



To: Development Permit Panel

Date: November 22, 2023

From: Wayne Craig
Director, Development

File: DP 23-025993

Re: **Application by Anthony Boni (Boni Maddison Architects) for a Development Permit at 4831 Steveston Highway**

Staff Recommendation

That a Development Permit be issued which would:

1. Permit the construction of a three-storey 25-unit affordable rental housing building at 4831 Steveston Highway on a site zoned "Low Rise Rental Apartment (ZLR48) – Steveston Highway (Steveston)"; and
2. Vary the provisions of Richmond Zoning Bylaw No 8500 to allow 37 per cent of the required vehicle parking spaces to be small car spaces.

Wayne Craig
Director, Development
(604-247-4625)

WC:ta
Att. 3

Staff Report

Origin

Anthony Boni (Boni Maddison Architects) has applied to the City of Richmond for permission to develop a three-storey 25-unit affordable rental housing building at 4831 Steveston Highway on a site zoned “Single Detached (RS1/E)”. The site is currently vacant. The proposed project is on land owned by the City of Richmond with funding support from the Canada Mortgage and Housing Corporation (CMHC) and BC Housing in partnership with Turning Point Housing Society.

The site is being rezoned from the “Single Detached (RS1/E)” zone to a new site-specific zone, “Low Rise Rental Apartments (ZLR48) – Steveston Highway (Steveston)” for this project under Bylaw 10478 (RZ 23-018081). The Bylaw was given third reading at the Public Hearing held on September 5, 2023.

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

- Road widening and frontage improvement work on the site’s Steveston Highway frontage.
- Assessing and monitoring the integrity of the sanitary sewer infrastructure in the existing Statutory-Right-of-Way (SRW).
- Related water and storm sewer connections to the subject site, along with public and private utility improvements.

Development Information

Please refer to the 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: Railway Community Gardens on a City road allowance owned by the City of Richmond zoned “Single Detached (RS1/E)” and single detached dwellings on lots zoned “Single Detached (RS1/E)” fronting onto Bonavista Drive and Argentia Drive.
- To the South: Across Steveston Highway, is the Branscombe House, a heritage-designated single detached dwelling on a lot owned by the City of Richmond zoned “School & Institutional Use (SI)”, and a single detached dwelling on a lot zoned “Compact Single Detached (RC1)”.
- To the East: The Railway Greenway on a lot owned by the City of Richmond, zoned “Single Detached (RS1/E).” Across Railway Avenue is a pub and liquor store on a lot zoned “Pub & Sales (CP2)” and single detached dwellings on lots zoned “Single Detached (RS1/E)”.
- To the West: A townhouse development with 12 units on a lot zoned “Town Housing (ZT54)”.

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following design issues to be resolved at the Development Permit stage:

- Design guidelines: compliance with Development Permit Guidelines for multiple family projects in the 2041 Official Community Plan (OCP).
- Residential streetscape: opportunities to enhance articulation and visual interest through design development to improve the interface fronting the pedestrian sidewalks. In addition, refinement of the site plan to ensure all the aboveground private utility infrastructure improvements required as part of this development will be located on-site and screened from street view.
- Landscaping and Tree management: Refinement of the landscape design and tree management plan to ensure the protection and long-term health of retained trees.
- Common amenity space: more information is required with respect to the programming, design, and landscaping of these spaces to ensure consistency with City guidelines. The conceptual design includes shared use of all indoor amenity areas by all residents and common outdoor amenity areas.
- Accessibility: opportunities for additional Basic Universal Housing (BUH) units.
- Pedestrian Circulation: opportunities to enhance pedestrian circulation and accessibility throughout the site.
- Sustainability: the proposed enhanced BC Energy Step Code compliance and opportunities to better understand and enhance the building's performance in coordination with its architectural expression.
- Crime Prevention through Environmental Design (CPTED): opportunities to incorporate CPTED measures including surveillance and territoriality to promote a sense of security.
- Parking, Loading and Waste Management: further design of vehicle parking and circulation, truck maneuvering, waste management activities and related features and spaces.
- Servicing Agreement: detailed design of the offsite frontage elements to be constructed as part of the Servicing Agreement.

The Public Hearing for the rezoning of this site was held on September 5, 2023. Through input received up to and including the Public Hearing, the following design related concerns about rezoning the property were expressed:

- Direct connection of the site to the Railway Greenway.
- Redesign the bicycle parking to provide more bicycle parking opportunities for the residents.

Through the review of this Development Permit application, staff have worked with the applicant to ensure that the proposed architectural form and character is of good quality and efficient, consistent with the design guidelines contained within the Official Community Plan (OCP) and that it provides an appropriate interface to adjacent properties.

The applicant has made modifications to their proposal to address the urban design issues identified at the rezoning stage in the following ways:

- Residential Streetscape: Revisions to the landscaping in the front yard and portions of the east side yard interfacing with the Railway greenway, including off-site improvements along the Steveston Highway frontage, such as the bus stop relocation, a new concrete sidewalk and a new treed/grass boulevard at the property line has effectively contributed in enhancing the building's response to fit with its surrounding. The final design of the Steveston Highway frontage is to be determined as part of the Servicing Agreement design review process.
- Private Utility Infrastructure: A location has been identified for required aboveground private utility infrastructure while also ensuring that it can be appropriately screened from street view.
- Landscaping and Tree Management: Refinement of the landscape design and tree management plan to ensure the protection and long-term health of retained trees while ensuring no conflict with the grading requirements, private infrastructure and the outdoor amenity area.
- Common Amenity Space: Indoor common amenity spaces are proposed on the ground and second floor, both will be accessible to all residents. The ground floor indoor common amenity space consists of a playroom and a common room with food preparation facilities. The ground floor indoor amenity space will also be adjacent to the common outdoor amenity area located on the east side of the building. The second floor indoor amenity area will provide general lounge space for the residents.
- Accessibility: Aging-in-place features are proposed in all units. Additionally, the proposed development also includes 14 units with Basic Universal Housing features (two of which will be fully accessible).
- Pedestrian Circulation: On-site access has been updated with features (such as a painted walkway connecting the Steveston Highway sidewalk to the building entrance, pathways around both sides of the building providing access to bike parking, garbage and recycling areas, as well as the amenity areas) to improve pedestrian circulation and accessibility throughout the site.
- Sustainability: The applicant has provided further detail on the sustainability approach. Their response is outlined in the "Analysis" section below.
- Direct connection of the site to the Railway Greenway: Parks staff have been consulted and a direct connection to the Railway Greenway is not supported as the portion of the Railway Greenway adjacent to the site is a natural area that is not regularly maintained for pedestrian passage. The pedestrian connection from the building entry to Steveston Highway provides a safe and convenient connection to the Railway Greenway.
- Bicycle parking: The applicant proposes to provide the required ten resident bicycle parking spaces (Class 1) and eight visitor bicycle parking spaces (Class 2). The applicant is also proposing six additional resident bicycle parking spaces (Class 1) above the bicycle parking requirement, making for a total of 16 resident bicycle parking spaces (Class 1).

- Crime Prevention through Environmental Design (CPTED): The applicant has provided statements on how their proposal responds to CPTED principles, which are summarized in the "Analysis" section below.
- Parking, Loading and Waste Management: The applicant has provided further detail on their response outlined in the "Analysis" section below.

Staff Comments

The proposed plans attached to this report have satisfactorily addressed the 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 “Low Rise Rental Apartment (ZLR48) – Steveston Highway (Steveston)” zone except for the zoning variance noted below.

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

The applicant is requesting to vary the provisions of Richmond Zoning Bylaw No. 8500 to allow 37 per cent of the required vehicle parking spaces to be small car spaces.

Staff supports the proposed variance for the following reasons:

- *The small car parking variance enables a more functional and efficient use of the site. The parking provisions of the Zoning Bylaw No. 8500 do not permit any small-sized parking spaces on a site unless the total parking requirement is 31 or more spaces. A total of 11 parking spaces are required; six parking spaces for residents and five parking spaces for visitors. To comply with the required Flood Construction Level for the site, the grading of the site needs to be raised thereby requiring retaining walls along portions of the site. To accommodate the retaining walls and to avoid negatively impacting the sanitary forcemain located in the Statutory Right-of-Way that runs along the eastern edge of the site, the applicant is requesting a variance to allow 37 per cent of the required vehicle parking spaces to be small-sized. There would be no reduction in the number of parking stalls. The applicant is proposing four small-sized parking spaces (two for residents and two for visitors). Transportation staff have reviewed and support the proposed variance.*

Advisory Design Panel Comments

The Advisory Design Panel (ADP) was on September 21, 2023. A copy of the relevant excerpt from the Advisory Design Panel Minutes from September 21, 2023 is attached for reference (Attachment 3). The design response from the applicant has also been included immediately following the specific Design Panel comments and is identified in ‘**bold italics**’.

Analysis

Conditions of Adjacency

- The proposed apartment building at the subject site has been designed with consideration of the adjacent townhouse and single-family context to the west and northwest of the site.
- The building setbacks are consistent with the requirements for low-rise apartment buildings. Setbacks from the neighbouring properties have also been considered as part of the review.

- The development is setback 5.9 m from the west side property line adjacent to the townhouse development located west of the site.
- There is an existing Statutory Right-of-Way (SRW), approximately 3.1 m wide, along the entire east property line. To ensure no negative impact to the sanitary sewer infrastructure in the SRW, the building is proposed to be setback at approximately 6.9 m from the east property line.
- A single-storey covered porch projection of 1.8 m is proposed on the east side of the building over a portion of the outdoor amenity space adjacent to the Railway Greenway.
- The existing site grade along the rear (north) property line will be maintained to provide an appropriate transition to the adjacent single-family properties to the northwest and the community garden to the north.
- A 1.8 m (6.0 ft.) tall cedar fence is proposed to be installed along the north property line and portions of the east and west property lines.
- A low retaining wall (approximately ranging in height from 1.0 m sloping south to a height of 0.5 m) will be installed along a portion of the west property line. The retaining wall will also have a fence 1.2 m (4.0 ft.) in height installed for safety.
- A low retaining wall will also be located along the western edge of portions of the City's sanitary sewer rights-of-way located by the east property line. A 1.2 m (4.0 ft.) high fence will be installed on top of the retaining wall. The existing site grade along the east property line adjacent to the Railway Greenway will be retained.
- Landscaping and trees in the west side yard will be used to provide site screening between the proposed development and the existing townhouse development to the west.
- Overall, landscaping and a variety of trees planted across the site will be used to enhance the pedestrian experience and the interface of the proposed development with adjacent properties. Details on landscaping are provided in the Landscape Design and Open Space Design section of this report.

Urban Design and Site Planning

- The site layout includes a three-storey building with 25 apartment units on a site that would be approximately 2,118.1 m² (22,799.0 ft²) in area after the required road dedication along Steveston Highway.
- Vehicle and pedestrian access to the site are proposed from Steveston Highway.
- The main pedestrian entry to the building is proposed to front onto Steveston Highway. There is a defined pathway that extends across a portion of the drive aisle and establishes a connection from the Steveston Highway sidewalk to the building entry.
- The proposal provides for 11 parking spaces (with five vehicle parking spaces reserved for visitors) located in a surface parking lot at the front of the property.
- A total of 16 resident bicycle parking spaces (Class 1) are proposed within and outside the building, along with eight visitor bicycle parking spaces (Class 2) proposed in the front yard.
- Two of the total 11 vehicle parking spaces will be accessible.
- The outdoor amenity area is located to the east of the building in connection to the indoor amenity space located at grade. It is also located adjacent to the Railway Greenway. A gazebo area is also provided at the rear of the building to provide for quieter outdoor amenity area. The outdoor amenity space incorporates areas with cover, seating, children's play elements, urban gardening and landscaping. More details of the outdoor amenity space features are included in the Landscape Design and Open Space Design section of this report.
- A mailbox kiosk will be provided in the lobby of the building.

- The required garbage, cardboard recycling and organic waste storage is proposed in an enclosed area on the west side of the building. The recycling bins for glass, mixed containers and mixed paper are proposed in an enclosed space in the west side yard of the building. The enclosures have been incorporated into the design of the building and the site to minimize their visual impact as best as possible. The proposed location will be accessible to all units.

Architectural Form and Character

The form of the proposed three-storey building is characterized by:

- The building has a basic rectangular form positioned north-south on the site, with the rental apartment units facing either east or west along a central corridor.
- The main entrance of the building is marked by a gable roof that fronts onto Steveston Highway with the building's signage placed at a visible level along the building's front façade.
- An east side door provides access to the proposed east side outdoor amenity space. There is also a door at the rear of the building that provides access to the rear yard gazebo and serves as an emergency exit for the building.
- Key building elements are used to create variation and articulation to the overall massing and scale of the building. Dark green Hardie board and batten cladding are proposed to wrap around and define the ground floor of the building. The two upper floors are clad with lighter green Hardie siding alternated with dark green Hardie board and batten cladding similar to that used on the ground floor. Vertical bays with gable roofs are used to break up the massing and create a rhythm to the elevations. Dark grey shingles are proposed for the roof with light grey Hardie trim used at the fascia, windows and doors.
- Glazing is mostly proposed across the east and west building elevations for all of the residential units providing maximum natural lighting and privacy to residential units.
- A porch projection is proposed over portions of the east side outdoor amenity area, this projection also wraps around the building to the front. The porch projection would provide cover for a portion of the outdoor amenity space and facilitate the use of the space year round.

Tree Preservation

- Tree preservation was reviewed at the rezoning stage, at that time, the applicant intended to remove three on-site trees (tag# 9668, 9669 and 9670). Tree preservation was further reviewed as part of the Development Permit application, and two off-site city trees (tag# City27 and 9667) by the southwest corner of the site have been further identified for removal trees. The additional tree removal is required to accommodate site planning requirements associated with the installation of BC Hydro infrastructure.
- A total of five trees are now proposed for removal. The Official Community Plan (OCP) requires a 2:1 replacement ratio for the trees removed, therefore requiring a total of ten replacement trees. The applicant is proposing to plant a total of 12 trees on-site, which exceeds the 2:1 replacement requirement established in the OCP.
- Two trees (tag# Tree06 and Tree07) along the east property line have also been identified for relocation due to their conflict with the proposed pedestrian path and outdoor amenity space. In consultation with the city's Urban Forestry staff, the two trees (tag# Tree06 and Tree07) are have been authorised for relocation to the adjacent Railway Greenway.

- Proof of a contract with a company specializing in tree relocation to undertake the transplant of the two trees (tag# Tree06 and Tree07) will be required prior to any site preparation or construction activities, including building demolition, occurring on-site.

Landscape Design and Open Space Design

- The proposed Landscape Plan includes a mix of 12 deciduous and coniferous trees, as well as a variety of shrubs, perennials and groundcovers.
- Landscaping with trees is proposed along the Steveston Highway frontage creating a visually appealing frontage and screening the proposed front yard parking from the sidewalk.
- A painted walkway is proposed to enhance pedestrian circulation and accessibility from the adjacent sidewalk along Steveston Highway to the building entrance.
- An outdoor amenity area with permeable pavers is proposed in the east side yard of the building adjacent to the Railway Greenway. The outdoor amenity space is terraced with garden planters provided at the lower level.
- The outdoor amenity area is proposed to be contiguous with the indoor amenity space.
- Outdoor lounge chairs and a table are proposed for informal use of the residents in the outdoor amenity area.
- Wood play features and a play hut within view from the office are proposed on turf material for active creative play for children.
- A gazebo is proposed in the rear yard of the building providing additional common outdoor space for the use of all residents.

Crime Prevention Through Environmental Design (CPTED)

- The building design provides for passive surveillance of fronting streets and the staff office will have clear sightlines to the fronting sidewalk, parking lot, building entry and portions of the children's play area.
- Public parking is clustered together in the front yard and provides direct access to/from the building for residents, staff and visitors.
- For onsite safety and security, all access pathways are lit by pedestrian-scale bollards. This lighting is also proposed to be integrated with the landscape design and installed in a manner that limits light pollution into adjacent properties.
- Transparent glazed fencing by the outdoor amenity area is proposed for better visibility of the amenity area.
- Landscape is proposed on the south and east edges of the parking area to soften this area and to provide some screening without blocking views, ensuring CPTED features are maintained.

Accessible Housing

- The proposed development includes 14 basic universal housing units (two of which are fully accessible) that are designed to be easily renovated to accommodate a future resident in a wheelchair. These single-storey units are required to incorporate all of the accessibility provisions listed in the Basic Universal Housing Features section of the City's Zoning Bylaw No. 8500 and are permitted a density exclusion of 1.86 m² (20 ft²) per unit.
- 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.
- Wheelchair access is accommodated in all common areas and corridors to units.

Sustainability Features

- The building is proposed to comply with the BC Energy Step Code 4 which includes a Greenhouse Gas Intensity (GHGI) standard of 3.0.
- Pedestal mounted Level 2 Electric vehicle (EV) charging stations are proposed for all parking spaces. This is in excess of the current Zoning Bylaw No. 8500 requirement which requires energized spaces for the six resident vehicle parking spaces.
- Other BC Housing sustainability practices will also be included such as LED lighting, energy star-rated appliances, water-efficient fixtures and low Volatile Organic Compound (VOC) material products.

Site Servicing and Off-site Improvements

Servicing requirements and off-site improvements to support the proposed development were identified as part of the rezoning application. Prior to Building Permit issuance, the applicant is required to enter into a Servicing Agreement, secured with a Letter of Credit, for the design and construction of the following, including (but not limited to):

- A 2.0 m wide road dedication along the entire Steveston Highway frontage for future road widening.
- Frontage improvement work on the site's Steveston Highway frontage, including a new sidewalk to be connected directly to the existing sidewalks to the east and west of the subject site.
- Assessing and monitoring the sanitary sewer infrastructure in the existing Statutory-Right-of-Way (SRW), approximately 3.1 m wide, along the entire east property line prior to and during preload/ construction to ensure no negative impact.
- Related water and storm sewer connections to the subject site, along with public and private utility improvements.
- Detailed site servicing and frontage improvement requirements are identified in the Development Permit Considerations (Attachment 3).

Conclusions

As the proposed development would meet applicable policies and Development Permit Guidelines, and the applicant has agreed to the list of Development Permit Considerations (signed concurrence on file) outlined in Attachment 3, staff recommend that the Development Permit be endorsed, and issuance by Council be recommended.



Tolu Alabi
Planner 1
(604-276-4092)

TA:js

Att. 1: Development Application Data Sheet
 2: Excerpt from Advisory Design Panel Minutes (September 21, 2023)
 3: Development Permit Considerations



City of Richmond

Development Application Data Sheet

Development Applications Department

DP 23-025993

Attachment 1

Address: 4831 Steveston Highway

Applicant: Anthony Boni (Boni Maddison Architects) Owner: City of Richmond

Planning Area(s): Steveston

	Existing	Proposed
Site Area	2,177.4 m ² (23,437.3 ft ²)	2,118.1 m ² (22,799.0 ft ²)
Land Uses	Vacant	Multiple-Family Residential
OCP Designation	Neighbourhood Residential	Neighbourhood Residential
Area Plan Designation	Multiple-Family	Multiple-Family
Zoning	Single Detached (RS1/E)	Low Rise Rental Apartment (ZLR48) – Steveston Highway (Steveston)
Number of Units	0	25 affordable rental units

	Bylaw Requirement	Proposed	Variance	
Floor Area Ratio	Max. 0.84 FAR for Affordable Housing with 0.06 FAR used for Indoor Amenity Space only.	Affordable Housing with Indoor Amenity Space: 0.85 FAR	None Permitted	
Buildable Net Floor Area*	Max. 1,906.3 m ²	1,805.4 m ²	None Permitted	
Lot Coverage	Building	Max. 40.0 %	30.9 %	None
	All Non-Porous	Min. 80.0 %	65.4 %	None
	Live Landscaping	Min. 20.0 %	34.6 %	None
Setback – Front Yard	Min. 25.0 m	26.3 m	None	
Setback – East Side Yard	Min. 6.5 m	6.9 m	None	
Setback – West Side Yard	Min. 5.5 m	5.9 m	None	
Setback – Rear Yard	Min. 3.0 m	3.5 m	None	
Height	Max. 14.2 m	13.8 m	None	
Lot Width	Min. 28.0 m	30.0 m	None	
Lot Depth	Min. 68.0 m	68.1 m	None	
Lot Area	Min. 2,100.0 m ²	2,118.1 m ²	None	

Off-street Parking Spaces	With TDMs		With TDMs		Variance Requested to allow 37 % of the required vehicle parking spaces to be small-sized.
	Resident	6 standard spaces	Resident	4 standard spaces 2 small spaces	
	Visitor	5 standard spaces	Visitor	3 standard spaces 2 small spaces	
Off-street Parking Spaces – Total	11		11		None
Off-street Parking Spaces – Accessible	Min. 2% (1 space)		2		None
EV Charging - Resident	6		11		None
Bicycle Parking	With TDMs		With TDMs		None
	Class 1	10	Class 1	16	
	Class 2	8	Class 2	8	

*Preliminary estimate; exact building size to be determined through Zoning Bylaw No. 8500 compliance review at Building Permit stage

**Excerpt from the Minutes from
Advisory Design Panel Meeting
Thursday, September 21, 2023 – 4: 00 p.m.**

DP 23-025993: THREE-STOREY 25-UNIT AFFORDABLE RENTAL HOUSING BUILDING

ARCHITECT:	Boni Maddison Architects
LANDSCAPE ARCHITECT:	ETA Landscape Architecture
PROPERTY LOCATION:	4831 Steveston Highway

Applicant’s Presentation

Architect Anthony Boni, Boni Maddison Architects, and Landscape Architect Kristin Defer, ETA Landscape Architecture, presented the project and answered queries from the Panel.

Panel Discussion

Comments from the Panel were as follows:

- understand the budget constraints for the project; however, the project appears harsh compared to the surroundings;
We do not agree that the building itself is ‘harsh’ relative to the surrounding buildings which are 2 and 3 storey townhouses. We have articulated the building with material variation and pitched roof/gables to fit in with the residential nature of this neighbourhood.
- from an urban design perspective, parking could have been better located at the back of the building and accessed from Railway Avenue;
We reviewed various options in relation to parking with a desire to locate at the rear of the property. Circulation for garbage and recycling and the turn around required wasn’t able to fit in the rear of the property, therefore we would have potentially parking in the rear and developing turn arounds in the front that would effectively create substantial amount of paved surfaces. This would also create a driveway along the full west of the property up against all of the neighbours rear yards. We are not allowed to access the rear of the lot off of Railway as there is a lot in between, which is the greenway.
- understand the security concerns; however, the high retaining walls and fences on top of the retaining walls along the east and west portions of the subject site make the proposed development appear isolated and separated from the neighbourhood, e.g. from the Railway Greenway;
Fencing on the west was incorrectly shown as 6 feet high, it would be 4 feet and transparent. Landscape drawings showed an articulate fence/screen along this side. We have reviewed security issues with the operators in relation to the east side. The east side

did not have fencing on top of the retaining wall as the retaining location was internal to the space. We will be designing this fence with some transparency to allow light in but still create a sufficient level of privacy for the residents adjacent to the public greenway or parking lot.

- consider introducing architectural treatment to the blank wall expression on the southeast portion of the building to make it more friendly;
Welcoming signage will be added to the front façade to create a friendly appearance. Additional window has been added and roofing articulation changed.
- introducing public art to the proposed development would help enhance its appearance;
Because of the rapid timeline of the project, a formal public art process will not be completed at this time. The operator is open to the possibility of exploring options for the future.
- appreciate the proposed development as it is needed by the population in Richmond;
- understand the project's design rationale including the site constraints for the decision to locate the parking at the front of the building rather than at the back; however, consider introducing landscape measures to help improve the relationship of the site entry to the street, e.g. look at paving treatments, more defined pathways, adequate pedestrian scale lighting, better fencing and appropriate landscaping;
Agreed, will review all of those elements. Will add markings to delineate the pedestrian walkway from the street to the building. Fencing will be more transparent, landscape is proposed on south and east edges of the parking area to soften this area and to provide some screening without blocking views, ensuring CPTED features are maintained.
- raising the grade of portions of the subject site presents challenges in terms of high retaining walls and fences that will be installed; consider installing appropriate landscaping to help soften the fencing adjacent to the Railway Greenway; also consider reducing the height of fencing along the west property line as the proposed development is not immediately adjacent to the existing development to the west and in order to mitigate the project's impact to the adjacent development;
Yes will reduce the fence along the west side and reviewing landscape options on the east.
- consider introducing additional glazing and more transparency to the front elevation of the building;
We have added an additional window, roof articulated. The fence will be more transparent.
- support the Panel comment regarding incorporating public art in the project, particularly along the south face of the building;
Agreed are reviewing this option in the future.
- not concerned about the proposed location of the gazebo at the rear of the building; there appears to be no better alternate location elsewhere in the subject site for the gazebo;
- investigate opportunities to reduce the elevation of the electrical, mechanical and garbage rooms near the loading area to reduce the height of the retaining wall on the west portion of the site;
Agreed that accessibility isn't required at these locations but considering that the front

entry needs to be accessible we wouldn't be able to substantially reduce the grade to these locations without creating slopes that wouldn't work with vehicle movement.

- appreciate the proposed Transportation Demand Management (TDM) measures; however, the proposed 11 vehicle parking spaces for the 25-unit rental apartment building would be challenging; also ensure adequate bicycle parking stalls for future residents including their dependents; and

We have reviewed parking requirements with the operators and they believe what is provided would easily meet their needs as majority of residents would not have vehicles. We are meeting bicycle requirements.

- clarify the use of materials in the renderings provided by the applicant, e.g. the use of board and batten and lap siding.

Correct some finishes were not clearly represented. The intent is that the darker green at the base and at gables is all board and batten. The lighter green is all horizontal lap siding

The following comments were submitted by Panel member Chris Lee and were read into the record by Staff Liaison Virendra Kallianpur:

- the submission is well put together and easy to follow;
- given the south-facing nature of the site, more soft landscape and tree canopy could be incorporated in the area; this would also complement where the play area is currently being proposed; the same comment is also suggested for the parking area;

There isn't sufficient space to add trees at the south play area. There are trees proposed at the south of the parking area.

- appreciate the less intensive approach to the design of play area in creating shared space for multi-generations;
- appreciate the terracing approach in organizing the outdoor amenity area; and
- the proposed gazebo creates pockets of seclusion when it is placed in the north side of the site; the design team is encouraged to revisit its location so that it would better respond to the site context, analysis and spatial arrangement.

We reviewed the gazebo location with an idea to provide different opportunities for residents. The main amenity space is active with children and this gazebo location be quieter.

The Chair noted that the comments of Panel members present as well as the written comments submitted by a Panel member expressed general support for the project.

Due to the absence of a quorum, a Panel recommendation could not be considered.



City of Richmond

Development Permit Considerations
Development Applications Department
6911 No. 3 Road, Richmond, BC V6Y 2C1

Address: 4831 Steveston Highway

File No.: DP 23-025993

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

1. **(Rezoning)** Final adoption of the Zoning Amendment Bylaw 10478.
2. **(Arborist Supervision)** Submission of a Contract entered into between the applicant and a Certified Arborist for supervision of any on-site works conducted within the tree protection zone of the trees to be retained [sixteen trees (tag# Tree01- Tree05, City15 - City25) along the east property line, nine trees (tag# OS01- OS09) on neighbouring properties and one street tree (tag# 9671)], and the relocation of two trees (tag# Tree06 and Tree07) on site along the east property line to the Railway Greenway. The Contract should include the scope of work to be undertaken, including: the proposed number of site monitoring inspections, and a provision for the Arborist to submit a post-construction assessment report to the City for review.

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

1. **(Legal Agreements)** Confirmation of compliance with legal agreements associated with the development.
2. **(Letter of Indemnity)** Receipt of a Letter of Indemnity from the BC Housing Management Commission in the amount of \$117,739 to ensure that development is carried out in accordance with the terms and conditions of this Permit.
3. **(Tree Protection)** Installation of appropriate tree protection fencing around all trees to be retained as part of the development prior to any site preparation or construction activities, including building demolition, occurring on-site.
4. **(Tree Relocation)** Provision of a proof of contract with a company specializing in tree relocation to undertake the transplant of the two trees (tag# Tree06 and Tree07) located on site by the east property line into the Railway Greenway, prior to any site preparation or construction activities, including building demolition, occurring on-site.
5. **(Ground Lease)** Confirmation of having entered into legal agreement(s) to lease the subject City-owned site. The terms of the lease will be approved by Council separate from the Development Permit application process.
6. **(Energy Step Code)** Submission of required documents as part of the Building Permit application process, including energy reports and modelling, to assure that the project substantially complies with the City's Energy Step Code requirements.
7. **(Accessibility)** Incorporation of accessibility measures in Building Permit (BP) plans as determined via the Rezoning and/or Development Permit processes.
8. **(Development Cost Charges)** Payment of all applicable Development Cost Charges.
9. **(Construction Parking and Traffic Management Plan)** Submission of a Construction Parking and Traffic Management Plan to the Transportation Department. Management Plan shall include location for parking for services, deliveries, workers, loading, application for any lane closures, and proper construction traffic controls as per Traffic Control Manual for works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.
10. **(Latecomer Agreement Charges)** If applicable, payment of latecomer agreement charges, plus applicable interest associated with eligible latecomer works.
11. **(Construction Hoarding)** Obtain a Building Permit (BP) for any construction hoarding. If construction hoarding is required to temporarily occupy a public street, the air space above a public street, or any part thereof, additional City approvals and associated fees may be required as part of the Building Permit. For additional information, contact the Building Approvals Department at 604-276-4285.

12. **(Servicing Agreement)** Enter into a Servicing Agreement* for the design and construction of Engineering and Transportation works in accordance with the Transportation Association of Canada (TAC) Specifications, City Engineering Design Specifications and applicable Bylaws to the satisfaction of the City. A Letter of Credit or cash security for the value of the Service Agreement works, as determined by the City, will be required as part of entering into the Servicing Agreement. Works include, but may not be limited to, the following:

I. Frontage Improvements

(a) Frontage improvements (sidewalk and boulevard)

The subject site has an existing frontage depth of 3.8 m (measurement based on City as-built drawings and is to be confirmed through legal survey). A 2.0 m dedication is required for future road widening. The required frontage improvements over the total 5.8 m frontage depth are to include the following (measured north to south):

- New south property of subject site (established 2.0 m north of the existing property line to account for road dedication requirements).
- 3.8 m wide landscaped boulevard with street trees
- 2.0 m wide concrete sidewalk. (Per arterial sidewalk standards).
- Existing north curb along subject site's Steveston Highway frontage.

(Note 1: The above dimensions are to be confirmed through the approved functional plan and legal survey).

(Note 2: Per Engineering Design Specifications, sidewalks are to be placed next to the property line. The above frontage improvements would deviate from established standards due to tree retention requirements).

