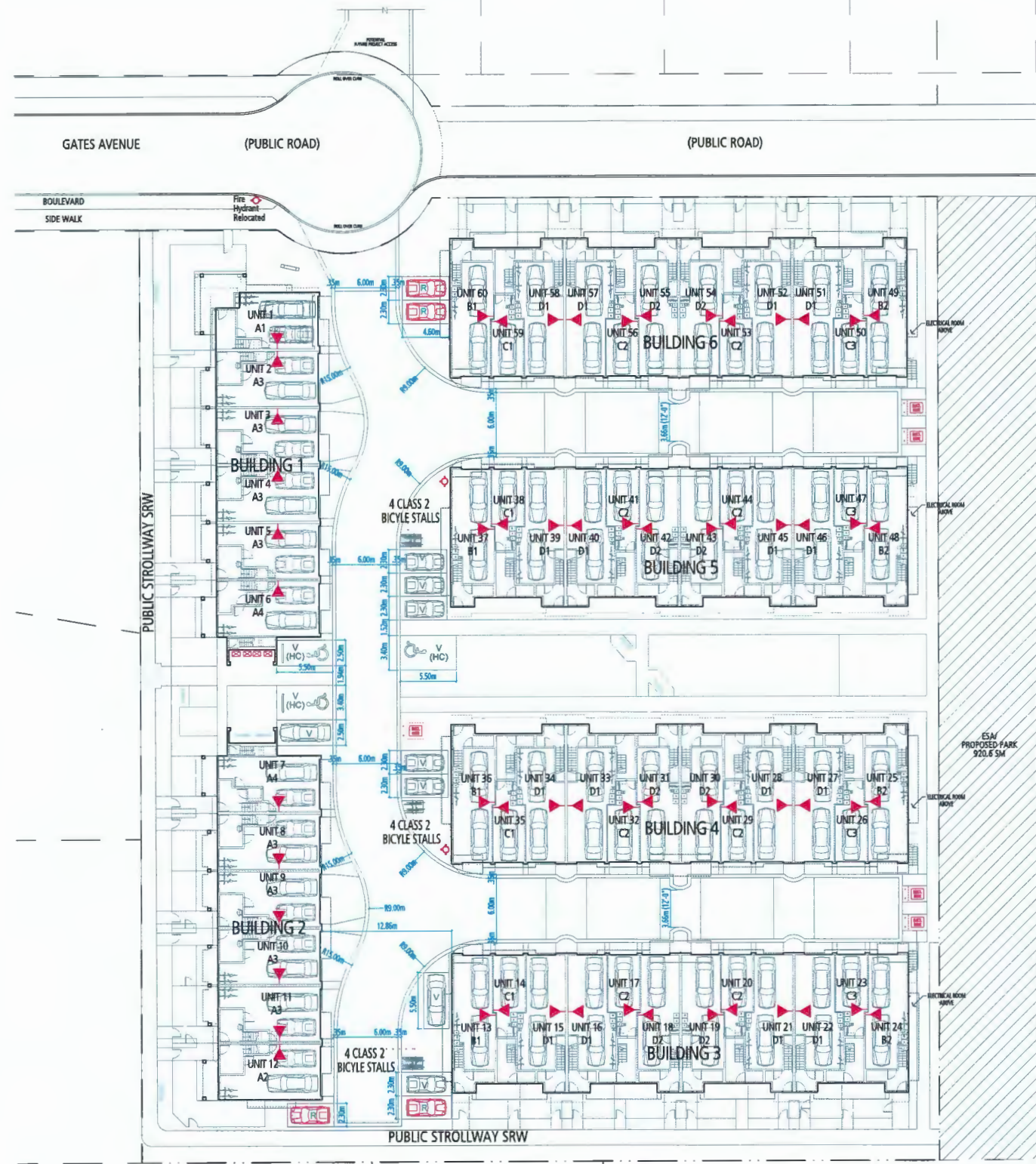


DP18-829228  
MAY 10, 2021



**PLAN 1E** Vancouver, BC V5T 4L6 fougerearchitecture.ca

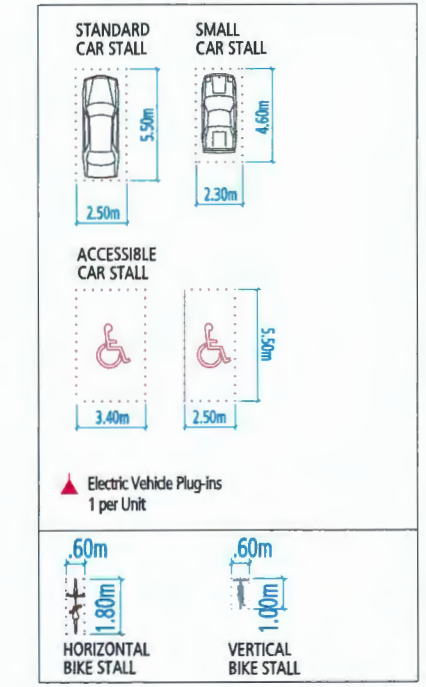
MAY 21, 2021 **DP 18-829228 PLAN # 3**



**PARKING DATA**

RESIDENTIAL PARKING	
Required (1.8 cars/unit)	108
Provided	108
small cars	16 cars (15%)
tandem arrangement	64 cars (60%)
VISITOR PARKING	
Required (0.18 cars/unit)	11
Provided	11
small cars	6 cars (55%)
ACCESSIBLE SPACES	
Required (2% of requ. spaces)	3
Provided	3
BICYCLE PARKING- CLASS 1	
Required (1.25 stalls/unit)	75
Provided	88
BICYCLE PARKING- CLASS 2	
Required (0.2 stalls/unit)	12
Provided	12

**PARKING LEGEND (NTS)**



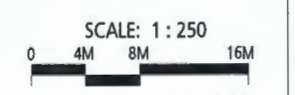
23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**PARKING PLAN**



DP18-829228  
MAY 10, 2021



MAY 21, 2021 **DP 18-829228 PLAN # 4**

**PLAN 2**

# Gates Avenue Townhouses

**RE-ISSUED FOR DEVELOPMENT PERMIT**



<b>Contact Information</b>	<b>Other Key Contacts:</b>	
van der Zalm + associates Inc.  Fort Langley Studio 102 - 9181 Church Street Fort Langley, British Columbia, V1M 2R8  Mount Pleasant Studio 102-355 Kingsway Vancouver, British Columbia, V5T 3J7  Primary project contact Travis Martin Travis@vzdz.ca d. 604 546 0924  Alternate contacts (in case away): Mark van der Zalm Principal Landscape Architect mark@vzdz.ca o. 604 882 0024	QRD (Hamilton) LP.  102 - 5469 Byrne Rd. Burnaby, BC V5J 3J1 604 362 8358	Fougere Architecture Inc.  202-2425 Quebec Street Vancouver, B.C. V5T 4L6 604 873 2907
<b>Legal Address and Description:</b>		
Lot 124 Plan 44742 Lot 58 Plan 8421 Except part Subdivided by Plan 44742 Lot 114 Plan 41397 Lot 115 Plan 41397 All of Section 36 Block 5 North Range 4 West New Westminster District #23400 Gates Avenue, Richmond B.C. P.I.D 003-980-501 #23440 Gates Avenue, Richmond B.C. P.I.D 011-323-370 #23460 Gates Avenue, Richmond B.C. P.I.D 006-141-935 #23500 Gates Avenue, Richmond B.C. P.I.D 003-453-138		

## Sheet List Table

Sheet Number	Sheet Title
L-01	COVER PAGE
L-02	OVERALL SITE PLAN
L-03	AMENITY AREA
L-04	SITE PLAN NORTH
L-05	SITE PLAN SOUTH
L-06	ESA & GREENSPACE COVERAGE
L-07	PLANTING PLAN NORTH
L-08	PLANTING PLAN SOUTH
L-09	IRRIGATION PLAN
L-10	LIGHTING PLAN
L-11	GRADING PLAN

L-12	ESA PLAN
L-13	PARK DEDICATION PLAN
LS-01	SECTIONS
LS-02	SECTIONS
LD-01	DETAILS
LD-02	DETAILS
LD-03	DETAILS
LD-04	DETAILS
LD-05	DETAILS
LAND-01	SERVICING PLAN - OFF-SITE
LAND-02	ESA ENHANCEMENT AREA - OFF-SITE
LAND-03	MOTI CORRIDOR - OFF-SITE
LAND-04	STROLLWAYS - OFF-SITE



No	By	Description	Date
12	DV	Re-issue for DP	May 11 2021
11	DV	Re-issue for DP	Mar 24 2021
10	DV	Re-issue for DP	Sept 28 2020
9	DV	ADP Response	Jan 30 2020
8	DV	Issue for BP	Dec 18 2019
7	DV	Issue for ADP	Nov 1 2019
6	DV	Re-issue for DP	Oct 17 2019
5	TM	Issued for Development Permit	Sept 5 2019
4	TM	Issued for Development Permit	July 25 2019
3	TM	Issued for Rezoning	Feb 20 2019

**REVISIONS TABLE FOR DRAWINGS**

\* Copyright reserved. This drawing and design is the property of van der Zalm + associates Inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
2	DV	ESA/Park Area Identification	May 17 2021
1	TM	MOTI Update	May 27 2019

**REVISIONS TABLE FOR SHEET**

**Project:**  
Gates Avenue Townhouses

**Location:**  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.

**DP #:**  
DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE OBTAINED AT THE COMPLETION OF THE WORK. ALL RECORDS, DRAWINGS, AND SPECIFICATIONS MUST NOT BE PLACED FOR CONSTRUCTION UNLESS LIBRARIAN ISSUED FOR TENDERS/CONSTRUCTION.

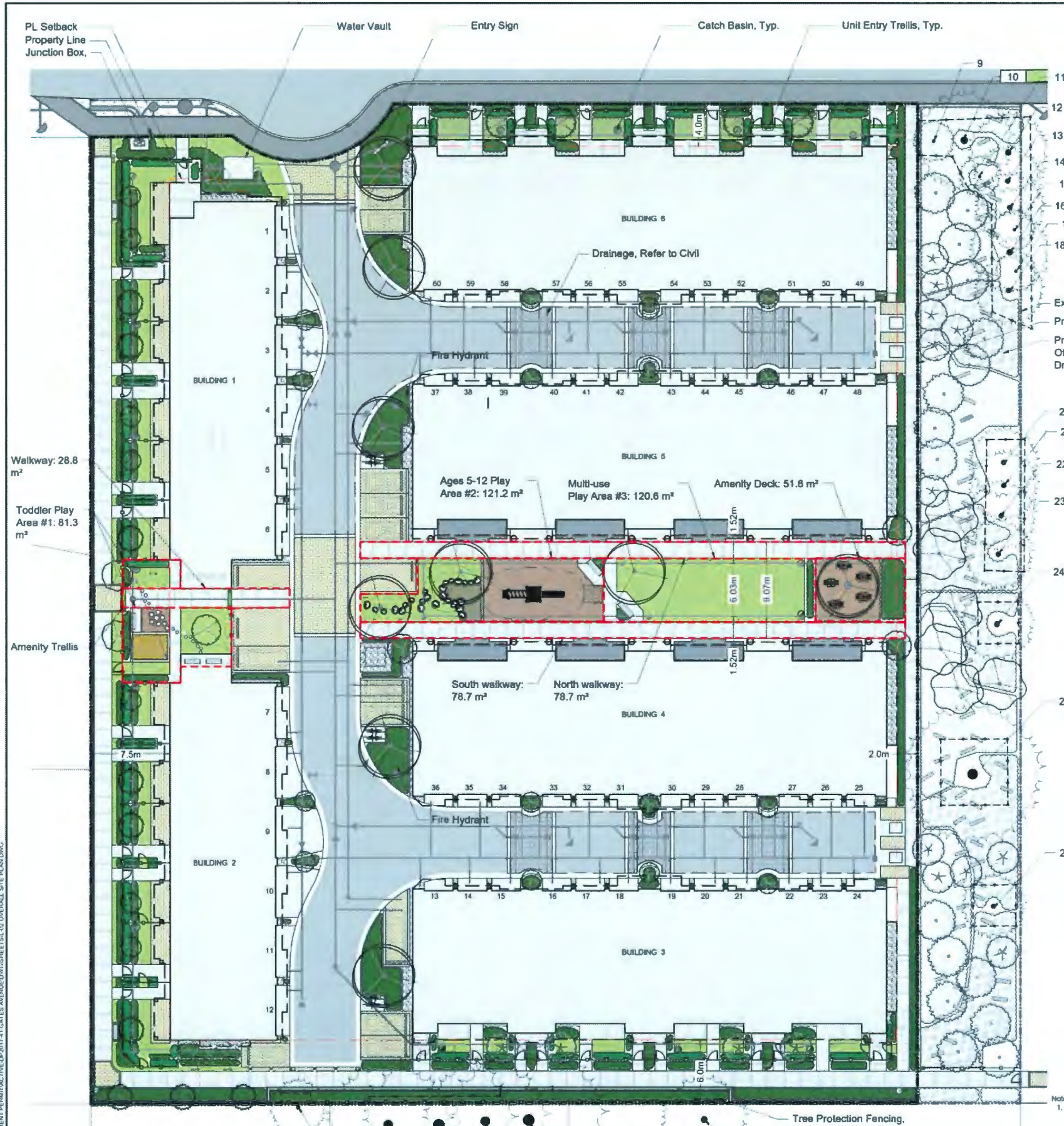
MAY 21, 2021

**DP 18-829228 PLAN # 5**

LOCATION MAP  
NTS

Drawing Title: **COVER PAGE**  
 VZD Project #: **DP2017-41**  
 Drawing #: **L-01**

Z:\PROJECTS\DEVELOPMENT PERMITS\DP2017-41\GATES AVENUE\DWG\SHEET\01 COVER PAGE.DWG



**ON-SITE TREE SCHEDULE**

TREES	BOTANICAL / COMMON NAME	CONT	QTY
	Acer rubrum 'Armstrong' / Armstrong Red Maple	8cm	2
	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	8cm	9
	Fagus sylvatica 'Dawyc Gold' / European Beech	6cm	23
	Malus fusca / Oregon Crab Apple	6cm	4
	Picea omorika 'Bruns' / Bruns Spruce	4m Height	9
	Sorbus scopulina / Western Mountain Ash	6cm	8
	Tsuga heterophylla / Western Hemlock	4m Height	3
Total Trees:			58

Total Amenity Area: 374.7 sm

**HARDSCAPE MATERIALS**

KEY	REF.	DESCRIPTION
	6 LD-01	CONCRETE SIDEWALK - PEDESTRIAN
	8 LD-01	CONCRETE PAVERS PEDESTRIAN
	7 LD-01	CONCRETE PAVERS VEHICULAR
	1 LD-03	WOOD DECK
	5 LD-01	DRIP STRIP
	5 LD-01	PERMEABLE PAVERS VEHICULAR, MATCH CONC. VEHICULAR PAVERS. REFER TO CIVIL FOR INSTALLATION

**SOFTSCAPE MATERIALS**

KEY	REF.	DESCRIPTION
	1 LD-01	PROPOSED TREE
		EXISTING TREE
		SOD See Critical Landscape Notes for Specifications
	4 LD-03	SAND PLAY AREA
	7 LD-02	CRUSHER FINES ENGINEERED WOOD FIBER PLAY SURFACE
	2,3 LD-01	SHRUB PLANTING
	2,3 LD-01	HEDGE PLANTING

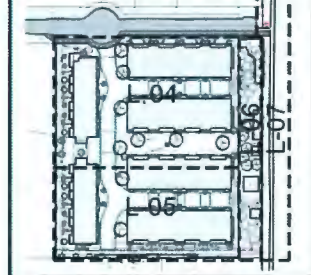
**SITE FURNISHINGS/LIGHTING**

KEY	REF.	DESCRIPTION
	1 LD-02	BENCH
	4 LD-04	STEPPING BOULDERS
	3 LD-02	TABLES AND CHAIRS
	2,3 LD-03	RESIDENTIAL ENTRY TRELLIS & AMENITY AREA TRELLIS
	6 LD-03	CONCRETE PLANTER
	8 LD-02	SITTING CIRCLE/ WOOD STEPPERS
	1 LD-02	BOLLARD
	6 LD-02	TALK TUBES
	4,5 LD-02	PLAY PANEL/ CHALK BOARD
	2 LD-04	WAYFINDING SIGN
	3 LD-04	BIKE RACK

**FENCING and WALLS**

KEY	REF.	DESCRIPTION
	5 LD-04	UNIT RAIL FENCE
	5 LD-03	PRIVACY FENCE
		UNIT GATE
	7 LD-04	BLOCK RETAINING WALL

**Key Map (M/S)**



No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 16, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019
No		By Description	Date

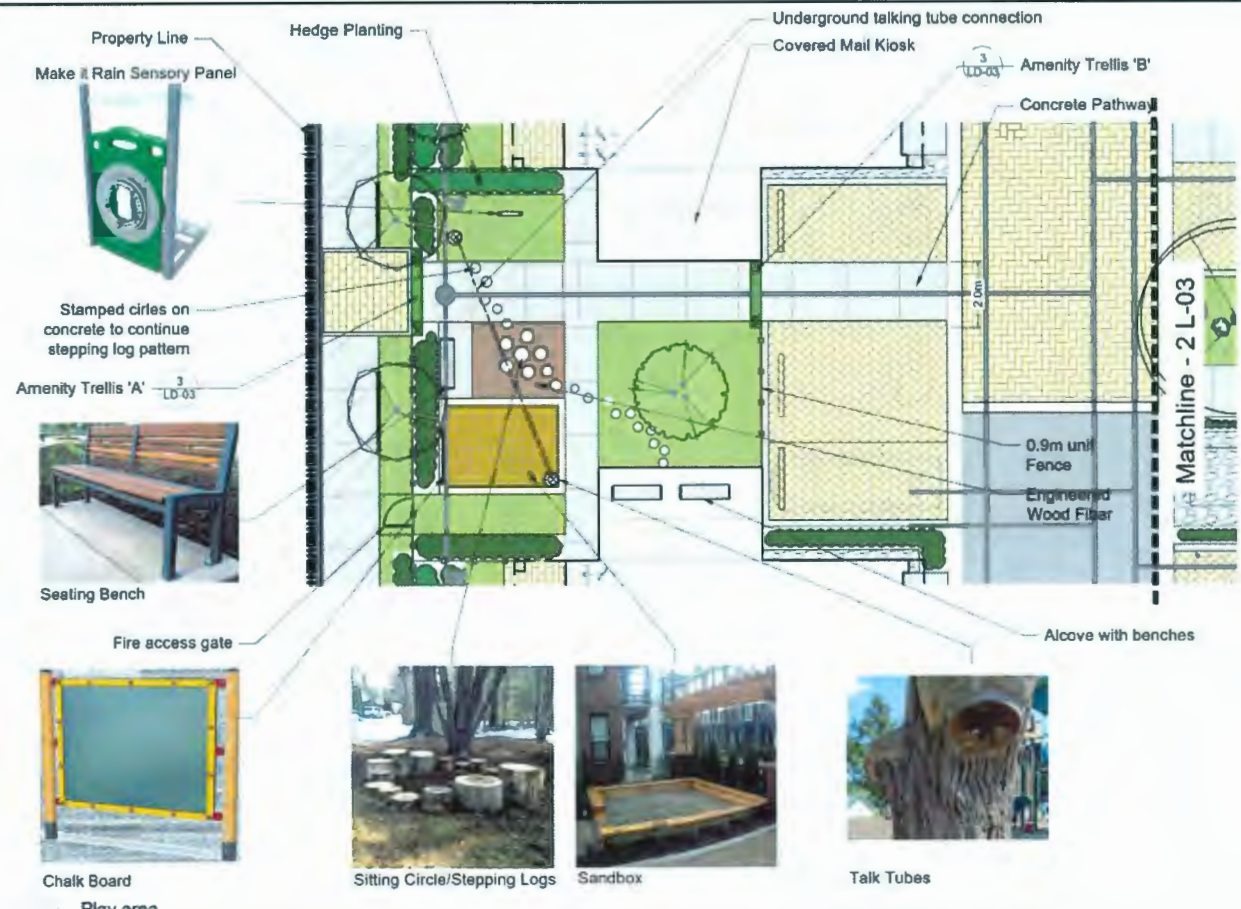
**REVISIONS TABLE FOR DRAWINGS**

No	By	Description	Date
3	TM	TP2 Update	May 21, 2021
2	TM	MOTI Update	May 27, 2019
1	TM	ESA Update	Jan 07, 2019
No		By Description	Date

**REVISIONS TABLE FOR SHEET**

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV  
 Checked: TM  
 Approved: MVDZ  
 Scale: AS SHOWN  
 Stamp: [Blank]  
 Original Sheet Size: 24"x36"



**HARDSCAPE MATERIALS**

KEY	REF.	DESCRIPTION
	6 LD-01	CONCRETE SIDEWALK - PEDESTRIAN
	8 LD-01	CONCRETE PAVERS PEDESTRIAN
	7 LD-01	CONCRETE PAVERS VEHICULAR
	1 LD-03	WOOD DECK
	5 LD-01	DRIP STRIP
		PERMEABLE PAVERS VEHICULAR MATCH CONC. VEHICULAR PAVERS. REFER TO CIVIL FOR INSTALLATION

**SOFTSCAPE MATERIALS**

KEY	REF.	DESCRIPTION
	1 LD-01	PROPOSED TREE
		EXISTING TREE
		SOD See Critical Landscape Notes for Specifications
		GROUNDCOVER SHADE MIX
	4 LD-03	SAND PLAY AREA
		CRUSHER FINES
	7 LD-02	ENGINEERED WOOD FIBER PLAY SURFACE
	2.3 LD-01	SHRUB PLANTING
	2.3 LD-01	HEDGE PLANTING

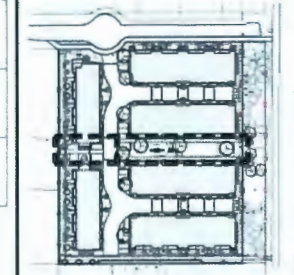
**SITE FURNISHINGS/LIGHTING**

KEY	REF.	DESCRIPTION
	1 LD-02	BENCH
	4 LD-04	STEPPING BOULDERS
	3 LD-02	TABLES AND CHAIRS
	2.3 LD-03	RESIDENTIAL ENTRY TRELLIS & AMENITY AREA TRELLIS
	6 LD-03	CONCRETE PLANTER
	8 LD-02	SITTING CIRCLE/ WOOD STEPPERS
	1 LD-02	BOLLARD
	6 LD-02	TALK TUBES
	4.5 LD-02	PLAY PANEL/ CHALK BOARD
	2 LD-04	WAYFINDING SIGN
	3 LD-04	BIKE RACK

**ON-SITE TREE SCHEDULE**

TREES	BOTANICAL / COMMON NAME	CONT	QTY
	Acer rubrum 'Armstrong' / Armstrong Red Maple	8cm	2
	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	8cm	9
	Fagus sylvatica 'Dawyd Gold' / European Beech	6cm	23
	Malus fusca / Oregon Crab Apple	8cm	4
	Picea omorika 'Bruns' / Brun's Spruce	4m Height	0
	Sorbus scopulina / Western Mountain Ash	8cm	6
	Tsuga heterophylla / Western Hemlock	4m Height	3

**Key Map (PTS)**

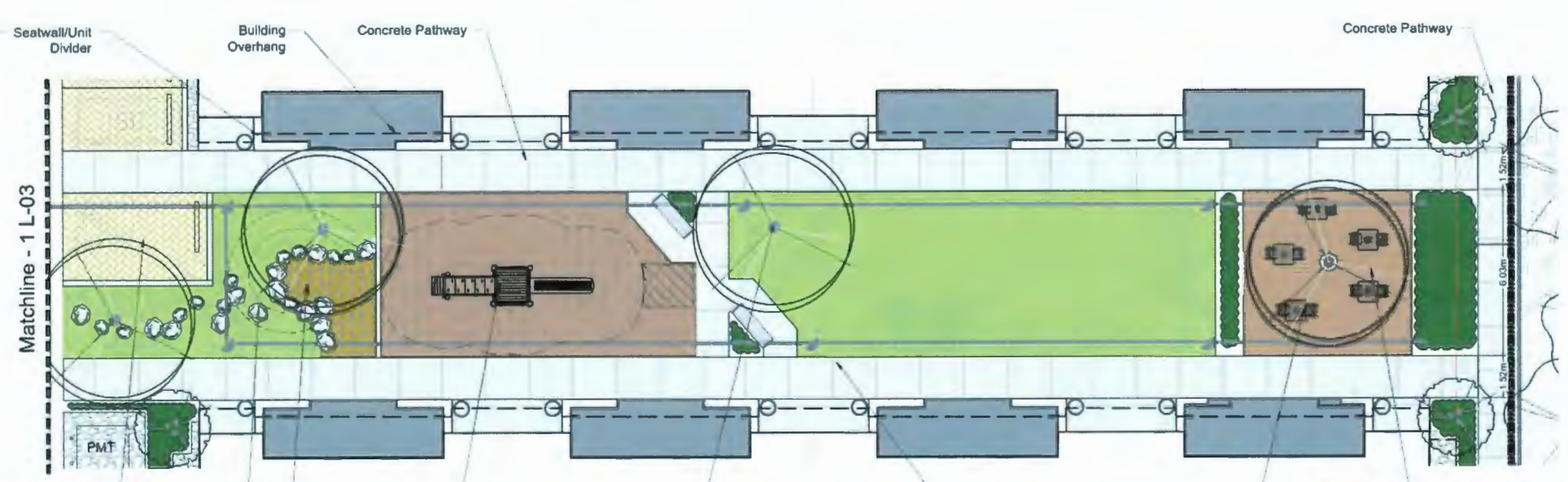


1 Play area  
 Scale 1:100



**FENCING and WALLS**

KEY	REF.	DESCRIPTION
	5 LD-04	UNIT RAIL FENCE
	5 LD-03	PRIVACY FENCE
		UNIT GATE



Parking Pavers



Stepping Boulders/Social



Climbing/Slide Structure



Shade tree



Tricycle Loop



Wood Deck with Shade Trees

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Reasoning	Feb 20, 2019
No	By	Description	Date

**REVISIONS TABLE FOR DRAWINGS**

© Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

**REVISIONS TABLE FOR SHEET**

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

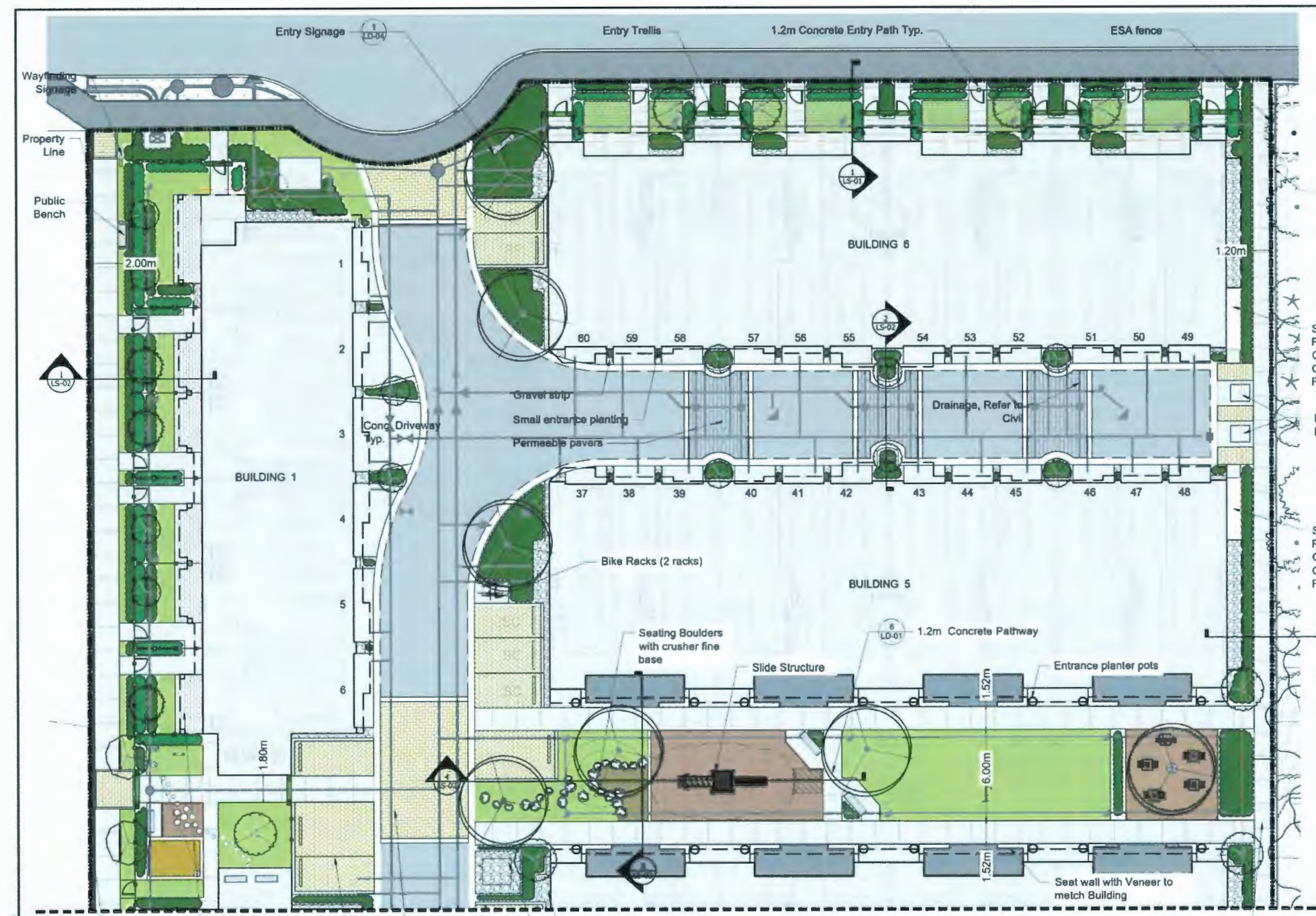
Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: 1:100	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE REFERENCED TO THE CORNER STAKES OF THE WORK. ALL REVISIONS OF THIS DRAWING SHALL BE MADE BY THE CONSULTANT UNLESS LABELED ISSUED FOR FIELD CONSTRUCTION.

MAY 21, 2021

DP 18-829228 PLAN # 7



Drawing Title: AMENITY AREA  
 Drawing #: L-03  
 Project #: DP2017-41



### HARDSCAPE MATERIALS

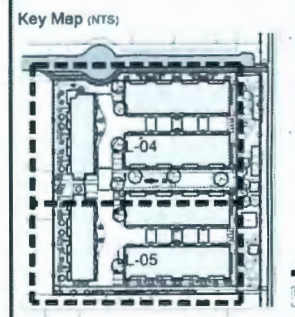
KEY	REF.	DESCRIPTION
[Symbol]	6 LD-01	CONCRETE SIDEWALK - PEDESTRIAN
[Symbol]	8 LD-01	CONCRETE PAVERS PEDESTRIAN
[Symbol]	7 LD-01	CONCRETE PAVERS VEHICULAR
[Symbol]	1 LD-03	WOOD DECK
[Symbol]	5 LD-01	DRIP STRIP
PERMEABLE PAVERS VEHICULAR. MATCH CONC. VEHICULAR PAVERS. REFER TO CIVIL FOR INSTALLATION.		

### SOFTSCAPE MATERIALS

KEY	REF.	DESCRIPTION
[Symbol]	1 LD-01	PROPOSED TREE
[Symbol]		EXISTING TREE
[Symbol]		SOD See Critical Landscape Notes for Specifications
[Symbol]		GROUND COVER SHADE MIX
[Symbol]	4 LD-03	SAND PLAY AREA
[Symbol]	7 LD-02	CRUSHER FINES
[Symbol]	2.3 LD-01	ENGINEERED WOOD FIBER PLAY SURFACE
[Symbol]	2.3 LD-01	SHRUB PLANTING
[Symbol]	2.3 LD-01	HEDGE PLANTING

### SITE FURNISHINGS/LIGHTING

KEY	REF.	DESCRIPTION
[Symbol]	1 LD-02	BENCH
[Symbol]	4 LD-04	STEPPING BOULDERS
[Symbol]	3 LD-02	TABLES AND CHAIRS
[Symbol]	2.3 LD-03	RESIDENTIAL ENTRY TRELLIS & AMENITY AREA TRELLIS
[Symbol]	6 LD-03	CONCRETE PLANTER
[Symbol]	8 LD-02	SITTING CIRCLE/ WOOD STEPPERS
[Symbol]	1 LD-02	BOLLARD
[Symbol]	6 LD-02	TALK TUBES
[Symbol]	4.5 LD-02	PLAY PANEL/ CHALK BOARD
[Symbol]	2 LD-04	WAYFINDING SIGN
[Symbol]	3 LD-04	BIKE RACK



### REVISIONS TABLE FOR DRAWINGS

No.	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019
No.	By	Description	Date

### REVISIONS TABLE FOR SHEET

No.	By	Description	Date
1	TM	Privacy Fence Update	May 26, 2021
No.	By	Description <td>Date</td>	Date

Project:  
Gates Avenue Townhouses

Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.

DP #:  
DP18-829228

Drawn: DV Stamp:

Checked: TM

Approved: MVDZ Original Sheet Size: 24"x36"

Scale: 1:150

CONTRACTOR SHALL OBTAIN ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE CONSULTANT AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS TO DRAWINGS MUST BE PRICED FOR CONSTRUCTION UNLESS OTHERWISE NOTED FOR THE CONTRACTOR'S RECORD.

### ON-SITE TREE SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	QTY
[Symbol]	Acer rubrum 'Armstrong' / Armstrong Red Maple	8cm	2
[Symbol]	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	8cm	9
[Symbol]	Fagus sylvatica 'Dawyck Gold' / European Beech	6cm	23
[Symbol]	Malus fusca / Oregon Crab Apple	6cm	4
[Symbol]	Picea omorika 'Bruns' / Bruns Spruce	4m Height	9
[Symbol]	Sorbus scopulina / Western Mountain Ash	6cm	8
[Symbol]	Tsuga heterophylla / Western Hemlock	4m Height	3

### FENCING and WALLS

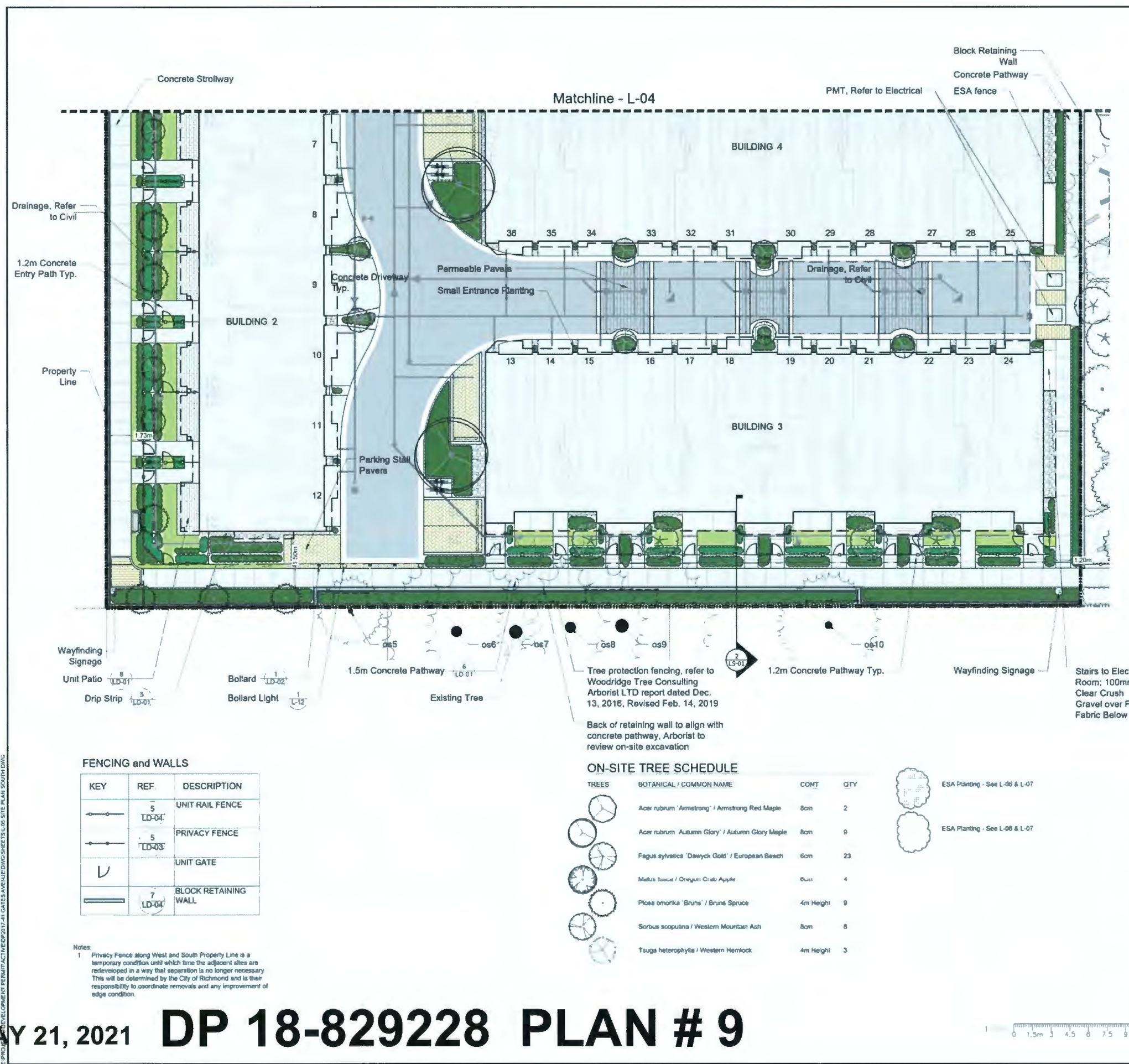
KEY	REF.	DESCRIPTION
[Symbol]	5 LD-04	UNIT RAIL FENCE
[Symbol]	5 LD-03	PRIVACY FENCE
[Symbol]		UNIT GATE

# MAY 21, 2021 DP 18-829228 PLAN # 8



Drawing Title: **SITE PLAN NORTH**  
 Drawing #: **DP2017-41**  
 Drawing #: **L-04**





### HARDSCAPE MATERIALS

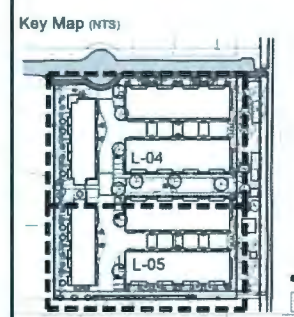
KEY	REF.	DESCRIPTION
[Pattern]	8 LD-01	CONCRETE SIDEWALK - PEDESTRIAN
[Pattern]	8 LD-01	CONCRETE PAVERS PEDESTRIAN
[Pattern]	7 LD-01	CONCRETE PAVERS VEHICULAR
[Pattern]	1 LD-03	WOOD DECK
[Pattern]	5 LD-01	DRIP STRIP
[Pattern]		PERMEABLE PAVERS VEHICULAR. MATCH CONC VEHICULAR PAVERS. REFER TO CIVIL FOR INSTALLATION

### SOFTSCAPE MATERIALS

KEY	REF.	DESCRIPTION
[Symbol]	1 LD-01	PROPOSED TREE
[Symbol]		EXISTING TREE
[Color]		SOD See Critical Landscape Notes for Specifications
[Color]		GROUNDCOVER SHADE MIX
[Color]	4 LD-03	SAND PLAY AREA
[Color]	7 LD-02	CRUSHER FINES
[Color]	7 LD-02	ENGINEERED WOOD FIBER PLAY SURFACE
[Symbol]	2,3 LD-01	SHRUB PLANTING
[Symbol]	2,3 LD-01	HEDGE PLANTING

### SITE FURNISHINGS/LIGHTING

KEY	REF.	DESCRIPTION
[Symbol]	1 LD-02	BENCH
[Symbol]	4 LD-04	STEPPING BOULDERS
[Symbol]	3 LD-02	TABLES AND CHAIRS
[Symbol]	2,3 LD-03	RESIDENTIAL ENTRY TRELLIS & AMENITY AREA TRELLIS
[Symbol]	8 LD-03	CONCRETE PLANTER
[Symbol]	8 LD-02	SITTING CIRCLE/ WOOD STEPPERS
[Symbol]	1 LD-02	BOLLARD
[Symbol]	6 LD-02	TALK TUBES
[Symbol]	4,5 LD-02	PLAY PANEL/ CHALK BOARD
[Symbol]	2 LD-04	WAYFINDING SIGN
[Symbol]	3 LD-04	BIKE RACK



### REVISIONS TABLE FOR DRAWINGS

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issued for BP	Dec 18, 2019
7	DV	Issued for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Reasoning	Feb 20, 2019

### REVISIONS TABLE FOR SHEET

No	By	Description	Date

Project:  
Gates Avenue Townhouses

Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.

DP #:  
DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVZ	Original Sheet Size: 24"x36"
Scale: 1:150	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND LOCATIONS ARE THE EXCLUSIVE RESPONSIBILITY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS, IMPROVEMENTS OR CHANGES MUST NOT BE MADE FOR CONSTRUCTION UNLESS LABELED AS SUCH BY THE CONSULTANT.

