

Submission to Advisory Design Panel

July 7, 2023

Budget Self Storage

6450 N. Island Hwy., Nanaimo, BC

- o Design Rational
- Variance Rational
- Development Data



DESIGN RATIONAL

Introduction

The proposed development consists of adding a 4-storey mixed-use building to a site currently housing two Budget Mini Self Storage buildings. The 4 storey building will house office, self storage and self storage associated retail uses.

Context

The development site is located at 6450 North Island Hwy. The site is bound to the north by an existing commercial development, to the west by North Island Hwy., to the east by Green Thumb Garden Centre/future residential development and to the south by a vacant triangular building lot. The proposed building is to be located at the north edge of the property facing North Island Hwy. to the west and Marlin Way to the North-East.

Woodgrove Urban Centre Neighbourhood

The existing mini storage facility is a lawfully non-conforming use, given that the property was being used for its current purpose prior to the adoption of the current zoning bylaw. The site is to support Woodgrove Urban Centre as a northern gateway and regional centre for commercial activity. The current zoning is supportive of a mix of uses including commercial, retail, residential etc.

Site Design

The overall site plan is based on the City of Nanaimo Design Guidelines. The mixed-use building addresses the primary roads – North Island Hwy. and Marlin Way. Parking is shielded from the street by landscaping. The mixed-use building is set back from the street along North Island Hwy. providing landscaping, parking and a building entry focal point. The current walking trail will be extended the full site frontage along North Island Hwy and be relocated outside of the fenced in property.

The proposed building follows the existing site grades, appearing as a 3-storey building along North Island Hwy and appearing as a 4-storey building along Marlin Way. Grades within the site will be maintained to acceptable municipal standards, with no slope greater than 5 percent and made accessible to the physically challenged.

Full time security and surveillance will be provided on site, however various other CPTED initiatives have also been put in place. The entire property will be well lit with street lighting and building lighting. Visual access to all outside areas from within the building, security cameras,



as well as, avoiding deep indentations and wells, in the design of the building further adds to providing a secure environment. Access to the site is restricted to operating hours or via electronic access. The on site self storage retail component is strategically situated in the central lower portion of the building providing visual security/view to the rest of the site.

Vehicular site access is existing and consistent with governing engineering practices. Slopes for parking areas will not exceed 5%. Loading zones and garbage will be screened and located away from the building main entry points.

Architectural Character

The mixed-use building is designed to relate primarily to the principal roads – North Island Hwy and Boundary Marlin Way. The building form, proportion and material treatment complements the most recent developments in the area and is sympathetic in scale and character to the existing context. The building has a modern and urban aesthetic, consists of 3 distinctive architectural parts: a front, a back and a middle which addresses the existing main entry points/frontages and the existing self storage buildings to the south. The main frontage and office access point addresses North Island Hwy. The retail component of the self storage use is accessible from the middle of the building and visible from within the site.

The upper floors, consist of cementitious panel and galvalume metal siding. The ground and 2nd floor consists of masonry veneer. The building is articulated along its length and height and is provided with large overhangs at the roof level. Large expanses of curtain wall and glazing is being provided along the North Island Hwy exposure. The juxtaposition of materials, textures, colours, and engineering practices, serves to place the building comfortably in the present, and compatible with the adjacent existing buildings and regenerative context.

Sustainability Initiatives

Our involvement in non-profit projects and a conscientious approach to design has served to cement our belief in the importance of sustainable and green initiatives. We are incorporating the following features in this project:

Mechanical:

- 1. Water use reduction:
 - a. All toilets will be 4.8 L/flush.
 - b. Lavatories will use 5.7 L/min (1.5 gpm) flow restrictors.
 - c. Showers heads will use 7.6 L/min (2 gpm) flow restrictors.
 - d. Use of motion sensored faucets, flush valves to conserve water.
- 2. Energy efficiency:
 - a. Electrification of all proposed and existing HVAC equipment.