(b) Pedestrian Access

As the sidewalk is kept next to the curb due to tree retention requirements, a walkway (2.0 m wide) is required to provide pedestrian access between the subject development and the fronting sidewalk and bus stop.

(c) Frontage improvements (driveway closure/back-fill)

The existing driveway at the Steveston Highway site frontage is to be closed permanently. The Applicant is responsible for removing the existing driveway let-down and the replacement with barrier curb/gutter, boulevards and concrete sidewalk per standards described above.

(d) Frontage improvements (sidewalk connectivity)

The new sidewalk is to be connected directly to the existing sidewalks to the east and west of the subject site.

(e) Frontage improvements (transit amenities)

There is an existing bus stop at the subject site's road frontage (ID #56846). As part of the frontage improvements, the Applicant is required to carry out the following bus stop upgrades:

- The existing retaining wall and hand rails supporting this bus stop are to be removed. Re-grading is required to provide level access to this bus stop.
- Confirm this bus stop is built to meet accessible standards (3.0 m x 9.0 m concrete landing pad. Otherwise, upgrade to accessible standards.
- The front of the bus stop pad is to have a minimum 3.0 m clearance from the driveway flare (measured at the curb).
- Install pre-ducting for future bus shelter electrical connections.
- The clearance distance between the crosswalk edge and the rear of the bus stop is to be at least 6.0 m for a bus making the through movement and 14.0 m for right-turning and left turning buses
- For details, refer to the following link for Bus Infrastructure Design Guidelines (TransLink): https://www.translink.ca/-/media/translink/documents/plans-and-projects/managing-the-transit-network/bus_infrastructure_design_guidelines-sept_2018.pdf
- The bus stop upgrade is to be coordinated with CMBC and Pattison Outdoor (bus shelter supplier). (Contact City Traffic Operations for further details).

II. Water Works

(a) Using the OCP Model, there is 828 L/s of water available at a 20 psi residual at the Steveston Highway frontage. Based on your proposed development, your site requires a minimum fire flow of 220 L/s.

(b) At Applicant's cost, the Applicant is required to:

- (i) Submit Fire Underwriter Survey (FUS) or International Organization for Standardization (ISO) fire flow calculations to confirm development has adequate fire flow for onsite fire protection. Calculations must be signed and sealed by a Professional Engineer and be based on Building Permit Stage building designs.
 - (ii) Review hydrant spacing on all road frontages and install new fire hydrants as required to meet City spacing requirements for the proposed land use. A new hydrant is required at Steveston Hwy frontage to meet the maximum spacing as per Engineering Specifications.
 - (iii) Replace the portion of the AC watermain that will be impacted by the required underground private utility connections (e.g., BC Hydro, Telus and Shaw) since the private utility overhead lines that will service the proposed site is located at the south side of Steveston Hwy. The extent of the replacement shall be determined via the servicing agreement design review.
 - (iv) Install a new water service connection, complete with water meter and water meter box as per City specifications to service the site.
 - (v) Provide a right-of-way for the water meter. Minimum right-of-way dimensions to be the size of the meter box (from the City of Richmond supplementary specifications) + any appurtenances (for example, the bypass on W2o-SD) + 0.5 m on all sides. Exact right-of-way dimensions to be finalized during the servicing agreement process.
- (c) At Applicant's cost, the City will:
- (i) Complete all tie-ins for the proposed works to existing City infrastructure.
 - (ii) Cut and cap all existing water service connections and remove all existing water meters.

III. Storm Sewer Works

- (a) At Applicant's cost, the Applicant is required to:
- (i) Cut and cap all existing storm sewer service connections and remove associated inspection chambers.
 - (ii) Install a new storm service connection complete with an inspection chamber as per City specifications for the proposed site. The location and size of the required storm sewer service connection shall be determined through the servicing agreement design process.
 - (iii) Provide an erosion and sediment control plan for all on-site and off-site works, to be reviewed as part of the servicing agreement design.
- (b) At Applicant's cost, the City will:
- (i) Complete all tie-ins for the proposed works to existing City infrastructure.

IV. Sanitary Sewer Works

- (a) At Applicant's cost, the Applicant is required to:
- (i) Not start onsite excavation or foundation construction until completion of rear-yard sanitary works by City crews.
 - (ii) Assess and monitor the forcemain along the east property line (as per the Applicant's Geotechnical Engineer's recommendations) prior to and during preload/construction.
 - (iii) Prior to any site preparation works (e.g., pre-load, etc.) commencing, the Applicant shall sign a receivable form that will be provided the City. The applicant is required to contact the City to obtain and sign the receivable form prior to start of any site preparation work. The cost for City staff response in the event that the forcemain is impacted shall be recovered from the applicant in the form of the signed receivable form.
 - (iv) Not encroach into City utility rights-of-ways with any proposed trees, retaining walls, or other non-removable structures.
 - (v) Provide a new sanitary connection. Tie-in shall be to the existing sanitary manhole SMH4387 located at the southeast corner of 4880 Bonavista Drive.
- (b) At Applicant's cost, the City will:
- (i) Complete all tie-ins for the proposed works to existing City infrastructure.
 - (ii) Cut and cap the existing sanitary service connection located at the northwest corner of 4831 Steveston Hwy.

V. Street Lighting

- (a) At Applicant's cost, the Applicant is required to:
- (i) Review street lighting levels along all road and lane frontages, and upgrade as required.

VI. General Items

- (a) At Applicant's cost, the Applicant is required to:
- (i) Complete other frontage improvements as per Transportation requirements.
 - (ii) BC Hydro pole relocation will be required if the existing BC Hydro pole near the south east corner of the proposed site conflicts with the frontage improvements as per the functional plan that will be reviewed and approved by Transportation department.
 - (iii) Coordinate with BC Hydro, Telus and other private communication service providers:
 - To pre-duct for future hydro, telephone and cable utilities along all road frontages.
 - Before relocating/modifying any of the existing power poles and/or guy wires within the property frontages.
 - To underground overhead service lines.
 - (iv) Locate/relocate all above ground utility cabinets and kiosks required to service the proposed development and proposed undergrounding works, and all above ground utility cabinets and kiosks located along the development's frontages, within the developments site (see list below for examples). A functional plan showing conceptual locations for such infrastructure shall be included in the development design review process. Please coordinate with the respective private utility companies and the project's lighting and traffic signal consultants to confirm the requirements (e.g., statutory right-of-way dimensions) and the locations for the aboveground structures. If a private utility company does not require an aboveground structure, that company shall confirm this via a letter to be submitted to the City. The following are examples of statutory right-of-ways that shall be shown on the architectural plans/functional plan, the servicing agreement drawings, and registered prior to SA design approval:
 - BC Hydro PMT – 4.0 x 5.0 m
 - BC Hydro LPT – 3.5 x 3.5 m
 - Street light kiosk – 1.5 x 1.5 m
 - Traffic signal kiosk – 2.0 x 1.5 m
 - Traffic signal UPS – 1.0 x 1.0 m
 - Shaw cable kiosk – 1.0 x 1.0 m
 - Telus FDH cabinet – 1.1 x 1.0 m
 - (v) Provide a video inspection report of the existing utilities along the road frontage and the rear yard sanitary prior to start of site preparation works or within the first servicing agreement submission, whichever comes first. A follow-up video inspection, complete with a civil engineer's signed and sealed recommendation letter, is required after site preparation works are complete (i.e. pre-load removal, completion of dewatering, etc.) to assess the condition of the existing utilities and provide recommendations to retain, replace, or repair. Any utilities damaged by the pre-load, de-watering, or other ground preparation shall be replaced or repaired at the Applicant's cost.
 - (vi) Not encroach into City rights-of-ways with any proposed trees, retaining walls, or other non-removable structures. Retaining walls proposed to encroach into rights-of-ways must be reviewed by the City's Engineering Department.
Enter into, if required, additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering, including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.

Note:

- * This requires a separate application.
- Where the Director of Development deems appropriate, the preceding agreements are to be drawn not only as personal covenants of the property owner but also as covenants pursuant to Section 219 of the Land Title Act.

All agreements to be registered in the Land Title Office shall have priority over all such liens, charges and encumbrances as is considered advisable by the Director of Development. All agreements to be registered in the Land Title Office shall, unless the Director of Development determines otherwise, be fully registered in the Land Title Office prior to enactment of the appropriate bylaw.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable/rent charges, letters of credit and withholding permits, as deemed necessary or advisable by the Director of Development. All agreements shall be in a form and content satisfactory to the Director of Development.

- Additional legal agreements, as determined via the subject development's Servicing Agreement(s) and/or Development Permit(s), and/or Building Permit(s) to the satisfaction of the Director of Engineering may be required including, but not limited to, site investigation, testing, monitoring, site preparation, de-watering, drilling, underpinning, anchoring, shoring, piling, pre-loading, ground densification or other activities that may result in settlement, displacement, subsidence, damage or nuisance to City and private utility infrastructure.
- Applicants for all City Permits are required to comply at all times with the conditions of the Provincial *Wildlife Act* and Federal *Migratory Birds Convention Act*, which contains prohibitions on the removal or disturbance of both birds and their nests. Issuance of Municipal permits does not give an individual authority to contravene these legislations. The City of Richmond recommends that where significant trees or vegetation exists on site, the services of a Qualified Environmental Professional (QEP) be secured to perform a survey and ensure that development activities are in compliance with all relevant legislation.

Signed concurrence on file

Signed

Date



No. DP 23-025993

To the Holder: Anthony Boni (Boni Maddison Architects)
Property Address: 4831 Steveston Highway
Address: 3732 W Broadway,
Vancouver, BC
V6R 2C1 Canada

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 No 8500" is hereby varied to allow 37 per cent of the required vehicle parking spaces to be small-sized.
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 #24 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 the Building Permit, the City is to receive a Letter of Indemnity from the BC Housing Management Commission in the amount of \$117,739 to ensure that development is carried out in accordance with the terms and conditions of this Permit.
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 23-025993

To the Holder: Anthony Boni (Boni Maddison Architects)
Property Address: 4831 Steveston Highway
Address: 3732 W Broadway,
Vancouver, BC
V6R 2C1 Canada

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

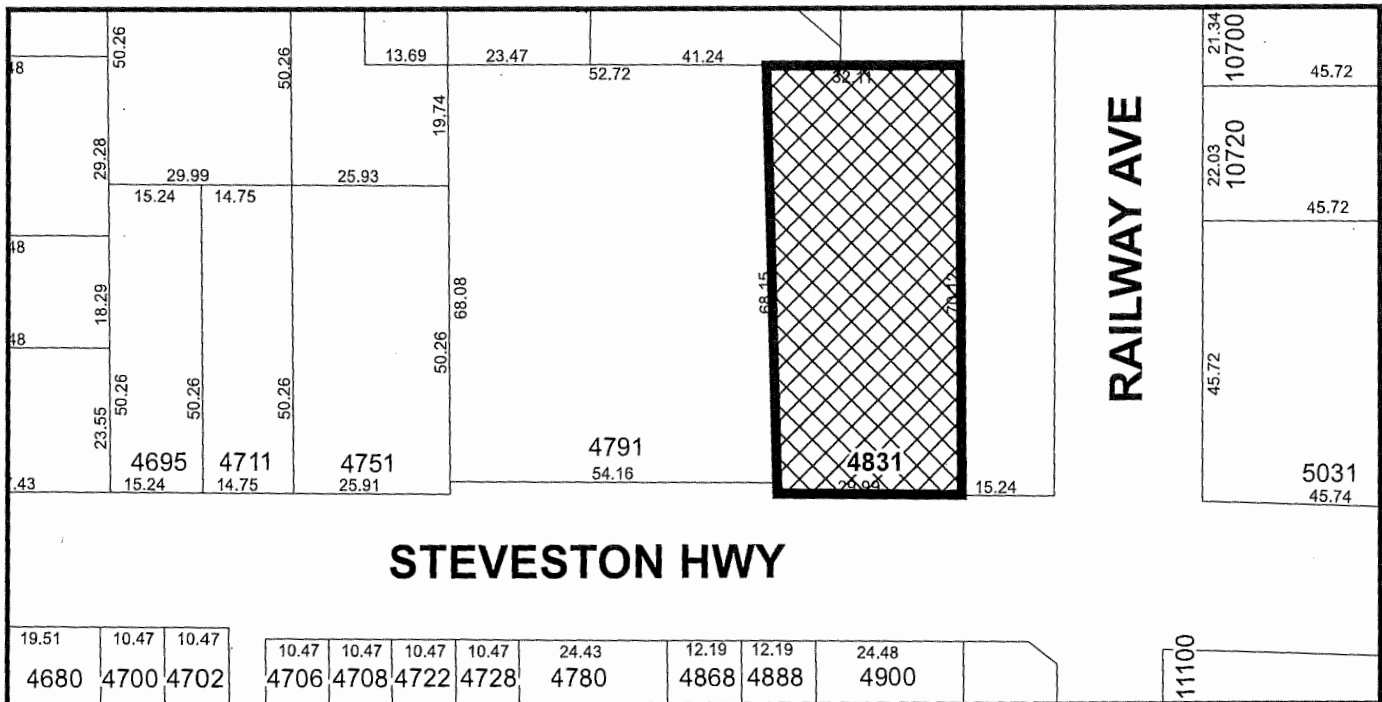
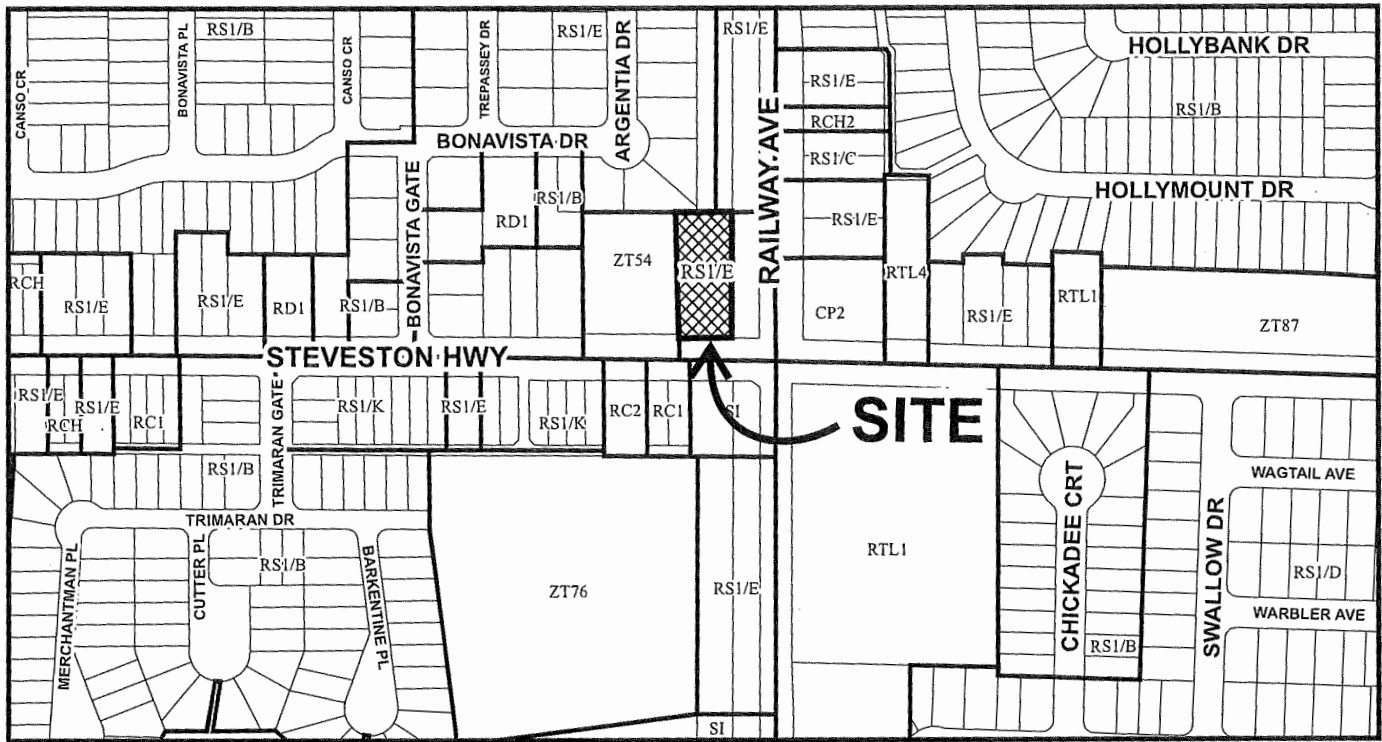
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE
DAY OF , .


DELIVERED THIS DAY OF , .

MAYOR

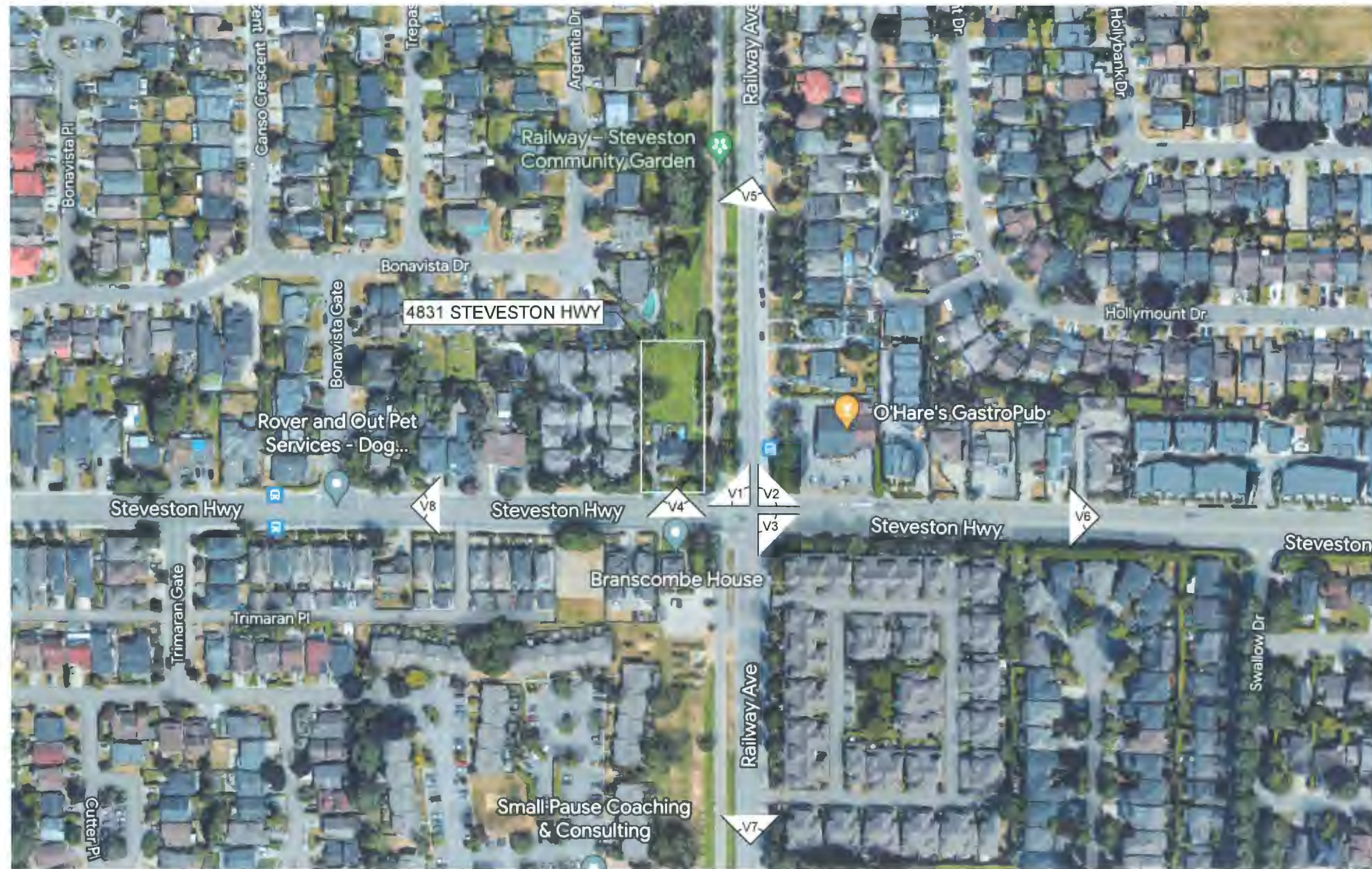


City of Richmond



	<h2 style="margin: 0;">DP 23-025993</h2> <h2 style="margin: 0;">SCHEDULE "A"</h2>	<p>Original Date: 08/24/23</p> <p>Revision Date: 09/07/23</p> <p>Note: Dimensions are in METRES</p>
---	---	---

November 22, 2023
 DP 23-025993
 DP Plan # 1



1 CONTEXT PLAN
 A0.1 Scale: 1:1000

REVISIONS:

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

ISSUES:
 I-1: PLEASE REFER TO THE DRAWING FOR THE CONTENTS OF THIS DRAWING. ALL RIGHTS ARE RESERVED AND WILL REMAIN THE PROPERTY OF BONI-MADDISON ARCHITECTS AND SHALL NOT BE USED, REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BONI-MADDISON ARCHITECTS.
 I-2: THE CLIENT'S USE OF THIS DRAWING SHALL BE LIMITED TO THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. ANY OTHER USE OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF BONI-MADDISON ARCHITECTS IS PROHIBITED.



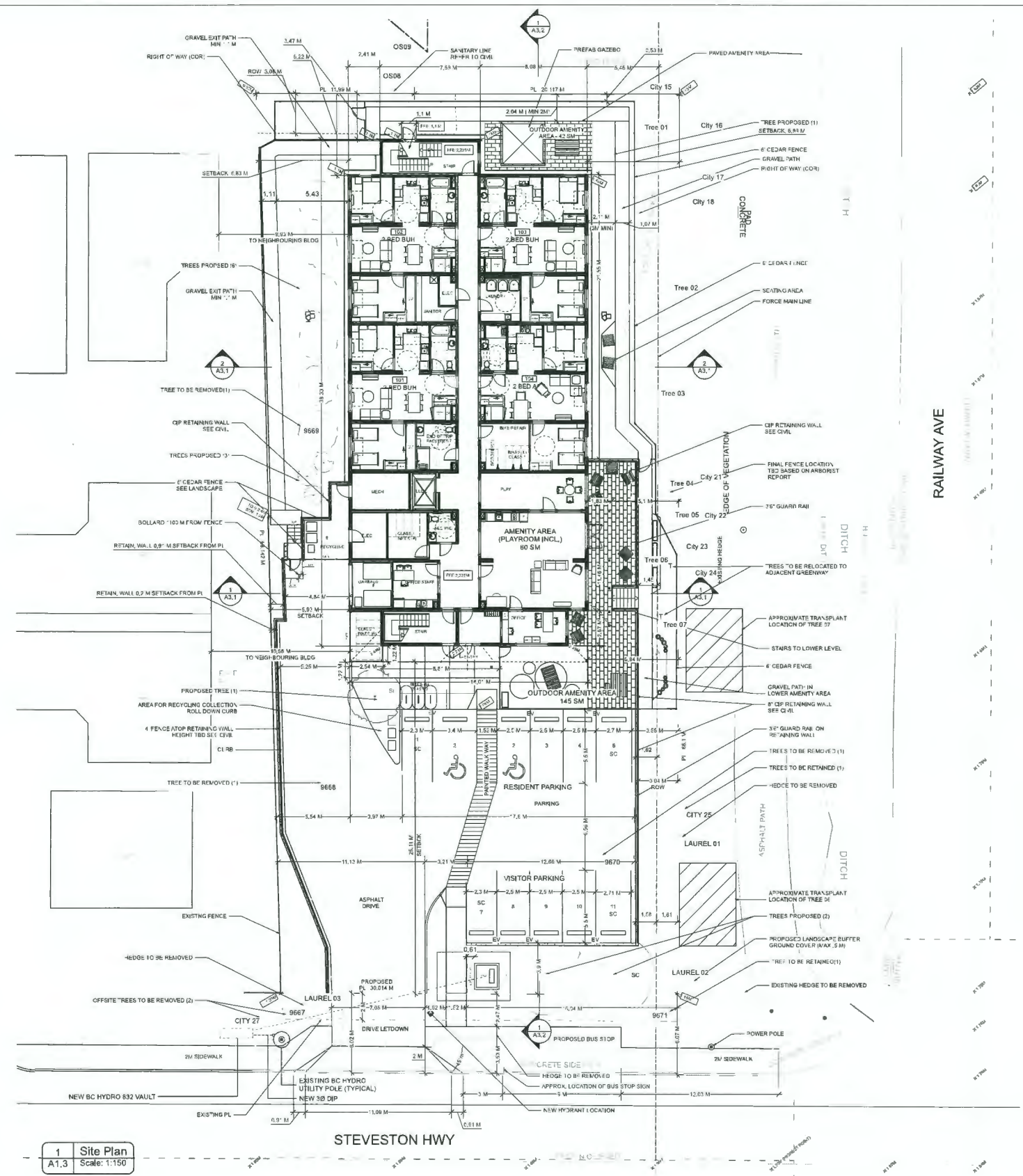
BONI • MADDISON
Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

TITLE:
 CONTEXT PLAN

DRAWN:	DRAWING NO:
SCALE:	A0.1
JOB NO: 23-01	
DATE: 2023-08-18	REV. NO:



EXISTING STATISTICS Summary
 CIVIL: 4831 Steveston Hwy, Richmond, BC V7E 2K4
 LEGAL: LOT 65 SEC 35 36 BLK 4N RG 7W PL NWP24405 LOT 65, BLOCK 4N, PLAN NWP24405, SECTION 35, 36, RAN GE 7W, NEW WESTMINSTER LAND DISTRICT, EXCEPT PLAN 4 7349

ZONING: RS1/E
 Parcel Area: 2118,1 sm

PROPOSED STATISTICS:
 YARD:
 FRONT YARD 26,32 m
 WEST YARD 6,83 m/ 5,93m
 EAST YARD 7,03 m
 REAR YARD 3,47 m

PARKING:
 9 PARKING STALLS (6 RESIDENT, 5 VISITOR/STAFF)
 2 ACCESSIBLE PARKING STALLS
 TOTAL = 11 PARKING SPACES

BIKE PARKING:
 16 CLASS 1 BIKE PARKING
 6 CLASS 2 BIKE PARKING

BUILDING:
 GROUND FLOOR 654,89 sm
 2ND FLOOR 637,31 sm
 3RD FLOOR 637,31 sm
 TOTAL AREA 1 929,52 sm

FSB:
 BUILDING AREA 1 929,52 sm
 EXCLUSIONS 219,18 sm
 1 710,34 sm / 2 118,1 sm = 0,807 FSR

RESIDENTIAL AREA (SQ/M): 1260 SM
OUTDOOR AMENITY AREA (SQ/M): 185 SM

UNIT SUMMARY:
 4x 2 BEDROOMS ON THE GROUND FLOOR
 6x 2 BEDROOMS ON THE 2ND FLOOR
 15x STUDIOS ON THE THIRD FLOOR
 TOTAL = 25 UNITS (10 - 2 BEDROOMS + 15 STUDIOS)

2 ACCESSIBLE UNITS
 14 UNITS MEETING BUH REQUIREMENTS (INCLUDING 2 ACCESS.)

BUILDING HEIGHT (M)
 FROM AVERAGE GRADE = 13,76M
 AVERAGE GRADE CALCULATION:
 2,49+2,49+1,1+1,45+1,39+1,15+1,65+0,97=12,69 ÷ 8 = 1,58625M

FLOOD CONTROL LEVEL CALCULATION:
 HIGHEST ELEVATION AT ROAD = 1,93M + 0,3M = 2,23M TO U/S FRAMING OF CRAWLSPACE.
 FINISHED FLOOR LEVEL THEREFORE 2,5M

PARCEL AREA 2,118,1 sm
FRONTAGE AREA 59,3 sm
FINAL SITE AREA 2,177,4 sm

LOT COVERAGE SM:
 BUILDING 654,89 SM / 31%
 NON-POROUS 730,00 SM / 34%
 POROUS/LIVELANDSCAPING 733,21 SM / 35%

TREE MANAGEMENT PLAN:
 ORIGINAL TOTAL # OF TREES ONSITE (Revised PL) = 10
 ONSITE TREES TO BE TRANSPLANTED OFFSITE = 2
 ONSITE TREES TO BE REMOVED = 3
 OFFSITE TREES TO BE REMOVED = 2
 TOTAL TREES REMOVED = 5
 REPLACEMENT TREES PROPOSED = 12
 NEW TOTAL # OF TREES ONSITE = 17

NOTES:
 -ALL UNITS INCLUDE AGE-IN-PLACE FEATURES
 -BUILDING TO CONFORM TO BCBC STEP 4 ENERGY CODE REQUIREMENTS
 -CHOOSING SUSTAINABILITY PRACTICES INCORPORATED
 -TREES LABELED WITH T TO BE TRANSPLANTED TO RAILWAY GREENWAY

November 22, 2023
 DP 23-025993
 DP Plan # 2

1 23-05-10 REVISED LANDSCAPE REVISIONS

G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-09-12 ADP SUBMISSION
 D 23-08-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT
 4831 STEVESTON HWY

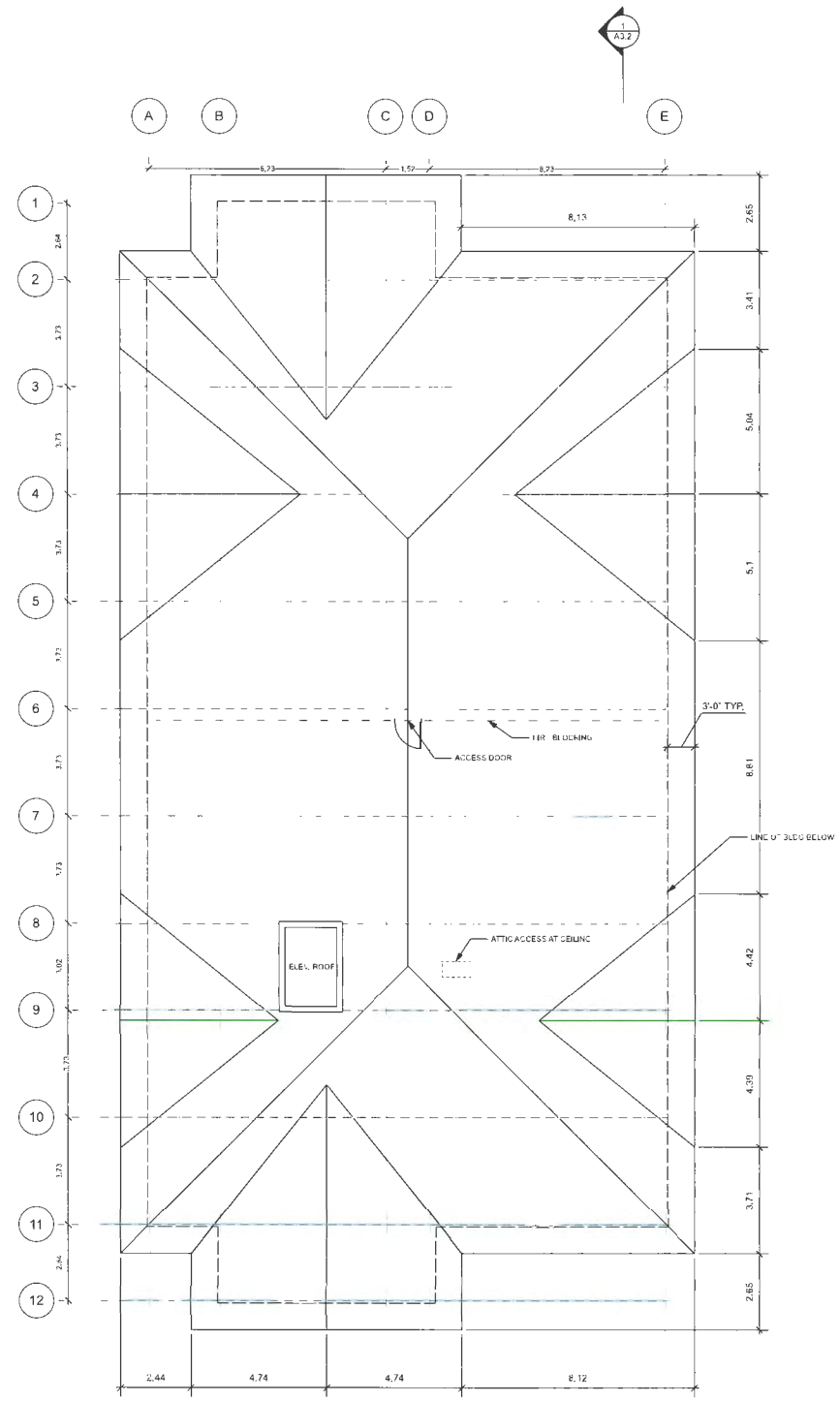
TITLE:
 SITE PLAN

DRAWN JS/GW DRAWING NO.
 SCALE 1:200 A1.3
 JOB NO. 23-01
 DATE: 2023-08-18 REV. NO.