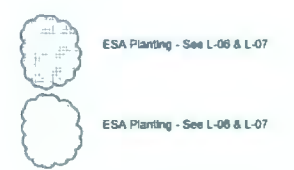
### FENCING and WALLS

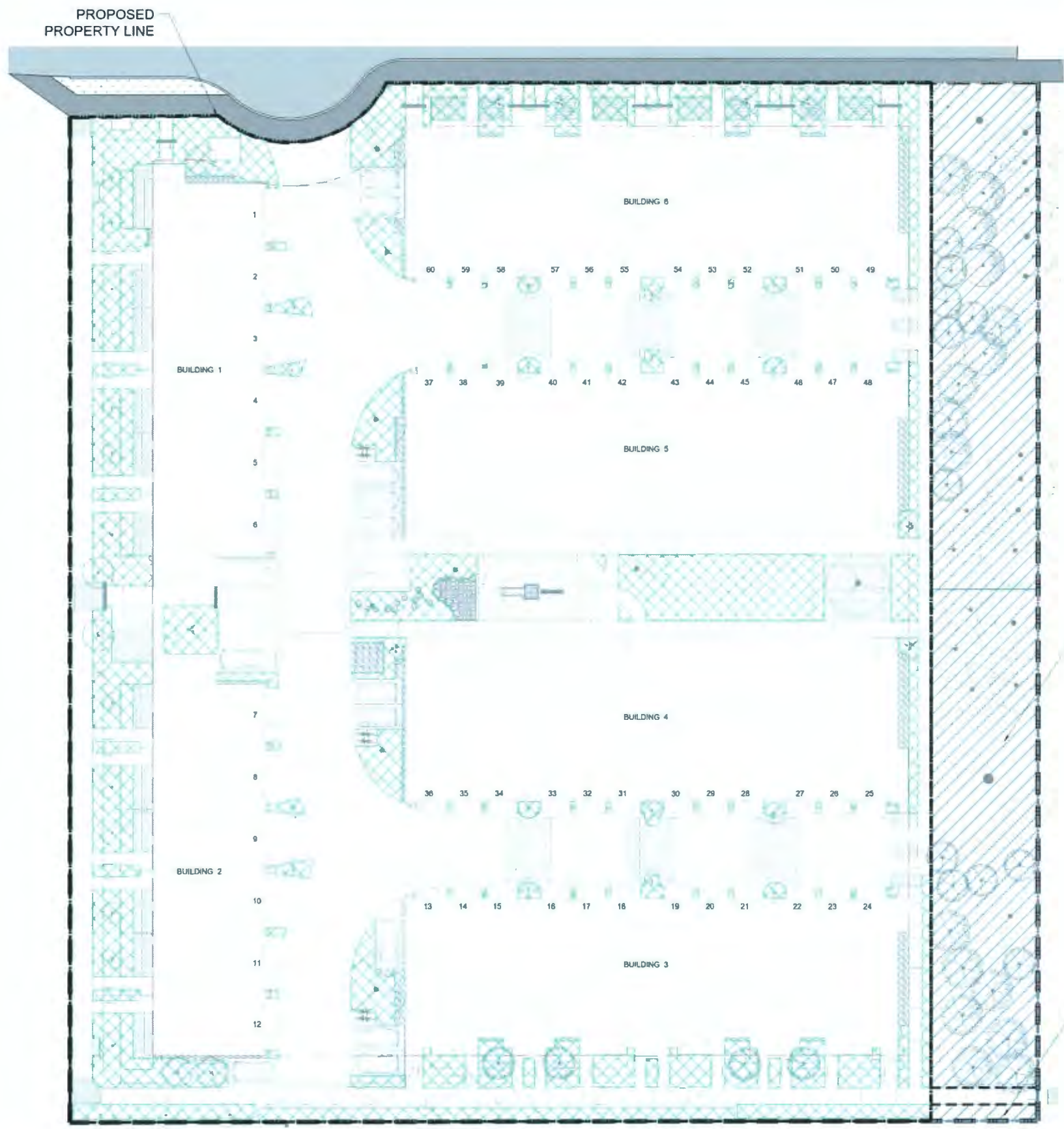
KEY	REF.	DESCRIPTION
[Symbol]	5 LD-04	UNIT RAIL FENCE
[Symbol]	5 LD-03	PRIVACY FENCE
[Symbol]		UNIT GATE
[Symbol]	7 LD-04	BLOCK RETAINING WALL

Notes:  
1 Privacy Fence along West and South Property Line is a temporary condition until such time the adjacent sites are redeveloped in a way that separation is no longer necessary. This will be determined by the City of Richmond and is their responsibility to coordinate removals and any improvement of edge condition.

### ON-SITE TREE SCHEDULE

TREES	BOTANICAL / COMMON NAME	COMT	QTY
[Symbol]	Acer rubrum 'Armstrong' / Armstrong Red Maple	8cm	2
[Symbol]	Acer rubrum 'Autumn Glory' / Autumn Glory Maple	8cm	9
[Symbol]	Fagus sylvatica 'Dawnyck Gold' / European Beech	6cm	23
[Symbol]	Malus fusca / Oregon Crataegus Apple	6cm	4
[Symbol]	Picea omorika 'Bruns' / Bruns Spruce	4m Height	9
[Symbol]	Sorbus scopulina / Western Mountain Ash	8cm	6
[Symbol]	Tsuga heterophylla / Western Hemlock	4m Height	3

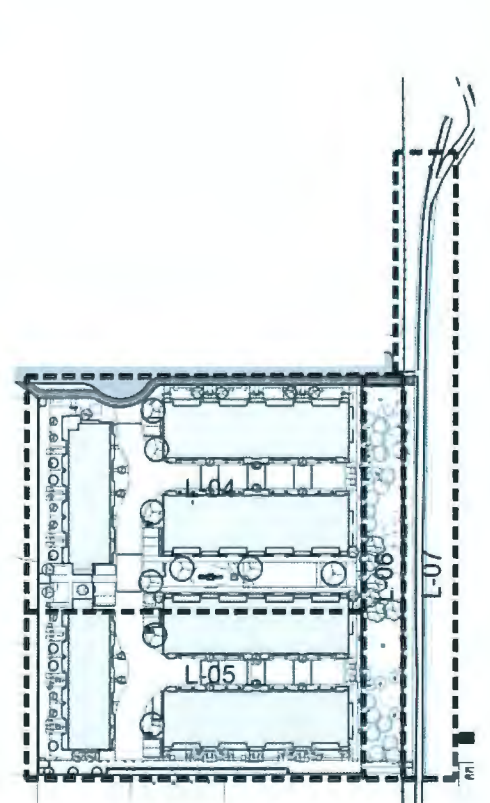




**LEGEND**

KEY		DESCRIPTION
		GROSS SITE BOUNDARY
		NET SITE BOUNDARY
	1107.12m <sup>2</sup>	VEGETATION COVERAGE ON-SITE
	905.7m <sup>2</sup>	ESA DEDICATION ( Pre-development ESA Area = 887 m <sup>2</sup> )

GROSS SITE AREA = 8248.2m<sup>2</sup>  
 ESA DEDICATION = 905.7m<sup>2</sup>  
 NET SITE AREA = 7342.5m<sup>2</sup>  
 NET SITE LIVE PLANT COVERAGE = 1107.12m<sup>2</sup> (15.08%)  
 GROSS SITE LIVE PLANT COVERAGE (includes ESA) = 2012.82m<sup>2</sup> (24.4%)



No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Responses	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

**REVISIONS TABLE FOR DRAWINGS**

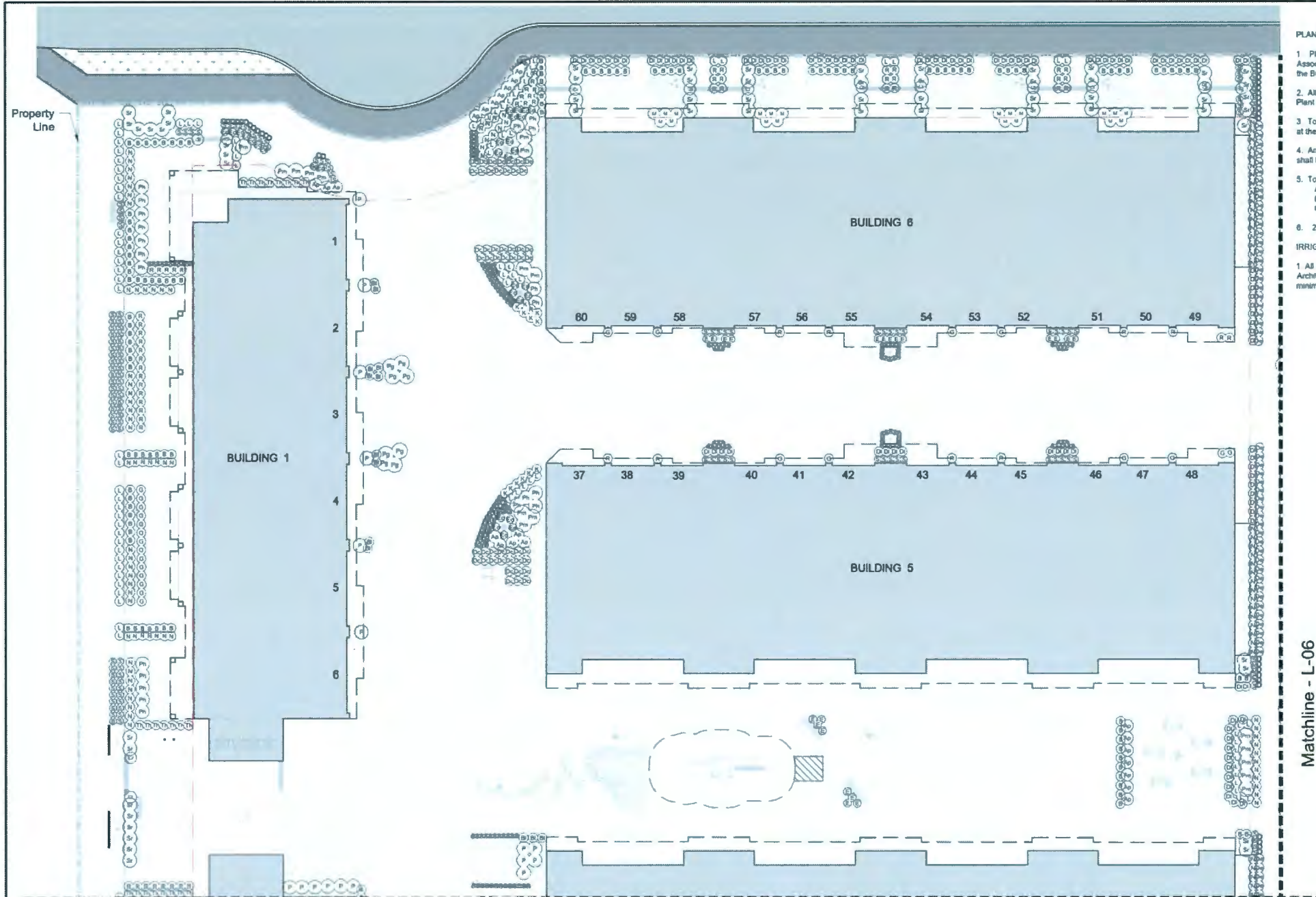
Copyright reserved. This drawing and design are the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
3	TM	MOTI Update	May 07, 2019
2	TM	Rezoning Update	Mar 20, 2019
1	TM	Rezoning Update	Feb 27, 2019

**REVISIONS TABLE FOR SHEET**

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND SHALL BE OBSERVED AT THE CONSTRUCTION OF THE WORK. ALL REVISIONS, APPROVALS/REVISIONS SHALL NOT BE MADE WITHOUT THE WRITTEN INSTRUCTIONS OF THE CONSULTANT UNLESS LABELED GOOD FOR TENDERS/CONSTRUCTION.



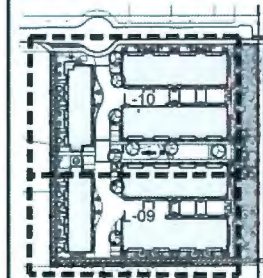
PLANTING NOTES

- Plants in this plant list are specified according to the Canadian Nursery Landscape Association Canadian Standards for nursery stock and section 12, container grown plants of the BC Landscape Standard, Current Edition
- All plant material shall meet or exceed standards required by BCLNA or BCSLA guidelines. Plant material to be approved by Landscape Architect prior to delivery to site
- Topsoil supplied shall be from a reputable source. A full analysis of the topsoil will be required at the contractor's expense, submit to Landscape Consultant for approval.
- Amend topsoil per soil analysis recommendations prior to spreading on site. Rejected topsoil shall be removed off-site immediately at the landscape contractor's expense.
- Topsoil depths for planting as follows:  
 A. SHRUBS: 450mm  
 B. SOO: 150mm  
 C. TREE PITTS: 1000mm with 300mm below root ball
- 2" Minus composted mulch to be installed in all shrub planting areas.

IRRIGATION NOTE

- All areas to be irrigated. Irrigation system to meet or exceed IM&C Standards. Landscape Architect to review irrigation plans. Climate-based automatic irrigation controls to be used to minimize the use of water on-site.

Key Map (NTS)



No.	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Responses	Jan 30, 2020
8	DV	Issue for BP	Dec 16, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Reasoning	Feb 20, 2019

REVISIONS TABLE FOR DRAWINGS

Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No.	By	Description	Date
1	DV	Planting Plan Update	Nov 6, 2019

REVISIONS TABLE FOR SHEET

Project:  
Gates Avenue Townhouses  
  
 Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.  
  
 DP #:  
DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"

Scale:  
1:150  
CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE FIELD AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS/DP/PPA/PP/ADP DRAWINGS MUST NOT BE PASSED FOR CONSTRUCTION UNLESS LABELS ISSUED FOR THE FIELD CONSTRUCTION.

PLANT SCHEDULE ON-SITE

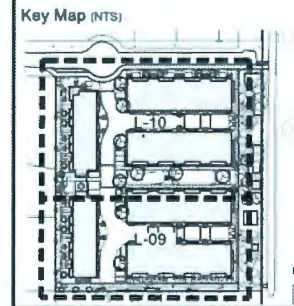
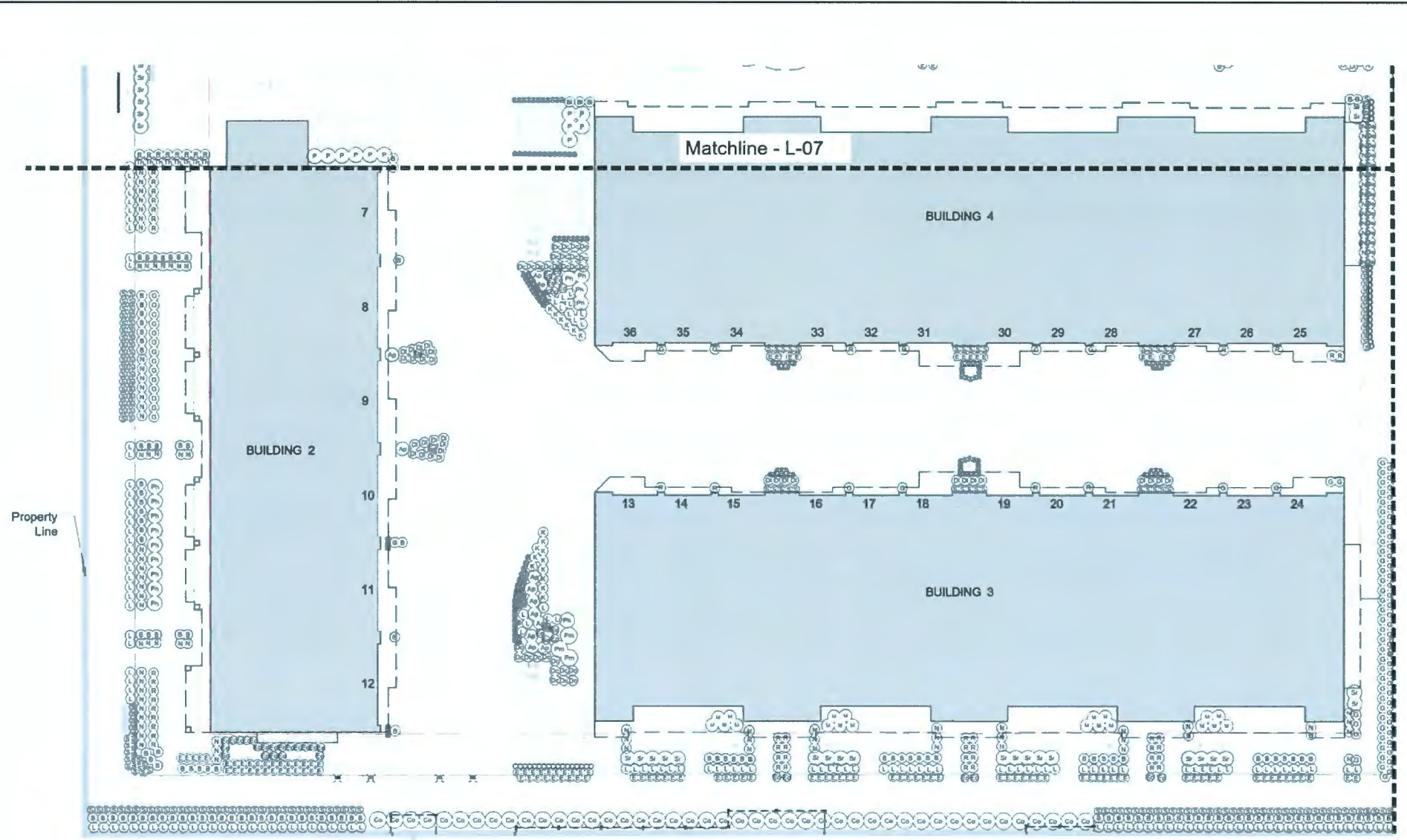
SHRUBS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
A	Arctostaphylos uva-ursi / Kinnikinnick	#1	0.3m	272
Ap	Aster divaricatus 'Wood's Pink' / Wood's Pink Aster	#2	0.8m	35
Bl	Blechnum spicant / Deer Fern	#2	0.6m	15
B	Buxus microphylla japonica / Japanese Boxwood	#2	0.6m	242
C	Cardamine trifolia / Three-leaf Cardamine	#1	0.3m	17
Cl	Clematis armandii / Evergreen Clematis	#2	0.75m	14
K	Cornus sericea 'Kelsey' / Kelsey Dogwood	#2	0.6m	36
Co	Cornus stolonifera / Red Osier Dogwood	#2	1m	44
Di	Daphne x 'Lawrence Crocker' / Lawrence Crocker Daphne	#2	0.6m	132
Dc	Deschampsia oespitosa 'Goldtau' / Gold Dew Tufted Hair Grass	#2	0.6m	70
D	Dicentra spectabilis 'Queen of Hearts' / Bleeding Heart	#1	0.35m	53
De	Dryopteris erythrosora / Autumn Fern	#2	0.6m	64
E	Erica carnea 'Pink' / Pink Snow Heath	#2	0.6m	1
F	Frythionium boreale / Snow Lily	#2	0.6m	5

G	Gaultheria shallon / Salal	#2	0.6m	117
L	Lavandula angustifolia 'Hidcote Blue' / Hidcote Blue Lavender	#2	0.6m	254
M	Morella californica / California Wax Myrtle	#3	0.75m	40
N	Nandina domestica 'Gulf Stream' TM / Heavenly Bamboo	#2	0.6m	208
Pg	Pachysandra terminalis 'Green Carpet' / Japanese Spurge	#2	1m	8
Ph	Pennisetum alopecuroides 'Hamel' / Hamel Dwarf Fountain Grass	#2	0.9m	37
Pm	Pieris japonica 'Mountain Fire' / Mountain Fire Pieris	#3	1m	20
P	Polystichum munitum / Western Sword Fern	#2	0.9m	16
R	Rhododendron x 'Ramapo' / Ramapo Rhododendron	#2	0.6m	115
S	Sarcococca hookeriana humilis / Sweet Box	#2	0.45m	319
S	Skimmia japonica 'Rubella' / Skimmia	#2	0.9m	72
T	Thuja occidentalis 'Shagbark' / Emerald Green Arborvitae	#2	0.6m	23

MAY 21, 2021 DP 18-829228 PLAN # 11



Drawing Title: PLANTING PLAN NORTH  
 VZ Project #: DP2017-41  
 Drawing #: L-07



No.	By	Description	Date
12	DV	Re-issue for DP	May 11 2021
11	DV	Re-issue for DP	Mar 24 2021
10	DV	Re-issue for DP	Sept 28 2020
9	DV	ADP Response	Jan 30 2020
8	DV	Issue for BP	Dec 18 2019
7	DV	Issue for ADP	Nov 1 2019
6	DV	Re-issue for DP	Oct 17 2019
5	TM	Issued for Development Permits	Sept 5 2019
4	TM	Issued for Development Permits	July 25 2019
3	TM	Issued for Reasoning	Feb 20 2019

REVISIONS TABLE FOR DRAWINGS  
 © Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No.	By	Description	Date
1	DV	Planting Plan Update	Nov 8 2019

REVISIONS TABLE FOR SHEET

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: 1:150	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BY FILING PROFILES. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS OR CHANGES MUST BE NOTED ON THE DRAWINGS AND MUST BE FILED FOR THE CONTRACTOR'S RECORD.

PLANT SCHEDULE ON-SITE

SHRUBS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
A	Arctostaphylos uva-ursi / Kinnikinnick	#1	0.3m	272
Ap	Aster divaricatus 'Wood's Pink' / Wood's Pink Aster	#2	0.8m	35
Bl	Blechnum spicant / Deer Fern	#2	0.6m	15
B	Buxus microphylla japonica / Japanese Boxwood	#2	0.6m	242
C	Cardamine trifolia / Three-leaf Cardamine	#1	0.3m	17
Cl	Clematis armandii / Evergreen Clematis	#2	0.75m	14
K	Cornus sericea 'Kelsey' / Kelseyl Dogwood	#2	0.6m	36
Co	Cornus stolonifera / Red Osier Dogwood	#2	1m	44
Di	Daphne x 'Lawrence Crocker' / Lawrence Crocker Daphne	#2	0.6m	132
Dc	Deschampsia cespitosa 'Goldtau' / Gold Dew Tufted Hair Grass	#2	0.6m	70
D	Dicentra spectabilis 'Queen of Hearts' / Bleeding Heart	#1	0.35m	53
De	Dryopteris erythrosora / Autumn Fern	#2	0.6m	64
E	Erica carnea 'Springwood Pink' / Pink Spring Heath	#2	0.5m	130
Eo	Erythronium oregonum / Fawn Lily	bulb	0.5m	54
G	Gaultheria shallon / Salal	#2	0.6m	117
L	Lavandula angustifolia 'Hidcote Blue' / Hidcote Blue Lavender	#2	0.6m	254
M	Morella californica / California Wax Myrtle	#3	0.75m	40
N	Narayanensis 'Gulf Stream' / Hebe	#2	0.6m	100

Pg	Pachysandra terminalis 'Green Carpet' / Japanese Spurge	#2	1m	8
Ph	Pennisetum alopecuroides 'Hameln' / Hameln Dwarf Fountain Grass	#2	0.9m	37
Pm	Pieris japonica 'Mountain Fire' / Mountain Fire Pieris	#3	1m	20
P	Polystichum munitum / Western Sword Fern	#2	0.9m	16
R	Rhododendron x 'Ramapo' / Ramapo Rhododendron	#2	0.6m	115
S	Sarcococca hookeriana humilis / Sweet Box	#2	0.45m	319
Sr	Skimmia japonica 'Rubella' / Skimmia	#2	0.9m	72
Tr	Thuja occidentalis 'Spiragard' / Emerald Green Arborvitae	#2	0.6m	23

PLANTING NOTES.

- Plants in this plant list are specified according to the Canadian Nursery Landscape Association Canadian Standards for nursery stock and section 12, container grown plants of the BC Landscape Standard, Current Edition.
- All plant material shall meet or exceed standards required by BCLNA or BCSLA guidelines. Plant material to be approved by Landscape Architect prior to delivery to site.
- Topsoil supplied shall be from a reputable source. A full analysis of the topsoil will be required at the contractor's expense, submit to Landscape Consultant for approval.
- Amend topsoil per soil analysis recommendations prior to spreading on site. Rejected topsoil shall be removed off-site immediately at the landscape contractor's expense.
- Topsoil depths for planting as follows:  
 A. SHRUBS: 450mm  
 B. SOD: 150mm  
 C. TREE PITS: 1000mm with 300mm below root ball
- 2" Minus composted mulch to be installed in all shrub planting areas.

IRRIGATION NOTE:

- All areas to be irrigated. Irrigation system to meet or exceed HADC standards. Landscape Architect to review irrigation plans. Climate-based automatic irrigation controls to be used to minimize the use of water on-site.

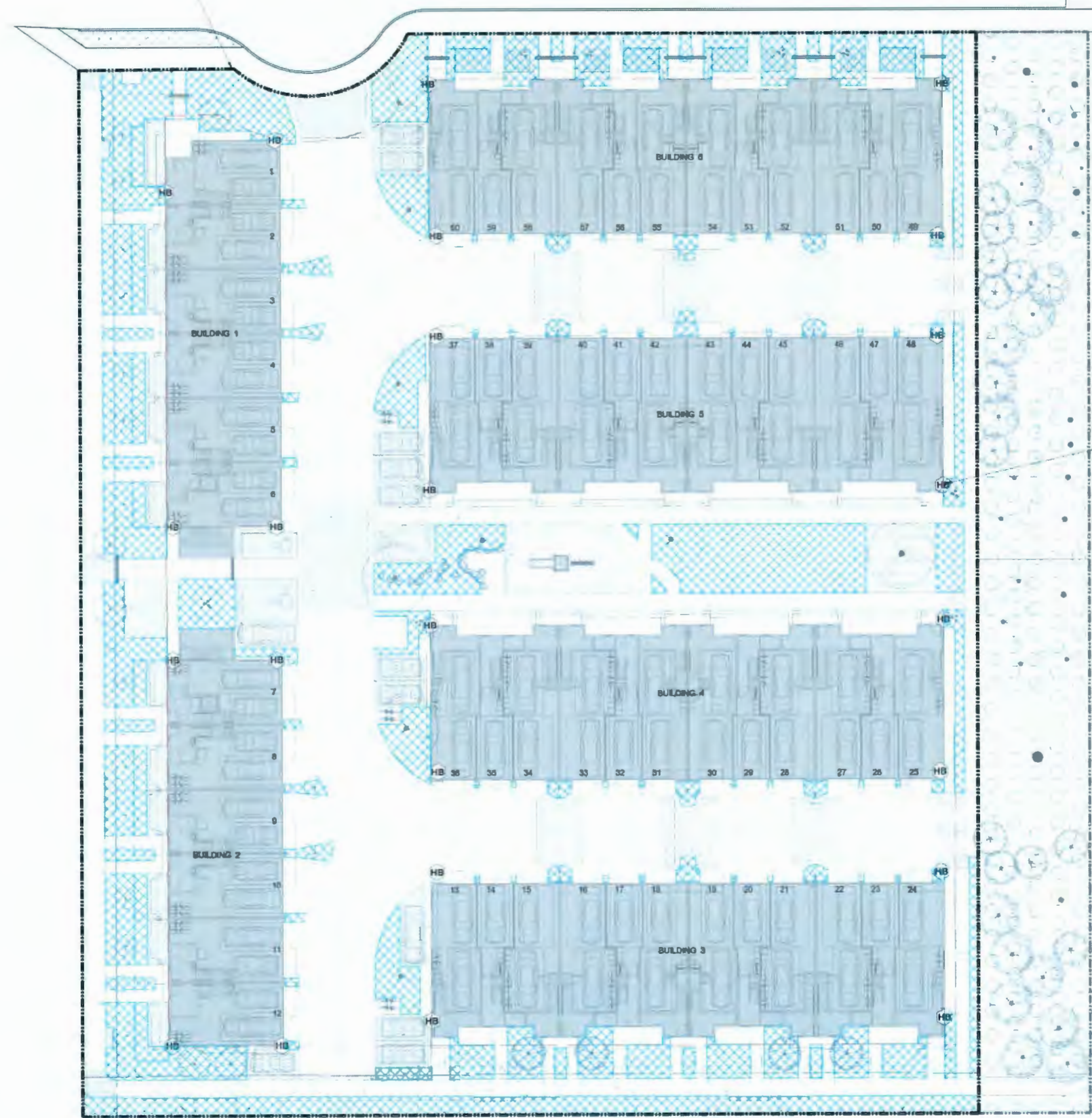


MAY 21, 2021 DP 18-829228 PLAN # 12

Z:\PROJECTS\PERMIT\DP2017-41 GATES AVENUE TOWNHOUSES\08 PLANTING PLAN SOUTH.DWG

Drawing Title: PLANTING PLAN SOUTH  
 Drawing #: L-08  
 VZJ Project #: DP2017-41

PROPOSED PROPERTY LINE



Hose Bib. Typ.

LEGEND

KEY	DESCRIPTION
[Cross-hatch pattern]	IRRIGATION TEMPORARY
[Blue-hatch pattern]	IRRIGATION PERMANENT
[HB symbol]	HOSE BIB

- Notes:
1. Irrigation Contractor to provide shop drawings to Landscape Architect for approval prior to installation.
  2. Irrigation system to be designed and installed to IAABC's standards.
  3. Climate-based automatic irrigation controls to be used to minimize the use of water on-site.

van der Zalm + associates inc.  
 Parks & Recreation • Civil Engineering  
 Urban Design • Landscape Architecture  
 Suite 1, 20177 67th Avenue  
 Langley, British Columbia  
 V1M 4B8  
 P 604 882 0234  
 F 604 882 0042  
 info@vzai.com



No.	By	Description	Date
12	DV	Re-issue for DP	May 11 2021
11	DV	Re-issue for DP	Mar 24 2021
10	DV	Re-issue for DP	Sept 28 2020
9	DV	ADP Response	Jan 30 2020
8	DV	Issue for BP	Dec 16 2019
7	DV	Issue for ADP	Nov 1 2019
6	DV	Re-issue for DP	Oct 17 2019
5	TM	Issued for Development Permit	Sept 5 2019
4	TM	Issued for Development Permit	July 25 2019
3	TM	Issued for Rezoning	Feb 20 2019
No.	By	Description	Date

REVISIONS TABLE FOR DRAWINGS

Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

REVISIONS TABLE FOR SHEET

Project:  
 Gates Avenue Townhouses  
 Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.  
 DP #:  
 DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE RESPONSIBILITY OF THE OWNER AND MUST BE REFERENCED AT THE COMPLETION OF THE WORK. ALL REVISIONS AND/OR CHANGES MUST NOT BE MADE FOR CONSTRUCTION UNLESS LABELLED ISSUED FOR TENDERS/CONSTRUCTION.

MAY 21, 2021 1 IRRIGATION PLAN Scale 1:200 DP 18-829228 PLAN # 13

Drawing Title: IRRIGATION PLAN

VDZ Project #: DP2017-41

Drawing #: L-09



LEGEND

KEY	DESCRIPTION
	PATHWAY LIGHT
	ENTRY SIGN LIGHT
	POLE LIGHT



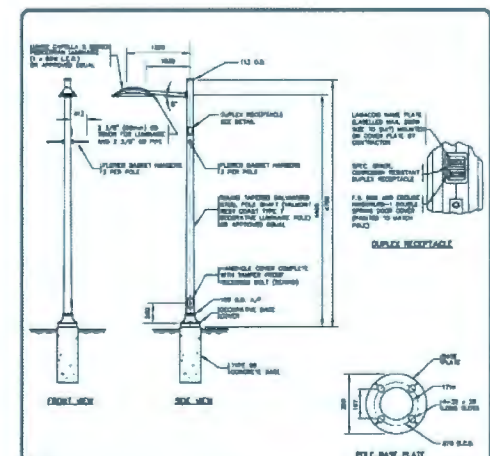
McGraw-Edison BSC Lensed Boltard  
Or Approved Other

2 PATHWAY LIGHT  
Scale NTS



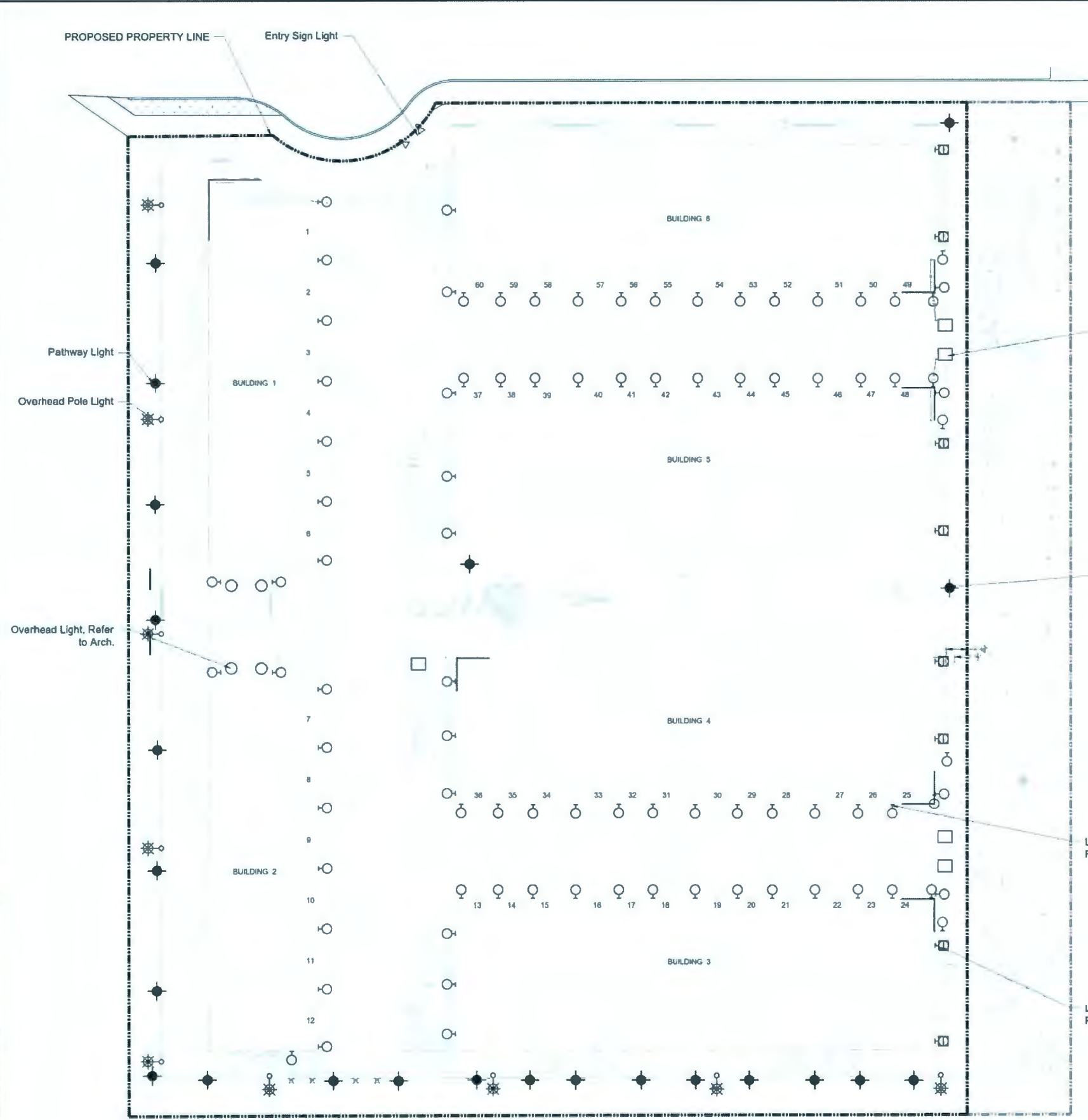
ERCO - Lightscan  
Or Approved Other

3 ENTRY SIGN LIGHT  
Scale NTS



TYPE B DECORATIVE PEDESTRIAN LUMINAIRE POLE  
 Richmond  
 SCALE: NTS  
 DRAWING NUMBER: L12.11

4 POLE LIGHT  
Scale NTS



No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

REVISIONS TABLE FOR DRAWINGS

Copyright reserved. This drawing and design is the property of van der Zalm + associates Inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date

REVISIONS TABLE FOR SHEET

No	By	Description	Date

Project:  
Gates Avenue Townhouses

Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.

DP #:  
DP18-829228

Drawn: DV  
Stamp:

Checked: TM

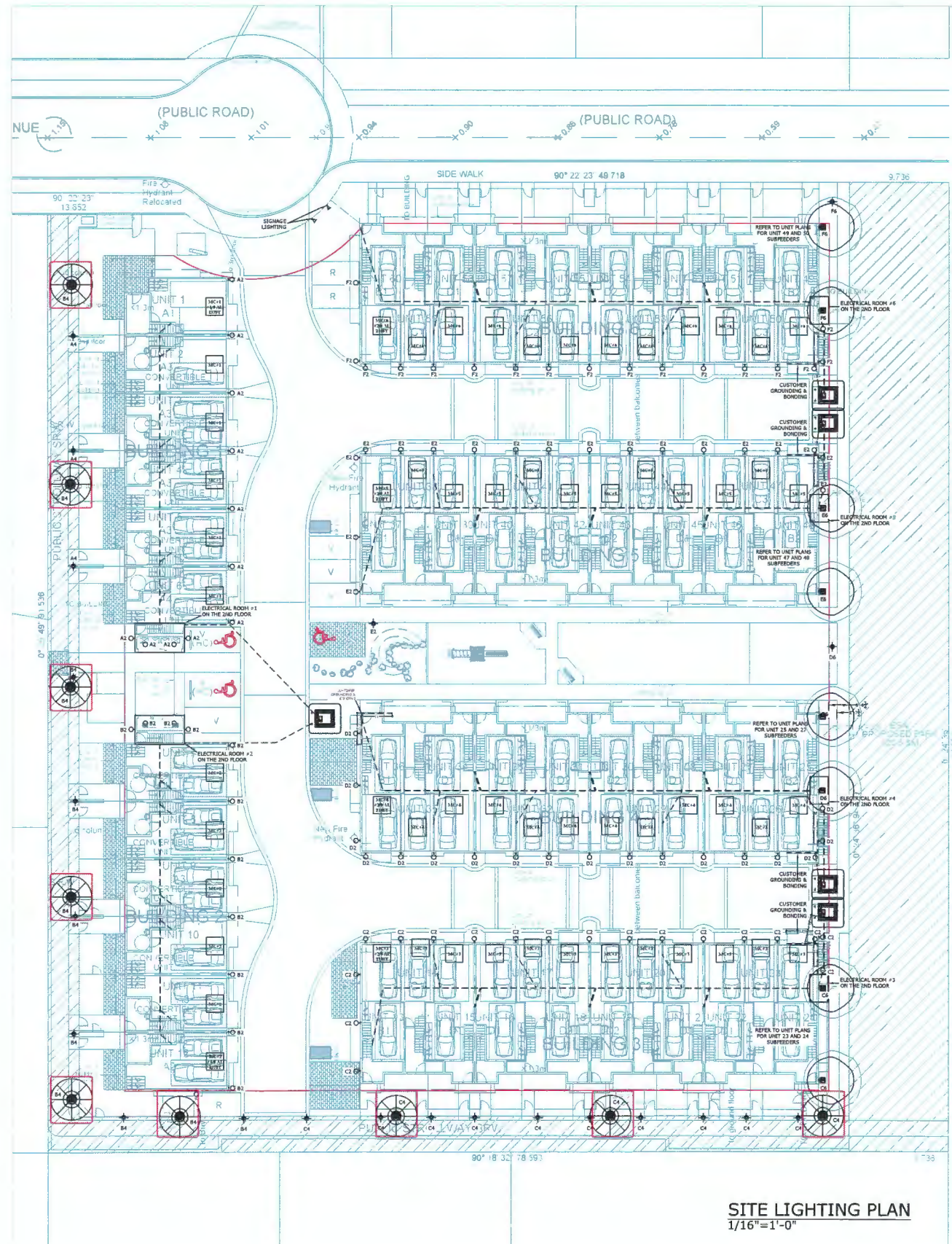
Approved: MVDZ  
Original Sheet Size: 24"x36"

Scale: AS SHOWN  
CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND SHALL BE OBSERVED AT THE CONSTRUCTION OF THE WORK. ALL REVISIONS/CHANGES/ADDITIONS MUST BE PROCESSED THROUGH THE CONSULTANT UNLESS OTHERWISE ISSUED FOR THE CONTRACTOR.

