CRITICAL AREAS MITIGATION PLAN:
CITYVIEW APARTMENTS PROJECT

Bellingham, Washington
Parcel No. 380332-172175

for
Madrona Bay Real Estate Investments, LLC

January 8, 2020

MILLER
ENVIRONMENTAL
SERVICES, LLC

Project No. 190017

CRITICAL AREAS MITIGATION PLAN:
CITYVIEW APARTMENT PROJECT

January 8, 2020

Prepared for:

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Author Qualifications

This report was prepared by Ed Miller and Liliana Hansen.

Ed Miller is a senior biologist and co-owner of Miller Environmental Services, LLC, who specializes in wetlands, wildlife, and habitat assessments. He is a Society of Wetland Scientists certified Professional Wetland Scientist (PWS), #1895. Mr. Miller obtained a Bachelor of Science in Terrestrial Ecology from Western Washington University in 1993 and a Masters of Environmental Science and Management with a focus on Watershed Management at the University of California at Santa Barbara in 2000. His experience includes preparing wetland delineations and reports, wetland functional assessments, stream and shoreline ordinary high water mark determinations, habitat conservation area reports, mitigation design, mitigation monitoring and floodplain habitat assessments for FEMA Endangered Species Act compliance. Mr. Miller has completed project permitting and compliance for agencies including U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Washington Department of Fish and Wildlife, Washington Department of Ecology.

Liliana Hansen is a senior biologist and co-owner of Miller Environmental Services, LLC. She is a Society of Wetland Scientists certified PWS, #2755. Ms. Hansen received a Bachelor of Science from Western Washington University in Environmental Science and has been working as a consulting biologist since 2003. Ms. Hansen's experience includes wetland delineations, floodplain habitat assessments for FEMA Endangered Species Act compliance, wetland and buffer mitigation design and monitoring, stream and shoreline ordinary high water mark determinations, environmental permitting. She has managed projects from the preliminary site assessment stage through permitting with the Corps, USFWS, WDFW, Ecology, and local jurisdictions.

Disclaimer

This report and wetland and/or stream delineation, is based on protocols that are described and defined in manuals and publications utilized by Federal, State, and Local agencies. The wetland delineation methodology used is consistent with the *Washington State Wetlands Identification and Delineation Manual* (Ecology, 1997), the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* (Corps, 2010), and subsequent Corps guidance. Completed work is based on conditions at the time of the site visit. No guarantees are given that a delineation determination or assessment will concur exactly with those performed by regulatory agencies or by other qualified professionals.

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2.0 METHODS

2.1 FIELD INVESTIGATION

Site investigations of the review area were conducted on April 29 and August 30, 2019 to document existing conditions. This included a wetland delineation, an assessment of onsite habitat, and documentation of potential mitigation opportunities. Wetland boundaries and data plot locations were flagged and surveyed by professional land surveyors. Site photographs taken during the site visit are included within **Appendix B**. Wetlands are described in a separate Critical Areas Report by MES (2019).

3.0 PROJECT AREA SETTING

3.1 WATERSHED

The subject property is located within the Whatcom Creek watershed, which drains to Bellingham Bay, a coastal watershed.

Runoff from the property flows west/northwest over a 10 to 30-percent slope. Water flows onto the property off of Puget Street and from a stormwater drain that captures upslope runoff east of Puget Street. The stormwater drains onto the property through a culvert under Puget Street and forms a narrow drainage feature (one to two feet wide) and small wetland (Wetland B). The drainage flows westward downslope into and through Wetland B. Water appears to disperse into the subsurface below Wetland B – as no downgradient channel was observed. A subdivision is located adjacent to the west property boundary. A drainage channel was observed along the western property line (on the east side of the subdivision) that collects subsurface and surface flow, directing the flow north and westward. The water may enter the stormwater system within Marionberry Court to the west or be directed to a stormwater pond to the northwest, adjacent to the east side of Nevada Street. Based on CityIQ, the stormwater system carries water from the development to the west into Lincoln Creek.