1 Site Plan
 A1.3 Scale: 1:150



November 22, 2023
 DP 23-025993
 DP Plan # 3



- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-05-12 ADP SUBMISSION
- D 23-05-16 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

DISCLAIMER: THE CONTRACTOR SHALL VERIFY DIMENSIONS AND FINISHES AND REPORT ANY ERRORS AND/OR OMISSIONS TO THE ARCHITECT IMMEDIATELY UPON DISCOVERY. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS MADE BY THE CONTRACTOR. THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS MADE BY THE CONTRACTOR.



BONI • MADDISON
 Architects
 3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT
 4831 STEVESTON HWY

TITLE
 ROOF PLAN

DRAWN	JS/GW	DRAWING NO.
SCALE	1:100	A2.4
JOB NO.	23-01	
DATE	2023-08-18	REV. NO.

1 ROOF PLAN
 A2.4 Scale: 1:96





North Elevation 8-8 Scale: 1:96



South Elevation 5-5 Scale: 1:96 [STEVESTON HWY]



West Elevation 7 Scale: 1:96



East Elevation 6 Scale: 1:96 [RAILWAY AVENUE]

*FENCES AND TREES GRAYED OUT FOR CLARITY

- GENERAL FINISHES:
1. FIBRE CEMENT TRIM AT FASCIA, CORNERS
 2. FIBRE CEMENT BOARD AND BATTEN CLADDING
 3. FIBRE CEMENT HORIZONTAL LAPPED SIDING
 4. PREFINISHED ALUMINUM ENTRY DOORS
 5. SHINGLED ROOF
 6. DOORS & WINDOWS - DOUBLE GLAZED WHITE VINYL

November 22, 2023
 DP 23-025993
 DP Plan # 4

- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-09-12 ADP SUBMISSION
 D 23-06-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION
- ISSA 5

COPYRIGHT RESERVED. THE CONCEPTS, DESIGN AND CONTENTS ARE SOLELY AND EXCLUSIVELY THE PROPERTY OF BONIMADDISON ARCHITECTS AND SHALL NOT BE USED, REPRODUCED OR REPRICED WITHOUT THE EXPRESS WRITTEN CONSENT OF BONIMADDISON ARCHITECTS.
 DIMENSIONS: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR OMISSIONS. DO NOT SCALE DRAWINGS.



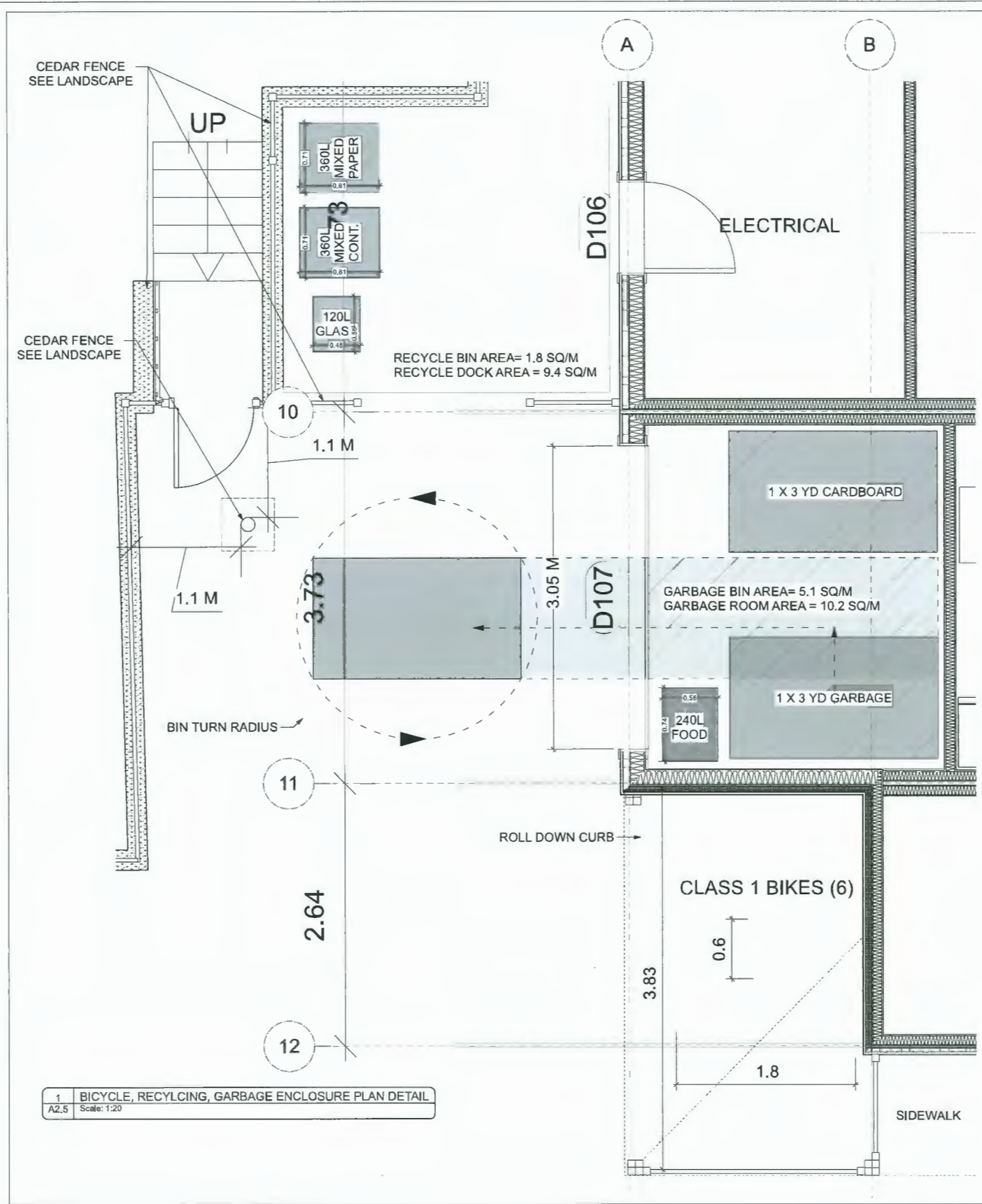
BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

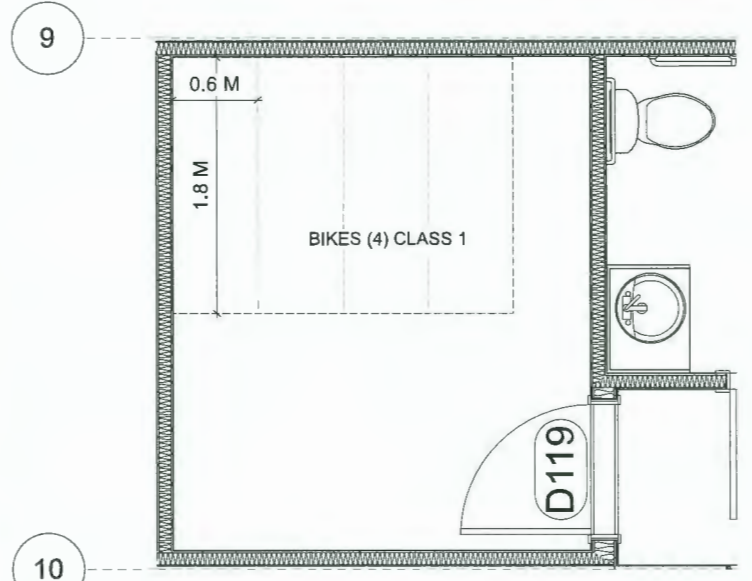
PROJECT
 4831 STEVESTON HWY

TITLE
 ELEVATIONS

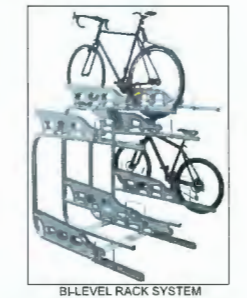
DRAWN	JS/GW	DRAWING NO.
SCALE	1:100	A4.1
JOB NO.	23-01	
DATE	2023-06-18	REV. NO.



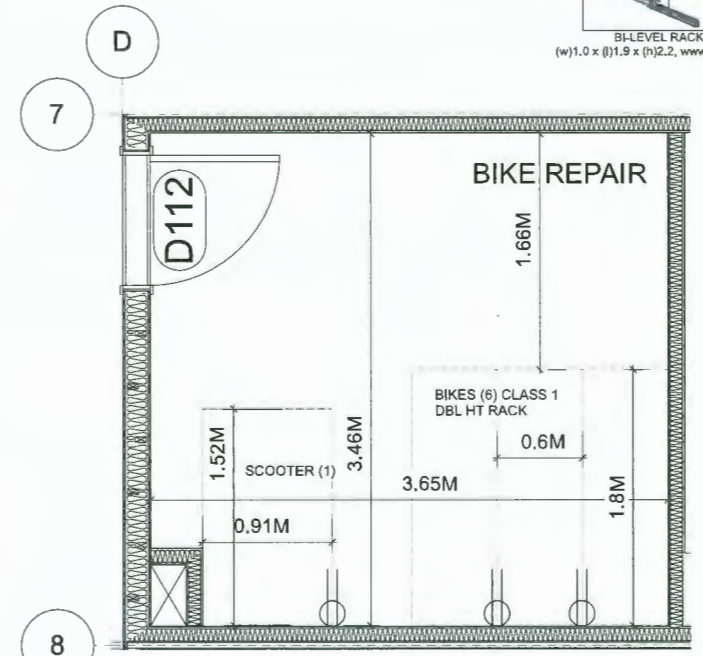
1 BICYCLE, RECYCLING, GARBAGE ENCLOSURE PLAN DETAIL
A2.5 Scale: 1:20



2 BICYCLE ROOM
A2.5 Scale: 1:20



BILEVEL RACK SYSTEM
(w)1.0 x (h)1.9 x (h)2.2, www.gogreenspoke.com



4 BICYCLE/SCOOTER/BIKE REPAIR ROOM
A2.5 Scale: 1:20

November 22, 2023
DP 23-025993
DP Plan # 7

- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
F 23-11-03 50% REVIEW
E 23-09-12 ADP SUBMISSION
D 23-08-18 SCHEMATIC DESIGN
C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED: THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS IS RESERVED AND REMAINS AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONIMADDISON ARCHITECTS AND SHALL NOT BE LOANED, REPRODUCED OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF BONIMADDISON ARCHITECTS.

DISCLAIMER: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DIMENSIONS SHALL BE SHOWN AS NOTED UNLESS OTHERWISE NOTED. DO NOT SCALE DRAWINGS.



BONI • MADDISON
Architects

3732 West Broadway
Vancouver, B.C., V6R 2C1
T: 604 688 5894
F: 604 688 5899
E: info@bonimaddison.com

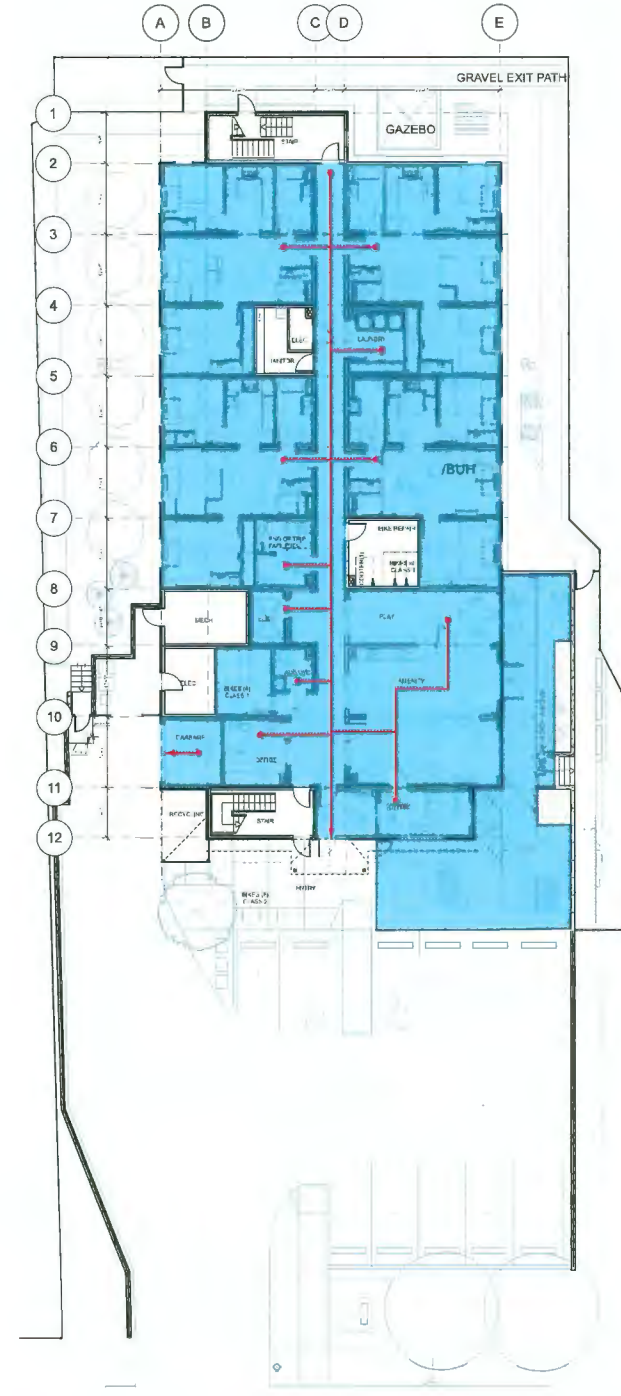
PROJECT:
4831 STEVESTON HWY

TITLE:
GARBAGE/RECYCLING/BIKES

DRAWN	JS	DRAWING NO.
SCALE	1:20	A2.5
JOB NO.	23-01	
DATE:	2023-08-18	REV. NO.

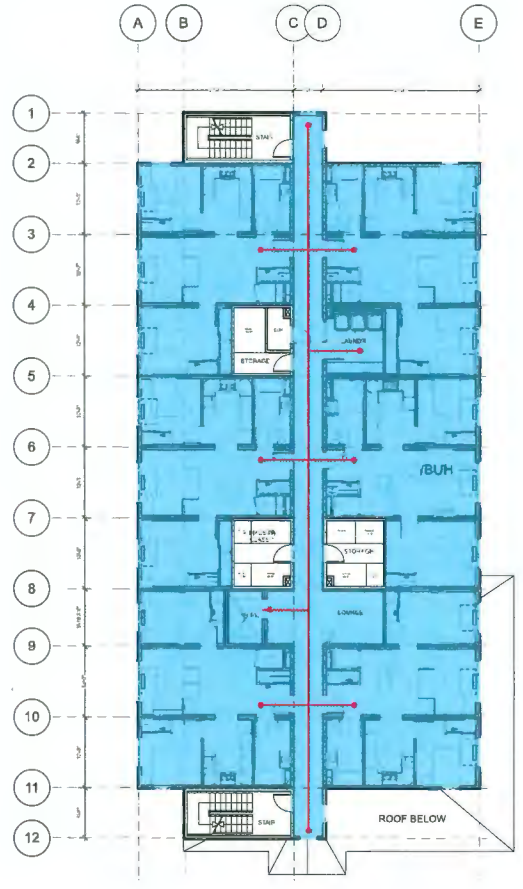


November 22, 2023
 DP 23-025993
 DP Plan # 8

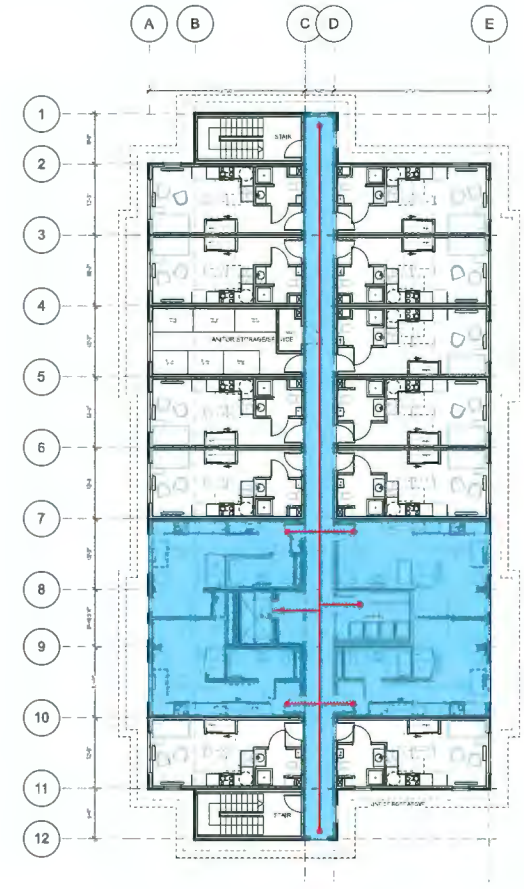


1 Ground Floor
 A2.6 Scale: 1:150

NOTE:
 RED SHOWS GENERAL PATH TO EXIT FOR
 WHEELCHAIR BLUE DENOTES ACC. AREAS.



2 Second Floor
 A2.6 Scale: 1:150



3 Third Floor
 A2.6 Scale: 1:150



1 23-05-10 REVISED LANDSCAPE REVISIONS:

 G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-08-12 ADP SUBMISSION
 D 23-08-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED:
 THE COPYRIGHT TO THE DRAWING AND ITS CONTENTS IS RESERVED AND WILL REMAIN AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONI-MADDISON ARCHITECTS AND SHALL NOT BE USED, REPRODUCED, OR REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF BONI-MADDISON ARCHITECTS.

 DIMENSIONS:
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR OMISSIONS TO THE SCALE DRAWINGS.

BONI · MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT
 4831 STEVESTON HWY

TITLE:
 WHEELCHAIR ACCESS.
 PLAN

DRAWN	JS/GW	DRAWING NO.
SCALE:	1:200	A2.6
JOB N°	23-01	
DATE:	2023-06-18	REV. N°

1. TRIM AT FASCIA, DOORS & WINDOWS

Hardie® Trim

HardieTrim® boards come finished with either the PrimePlus® factory primer and sealer or with ColorPlus® Technology. The ColorPlus® coating is a factory-applied, oven-baked finish available on a variety of James Hardie® siding and trim products. See your local dealer for details and availability of products, colors, and accessories.

5/4, 4/4 HardieTrim® board is a decorative non-load bearing trim product. 5/4 HardieTrim board is 25mm (1 in) thick, 4/4 HardieTrim board is 19mm (¾ in) thick, and both can be purchased in 3,038mm (10 ft) and 3,658mm (12 ft) lengths, based on local availability. In addition to frieze, rake, window, door, and corner details, 5/4, 4/4 HardieTrim boards may be used to construct light blocks, column wraps and decorative scroll work. Available in commonly-used nominal widths from 101mm (4 in) to 304mm (12 in).



COBBLE STONE

2. SHINGLE CLADDING & BOARD AND BATTEN CLADDING

Hardie® Shingle

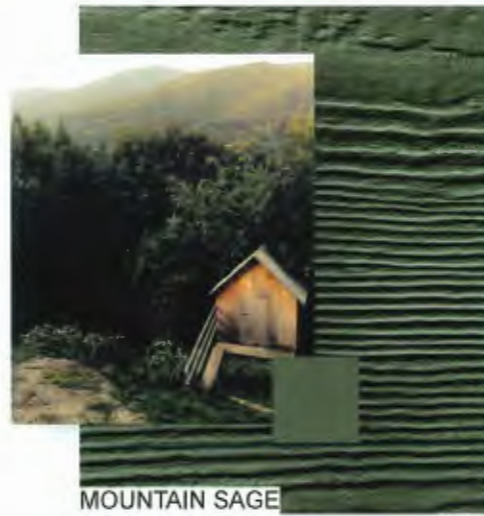
Hardie Shingle® siding is fiber-cement shingle siding for sidewall applications. HardieShingle siding is available as straight-edge panels or staggered-edge panels 1.2m (48 in) long by 406mm (16 in) high. HardieShingle panels also come as decorative half-round shingles. For smaller coverage areas, individual shingles are also available in 152mm (6 in), 203mm (8 in), and 305mm (12 in) widths. Please see your James Hardie dealer for local availability of these products.

Hardie Shingle® siding is available as a prefinished James Hardie product with ColorPlus® Technology. The ColorPlus coating is a factory applied, oven-baked finish available on a variety of James Hardie siding and trim products.

Hardie® Panel

HardiePanel® vertical siding is factory-primed fiber-cement vertical siding available in a variety of sizes and textures. HardiePanel vertical siding is 7.5mm (5/16 in) thick and is available in 4 ft x 8 ft, 4 ft x 9 ft and 4 ft x 10 ft sizes. Hardie Panel vertical siding is available as a prefinished James Hardie® product with ColorPlus® Technology. The ColorPlus coating is a factory applied, oven baked finish available on a variety of James Hardie siding and trim products.

HardieTrim® Batten Boards are a decorative non-load bearing trim product. HardieTrim® Batten Boards are 19mm (¾ in) thick, 64mm (2½ in) wide, and come on 3,658mm (12 ft) lengths.



MOUNTAIN SAGE

NOTE: METAL FLASHING TO MATCH CLADDING

3. HORIZONTAL SIDING

Hardie® Plank

Hardie Plank® lap siding is factory-primed fiber-cement lap siding available in a variety of styles and textures. Please see your local James Hardie® product dealer for product availability. HardiePlank® lap siding comes in 12 ft. lengths. Nominal widths from 5¼ in. to 12 in. create a range of exposures from 4 in. to 10¼ in.



HEATHERED MOSS

NOTE: METAL FLASHING TO MATCH CLADDING

FENCE STAIN



GENERAL FINISHES:
1 - FIBRE CEMENT SIDING THROUGHOUT, BOARD AND BATTEN AND HORIZONTAL PLANK
2 - FIBRE CEMENT TRIMS AT WINDOW, DOORS, FASCIA AND CORNERS-DOUBLE GLAZED WHITE VINYL WINDOWS
3 - ALL CLADDING MATERIALS PREFINISHED
4 - PREFINISHED ALUMINUM ENTRY DOORS
5 - ASPHALT SHINGLES

November 22, 2023
DP 23-025993
DP Plan # 9

1 23-05-10 REVISED LANDSCAPE REVISIONS:

G 23-11-20 DP APPLICATION
F 23-11-03 50% REVIEW
E 23-09-12 ADP SUBMISSION
D 23-08-18 SCHEMATIC DESIGN
C 23-07-31 DP SUBMISSION

ISSUES:
L: PLEASE REFER TO THE DRAWING AND ITS CONTENTS FOR DETAILS AND DIMENSIONS. ALL DIMENSIONS ARE THE EXCLUSIVE PROPERTY OF BONI-MADDISON ARCHITECTS AND SHALL BE USED AS SHOWN. FOR ANY REVISIONS, CONTACT THE ARCHITECT FOR THE LATEST EDITION OF DRAWINGS ON ARCHIBENT.

DATE: 2023-11-20
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MATCHES BEFORE ANY WORK BEGINS AND/OR AMENDMENTS TO SCALE DRAWINGS.



BONI • MADDISON
Architects

3732 West Broadway
Vancouver, B.C., V6R 2C1
T: 604 688 5894
F: 604 688 5899
E: info@bonimaddison.com

PROJECT:
4831 STEVESTON HWY

TITLE:
MATERIALS SHEET

DRAWN: JS/GW DRAWING NO:
SCALE: 1:100 A4.2
JOB NO: 23-01
DATE: 2023-08-18 REV. NO:

**ALL PLANTS TO BE NURSERY GROWN
ALL PLANT MATERIALS AND LABOUR TO CONFORM
TO THE CURRENT EDITION OF THE CSLA LANDSCAPE STANDARDS.**

**ALL PLANT MATERIAL TO BE INSPECTED PRIOR TO DELIVERY ON SITE. CONTRACTOR TO
ARRANGE FOR INSPECTION AND MATERIAL TO ASSEMBLED IN ONE LOCATION FOR REVIEW.**

IMPORTED GROWING MEDIA SHALL BE A SANDY LOAM OR LOAMY SAND TEXTURE (NO LESS THAN 50% SAND BY WEIGHT) CONTAINING 4 AND 15% ORGANIC MATTER (DRY WEIGHT BASIS).

GROWING MEDIA SHALL VIRTUALLY FREE FROM SUBSOIL, WOOD INCLUDING WOODY PLANT PARTS, INVASIVE AND NOXIOUS PLANT AND THEIR REPRODUCTIBLE PARTS, PLANT PATHOGENIC ORGANISMS, ORGANIC OR INORGANIC MATERIALS, TOXINS, STONES OVER 30mm (1.2"), ANY DEBRIS AND FOREIGN OBJECTS.

IMPORTED GROWING MEDIA SHALL CONFORM TO AND BE TREATED AS PER SECTION 6.2.3 TO 6.2.7 INCLUSIVE OF THE CURRENT EDITION CSLA LANDSCAPE STANDARDS.

GROWING MEDIUM SHALL CONFORM TO LEVEL 1 "WELL-GROOMED" AREAS; LOW TRAFFIC LAWN AREAS, TREES AND LARGE SHRUBS (1.1 IN TABLE T-6.3.5.1 OF THE CURRENT EDITION OF THE CSLA LANDSCAPE STANDARDS). IT SHALL POSSESS THE FOLLOWING QUALITIES:

TEXTURE

- *COARSE GRAVEL (LARGER THAN 19mm AND SMALLER THAN 40mm): 0-1%
- *ALL GRAVEL (LARGER THAN 2mm AND SMALLER THAN 40mm): 0-5%
- *SAND (LARGER THAN 0.05mm AND SMALLER THAN 2mm): 50-70%
- *SILT (LARGER THAN 0.002mm AND SMALLER THAN 0.05mm): 10-25%
- *CLAY (SMALLER THAN 0.002mm): 0-20%
- *CLAY AND SILT COMBINED: MAXIMUM 25%

ORGANIC CONTENT: 3-10%

Acidity (pH): 6.0-7.0 as per CSLA Standards

DRAINAGE: PERCOLATION SHALL BE SUCH THAT NO STANDING WATER IS VISIBLE 60 MINUTES AFTER AT LEAST 10 MINUTES OF MODERATE TO HEAVY RAIN OR IRRIGATION.

MINIMUM SOIL DEPTH TO BE AS PER TABLE T.6.3.5.5 OF THE CURRENT EDITION CSLA LANDSCAPE STANDARDS:

	Over prepared subgrade where the subsoil drains rapidly	Over structures or where the subsoil drains poorly
LARGE TREE	750mm(30")	900mm(35")
TREES (10m3 PER TREE)	600mm(24")	750mm(30")
LARGE SHRUBS	600mm(24")	500-600mm(20"-36")
SMALL SHRUBS	450mm(18")	300-500mm(12"-20")
GROUNDCOVERS	300mm(12")	225mm(9")
LAWN-IRRIGATED	150mm(6")	150mm(6")
LAWN-NOT IRRIGATED	150mm(6")	225mm(9")

SOIL DEPTHS WILL BE CHECKED AT TIME OF SUBSTANTIAL COMPLETION REVIEW

SOIL FOR URBAN AGRICULTURE PLOTS IS TO BE URBAN GRO PROVIDED BY VERATEC, OR APPROVED ALTERNATIVE. SOIL FOR URBAN AGRICULTURE AREAS IS TO MEET OR EXCEED THE GUIDELINES FOR COMPOST QUALITY UNDER CANADIAN COUNCIL OF MINISTERS OF THE ENVIRONMENT (CCME).

COMPOST IS TO BE TESTED AND RESULTS SUBMITTED TO CONSULTANT PRIOR TO DELIVERY TO SITE.

BEDS TO HAVE 3" MULCH LAYER (after settling) CONSISTING OF ORGANIC COMPOSTED BARK APPLIED.

PLANTED AREAS TO HAVE PERMANENT HIGH EFFICIENCY IRRIGATION SYSTEM - SHOP DRAWINGS ARE TO BE PREPARED BY AN IAABC CERTIFIED DESIGNER AND APPROVED BY LANDSCAPE ARCHITECT.

CONTRACTOR TO PROVIDE MAINTENANCE FOR 1 YEAR FOLLOWING SUBSTANTIAL COMPLETION.

CONTRACTOR TO PROVIDE WRITTEN 1 YEAR WARRANTY ON PLANT MATERIAL

CONTRACTOR TO PROVIDE COPY OF SOIL TEST TO LANDSCAPE CONSULTANT 3 WEEKS PRIOR TO DELIVERY ON-SITE. TEST TO BE PERFORMED BY AN INDEPENDENT LAB AND IS TO INCLUDE RECOMMENDATIONS FOR BOTH LAWN AND PLANTING BEDS.