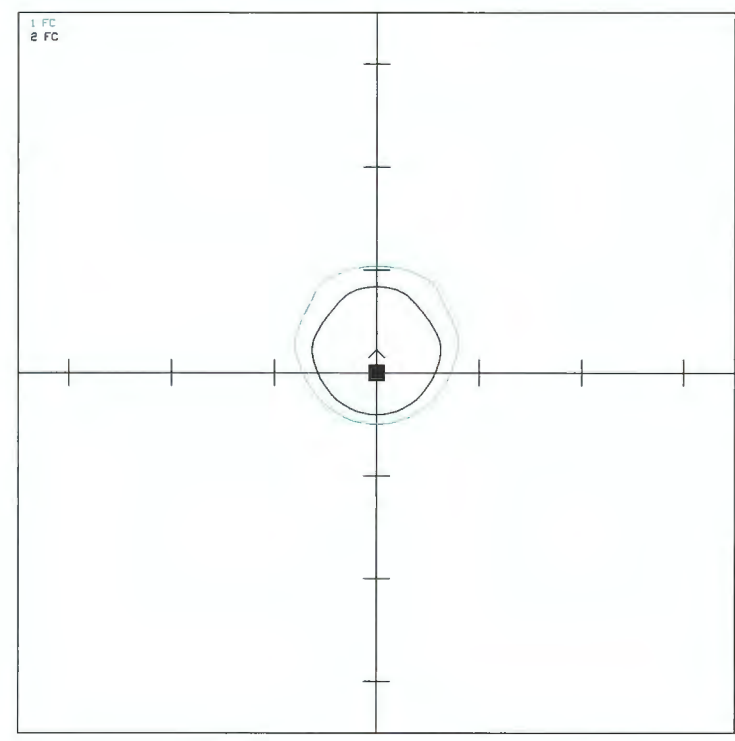
MAY 21, 2021 1 LIGHTING PLAN Scale 1:200 DP 18-829228 PLAN # 14

Drawing Title: LIGHTING PLAN  
 VZ Project #: DP2017-41  
 Drawing #: L-10

Z:\PROJECTS\DEVELOPMENT PERMITS\DP2017-41 GATES AVENUE\DWGS\SHEETS\L-10 LIGHTING PLAN.DWG



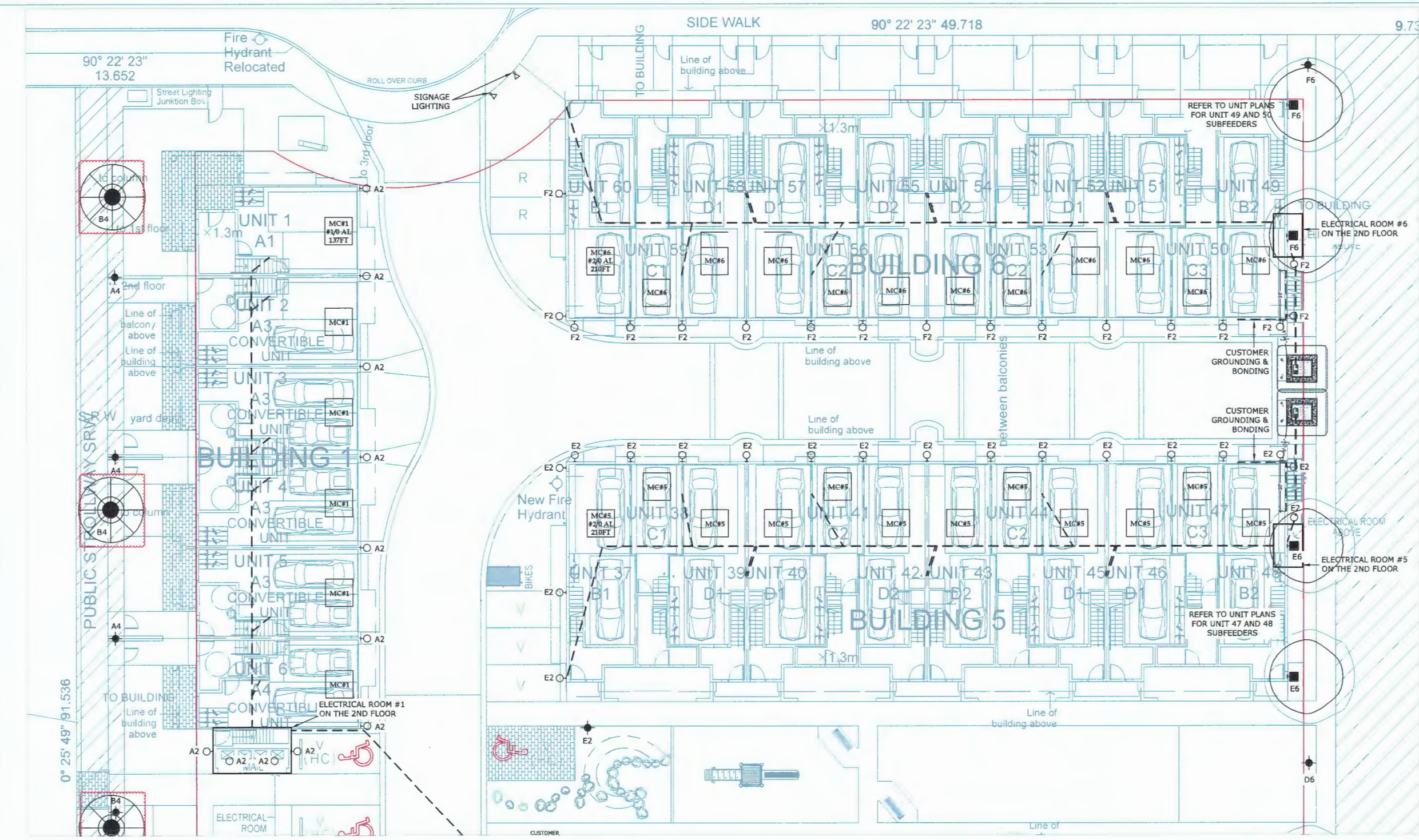
SITE LIGHTING PLAN  
1/16"=1'-0"



IESNALM-63-2002  
 (TEST)P208563  
 (MFR)TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27817)  
 (TEST)LAB(INNOVATION CENTER(G2)  
 (ISSUE)DATE(3/3/2020)  
 (MANUFACT)COOPER LIGHTING SOLUTIONS - LUMARK (FORMERLY EATON)  
 (LUMINAIRE)CROSSOUR 12W WALL MOUNT LED  
 (MFR)EATON  
 (LAMP)EATON LED 500K  
 (BALLAST)ELECTRONIC DRIVER  
 (MOUNTING)RECESSED  
 (ABSOLUTE)DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED  
 (ABSOLUTE)PHOTOMETRY IS BASED ON CALIBRATION FACTORS  
 (CREATED)USING LAB LUMEN STANDARDS IN GONIOPHOTOMETER  
 (WIDTH)TEST DISTANCE OF 28.75 FEET  
 (ABSOLUTE)LUMENS(11418)  
 (SEARCH\_SOURCE)LED  
 (SEARCH\_CR1)70  
 (SEARCH\_COLOR)TEMP(5000)  
 (SEARCH\_APPLICATION)Outdoor, Architectural Area, Amusement, Automotive,  
 (MFR)Warehouse  
 (MFR)Security, Corrosion Resistant, Vandal Resistant, Vet Location  
 (SEARCH\_MOUNTING)Pole, Surface, Wall

12 FEET BETWEEN AXIS TICK-MARKS  
 LUMENS PER LAMP = 1  
 LIGHT LOSS FACTOR = 0.8  
 OPTICAL HEIGHT = 7.5 FEET  
 ARM LENGTH = 0 FEET  
 TILT = 0 DEGREES FROM NADIR  
 MAXIMUM ILLUMINANCE = 10.1 FOOTCANDLES

Footprints (TM) by Philips-Gardco Lighting



4	SITE PLAN UPDATED	28APR21
3	SITE PLAN UPDATED	22MAR21
2	SITE LIGHTING REVISED	03MAR21
1	SITE PLAN UPDATED	17JAN20
NO.	DESCRIPTION	DATE
REVISIONS		

3	FOR BUILDING PERMIT	18DEC19
2	FOR COORDINATION	12DEC19
1	FOR COORDINATION	12DEC19
NO.	DESCRIPTION	DATE
ISSUE		



23400 - 23500  
GATES AVENUE  
RICHMOND, B.C.  
for



**QUARRY ROCK DEVELOPMENTS**

**NORTH SITE PLAN**

**LIEW ENGINEERING LTD.**  
Electrical Consulting Engineers  
108-11121 Horseclose Way  
Richmond, BC, V7A 5G7  
Tel/Fax: 604-277-3157



DATE	10DEC19
SCALE	AS SHOWN
DRAWN BY	RVL/ACS
CHECKED	RVL
PROJECT NUMBER	1937
SHEET NUMBER	E2

SITE LIGHTING LEGEND	
	BOLLARD LED LIGHTS: 42" HIGH C/W CONCRETE BASE, 3000K COLOUR TEMPERATURE. SPECIFICATIONS TO BE CONFIRMED.
	STEP LED LIGHTS: 3000K COLOUR TEMPERATURE. SPECIFICATIONS TO BE CONFIRMED.
	SIGNAGE UPLIGHT AT GRADE LEVEL C/W CONCRETE MOUNTING BASE TO SUIT. SPECIFICATIONS TO BE CONFIRMED.
	POLE LIGHT PROVIDED AND INSTALLED BY CIVIL. DIV 28 PROVIDE POWER AND FINAL CONNECTION FROM HOUSE PANELS WITH CIRCUITS AS SHOWN ON DRAWINGS. COORDINATE LOCATION AND DETAILS WITH CIVIL CONTRACTOR.
	LED WALL SCONCE FIXTURE: 3000K



**NORTH SITE PLAN**  
1/8" = 1'-0"

MAY 21, 2021 **DP 18-829228 PLAN # 16**



4	SITE PLAN UPDATED	28APR21
3	SITE PLAN UPDATED	22MAR21
2	SITE LIGHTING REVISED	01MAR21
1	SITE PLAN UPDATED	17JAN20
NO.	DESCRIPTION	DATE
REVISIONS		

3	FOR BUILDING PERMIT	18DEC19
2	FOR COORDINATION	12DEC19
1	DESCRIPTION	DATE
ISSUE		

  
**GATES AVENUE**  
 23400 - 23500  
 GATES AVENUE  
 RICHMOND, B.C.  
 for  
  
**QUARRY ROCK DEVELOPMENTS**

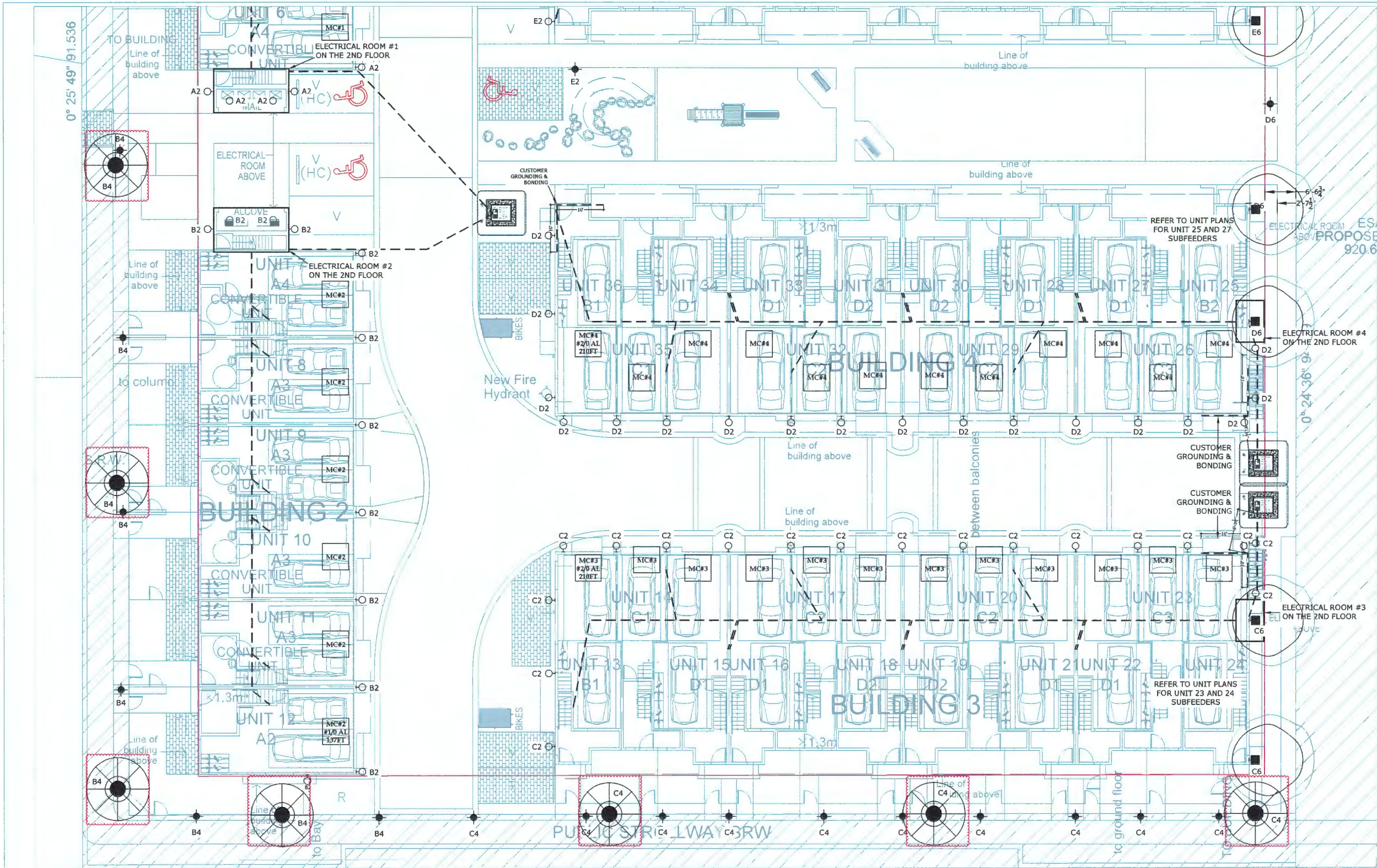
**SOUTH SITE PLAN**





**LIEW ENGINEERING LTD.**  
 Electrical Consulting Engineers  
 108-11121 Horseshoe Way  
 Richmond, BC, V7A 5G7  
 Tel/Fax: 604-277-3157

SEAL

  
**FOUGERE architecture inc**  
 200 - 2422 Quince Street  
 Vancouver BC V6T 4L6  
 Fougere@fougere.ca

DATE	10DEC19
SCALE	AS SHOWN
DRAWN BY	RVL/JACS
CHECKED	RVL
PROJECT NUMBER	1937
SHEET NUMBER	E3



SITE LIGHTING LEGEND	
	BOLLARD LED LIGHTS: 42" HIGH C/W CONCRETE BASE, 3000K COLOUR TEMPERATURE. SPECIFICATIONS TO BE CONFIRMED.
	STEP LED LIGHTS: 3000K COLOUR TEMPERATURE. SPECIFICATIONS TO BE CONFIRMED.
	SIGNAGE UPLIGHT AT GRADE LEVEL C/W CONCRETE MOUNTING BASE TO SUIT. SPECIFICATIONS TO BE CONFIRMED.
	POLE LIGHT PROVIDED AND INSTALLED BY CIVIL. DIV 28 PROVIDE POWER AND FINAL CONNECTION FROM HOUSE PANELS WITH CIRCUITS AS SHOWN ON DRAWINGS. COORDINATE LOCATION AND DETAILS WITH CIVIL CONTRACTOR.

**SOUTH SITE PLAN**  
 1/8"=1'-0"

MAY 21, 2021 **DP 18-029228 PLAN # 17**

**CHECK BEFORE YOU DIG**  
 CONTRACTOR SHALL REFER TO DRAWINGS FOR ALL OTHER UTILITIES, SERVICE LOCATIONS, AND DETAILS. THE EXACT LOCATION OF THESE UTILITIES SHALL BE DETERMINED ON SITE. INFORMATION ON EXISTING UTILITIES MAY NOT BE COMPLETE OR ACCURATE. PRIOR TO CONSTRUCTION CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

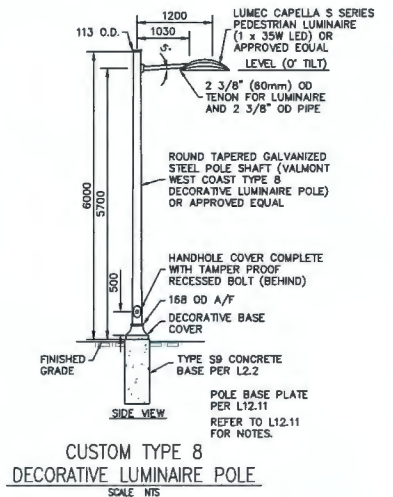
**EX. DITCH NOTES:**

- AQUATIC INVASIVE SPECIES CALLED PARROT'S FEATHER HAS BEEN MAPPED IN THE DITCHES ALONG SMITH CR AND GATES AVE. PARROT'S FEATHER CAN BE BURIED UNDER THE INFILL MATERIAL. IF MATERIAL IS TO BE REMOVED TO FACILITATE INFILL AREAS, IT SHOULD BE DISPOSED OF AT AN APPROPRIATE FACILITY.
- THE DITCHES IN THESE AREAS ARE CURRENTLY LINED WITH GEOTEXTILE LINER TO HELP MITIGATE REGROWTH OF INVASIVE SPECIES. ANY DISTURBANCE TO THE DITCH LINERS WILL BE RE-ESTABLISHED AS PER THE ORIGINAL CONDITION THAT THEY WERE FOUND IN.
- CITY RECORDS SHOW TREATED SITE FOR JAPANESE KNOTWEED AROUND THIS AREA. JAPANESE KNOTWEED IS AN INVASIVE PLANT SPECIES THAT CAN GROW THROUGH INFRASTRUCTURE. PRIOR TO REMOVAL OF MATERIAL IN THIS AREA, CONFIRM THAT KNOTWEED REGROWTH IS NOT OBSERVED. COORDINATE THIS WITH CITY ENVIRONMENT DEPARTMENT 604-247-4166.

**LEGEND**

- EXIST. HYDRO LEASE LIGHT
- AT GATES AVE: PROPOSED STREET LIGHT POLE (6.00m-35W-LED) (CUSTOM TYPE B DECORATIVE LUMINAIRE POLE PER DETAIL) AT PATHWAY: PROPOSED PATHWAY SIDE MOUNTED LUMINAIRE POLE (4.57m-25W-LED) (PATHWAY LUMINAIRE POLE PER C.O.R. DWG. L11.5).
- PROPOSED PATHWAY SIDE MOUNTED LUMINAIRE POLE (3.57m-25W-LED) c/w PHOTOCELL AND SERVICE BASE (PATHWAY LUMINAIRE POLE PER C.O.R. DWG. L11.5, L5.2, L5.6, L5.8 AND L13.1).
- PROPOSED PRIVATE STREET LIGHT POLE AT STROLLWAY SRW (4.70m-35W-LED) (TYPE B DECORATIVE PEDESTRIAN LUMINAIRE POLE PER C.O.R. DWG. L12.1) - FLOWER BASKET HANGERS AND DUPLEX RECEPTACLES ARE NOT REQUIRED).
- PROPOSED POLE WITH INTERIM HYDRO LEASE LIGHT
- FUTURE STREET LIGHT POLE (6.00m-35W-LED) (CUSTOM TYPE B DECORATIVE LUMINAIRE POLE PER DETAIL)
- FUTURE PATHWAY SIDE MOUNTED LUMINAIRE POLE (4.57m-25W-LED) (PATHWAY LUMINAIRE POLE PER C.O.R. DWG. L11.5).
- 3 NO. 6 RW90 FEEDERS AND 1 NO. 8 RW90 BOND IN 32mm R.PVC CONDUIT
- 2 NO. 6 RW90 FEEDERS AND 1 NO. 8 RW90 BOND IN 32mm R.PVC CONDUIT
- LUMINAIRE ON RED PHASE CONDUCTOR
- LUMINAIRE ON BLACK PHASE CONDUCTOR
- STUB OUT AND CAP 32mm R.PVC CONDUIT ONLY FOR FUTURE EXTENSIONS
- 50mm R.PVC SERVICE CONDUIT c/w 3 NO. 6 RW90 FEEDERS
- AT GATES AVE: PROPOSED TYPE S SERVICE KIOSK (DECORATIVE LIGHTING) PER C.O.R. DET. L4.1, L6.1, L6.2 AND L6.7
- AT PATHWAY: PROPOSED TYPE M SERVICE KIOSK (METERED SERVICE) PER C.O.R. DET. L4.2, L6.3, L6.4 AND L6.6

- STREET LIGHTING GENERAL NOTES**
- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (MMCD) AND CITY OF RICHMOND SUPPLEMENTARY SPECIFICATIONS AND DETAIL DRAWINGS UNLESS OTHERWISE NOTED.
  - ALL LAMP STANDARDS ARE TO BE MOUNTED WITH DAVIT ARM AT 90 DEGREES TO CURB FACE WITH A 3 DEGREE TOLERANCE.
  - ALL LAMP STANDARDS MOUNTING HEIGHT ARE TO BE 4.48m AT WALKWAY, 5.70m AT GATES AVE AND 4.40m AT STROLLWAY SRW, UNLESS OTHERWISE NOTED.
  - GATES AVENUE LUMINAIRES ARE TO BE 37 WATT LED WITH L.E.S. TYPE 3F DISTRIBUTION. WALKWAY LUMINAIRES ARE TO BE 25W LED WITH L.E.S. TYPE R2M DISTRIBUTION AND STROLLWAY SRW LUMINAIRES ARE TO BE 37W LED WITH L.E.S. TYPE 2F DISTRIBUTION, UNLESS OTHERWISE NOTED.
  - ALL DRIVERS TO BE SUITABLE FOR 120 VOLT OPERATION.
  - SERVICE TO BE 120/240 VOLT SINGLE PHASE 3 WIRE.
  - ALL VOLTAGES TO BE CHECKED PRIOR TO CONSTRUCTION.
  - ALL WIRING TO BE 2 OR 3 NO. 6 RW90 FEEDERS & 1 NO. 8 RW90 BOND WIRE IN 32mm RIDGED PVC CONDUIT.
  - FINISHED ELEVATIONS FOR LAMP STANDARD BASES TO BE PER RICHMOND STD. L13.3 FOR 4.57m POLES AND PER STD. L13.5 FOR TYPE B DECORATIVE POLES.
  - APPROVAL OF PROVINCIAL ELECTRICAL INSPECTOR TO BE OBTAINED PRIOR TO MAKING CONNECTION.
  - CONTRACTOR TO ENSURE EXISTING ORNAMENTAL STREET LIGHTING IS NOT DISRUPTED DURING NEW INSTALLATION (I.E. TIE TO EXISTING CONDUIT AT COMPLETION OF O.S.L. CONSTRUCTION).
  - WHERE EXISTING LAMP STANDARDS HAVE BEEN MODIFIED IN ANY FORM, THE CONTRACTOR WILL BE RESPONSIBLE TO REWIRE POLE AND LUMINAIRE TO TYPICAL HANDHOLE WIRING DETAIL SHOWN ON RICHMOND STD. DWG. NO. L7.1.
  - FORTISBC GAS SERVICES: THE DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXISTING LOCATIONS OF GAS SERVICE LINES, AND WHERE NECESSARY ARRANGE FOR THEIR RELOCATION IN ORDER TO FACILITATE INSTALLATION OF THE WORKS SHOWN ON THESE PLANS. SERVICE LINE LOCATIONS MAY BE OBTAINED FROM FORTISBC GAS SERVICE RECORDS DEPARTMENT TEL 604-293-8552. FORTISBC GAS REQUIRES 10 DAYS NOTICE PRIOR TO THE COMMENCEMENT OF ANY WORK.
  - CUSTOM TYPE B POLES, LUMINAIRES AND KIOSK ARE TO BE POWDER COATED GLOSS GREY SMOOTH FINISH RAL 7040.



PRIOR TO ISSUANCE OF CERTIFICATE OF COMPLETION, THE OWNER'S ENGINEER SHALL SUBMIT A CERTIFICATE OF INSPECTION FOR THE WORKS IN A FORM AND CONTENT ACCEPTABLE TO THE CITY AND PREPARED AND SEALED BY THE OWNER'S ENGINEER CERTIFYING TO THE CITY THAT THE WORKS HAVE BEEN CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

**LUMINANCE AND ILLUMINANCE DESIGN CRITERIA**

ITEM	DESCRIPTION	DESCRIPTION	DESCRIPTION	DESCRIPTION
LIGHTING PROGRAM	VISUAL ROADWAY LIGHTING	VISUAL ROADWAY LIGHTING	VISUAL ROADWAY LIGHTING	VISUAL ROADWAY LIGHTING
STREET NAME(S)	GATES AVENUE	WALKWAY	STROLLWAY (N-S)	STROLLWAY (E-W)
LAND USE	MULTI-FAMILY	PATHWAY	STROLLWAY	STROLLWAY
ROADWAY CLASSIFICATION	LOCAL	PATHWAY	STROLLWAY SRW	STROLLWAY SRW
PEDESTRIAN AREA CONFLICT	MEDIUM	MEDIUM	MEDIUM	MEDIUM
PAVEMENT CLASSIFICATION	ASPHALT R3	ASPHALT R3	CONCRETE R1	CONCRETE R1
ROADWAY WIDTH (m)	7.70m (ULTIMATE)	3.00m	2.00m	1.50m
LANE QUANTITY	2	1	1	1
LANE WIDTH (m)	3.85m	3.00m	2.00m	1.50m
MEDIA WIDTH (m)	N/A	N/A	N/A	N/A
LUMINAIRE DESCRIPTION/PRODUCT NUMBER	LUMEC CAPELLA CPLS-35W32LED3K-G2-LE3F-RC7-PH9 (PH8 AT PHOTOCELL)-RC7-GY3	LUMEC ROADFOCUS RFS-25W16LED-2.7K-G2-R2M-UNV-DMC-HS-PH9 (PH8 AT PHOTOCELL)-RC7-GY3	LUMEC CAPELLA CPLS-35W32LED3K-G2-LE2F-HS-RC7-PH9	LUMEC CAPELLA CPLS-35W32LED3K-G2-LE2F-HS-RC7-PH9
LUMINAIRE PHOTOMETRIC FILE NO.	CPLS-35W32LED3K-G2-LE3F.ies	RFS-25W16LED2.7K-G2-R2M-HS.ies	CPLS-35W32LED3K-G2-LE2F-HS.ies	CPLS-35W32LED3K-G2-LE2F-HS.ies
LAMP WATTAGE & LIGHT SOURCE	37W LED	25W LED	37W LED	37W LED
LAMP COLOR TEMPERATURE (K)	3000K	2700K	3000K	3000K
INITIAL LAMP LUMENS	3594	2858	3676	3676
LIGHT LOSS FACTOR	LLF(0.78)=LLD(0.90)LD(0.89)EF(0.95)ITF(1.00)CF(1.03)	LLF(0.78)=LLD(0.90)LD(0.89)EF(0.95)ITF(1.00)CF(1.03)	LLF(0.78)=LLD(0.90)LD(0.89)EF(0.95)ITF(1.00)CF(1.03)	LLF(0.78)=LLD(0.90)LD(0.89)EF(0.95)ITF(1.00)CF(1.03)
LUMINAIRE DISTRIBUTION TYPE	3F	R2M	2F	2F
LUMINAIRE BUG RATING	B1-U0-G1	B1-U0-G1	B1-U0-G1	B1-U0-G1
LUMINAIRE TILT OR SPIN (IF APPLICABLE)	N/A	N/A	N/A	N/A
LUMINAIRE MOUNTING HEIGHT (m)	5.70m	4.48m	4.40m	4.40m
POLE HEIGHT (m)	6.00m	4.57m	4.70m	4.70m
POLE SETBACK (m)	0.60m (FROM BACK OF CURB)	0.80m (FROM EDGE OF PATH)	0.30m (FROM EDGE OF PATH)	0.30m (FROM EDGE OF PATH)
POLE ARM LENGTH (m)	1.03m	0.60m	1.03m	1.03m
POLE ARRANGEMENT	STAGGERED	ONE SIDE	ONE SIDE	ONE SIDE
POLE SPACING (m MAX)	29m	24m	31m	31m
ILLUMINANCE DESIGN CRITERIA FOR ROADWAYS				
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES		
ILLUMINATION LEVEL (E avg) IN LUX	7.0	7.7		
UNIFORMITY RATIO (E avg/E min)	6.0	2.4		
VEILING LUMINANCE RATIO (LV max/L avg)	0.4	0.3		
LUMINANCE DESIGN CRITERIA FOR ROADWAYS				
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES		
AVERAGE LUMINATION L avg (cd/m2)	0.5	0.5		
UNIFORMITY RATIO (L avg/L min)	6.0	1.9		
UNIFORMITY RATIO (L max/L min)	10.0	3.8		
VEILING LUMINANCE (LV max/L avg)	0.4	0.3		
ILLUMINANCE DESIGN CRITERIA FOR WALKWAYS AND BIKEWAYS				
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES	RECOMMENDED VALUES	ACHIEVED VALUES
AVERAGE ILLUMINATION LEVEL (E avg) IN LUX	5.0	9.5	5.0	10.8
AVERAGE UNIFORMITY RATIO (E ave/E min)	4.0	4.0	3.9	4.0
MIN VERTICAL ILLUMINANCE (EV min)	2.0	0.4	2.0	0.3

**LEGAL DESCRIPTION**  
 LOT 56 PLAN 8421 EXCEPT PART SUBDIVIDED BY PLAN 44742; LOTS 114 AND 115 PLAN 41397; LOT 124 PLAN 44742 ALL OF SECTION 36 BLOCK 5 NORTH, RANGE 4 WEST, N.W.D.

**GRAPHIC SCALE**  
 SCALE: 1:500

The copyrights to all designs and drawings (JOB 1911) are the property of Core Group Civil Consultants Ltd. Reproduction or use for any purpose other than that authorized by Core Group Consultants is forbidden.

**City of Richmond**  
 6911 N.S. 3 ROAD RICHMOND B.C. V6Y 2C1

TITLE:  
**ORNAMENTAL STREETLIGHTING**  
 23400, 23460 AND 23500 GATES AVENUE  
 CITY FILE: SA19-880363

DESIGN: C.N.  
 DRAWN: T.U.  
 CHECKED: C.N.  
 ENGINEER: C.N.

DWG. NO.: **880363-19-09**  
 SCALE: 1:500  
 SEC. NO.: 36-5-4

DATE: 03/08/21  
 SHT. NO.: 1 OF 1

NO	DATE	BY	CH.	DESCRIPTION
B	03/08/21	T.U.	C.N.	SECOND SUBMISSION
A	12/23/19	T.U.	C.N.	FIRST SUBMISSION

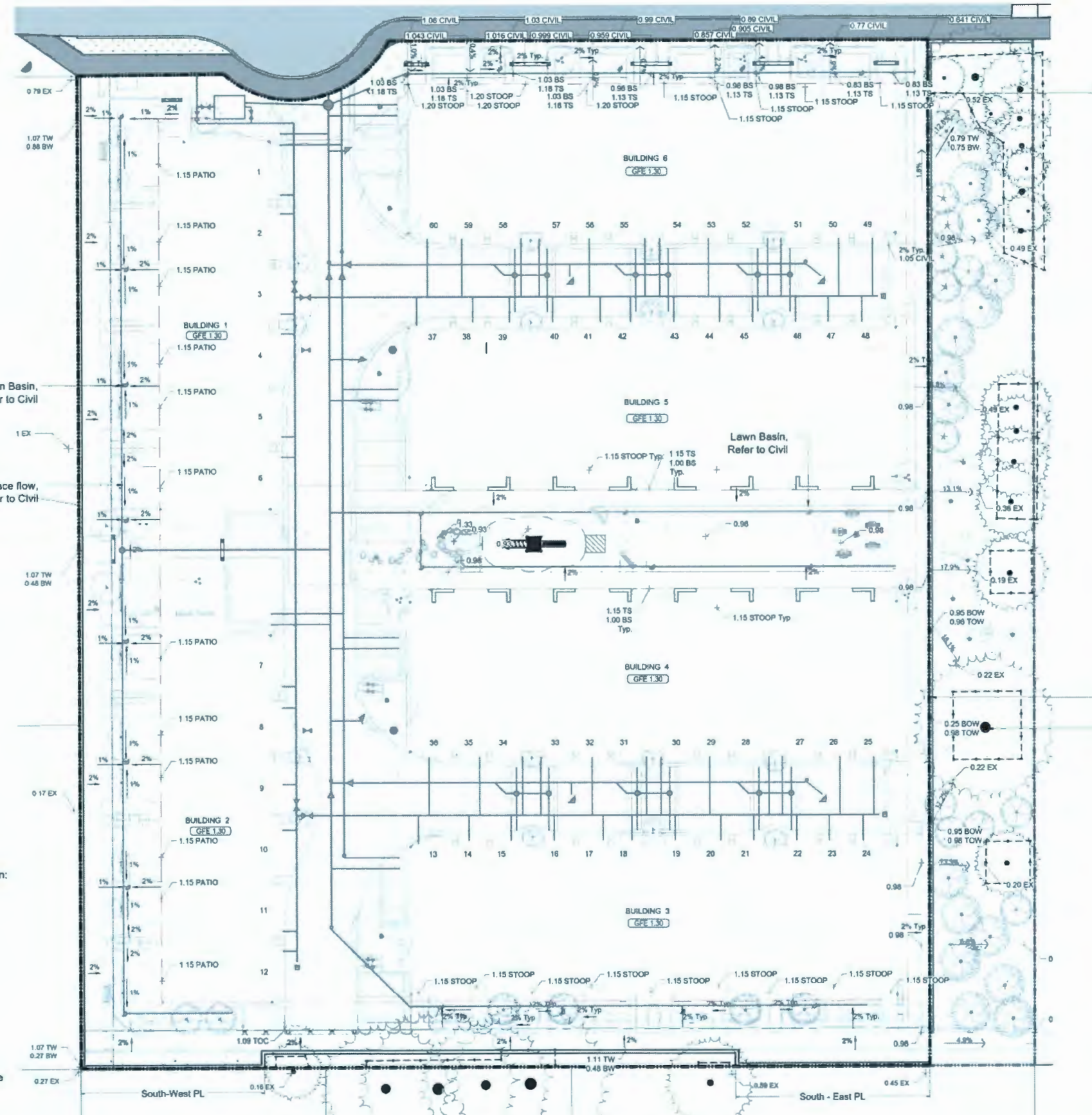
**BENCHMARK**  
 ALL ELEVATIONS ARE TO GEODETIC DATUM AND REFER TO RICHMOND BENCHMARK NUMBER:  
 ELEVATIONS ARE BASED ON CITY OF RICHMOND BENCHMARK HPN/1005, CONTROL MONUMENT 02-2453 ELEVATION = 1.783m.  
 (BENCHMARK HPN/193, CONTROL MONUMENT 78-8510 ELEVATION = 1.632m)  
 ELEVATION: 1.783

**DEVELOPER**  
 QRD (HAMILTON) LP  
 #102 - 5489 BYRNE ROAD  
 BURNABY, BC V5J 3J1

**ENGINEER**  
**Core Group**  
 CIVIL CONSULTANTS  
 326-8968 FRAZERBURN COURT  
 BURNABY, BC V5J 5H8  
 TEL (604)299-0605 FAX (604)299-0629

MAY 21, 2021

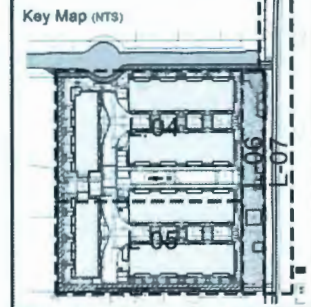
**DP 18-829228 PLAN 18**



**West PL Wall & Fence Calculation:**  
 Average Off-site Grade:  
 $(0.71+0.79+0.17+0.27/4) = 0.485m$   
 Averaged Finished Grade:  
 $(1.07+0.485/2) = 0.778m$   
 Average Wall Height:  
 $(1.07-0.778) = 0.292$   
 Maximum Fence Height:  
 $(2.0 - 0.292) = 1.708m$   
 Installed Fence Height = 1.5m  
 Combined Average Wall Height & Fence Height:  
 $(0.292+1.5) = 1.792m$

**South-West PL Wall & Fence Calculation:**  
 Average Off-site Grade:  
 $(0.27+0.18/2) = 0.215m$   
 Averaged Finished Grade:  
 $(1.11+0.215/2) = 0.663m$   
 Average Wall Height:  
 $(1.11-0.663) = 0.447$   
 Maximum Fence Height:  
 $(2.0 - 0.447) = 1.55m$   
 Installed Fence Height = 1.5m  
 Combined Average Wall Height & Fence Height:  
 $(0.447+1.5) = 1.947$

**South-East PL Wall & Fence Calculation:**  
 Average Off-site Grade:  
 $(0.59+0.45/2) = 0.52m$   
 Averaged Finished Grade:  
 $(1.11+0.52/2) = 0.815m$   
 Average Wall Height:  
 $(1.11-0.815) = 0.295$   
 Maximum Fence Height:  
 $(2.0 - 0.295) = 1.705m$   
 Installed Fence Height = 1.5m  
 Combined Average Wall Height & Fence Height:  
 $(0.295+1.5) = 1.795$



No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

**REVISIONS TABLE FOR DRAWINGS**

Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
2	TM	Privacy Fence Update	May 26, 2021
1	TM	TP2 Update	May 21, 2021

**REVISIONS TABLE FOR SHEET**

Project:  
Gates Avenue Townhouses

Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.

DP #:  
DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE OBSERVED AT THE COMPLETION OF THE WORK. ALL REVISIONS TO THIS DRAWING MUST BE MADE IN WRITING. CONTRACTOR SHALL MAINTAIN LABELS FOR THE LIFE OF THE PROJECT.

MAY 21, 2021 **DP 18-829228 PLAN # 19**



Drawing Title: **GRADING PLAN**  
 VZD Project #: **DP2017-41**  
 Drawing #: **L-11**

THIS DRAWING CONFORMS TO THE BRITISH COLUMBIA BUILDING CODE 2018. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS AND LEVELS PRIOR TO THE COMMENCEMENT OF WORK. ALL ERRORS AND OMISSIONS TO BE REPORTED IMMEDIATELY TO THE ARCHITECT. VARIATIONS AND MODIFICATIONS TO WORK SHOWN ON THESE DRAWINGS SHALL NOT BE CARRIED OUT WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT. THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS ISSUED "FOR CONSTRUCTION".