- b. Exhaust from all washrooms will be centralized and air to air heat recovery employed to transfer recovered heat to the incoming makeup air to the building.
- c. All heating pumps will utilize variable frequency drives.
- d. Building envelope and mechanical equipment efficiency will meet ASHRAE 90.1-2010 and Step 3 This, inherently, will provide a much higher performance building than required.
- 3. All refrigeration systems will utilize CFC & HCFC free refrigerants where proposed.
- 4. Outdoor air ventilation to all spaces will meet or exceed ASHRAE 62.1 requirements.
- 5. Common, office and retail areas will contain inoperable windows to maintain HVAC balance and minimize energy use.

Electrical:

- 1. Energy efficiency:
 - a. Common area lighting will utilize LED lighting.
 - b. Occupancy sensors will be utilized for common area spaces, where appropriate, to turn lighting on and off.
- 2. Exterior lighting:
 - a. Lighting fixtures will utilize "dark sky" design to avoid light pollution.
 - b. Exterior lighting control will utilize daylight sensors to turn lights on and off.

Architectural:

- 1. Higher density vs. lower coverage provided, thereby promoting open space.
- 2. Building Siting Use existing grades and minimize transfer of soil off site.
- Reducing the amount of asphalt and surface water run-off.
- Storm water quantity control will utilize infiltration back into the ground.
- 5. Drought-tolerant, and indigenous natural plant material to minimize irrigation.
- 6. Permeable paving, rain harvesting/gardens and bioswales for enhanced stormwater management and to promote the native habitat.
- 7. Build in concrete and steel durable renewable materials.
- 8. Sealed thermal low e glazing.
- 9. Well-insulated building design practices.
- 10. Shading devices.
- 11. Incorporate DDC systems to monitor and schedule mechanical and electrical systems.
- 12. Naturally ventilated ventilation systems.
- 13. Use of lighter more reflective surface materials on walls and roof to minimize heat gain.
- 14. Green roof providing stormwater management, reducing urban heat island effect, and improved air quality.
- 15. Environmentally friendly materials, adhesives and paints.
- 16. Max. 40% glazing.



- 17. Solar heat gain reduction thru use of large overhangs.
- 18. Provisions for future solar panels.

Variance Rational:

North Setback:

A variance of 1.5m is requested along portions of the north property line to allow for larger ground related storage units. The proposed building positioning and setback is consistent with the neighbouring property to the north, which is also below the 3m setback requirement. Portions of the height of the building has also been reduced to better assimilate with the neighbouring context and to visually articulate and enhance the appearance of the proposed building.

Parking:

Parking deficiency of 4 spaces is required to accommodate the office uses proposed. The nature of the parking required for the self-storage use is periodic, short duration and usually adjacent to the actual location of storage units and building entries. The longer-term load of the office uses is provided and will easily be accommodated along the visible frontage of North Island Hwy.