CONSULTANT TO APPROVE SOIL BEFORE INSTALLATION. THIS DOES NOT PRECLUDE THE CONSULTANT FROM PERFORMING AN INDEPENDENT SOIL ANALYSIS AT TIME OF SUBSTANTIAL COMPLETION. CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF SOIL THAT DOES NOT MEET SPECIFICATIONS AT NO EXTRA COST TO CLIENT.

CONTRACTOR TO PROVIDE WRITTEN 1 YEAR WARRANTY ON SOIL SPECIFICATIONS.

AN INDEPENDENT SOIL TEST TO BE PROVIDED 1 WEEK PRIOR TO END OF 1 YEAR WARRANTY PERIOD CONTRACTOR TO PROVIDE SOIL AMMENDMENTS TO BRING SOIL UP TO QUALITY RECOMMENDED IN SOILS REPORT.

SITE INSPECTION

EXAMINE EXISTING SUBGRADE CONDITIONS AND SIGNIFY ACCEPTANCE IN WRITING TO THE CONSULTANT.

ASCERTAIN THE SIZE AND LOCATION OF ALL EXISTING SERVICES AND SUBGRADES PRIOR TO THE WORK.

IMMEDIATELY REPAIR DAMAGE RESULTING FROM FAILURE TO EXERCISE SUCH PRECAUTIONS AT NO COST TO THE OWNER.

ALL PRUNING TO BE IN ACCORDANCE WITH THE CSLA LANDSCAPE STANDARDS CURRENT EDITION.

ALL SOFTSCAPE AREAS TO INCLUDE MIN. 75MM GRAVEL DRAINAGE LAYERS IN ADDITION TO INDICATED SOIL DEPTH.

PLANT COUNTS

IN THE CASE OF ANY DISCREPANCY BETWEEN PLANT COUNTS ON PLANT LIST AND PLANT SYMBOLS ON DRAWING, THE DRAWING TAKES PRECEDENT. THE CONTRACTOR IS TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.

BIRD FRIENDLY PLANTING

PLANTS THAT ENABLE BIRD-FRIENDLY HABITAT CONSERVATION AND PROMOTION HAVE BEEN SELECTED AND CAN BE FOUND THROUGHOUT THE LANDSCAPE. PLANTING IS GROUPED IN NATURALIZED LAYERS OF TREES, TALL SHRUBS, LOW SHRUBS AND GROUNDCOVERS. MIMICKING THE IDEAL ENVIRONMENTAL CONDITIONS FOR BIRDS, THESE LAYERS WILL BE VARIED WITH A DIVERSITY OF TEXTURES AND DENSITIES THAT ATTRACTS AND PROTECTS MANY BIRD SPECIES. SPECIFIC LOCAL AND NON-INVASIVE PLANT SPECIES HAVE BEEN SELECTED BASED ON THEIR ABILITY TO PROVIDE YEAR-ROUND FOOD FOR BIRDS AND/OR YEAR-ROUND NESTING OPPORTUNITIES.

GENERAL NOTES

1. DO NOT SCALE DIRECTLY FROM DRAWINGS.
2. WHERE PLANS AND SPECIFICATIONS ARE FOUND TO BE IN CONFLICT, OR WHERE VARIOUS ITEMS OF WORK ARE SEEN TO BE IN CONFLICT, NOTIFY THE CONSULTANT IN WRITING IMMEDIATELY PRIOR TO COMMENCING CONSTRUCTION.
3. THE CONTRACTOR IS REQUIRED TO INVESTIGATE AND VERIFY THE ALIGNMENT AND LOCATION OF ALL EXISTING SERVICES AND ALL EXISTING LANDSCAPE FEATURES ON SITE PRIOR TO COMMENCING CONSTRUCTION.
4. THE CONTRACTOR SHOULD PROVIDE SHOP DRAWINGS FOR REVIEW PRIOR TO COMMENCEMENT OF LANDSCAPE WORKS. MOCK UPS MAY BE REQUIRED AS NOTED/REQUESTED. DIMENSIONS ON THIS DRAWING ARE IN MM, UNLESS OTHERWISE STATED AS REQUIRED BY THE CITY.
5. THESE DRAWINGS SHOULD BE READ IN CONJUNCTION WITH CORRESPONDING ARCHITECTURE AND CIVIL ENGINEER'S DRAWINGS.
6. VERIFY LOCATION OF ALL UNDERGROUND STRUCTURES INCLUDING, BUT NOT LIMITED TO, VAULTS, ELECTRICAL DUCT BANKS, MANHOLES, CONDUITS AND PIPING, DRAINAGE STRUCTURES AND OTHER UTILITIES WITH CORRESPONDING WET AND DRY ENGINEERS AND CIVIL DRAWINGS.
7. ALL VEHICULAR ROADS SUB LAYERS TO BE READ FROM GEOTECHNICAL SPECIFICATIONS.
8. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL WORK DISTURBED BY CONSTRUCTION OUTSIDE OF LIMIT LINES DEFINED ON DRAWINGS OR THROUGH HIS/HER MEANS AND METHODS TO A CONDITION BETTER THAN OR EQUAL TO THE EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
9. FOR PHASED PROJECT A SOIL TEST SUBMITTAL WILL BE REQUIRED AT EACH PHASE AND THE TEST IS TO BE WITHIN 3 WEEKS OF THE DELIVERY TO SITE.

PLANTING NOTES- REFER TO CURRENT NOTES LIST.

1. THE CONTRACTOR SHALL INSTALL TREE PROTECTION FENCE AS INDICATED ON THE DRAWINGS OR ARBORIST REPORT IN COMPLIANCE WITH ALL MUNICIPAL AND PROFESSIONAL REQUIREMENTS.
2. TREE PROTECTION TO REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETE.
3. DO NOT STORE CONSTRUCTION MATERIALS, DEBRIS, EXCAVATED MATERIAL OR EQUIPMENT WITHIN TREE PROTECTION ZONE.
4. FINISH GRADING TO MEET EXISTING GRADE OF PROTECTED TREES 0.5M OR (20 INCHES) BEYOND THE DRUPLINE.
5. EXACT LOCATIONS OF PROPOSED PLANT MATERIALS SHALL BE FLAGGED / STAKED AND APPROVED BY LANDSCAPE ARCHITECT CONSULTANT ON SITE PRIOR TO INSTALLATION. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT UNSUITABLE MATERIAL DELIVERED OR INSTALLED ON SITE WITHOUT PRIOR REVIEW AND APPROVAL.
6. THE CONTRACTOR SHALL OBTAIN AN AGRONOMIC SOIL ANALYSIS REPORT, WHICH TESTS THE SOIL QUALITY CATEGORIES RELATIVE TO AGRICULTURE BY AN CERTIFIED SOIL NUTRIENT TESTING LABORATORY FOR APPROVAL BY THE LANDSCAPE ARCHITECT. THE REPORT SHALL INCLUDE RECOMMENDATIONS FOR PREPARATION OF GROWING MEDIUM TO MEET THE CSLA AAPC & ONLA AAPC.
7. EXCESS SOIL FROM LANDSCAPE GRADING IS TO BE REMOVED AND DISPOSED OF OFFSITE BY THE CONTRACTOR IN A LOCATION APPROVED BY THE DEPARTMENTAL REPRESENTATIVE.
8. REFER TO PLANT SCHEDULE FOR THE LIST OF SPECIES, INCLUDING SIZE AND FORM AND OTHER SPECIFIED INFO.
9. CONTRACTOR TO OBTAIN APPROVAL OF LANDSCAPE ARCHITECT FOR ANY SUBSTITUTIONS OF PLANT SPECIES OR SIZES.
10. ALL TREES MUST BE GUYED OR STAKED AS PER DETAILS AND SPECIFICATIONS.
11. THE CONTRACTOR SHALL PROVIDE ROOT BARRIERS FOR ALL TREES LOCATED WITHIN TWO (2.0) METERS OF PAVING OR UNDERGROUND UTILITIES.
12. THE CONTRACTOR SHALL MANUALLY IRRIGATE OR ACTIVATE IRRIGATION SYSTEMS NECESSARY TO WATER AND MAINTAIN PROPOSED AND EXISTING VEGETATION.
13. FOR PLANTING SOIL DEPTH, FOLLOW THE CITY'S RECOMMENDATION AND REQUIREMENTS ONLY IF THE CITY'S REQUIREMENTS FOR SOIL DEPTH EXCEEDS CSLA OR BC SLA STANDARDS AND REQUIREMENTS.
14. A SHOP DRAWING INDICATING THE SOIL DEPTH TO BE PROVIDED FOR THE LANDSCAPE REVIEW PRIOR TO INSTALLATION.
15. LIGHT-WEIGHT-BLOW-IN SOIL WILL NOT BE ACCEPTED UNLESS IT IS REQUIRED BY STRUCTURAL ENGINEER.
16. A LANDSCAPE ARCHITECT SHALL BE ON SITE AT SOIL DELIVERY DATE.

HARD LANDSCAPE & FURNITURE NOTES

1. PROVIDE EXPANSION JOINTS ALIGNED WITH PROPOSED PAVING PATTERN AND PAVING MODULES. THE SPACING OF EXPANSION JOINTS TO STRUCTURAL ENGINEERS RECOMMENDATION.
2. UNLESS SPECIFICALLY DIMENSIONED SITE FURNITURE LOCATIONS ON DRAWINGS ARE APPROXIMATE AND MUST BE APPROVED ON SITE BY THE LANDSCAPE ARCHITECT BEFORE UNDERTAKING INSTALLATION.
3. CONTRACTOR TO SUBMIT ENLARGED DETAILED PLANS AND SHOP DRAWINGS FOR ALL HARDSCAPE MATERIAL PAVING, CLADDING AND CAPPING SHOWING PATTERNS, EXACT DIMENSIONS AND ARRANGEMENT FOR LANDSCAPE ARCHITECT'S APPROVAL.
4. ALL PAVING MATERIALS COLORS AND FINISHES ARE AS INDICATED ON DRAWINGS AND SPECIFICATIONS OR AS APPROVED BY THE LANDSCAPE ARCHITECT.
5. CONTRACTOR TO BUILD A 2M LONG X MINIMUM WIDTH OR 2M WIDTH (WHICH EVER IS LESS) MOCK-UP FOR ALL HARDSCAPE MATERIALS AS SPECIFIED ON DRAWINGS AND SPECIFICATIONS SETS FOR LANDSCAPE ARCHITECT'S APPROVAL PRIOR TO INSTALLATION ON SITE. APPROVED MOCK-UPS COULD BE USED FOR THE OVERALL HARDSCAPE INSTALLATIONS.
6. ALL SITE FURNITURE COLORS AND FINISHES IS AS INDICATED ON DRAWINGS AND SPECIFICATIONS OR AS APPROVED BY THE LANDSCAPE ARCHITECT.
7. CONTRACTOR TO FOLLOW MANUFACTURER RECOMMENDATIONS FOR INSTALLATION AND FIXATION OF ALL SITE FURNITURE AND TO SUBMIT SHOP DRAWINGS FOR LANDSCAPE ARCHITECT'S APPROVAL.

SITE LAYOUT & GRADING NOTES

1. ALL PROPOSED DIMENSIONS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING WITH CONSTRUCTION.
2. SITE LAYOUT DIMENSIONS ARE IN M, UNLESS OTHERWISE INDICATED.
3. ALL PROPOSED LEVELS SHALL BE VERIFIED ON SITE BEFORE PROCEEDING WITH CONSTRUCTION.
4. STAIRS NUMBERS AND RISERS HEIGHT SHOULD BE VERIFIED ON SITE AND ADJUSTED AS SEEN NECESSARY AND AS APPROVED BY ENGINEER.
5. CONTRACTOR TO CROSS CHECK ALL EXTERNAL WORKS LEVELS WITH EXISTING BUILDINGS. ANY DISCREPANCIES TO BE SUBMITTED FOR THE LANDSCAPE ARCHITECT'S FEEDBACK.
6. DIMENSIONS TAKE OVER SCALE SHOWN ON DRAWINGS.
7. FOR LAYING OF ROADS AND CAR PARKING AND ASSOCIATED DRAINAGE REFER TO ENGINEER'S DRAWINGS AND SPECIFICATIONS.
8. THE FINISH GRADING OF PLANTING AREAS SHALL BE 50MM BELOW ADJACENT CURB OR PAVEMENT.

IRRIGATION NOTES

1. IRRIGATION TO BE PROVIDED FOR ALL SOFT LANDSCAPE AREAS SHOWN ON THE DRAWING BY LANDSCAPE CONTRACTOR.
2. IRRIGATED AREAS TO BE INSTALLED AS A DESIGN BUILD IRRIGATION SYSTEM FROM THE STUB OUTS PROVIDED (TYP. 2" CONFORM WITH MECHANICAL). PROVIDE SUBMITTALS OF DESIGN FOR LANDSCAPE REVIEW AT LEAST ONE WEEK PRIOR TO INSTALLATION AND AS-BUILT DRAWING WITHIN ONE MONTH OF SUBSTANTIAL PERFORMANCE. TO INCLUDE SLEEVING, DRIP LINE, PIPE SIZE, VALVE BOXES, ETC. VALVE BOXES TO BE LOCATED IN LOW-VISIBLE PLANTED AREAS ONLY AND LOCATIONS TO BE APPROVED.
3. IRRIGATION SYSTEM DESIGN AND INSTALLATION SHALL BE IN ACCORDANCE WITH CANADIAN LANDSCAPE STANDARDS.
4. IRRIGATION CONTRACTOR PERFORMING THE WORK MUST HAVE MINIMUM (5) FIVE YEARS DOCUMENTED EXPERIENCE, AND BE A MEMBER IN GOOD STANDING OF THE IAABC (IRRIGATION INDUSTRY ASSOCIATION OF BC).
5. IRRIGATION TO CONFORM TO ALL LOCAL PLUMBING AND ELECTRICAL CODE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH MECHANICAL AND ELECTRICAL CONSULTANTS AND TRADES.
6. IRRIGATION STUB-OUTS AND HOSE BIBS PER MECHANICAL PLANS.
7. SEPARATE ZONE AND REQUIRED SLEEVES TO BE PROVIDED FOR SPRAY IRRIGATION OF OFFSITE AREAS, PER CITY STANDARDS.
8. ALL IRRIGATION VALVE BOXES TO BE EQUIPPED WITH QUICK COUPLERS.
9. TEST SYSTEM PRIOR TO COMPLETION OF LANDSCAPE WORKS TO ENSURE NO LEAKAGE AND SPECIFIED PSI IS MET. PROVIDE WRITTEN NOTICE THAT PRESSURE TESTING HAS MET STANDARDS.
10. MAINTAIN AND OPERATE IRRIGATION PER MANUFACTURER'S RECOMMENDATIONS THROUGHOUT WARRANTY PERIOD - WINTERIZE AS REQUIRED.
11. PROVIDE COPIES OF INSTRUCTION MANUALS FOR OPERATION AND MAINTENANCE OF SYSTEM AND CONTROLS, SEASONAL ACTIVITY, AND SHUTDOWN AND MANUFACTURER'S PARTS CATALOGUE.

LANDSCAPE LIGHTING NOTES

1. ALL LIGHTING POINTS SHOWN ON LANDSCAPE PLANS ARE FOR REFERENCE ONLY. FOR ALL LIGHTING FIXTURES AND TYPES, REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.
2. CONTRACTOR TO SUBMIT SAMPLES OF ALL LIGHTING FIXTURES WITH REFERENCE SPECIES AND PHOTOMETRIC'S TO THE LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION ON SITE.
3. FOR STREET LIGHTING LOCATIONS AND TYPES REFER TO CIVIL DRAWINGS AND SPECIFICATIONS.
4. LIGHTING SPECS TO BE COORDINATED AND REVIEWED WITH ELECTRICAL PRIOR TO CONSTRUCTION.
5. STREET TREES AND FURNISHINGS TO BE LOCATED AT ACCEPTABLE OFFSITE- REFER TO LAYOUT DRAWINGS AND MUNICIPAL STANDARDS.

PLANT LIST

ID	QTY	LATIN NAME	COMMON NAME	SPACING	SIZE	NOTES	ATTRIBUTES
TREES							
Pas	3	Pinus nigra 'Arnold Sentinel'	Arnold Sentinel Austrian pine	as shown	4m ht/B&B	full/ bushy canopy	E, S
Pte	6	Populus tremula 'Erecta'	Swedish columnar aspen	as shown	6cm cal/B&B	low branching/ multiten	N
Pya	2	Prunus x yedoensis 'Akebono'	Akebono cherry	as shown	7cm cal/B&B	2.5m standard/ matchec	B, S
Stj	1	Styrax japonicus	Japanese snowbell	as shown	6cm cal/B&B	full/ bushy canopy	P, S
SHRUBS / GROUNDCOVERS / PERENNIALS							
Am	166	Achillea millefolium	yarrow		0,3 #1 cont.	full/ bushy plants	P
Auu	207	Arctostaphylos uva-ursi	kinnikinnick		0,3 #1 cont.	full/ bushy plants	N, E, B, P
Dfo	52	Dicentra formosa	pacific bleeding heart		0,61 #2 cont.	full/ bushy plants	P
Gem	53	Geranium macrorrhizum 'Bevan's Variety'	bigroot geranium		0,3 #1 cont.	full/ bushy plants	E, P
Gs	156	Gaurtheria shalton	satal		0,61 #2 cont.	full/ bushy plants	N, E, B, P, Ed
Lm	76	Liriope muscari	blue lily turf		0,46 #1 cont.	full/ bushy plants	E, P, B
Lp	27	Lonicera pileata	box leaf honeysuckle		0,76 #2 cont.	full/ bushy plants	E, B, P
Mr	100	Mahonia repens	creeping Oregon grape		0,46 #1 cont.	full/ bushy plants	N, E, B, P, Ed
Pm	72	Polystichum munium	sword fern		0,76 #3 cont.	full/ bushy plants	N, E
Pm+	40	Polystichum munium*	Sword Fern		0,61 #3 cont.	full/ bushy plants	
Pt	458	Pachysandra terminalis	Japanese spurge		0,25 #1 cont.	full/ bushy plants	E, P
Rtg	42	Rudbeckia fulgida 'Goldsturm'	black-eyed Susan		0,3 #2 cont.	full/ bushy plants	B, P
Sh	29	Sarcococca hookeriana	sweet box		0,46 #2 cont.	Full, bushy plants	
Sr	36	Sarcococca ruscolifolia	sweet box		0,76 #3 cont.	full/ bushy plants	E, B, P
Vot	73	Vaccinium ovatum 'Thunderbird'	Thunderbird evergreen huckle		0,76 #5 cont.		N, E, B, P
	0				0		

NOTES:

1. ALL LANDSCAPE TO CONFORM TO THE CURRENT EDITION OF THE CSLA STANDARDS FOR LEVEL 1 'GROOMED' LANDSCAPE TREATMENT IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT LIST AND THE PLANTING PLAN, THE PLANTING PLAN TAKES PRECEDENCE.
2. SEARCH AREA TO INCLUDE BRITISH COLUMBIA, WASHINGTON, AND OREGON
3. N - NATIVE E - EVERGREEN B - BIRD FRIENDLY P - POLLINATOR Ed - EDIBLE W - WINTER INTEREST S - VERY SUITABLE/SUITABLE AS PER URBAN TREE LIST FOR METRO VANCOUVER IN A CONSTRUCTION CLIMATE
4. IN THE CASE OF ANY DISCREPANCY BETWEEN PLANT COUNTS ON PLANT LIST AND PLANT SYMBOLS ON DRAWING, THE DRAWINGS TAKES PRECEDENT. THE CONTRACTOR IS TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.

SITE FURNISHINGS

ID	DETAIL	DESCRIPTION	SIZE	COLOUR	MATERIAL	MODEL	MANUFACTURER	QTY	NOTES
F1	1/L7.2	BIKE RACK	1,01m x 0,9m	blue water	aluminum	Loop 2	wishbone	3	
F2	2/L7.2	DINING TABLE	1,83m x 1,67m	blue water, walnut	aluminum	Bayview	wishbone	2	w/ wheelchair access
F3	3/L7.2	LOUNGE CHAIR	0,9m x 0,86m	blue water, walnut	aluminum	Jem	wishbone	10	
F4	4/L7.2	SHELTER	10ft x 10ft	-	-	meridian	yardistry	1	
F5	5/L7.2	GARDEN PLANTER	60"L x 12"W x 16"H	pewter	aluminum	low rectangle	greentheory	4	
F6	6/L7.2	BIRD HOUSES	0,67 x 0,64 x 3,0m	blue	aluminum	habitat	vestre	2	
F7	2/L7.3	36" GUARDRAIL	36" HT (1,07m)	-	-	-	-	-	
F8	1/L7.3	6' CEDAR FENCE	6'0" HT (1,83m)	-	cedar	custom	-	-	
F9	per Owner	STORAGE BOX	64,4x72,4x155cm	anthracite	-	rockwood box	keter	1	

PLAY ELEMENTS

ID	DETAIL	DESCRIPTION	SIZE	COLOUR	MATERIAL	MODEL	MANUFACTURER	QTY	NOTES
P1	7/L7.2	PLAYHUT	1,8m x 1,0m x 1,58m	blue	robinia	NRO410	Kompan	1	-
P2	6/L7.1	PIP RUBBER SURFACE -		blue/black 50/50	-	-	marathon surfaces	-	-
P3	3/L7.3	PLAY STUMPS	max 0,3m HT	-	-	-	custom	10	

MATERIALS

ID	DETAIL	DESCRIPTION	SIZE	COLOUR	PATTERN	MODEL	MANUFACTURER	QTY	NOTES
M1	3/L7.1	CIP CONCRETE	-	-	-	-	-	-	-
M2	5/L7.1	GRAVEL FINES	5-8mm dia.	charcoal	-	-	NW Landscape	-	-
M3	4/L7.1	SLAB UNIT PAVERS	300x600mm	charcoal	running bond	Vancouver Bay	Mutual Materials	-	-
M4	7/L7.1	ARTIFICIAL TURF	-	-	-	-	Marathon Surfaces	-	-
M5	5/L7.1	DRIP STRIP	300mm width. typ.	-	-	-	NW Landscape	-	-

NOTE: IN THE EVENT OF A DISCREPANCY BETWEEN THE SITE FURNISHINGS, MATERIALS, AND LIGHTING SCHEDULE. QUANTITIES AND THE LANDSCAPE PLANS, THE LANDSCAPE PLANS TAKE PRECEDENCE.

Contractor
No. Date Revision Notes

Issue No.	Date	Issue Notes
A	2023-09-19	Revised for R2
B	2023-09-29	Revised for R2
C	2023-09-29	Revised for DP
D	2023-09-29	Revised for OP
E	2023-09-11	Issued for ACP
F	2023-10-23	Revised for DP
G	2023-11-20	Revised for DP

NOT FOR CONSTRUCTION



1690 West 2nd Avenue
Vancouver, BC, Canada, V6J 1H4

T 604.683.1456
F 604.683.1459
www.etalandscape.com

All Rights Reserved by eta landscape architecture inc.
Information contained on this document is that of eta landscape architecture inc. and is not to be used for any purpose other than that for the completion of the associated project. Any other use, reuse or reproduction of the documents without the Consultant's prior written approval is prohibited.

Project

Steveston Highway

4831 Steveston Highway
Richmond, BC

Drawing Title

Notes & Schedules

Legend

Project No.	Rev. No.
KD	22313
Drawn By:	0.00
KD	1:150
Checked By:	1:150
DT	1:150
Scale	LO,1
	2
	12

November 22, 2023
 DP 23-025993
 DP Plan # 13

Issue No. Date Revision Notes

Issue No.	Date	Revision Notes
A	2022-05-19	Redesign for R2
B	2022-09-23	Redesign for R2
C	2022-09-29	Revised for EP
D	2022-09-01	Revisions to DP
E	2022-09-11	Issued for AEP
F	2022-10-23	Revisions for DP
G	2023-11-20	Revisions for DP

NOT FOR CONSTRUCTION

Project Lead: [Name]

eta landscape architecture

1650 West 2nd Avenue
 Vancouver, BC, Canada, V6J 1H4

T: 604.683.1435
 F: 604.683.1438
 W: www.eta.ca

All Rights Reserved by eta landscape architecture inc. eta landscape architecture inc. is not responsible for any damage or injury to persons or property resulting from the use of the information contained in this document. eta landscape architecture inc. is not responsible for any damage or injury to persons or property resulting from the use of the information contained in this document. eta landscape architecture inc. is not responsible for any damage or injury to persons or property resulting from the use of the information contained in this document.

Project: **Steveston Highway**

4831 Steveston Highway
 Richmond, BC

Drawing Title: **Landscape Illustrative Site Plan**

Legend

Project No.	22313
Drawn By	[Name]
Checked By	[Name]
Date	3
Scale	1:150
Sheet No.	12



BLOSSOM TREES



GARDEN PLANTERS



MOVEABLE FURNITURE



TURF PLAY CIRCLES IN PLAY SURFACE



PATIO SLAB PAVERS



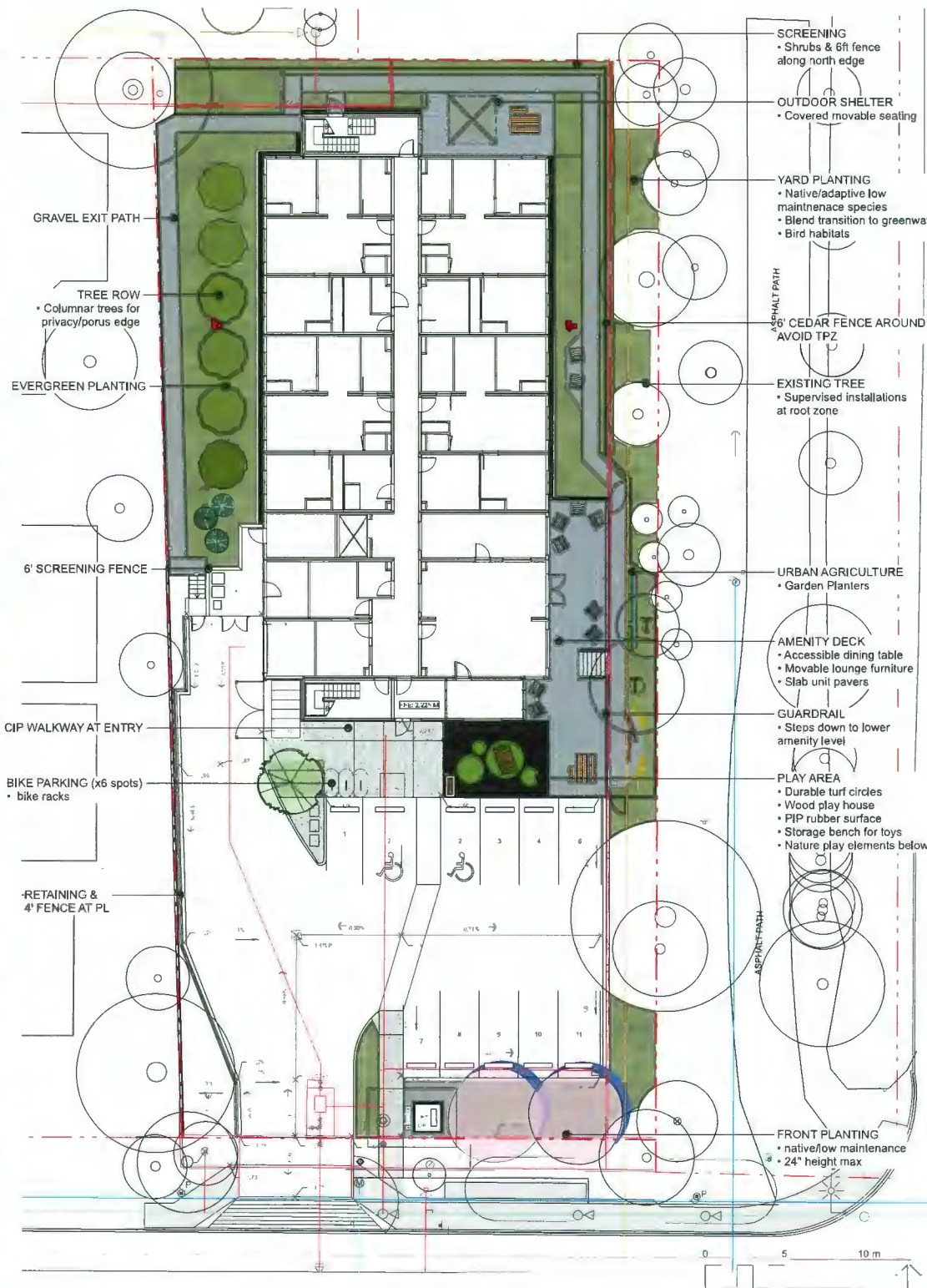
STORAGE BENCHES



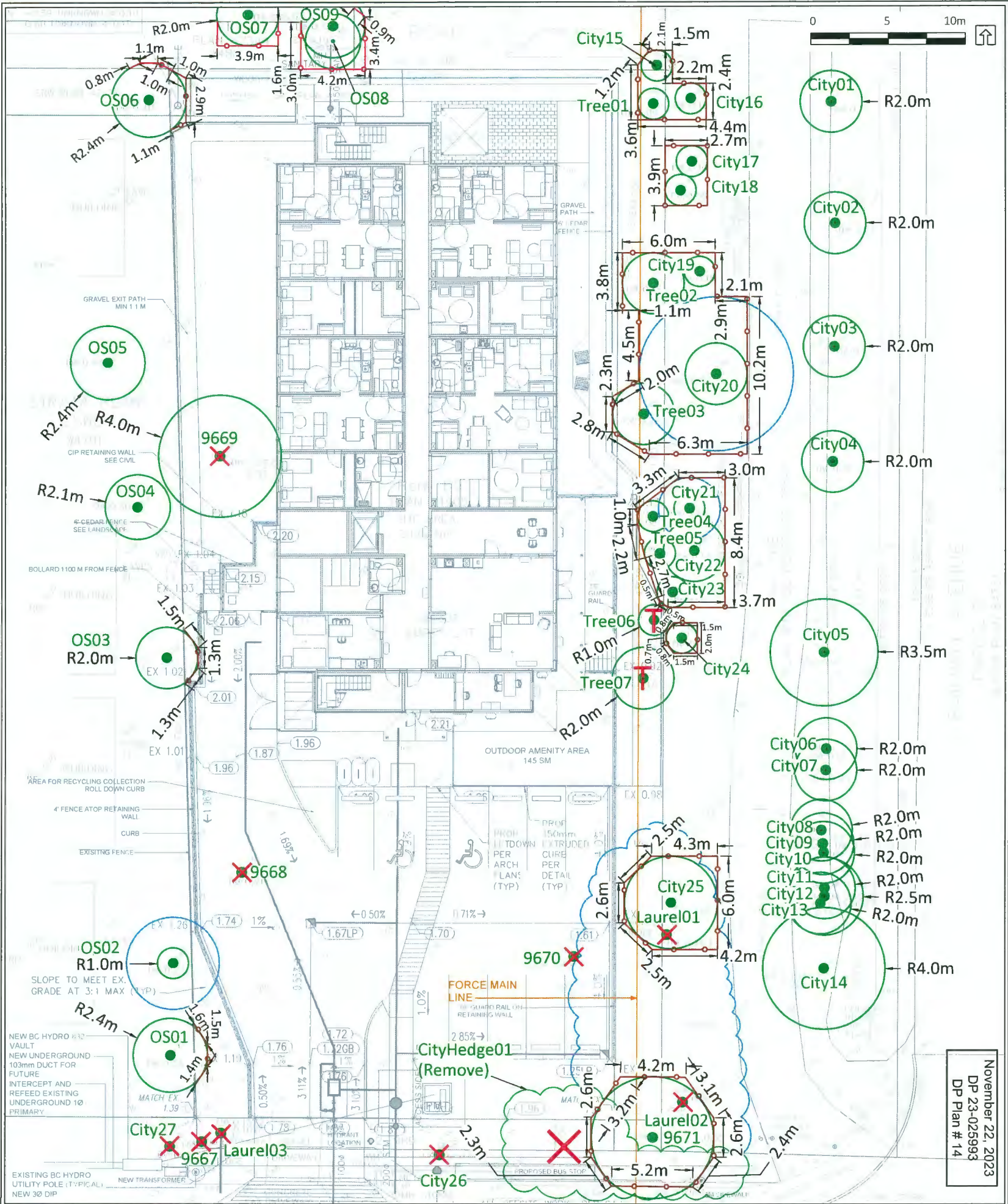
PLAY HUT



OUTDOOR SHELTER



L0,2



November 22, 2023
 DP 23-025993
 DP Plan # 14

- LEGEND**
- TREE PROTECTION FENCING
 - CRITICAL ROOT ZONE
 - DRIPLINE (APPROXIMATE)
 - SURVEYED TREE TO BE RETAINED
 - UN-SURVEYED TREE TO BE RETAINED
 - ✗ SURVEYED TREE TO BE REMOVED
 - ✗ UN-SURVEYED TREE TO BE REMOVED
 - SURVEYED TREE TO BE TRANSPLANTED

- NOTES**
- The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
 - All tree protection fencing must be built to the relevant municipal bylaw specifications.
 - The tree protection zone shown is a graphical representation of the critical root zone, measured from the center of the tree.
 - Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
 - This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and design drawings provided to Diamond Head Consulting.
 - This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and design drawings.