NO.	DESCRIPTION	DATE
1	ISSUED FOR PERMIT	19/11/20
2	REVISED PER DP COMMENTS	21/05/21
3	REVISED PER DP	19/11/20
4	ISSUED	19/11/20
5	NO DESCRIPTION	
6	REVISION / ISSUE	YY/MM/DD



**CoreGroup CONSULTANTS**  
LAND DEVELOPMENT SERVICES  
330-1000 FREDERICK COURT  
VANCOUVER, BC V6Z 2R8  
Tel: (604) 299-0005 Fax: (604) 299-0829

# GATES AVENUE

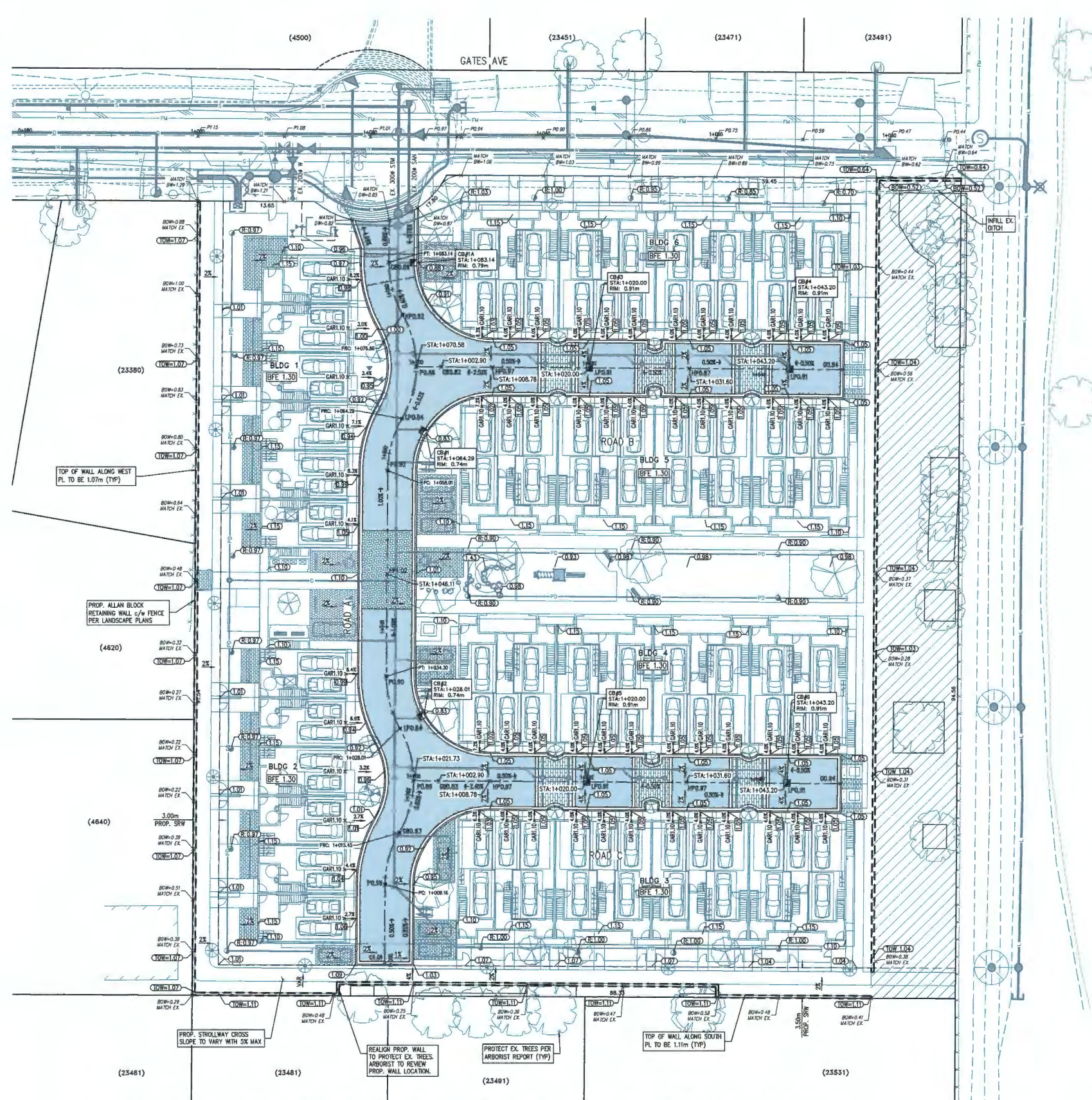
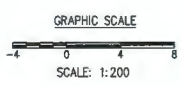
23400 - 23500  
GATES AVENUE  
RICHMOND, B.C.  
for  
Bains Properties

TITLE  
**GRADING PLAN**

**FOUGERE architecture inc.**  
BRITISH COLUMBIA • ALBERTA • WASHINGTON  
302 - 1025 Quebec Street VANCOUVER, BC V6Z 2R8  
Vancouver, BC V6Z 2R8 fougerearchitecture.com

SCALE	1:200
DRAWN BY	TU
CHECKED	CI
PROJECT NUMBER	1911
SHEET NUMBER	

BENCHMARK:  
ELEVATIONS SHOWN ARE BASED ON CITY OF RICHMOND HPN BENCHMARK NETWORK.  
BENCHMARK: HPN #1005, CONTROL MONUMENT 0202453 ELEVATION = 1.783m  
× G 5.80  
(BENCHMARK: HPN #193, CONTROL MONUMENT 7080518 ELEVATION = 1.653m)



PROP. AVE FINISHED GRADE = 1.0m  
APPROX FILL VOLUME = 2,700 m<sup>3</sup>

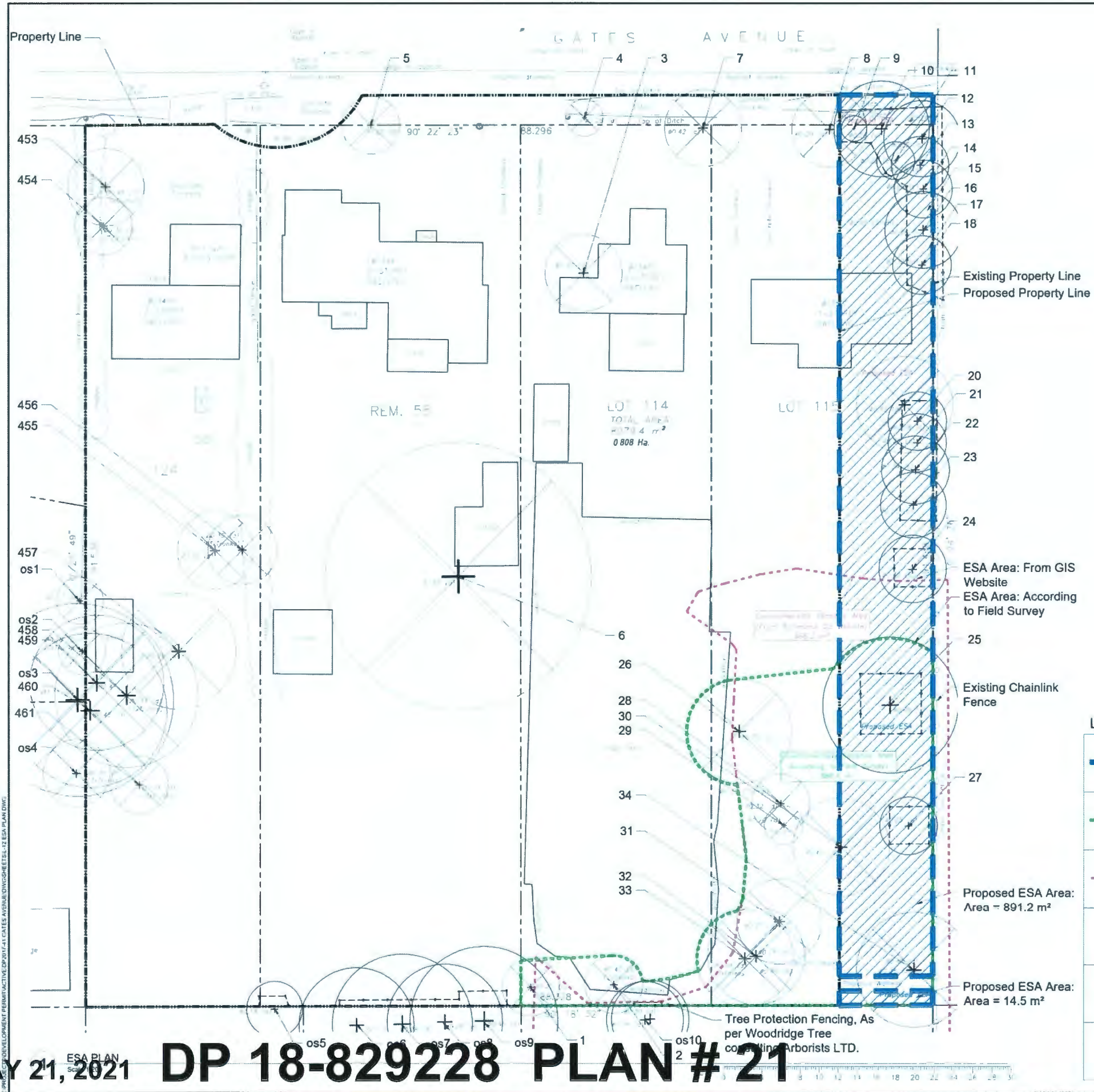
**GRADING NOTES**

- ALL ELEVATIONS AND DIMENSIONS ARE METRIC.
- SITE PREPARATION, STRIPPING, EXCAVATION AND FILLING OPERATIONS TO BE REVIEWED BY A GEOTECHNICAL ENGINEER AND ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
- CUT AND FILL SLOPES TO BE REVIEWED AND APPROVED BY GEOTECHNICAL ENGINEER.
- ALL SITE GRADES SHOWN ARE FINISHED GRADING ELEVATIONS AND ARE TO BE REVIEWED BY GEOTECHNICAL ENGINEER.
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS AND BYLAWS OF ALL REGULATORY AUTHORITIES, FEDERAL AND PROVINCIAL GOVERNMENT DEPARTMENTS INCLUDING THE LAND DEVELOPMENT GUIDELINES FOR THE PROTECTION OF AQUATIC HABITAT AS PRODUCED BY THE DEPARTMENT OF FISHERIES AND OCEANS CANADA.
- ALL ROOF DRAINS TO DRAIN TOWARD THE ROADS AND LANES, NO ROOFS ARE TO DRAIN ONTO THE BACK YARDS.

**LEGEND**

PROP. BUILDING ELEVATION (BFE)	(BFE 9.00)
PROP. TOP OF CURB ELEV AT DRIVEWAY	(5.70)
PROP. TOP OF WALL ELEV	(TOW=5.70)
PROP. BOTTOM OF WALL ELEV	(BOW=5.70)
PROP. TOP OF CURB ELEV TO MATCH EXISTING GROUND ELEV	(5.70)
PROP. PAVEMENT ELEVATION	× P 5.80
PROP. GUTTER ELEVATION	× G 5.80
PROP. ELEVATION AT GARAGE	× GAR 5.80
PROP. CATCH BASIN (CB)	(CB)

# MAY 21, 2021 DP 18-829228 PLAN # 20



**LEGEND**

	Proposed ESA Area: 905.7 m <sup>2</sup>
	ESA Area: According to Field Survey Area: 886.6 m <sup>2</sup>
	ESA Area: From GIS Website Area: 966.2 m <sup>2</sup>
	Proposed ESA Area: Area = 891.2 m <sup>2</sup>
	Proposed ESA Area: Area = 14.5 m <sup>2</sup>
	Tree Protection Fencing: As per Woodridge Tree Consulting Arborists LTD.
	Tree to Remain: Refer to report prepared by Woodridge Tree Consulting Arborists LTD.
	Tree to Remove: Refer to report prepared by Woodridge Tree Consulting Arborists LTD.

**REVISIONS TABLE FOR DRAWINGS**

No.	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for SP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

**REVISIONS TABLE FOR SHEET**

No.	By	Description	Date
2	TM	TPZ Update	May 21, 2021

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23480, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV  
 Checked: TM  
 Approved: MVDZ  
 Scale: AS SHOWN  
 Stamp: [Stamp]

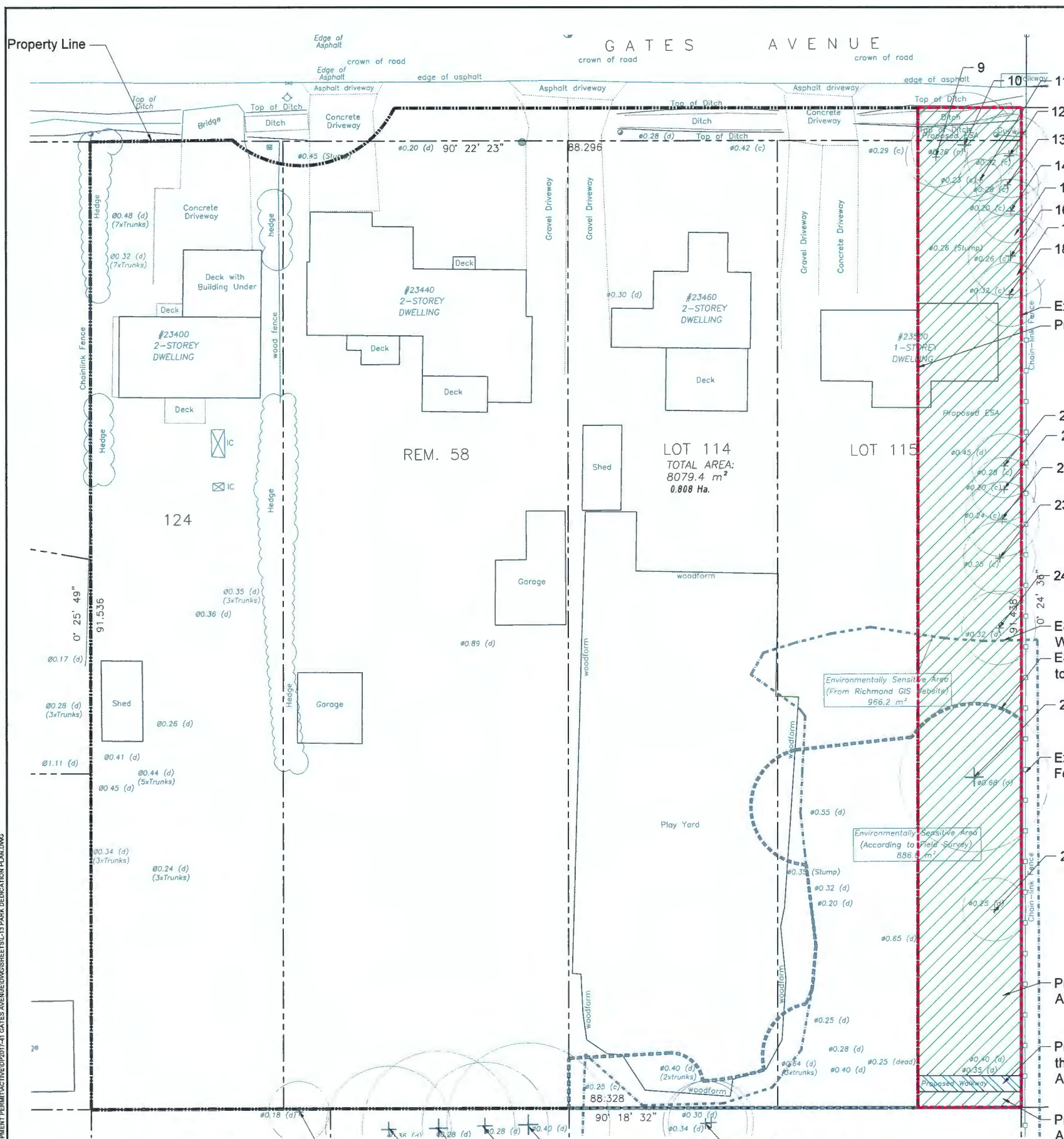
**MAY 21, 2021** **ESA PLAN** **DP 18-829228** **PLAN # 21**

Drawing Title: **ESA PLAN**  
 Drawing #: **DP2017-41**  
 Drawing #: **L-12**



**LEGEND**

	Proposed Park Boundary Area: 920.6 m <sup>2</sup>
	Proposed ESA Area: 905.7 m <sup>2</sup>
	Proposed Pathway Through Park Area: 14.9 m <sup>2</sup>



Existing Property Line  
 Proposed Property Line

ESA Area: From GIS Website  
 ESA Area: According to Field Survey

Existing Chainlink Fence

Proposed ESA Area:  
 Area = 891.2 m<sup>2</sup>

Proposed Walkway through Park Area  
 Area = 14.9m<sup>2</sup>

Proposed ESA Area:  
 Area = 14.5 m<sup>2</sup>

**REVISIONS TABLE FOR DRAWINGS**

No.	By:	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar. 24, 2021
10	DV	Re-issue for DP	Sept. 28, 2020
9	DV	ADP Response	Jan. 30, 2020
8	DV	Issue for BP	Dec. 18, 2019
7	DV	Issue for ADP	Nov. 1, 2019
6	DV	Re-issue for DP	Oct. 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

**REVISIONS TABLE FOR SHEET**

No.	By:	Description	Date
2	DV	Park Dedication Calculation	May 16, 2021
1	DV	ESAPark Area Identification	May 17, 2021

Project:  
 Gates Avenue Townhouses

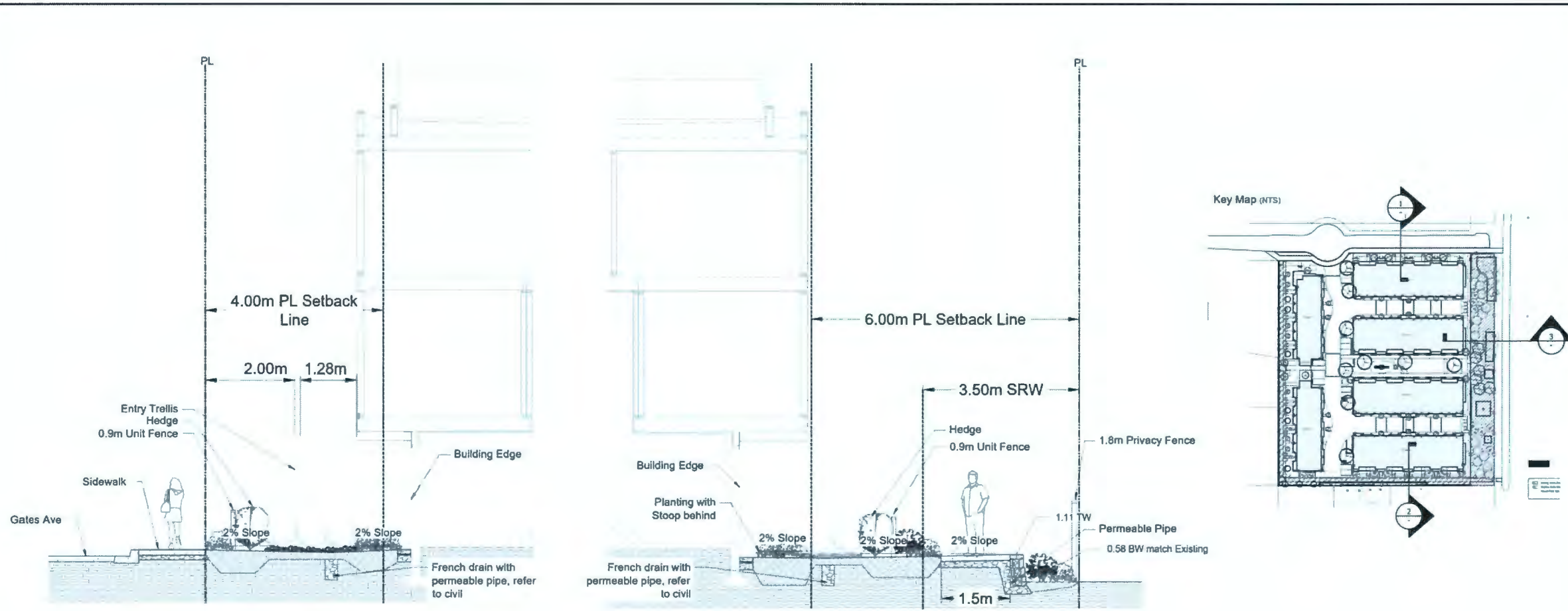
Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.

DP #:  
 DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REZONING/DP/PPA/RHA/RP DRAWINGS MUST NOT BE REPRODUCED FOR CONSTRUCTION UNLESS A WRITTEN LETTER IS ISSUED FOR TENDER/CONSTRUCTION.

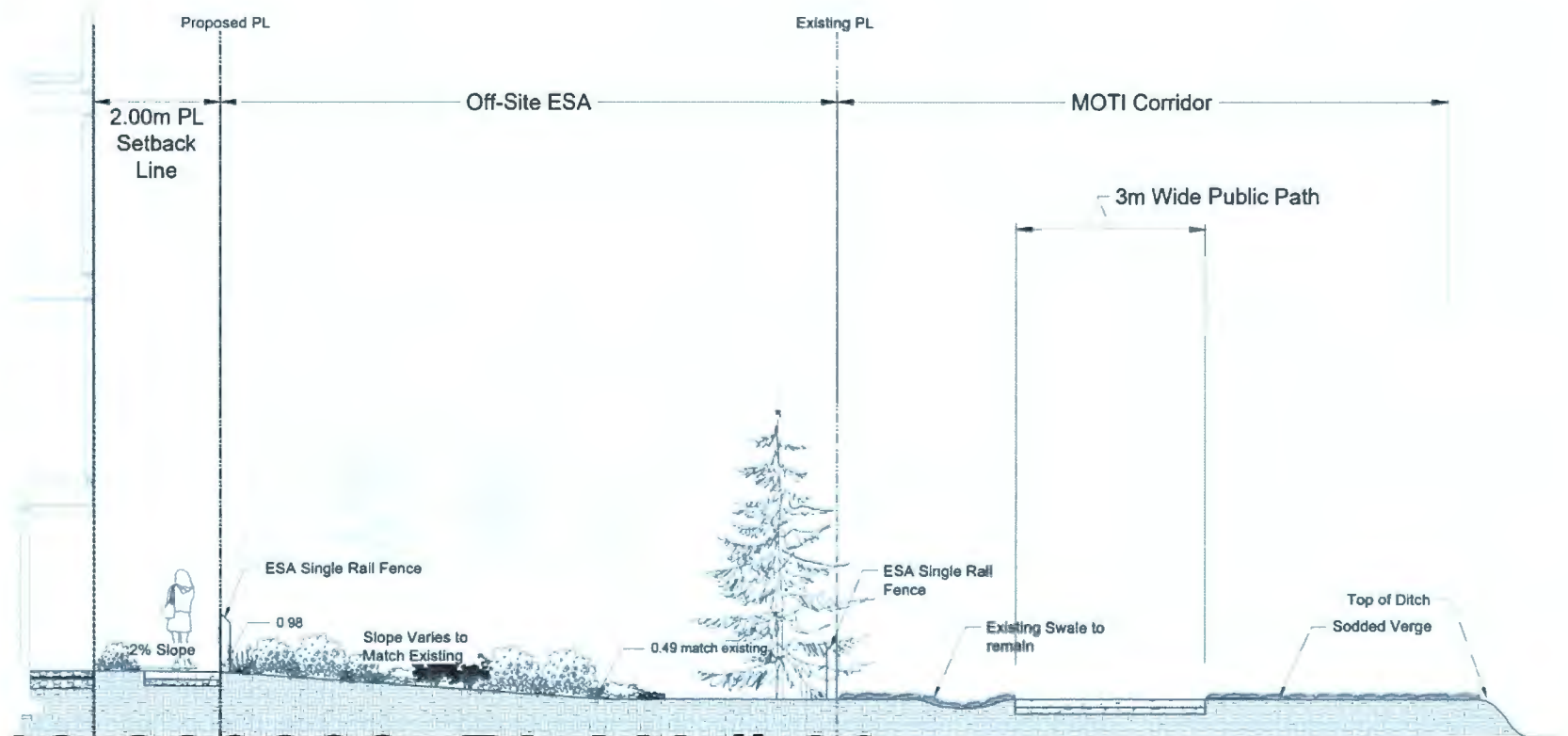
**MAY 21, 2021** **PARK DEDICATION PLAN** **DP 18-829228** **PLAN # 22**

Drawing Title: **PARK DEDICATION PLAN**  
 VZ Project #: **DP2017-41**  
 Drawing #: **L-13**



1 SECTION 1 - GATES AVENUE INTERFACE  
 Scale 1:50

2 SECTION 2 - SOUTH YARD AND WALKWAY  
 Scale 1:50



3 SECTION 3 - SOUTH YARD AND WALKWAY INTERFACE  
 Scale 1:50

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sep 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 16, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

REVISIONS TABLE FOR DRAWINGS  
 Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
1	TM	MOTI Update	May 27, 2019

REVISIONS TABLE FOR SHEET

Project:  
 Gates Avenue Townhouses  
 Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.  
 DP #:  
 DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE CONSULTANT AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS/DP/PPA/PPSP/PPSW/PPSW/PPSW MUST BE PROVIDED FOR CONSTRUCTION UNLESS LABELLED ISSUED FOR TENDER/CONSTRUCTION.

MAY 21, 2021

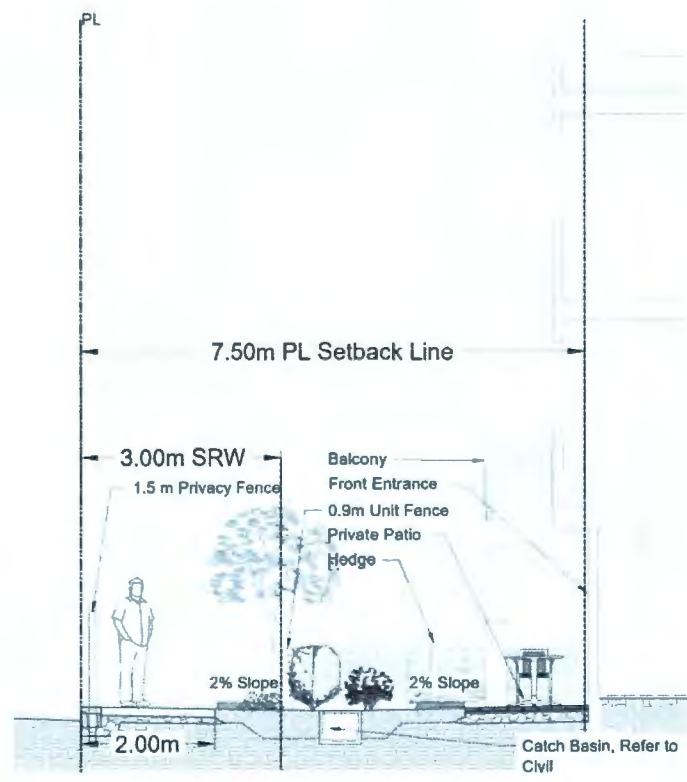
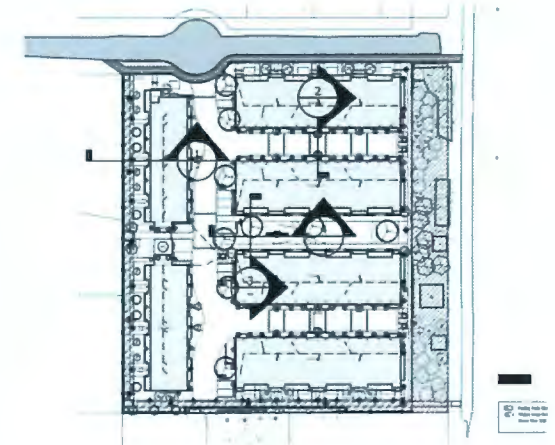
DP 18-829228 PLAN # 23

Drawing Title: SECTIONS  
 VZ Project #: DP2017-41  
 Drawing #: LS-01

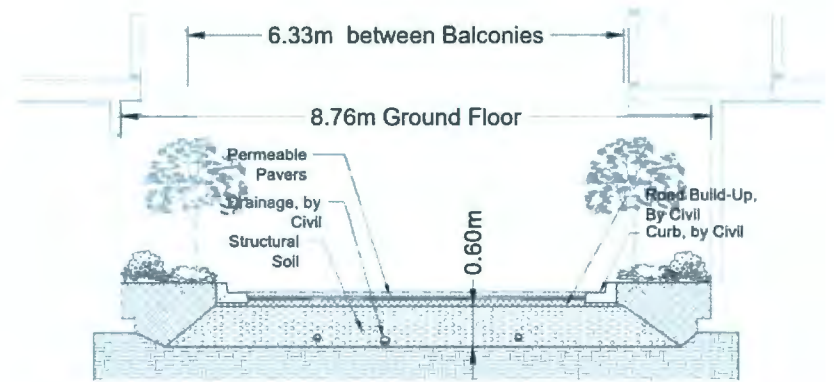
Z:\PROJECTS\DEVELOPMENT PERMITS\DP18-41 GATES AVENUE DWG\SHEETS\LS-01 SECTIONS.DWG



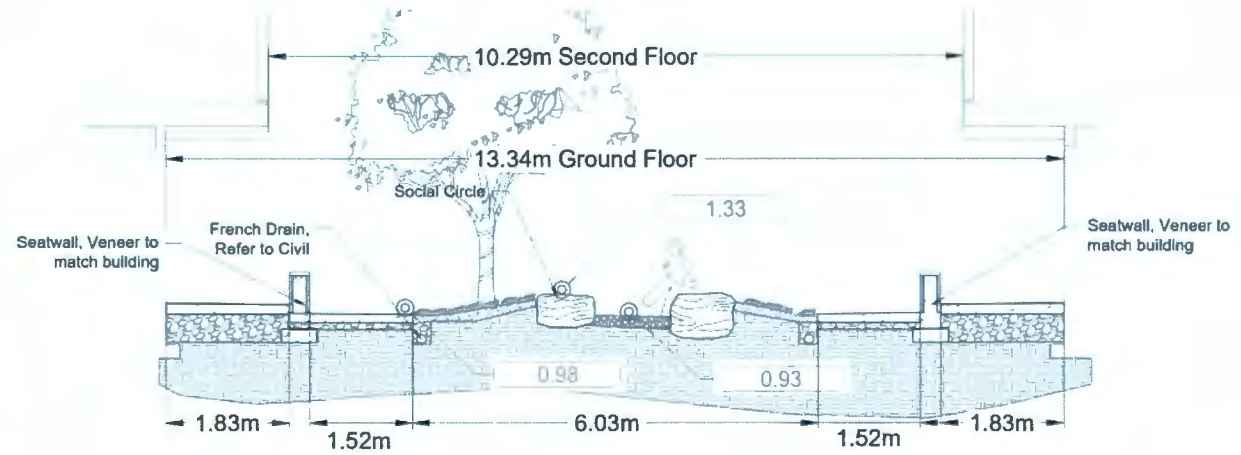
Key Map (RTS)



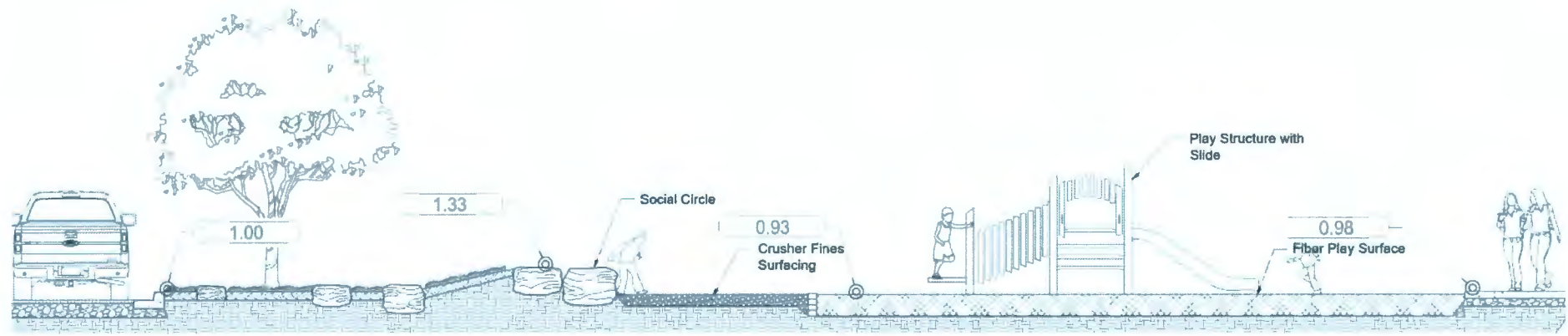
1 SECTION 4 - WEST YARD AND WALKWAY  
Scale 1:50



2 SECTION 5 - CENTRAL DRIVE AISLE  
Scale 1:50



3 SECTION 6 - CENTRAL AMENITY AREA - A  
Scale 1:50



4 SECTION 7 - CENTRAL AMENITY AREA - B  
Scale 1:50

No.	By	Description	Date
12	DV	Re-issue for DP	May 11 2021
11	DV	Re-issue for DP	Mar 24 2021
10	DV	Re-issue for DP	Sep 28 2020
9	DV	ADP Response	Jan 30 2020
8	DV	Issue for BP	Dec 18 2019
7	DV	Issue for ADP	Nov 1 2019
6	DV	Re-issue for DP	Oct 17 2019
5	TM	Issued for Development Permit	Sept 5 2019
4	TM	Issued for Development Permit	July 25 2019
3	TM	Issued for Reasoning	Feb 20 2019
No.	By	Description	Date

REVISIONS TABLE FOR DRAWINGS  
 © Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No.	By	Description	Date
1	TM	Privacy Fence Update	May 26 2021
No.	By	Description	Date

REVISIONS TABLE FOR SHEET

Project:  
Gates Avenue Townhouses  
 Location:  
23400, 23440, 23460, 23500  
Gates Avenue, Richmond, B.C.  
 DP #:  
DP 18-829228

Drawn: DV	Stamp:
--------------	--------

Checked: TM	
----------------	--

Approved: MVD2	Original Sheet Size: 24"x36"
-------------------	---------------------------------

Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND SHALL NOT BE RETRANSMITTED AT THE COMPLETION OF THE WORK. ALL DIMENSIONS SHALL BE TAKEN FROM CONSTRUCTION UNLESS OTHERWISE INDICATED FOR TRADE/CONSTRUCTION.
--------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Drawing Title:  
**SECTIONS**

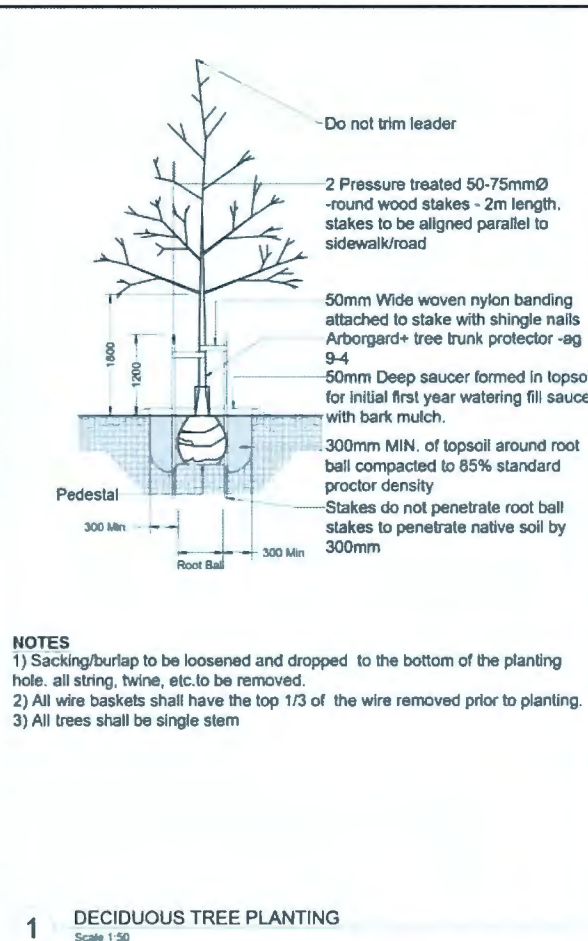
Project #:  
**DP2017-41**

Drawing #:  
**LS-02**

**MAY 21, 2021 DP 18-829228 PLAN # 24**

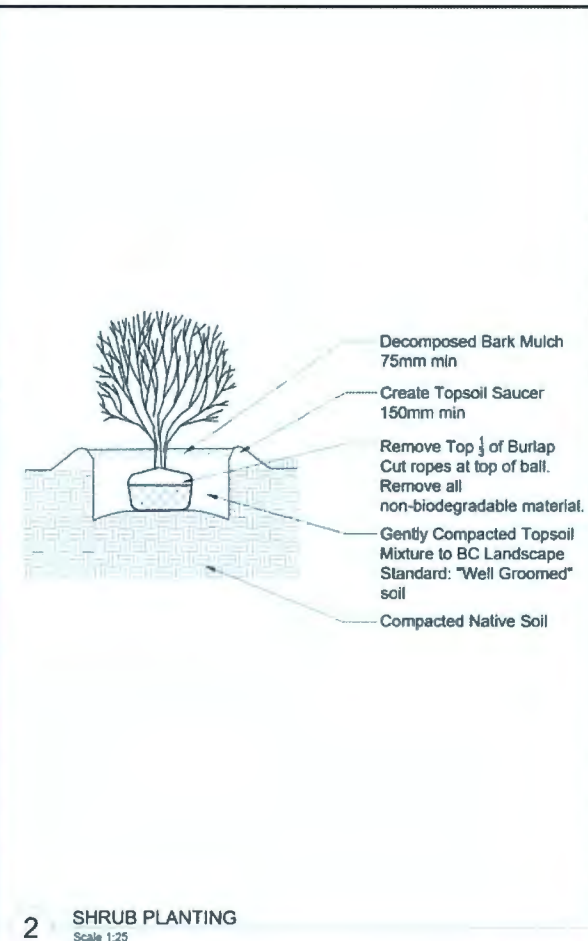
Z:\PROJECTS\DEVELOPMENT PERMITS\DP2017-41 GATES AVENUE\DWG\SHEETS\02 SECTIONS.DWG



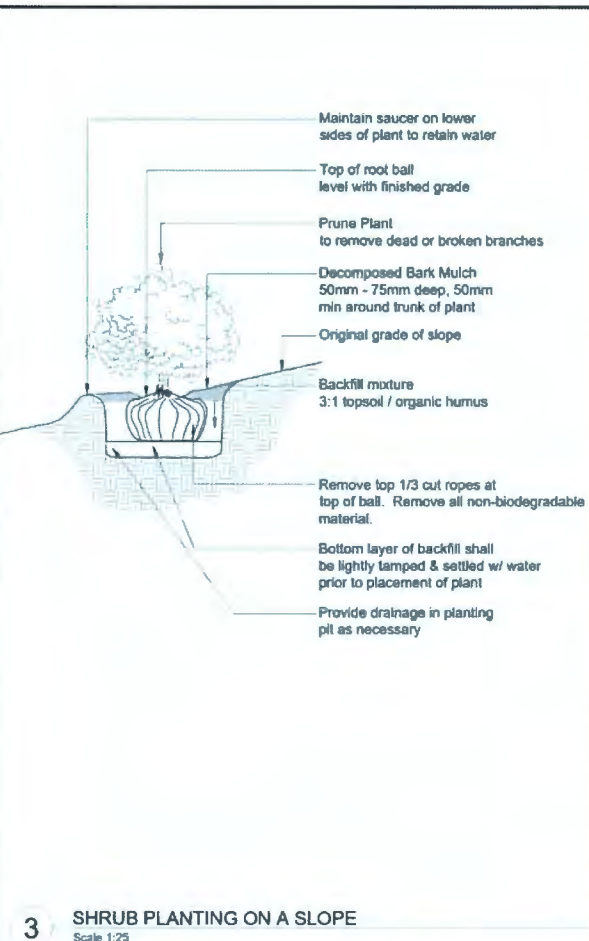


**NOTES**  
 1) Sacking/burlap to be loosened and dropped to the bottom of the planting hole. all string, twine, etc. to be removed.  
 2) All wire baskets shall have the top 1/3 of the wire removed prior to planting.  
 3) All trees shall be single stem

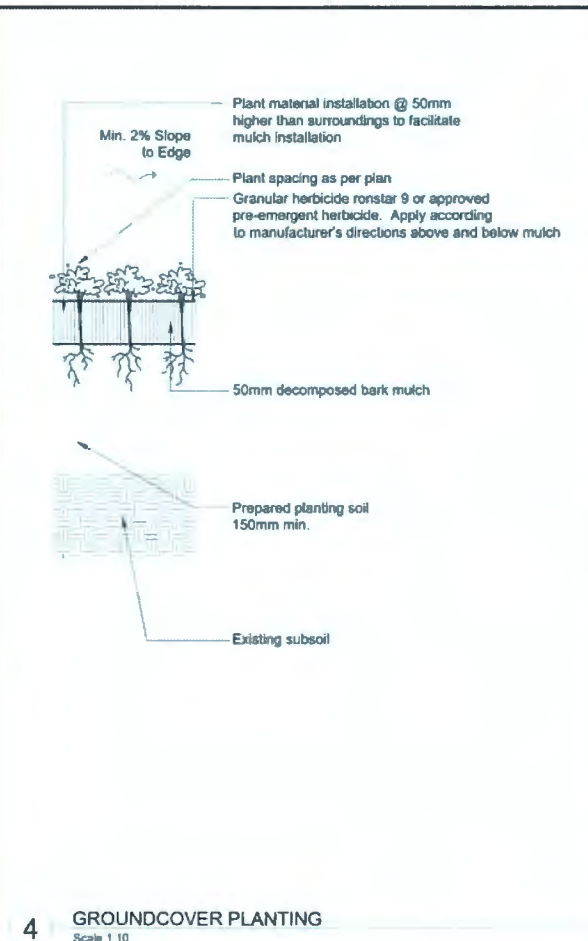
**1 DECIDUOUS TREE PLANTING**  
 Scale 1:50



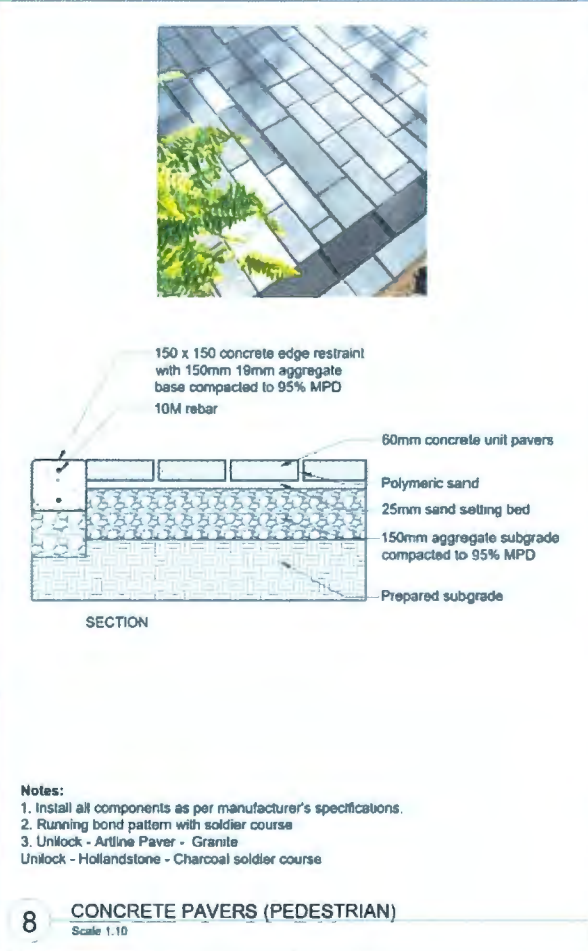
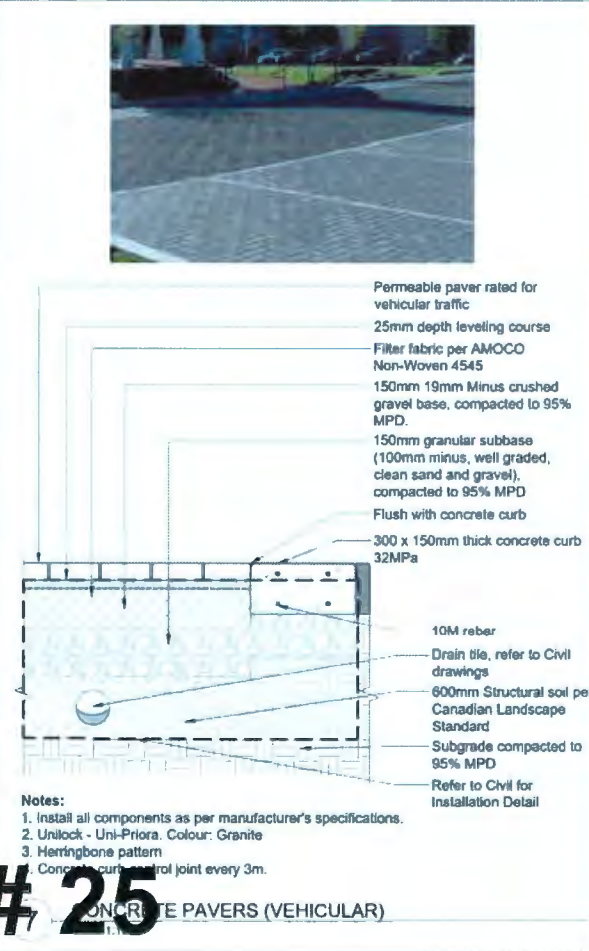
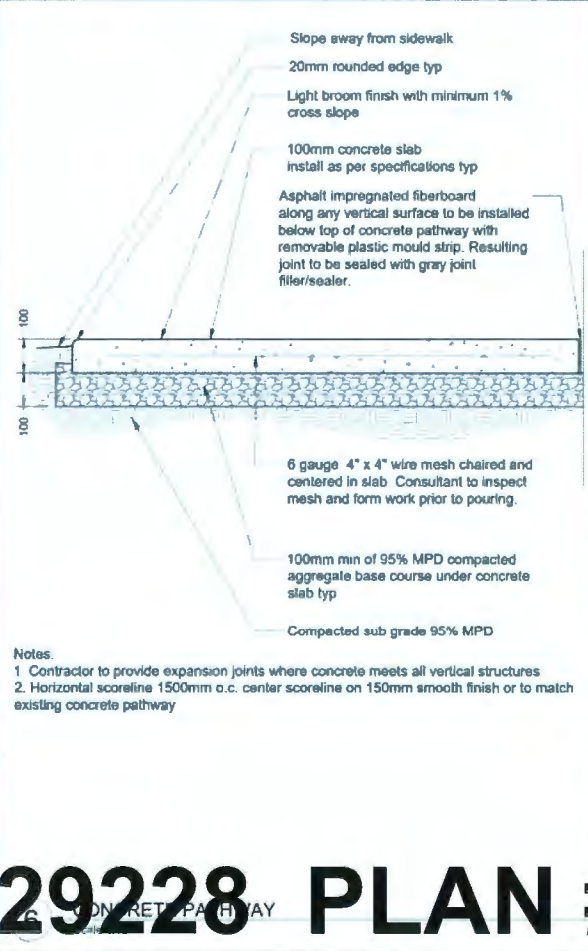
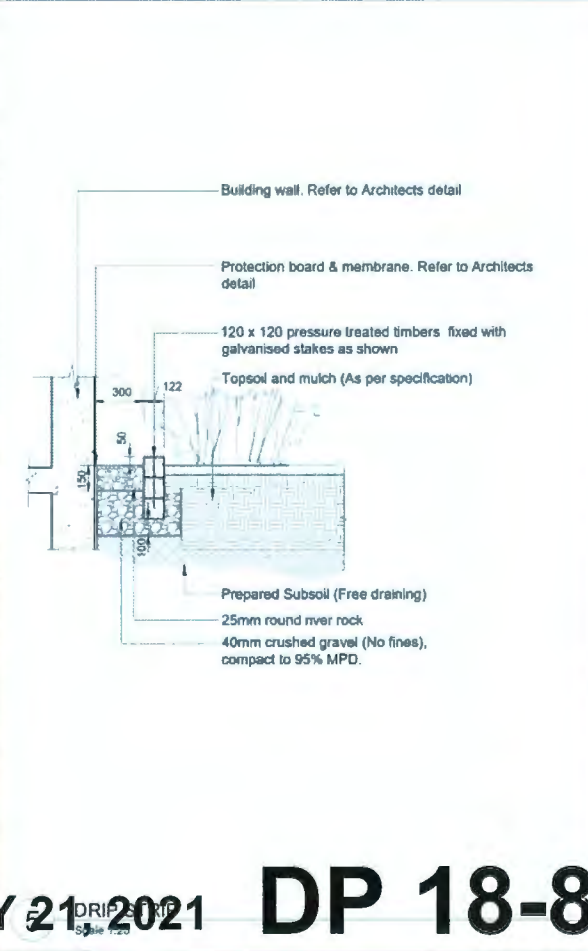
**2 SHRUB PLANTING**  
 Scale 1:25



**3 SHRUB PLANTING ON A SLOPE**  
 Scale 1:25



**4 GROUNDCOVER PLANTING**  
 Scale 1:10



**Notes:**  
 1. Contractor to provide expansion joints where concrete meets all vertical structures  
 2. Horizontal scoreline 1500mm o.c. center scoreline on 150mm smooth finish or to match existing concrete pathway

**Notes:**  
 1. Install all components as per manufacturer's specifications.  
 2. Unilock - Uni-Priora. Colour: Granite  
 3. Herringbone pattern  
 Concrete curb control joint every 3m.