2023-07-07





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SITE DATA:
                                       CC4 NORTH NANAIMO URBAN CENTRE
 ZONING:
                                       6450 N ISLAND HWY.
 CIVIL ADDRESS:
                                       LOT 1, SEC. 12, WELLINGTON DISTRICT,
PLAN 12124, EXCEPT PART IN PLAN
33807
 SITE AREA:
                                       125,166 af (11,628.29am)
BUILDING AREA:
BUILDING A
BUILDING B
                                        16,709 sf
16,472 sf
12,475 sf
      BUILDING C
COVERAGE:
                                       50% (.5x125,166 SF = 62,583 SF)
        EXT'G. BLDG. A
EXT'G. BLDG. B
PROPOSED BLDG. C
                                       16,709 SF
16,472 SF
13,547 SF
                                         46,728 SF / 125,166 SF X 100 = 38% Propo
                                        1.25 (1.25x125,166 SF=156,457 SF ALLOWED)
                                       134,410 sf = 1.06 Proposed 125,166 af
D OCCUPANCY BLDG. GFA:
                                       125.166 af
     EXT'G. BUILDING A
                                                          16,709 sf
16,709 SF
33,418 SF/3,105 sm
     EXT'G. BUILDING B
                                                                             49,416 SF/4,591 sm
     PROPOSED BUILDING C
                                                            51,576 SF 51,576 SF/4,791 sm
                                                                             134,410 SF/12,487 sm
 REQUIRED PARKING:
         MINI STORAGE:
1 SPACE PER 200mm (2152m) OF GROSS FLOOR AREA
3 LOADING SPACES FOR 4,850mm + 1 PER ADDITIONAL 4,650mm
              1 SPACE PER 22sm (238.8sf) OF CROSS FLOOR AREA
       EXT'G. BUILDING A
EXT'G. BUILDING B
                                                 ilor cor spoces
sli spaces (14/44=32%)
: spaces
ces in front of OHD © Bldg, A & B
  LODDING CALCS:
     Required: 12,487em-4,650em = 3 + (7,837em/4,650 = 1.6) 2 = 5 LOADING SPACES Provided: 6 LOADING SPACES REQUIRED.
  BUILDING HEIGHT:
         Average Grade: 111.87 + 111.40 + 108.3 + 108.94 = 440.51/4 = 110.13
                              13.27m (NOT INCL. ROOF TOP MECHANICAL)
BULDING CLASSFICATION
3.2.2.77. CROUP F, DIV 2, UP TO 4 STOREYS, SPRINGLERED
MAX. BLDG. AREA = 3,200 SM.(34,444 S*) F 3 STY.
MAX. BLDG. AREA = 2,400 SM.(23,33) F 4 STY.
COMBUSTIBLE OR NONCOMBUSTIBLE CONSTRUCTION
                     .r.r.; 3/4 Hr. Lb. Walls, couns. ETC: 3/4 Hr. or non-combustible R00F; 0 min.
 SETBACKS:
FRONT YARD — ISLAND HWY.
REAR YARD — IMARLIN WAY
SIDE YARD (SOUTH):
SIDE YARD (NORTH):
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SUBJECT PROPERTY MAP