Arborist's Project Notes

Transplanting:

- Prior to construction commencing, Tree06, Tree07 are to be transplanted following ISA transplanting standards. Please refer to accompanying DHC Tree Transplant Plan and Arborist Report for further information.

Tree Protection Zone (TPZ) Fencing:

- TPZ fencing to be aligned along existing hardscape and wooden fencing, and abut existing wooden fencing where applicable.
- TPZ fencing for tree City25 is to be installed immediately after Laurel01 is removed.
- TPZ fencing for 9671 is to be installed immediately after CityHedge01 and Laurel02 are removed.
- Please note that TPZ barriers will be taken down and rebuilt under arborist supervision as construction progresses.

Tree Pruning:

- Lift prune crown to 1m on south side of OS08 prior to proposed sanitary tie-in to existing sanitary manhole within TPZs of OS08, OS09 commencing. Pruning to be done by ISA Certified Arborist following industry best management practices/ANSI A300 standards.
- Above must be coordinated with off-site owner prior to occurring.

Tree Protection:

- Removal of any existing fencing, hardscape, in-ground materials within retained tree TPZs must occur under arborist supervision.
- Removal of existing wooden fencing adjacent crowns of trees OS08, OS09 must be done by-hand/manually.
- Note that the subbase from existing sidewalk within TPZ of 9671 is to be kept and re-used for the new sidewalk proposed within.
- Note that the TPZ fencing shown in red for OS06, OS07, OS08, OS09 is to be installed after adjacent, on-site existing wooden fencing is removed.
- Proposed must be done under arborist supervision:
- Retaining wall installations within 1m of TPZs of trees City25 and OS03.
- Proposed retaining wall adjacent TPZ of OS03 is to use vertical excavation, avoid encroachment into TPZ and use L-shaped footing(s).

- New sidewalk installation within TPZ of 9671.
- Bus stop pad within 1m of TPZ of 9671.
- Fencing adjacent TPZ fencing of Tree03, Tree04, OS06, City23.
- Proposed fencing footings and posts within any retained tree TPZ must be hand-dug and locations must be flexible to avoid root conflicts.
- Proposed sidewalk within TPZ of tree 9671, proposed bus stop pad within 1m of TPZ of 9671 must each be installed above grade, using zero excavation and low impact methods.
- Low impact methods should include utilizing an aerated sub-base for bus stop pad and sidewalk to reduce compaction and allow for additional gas exchange within the root zone.
- DHC recommends for the aerated sub-base for bus stop pad and sidewalk to use a minimum depth of 15cm, 19mm clear crush rock.
- DHC also recommends Nilex 4545 non-woven geotextile to be placed below the 19mm clear crush rock, to prevent any leachate into undisturbed subgrade.
- No grading (aside from what is part of proposed works mentioned in these notes) is to occur within TPZ of 9671.
- All works for installations of proposed gravel paths to remain outside TPZs of trees OS06, Tree02, Tree03, Tree04.
- Placement of fill and/or wood chips within all retained tree TPZs must occur manually. Total depths of fill and/or wood chips must not exceed over 10cm.
- For existing service proposed to be capped adjacent OS06, OS07 and at the location shown above, excavation as part of this work is to remain outside of OS06 or OS07's TPZ fencing.
- Regarding proposed sanitary tie-in to existing sanitary manhole within TPZs of OS08, OS09, hydrovac excavation using the lowest possible water pressure level will be done to excavate, along with any necessary root pruning, both under arborist supervision.
- Hydrovac excavation must remain on the south side of the existing manhole.
- No over-excavation is to occur and grading is to be kept to an absolute minimum as part of trenching to install the proposed sanitary tie-in to existing sanitary manhole.
- Backfill top of trench with good topsoil and (after sanitary tie-in works have occurred within TPZs) place 10cm of composted wood mulch by hand within TPZs.



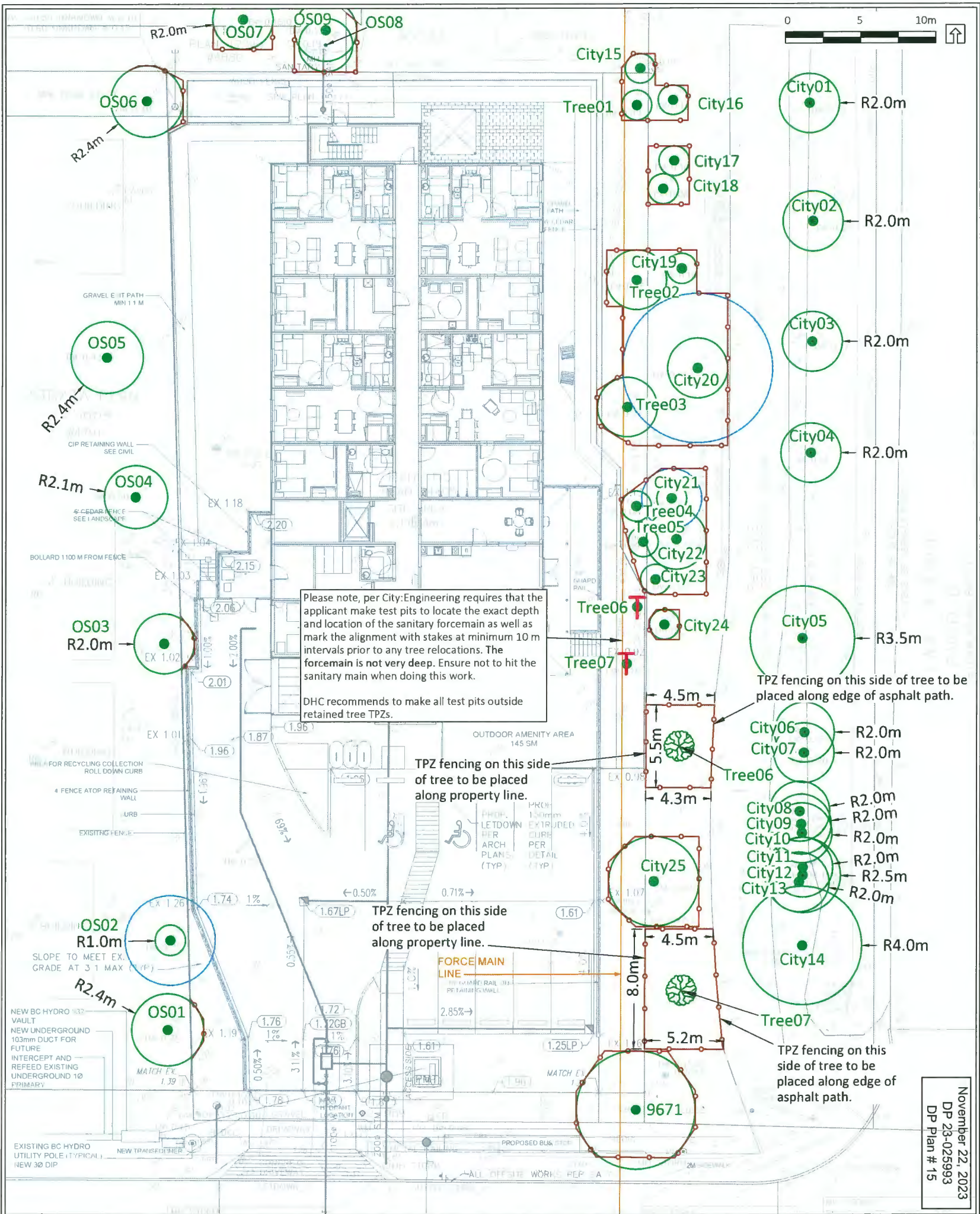
3559 COMMERCIAL ST
 VANCOUVER BC, V5N 4E8
 T 604.733.4886

Drawing title: Tree Management Plan
 Project address: 4831 Steveston Hwy, Richmond BC
 Client: CPA Development

- REFERENCE DRAWINGS**
- Base Survey by Matson Peck & Topliss. Sept 28, 23.
 - Site Plan by Boni-Maddison Architects. Nov 3, 23.
 - Grading Plan by Core Group Civil Consultants. Nov 10, 2023.

Dwg. No: 03
 Date: 2023/11/20
 Drawn by: DBE
 Page Size: 11"x17"

Page #
 1 of 2



Please note, per City:Engineering requires that the applicant make test pits to locate the exact depth and location of the sanitary force main as well as mark the alignment with stakes at minimum 10 m intervals prior to any tree relocations. The force main is not very deep. Ensure not to hit the sanitary main when doing this work.

DHC recommends to make all test pits outside retained tree TPZs.

TPZ fencing on this side of tree to be placed along property line.

TPZ fencing on this side of tree to be placed along property line.

TPZ fencing on this side of tree to be placed along edge of asphalt path.

TPZ fencing on this side of tree to be placed along edge of asphalt path.

November 22, 2023
 DP 23-025993
 DP Plan # 15

Arborist's Transplanting Notes

- Prior to construction commencing, Tree06, Tree07 are to be transplanted following ISA transplanting standards.
- Transplanting must occur under project arborist supervision.
- All transplanting works are to be coordinated with the City as necessary.
- All required permissions must be received from the City prior to transplanting occurring.
- Once trees have been transplanted, they are all to be protected with TP2 fencing as shown above.
- Once TP2 fencing for transplanted trees has been installed, 2-4 inches of organic mulch is to be laid within TP2 fencing, either by hand or using a blower truck, and under project arborist supervision.
- Please refer to accompanying DHC Arborist Report for further information.

LEGEND

- CRITICAL ROOT ZONE
- TREE PROTECTION FENCING
- DRIPLINE (APPROXIMATE)
- SURVEYED TREE TO BE RETAINED
- UN-SURVEYED TREE TO BE RETAINED
- 🌳 SURVEYED TREE TO BE TRANSPLANTED
- 🌳 NEW LOCATION OF TREE TO BE TRANSPLANTED

REFERENCE DRAWINGS

1. Base Survey by Matson Peck & Topliss. Sept 28, 23.
2. Site Plan by Boni-Maddison Architects. Nov 3, 23.
3. Grading Plan by Core Group Civil Consultants. Nov 10, 2023.

NOTES

1. The location of un-surveyed trees on this plan is approximate. Their location and ownership cannot be confirmed without being surveyed by a Registered BC Land Surveyor.
2. All tree protection fencing must be built to the relevant municipal bylaw specifications.
3. The tree protection zone shown is a graphical representation of the critical root zone, measured from the center of the tree.
4. Any construction activities or grade changes within the Root Protection Zone must be approved by the project arborist.
5. This plan is based on a topographic and tree location survey provided by the owners' Registered British Columbia Land Surveyor (BCLS) and design drawings provided to Diamond Head Consulting.
6. This plan is provided for context only, and is not certified as to the accuracy of the location of features or dimensions that are shown on this plan. Please refer to the original survey plan and design drawings.



3559 COMMERCIAL STREET
 VANCOUVER BC | V5N 4E8
 T 604.733.4886

Drawing title: Tree Transplant Plan
 Project address: 4831 Steveston Highway, Richmond BC
 Client: CPA Development

Drawing No: 01
 Date: 2023/11/20
 Drawn by: DBE
 Page Size: TABLOID 11"x17"

Page #
 2 of 2

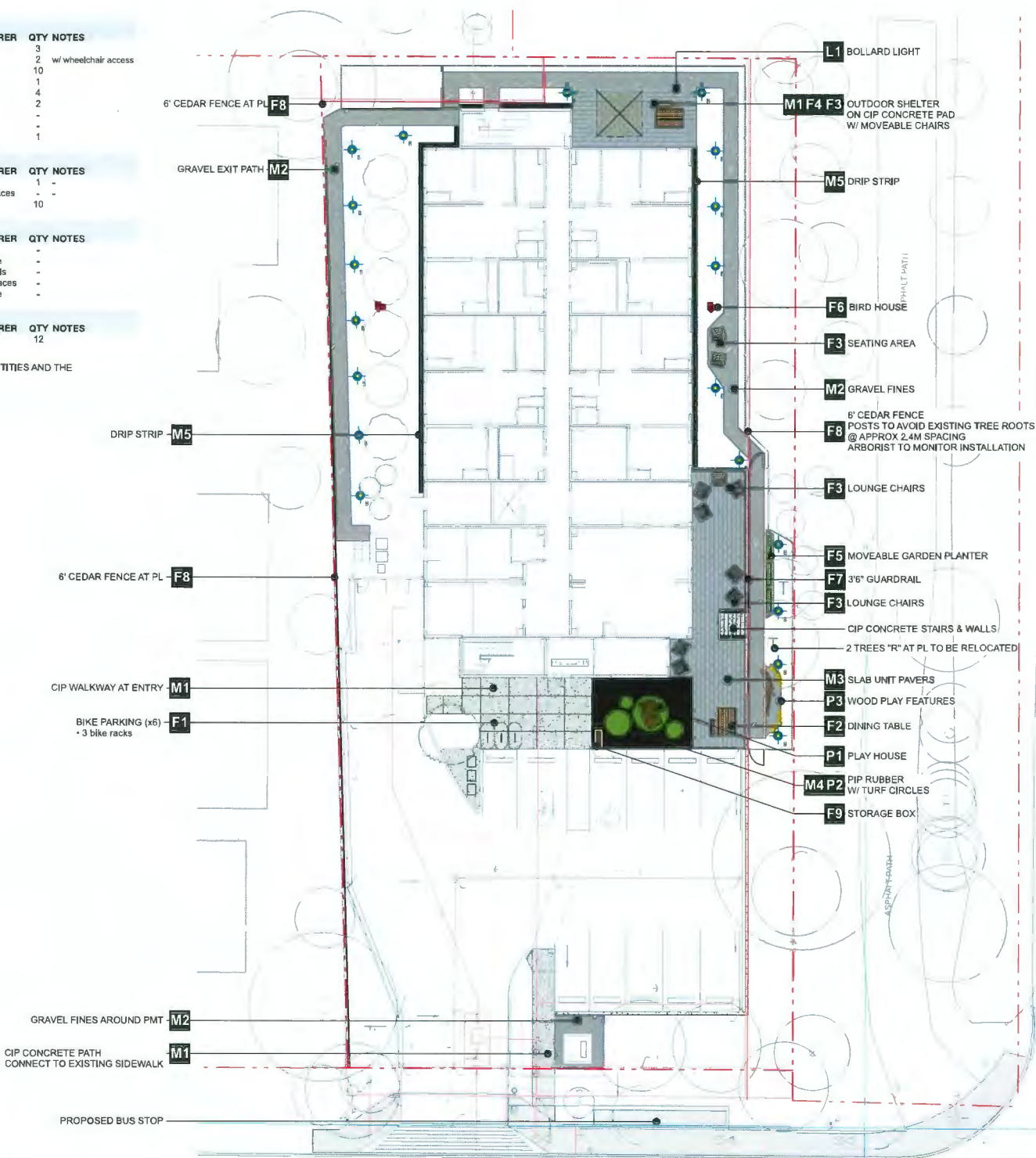
SITE FURNISHINGS									
ID	DETAIL	DESCRIPTION	SIZE	COLOUR	MATERIAL	MODEL	MANUFACTURER	QTY	NOTES
F1	1/L7.2	BIKE RACK	1.01m x 0.9m	blue water	aluminum	Loop 2	wishbone	3	
F2	2/L7.2	DINING TABLE	1.83m x 1.67m	blue water, walnut	aluminum	Bayview	wishbone	2	w/ wheelchair access
F3	3/L7.2	LOUNGE CHAIR	0.9m x 0.86m	blue water, walnut	aluminum	Jem	wishbone	10	
F4	4/L7.2	SHELTER	10ft x 10ft	-	-	meridian	yardistry	1	
F5	5/L7.2	GARDEN PLANTER	60"L x 12"W x 16"H	-	pewter	aluminum	low rectangle	4	greentree
F6	6/L7.2	BIRD HOUSES	0.67 x 0.84 x 3.0m	blue	aluminum	habitat	vestre	2	
F7	2/L7.3	36" GUARDRAIL	36" HT (1.07m)	-	-	-	-	-	
F8	1/L7.3	6" CEDAR FENCE	6'0" HT (1.83m)	-	cedar	custom	-	-	
F9	per Owner	STORAGE BOX	64.4x72.4x155cm	anthracite	-	rockwood box	Keter	1	

PLAY ELEMENTS									
ID	DETAIL	DESCRIPTION	SIZE	COLOUR	MATERIAL	MODEL	MANUFACTURER	QTY	NOTES
P1	7/L7.2	PLAYHUT	1.8m x 1.0m x 1.58m	blue	robinia	NRO4-10	Kompan	1	-
P2	6/L7.1	PIP RUBBER SURFACE	-	blue/black 50/50	-	-	marathon surfaces	-	-
P3	3/L7.3	PLAY STUMPS	max 0.3m HT	-	-	-	custom	10	

MATERIALS									
ID	DETAIL	DESCRIPTION	SIZE	COLOUR	PATTERN	MODEL	MANUFACTURER	QTY	NOTES
M1	3/L7.1	CIP CONCRETE	-	-	-	-	-	-	-
M2	5/L7.1	GRAVEL FINES	5-8mm dia.	charcoal	-	-	NW Landscape	-	-
M3	4/L7.1	SLAB UNIT PAVERS	300x600mm	charcoal	running bond	-	Vancouver Bay	-	-
M4	7/L7.1	ARTIFICIAL TURF	-	-	-	-	Marathon Surfaces	-	-
M5	5/L7.1	DRIP STRIP	300mm width, typ.	-	-	-	NW Landscape	-	-

LIGHTING FEATURES									
ID	DETAIL	DESCRIPTION	SIZE	COLOUR	MATERIAL	MODEL	MANUFACTURER	QTY	NOTES
L1	per Elec	BOLLARD	610MM HT	black anodized, teak	-	L904	mplighting	12	

NOTE: IN THE EVENT OF A DISCREPANCY BETWEEN THE SITE FURNISHINGS, MATERIALS, AND LIGHTING SCHEDULE QUANTITIES AND THE LANDSCAPE PLANS, THE LANDSCAPE PLANS TAKE PRECEDENCE.



Reason	No.	Date	Revision Notes
	A	2023-09-19	Revised for RZ
	B	2023-09-23	Revised for RZ
	C	2023-10-28	Issued for DP
	D	2023-10-01	Revised for DP
	E	2023-09-11	Issued for ADP
	F	2023-10-23	Revised for DP
	G	2023-11-20	Revised for DP

Issue	No.	Date	Issue Notes
	A	2023-09-19	Revised for RZ
	B	2023-09-23	Revised for RZ
	C	2023-10-28	Issued for DP
	D	2023-10-01	Revised for DP
	E	2023-09-11	Issued for ADP
	F	2023-10-23	Revised for DP
	G	2023-11-20	Revised for DP

Precedence Set

eta landscape architecture

1690 West 2nd Avenue
 Vancouver, BC, Canada, V6J 1R4

T | 604.683.1456
 F | 604.683.1459
 W | www.eta.ca

All Rights Reserved by eta landscape architecture Inc.
 Information contained on these documents is part of the Consultant's professional services, and the Consultant will retain ownership thereof. Such information shall not be used for any purpose other than that for which it was originally intended. Any other use, reuse or modification of the documents without the Consultant's prior written consent will be at the user's sole risk and without liability to the Consultant.

Project
Steveston Highway

4831 Steveston Highway
 Richmond, BC

Driving Title
Landscape Materials Plan

Rev	Author	Check	Date	Rev	Issue
1	KD	DT	2023/11	1	L3.0
2	KD	DT	2023/11	2	5
3	KD	DT	2023/11	3	12



November 22, 2023
 DP 23-025993
 DP Plan # 17

Revised
 No. Date Revision Notes

Issue No.	Date	Issue Notes
A	2023-06-19	Revised for RZ
B	2023-06-23	Revised for RZ
C	2023-07-20	Issued for DP
D	2023-08-01	Revised for DP
E	2023-09-11	Issued for ADP
F	2023-10-23	Revised for DP
G	2023-11-20	Revised for DP

Perceivable Grid

eta landscape architecture

1890 West 2nd Avenue
 Vancouver, BC, Canada, V6J 1H4

t | 604.683.1456
 f | 604.683.1459
 w | www.eta.ca

All Rights Reserved by eta Landscape Architecture Inc.
 Information contained on these documents is part of the Consultant's professional services, and the Consultant will remain responsible for the accuracy of the information provided. Any person other than the Consultant or its authorized representatives, who uses or reproduces the information contained on these documents without the Consultant's prior written consent will be held responsible for any and all liability or legal exposure to the Consultant.

Project

Steveston Highway

4831 Steveston Highway
 Richmond, BC

Drawing Title

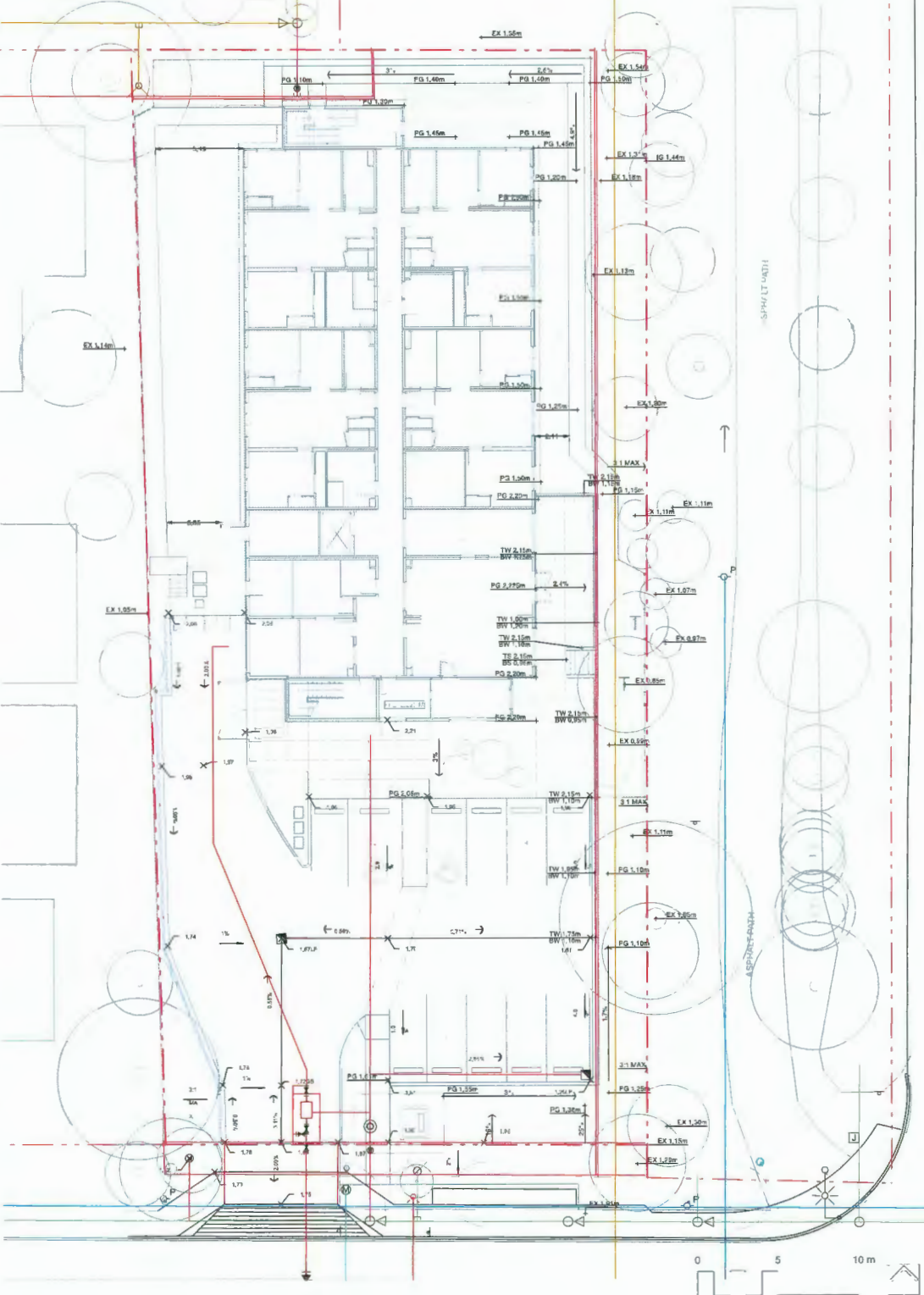
Landscape Materials Plan

Scale

Author/Designer	KL	Project No.	221113
Checker	KL	Date	11/20/23
Drawn/Plotted	KL	Scale	1:150
Reviewed/Approved	KL	Project Name	Steveston Highway
DT		Sheet No.	L4.0
CAD		Total Sheets	12

LANDSCAPE GRADING & DRAINAGE PLAN LEGEND

← TW 0.00m	TW - Top of Wall
← BW 0.00m	BW - Bottom of Wall
← FFE 0.00m	FFE - Finish Floor
← PG 0.00m	PG - Proposed Grade
← EX 0.00m	EX - Existing Grade
← IG 0.00m	IG - Interpolated Grade
← 1% - 5% MIN-MAX	Slope



Rev. No.	Date	Revision Notes
A	2023-06-19	Revised for R2
B	2023-06-23	Revised for R2
C	2023-07-20	Issued for DP
D	2023-08-01	Revised to DP
E	2023-09-11	Issued for ACP
F	2023-10-23	Revised to DP
G	2023-11-20	Revised for DP

Issue No.	Date	Issue Notes
A	2023-06-19	Revised for R2
B	2023-06-23	Revised for R2
C	2023-07-20	Issued for DP
D	2023-08-01	Revised to DP
E	2023-09-11	Issued for ACP
F	2023-10-23	Revised to DP
G	2023-11-20	Revised for DP

Perforated Soil



1830 West 2nd Avenue
 Vancouver, BC, Canada, V6J 1H4

T: 604.683.455
 F: 604.683.459
 W: www.eta.ca

All Rights Reserved by eta landscape architecture inc.
 Information contained in this document is part of the consultant's professional services and the Consultant shall retain ownership of the same. Such information shall not be used for any purpose other than the completion of the referenced project. Any other use, reuse or reproduction of the information without the Consultant's prior written consent will be at the user's sole risk and without liability to the Consultant.