**Notes:**  
 1. Install all components as per manufacturer's specifications.  
 2. Running bond pattern with soldier course  
 3. Unilock - Artline Paver - Granite  
 Unilock - Hollandstone - Charcoal soldier course

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019
2	TM	Issue for ADP	Nov 1, 2019
1	TM	Issue for ADP	Nov 1, 2019

**REVISIONS TABLE FOR DRAWINGS**  
 © Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
1	TM	Issue for ADP	Nov 1, 2019

**REVISIONS TABLE FOR SHEET**  
 Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV  
 Stamp:  
 Checked: TM  
 Approved: MVDZ  
 Original Sheet Size: 24"x36"  
 Scale: AS SHOWN  
 CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE OBTAINED AT THE COMMENCEMENT OF THE WORK. ALL REVISIONS/CHANGES/ADJUSTMENTS MUST NOT BE MADE PRIOR TO CONSTRUCTION UNLESS LABELLED ISSUED FOR TENDER CONSTRUCTION.

Drawing Title: **DETAILS**  
 VZ Project #: **DP2017-41**  
 Drawing #: **LD-01**



Supplier: Wishbone  
 Product: Modena Bollard - MB-37  
 Height: 37"  
 Colour: Black  
 Supplier: Wishbone Site Furnishings  
 Katie Palmer  
 sales@wishboneltd.com  
 1-866-626-0476

1 BOLLARD  
 NTS



Manufacturer: Maglin Site Furniture  
 Product: MLB720 SERIES BENCH  
 Finish: Ipe Wood  
 Mount: Surface  
 Supplier: Maglin Site Furniture  
 Jennifer Fancy  
 Jennifer.fancy@maglin.com  
 1-800-716-5506 x 6050

2 PARKING STALL PAVERS  
 NTS



Manufacturer: Maglin Site Furniture  
 Product: FRC1700-A ARMED CHAIR and FRT1700-SQ SQUARE TABLE 36"  
 Metal Pattern 2  
 Colour: Gunmetal  
 Mount: Free Standing  
 Supplier: Maglin Site Furniture  
 Jennifer Fancy  
 Jennifer.fancy@maglin.com  
 1-800-716-5506 x 6050

3 TABLES AND CHAIRS  
 NTS



Manufacturer: GameTime  
 Product: Make It Rain Sensory Panel #19455  
 Colour: Green  
 Mount: Direct Burial  
 Supplier: Park N Play Design  
 Info@parknplaydesign.com  
 1-866-552-8188

4 PLAY BOARD  
 NTS



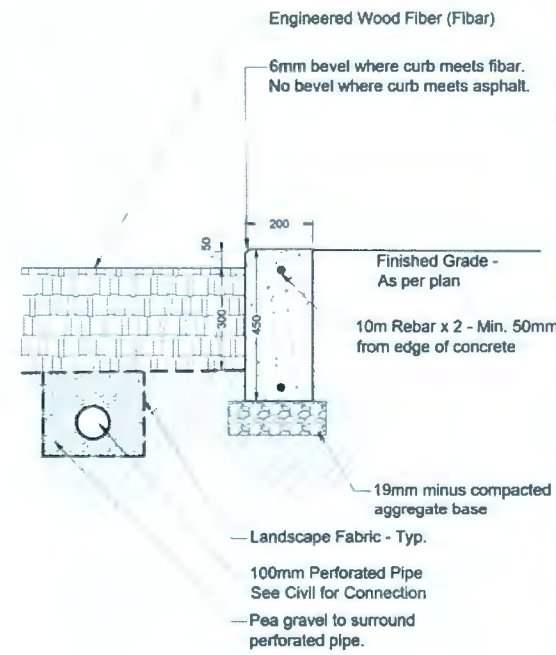
Manufacturer: Kompan  
 Product: Chalk Board Large  
 Mount: Direct Burial  
 Supplier: Rectec Industries  
 Kathleen Triles  
 kathleen@rectecindustries.com  
 1-800-667-8141

5 CHALK BOARD  
 NTS

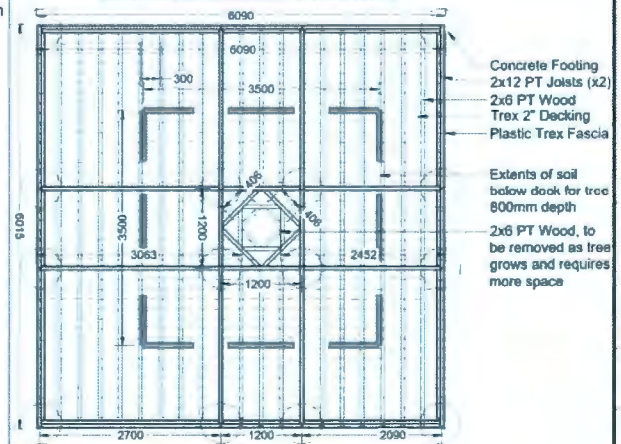


Manufacturer: GameTime  
 Product: Talking Stump - 38113  
 Mount: Direct Burial  
 Supplier: Park N Play Design  
 Info@parknplaydesign.com  
 1-866-552-8188

6 TALKING STUMP  
 NTS



Product: 2" Square Edge Board  
 Manufacturer: Trax Decking  
 Colour: Foggy Wharf  
 Or approved Composite Walkway by Shuttle Recreation



8 WOOD DECK WITH SHADE TREE  
 NTS

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Responses	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019

REVISIONS TABLE FOR DRAWINGS  
 © Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
REVISIONS TABLE FOR SHEET			

Project: Gates Avenue Townhouses  
 Location: 23400, 23440, 23460, 23500 Gates Avenue, Richmond, B.C.  
 DP #: DP18-829228

Drawn: DV  
 Stamp:

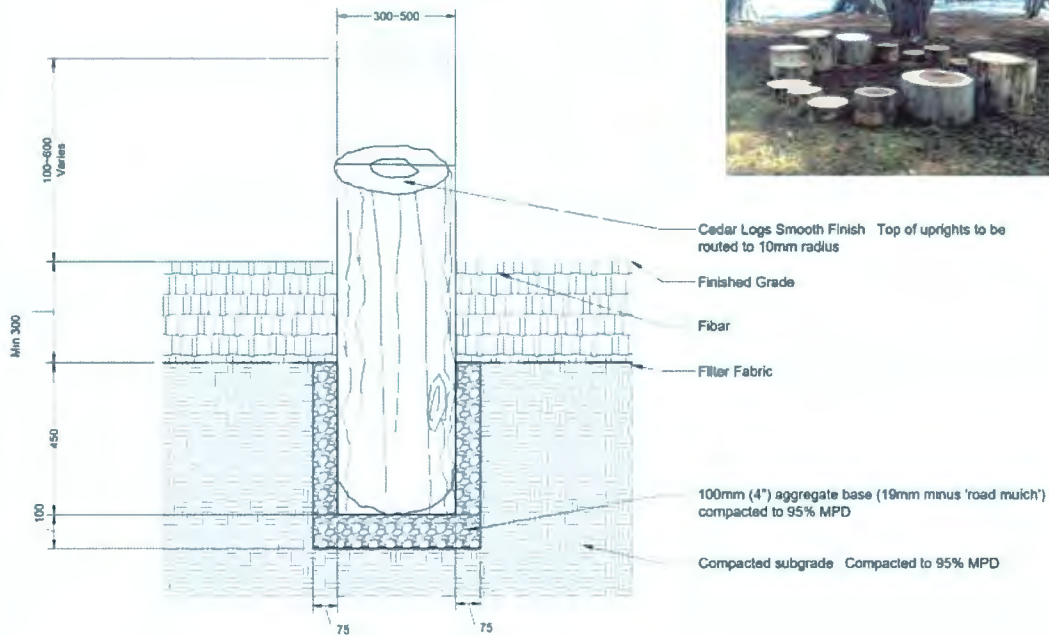
Checked: TM

Approved: MVDZ  
 Original Sheet Size: 24"x36"

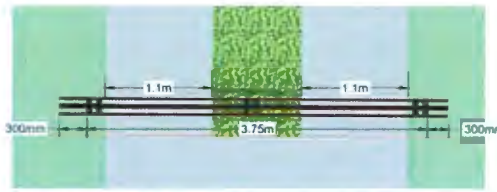
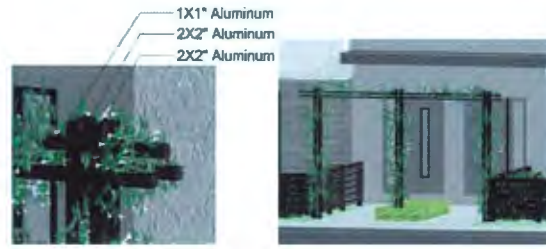
Scale: AS SHOWN  
 CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE OBTAINED AT THE CONSULTANT'S OFFICE. THE CONSULTANT'S RESPONSIBILITY IS LIMITED TO THE WORK AND REVISIONS/ADDENDUMS/DRAWINGS MUST NOT BE PRECEDED FOR CONSTRUCTION UNLESS SPECIFICALLY NOTED FOR TENDERS/CONSTRUCTION.

**Notes:**

1. Logs to be stained with Sikkens Cetol SRD - Colour 077-Cedar or approved equal. End sealer to be used on all areas below grade. Apply as per manufacturers specifications.
2. Size of log uprights as per plan.
3. All branches and trunk splits to be cut flush, routed and sealed. Bark to remain intact.



**1 SITTING CIRCLE**  
1:10



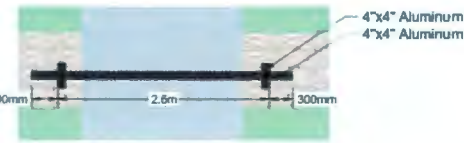
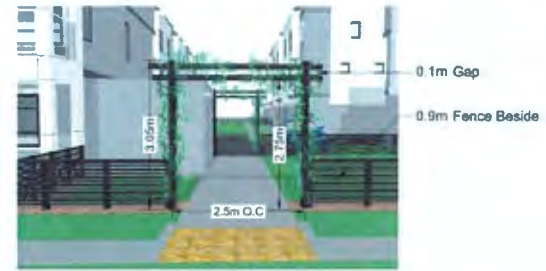
Double-wide Residential



Single-wide Residential

**NOTE:**  
 Colour: Powder Coated Black  
 Contractor to provide shop drawings for review and approval prior to fabrication

**2 RESIDENTIAL ENTRY TRELLIS**  
NTS



Amenity Trellis 'A'



Amenity Trellis 'B'

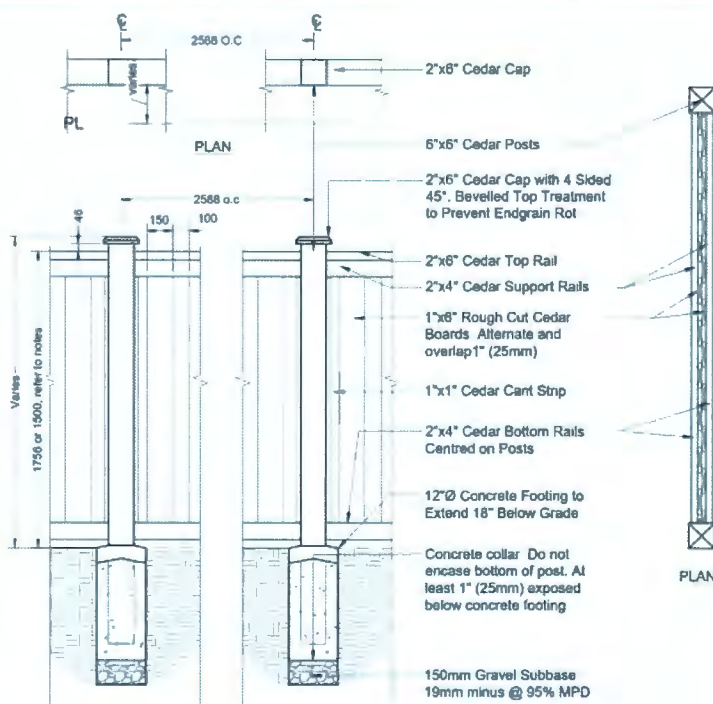
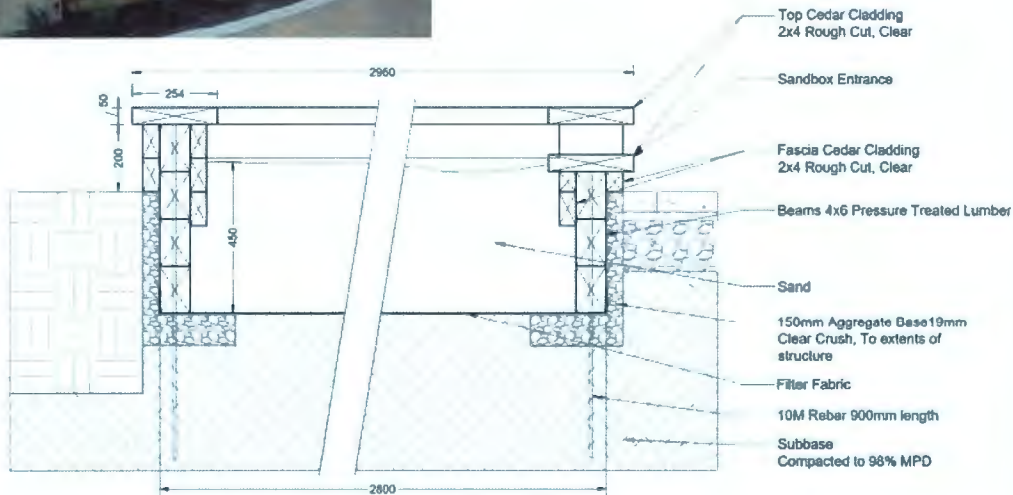
**NOTE:**  
 Colour: Powder Coated Black  
 Contractor to provide shop drawings for review and approval prior to fabrication

**3 AMENITY AREA TRELLIS**  
NTS



**Notes:**

1. All exposed decking and fascia to be sanded smooth.
2. Apply Sikkens Cetol SRD to all Cedar elements. Colour: Oak.
3. All members to be fastened with hot dipped galvanized hardware.



**Note:**  
 1. Ensure all fasteners exposed to weather are hot-dipped galvanized to prevent staining.  
 2. Apply Sikkens Cetol SRD to all Cedar elements. Colour: Natural  
 3. 1.756m Height Fence when located at grade. 1.5m Height Fence when located on top of retaining wall



Manufacturer: CAMPANIA INTERNATIONAL  
 Product name: Park Slope Urn  
 Product code: P-787  
 Material: Cast Stone  
 Colour: Alpine Stone (AS)

**6 CONCRETE PLANTER**  
NTS

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for SP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Rezoning	Feb 20, 2019
No	By	Description	Date

**REVISIONS TABLE FOR DRAWINGS**

© Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
1	TM	Privacy Fence Update	May 26, 2021
No	By	Description	Date

**REVISIONS TABLE FOR SHEET**

Project:  
 Gates Avenue Townhouses  
 Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.  
 DP #:  
 DP18-829228

Drawn: DV  
 Checked: TM  
 Approved: MVDZ  
 Scale: AS SHOWN

Original Sheet Size: 24"x36"  
 CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE CONSULTANT AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS/CHANGES/ADDITIONS MUST BE APPROVED BY THE CONSULTANT. CONSTRUCTION UTILISE LABELS ISSUED FOR THIS PROJECT.



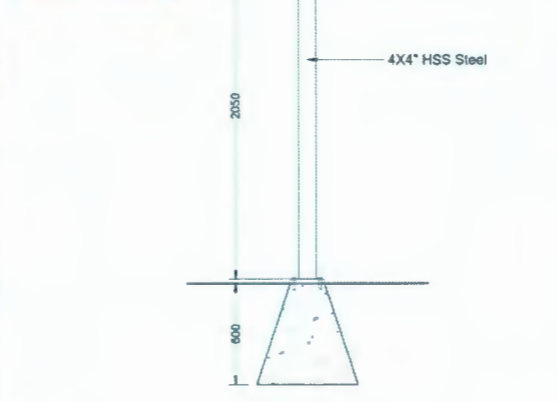
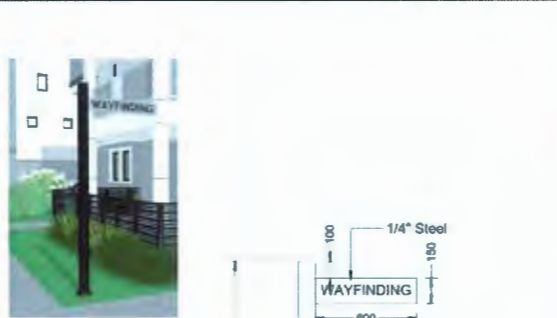
FRONT VIEW



TOP VIEW

NOTE:  
 Colour: Powder Coated Black  
 Contractor to provide shop drawings for review and approval prior to fabrication

1 ENTRY SIGNAGE  
 NTS



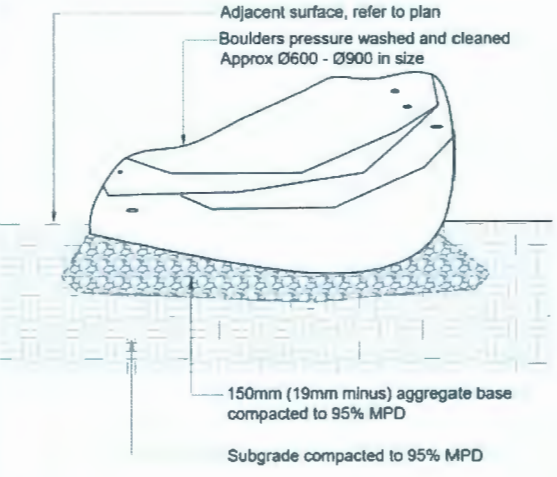
NOTE:  
 Colour: Silver  
 Font: TBD  
 Contractor to provide shop drawings for review and approval prior to fabrication

2 PATHWAY WAYFINDING  
 NTS

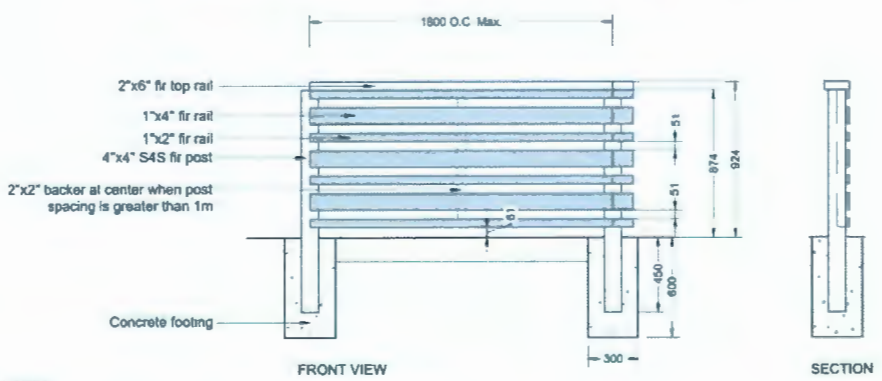


Manufacturer: Maglin Site Furniture  
 Product: MBR-2300-00001 Bike Rack  
 Colour: Gun Metal  
 Mount: Surface  
 Supplier: Maglin Site Furniture  
 Jennifer Fancy  
 Jennifer.fancy@maglin.com  
 1-800-716-5506 x 6050

3 BIKE RACK  
 NTS



4 STEPPING BOULDERS  
 NTS



NOTES:  
 1. All hardware to be hot dipped galvanized and painted to match fence.  
 2. All wood to be S4S fir or better.  
 3. All wood to be sealed and painted charcoal (2 coats).

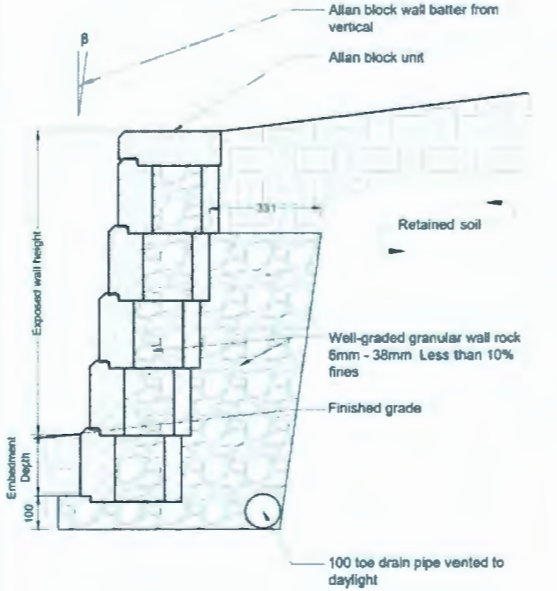
7 BLOCK RETAINING WALL  
 Scale 1/10



Manufacturer: Kompan  
 Product: NRO897507 - Robinia Structure with Steel Slide  
 Mount: Direct Burial  
 Supplier: Rectec Industries  
 Danielle Clarkson  
 danielle@rectecindustries.com  
 1-800-867-8141  
 alternate:  
 jeff.kuby@rectecindustries.com  
 604-940-0067

6 PLAY STRUCTURE

BLOCK WALL  
 Type: Allan Block - Or Approved Equal  
 Wall Colour: Charcoal  
 Cap Colour: Charcoal



7 BLOCK RETAINING WALL  
 Scale 1/10

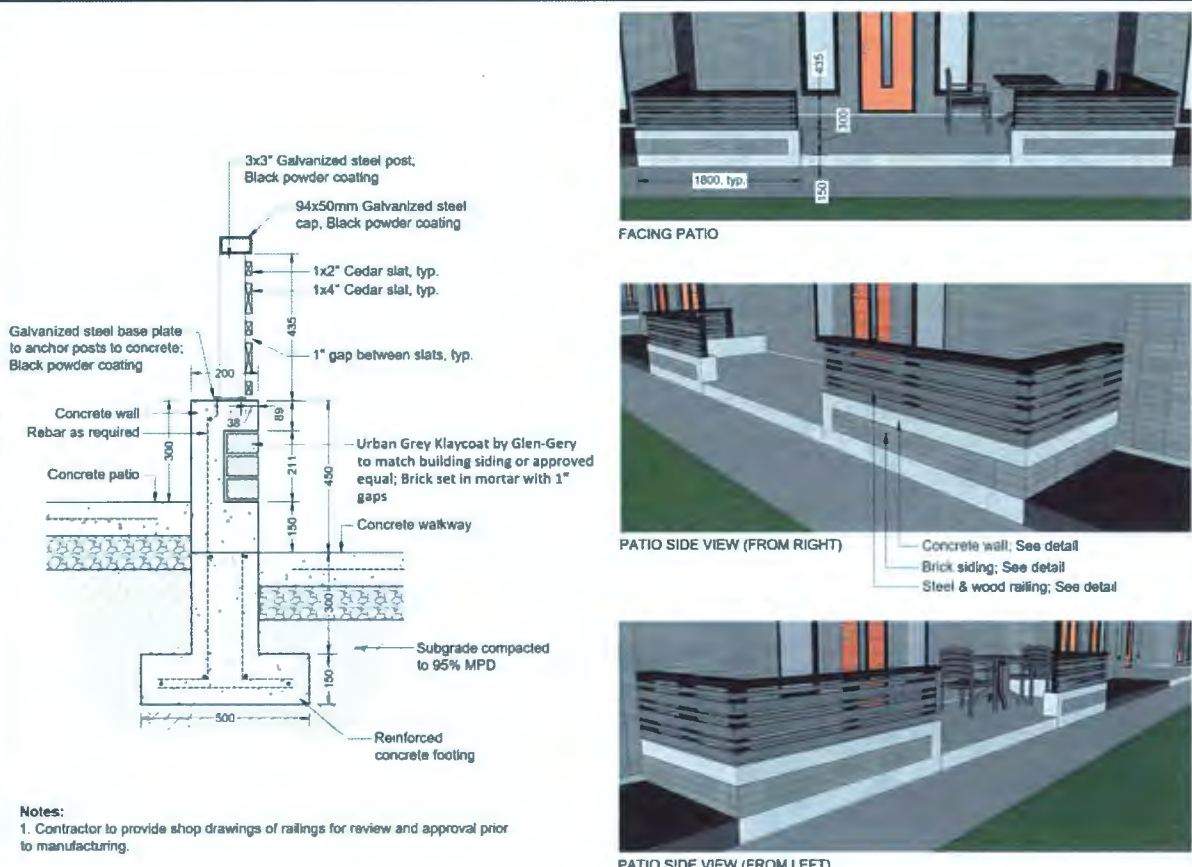
No	By	Description	Date
12	DV	Re-issue for DP	May 11 2021
11	DV	Re-issue for DP	Mar 24 2021
10	DV	Re-issue for DP	Sept 28 2020
9	DV	ADP Response	Jan 30 2020
8	DV	Issue for BP	Dec 18 2019
7	DV	Issue for ADP	Nov 1 2019
6	DV	Re-issue for DP	Oct 17 2019
5	TM	Issued for Development Permit	Sept 5 2019
4	TM	Issued for Development Permit	July 25 2019
3	TM	Issued for Reasoning	Feb 20 2019

REVISIONS TABLE FOR DRAWINGS  
 Copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
----	----	-------------	------

Project:  
 Gates Avenue Townhouses  
 Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.  
 DP #:  
 DP18-829228

Drawn: DV	Stamp:
Checked: TM	
Approved: MVDZ	Original Sheet Size: 24"x36"
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE OBTAINED AT THE COMPLETION OF THE WORK. ALL NEIGHBORHOOD/PLANNING/DEVELOPMENT/ENVIRONMENTAL/REGULATORY/CONSTRUCTION/UTILITY LABELS ISSUED FOR TECHNICAL CONSTRUCTION



Concrete wall; See detail  
 Brick siding; See detail  
 Steel & wood railing; See detail

Notes:  
 1. Contractor to provide shop drawings of railings for review and approval prior to manufacturing.

1 PATIO WALL AND RAILING  
 Scale 1"=10'

No	By	Description	Date
12	DV	Re-issue for DP	May 11, 2021
11	DV	Re-issue for DP	Mar 24, 2021
10	DV	Re-issue for DP	Sept 28, 2020
9	DV	ADP Response	Jan 30, 2020
8	DV	Issue for BP	Dec 18, 2019
7	DV	Issue for ADP	Nov 1, 2019
6	DV	Re-issue for DP	Oct 17, 2019
5	TM	Issued for Development Permit	Sept 5, 2019
4	TM	Issued for Development Permit	July 25, 2019
3	TM	Issued for Reasoning	Feb 20, 2019

REVISIONS TABLE FOR DRAWINGS  
 © copyright reserved. This drawing and design is the property of van der Zalm + associates inc. and may not be reproduced or used for other projects without permission.

No	By	Description	Date
REVISIONS TABLE FOR SHEET			

Project:  
 Gates Avenue Townhouses  
 Location:  
 23400, 23440, 23460, 23500  
 Gates Avenue, Richmond, B.C.  
 DP #:  
 DP18-829228

Drawn: DV  
 Stamp:

Checked: TM

Approved: MVDZ  
 Original Sheet Size: 24"x36"

Scale:  
 AS SHOWN  
 CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL RESPONSIBILITY FOR ANY/ALL DELAYED MUST NOT BE PLACED FOR CONSTRUCTION UNLESS LABELS ISSUED FOR TENDERS/CONSTRUCTION.

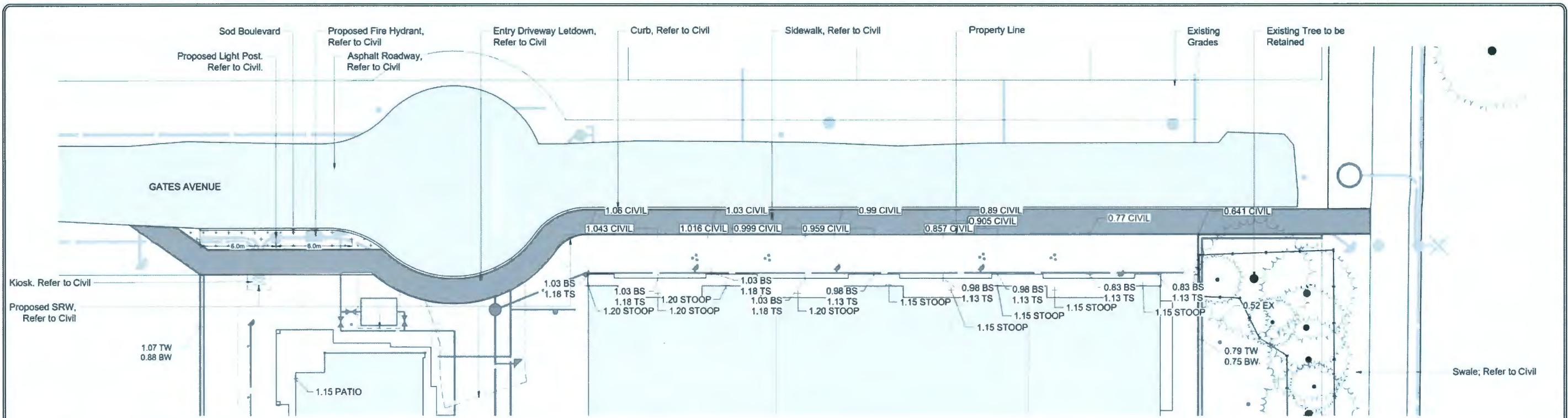
Drawing Title: DETAILS

VDZ Project #: DP2017-41

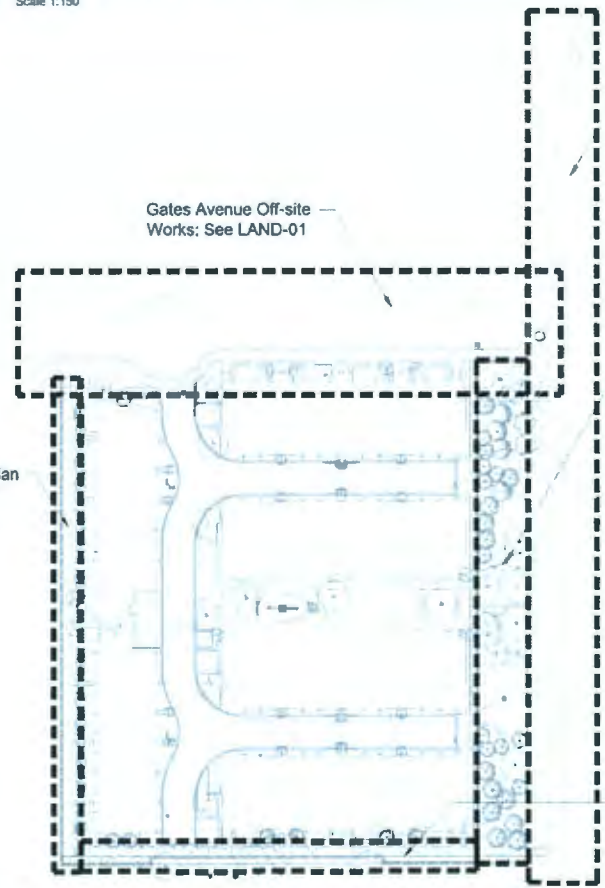
Drawing #: LD-05

MAY 21, 2021 DP 18-829228 PLAN # 29

Z:\PROJECTS\DEVELOPMENT PERMITS\DP2017-41\GATES AVENUE\DWG\SHEET\LD-05.DWG



1 OFF-SITE SERVICING PLAN  
Scale 1:150



2 KEY PLAN  
Scale 1:650

MOTI Corridor  
Public Walkway;  
See LAND-03

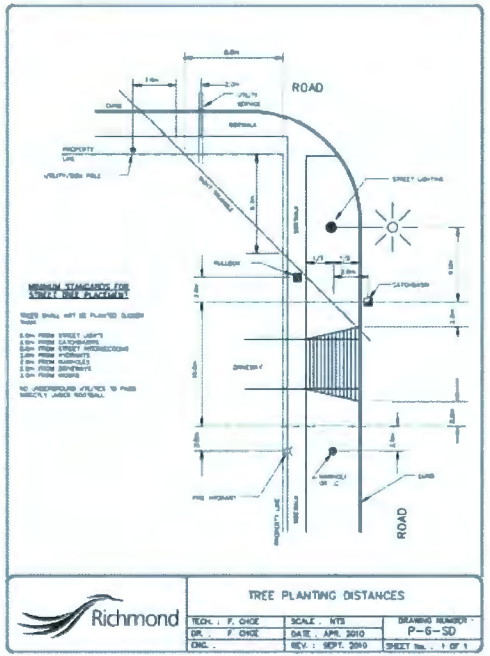
ESA to be dedicated  
to CoR; See LAND-02

On-site pedestrian W-E  
"Strollway" SRW 3.5m  
wide; See LAND-04

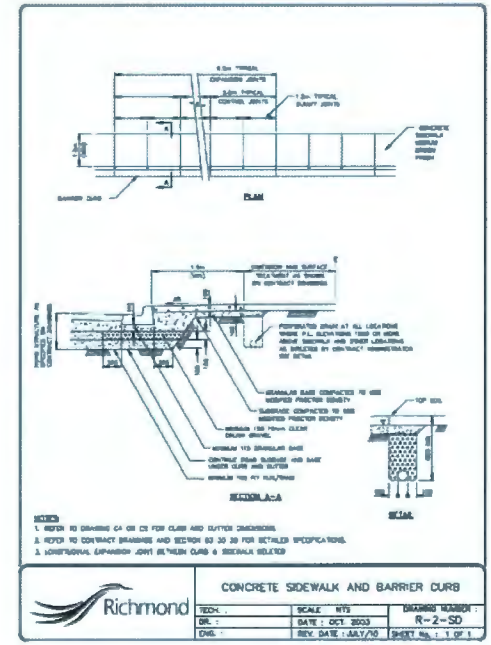
OFF-SITE PLANT SCHEDULE

GRASSES SCHEDULE				
SYMBOL/BOTANICAL NAME	COMMON NAME	QTY	SIZE	SPACING
GRASSES				
Scot	Scot	20	50x2	

- Off-Site Planting & Irrigation Notes:
- Plants in this plant list are specified according to the Canadian Nursery Landscape Association Canadian Standards for Nursery Stock and Section 12, Container Grown Plants of the BC Landscape Standard, current edition.
  - All plant material shall meet or exceed standards required by bcina or bcsla guidelines.
  - Topsoil supplied shall be from a reputable source. A full analysis of the topsoil will be required at the contractor's expense, submit to landscape consultant for approval.
  - Amend topsoil per soil analysis recommendations prior to spreading on site. Rejected topsoil shall be removed off site immediately at the landscape contractor's expense.
  - Minimum topsoil depths for planting as follows:
    - Shrubs, Perennials, Orn. Grasses & Ferns: 450mm
    - Sod: 200mm
    - Tree pits: 800mm with 300mm (below root ball)
  - 1" minus compost mulch to be installed in all shrub planting areas.
  - All landscaped areas to be irrigated.
  - For topsoil and finish grading specifications refer to City of Richmond specification section 32 91 21 - Topsoil and Finish Grading.
  - Irrigation to meet IABC standards.
  - Provide sleeve under hardscape for irrigation.