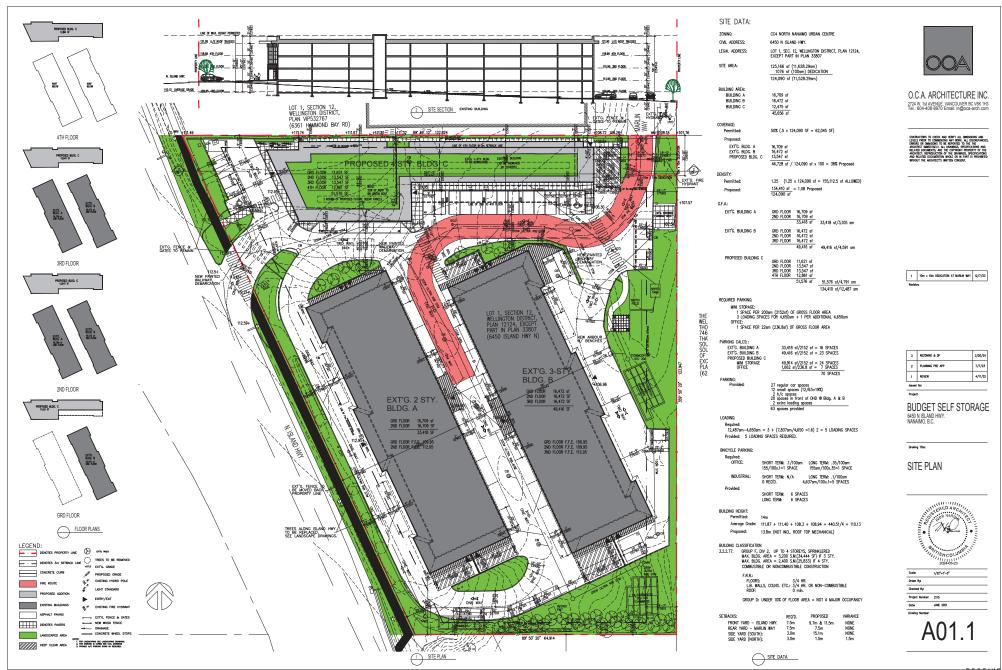


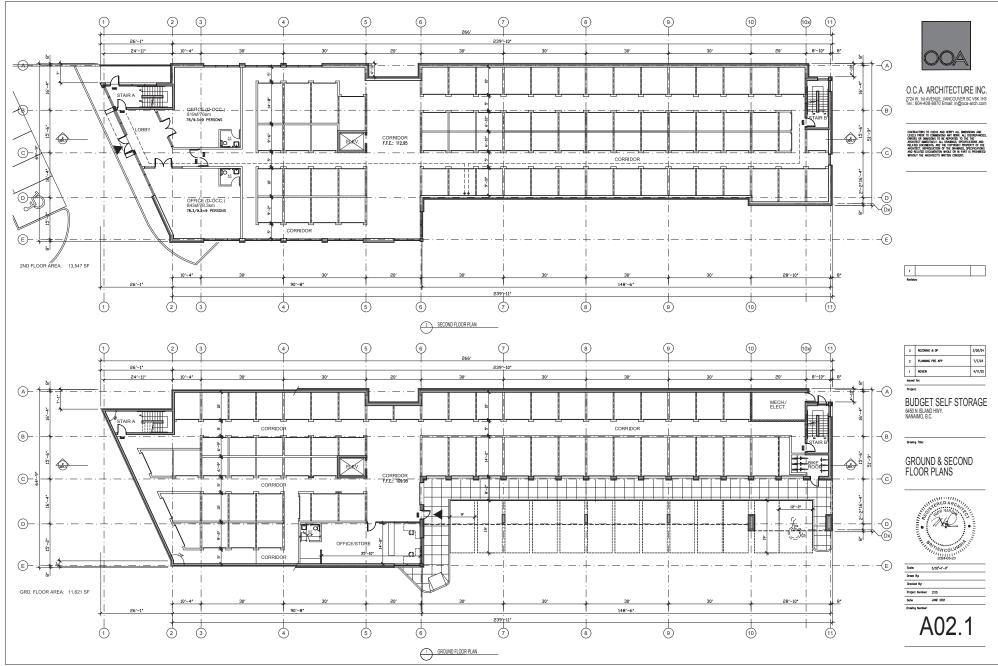
AERIAL PHOTO

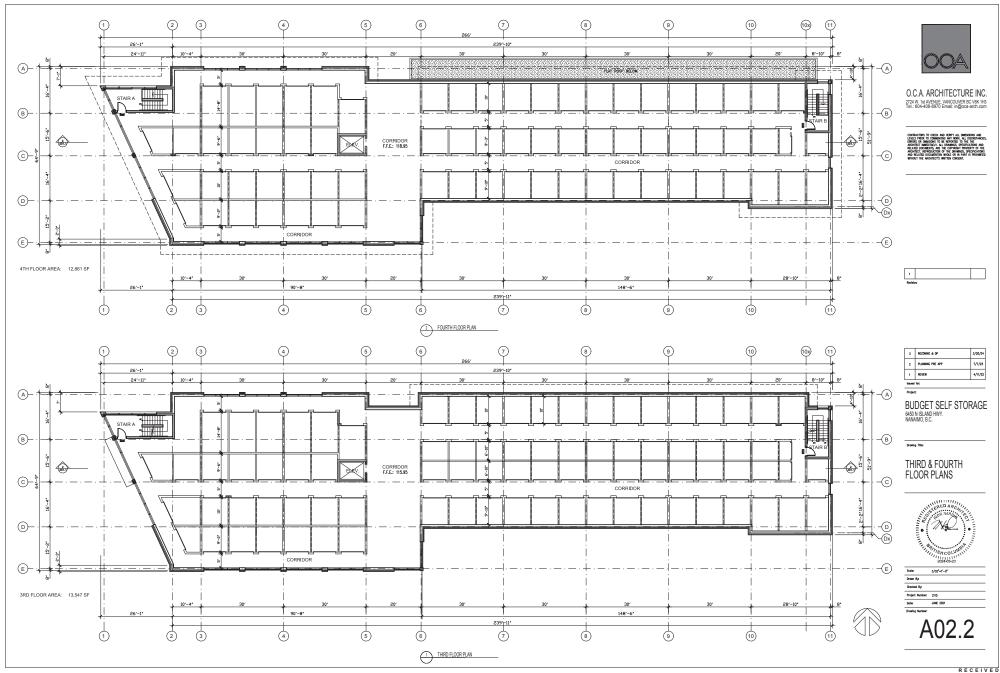














BUDGET SELF STORAGE

6450 N. ISLAND HWY, NANAIMO, B.C.







O.C.A. ARCHITECTURE INC. 2724 W. 1st AVENUE, VANCOUVER BC V6K 1H3 Tel.: 604-408-8970 Email: in@oca-arch.com





1	REVIEW	4/11/22
Issued	fec	
Project		
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	N ISLAND HWY.	

NANAIMO, B.C.

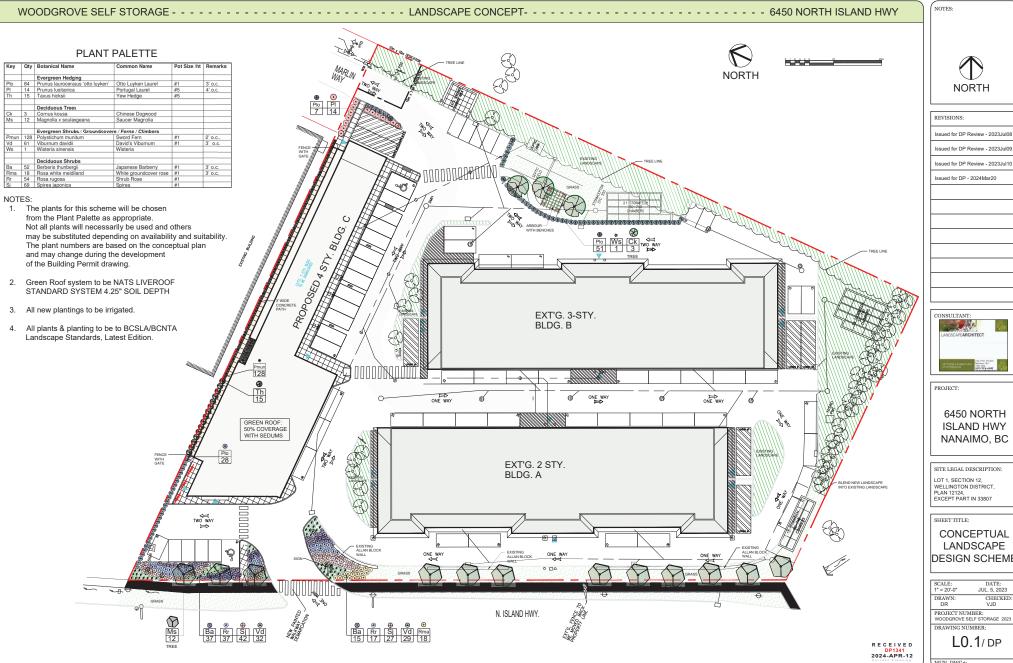
RENDERINGS & SHADING STUDIES



2024-0525			
Scales	1/16 =1-0		
Drown By:			
Checked By:			
Project Number:	2115		
Dates	JUNE 2021		







NOTES:



REVISIONS:

Issued for DP Review - 2023Jul08

Issued for DP Review - 2023Jul09

Issued for DP - 2024Mar20



6450 NORTH ISLAND HWY NANAIMO, BC

SITE LEGAL DESCRIPTION:

LOT 1, SECTION 12, WELLINGTON DISTRICT, PLAN 12124, EXCEPT PART IN 33807

SHEET TITLE:

CONCEPTUAL LANDSCAPE DESIGN SCHEME

SCALE: 1" = 20'-0" DATE: JUL. 5, 2023 DRAWN CHECKED: VJD

PROJECT NUMBER: WOODGROVE SELF STORAGE 2023

L0.1/DP