Project
Steveston Highway

4831 Steveston Highway
 Richmond, BC

Drawing Title

**Landscape Tree Plan
 & Plant Materials**

Scale

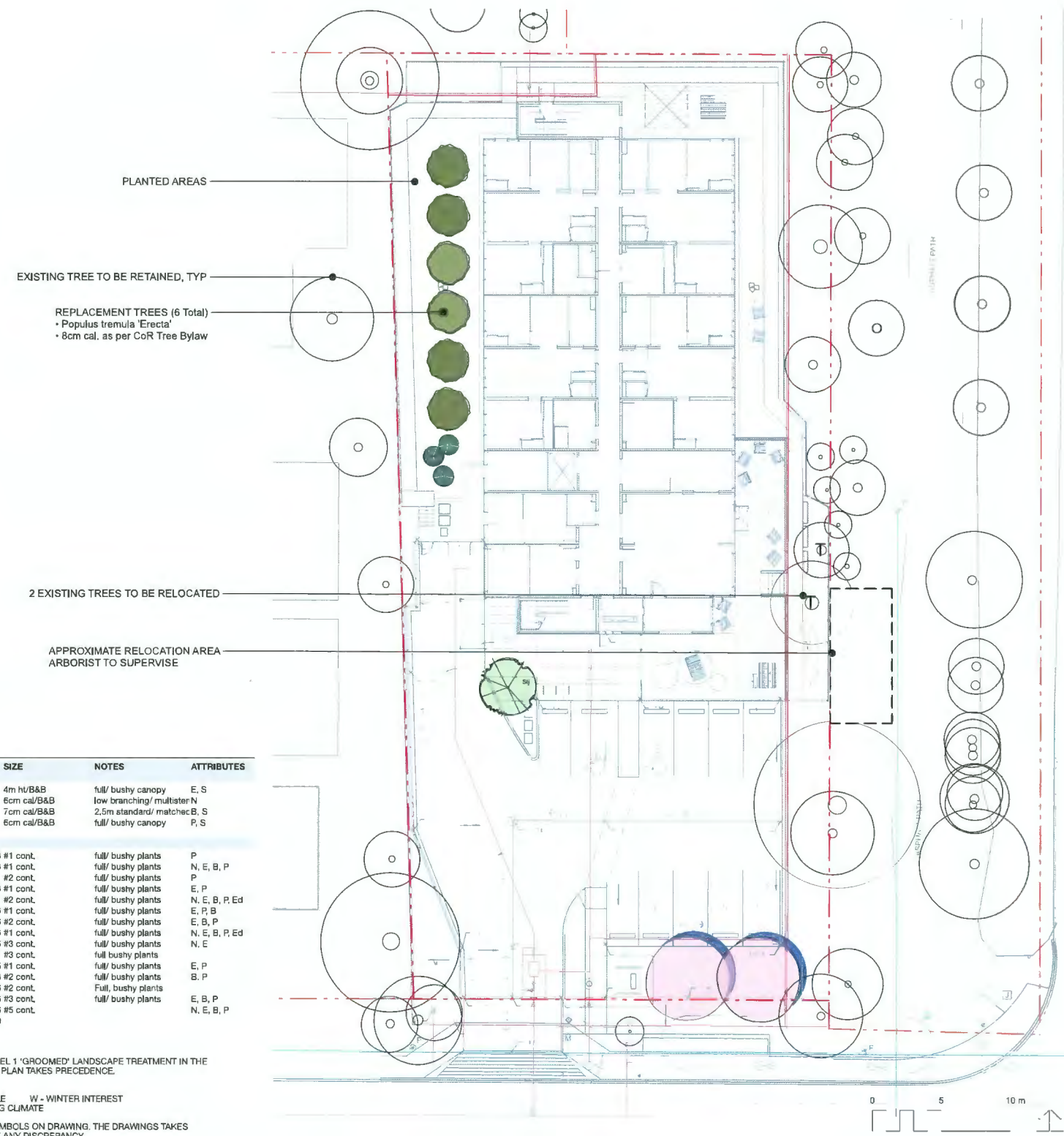
Project No.	22313
Sheet No.	1-150
Scale	1:150
DT	L5.1
of	7
12	

TREE REPLACEMENT:
 REMOVED TREES: 5
 RELOCATED TREES: 2
 REPLACEMENT TREES PROPOSED: 12
 *minimum caliper size exemption for 1 tree

Refer to *Tree Management Plan* and full *Arborist Report* for more information on retained and removed trees.

PLANT LIST							
ID	QTY	LATIN NAME	COMMON NAME	SPACING	SIZE	NOTES	ATTRIBUTES
TREES							
Pas	3	Pinus nigra 'Arnold Sentinel'	Arnold Sentinel Austrian pine	as shown	4m ht/B&B	full/ bushy canopy	E, S
Pte	6	Populus tremula 'Erecta'	Swedish columnar aspen	as shown	6cm cal/B&B	low branching/ multiterm	N
Pya	2	Prunus x yedoensis 'Akabono'	Akabono cherry	as shown	7cm cal/B&B	2.5m standard/ match	B, S
Stj	1	Styrax japonicus	Japanese snowbell	as shown	6cm cal/B&B	full/ bushy canopy	P, S
SHRUBS / GROUNDCOVERS / PERENNIALS							
Am	166	Achillea millefolium	yarrow		0.3 #1 cont.	full/ bushy plants	P
Auu	207	Arctostaphylos uva-ursi	kinnikinnick		0.3 #1 cont.	full/ bushy plants	N, E, B, P
Dfo	52	Dicentra formosa	pacific bleeding heart		0.61 #2 cont.	full/ bushy plants	P
Gem	53	Geranium macrorrhizum 'Bevan's Variety'	bigroot geranium		0.3 #1 cont.	full/ bushy plants	E, P
Gs	158	Gaultheria shallon	salsal		0.61 #2 cont.	full/ bushy plants	N, E, B, P, Ed
Lm	76	Liriope muscari	blue lily turf		0.46 #1 cont.	full/ bushy plants	E, P, B
Lp	27	Lonicera pileata	box leaf honeysuckle		0.76 #2 cont.	full/ bushy plants	E, B, P
Mr	100	Mahonia repens	creeping Oregon grape		0.46 #1 cont.	full/ bushy plants	N, E, B, P, Ed
Pm	72	Polystichum munitum	sword fern		0.76 #3 cont.	full/ bushy plants	N, E
Pm*	40	Polystichum munitum*	sword fern		0.61 #3 cont.	full bushy plants	
Pt	458	Pachysandra terminalis	Japanese spurge		0.25 #1 cont.	full/ bushy plants	E, P
Rtg	42	Rudbeckia fulgida 'Goldsturm'	black-eyed Susan		0.3 #2 cont.	full/ bushy plants	B, P
Sh	29	Sarcococca hookeriana	sweet box		0.46 #2 cont.	Full, bushy plants	
Sr	36	Sarcococca ruscifolia	sweet box		0.76 #3 cont.	full/ bushy plants	E, B, P
Vot	73	Vaccinium ovatum 'Thunderbird'	Thunderbird evergreen huckle		0.76 #5 cont.	full/ bushy plants	N, E, B, P
	0				0		

NOTES:
 1 ALL LANDSCAPE TO CONFORM TO THE CURRENT EDITION OF THE CSLA STANDARDS FOR LEVEL 1 'GROOMED' LANDSCAPE TREATMENT IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT LIST AND THE PLANTING PLAN, THE PLANTING PLAN TAKES PRECEDENCE.
 2 SEARCH AREA TO INCLUDE BRITISH COLUMBIA, WASHINGTON, AND OREGON.
 3 N - NATIVE E - EVERGREEN B - BIRD FRIENDLY P - POLLINATOR Ed - EDIBLE W - WINTER INTEREST
 S - VERY SUITABLE/SUITABLE AS PER URBAN TREE LIST FOR METRO VANCOUVER IN A CHANGING CLIMATE
 4 IN THE CASE OF ANY DISCREPANCY BETWEEN PLANT COUNTS ON PLANT LIST AND PLANT SYMBOLS ON DRAWING, THE DRAWING TAKES PRECEDENCE. THE CONTRACTOR IS TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.



November 22, 2023
 DP 23-025993
 DP Plan # 19

Revise	No.	Date	Revision Notes

Issue	No.	Date	Issue Notes
A	2023-04-19		Revised for RZ
B	2023-04-21		Revised for RZ
C	2023-04-29		Revised for EP
D	2023-04-01		Revised for DP
E	2023-04-11		Issued for ACP
F	2023-10-23		Revised for DP
G	2023-11-20		Revised for DP

Project: Steveston Hwy

eta landscape architecture

1690 West 2nd Avenue
 Vancouver, B.C., Canada, V6J 1H4

T 604.583.7456
 F 604.583.4558
 W www.eta.ca

All Rights Reserved by eta landscape architecture inc.
 Information contained in these documents is part of the Consultant's professional services and the Consultant shall retain ownership thereof. Such information shall not be used for any purpose other than for the construction of the referenced project. Any other use, reuse or modification of the information without the Consultant's prior written consent will be at the user's sole risk and without liability to the Consultant.

Project: **Steveston Highway**

4821 Steveston Highway
 Richmond, BC

Drawing Title:

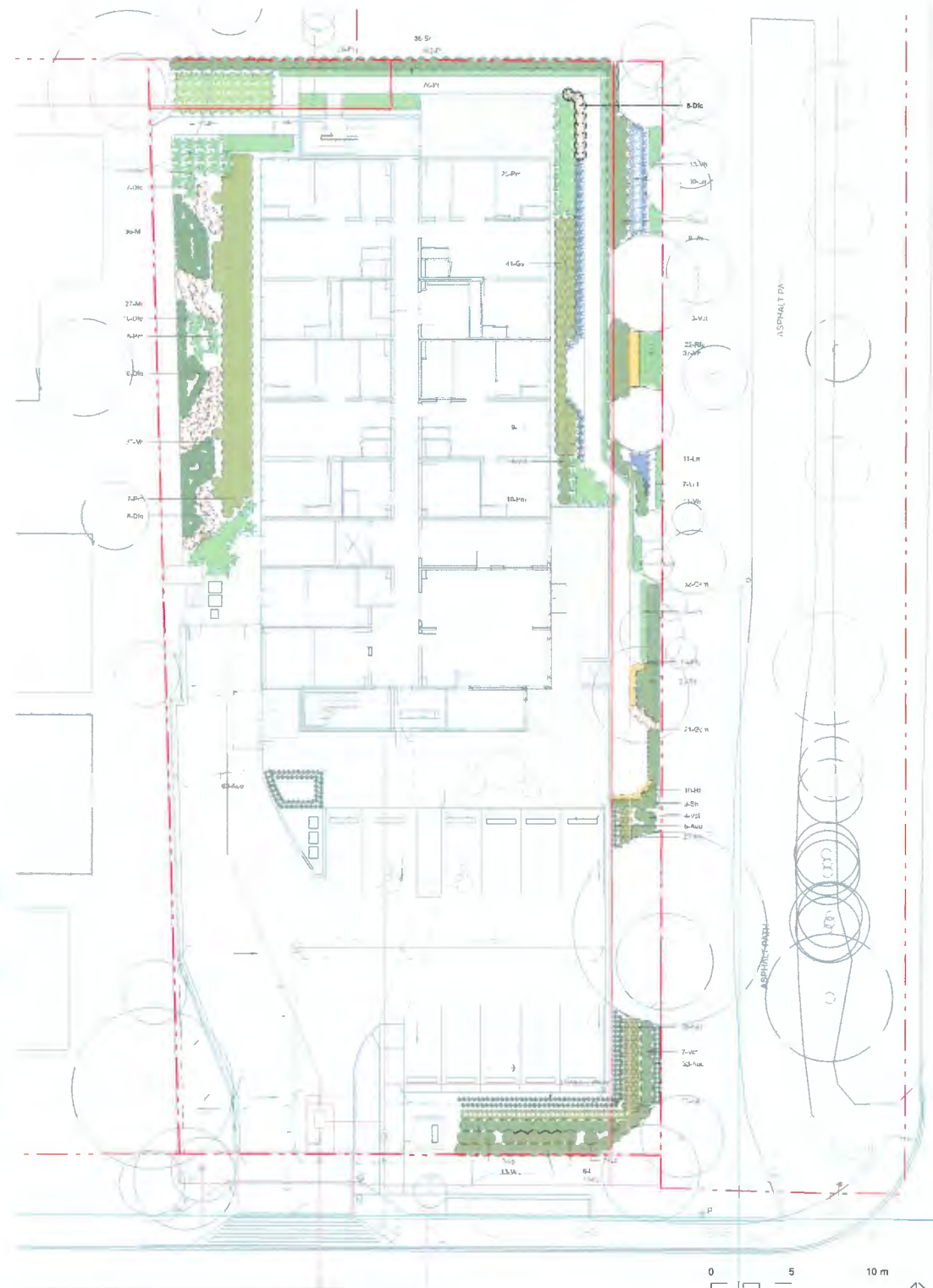
**Landscape Tree Plan
 & Plant Materials**

Scale:

Project No.	22313
Client	1:150
Scale	
DT	L5.2
12	

ID	QTY	LATIN NAME	COMMON NAME	SPACING	SIZE	NOTES	ATTRIBUTES
TREES							
Pas	3	Pinus nigra 'Arnold Sentinel'	Arnold Sentinel Austrian pine	as shown	4m ht/B&B	full/ bushy canopy	E, S
Pte	6	Populus tremula 'Erecta'	Swedish columnar aspen	as shown	6cm cal/B&B	low branching/ multiterN	
Pya	2	Prunus x yedoensis 'Akebono'	Akebono cherry	as shown	7cm cal/B&B	2.5m standard/ matchec	B, S
Stj	1	Styrax japonicus	Japanese snowbell	as shown	6cm cal/B&B	full/ bushy canopy	P, S
SHRUBS / GROUNDCOVERS / PERENNIALS							
Am	166	Achillea millefolium	yarrow		0.3 #1 cont.	full/ bushy plants	P
Auu	207	Arctostaphylos uva-ursi	kinnikinnick		0.3 #1 cont.	full/ bushy plants	N, E, B, P
Dfo	52	Dicentra formosa	pacific bleeding heart		0.61 #2 cont.	full/ bushy plants	P
Gem	53	Gentiana macrorrhizum 'Bevan's Variety'	bigroot gentianium		0.3 #1 cont.	full/ bushy plants	E, P
Gs	156	Gaultheria shallon	santal		0.61 #2 cont.	full/ bushy plants	N, E, B, P, Ed
Lm	76	Liriope muscari	blue lily turf		0.46 #1 cont.	full/ bushy plants	E, P, B
Lp	27	Lonicera pileata	box leaf honeysuckle		0.76 #2 cont.	full/ bushy plants	E, B, P
Mr	100	Mahonia repens	creeping Oregon grape		0.46 #1 cont.	full/ bushy plants	N, E, B, P, Ed
Pm	72	Polystichum munitum	sword fern		0.76 #3 cont.	full/ bushy plants	N, E
Pm'	40	Polystichum munitum'	Sword Fern		0.61 #3 cont.	full/ bushy plants	
Pt	458	Pachysandra terminalis	Japanese spurge		0.25 #1 cont.	full/ bushy plants	E, P
Rtg	42	Rudbeckia fulgida 'Goldsturm'	black-eyed Susan		0.3 #2 cont.	full/ bushy plants	B, P
Sh	29	Sarcococca hookeriana	sweet box		0.46 #2 cont.	Full, bushy plants	
Sr	36	Sarcococca tuscifolia	sweet box		0.76 #3 cont.	full/ bushy plants	E, B, P
Vot	73	Vaccinium ovatum 'Thunderbird'	Thunderbird evergreen huckle		0.76 #5 cont.		N, E, B, P
	0				0		

NOTES:
 1. ALL LANDSCAPE TO CONFORM TO THE CURRENT EDITION OF THE CSLA STANDARDS FOR LEVEL 1 'GROOMED' LANDSCAPE TREATMENT IN THE EVENT OF A DISCREPANCY BETWEEN THE PLANT LIST AND THE PLANTING PLAN, THE PLANTING PLAN TAKES PRECEDENCE.
 2. SEARCH AREA TO INCLUDE BRITISH COLUMBIA, WASHINGTON, AND OREGON
 3. N - NATIVE E - EVERGREEN B - BIRD FRIENDLY P - POLLINATOR Ed - EDIBLE W - WINTER INTEREST
 S - VERY SUITABLE/SUITABLE AS PER URBAN TREE LIST FOR METRO VANCOUVER IN A CHANGING CLIMATE
 4. IN THE CASE OF ANY DISCREPANCY BETWEEN PLANT COUNTS ON PLANT LIST AND PLANT SYMBOLS ON DRAWING, THE DRAWING TAKES PRECEDENCE. THE CONTRACTOR IS TO VERIFY ALL PLANT COUNTS AND NOTIFY CONSULTANT OF ANY DISCREPANCY.



November 22, 2023
 DP 23-025993
 DP Plan # 20

Revised
 No. Date Revision Notes

Issue No.	Date	Issue Notes
A	2023-06-19	Revised for R2
B	2023-06-23	Revised for R2
C	2023-07-20	Revised for DP
D	2023-09-01	Revisions for DP
E	2023-09-11	Issued for ACP
F	2023-10-23	Revisions for DP
G	2023-11-20	Revisions for DP

Prepared by: [Name]

eta landscape architecture

1606 West 2nd Avenue
 Vancouver, BC, Canada, V6J 1H4

T | 604.583.1456
 F | 604.583.1458
 W | www.eta.ca

All Rights Reserved by eta landscape architecture inc. Information contained on these documents is part of the Company's intellectual property and the Consultant shall retain ownership thereof. Such information shall not be used for any purpose other than for the construction of the referenced project. Any other use, reuse or modification of the documents without the Consultant's prior written consent will be at the user's sole risk and without liability or legal recourse to the Consultant.

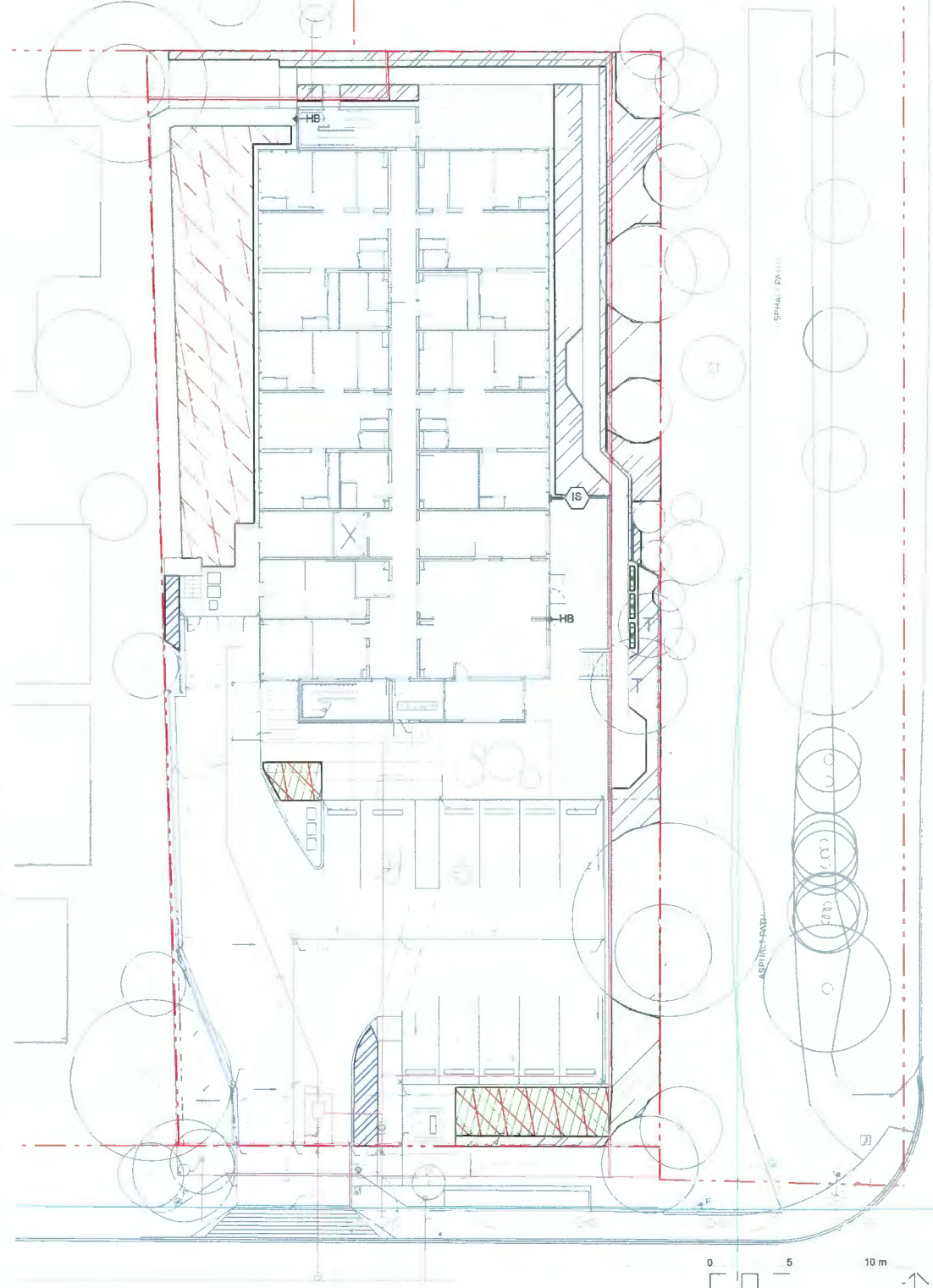
Project
Steveston Highway

4831 Steveston Highway
 Richmond, BC

Drawing Title
**Landscape Soil Depth
 & Irrigated Areas Plan**

Legend

Project No.	23-025993
Rev. No.	20
Scale	1:150
Sheet No.	L6.0
Total Sheets	12



IRRIGATED AREAS & SERVICING LEGEND

IS → Irrigation Stub-out
 HB → Hosebib

All onsite planted areas to be irrigated.

Note:
 1. Refer to Canadian landscape standard, typ.
 2. This sheet is for reference only. Contractor to refer to irrigation drawings for the irrigation design.
 3. Final locations per Mechanical.
 4. Shop drawings to be provided prior to installation for Landscape review.
 5. Electrical outlets to be provided for each BBO, Trellis, and Fire Table, if applicable. Refer to Electrical.

PLANTING SOIL DEPTH LEGEND

Wood Chips @ ex. trees
 123 sq.m

300 mm (12") Soil Depth
 1.39 sq.m = 0.42 cu.m

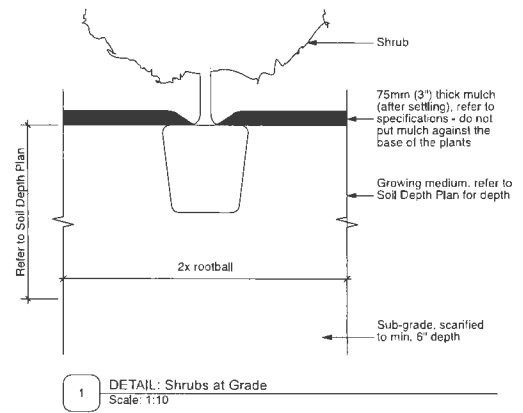
610 mm (24") Soil Depth
 198.1 sq.m = 120.8 cu.m

915 mm (36") Soil Depth
 168.3 sq.m = 157.0 cu.m

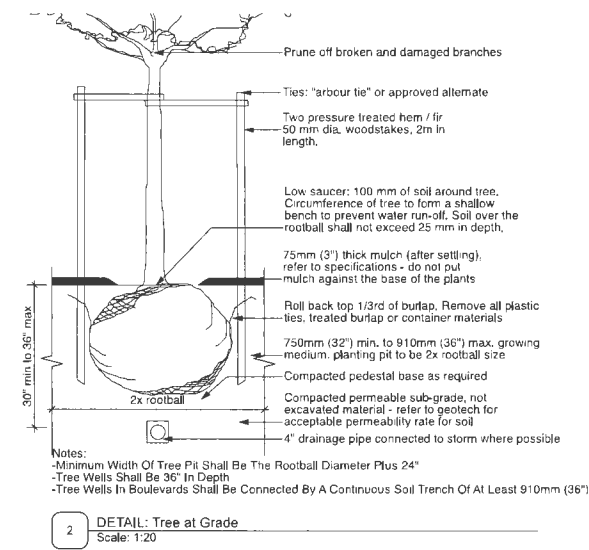
Note:
 All softscape areas to include min. 75mm gravel drainage layers in addition to indicated soil depth for on slab conditions.

No.	Date	Revision Notes

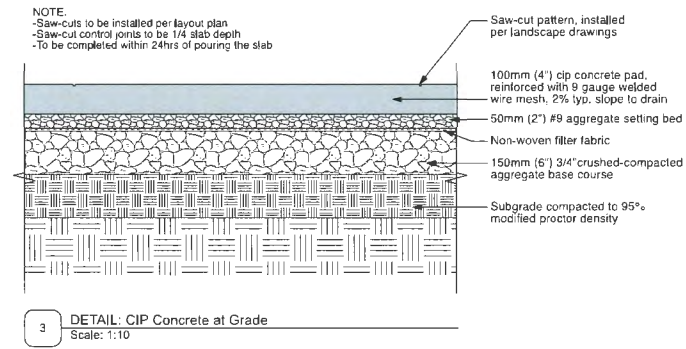
Rev.	Date	Issue Notes
1	2023-11-22	Approved for ITP
2	2023-11-22	Approved for ITP
3	2023-11-22	Approved for ITP
4	2023-11-22	Approved for ITP
5	2023-11-22	Approved for ITP
6	2023-11-22	Approved for ITP
7	2023-11-22	Approved for ITP



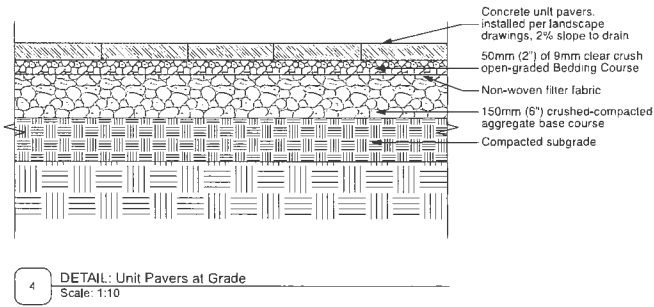
1 DETAIL: Shrubs at Grade
 Scale: 1:10



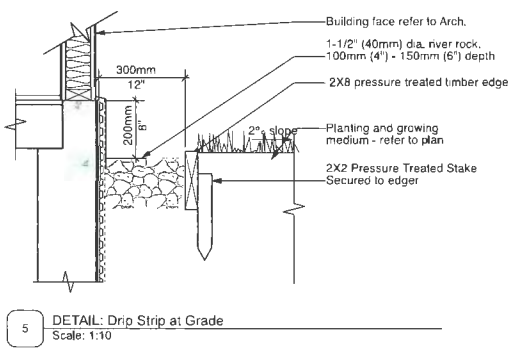
2 DETAIL: Tree at Grade
 Scale: 1:20



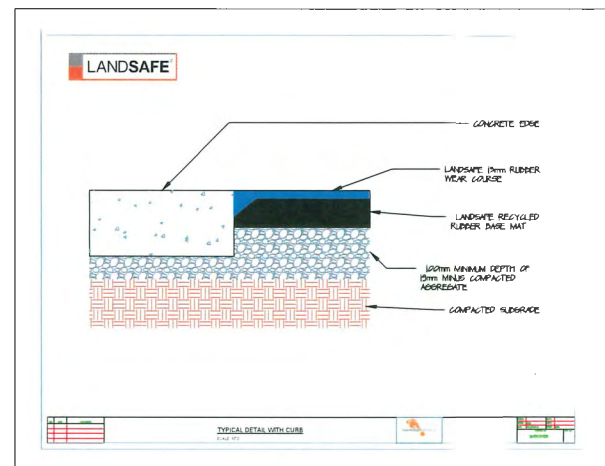
3 DETAIL: CIP Concrete at Grade
 Scale: 1:10



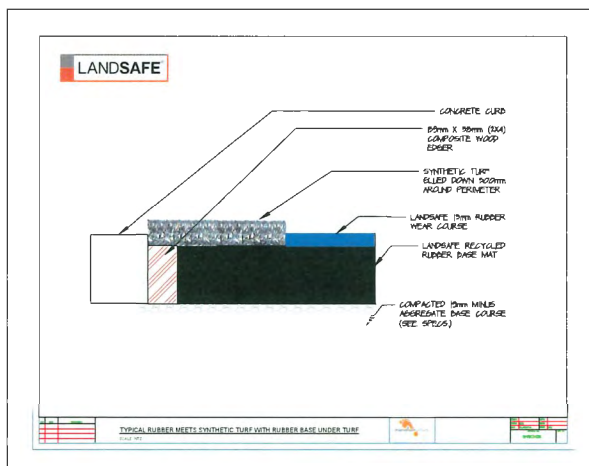
4 DETAIL: Unit Pavers at Grade
 Scale: 1:10



5 DETAIL: Drip Strip at Grade
 Scale: 1:10



6 CUTSHEET: PIP Rubber at Paving
 Scale: 1:10



7 CUTSHEET: PIP Rubber & Artificial Turf
 Scale: 1:10

eta landscape architecture
 1600 West 2nd Avenue
 Vancouver, BC, Canada, V6L 1H4
 | 604.683.4550
 | 604.683.4559
 | www.eta.ca

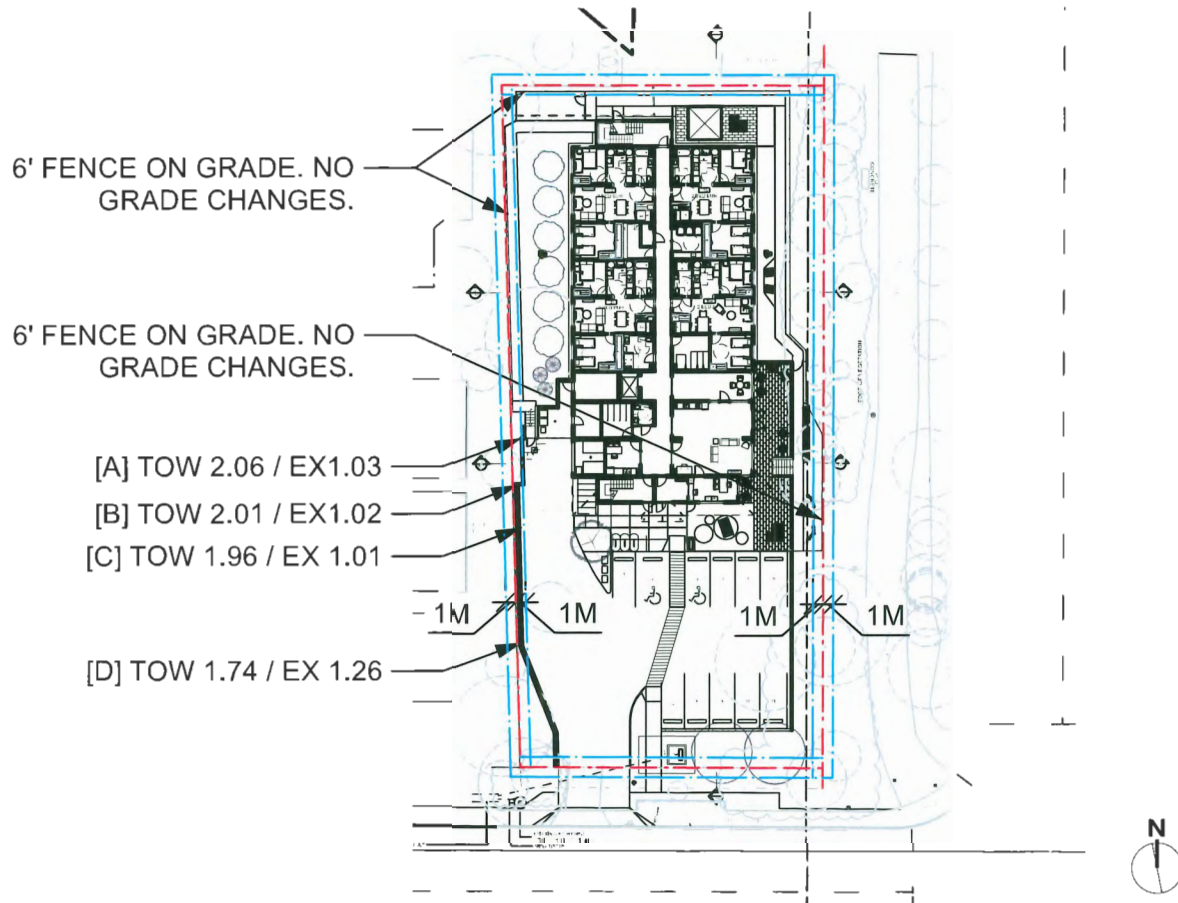
All Rights Reserved by eta Landscape Architecture Inc. Information contained on these documents is part of the Contractor's obligations of service and the Contractor shall remain responsible for the completion of the referenced project. Any other use, reuse or modification of the documents without the Contractor's prior written consent shall be the responsibility of the user and shall not be held in any way by eta Landscape Architecture Inc.