3 TREE PLANTING DISTANCES  
Scale NTS



4 CONCRETE SIDEWALK AND BARRIER CURB  
Scale NTS

MAY 21, 2021

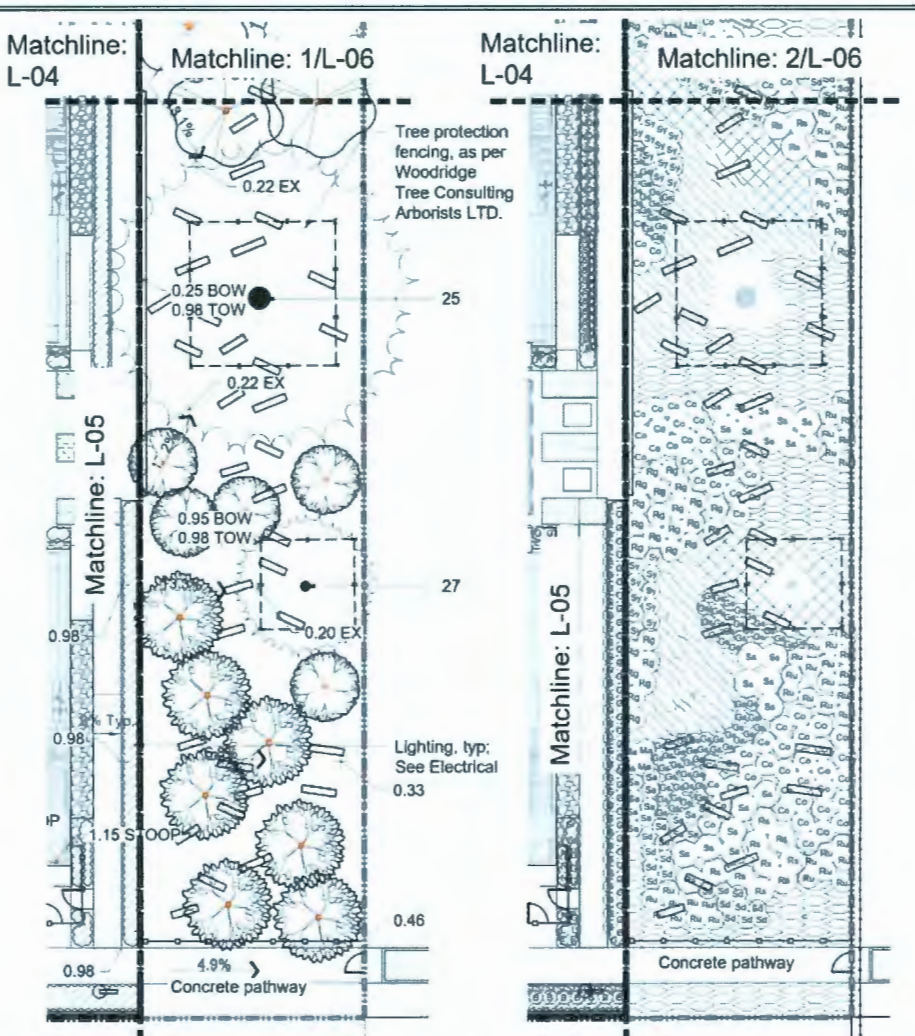
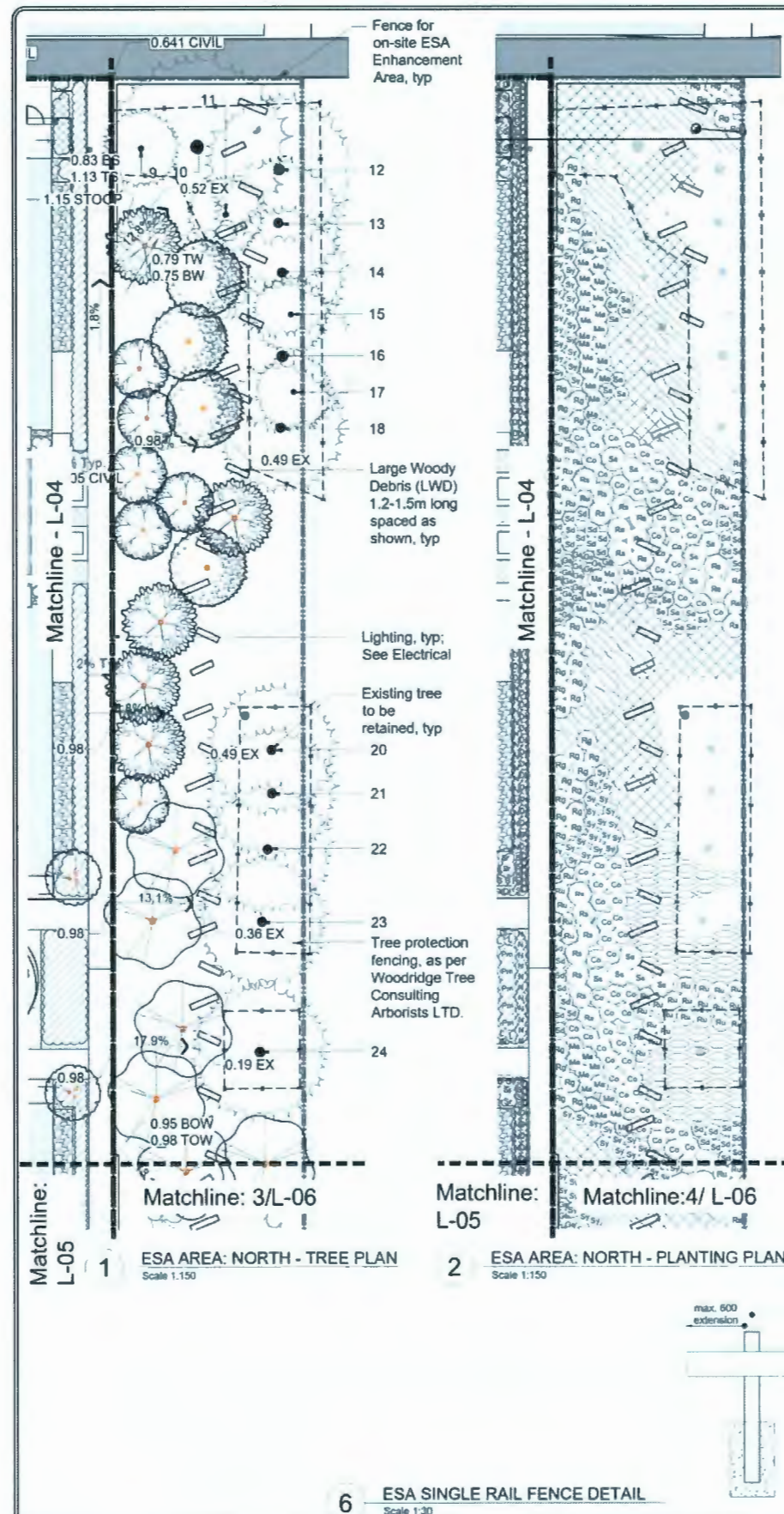
DP 18-829228 PLAN # 30

BENCHMARK  
ELEVATIONS ARE IN METRIC TO GEODETIC DATUM REFERENCED TO RICHMOND BENCHMARK WITH #001 CONTROL MONUMENT OSN443 ELEVATION = 1.783M (BENCHMARK IMPALES, CONTROL MONUMENT NUMBER ELEVATION = 1.823M)  
DATE: 05/11/21  
DWG: 1 OF 4

van der Zanden + associates inc.  
5489 Byrne Rd,  
Burnaby, BC  
V5J 3J1  
PROJECT: 18-829228  
DATE: 05/11/21  
DWG: 1 OF 4

NO.	DATE	BY	CHK	DESCRIPTION
1	05-11-21	TM	TM	PRELIMINARY SITE LAYOUT
2	05-11-21	TM	TM	REVISED SITE LAYOUT
3	05-11-21	TM	TM	REVISED SITE LAYOUT
4	05-11-21	TM	TM	REVISED SITE LAYOUT

City of Richmond  
TITLE: LANDSCAPE GATES AVENUE FROM #23400 TO #23500  
CITY FILE: SA19-880363  
DESIGN: TM  
DRAWN: TM  
CHECKED: TM  
ENGINEER: TM  
DWG. NO: 880363-19-10  
SCALE: 1:150  
DATE: 05/11/21  
SHEET NO: 1 OF 4

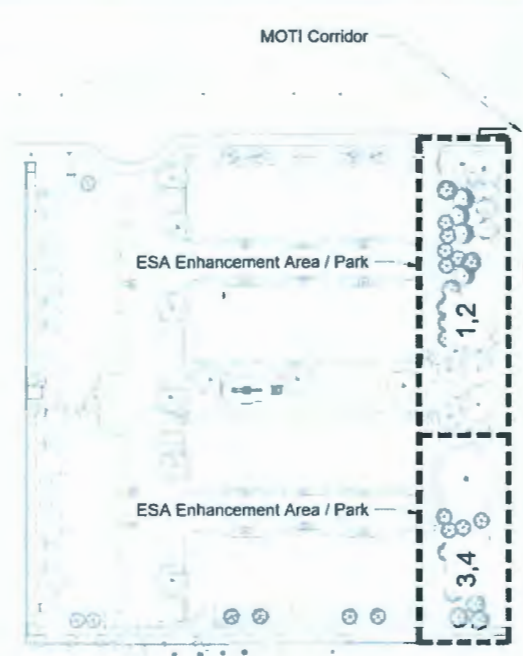


3 ESA AREA: SOUTH - TREE PLAN  
Scale 1:150

4 ESA AREA: SOUTH - PLANTING PLAN  
Scale 1:150

OFF-SITE ESA TREE SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	QTY
	Betula papyrifera / Paper Birch	6cm	6
	Malus fusca / Oregon Crab Apple	6cm	11
	Pseudotsuga menziesii / Douglas Fir	4m Height	4
	Thuja plicata / Western Red Cedar	4m Height	12
ESA Tree Total:			33



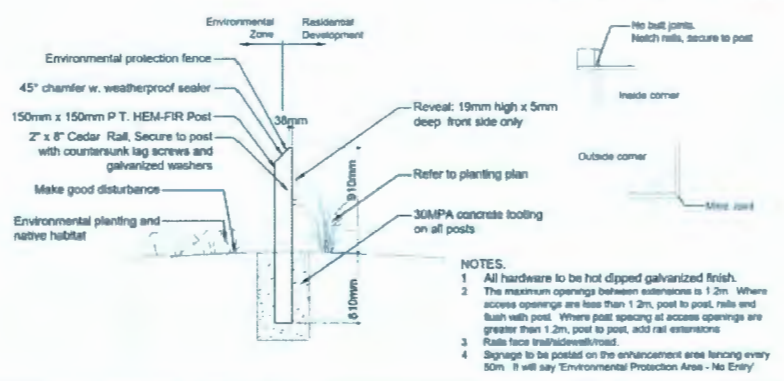
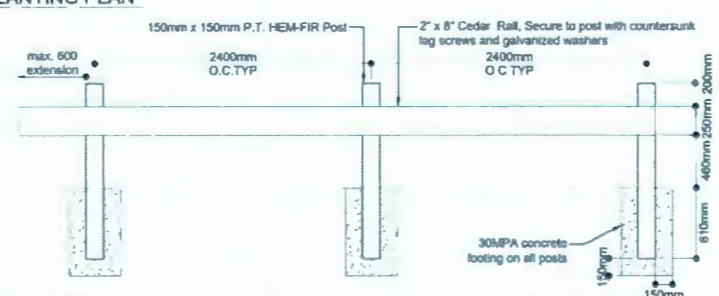
5 KEYMAP

PLANT SCHEDULE OFFSITE ESA

OFF-SITE PLANT SCHEDULE	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
Co	Cornus stolonifera / Red Osier Dogwood	#2	1m	133
Gs	Gautheria shallon / Salal	#2	0.60m	100
Ma	Mahonia aquifolium / Oregon Grape	#2	0.90m	51
Rs	Ribes sanguineum / Red Flowering Currant	#2	1.20m	36
Rg	Rosa gymnocarpa Nutt. / Baldhip Rose	#2	1m	82
Ru	Rubus spectabilis / Salmonberry	#2	0.90m	88
Ss	Salix sitchensis / Sitka Willow	#2	1.20m	32
Sa	Sambucus racemosa / Red Elderberry	#2	0.75m	30
Sd	Spiraea douglasii / Western Spirea	#2	0.75m	57
Sy	Symphoricarpos albus / Common White Snowberry	#2	0.75m	79

GROUND COVERS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	Arctostaphylos uva-ursi / Kinnikinnick	#2	300mm	1 549
	Athyrium filix-femina cuculosorum / Lady Fern	#2	400mm	773
	Polystichum munitum / Western Sword Fern	#2	750mm	238

6 ESA SINGLE RAIL FENCE DETAIL  
Scale 1:30



- NOTES:
- All hardware to be hot dipped galvanized finish.
  - The maximum opening between extremities is 1.2m. Where access openings are less than 1.2m, post to post, rails and flush with post. Where post spacing at access openings are greater than 1.2m, post to post, add rail extensions.
  - Rails face trash/roadward.
  - Signage to be posted on the enhancement area fencing every 50m. It will say "Environmental Protection Area - No Entry".

MAY 21, 2021

DP 18-829228 PLAN # 31

van der Zanden + associates inc.  
ORD 5489 Byrne Rd, Burnaby, BC V5J 3J1  
PROJECT NAME: GATES AVENUE  
DWG: 2 OF 4

NO.	DATE	BY	CHK.	DESCRIPTION
1				ISSUED FOR PERMIT
2				REVISED PER COMMENTS
3				REVISED PER COMMENTS
4				REVISED PER COMMENTS

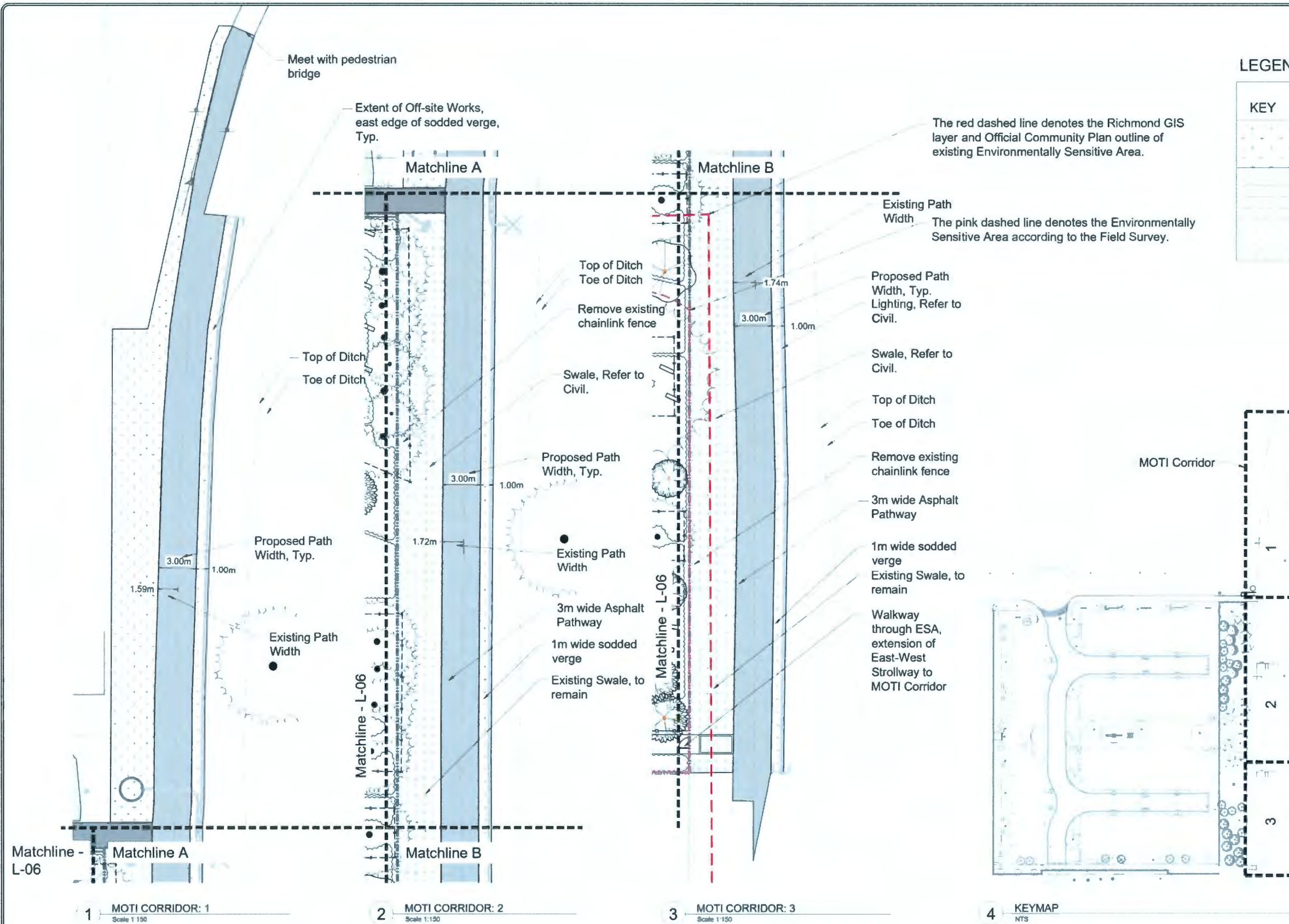
City of Richmond  
TITLE: LANDSCAPE GATES AVENUE FROM #23400 TO #23500  
CITY FILE: SA19-880363  
DESIGN: TV  
DWG. NO.: 880363-19-10  
CHECKED: TM  
SCALE: 1:150  
DATE: 05/11/21  
DESIGNED: TM  
SEC. NO: 38-9-4  
SHEET NO: 2 OF 4

**LEGEND**

KEY	DESCRIPTION
	SOD See Critical Landscape Notes for Specifications
	CONCRETE PAVERS
	PEDESTRIAN
	Existing Swale, To Remain

Existing swale along west side of 3m Asphalt Pathway to remain.

If swale is largely disturbed by construction, then grass and native wildflower seed mix to be used to rehabilitate. As specified by Landscape Architect.



MOTI Corridor

Matchline - L-06

1 MOTI CORRIDOR: 1  
Scale 1:150

2 MOTI CORRIDOR: 2  
Scale 1:150

3 MOTI CORRIDOR: 3  
Scale 1:150

4 KEYMAP  
NTS



MAY 21, 2021

**DP 18-829228 PLAN # 32**

BENCHMARK  
ELEVATIONS ARE IN METERS TO GEODETIC DATUM REFERENCED TO RICHMOND BENCHMARK NPN #2006, CONTROL MONUMENT CON483 ELEVATION = 1.7634 (BENCHMARK NP4052, CONTROL MONUMENT T88818 ELEVATION = 1.653m)  
ELEVATION 1.7634  
CITY WORK ORDER #  
WHENEVER THE USE OF

*van der Zalm + associates inc.*  
5489 Byrne Rd,  
Burnaby, BC  
V5J 3J1  
PROJECT NO: 2017-41  
DRAWING NAME: 18-829228-03  
03363-19-10  
DWG 3 OF 4

NO.	DATE	BY	CHK.	DESCRIPTION
1				PRELIMINARY PLAN UPDATE
2				REVISED PLAN FOR SUBMISSION
3				REVISED PLAN FOR SUBMISSION
4				REVISED PLAN FOR SUBMISSION

**City of Richmond**

TITLE: LANDSCAPE GATES AVENUE FROM #23400 TO #23500

CITY FILE: SA19-890363

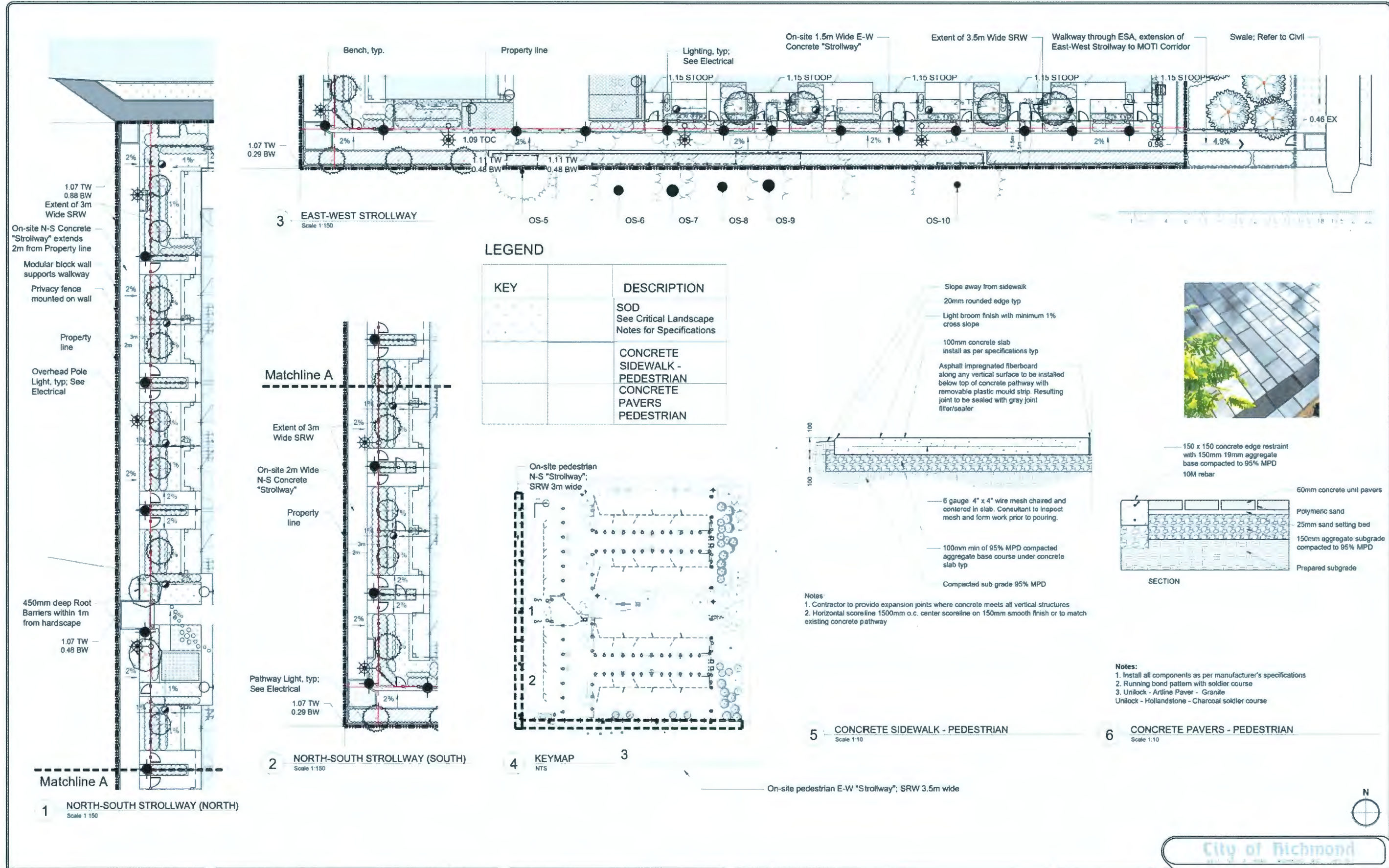
DESIGNER: [Name]

DWG. NO.: 880363-19-10

SCALE: 1:150 DATE: 05/11/21

SEC. NO.: 30/54 SHEET NO.: 3 OF 4





MAY 21, 2021

**DP 18-829228 PLAN # 33**

BENCHMARK  
ELEVATIONS ARE IN METRIC TO GEODETIC DATUM REFERENCED TO BURNABY BENCHMARK 19M (2008 CONTROL MONUMENT 021483 ELEVATION = 1.752M (BENCHMARK 19M/23M CONTROL MONUMENT TERNIS ELEVATION = 1.653M)  
ELEVATION: 1.752M  
CITY WORK ORDER #  
ACCOUNT #

**van der Zanden + associates inc.**  
ORD  
5489 Byrne Rd,  
Burnaby, BC  
V5J 3J1  
PROJECT NO. 2017-41  
DRAWING NAME  
880363-19-10  
DWG 4 OF 4

NO.	DATE	BY	CHK	DESCRIPTION
1				
2				
3				
4				
5				
6				

**City of Richmond**  
TITLE: **LANDSCAPE GATES AVENUE FROM #23400 TO #23500**  
CITY FILE SA19-880363  
DESIGN: TM  
DWC N°: 880363-19-10  
CHECKED: TM  
SCALE: 1:150  
DATE: 05/11/21  
ENGINEER: SEC. 46-5-4  
SHEET: 4 OF 4



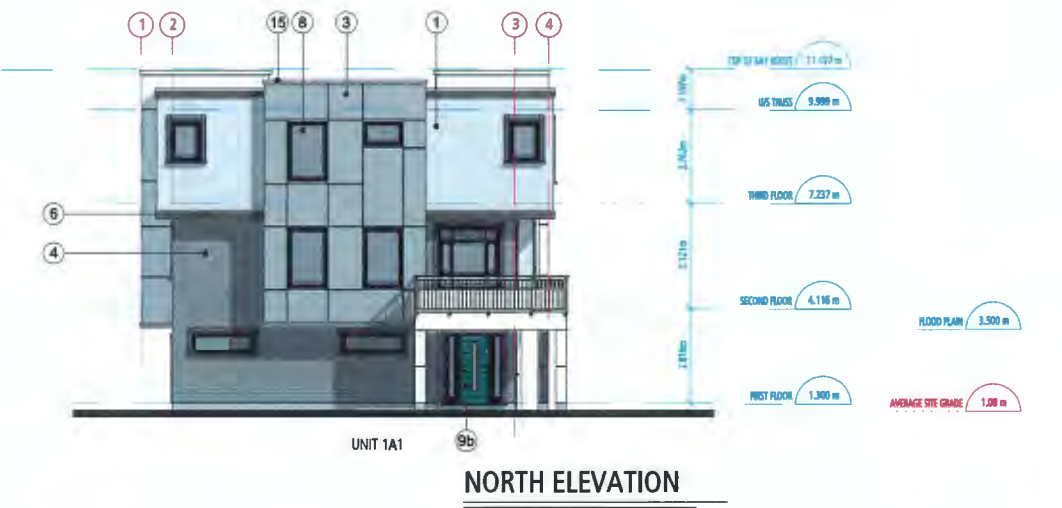
WEST ELEVATION



EAST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

**EXTERIOR FINISHES SCHEDULE**

1	EIFS STUCCO TEXTURED	Benjamin Moore_Stonington Gray HC-170
2	EIFS STUCCO SMOOTH	Benjamin Moore_Swiss Coffee OC-60
3	EIFS STUCCO SMOOTH	Benjamin Moore_Escarpment CC-518
4	HORIZONTAL SIDING	Hardie Lap Siding_Aged Pewter
5	BRICK	DXL_Urban Gray Klaycoat
6	HORIZONTAL WOOD TRIMS	Benjamin Moore_Midsummer Night BM 2134-20
7	WINDOW & DOOR TRIM	Benjamin Moore_Midsummer Night BM 2134-20
8	VINYL WINDOWS	Black
9 a-h	EXTERIOR DOOR	varies (see accent colours)
10	METAL GUARDRAIL	Benjamin Moore_Swiss Coffee OC-60
11	GLASS GUARDRAIL	Clear Glass & Black Metal Frame
12	MECH. ROOM DOOR & STAIR	Benjamin Moore_Midsummer Night BM 2134-20
13	GARAGE DOOR	Painted to match BM_Swiss Coffee OC-60
14	METAL FLASHING	Benjamin Moore_Swiss Coffee OC-60
15	METAL FLASHING	Benjamin Moore_Escarpment CC-518

**ACCENT (Door) COLOURS**

9a	Bldg 1 + 5	Sherwin Williams- SW 5761 Thermal Springs
9b	Bldg 1 + 5	Sherwin Williams- SW 8753 Jargon Jade
9c	Bldg 2 + 4	Sherwin Williams- SW 8790 Adriatic Sea
9d	Bldg 2 + 4	Sherwin Williams- SW 6666 Real Red
9e	Bldg 2 + 4	Sherwin Williams- SW 6666 Real Red
9f	Bldg 3	Sherwin Williams- SW 6634 Copper Harbor
9g	Bldg 6	Sherwin Williams- SW 7588 Show Stopper
9h	Bldg 6	Sherwin Williams- SW 6666 Real Red

23400, 23440,  
23460, & 23500  
**GATES AVENUE**  
for  
**Q-R-D**  
QUARRY-ROCK DEVELOPMENTS

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND AIPQC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**ELEVATIONS BUILDING 1**  
SCALE: 1 : 100  
0 2M 4M 6M

DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

**DP 18-829228 PLAN # 34**

**MAY 21, 2021**

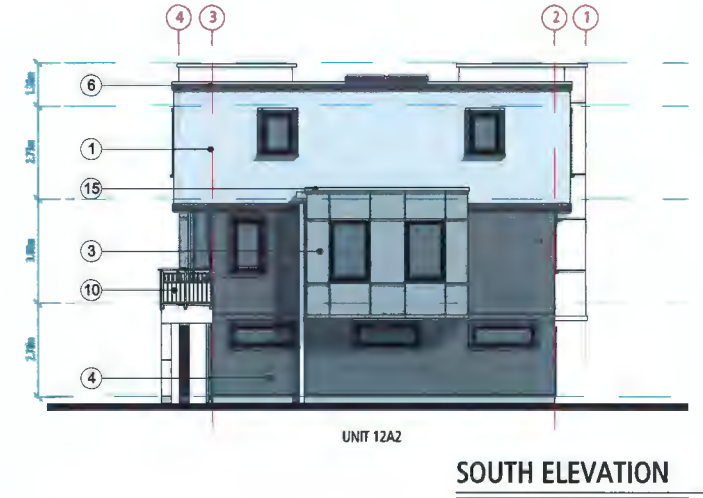
PLAN 4



WEST ELEVATION



EAST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION

**EXTERIOR FINISHES SCHEDULE**

1	EIFS STUCCO TEXTURED	Benjamin Moore_Stonington Gray HC-170
2	EIFS STUCCO SMOOTH	Benjamin Moore_Swiss Coffee CC-80
3	EIFS STUCCO SMOOTH	Benjamin Moore_Escarpment CC-518
4	HORIZONTAL SIDING	Hardie Lap Siding_Aged Pewter
5	BRICK	DXL_Urban Gray Klaycoat
6	HORIZONTAL WOOD TRIMS	Benjamin Moore_Midsummer Night BM 2134-20
7	WINDOW & DOOR TRIM	Benjamin Moore_Midsummer Night BM 2134-20
8	VINYL WINDOWS	Black
9 a-h	EXTERIOR DOOR	varies (see accent colours)
10	METAL GUARDRAIL	Benjamin Moore_Swiss Coffee CC-80
11	GLASS GUARDRAIL	Clear Glass & Black Metal Frame
12	MECH.L ROOM DOOR & STAIR	Benjamin Moore_Midsummer Night BM 2134-20
13	GARAGE DOOR	Painted to match BM_Swiss Coffee CC-80
14	METAL FLASHING	Benjamin Moore_Swiss Coffee CC-80
15	METAL FLASHING	Benjamin Moore_Escarpment CC-518

**ACCENT (Door) COLOURS**

9a	Bldg 1 + 5	Sherwin Williams-SW 6761 Thermal Springs
9b	Bldg 1 + 5	Sherwin Williams-SW 6753 Jargon Jade
9c	Bldg 2 + 4	Sherwin Williams-SW 6790 Adriatic Sea
9d	Bldg 2 + 4	Sherwin Williams-SW 6690 Dunes
9e	Bldg 2 + 4	Sherwin Williams-SW 6652 Rustic Orange
9f	Bldg 3	Sherwin Williams-SW 6634 Copper Harbor
9g	Bldg 6	Sherwin Williams-SW 7568 Show Stopper
9h	Bldg 6	Sherwin Williams-SW 6668 Real Red

# DP 18-829228 PLAN # 35

23400, 23440,  
23460, & 23500  
**GATES AVENUE**  
for  
**Q-R-D**  
QUARRY-ROCK DEVELOPMENT

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGC. THE AUTHORITY ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**ELEVATIONS BUILDING 2**  
SCALE: 1 : 100  
0 2M 4M 6M

DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

PLAN 5

MAY 21, 2021



NORTH ELEVATION (BLDG. 3&5)  
SOUTH ELEVATION (BLDG. 4&6)



SOUTH ELEVATION (BLDG. 3&5)  
NORTH ELEVATION (BLDG. 4&6)



WEST ELEVATION (BLDG. 3&5)  
EAST ELEVATION (BLDG. 4&6)

**EXTERIOR FINISHES SCHEDULE**

1 EIFS STUCCO TEXTURED	Benjamin Moore_Stonington Gray HC-170
2 EIFS STUCCO SMOOTH	Benjamin Moore_Swiss Coffee OC-60
3 EIFS STUCCO SMOOTH	Benjamin Moore_Escarpment CC-518
4 HORIZONTAL SIDING	Hardie Lap Siding_Aged Pewter
5 BRICK	DL_Urban Gray Klaycoat
6 HORIZONTAL WOOD TRIMS	Benjamin Moore_Midsummer Night BM 2134-20
7 WINDOW & DOOR TRIM	Benjamin Moore_Midsummer Night BM 2134-20
8 VINYL WINDOWS	Black
9 e-h EXTERIOR DOOR	various (see accent colours)
10 METAL GUARDRAIL	Benjamin Moore_Swiss Coffee OC-60
11 GLASS GUARDRAIL	Clear Glass & Black Metal Frame
12 MECH. ROOM DOOR & STAIR	Benjamin Moore_Midsummer Night BM 2134-20
13 GARAGE DOOR	Painted to match BM_Swiss Coffee OC-60
14 METAL FLASHING	Benjamin Moore_Swiss Coffee OC-60
15 METAL FLASHING	Benjamin Moore_Escarpment CC-518

**ACCENT (Door) COLOURS**

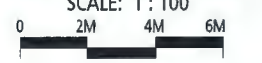
9a Bldg 1 + 5	Sherwin Williams- SW 6761 Thermal Springs
9b Bldg 1 + 5	Sherwin Williams- SW 8753 Jargon Jade
9c Bldg 2 + 4	Sherwin Williams- SW 6790 Adriatic Sea
9d Bldg 2 + 4	Sherwin Williams- SW 6890 Copper Harbor
9e Bldg 3	Sherwin Williams- SW 6890 Copper Harbor
9f Bldg 3	Sherwin Williams- SW 6834 Copper Harbor
9g Bldg 6	Sherwin Williams- SW 7588 Show Stopper
9h Bldg 6	Sherwin Williams- SW 6888 Real Red

DP 18-829228 PLAN # 36

23400, 23440,  
23460, & 23500  
**GATES AVENUE**  
for  
**Q-R-D QUARRY-ROCK DEVELOPMENT**

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND AIFBC. THE AUTHORITY ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.

**ELEVATIONS BUILDING 3,4,5,6**  
SCALE: 1 : 100



DP18-829228  
MAY 10, 2021

**FOUGERE architecture inc.**  
BRITISH COLUMBIA • ALBERTA • WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21 2021



**GATES AVENUE STREETSCAPE (NORTH)**



**YARDSCAPE (WEST)**



**YARDSCAPE (SOUTH)**

23400, 23440,  
23460, & 23500

**GATES AVENUE**

for

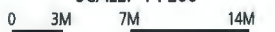


THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**STREETSCAPE & YARDSCAPE**

SCALE: 1 : 200



DP18-829228  
MAY 10, 2021



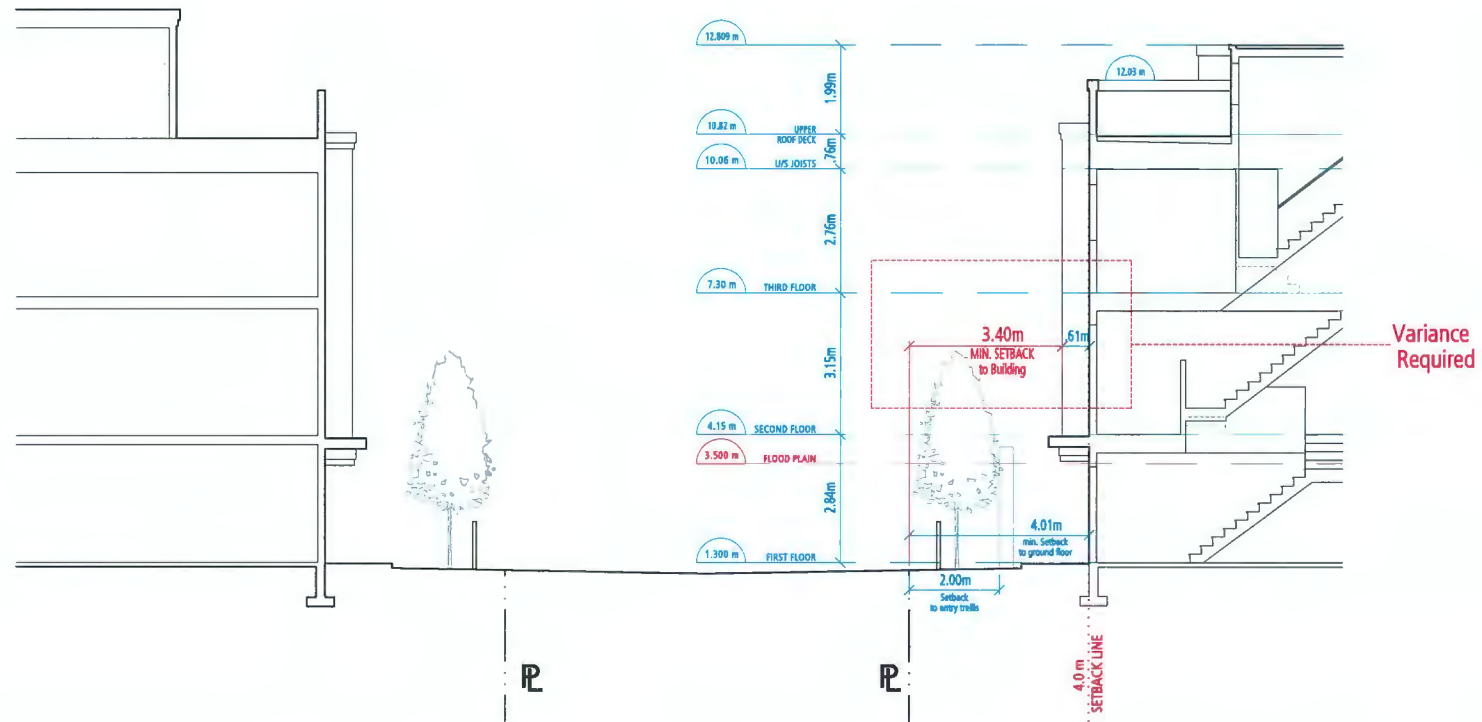
**FOUGERE**  
architecture inc.

BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V6T 4L6 fougerearchitecture.ca

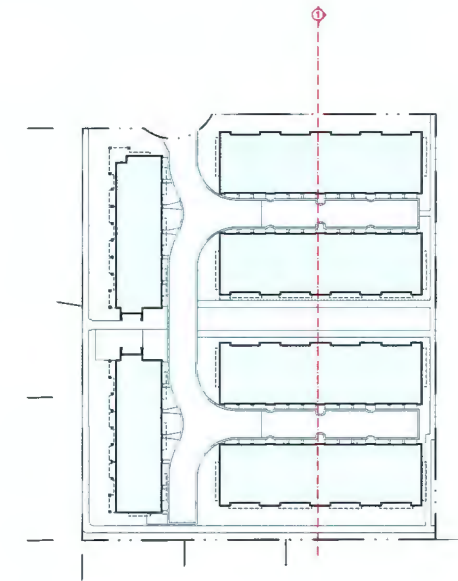
**PLAN 22**

MAY 21, 2021

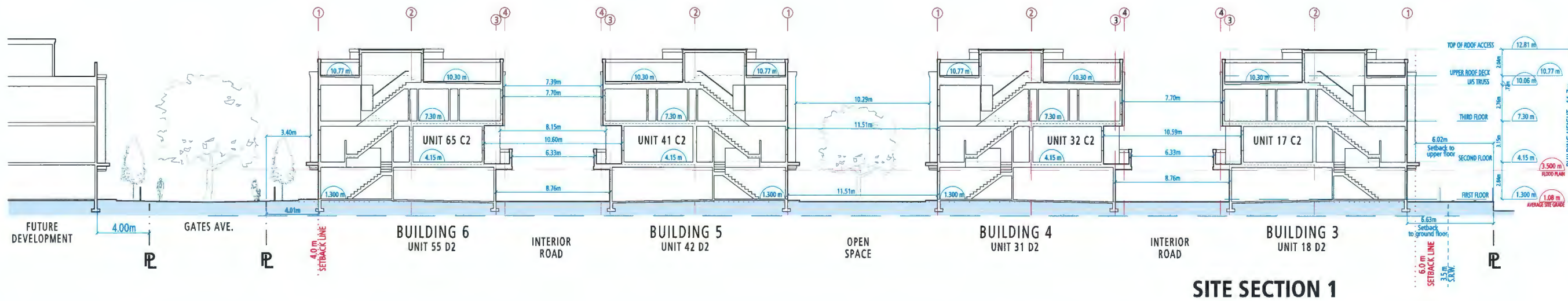
**DP 18-829228 PLAN # 37**



**DETAIL SECTION 1**  
 Front Yard Setbacks  
 SCALE: 1 : 75



23400, 23440,  
 23460, & 23500  
**GATES AVENUE**

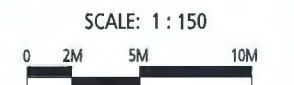


**SITE SECTION 1**

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**SITE SECTIONS**

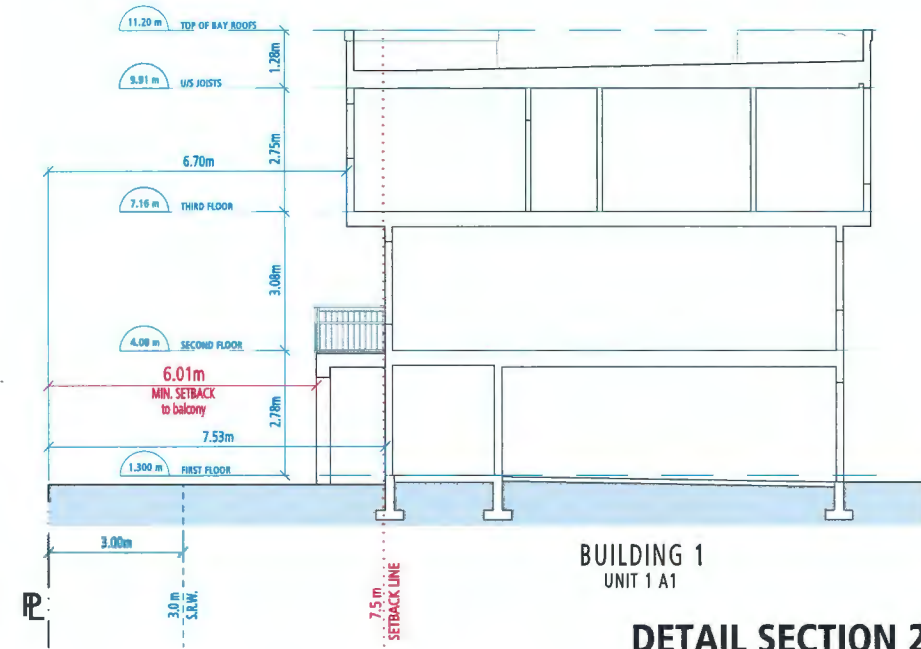


DP18-829228  
 MAY 10, 2021

MAY 21, 2021 **DP 18-829228 PLAN # 38**

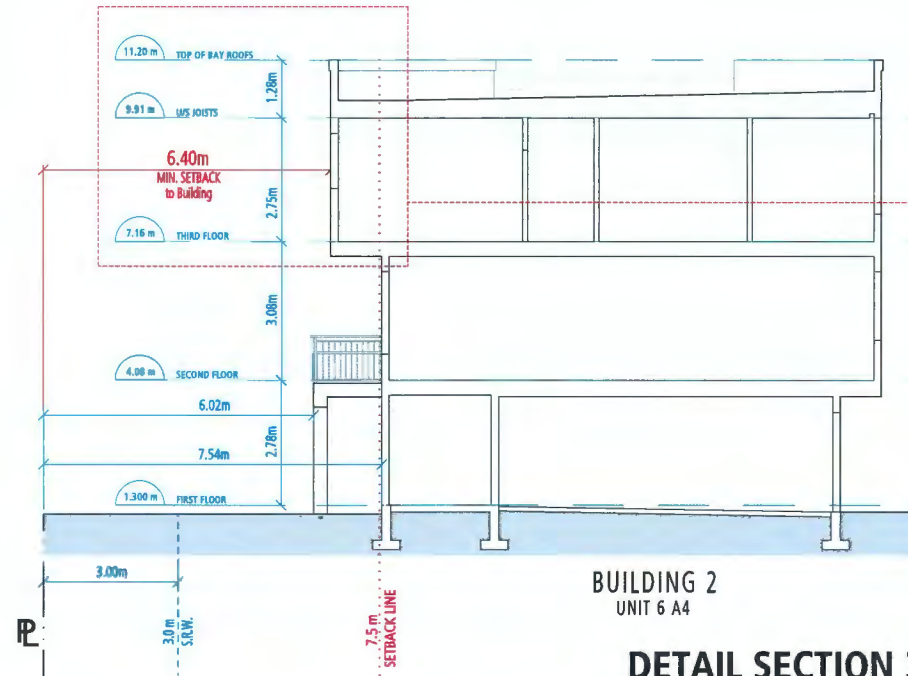


PLAN 23



BUILDING 1  
UNIT 1 A1

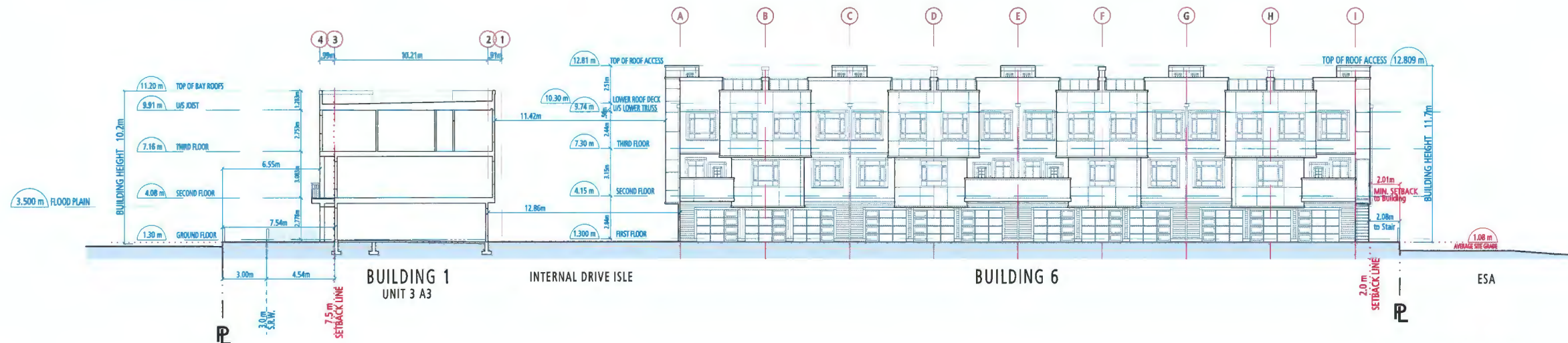
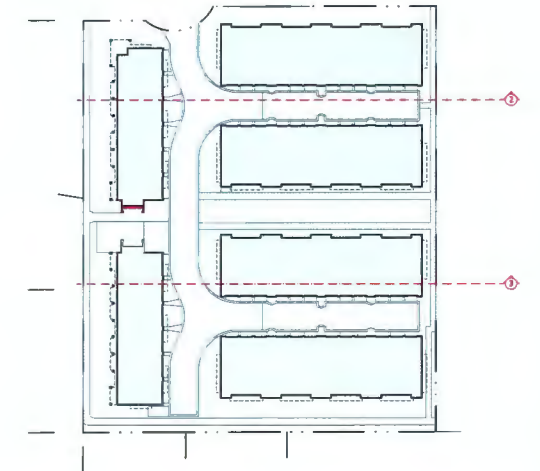
**DETAIL SECTION 2**  
Side Yard Setback  
SCALE: 1:75



BUILDING 2  
UNIT 6 A4

**DETAIL SECTION 3**  
Side Yard Setback  
SCALE: 1:75

Variance  
Required



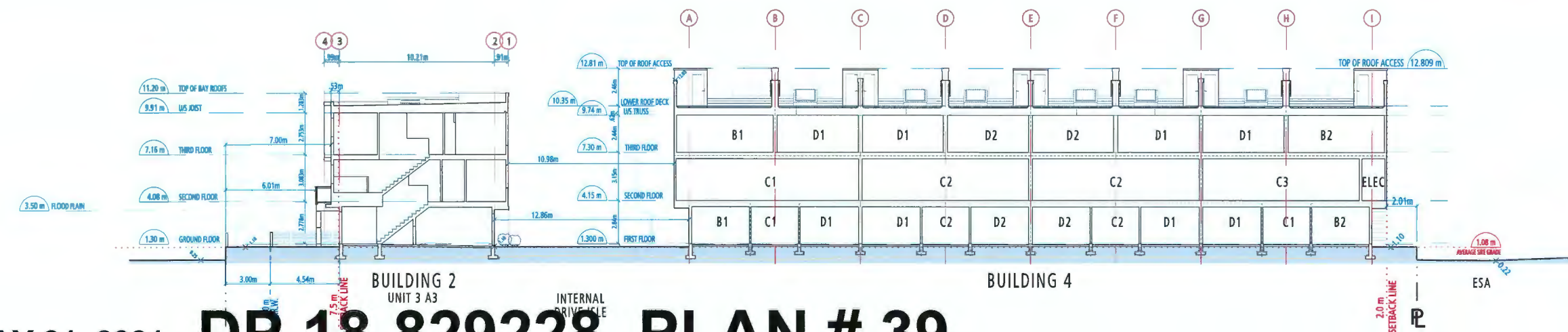
BUILDING 1  
UNIT 3 A3

INTERNAL DRIVE ISLE

BUILDING 6

ESA

**SITE SECTION 2**



BUILDING 2  
UNIT 3 A3

INTERNAL DRIVE ISLE

BUILDING 4

ESA

**SITE SECTION 3**

23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**SITE SECTIONS**

SCALE: 1:150



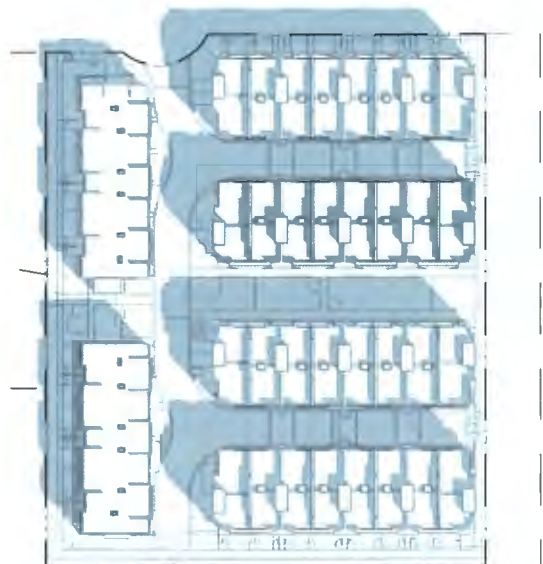
DP18-829228  
MAY 10, 2021



**PLAN 24**

MAY 21, 2021

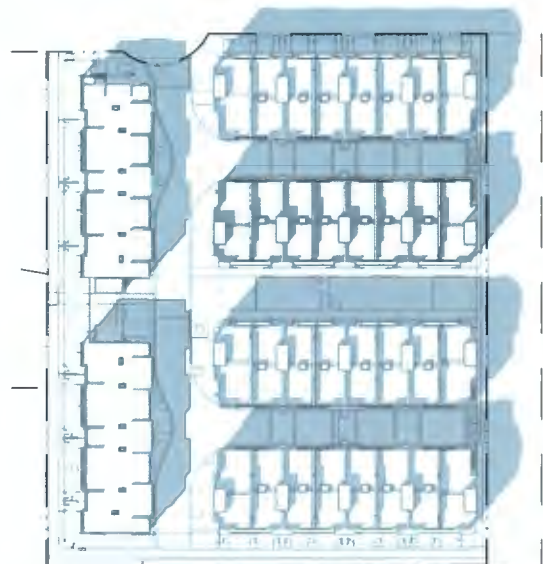
**DP 18-829228 PLAN # 39**



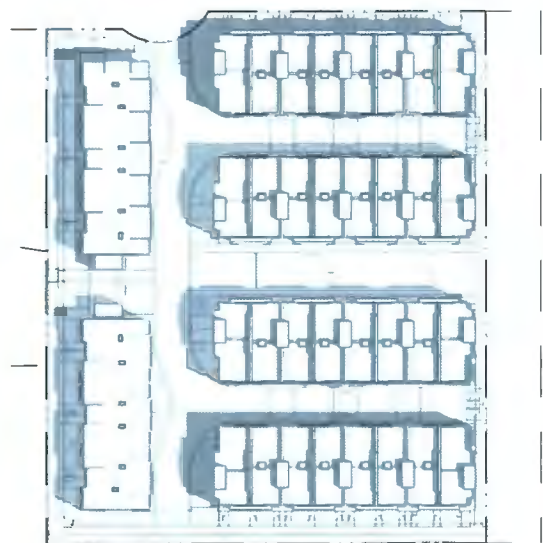
MARCH 21, 10 am



MARCH 21, 12 pm



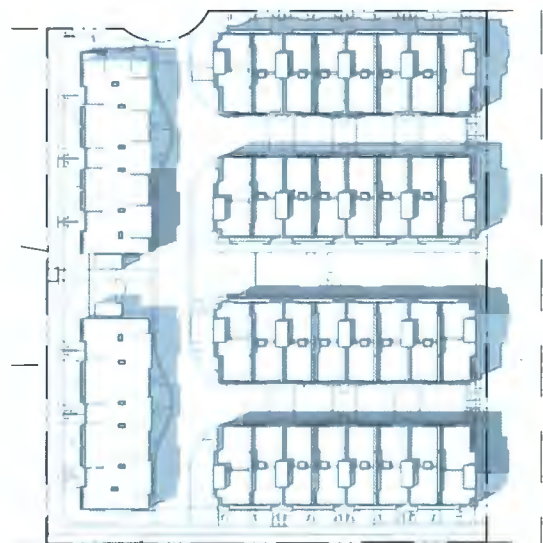
MARCH 21, 2 pm



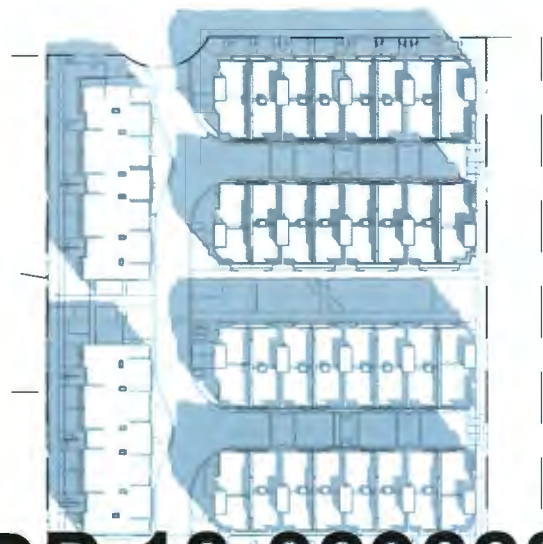
JUNE 21, 10 am



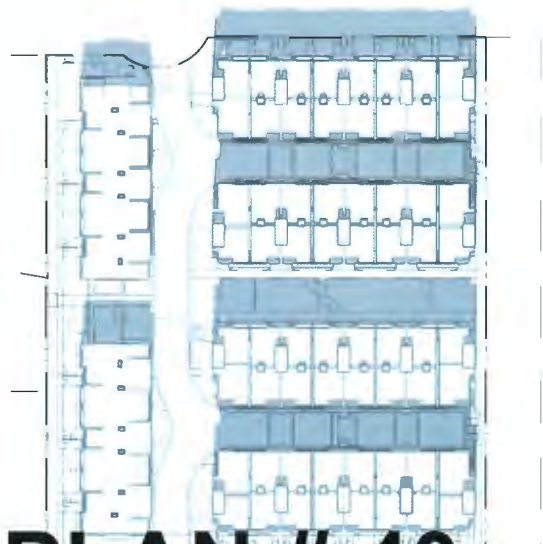
JUNE 21, 12 pm



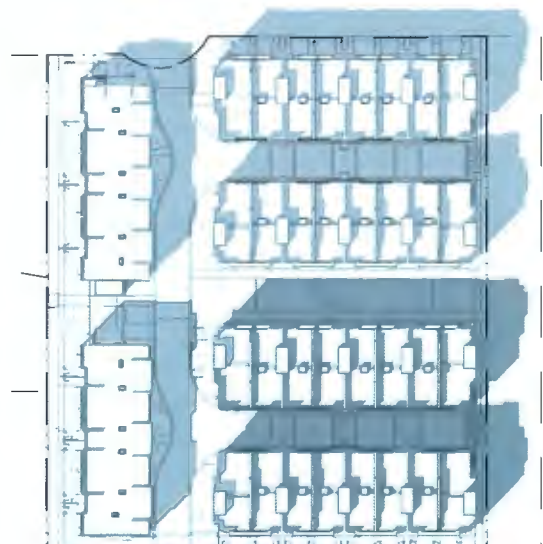
JUNE 21, 2 pm



SEPTEMBER 21, 10 am



SEPTEMBER 21, 12 pm



SEPTEMBER 21, 2 pm

MAY 21, 2021

**DP 18-829228 PLAN # 40**



23400, 23440,  
23460, & 23500

**GATES  
AVENUE**

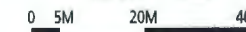
for



THIS DOCUMENT HAS BEEN ELECTRONICALLY  
CERTIFIED WITH DIGITAL CERTIFICATE AND  
ENCRYPTION TECHNOLOGY AUTHORIZED BY  
THE AIBC AND AREGBC. THE AUTHENTIC  
ORIGINAL IS IN ELECTRONIC FORM  
TRANSMITTED TO YOU. ANY PRINTED VERSION  
CAN BE RELIED UPON AS A TRUE COPY OF THE  
ORIGINAL WHEN SUPPLIED BY THE ORIGINAL  
AUTHOR. BEARING IMAGES OF THE  
PROFESSIONAL SEAL AND DIGITAL CERTIFICATE  
OR WHEN PRINTED FROM THE DIGITALLY  
CERTIFIED ELECTRONIC FILE SENT TO YOU.



**SHADOW  
ANALYSIS**  
SCALE: 1 : 600



DP18-829228  
MAY 10, 2021



**FOUGERE  
architecture inc.**

BRITISH COLUMBIA • ALBERTA • WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

**PLAN 25**





AERIAL 1- View from north west



AERIAL 2- View from south east

23400, 23440,  
23460, & 23500

# GATES AVENUE

for

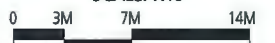


THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## PERSPECIVES

SCALE: NTS



DP18-829228  
MAY 10, 2021



BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitect.com

**PLAN 26**

MAY 21, 2021

**DP**

**18-829228 PLAN # 41**



VIEW 1- West Strollway



VIEW 2- West Strollway

23400, 23440,  
23460, & 23500

# GATES AVENUE

for



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## PERSPECIVES

SCALE: NTS  
0 3M 7M 14M

DP18-829228  
MAY 10, 2021



PLAN 27

MAY 21, 2021

DP 18-829228 PLAN # 42



VIEW 3- North Strollway



VIEW 4- South Strollway

23400, 23440,  
23460, & 23500

# GATES AVENUE

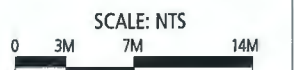
for



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHORITATIVE ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## PERSPECIVES



DP18-829228  
MAY 10, 2021



PLAN 28

MAY 21, 2021

DP

18-829228 PLAN # 43



View 5- Open Space



View 5- Open Space

23400, 23440,  
23460, & 23500

# GATES AVENUE

for



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHORITY OF THE ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## PERSPECIVES



DP18-829228  
MAY 17, 2021



**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA • ALBERTA • WASHINGTON  
202-2425 Quebec Street 604.873.2907

PLAN 29 Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021 **DP 18-829228 PLAN #**



VIEW 7- Open Space



VIEW 8- Patios

23400, 23440,  
23460, & 23500

# GATES AVENUE

for



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHORITY ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



## PERSPECIVES

SCALE: NTS  
0 3M 7M 14M

DP18-829228  
MAY 17, 2021



**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907

PLAN 30 Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021

**DP 18-829228 PLAN # 45**

STUCCO: TEXTURED



BM\_Stonington Grey

STUCCO: SMOOTH



BM\_Swiss Coffee

TRIMS & COLUMNS



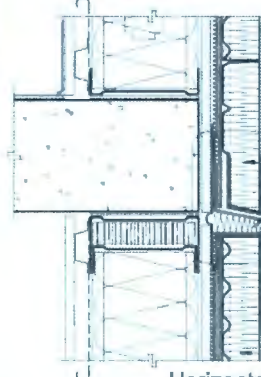
BM\_Midsummer Night

STUCCO TEXTURE



MISTRAL

JOINT DETAIL



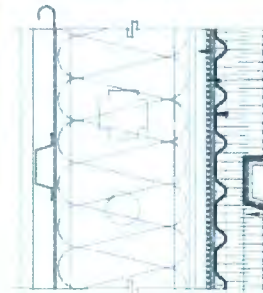
Horizontal Control Joint

STUCCO TEXTURE



GRANULAR

JOINT DETAIL



Aesthetic Grooves

BRICK



IXL\_Urban Grey Klaycoat

SIDING



James Hardie\_Aged Pewter

EXTERIOR FINISHES SCHEDULE

1	EIFS STUCCO TEXTURED	Benjamin Moore_Stonington Gray HC-170
2	EIFS STUCCO SMOOTH	Benjamin Moore_Swiss Coffee OC-60
3	EIFS STUCCO SMOOTH	Benjamin Moore_Escarpment CC-518
4	HORIZONTAL SIDING	Hardie Lap Siding_Aged Pewter
5	BRICK	IXL_Urban Grey Klaycoat
6	HORIZONTAL WOOD TRIMS	Benjamin Moore_Midsummer Night BM 2134-20
7	WINDOW & DOOR TRIM	Benjamin Moore_Midsummer Night BM 2134-20
8	VINYL WINDOWS	Black
9 a-h	EXTERIOR DOOR	varies (see accent colours)
10	METAL GUARDRAIL	Benjamin Moore_Swiss Coffee OC-60
11	GLASS GUARDRAIL	Clear Glass & Black Metal Frame
12	MECH. ROOM DOOR & STAIR	Benjamin Moore_Midsummer Night BM 2134-20
13	GARAGE DOOR	Painted to match BM_Swiss Coffee OC-60
14	METAL FLASHING	Benjamin Moore_Swiss Coffee OC-60
15	METAL FLASHING	Benjamin Moore_Escarpment CC-518

ACCENT (Door) COLOURS

9a	Sherwin Williams- SW 6761 Thermal Springs
9b	Sherwin Williams- SW 6753 Jargon Jade
9c	Sherwin Williams- SW 6790 Adriatic Sea
9d	Sherwin Williams- SW 6803 Danube
9e	Sherwin Williams- SW 6628 Robust Orange
9f	Sherwin Williams- SW 6634 Copper Harbor
9g	Sherwin Williams- SW 7588 Show Stopper
9h	Sherwin Williams- SW 6868 Real Red

DOOR COLOURS



9a



9b



9c



9d



9e



9f



9g



9h

BLDG 1 & 5

BLDG 2 & 4

BLDG 3

BLDG 6

MAY 21, 2021

DP 18-829228 PLAN # 46

23400, 23440,  
23460, & 23500  
**GATES AVENUE**

for



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**MATERIAL BOARD**

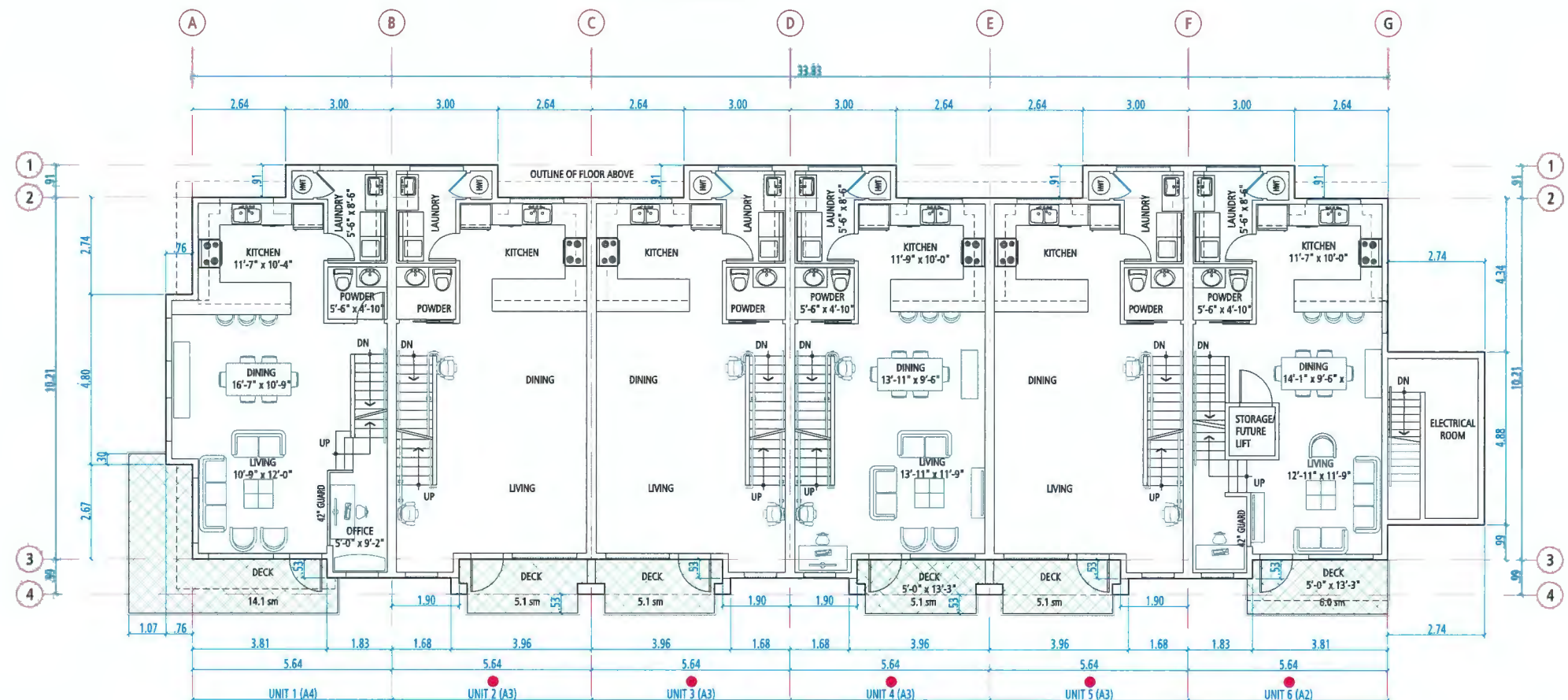
DP18-829228  
MAY 10, 2021



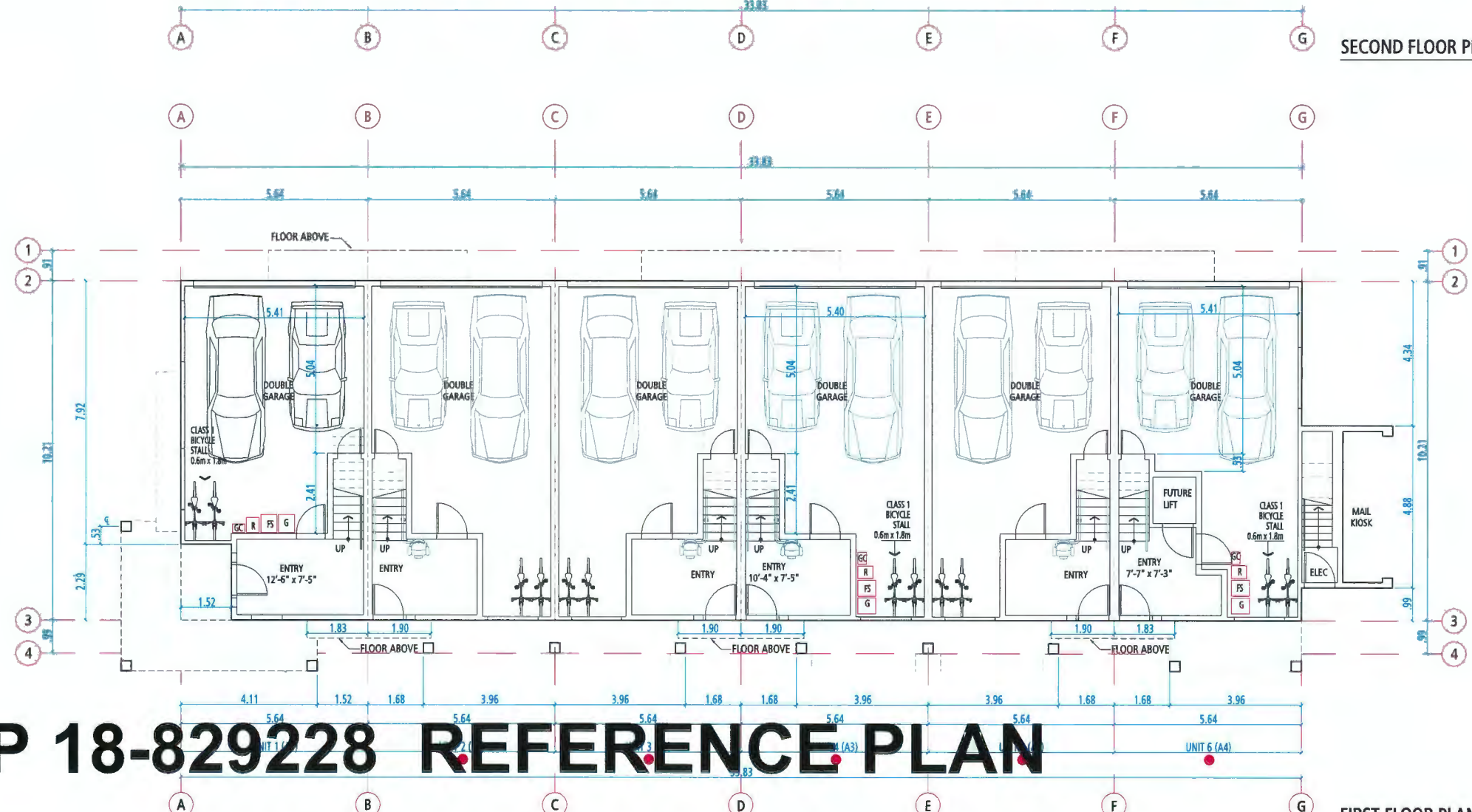
**FOUGERE**  
architecture inc.

BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

PLAN 30



SECOND FLOOR PLAN



FIRST FLOOR PLAN

**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**FLOOR PLANS  
BUILDING 1**  
SCALE: 1 : 75



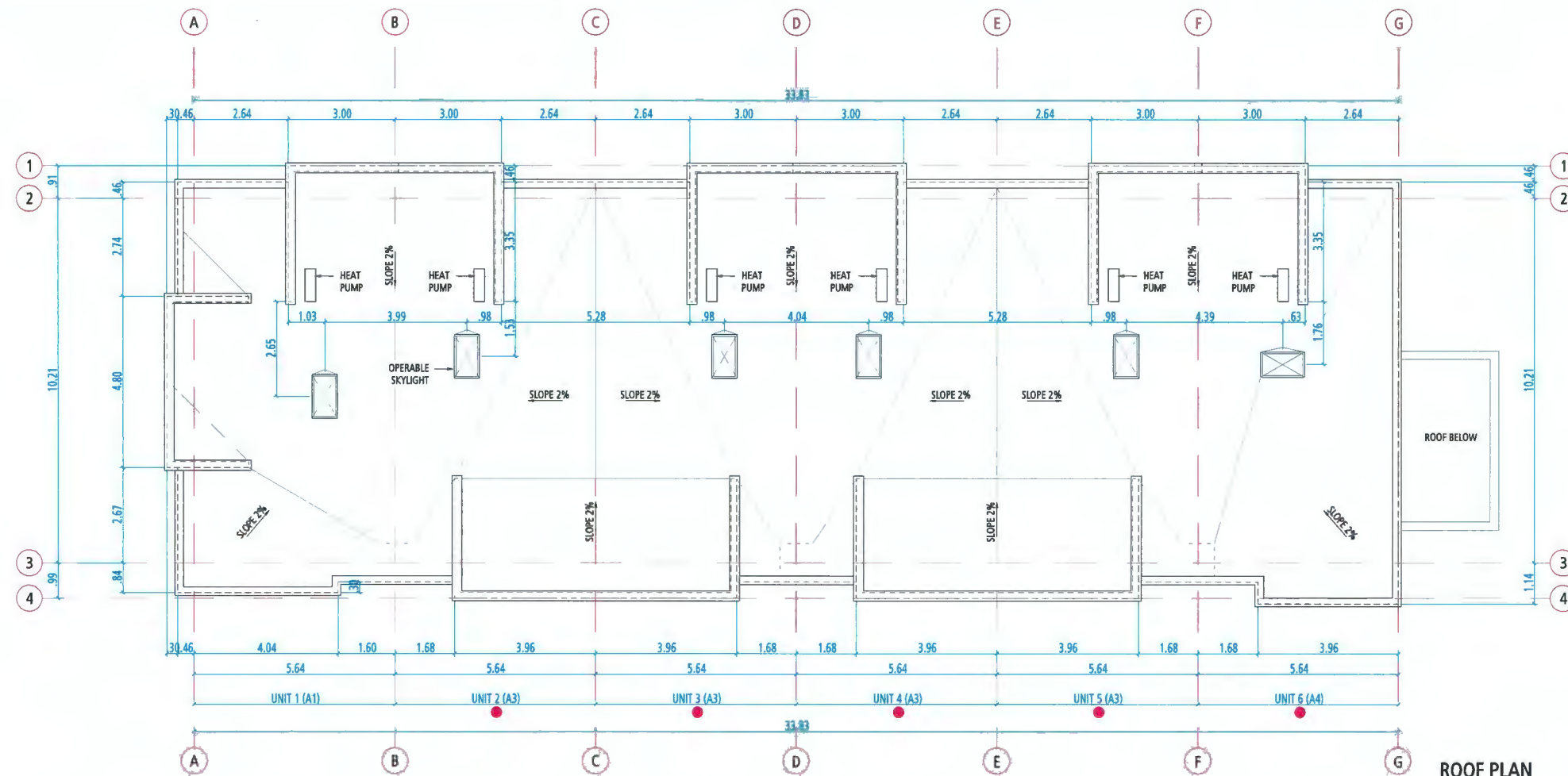
DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

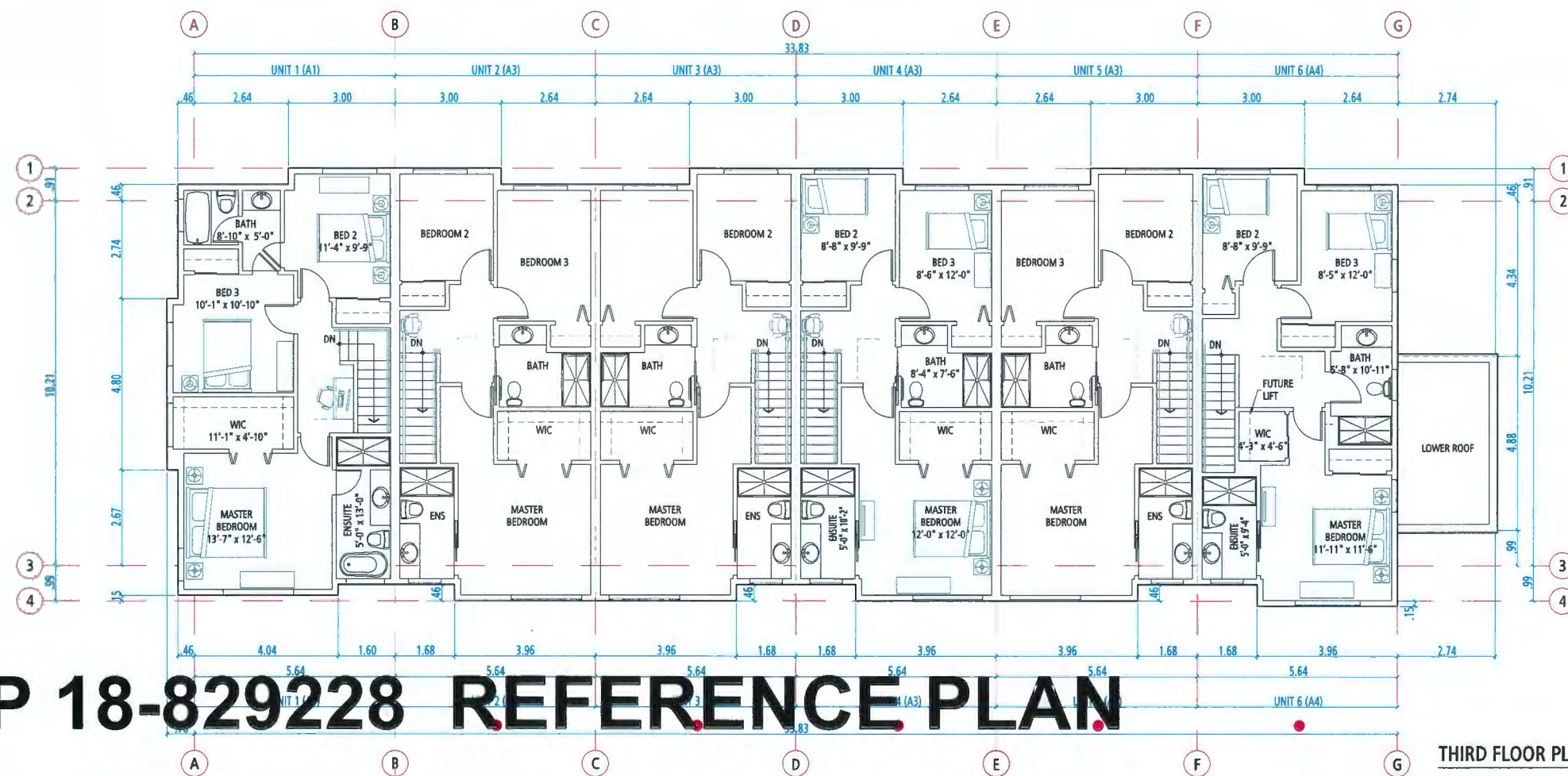
MAY 21, 2021

**DP 18-829228 REFERENCE PLAN**

PLAN 7



ROOF PLAN



THIRD FLOOR PLAN

**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

23400, 23440,  
23460, & 23500  
**GATES  
AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**FLOOR PLANS  
BUILDING 1**

SCALE: 1 : 75  
0 1.5M 3M 4.5M

DP18-829228  
MAY 10, 2021

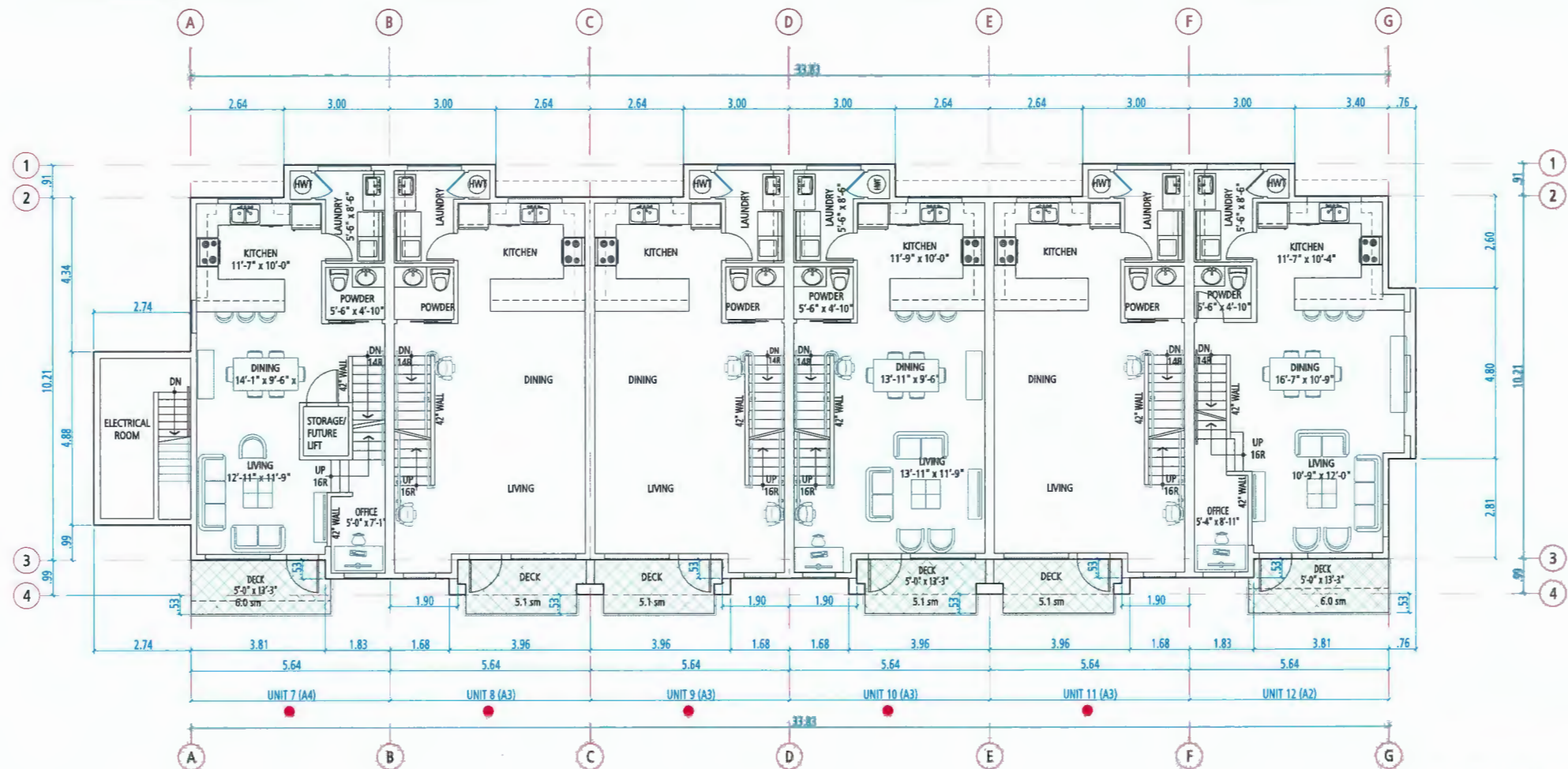
**FOUGERE  
architecture inc.**  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021

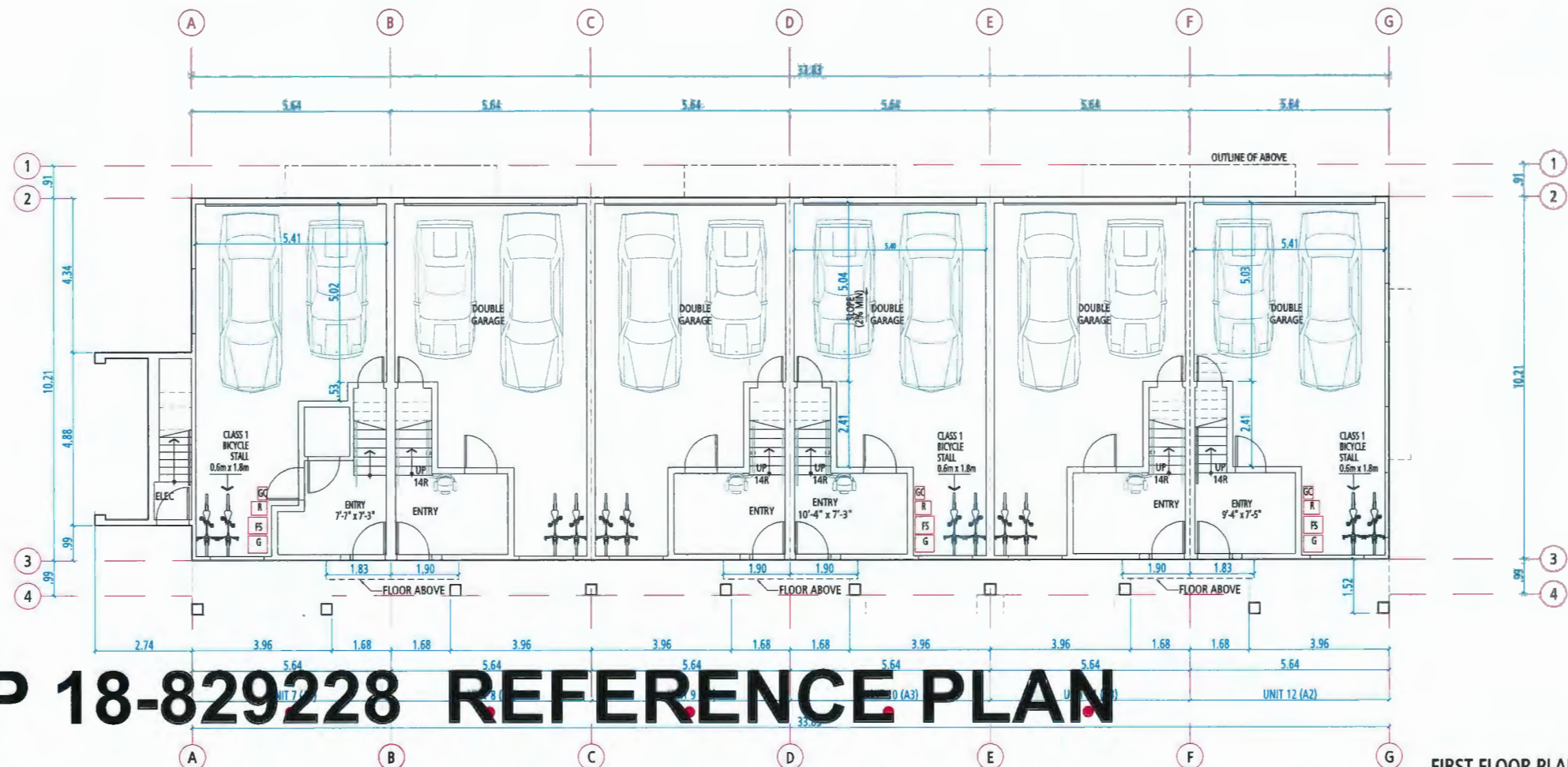
**DP 18-829228 REFERENCE PLAN**

PLAN 8





SECOND FLOOR PLAN



FIRST FLOOR PLAN

**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

23400, 23440,  
23460, & 23500  
**GATES AVENUE**  
for  
**Q·R·D**  
QUARRY·ROCK DEVELOPMENTS

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND AREGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.