Project:
Steveston Highway
 1801 Steveston Highway
 Richmond, BC

Drawn By:
Softscape & Hardscape Details

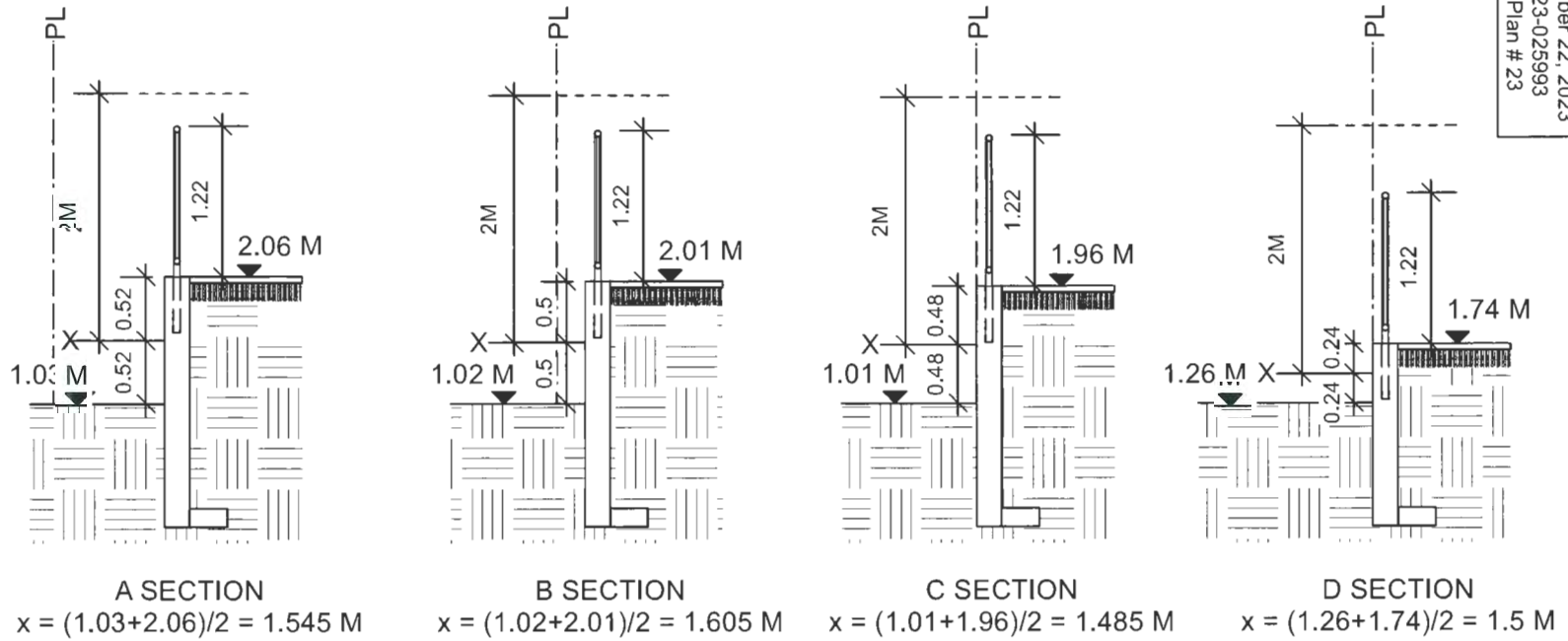
Project No.	22313
Rev.	10
Date	12

NOTE: Fence height is determined by measuring the vertical distance between the average finished site grade, measured 1.0 m from both sides of the property line, to the top of the fence (Richmond Zoning Bylaw No. 8500, Section 6.8.3).



NOTE: The maximum fence height of 2.0 metres (m) is permitted for fences constructed in residential zones and site specific zones that include residential uses (Richmond Zoning Bylaw No.8500, Section 6.8.1).

NOTE: 1.1 M (42") minimum when the difference between grade heights is more than 0.6M Fence height



November 22, 2023
DP 23-025993
DP Plan # 23

BONI•MADDISON
Architects
3732 West Broadway,
Vancouver, B.C., V6R 2C1
T: 604 688 5894 F: 604 688 5899

TITLE:
FENCE HEIGHT
PROJECT:
4831 STEVESTON HWY

ISSUE:
G 23-11-20 DP



JOB N°: 23-01	DATE: 2023-11-14
SCALE:	DRAWING N°:
DRAWN: GW	A8.1

November 22, 2023
 DP 23-025993
 DP Plan # 24

Revisor
 No. Date Revision Notes

Issue No.	Date	Issue Notes
A	2023-04-19	Revised for RZ
B	2023-04-23	Revised for RZ
C	2023-07-29	Issued for DP
D	2023-09-01	Revised for DP
E	2023-09-11	Issued for ACP
F	2023-10-23	Revised for DP
G	2023-11-23	Revised for DP

Perimeter Wall

eta landscape architecture

1600 West 2nd Avenue
 Vancouver, BC, Canada, V6L 1H4

T | 604.683.7456
 F | 604.683.4559
 W | www.eta.ca

All Rights Reserved by eta landscape architecture inc.
 Information contained on these documents is part of the contractor's
 requirements of service and the Contractor shall remain responsible
 therefor. Such information shall not be used for any purpose other than
 for the construction of the referenced project. Any other use, made or
 modification of the documents without the Contractor's prior written
 consent will be at the user's sole risk and without liability to eta
 landscape architecture.

Project
Steveston Highway

1831 Steveston Highway
 Richmond, BC

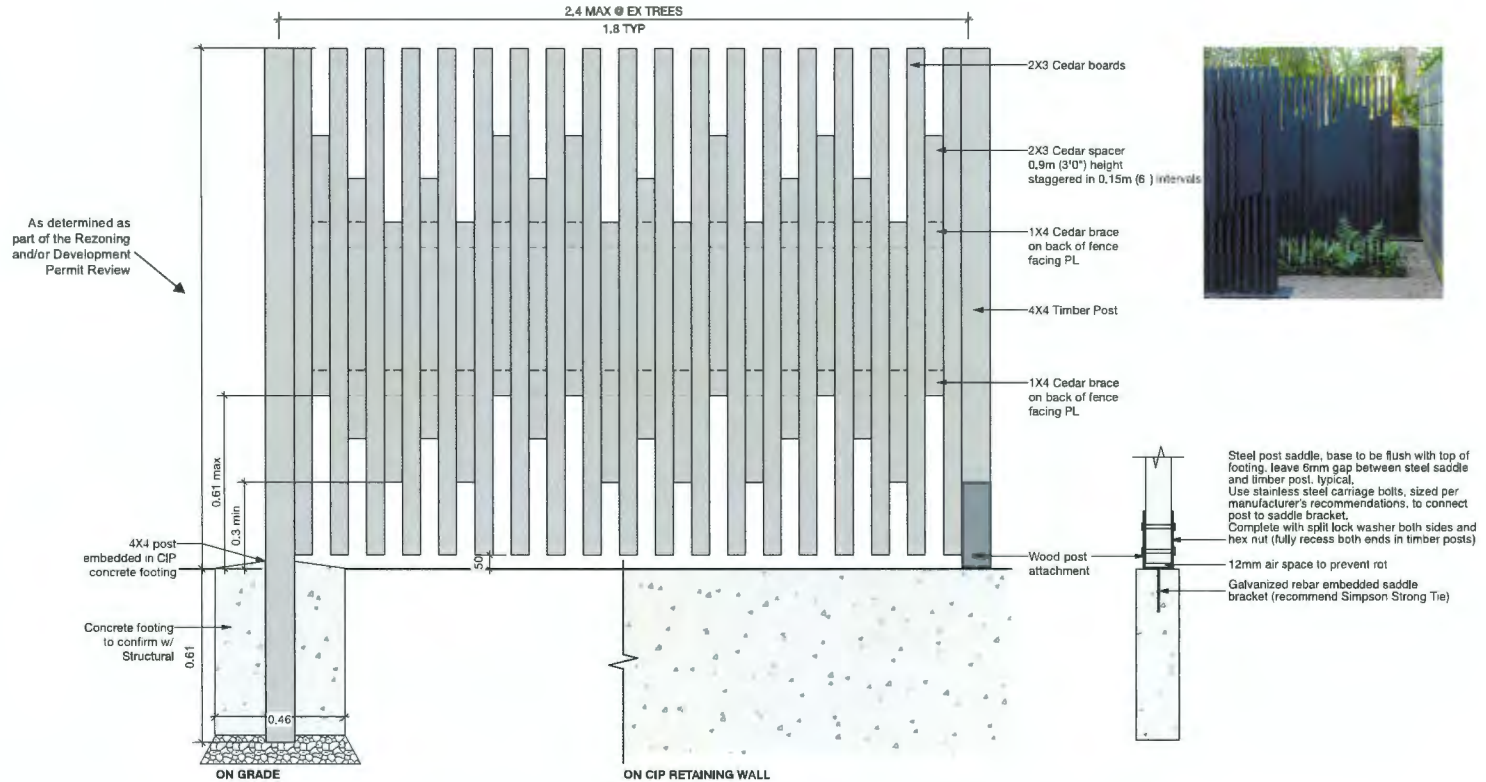
Drawing Title

**Timber
 Details**

Legal

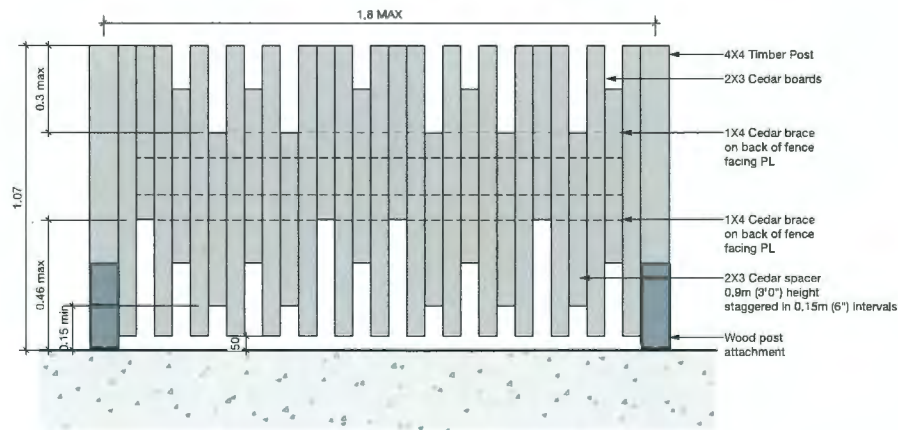
Project No.	22313
Sheet No.	05 STUMP
Revision	DT
Date	12/12
Scale	12

Timber Notes:
 Timber to be pressure-treated, cut ends to be treated with preservative
 Exposed wood to be smooth and splinter free
 Cuts to be square and clean
 Shop drawings for all fencing to be provided to Landscape Architect for review prior to construction

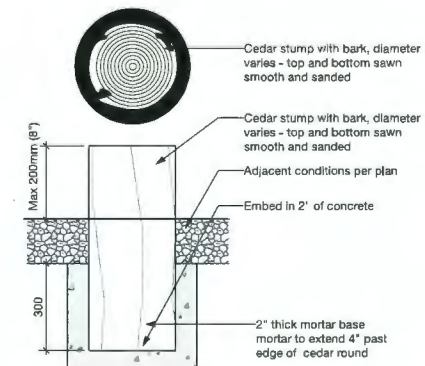


NOTE: Arborist to supervise installation locations of fence post in Tree Protection Zones at existing tree roots. Ensure posts are MAX 2.4m (8'0") o.c. apart, closer where possible.

1 DETAIL: Perimeter Wood Fence
 Scale: 1:10



2 DETAIL: 1.07m (3'6") Wood Guardrail
 Scale: 1:10



3 DETAIL: Wood Play Stump
 Scale: 1:10

DESIGN RATIONALE

This proposed project is for 25 units of affordable housing for women and women with children. The CMHC funding under the Rapid Housing Initiative requires an aggressive timeline for development, therefore a prefabricated modular approach has been proposed.

SITING:

A number of factors effected building siting including:

- Maintaining setbacks in keeping with this building type with appropriate setbacks from neighbours to the west and greenway to the east.
- Providing sufficient clearances from an existing municipal force flow sanitary line and right of way on the east side of the property. Fire access is provided onsite for fire trucks.
- Providing sufficient parking for the project based on transportation studies and anticipated requirements by residents and staff. 9 stalls provided (6 resident/5 visitor, 2 of which are accessible. EV charging stations provided.
- Providing proper circulation for refuse vehicles. Access is only allowed on the south end of the property on Steveston Hwy.
- Ensuring private open space is developed, connected to the building common areas, for women and women with children, oriented away from neighbourhood overlook.
- A number of parking configurations were tested on site with the assistance of a traffic engineer. It was determined the most pheasable solution to provide adqueate truck access (fire/garbage/recycling) was to locate the parking at the front of the site in close prximity to the front entrance. The drive aisle location and distance from the Stevenson/Railway intersection dictated the path of the access driveway on site and it was determined through turning radius tests conducte dby the traffic engineer that the parking would need to be pushed as fart East as possible, while avoiding the force main ROW. It was also determined that garbage and recycling services were better suited to be located on the west side of the building and away from the Railway greenway. It was determined that locating the parking at the rear of the building would drastically increase the impermeable surface area on site. Lastly, it was determined by the owner/operator that a singular main access point was the safet solution in terms of security.
- Bike parking is provided to City standards. 10 Class 1 and 8 Class 2.
- The Flood Control Level required the building to be raised $\pm 1.2m$ from natural grade. To ensure accessibility to all common areas retaining walls are incorporated on the east and west side with the front parking area sloping up to the building. In this way entry, amenity spaces and service spaces have level access. The grade then drops back down to natural grade to provide better connection to existing grades to the majority of the site and building going north.
- The existing bus stop is being moved and enlarged to meet standards. A sidewalk is added to the frontage as well as a walkway leading to the building entry. A painted path is proposed to identify the walkway to the road from the walkway to the building.

LANDSCAPE:

The landscape strategy focuses on buffering, screening and creating useable outdoor spaces for the residents. Some elements:

- 6-foot wood fencing along the west, north and east sides at the building footprint for privacy. Lower fencing along the front west side and a 4-foot picket fence along the southern east and south side. This picket fence is primarily to define our site edges and prevent any cut-throughs from the public path along the east side.
- The south and east sides of the parking area have native low maintenance planting, with a maximum of 24" high.
- Trees are added to the west and east sides of the building. On the west to provide additional screening from the townhouses, and on the east as a buffer between a walkway and the units.
- Urban agriculture in the form of raised garden beds are located on the lower portion of the outdoor amneity space alongside the proposed exit pathway.
- A gazebo is located at the north end of the property which allows those who desire a more quiet place to gather away from the play area.
- The outdoor amenity space includes a play area with rubber and turf surfaces, a small play house, paved surfaces and wood play features. The client requested a less intensive play area or equipment. There are also more passive areas for lounging as well as a covered area directly outside the amenity room.
- Due to the location of the existing force main, and setback requirements, the raised outdoor area is required to step down to meet existing grade. This has created a step in the amenity space. We have created a terrace in this space to better connect upper and lower spaces. The lower area has garden planters and a natural play feature, all visible from the main outdoor space. A glass guard is proposed here to provide better visual connection.
- A gazebo is located on the north side to provide an alternative location for residents away from the more active play/lounge space.
- All bollards on site will be at pedestrian scale.
- Lighting will be integrated into the landscape design to increase safety and securiy and will not negatively impact the adjacent properties.
- All 11 parking stalls will be provided with electrial charging equipment.

BUILDING LAYOUT:

- Modularity requires various dimensions to be maintained for assembly, shipping and efficiency, therefore a basic module of 12'-2" x 59' is used. We require some minimum areas for the studio units; therefore, this layout met these expectations. A simple building block was developed for efficiency of constructability and energy with stair units at either end. To ensure accessibility throughout the building an elevator module is incorporated. The goal was to maximize the number of units on this site while providing a unit mix that suits the anticipated operating approach, which was for women and women with children. Therefore, there are 10 2-bedroom units and 15 studio units.
- The building is oriented north/south on the site with all units facing either east or west. It was determined by the operator that private balconies were not desirable, and common open space is preferred for residents.
- The two-bedroom units for families are located on the ground and second floor with studios on the 3rd floor.
- There are internal bike and scooter rooms, an end of trip facility, resident and building storage, and common laundry rooms.
- On the ground floor there are staff areas which overlook to both exterior and interior spaces. An interior playroom and common room is connected to the exterior outdoor amenity space. The building's design provides for passive surveillance of fronting streets and the staff office will have clear sightlines to the fronting sidewalk, parking lot, building's entry and portions of the children's play area.

November 22, 2023
DP 23-025993
REFERENCE

REVISIONS:

G 23-11-20 DP APPLICATION
F 23-11-03 50% REVIEW
E 23-09-12 ADP SUBMISSION
D 23-08-18 SCHEMATIC DESIGN
C 23-07-31 DP SUBMISSION

ISSUES:

CONTRACTOR RESPONSIBILITY
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND SERVICES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND SERVICES AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND LOCATIONS OF ALL UTILITIES AND SERVICES AT ALL TIMES.

BONI • MADDISON
Architects

3732 West Broadway
Vancouver, B.C., V6R 2C1
T: 604 688 5894
F: 604 688 5899
E: info@bonimaddison.com

PROJECT
4831 STEVESTON HWY

TITLE
DESIGN RATIONALE

DRAWN	DRAWING NO:
SICA #	A0.4
JOB #	23-01
DATE	2023-08-18
REV. #	

DESIGN RATIONALE

ACCESSIBILITY STRATEGY:

- The walkway from the street and from the parking area, passes between the 2 accessible stalls, and incorporates a let down to the front entrance.
- Automatic operators are located at the entry and bike rooms.
- All common areas are accessible incorporating CMHC Universal Design.
- Two units are fully accessible and twelve addition units meet City BUH requirements.

EXTERIOR ARTICULATION:

- The site is neighbored by commercial property to the east across Railway Ave, single family to the south, 2 and 3 storey townhouses to the west and single family to the north. Most of the development along Steveston Hwy is residential with multifamily townhouses or row houses in 2 to 3 storey formats. To fit into this neighbourhood, we have incorporated residential features such as dormers and a variety of cladding and colours. The stair elements at the north and south end are set back from the main building face.
- The east façade along Railway Ave is the most prominent exposure. Along this side we have incorporated dormers with a change in colour and cladding materials to break up this façade. A darker green board and batten materials is on the ground floor and extends up to the gabled dormers. This creates a horizontal and well as vertical break to the building. There is also a canopy at the amenity area that modulates the façade. A similar approach is taken on the west façade.
- At the south/entry façade, the canopy over the amenity space wraps around the front. Over the single storey office, and the entry his marked with a gable feature. Signage is proposed at a high level above the canopy roof.

SUSTAINABILITY STRATEGY:

- We are targeting Step 4 for energy and requirements which includes the GHGI standard of 3.0. Sustainability measures per BCHousing are also included including LED lighting, energy star rated appliances, water efficient fixtures and low VOC material products.
- In addition, this project will include increased indoor environment quality for tenants, enhanced resource efficiency, reduced operating and maintenance costs, and maintain a sustainable procurement policy.
- The Energy Targets shall be verified through mandatory building and energy modelling as described in the Provincial Energy Step Code, performed by an experienced Energy Modeller hired by the Owner/Consultant.
- A thermal comfort evaluation is required for all actively cooled buildings. For all BC Housing buildings, it shall not exceed more than 20 overheating hours per year for any climate zone and must adhere to the City of Vancouver Energy Modelling Guidelines. The Canadian Weather Year for Energy Calculation (CWEC) 2020 file shall be used as the baseline for all thermal comfort evaluations.
- Additional requirements to be met can be found in Section 2: Energy and Environmental Design of the BC Housing Design Guidelines

November 22, 2023
DP 23-025993
REFERENCE

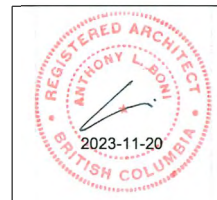
REVISIONS

G 23-11-20 DP APPLICATION
F 23-11-03 50% REVIEW
E 23-09-12 ADP SUBMISSION
D 23-08-18 SCHEMATIC DESIGN
C 23-07-31 DP SUBMISSION

ISSUES

FURTHER REVISIONS:
THIS DRAWING IS THE PROPERTY OF BONI-MADDISON ARCHITECTS. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED IN THE TITLE BLOCK. ANY REVISIONS TO THIS DRAWING MUST BE APPROVED BY BONI-MADDISON ARCHITECTS.

CONTRACTORS:
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR OMISSIONS TO THE ARCHITECT.



BONI • MADDISON
Architects

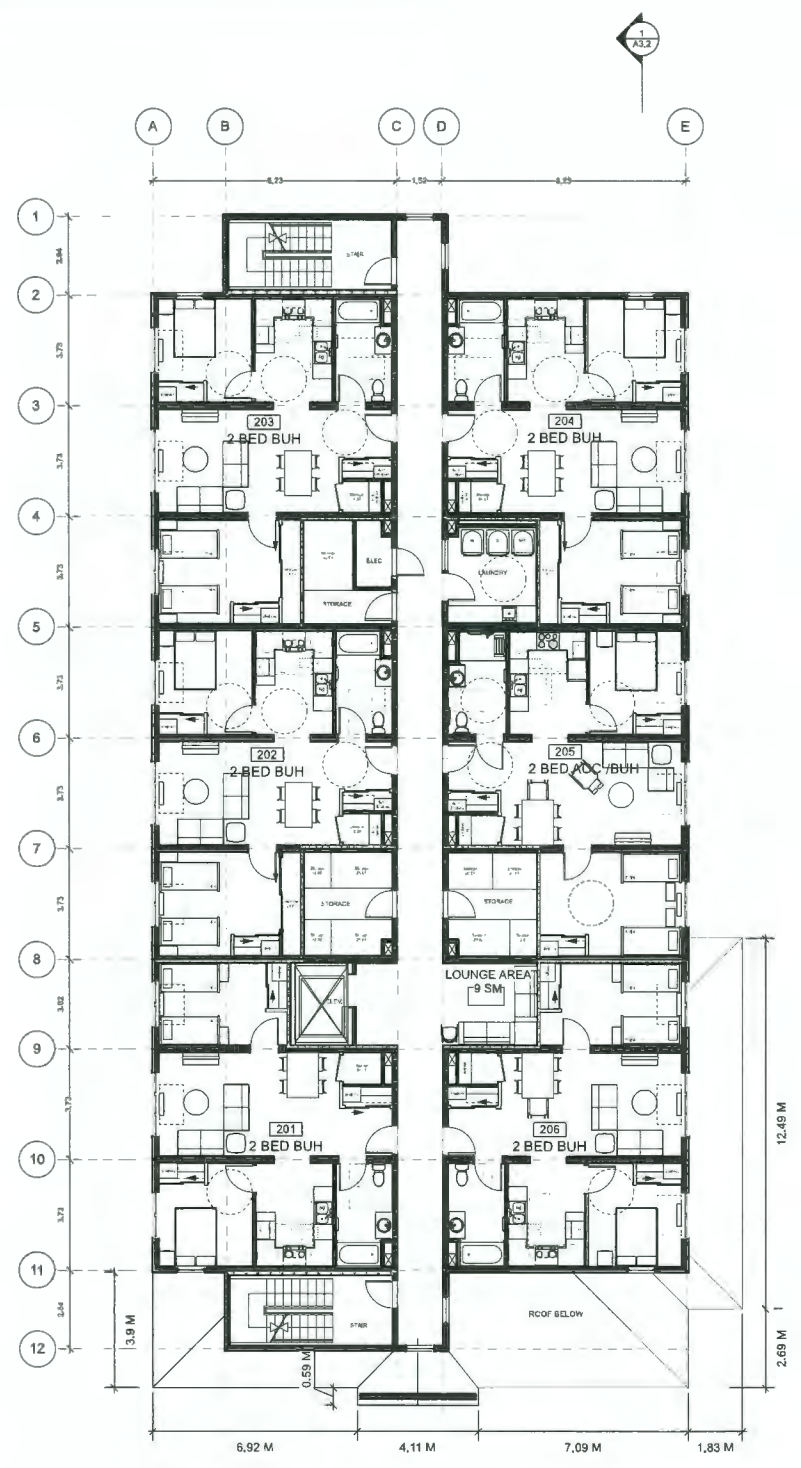
3732 West Broadway
Vancouver, B.C., V6R 2C1
T: 604 688 5894
F: 604 688 5899
E: info@bonimaddison.com

PROJECT
4831 STEVESTON HWY

TITLE
DESIGN RATIONALE

DRAWN	DRAWING NO.
SCA 1	A0.5
JOB NO.	
23-01	
DATE: 2023-08-18	REV. NO.

November 22, 2023
 DP 23-025993
 REFERENCE



1 Second Floor
 A2.2 Scale: 1/86



- 1 23-05-10 REVISED LANDSCAPE REVISIONS:
- G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-09-12 ADP SUBMISSION
 D 23-08-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED. THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS BELONGS TO AND REMAINS AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONI-MADDISON ARCHITECTS AND SHALL NOT BE USED, MODIFIED, OR REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF BONI-MADDISON ARCHITECTS.
 DIMENSIONS: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR OMISSIONS. DO NOT SCALE DRAWINGS.



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

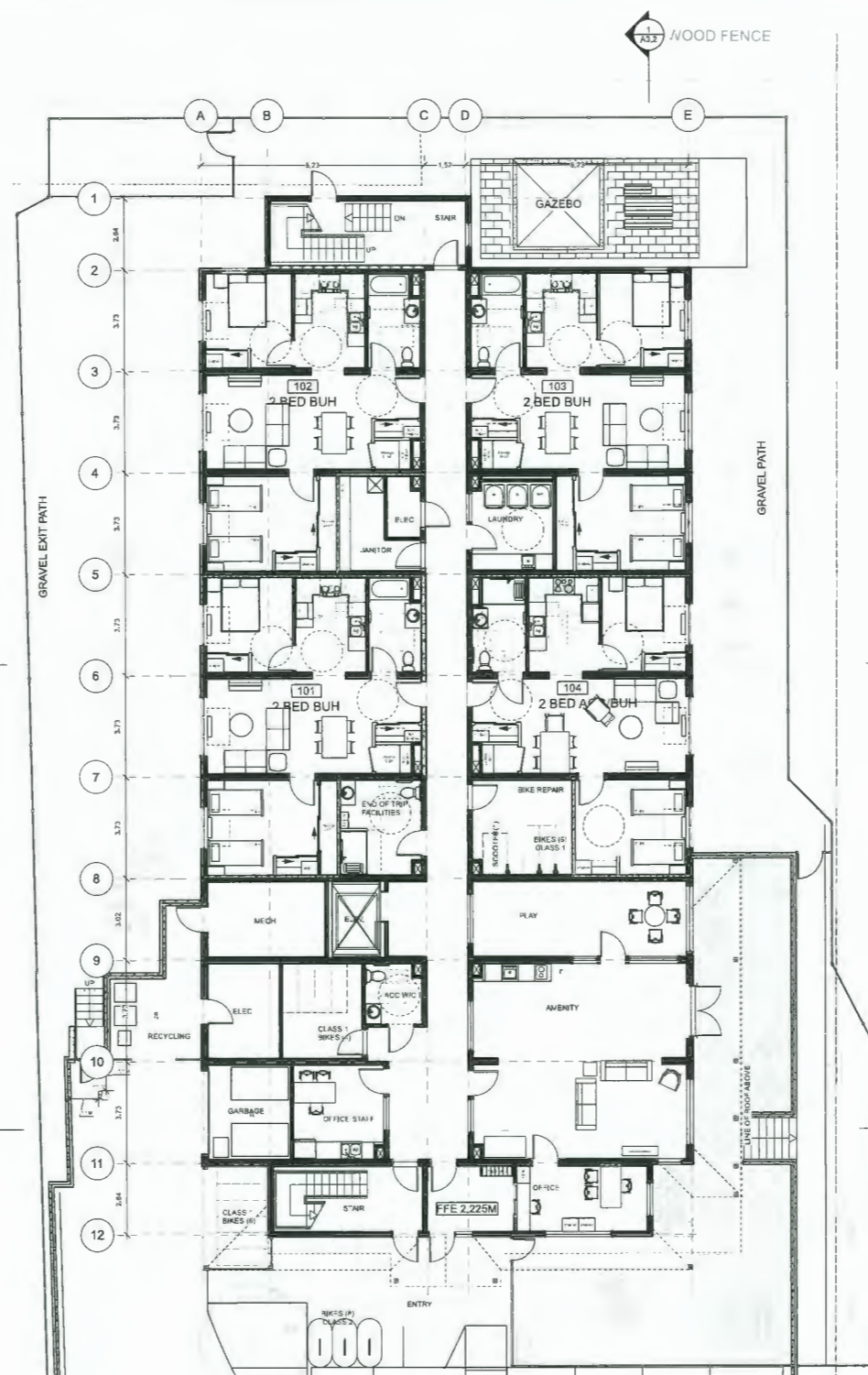
PROJECT
 4831 STEVESTON HWY

TITLE:
 SECOND FLOOR

DRAWN	JS/GW	DRAWING N°
SCALE	1:200	A2.2
JOB N°	23-01	
DATE	2023-08-18	REV. N°



November 22, 2023
 DP 23-025993
 REFERENCE



1 Ground Floor
 A2.1 Scale: 1:96



- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-08-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION ISSUES

COPYRIGHT RESERVED:
 THE COPYRIGHT TO THESE PLANS AND ITS CONTENTS IS RESERVED AND REMAINS AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONIMADDISON ARCHITECTS AND SHALL NOT BE USED, MODIFIED OR REPRODUCED WITHOUT THE EXPRESSED WRITTEN CONSENT OF BONIMADDISON ARCHITECTS.
 DISCLAIMER:
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND MANUALLY REPORT ANY ERRORS AND/OR OMISSIONS. DO NOT SCALE DRAWINGS.



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

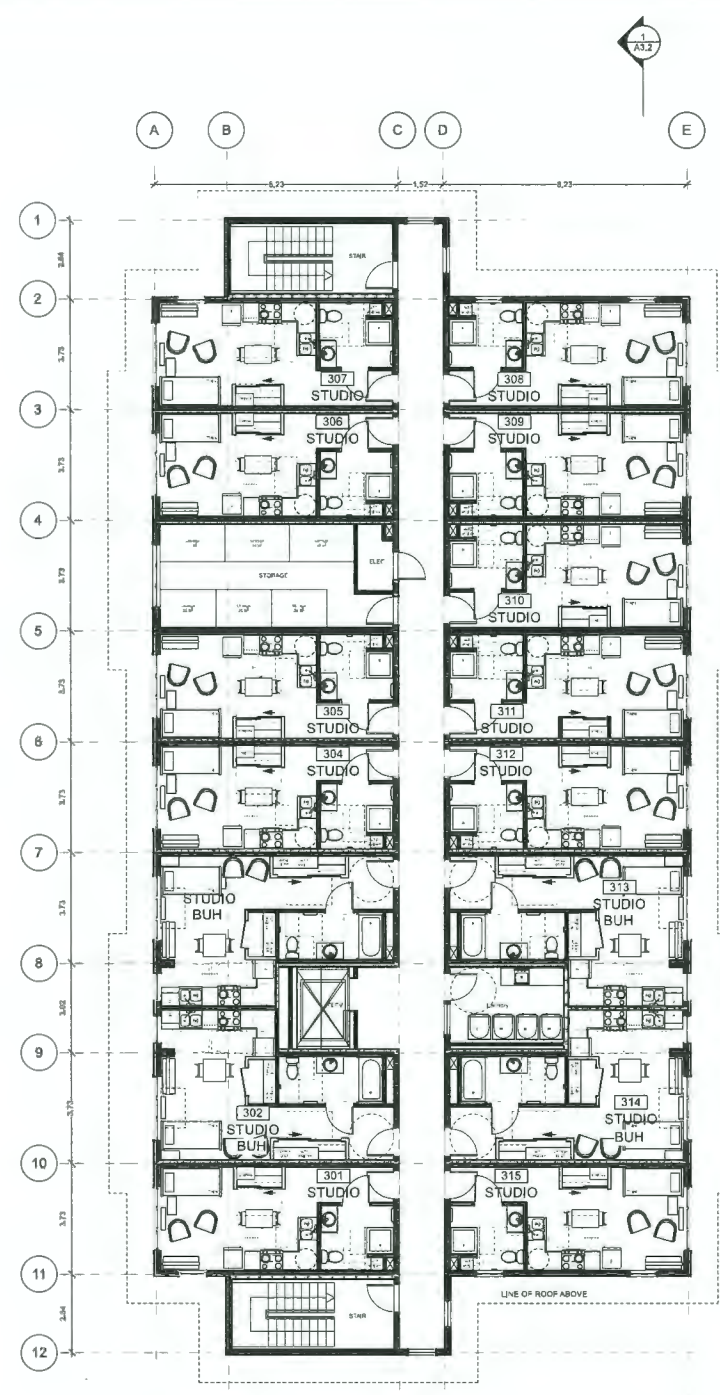
PROJECT
 4831 STEVESTON HWY

TITLE
 GROUND FLOOR

DRAWN	JS/GW	DRAWING N°
SCALE	1:100	A2.1
JOB N°	23-01	
DATE	2023-08-18	REV. N°



November 22, 2023
 DP 23-025993
 REFERENCE



- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED.
 THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS, BY REFERENCE AND REMAINS AT ALL TIMES THE LEGAL PROPERTY OF BONIMADDISON ARCHITECTS AND SHALL NOT BE REPRODUCED OR REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF BONIMADDISON ARCHITECTS.
 DIMENSIONS: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR DISCREPANCIES TO THE ARCHITECT. DO NOT SCALE DRAWINGS.



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

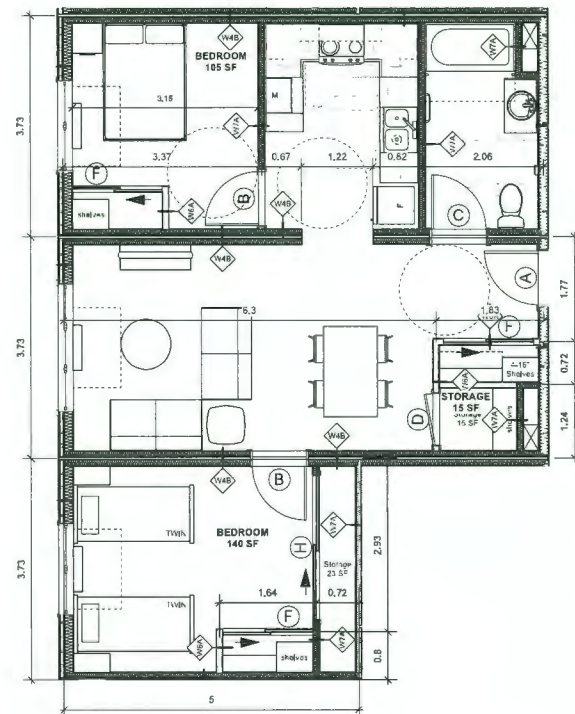
TITLE:
 THIRD FLOOR

DRAWN	JS/GW	DRAWING NO.
SCALE	1:100	A2.3
JOB NO.	23-01	
DATE	2023-08-18	REV. NO.

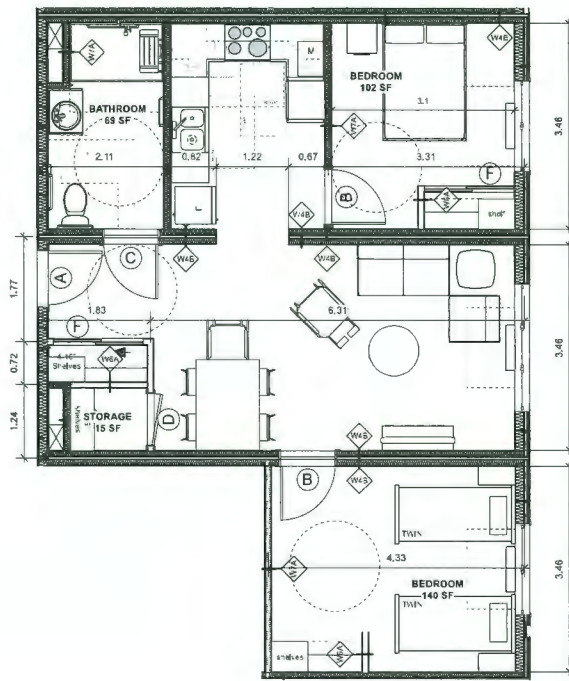
1 Third Floor
 A2.3 Scale: 1:96



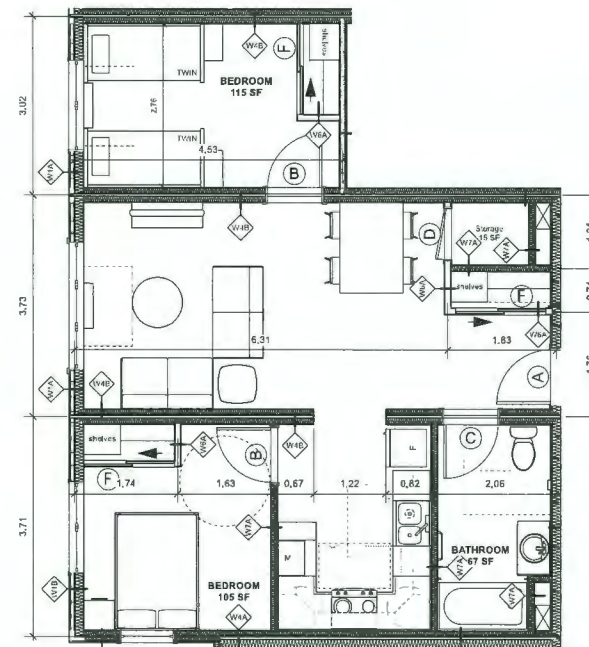
November 22, 2023
 DP 23-025993
 REFERENCE



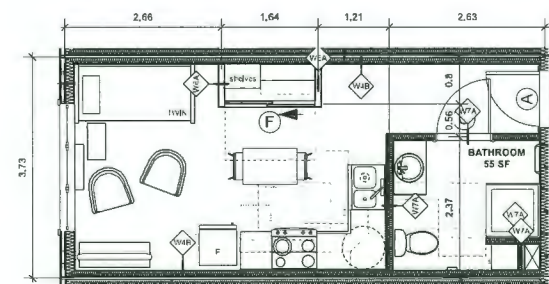
1 UNIT A2 - 2 BED BUH 850 SF
 Scale: 1:48
 UNITS 101, 103, 202, 203, 204
 UNIT A - 2 BED BUH SIMILAR - 850 SF
 UNIT 102



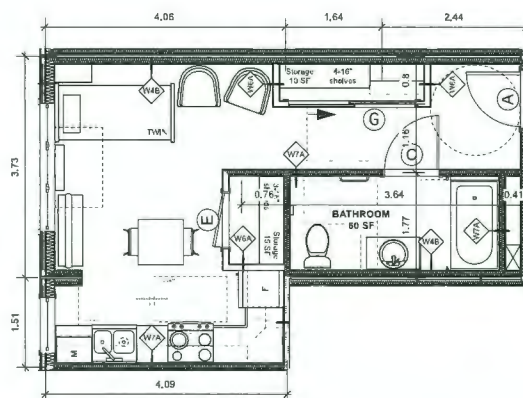
2 UNIT B - 2 BED ACC/BUH 823 SF
 Scale: 1:48
 UNIT 104
 UNIT B2 - 2 BED ACC/BUH SIMILAR - 850 SF
 UNIT 205



3 UNIT C - 2 BED BUH 802 SF
 Scale: 1:48
 UNIT 201
 UNIT C2 - 2 BED BUH SIMILAR - 816 SF
 UNIT 206



4 UNIT D - STUDIO 326 SF
 Scale: 1:48
 UNITS 301, 304, 305, 306, 307, 308, 309, 310, 311, 312, 315



5 UNIT E - STUDIO BUH 389 SF
 Scale: 1:48
 UNITS 302, 303, 313, 314

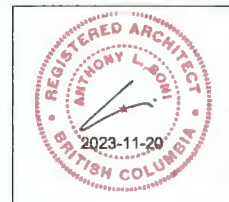
UNIT MATRIX

TYPE	BEDRMS	AREA	COUNT	ACC.
Unit A	2 BED	79.0 m2	850 SF	1 -
Unit A2	2 BED	79.0 m2	850 SF	5 -
Unit B	2 BED	76.5 m2	823 SF	1 YES
Unit B2	2 BED	79.0 m2	850 SF	1 YES
Unit C	2 BED	74.5 m2	802 SF	1 -
Unit C2	2 BED	75.8 m2	816 SF	1 -
Unit D	STUDIO	30.3 m2	326 SF	11 -
Unit E	STUDIO	36.1 m2	389 SF	4 -
Total:				25
# OF STUDIO UNITS	15	60%		
# OF 2 BEDRMS:	10			
TOTAL:	25			
ACCESSIBLE UNITS	2			

STORAGE NOTES:
 -ALL 2 BEDROOMS WILL HAVE MINIMUM 10SF STORAGE IN COMMON STORAGE ROOM
 -ALL UNIT D STUDIOS WILL HAVE MINIMUM 25SF STORAGE IN COMMON STORAGE ROOM

- 1 23-05-10 REVISED LANDSCAPE REVISIONS
- G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-06-12 ADP SUBMISSION
 D 23-08-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED
 THE COPYRIGHT TO THESE DRAWINGS AND ITS CONTENTS IS RESERVED AND REMAINS AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONIMADDISON ARCHITECTS. IT SHALL NOT BE USED, MODIFIED OR REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF BONIMADDISON ARCHITECTS.
 OBSERVATIONS:
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND BARRIERS. REPORT ANY ERRORS AND/OR DISCREPANCIES TO NOT SCALE DIMENSIONS.



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT
 4831 STEVESTON HWY

TITLE:
 TYPICAL UNIT PLANS

DRAWN	JS/GW	DRAWING #
SCALE	1:100	A2.7
JOB #	23-01	
DATE	2023-08-18	REV. #

**4831 STEVESTON HWY
RICHMOND, BC
DP APPLICATION**

DRAWING LIST

ARCHITECTURAL 31 SHEETS IN SET

- A0.0 COVER SHEET
- A0.1 CONTEXT PLAN
- A0.2 CONTEXT IMAGES
- A0.3 STREETSCAPE ELEVATIONS
- A0.4 DESIGN RATIONALE
- A0.5 DESIGN RATIONALE
- A1.1 SURVEY PLAN
- A1.2 UPDATED SUBDIVISION PLAN
- A1.3 SITE PLAN
- A1.4 RETAINING WALL PLAN
- A2.1 GROUND FLOOR
- A2.2 SECOND FLOOR
- A2.3 THIRD FLOOR
- A2.4 ROOF PLAN
- A2.5 GARBAGE/RECYCLING/BIKES
- A2.6 WHEELCHAIR ACCESS. PLAN
- A2.7 TYPICAL UNIT PLANS
- A3.1 SECTIONS
- A3.2 SECTIONS
- A4.1 ELEVATIONS
- A4.2 MATERIALS SHEET
- A6.1 SUN STUDY
- A6.2 SUN STUDY
- A6.3 FAR OVERLAYS
- A6.4 FAR OVERLAYS
- A7.1 RENDERS
- A7.2 RENDERS
- A7.3 RENDERS
- A7.4 RENDERS
- A8.0 FIRE ACCESS PLAN
- A8.1 FENCE HEIGHT



CONTACT LIST:

Owner: Turning Point Housing Society	Electrical Engineer: Jarvis Engineering
Funding: BCHousing CMHC	Landscape Architects: ETA Landscape Architecture
Housing Consultant: CPA Development Consultants	Civil Engineers: CoreGroup Consultants
Architects: Boni • Maddison Architects	Geotechnical Engineers: GeoPacific
General Contractor: Buttcon	Building Envelope: Aqua-Coast Engineering Ltd.
Structural Engineers: Welter Smith Bowers	Arborist: Diamond Head Consulting
Mechanical Engineers: Rocky Point Engineering Ltd.	Traffic Consultant: Bunt Engineering
Energy Consultants: Rocky Point Engineering Ltd.	

November 22, 2023
DP 23-025993
REFERENCE

REVISIONS

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-08-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

ISSUES:
COPYRIGHT RESERVED:
THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS IS RESERVED AND REMAINS AT ALL TIMES THE EXCLUSIVE PROPERTY OF BONI-MADDISON ARCHITECTS AND SHALL NOT BE USED, MODIFIED OR REPRODUCED WITHOUT THE EXPRESS WRITTEN CONSENT OF BONI-MADDISON ARCHITECTS.
DISCREPANCIES:
THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND IMMEDIATELY REPORT ANY ERRORS AND/OR OMISSIONS TO THE SCALE DRAWINGS.



BONI • MADDISON
Architects

3732 West Broadway
Vancouver, B.C., V6R 2C1
T: 604 688 5894
F: 604 688 5899
E: info@bonimaddison.com

PROJECT
4831 STEVESTON HWY

TITLE:
COVER SHEET

DRAWN:	DRAWING NO:
SCA: F	A0.0
JOB NO: 23-01	
DATE: 2023-08-18	REV. NO:



R1: BUILDING AND EXIT PATH FROM RAILWAY GREENWAY



R2: BUILDING FROM ENTRY DRIVEWAY

November 22, 2023
 DP 23-025993
 REFERENCE

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

UPRIGHT RENDERING:
 THE CONTENTS OF THIS DRAWING AND ITS CONTENTS
 HAVE BEEN PREPARED BY THE ARCHITECT AND SHALL
 BE USED AS A REFERENCE ONLY. THE ARCHITECT SHALL
 BE RESPONSIBLE FOR ANY ERRORS AND OMISSIONS.
 THE ARCHITECT'S LIABILITY IS LIMITED TO THE
 ARCHITECT'S PROFESSIONAL OBLIGATIONS.



BONI · MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

TITLE:
 RENDERS

SCALE:	DRAWING NO.:
23-01	A7.1
DATE:	REV. NO.:
2023-08-18	



R3: BUILDING FROM DRIVEWAY



R4: REAR BUILDING FROM RAILWAY GREENWAY

November 22, 2023
 DP 23-025993
 REFERENCE

ADVISORS:

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

ALTHOUGH I HAVE REVIEWED THE CONTENTS OF THIS DRAWING AND ITS CONTENTS HAVE BEEN APPROVED BY ME AT THE TIME OF THE ISSUE OF THIS DRAWING, I AM NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT MAY BE FOUND IN THIS DRAWING. I AM NOT PROVIDING ANY GUARANTEE OR WARRANTY OF ANY KIND. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR VERIFYING ALL INFORMATION AND DATA AND FOR MAKING ANY NECESSARY CHANGES.



BONI • MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

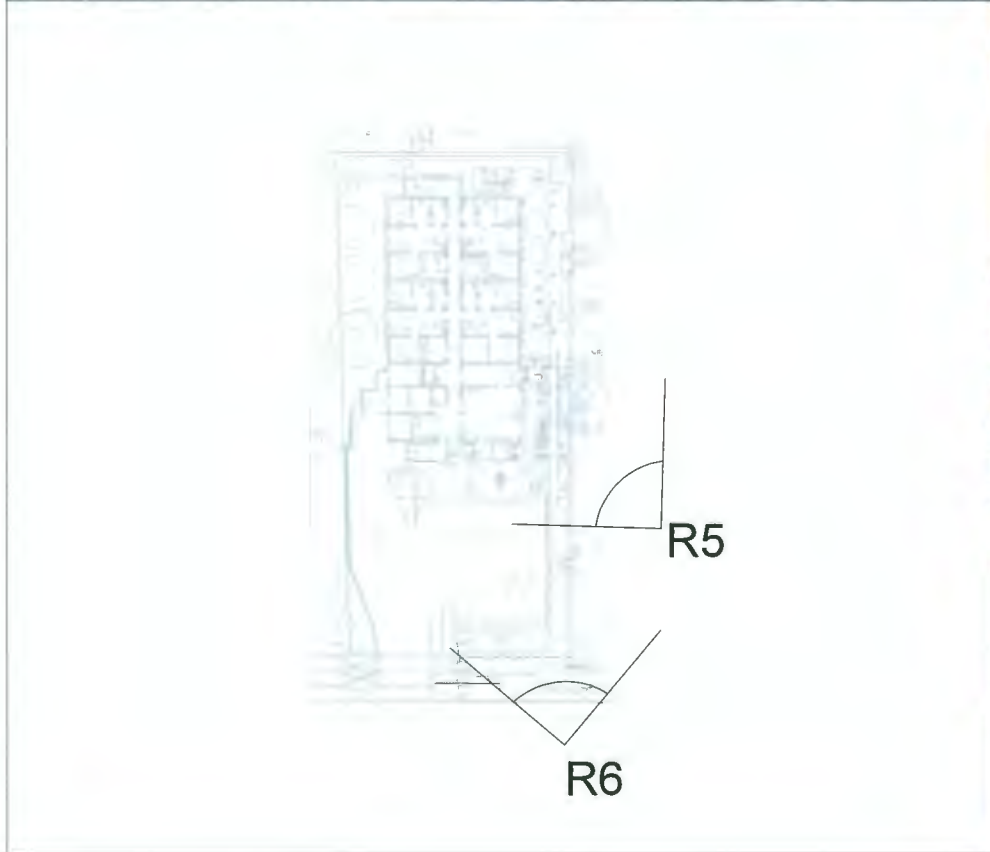
PROJECT
 4831 STEVESTON HWY

TITLE
 RENDERS

DATE:	2023-08-18	DRAWING NO.:	A7.2
SCALE:		DATE:	23-01
DATE:	2023-08-18	REV. NO.:	



R5: BUILDING FROM RAILWAY SIDEWALK



R6: BUILDING FROM INTERSECTION

November 22, 2023
 DP 23-025993
 REFERENCE

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

COPYRIGHT RESERVED.
 THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS
 IS RESERVED AND REMAINS AT ALL TIMES THE PROPERTY
 OF BONI-MADDISON ARCHITECTS AND SHALL
 NOT BE USED, REPRODUCED OR REPRODUCED IN ANY
 MANNER WITHOUT THE WRITTEN CONSENT OF BONI-MADDISON
 ARCHITECTS.
 THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND
 IMMEDIATELY REPORT ANY ERRORS AND OMISSIONS
 TO THE ARCHITECT.



BONI · MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

TITLE:
 RENDERS

DATE:	2023-08-18	DRAWING NO.:	A7.3
SCALE:		JOB NO.:	
		23-01	



R7: BUILDING FROM EAST GREENSPACE



R8: BUILDING FROM WEST GREENSPACE

November 22, 2023
 DP 23-025993
 REFERENCE

REVISIONS:

- G 23-11-20 DP APPLICATION
- F 23-11-03 50% REVIEW
- E 23-09-12 ADP SUBMISSION
- D 23-08-18 SCHEMATIC DESIGN
- C 23-07-31 DP SUBMISSION

CLIENTS HEREBY RELEASE THE ARCHITECT FROM ALL LIABILITY FOR ANY AND ALL DAMAGES, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM THE USE OF ANY INFORMATION CONTAINED HEREIN, WHETHER OR NOT SUCH DAMAGES ARE CAUSED BY THE NEGLIGENCE OF THE ARCHITECT.

THE ARCHITECT SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING, WHETHER OR NOT SUCH ERRORS OR OMISSIONS ARE CAUSED BY THE NEGLIGENCE OF THE ARCHITECT.



BONI • MADDISON
Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

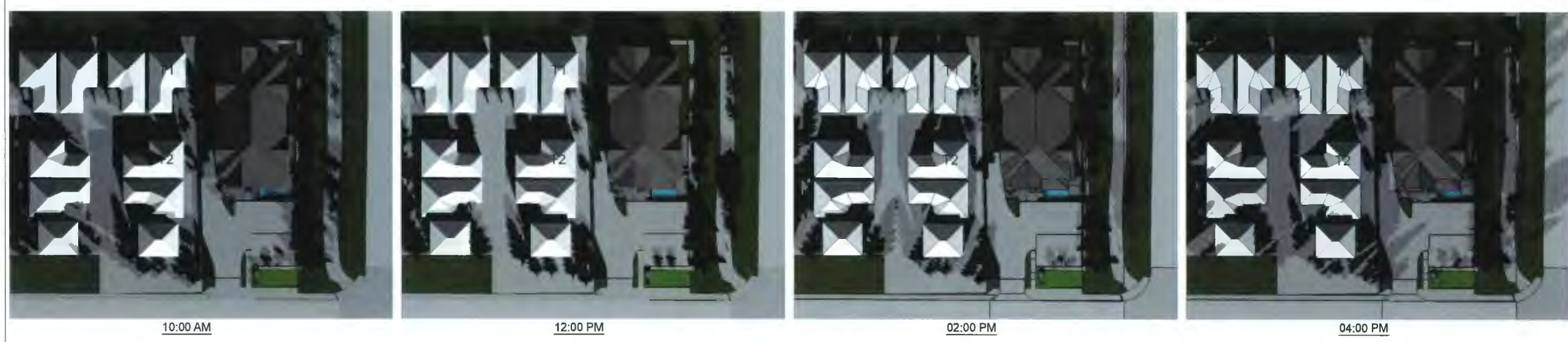
PROJECT:
 4831 STEVESTON HWY

TITLE:
 RENDERS

DATE:	23-01	DRAWING NO.:	A7.4
SCALE:		DATE:	
DATE:	2023-08-18	SCALE:	

November 22, 2023
 DP 23-025993
 REFERENCE

FALL EQUINOX SUN STUDY - SEPTEMBER 22



WINTER SOLSTICE SUN STUDY - DECEMBER 21



SUMMARY:

Our relationship is between the 2 and 3 storey townhomes to our west and our 3 storey building, and to some extent the property to the north. There are 4 townhouses along the boundary, the 2 southernmost townhouses are not shadowed in any way by our building. The northernmost townhouse, T1, has its garage and entry at its south end with some open space at north and east sides. The 2nd building, T2, has its garage and entrance on the west side with open space on its east side, against the property line. Note that our building is located approximately more than twice as far from the property line than T1, 6.8m versus 3.1m. If a townhouse project were to be developed on our property, with similar layouts, it would be closer and potentially extend shadowing.

Spring Equinox/ March 20 and Fall Equinox/ Sept 22 (these have the same sun angles)
 T1 has shadow from morning to 11am. Our building does not shadow the rear yard but is shadowed by itself. Currently existing trees and fences shadow the yard throughout the day. We are replacing one of these trees which will reduce shadows.
 T2 has shadow from morning to 10am. The fence shadows the rear yard of this building.
 The pool of the home north of the proposed building is not shadowed at any point during the day.

Summer June 20
 Minor shadowing noted to 11am. The fence provides as much shadow as the building.

Winter Solstice/ Dec 21
 T1 has shadow from sun up to 11am. Currently trees and fences shadow the yards throughout the day.
 T2 is not in shadow, aside from the trees and fence.
 The pool of the home north of the proposed building is in shadow all day due to the low sun angle. The existing townhouses also shadow the properties to the north.
 After 2pm the existing townhouses shadow our building.

- 1 23-05-10 REVISED LANDSCAPE REVISIONS:
- G 23-11-20 DP APPLICATION
 F 23-11-03 50% REVIEW
 E 23-09-12 ADP SUBMISSION
 D 23-08-18 SCHEMATIC DESIGN
 C 23-07-31 DP SUBMISSION

I, THE CLIENT HEREBY RELEASE THE ARCHITECT FROM ALL LIABILITY AND OBLIGATION IN CONNECTION WITH THIS DRAWING AND ITS CONTENTS. THE ARCHITECT'S LIABILITY IS LIMITED TO THE PROFESSIONAL FEES PAID TO HIM OR HER BY THE CLIENT. THE ARCHITECT'S LIABILITY IS LIMITED TO THE PROFESSIONAL FEES PAID TO HIM OR HER BY THE CLIENT.



BONI · MADDISON
 Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

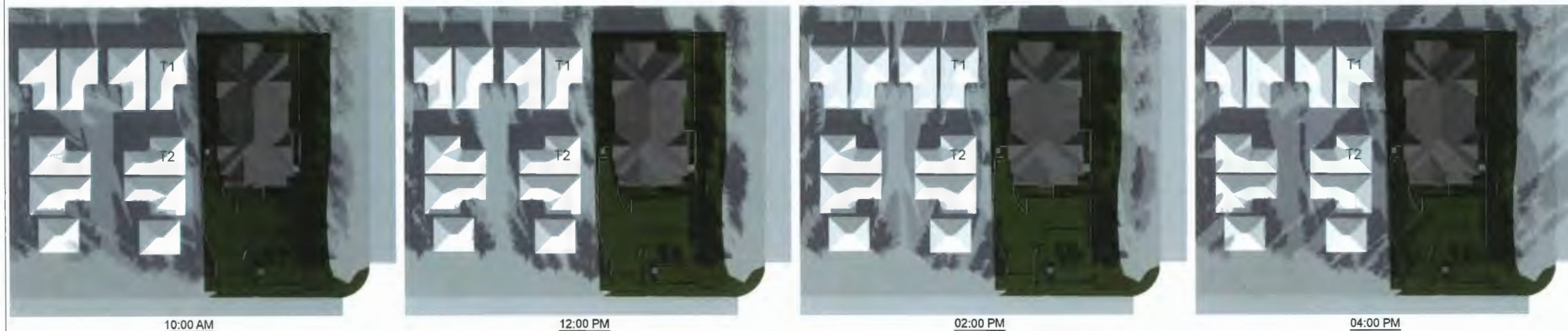
TITLE:
 SUN STUDY

DRAWN: JS/GW	DRAWING NO:
SCALE: 1/8" = 1'-0"	A6.1
JOB NO: 23-01	REV. NO:
DATE: 2023-08-18	

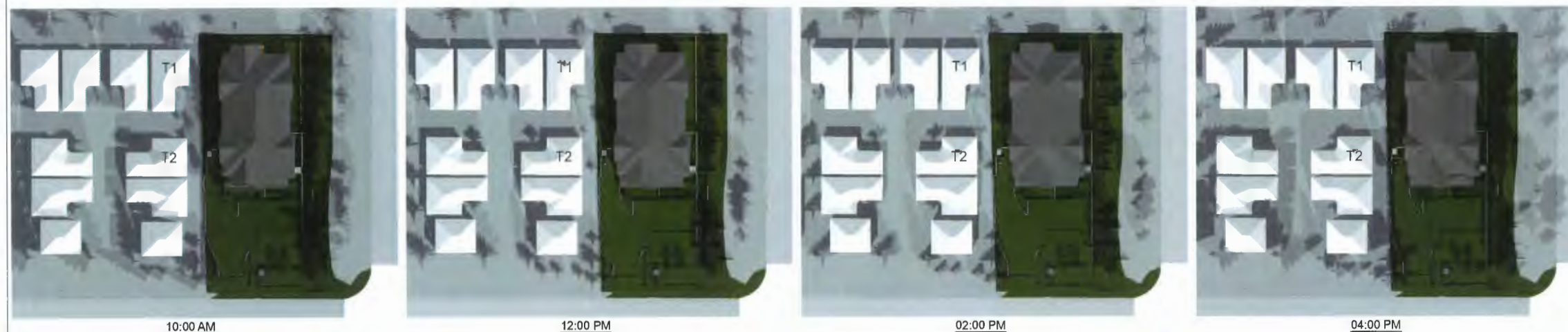


November 22, 2023
 DP 23-025993
 REFERENCE

SPRING EQUINOX SUN STUDY - MARCH 20



SUMMER SOLSTICE SUN STUDY - JUNE 20



- 1 23-05-10 REVISED LANDSCAPE REVISIONS:
- G 23-11-20 DP APPLICATION
 - F 23-11-03 50% REVIEW
 - E 23-09-12 ADP SUBMISSION
 - D 23-08-18 SCHEMATIC DESIGN
 - C 23-07-31 DP SUBMISSION

CLIENTS REVIEW AND THE COPYRIGHT TO THIS DRAWING AND ITS CONTENTS IS RESERVED AND REMAINS WITH THE CLIENT. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING OR ANY INFORMATION CONTAINED HEREIN MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF BONI • MADDISON ARCHITECTS.

CONTRACTOR: THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES.



BONI • MADDISON
Architects

3732 West Broadway
 Vancouver, B.C., V6R 2C1
 T: 604 688 5894
 F: 604 688 5899
 E: info@bonimaddison.com

PROJECT:
 4831 STEVESTON HWY

TITLE:
 SUN STUDY

DRAWN:	JS/GW	DRAWING NO.:	A6.2	
SCALE:	1/8" = 1'-0"	JOB NO.:		23-01
DATE:	2023-08-18	REV. NO.:		