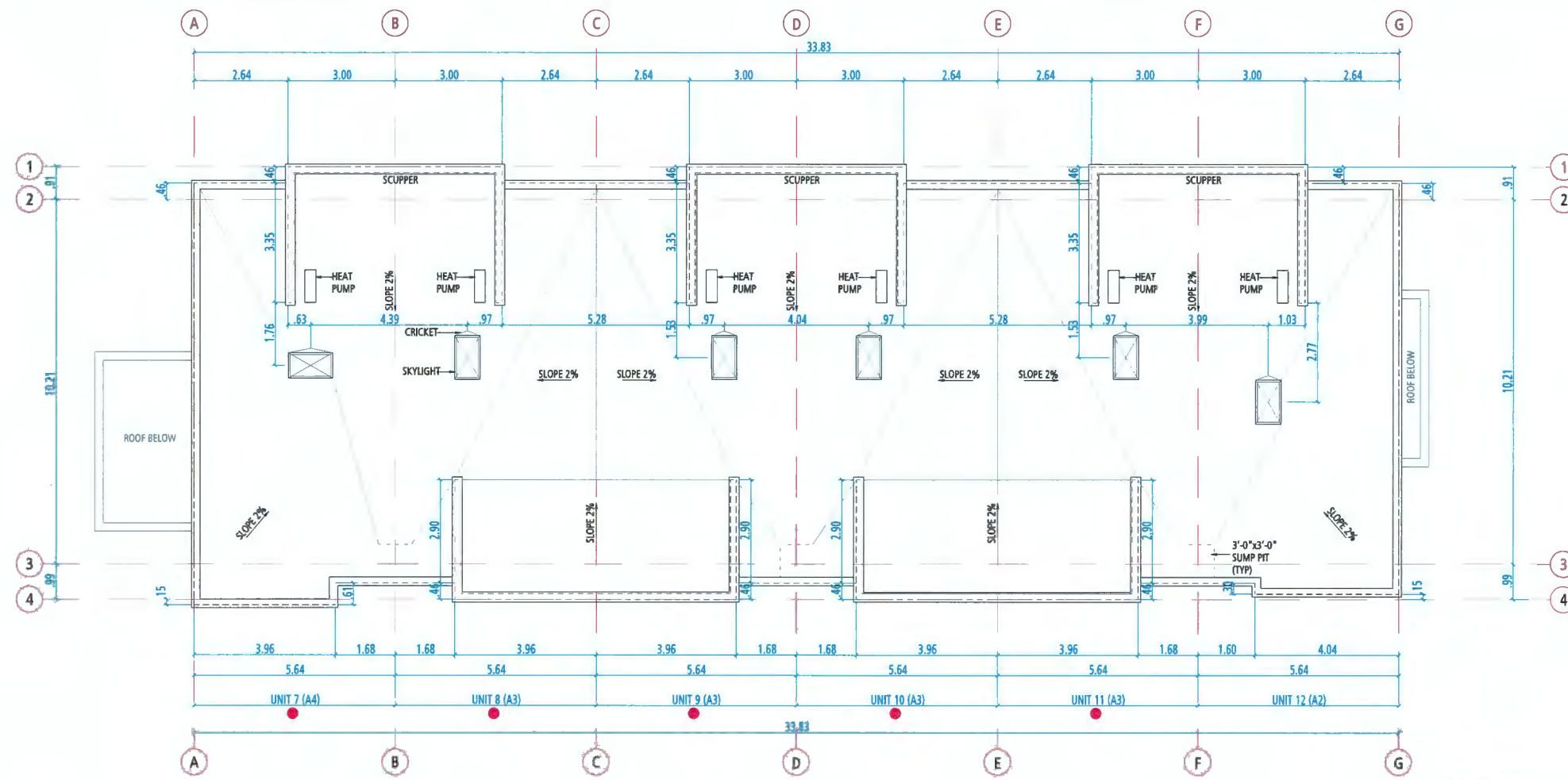


**FLOOR PLANS  
BUILDING 2**  
SCALE: 1 : 75  
0 1.5M 3M 4.5M

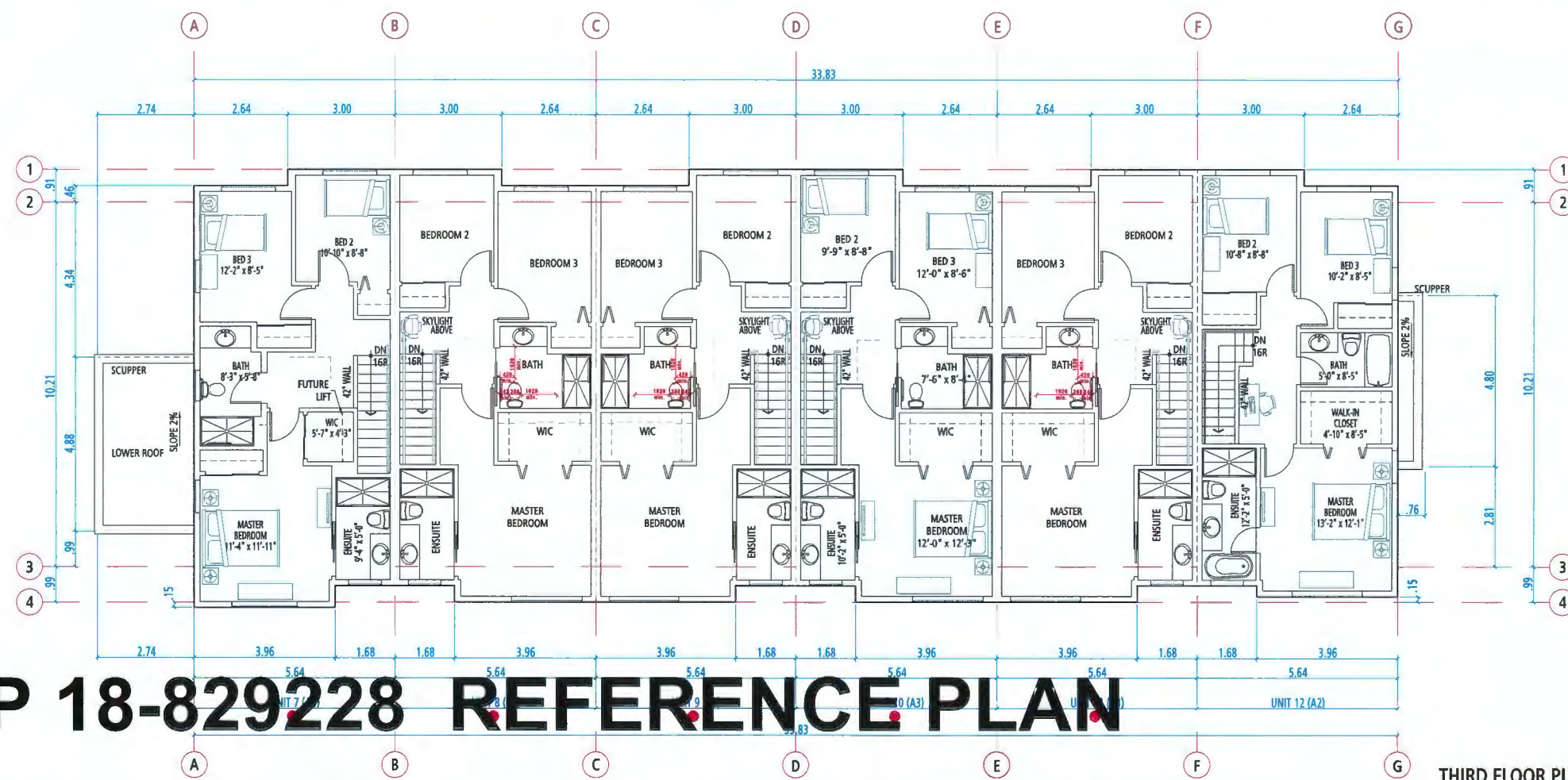
DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA · ALBERTA · WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021 **DP 18-829228 REFERENCE PLAN**



ROOF PLAN



THIRD FLOOR PLAN

**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

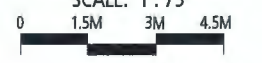
23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**FLOOR PLANS  
BUILDING 2**  
SCALE: 1:75



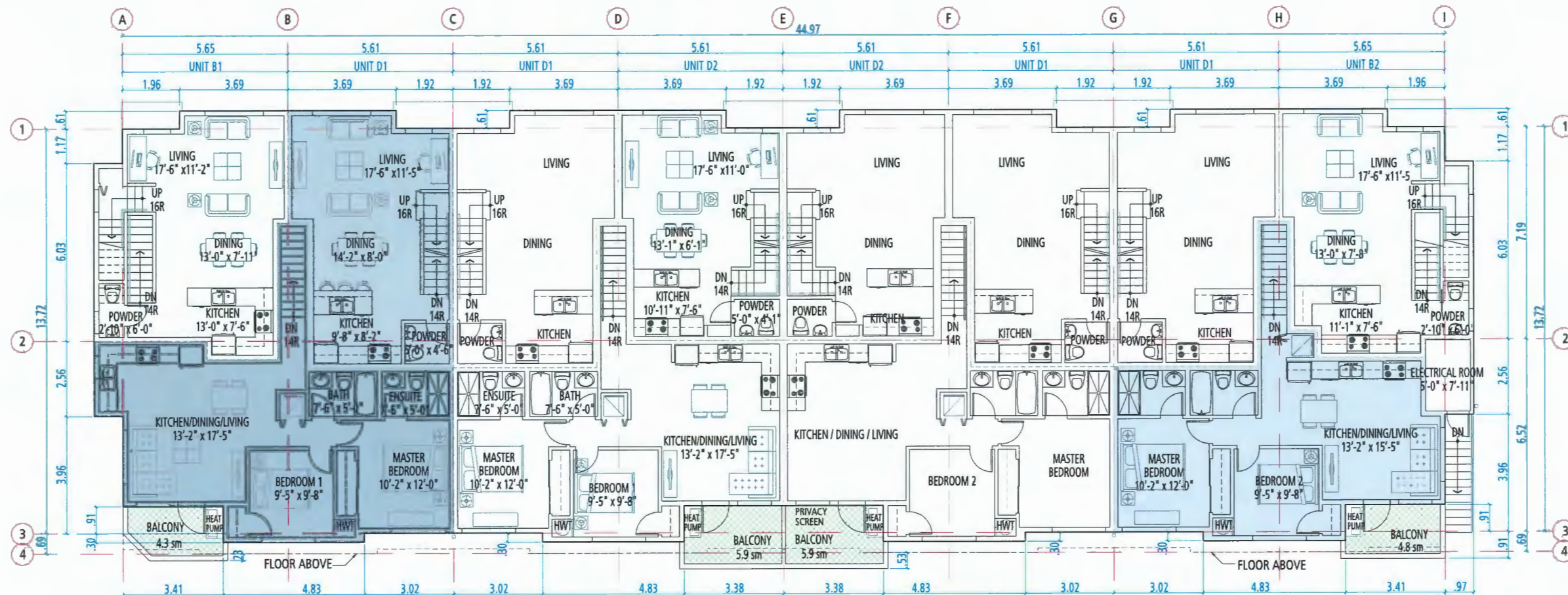
DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L5 fougerearchitecture.ca

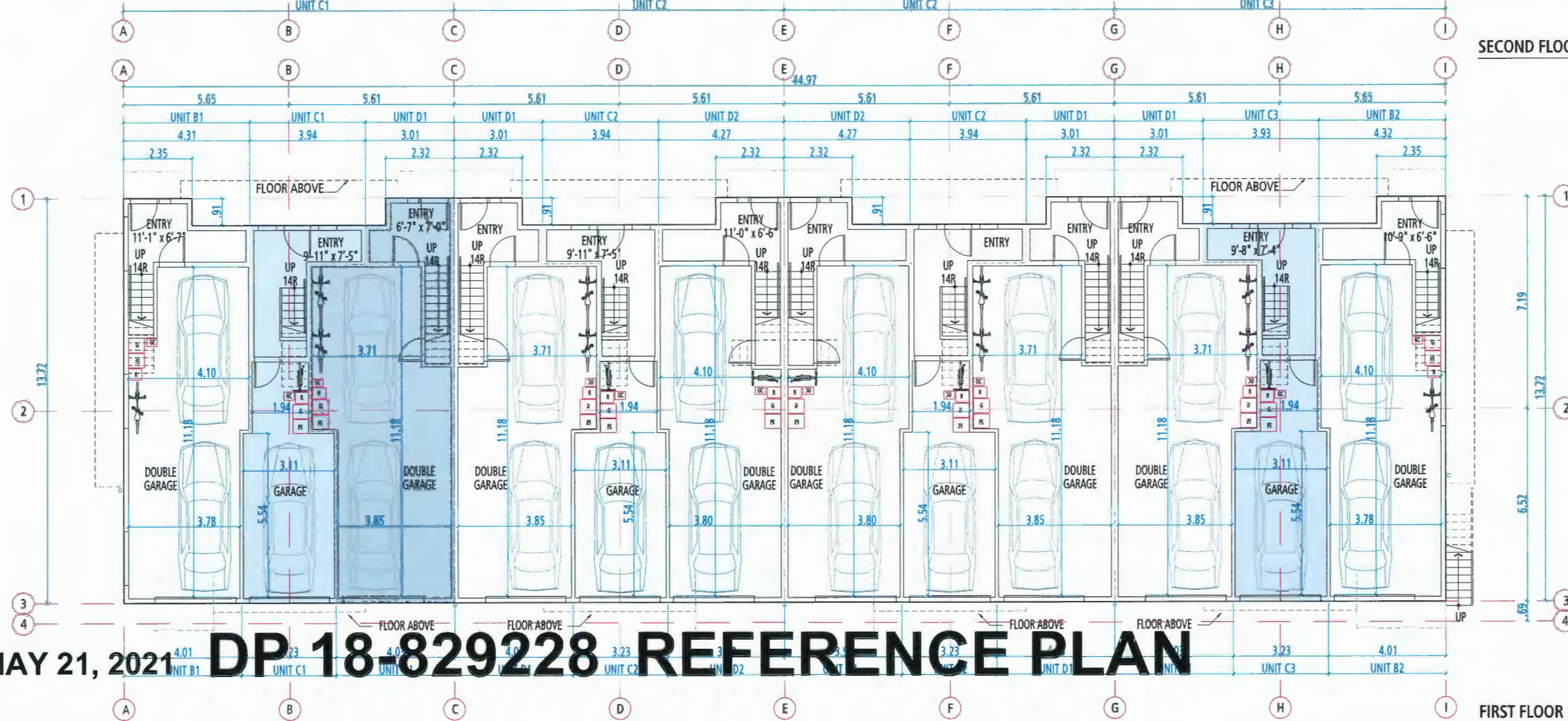
PLAN 10

MAY 21, 2021

**DP 18-829228 REFERENCE PLAN**



SECOND FLOOR PLAN



FIRST FLOOR PLAN

**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND AFCEBC. THE AUTHENTICATIVE ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.

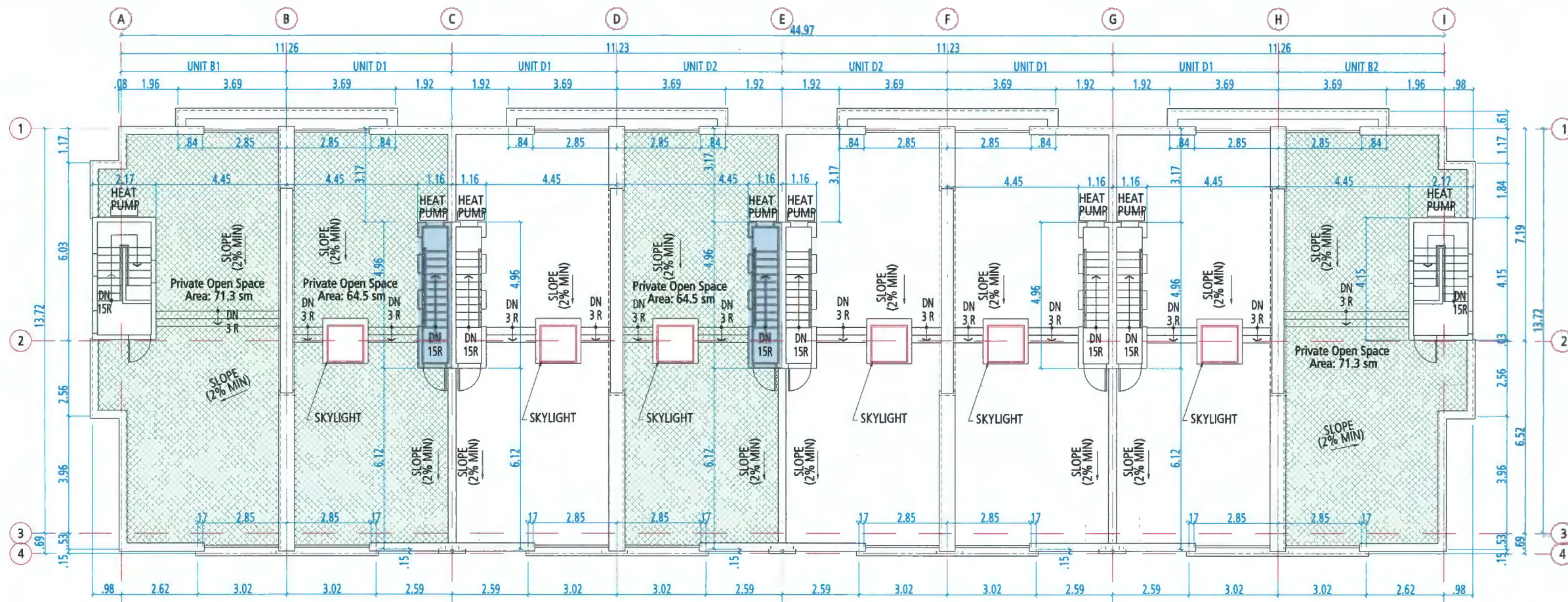


**FLOOR PLANS  
BUILDING 3-6**  
SCALE: 1:75  
0 1.5M 3M 4.5M

DP18-829228  
MAY 10, 2021

**FOUGERE architecture inc.**  
BRITISH COLUMBIA • ALBERTA • WASHINGTON  
202-2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021 **DP 18-829228 REFERENCE PLAN**



SECOND FLOOR PLAN

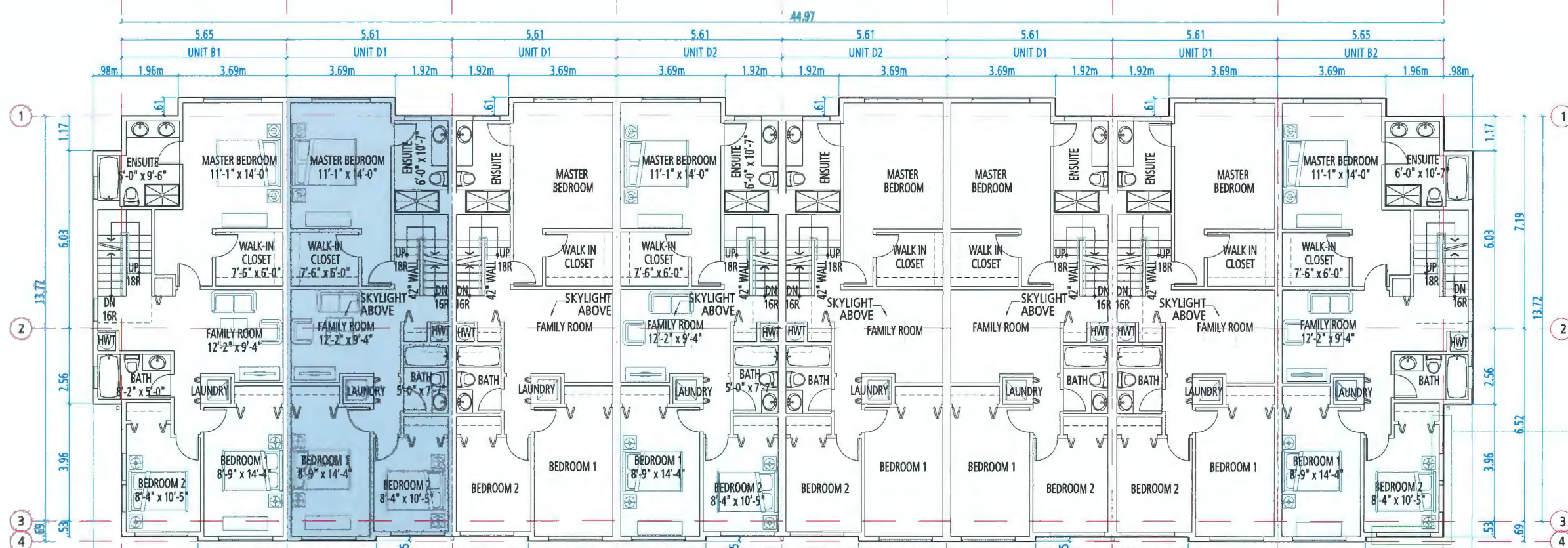
**PROVISION OF ACCESSIBILITY FEATURES  
"AGING-IN-PLACE" REQUIREMENTS  
ON ALL UNITS:**

- Blocking in bathroom walls for installation of grab-bars (beside toilet, tub and shower)
- Provision of lever door handles for plumbing fixtures and door handles
- Stairwell Handrails
- Entry doors minimum 855 mm clear opening (3'-0" swinging door spec.)
- Door from garage to living area minimum 2'-10" (swinging door spec.)

**ACOUSTIC UPGRADES  
to mitigate noise exposure**

Bedroom 2 of Unit B2 in Buildings 3, 4, 5, & 6 requires 2 layers of 1/2" Gypsum Wall Board

Window upgrade to a minimum OITC rating of 27 in the east and south facing windows of Bedroom 2 of units 24, 25, 48 and 49 of Buildings 4, 5 and 6



FIRST FLOOR PLAN

23400, 23440,  
23460, & 23500  
**GATES AVENUE**  
for  
**Q-R-D**  
QUARRY ROCK

THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE ABC AND APEBC. THE AUTHORITY ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR. BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



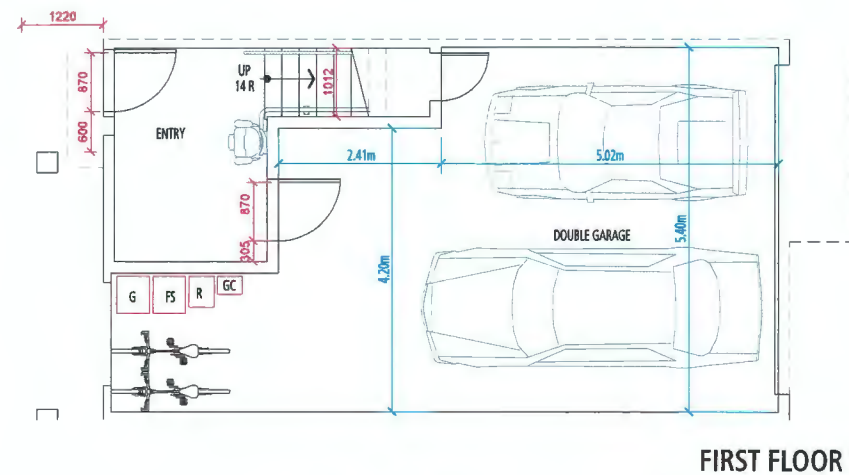
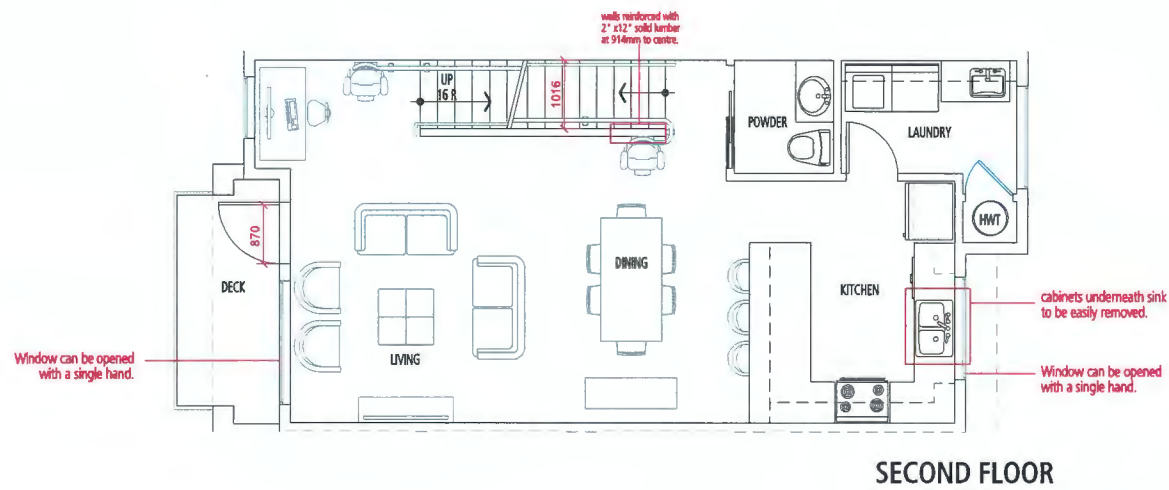
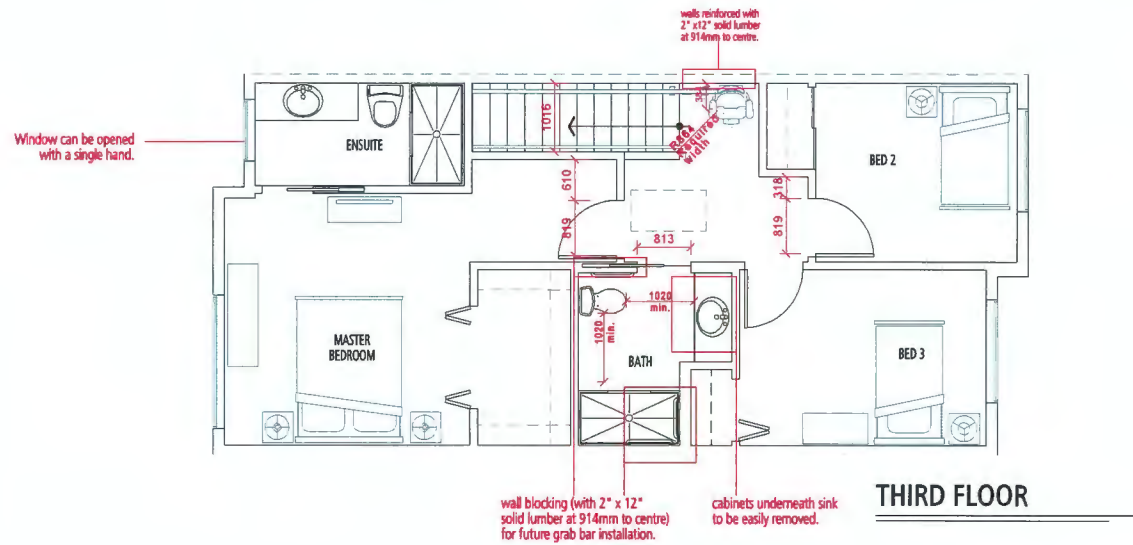
**FLOOR PLANS  
BUILDING 3-6**  
SCALE: 1 : 75  
0 1.5M 3M 4.5M

Acoustical Upgrades (see Note)

DP18-829228  
MAY 10, 2021

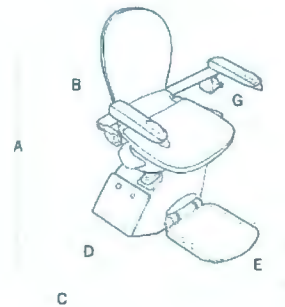
**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA - ALBERTA - WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitect.com

MAY 21, 2021 **DP 18-829228 REFERENCE PLAN**



**UNIT A3**  
(3 Bedrooms End Units)

**Acorn 130 Starlift**



Dimensions	inch
A Overall height	38.5
B Height of Seat	17.25
C Overall depth (from wall)	22.5
D Overall depth (when folded)	12.25
E Width of footrest	12.25
F Overall width	23.25
G Depth of seat	16

This stairlift is independently tested to comply with:

- BS EN 81-40:2008 - European safety standard - 'Specification for powered stairlifts'.
- CE mark - Acorn Stairlift meets the requirements of the applicable European Directive(s).
- ASME compliant for mechanical and electrical hazards - ASME A18.1 and A17.5.
- ISO 9386:2-2000 International standard for stairlifts.

**Specifications**

Motor output speed	120mm/s   4.8inches per second - No greater than 0.15 meters per second
Method of drive	Rack and pinion
Power supply	24V DC (battery)
Maximum capacity	350lbs/158kg
Track	Extruded aluminium
Mains supply	50-60Hz, 100-240V AC

\* NOTE: Acorn, in keeping with its policy of continual development, reserves the right to change specification without notice. All measurements are approximate.

23400, 23440,  
23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND AREGBC. THE AUTHENTIC ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**CONVERTIBLE UNIT PLANS**

SCALE: 1 : 50  
0 1M 2M 3M

DP18-829228  
MAY 10, 2021

**FOUGERE**  
architecture inc.  
BRITISH COLUMBIA • ALBERTA • WASHINGTON  
202 - 2425 Quebec Street 604.873.2907  
Vancouver, BC V5T 4L6 fougerearchitecture.ca

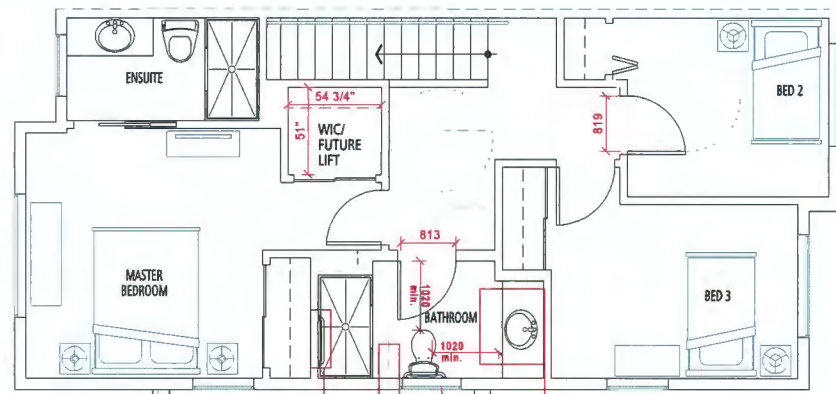
PLAN 20

**Summary of the Convertible Unit Features**

- Entry doors min. 863mm opening.
- Entry door clear exterior floor space min. 1220 mm depth by door width plus 600 mm on latch side.
- Interior doors to entry & main living areas, min. 800 mm clear opening. (2'8" sliding or 2'10" swinging door spec.) with flush thresholds max. 13mm height.
- Patio/balcony min. 860mm clear opening.
- Lever-type handles for doors.
- Stair lift elevator case per manufacturer spec.
- Hallways minimum 900mm min. width.
- Door from garage to living area minimum 800 mm clear opening.
- Min. 1 accessible parking space with min. 4 m garage width.
- Toilet clear floor space min. 1020 mm at side and in front.
- Wall blocking for future installation of grab-bars (toilet, tub and shower).
- Lever-type handles for plumbing fixtures.
- Pressure & temperature control valves on all shower faucets.
- Clear area under future kitchen work space. Plumbing and gas pipes (in-wall and in-floor) located clear of under counter area of future work space (stove, sink & min. 810 mm wide counter).
- 1500 mm turning diameter or turning path diagram in kitchen.
- One window that can be opened with a single hand (bathroom, kitchen, living room).

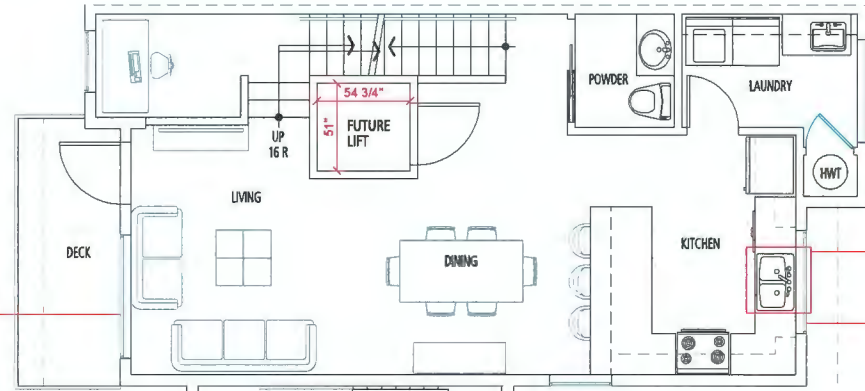
MAY 21, 2021

**DP 18-829228 REFERENCE PLAN**



- wall blocking (with 2" x 12" solid lumber at 914mm to centre) for future grab bar installation.  
 - fold-downs style grab bar beside toilet  
 cabinets underneath sink to be easily removed.  
 Window can be opened with a single hand.

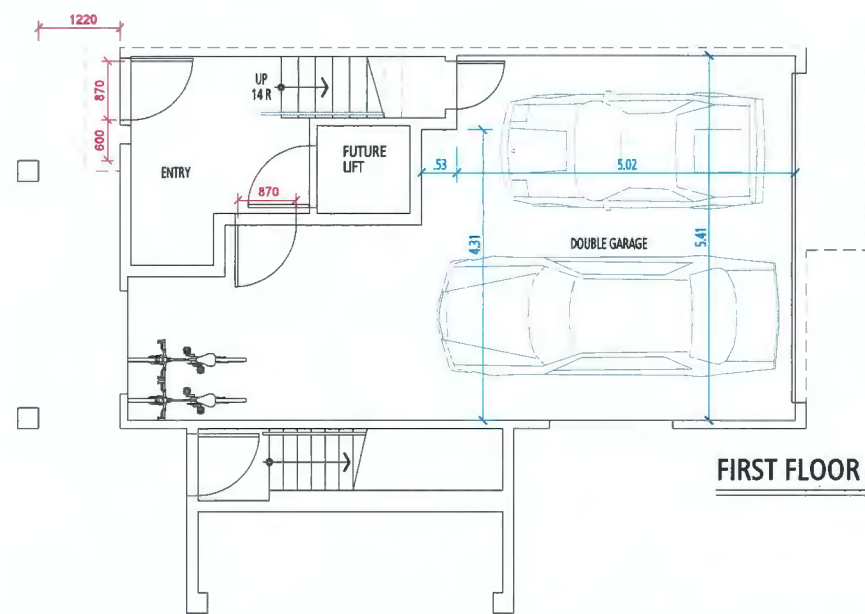
THIRD FLOOR



Window can be opened with a single hand.

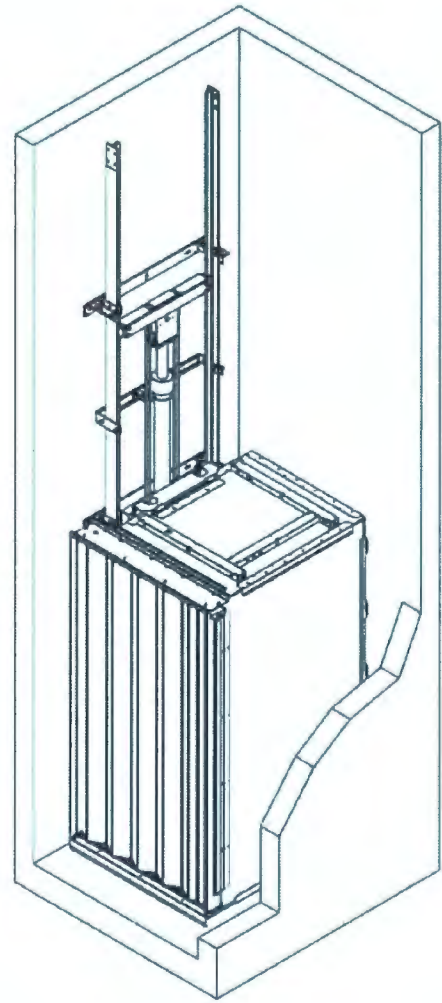
cabinets underneath sink to be easily removed.  
 Window can be opened with a single hand.

SECOND FLOOR

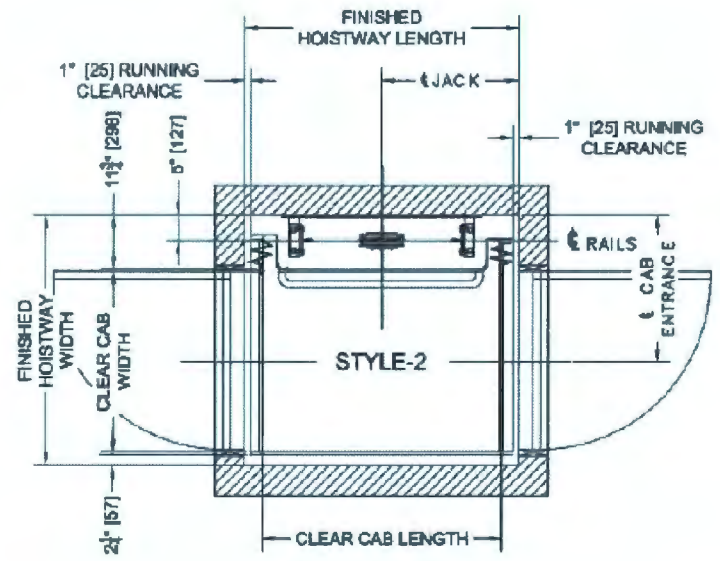


FIRST FLOOR

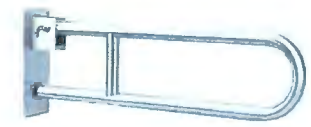
Garaventa Home Elevator  
 Style 2  
 Standard Door Package



Hydraulic Drive System (Accordion Gate Shown)



Style 2 Clear Cab Size	Hoistway Width	Hoistway Length	Jack Centerline	Entrance Centerline
36 x 48	51	54 3/4	27 3/8	30 1/4
36 x 54	51	60 3/4	30 3/8	30 1/4
36 x 60	51	66 3/4	33 3/8	30 1/4
40 x 54	55	60 3/4	30 3/8	34 1/4
42 x 60	57	73 1/2	36 3/4	36 1/4
48 x 60	63	73 1/2	36 3/4	42 1/4



Example of Fold-down Grab Bar

Summary of the Convertible Unit Guidelines for Townhouses

- Entry doors min. 863mm opening.
- Entry door clear exterior floor space min. 1220 mm depth by door width plus 600 mm on latch side.
- Interior doors to entry & main living areas, min. 800 mm clear opening. (2'8" sliding or 2'10" swinging door spec.) with flush thresholds max. 13mm height.
- Patio/balcony min. 860mm clear opening.
- Lever type handles for doors.
- Stair lift/elevator based on manufacturer spec.
- Hallways minimum 900 mm width.
- Door from garage to living area minimum 800 mm clear opening.
- Min. 1 accessible parking space with min. 4 m garage width.
- Toilet clear floor space min. 1020 mm at side and in front.
- Wall blocking for future installation of grab-bars (toilet, tub and shower).
- Lever-type handles for plumbing fixtures.
- Pressure & temperature control valves on all shower faucets.
- Clear area under future kitchen work space. Plumbing and gas pipes (in-wall and in-floor) located clear of under counter area of future work space (stove, sink & min. 810 mm wide counter).
- 1500 mm turning diameter or turning path diagram in kitchen.
- One window that can be opened with a single hand (bathroom, kitchen, living room).

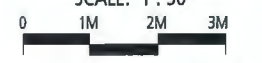
23400, 23440,  
 23460, & 23500  
**GATES AVENUE**



THIS DOCUMENT HAS BEEN ELECTRONICALLY CERTIFIED WITH DIGITAL CERTIFICATE AND ENCRYPTION TECHNOLOGY AUTHORIZED BY THE AIBC AND APEGC. THE AUTHORITATIVE ORIGINAL IS IN ELECTRONIC FORM TRANSMITTED TO YOU. ANY PRINTED VERSION CAN BE RELIED UPON AS A TRUE COPY OF THE ORIGINAL WHEN SUPPLIED BY THE ORIGINAL AUTHOR, BEARING IMAGES OF THE PROFESSIONAL SEAL AND DIGITAL CERTIFICATE OR WHEN PRINTED FROM THE DIGITALLY CERTIFIED ELECTRONIC FILE SENT TO YOU.



**CONVERTIBLE UNIT PLANS**  
 SCALE: 1 : 50



DP18-829228  
 MAY 10, 2021



BRITISH COLUMBIA - ALBERTA - WASHINGTON  
 202 - 2425 Quebec Street 604.873.2907  
 Vancouver, BC V5T 4L6 fougerearchitecture.ca

MAY 21, 2021

**DP 18-829228 REFERENCE PLAN**

(3 Bedrooms End Units)