Additionally, a ditch is located within the southern portion of the unopened Consolidation Avenue right-of-way (ROW). This ditch is one to two feet wide, with areas of quarry spall and distinct side slopes. The ditch is artificial, and starts at the east end of the Consolidation Avenue ROW, at the outfall of a stormwater pond. The pond is labeled as the 46th and Consolidation pond BMP T10.10 wetpond in the City of Bellingham IQ Mapper. A 12 inch outlet pipe drains the pond to the upper portion of the ditch. This ditch drains into a catch basin at the west end of the unopened Consolidation Avenue ROW and continues westward within ditches and pipes along and under Consolidation Avenue (City stormwater collection system).

3.2 PROJECT VICINITY

The review area is located within the City of Bellingham, within densely developed residential and urban area. Adjoining properties to the east and west are developed with single-family residences. The property to the north is undeveloped, forested City of Bellingham property, designated as the "Hawley Open Space". The properties to the south are partially developed with single-family residences and partially undeveloped forest.

3.3 REVIEW AREA

The review area includes one tax parcel, approximately 11.15 acres in size that is predominantly upland forest. Two wetlands (Wetlands A and B) and a drainage feature were identified on the property. The location of the wetlands and drainage are shown on the map in **Appendix A.**

The property is on a 10 to 30-percent slope down to the west-northwest. The property is a mixed deciduous/coniferous forest with red alder (*Alnus rubra*), big-leaf maple (*Acer macrophyllum*), paper birch (*Betula papyifera*), Western red-cedar (*Thuja plicata*), and Douglas fir (*Pseudotsuga menziesii*). Several mature trees and priority snags and logs were observed on the property. Site photographs are included in **Appendix B**.

4.0 RESULTS

4.1 FIELD INVESTIGATION

A majority of the property consists of upland forest that includes red alder, big-leaf maple, paper birch, Western red-cedar, Douglas fir, oceanspray (*Holodiscus discolor*), low Oregon grape (*Mahonia nervosa*), salmonberry (*Rubus spectabilis*), Himalayan blackberry (*Rubus armenicacus*), snowberry (*Symphoricarpos albus*), and sword fern (*Polystichum munitum*).

Two wetlands were identified within the review area: Wetlands A and B. Wetland A extends offsite to the north. With the exception of Wetland A, no wetlands were observed on adjacent, offsite properties, as observed from property boundaries. Onsite wetlands are summarized **Table 1** and described below.

Table 1: Project Wetlands Summary

Wetland	Cowardin Classification	Ecology Category	HGM Class	Ecology Habitat Score	City of Bellingham Buffer Width[1]
A	PFO	I	Slope	Low (4)	100 feet
B	PEM	IV	Slope	Low (4)	50 feet

[1]Assumes high intensity land use proposal – more than one unit per acre.

The critical areas report documented a drainage feature that flows west through the north half of the property. The drainage feature appears to be artificial as the hydrology source is a stormwater pipe outfall on the west side of Puget Street. Based on CityIQ, the catch basin on the east side of Puget Street captures runoff from ditches and catch basins in the dense residential development to the southeast and directs the water via a culvert under Puget Street onto the property. The drainage has two small forks just east of Wetland B, that feed into the wetland and provide the source of hydrology for the wetland. A defined channel disappears below Wetland B and runoff from the drainage and wetland continues as subsurface flow. Due to a lack of downstream surface connection, per WAC 222-16-031, the onsite drainage is not classified as a stream and is not required to have a buffer under the City of Bellingham CAO.

A ditch is located within the southern portion of the unopened Consolidation Avenue right-of-way (ROW). This ditch is one to two feet wide, with areas of quarry spall and distinct side slopes. The ditch is artificial, and starts at the east end of the Consolidation Avenue ROW at the outfall of a stormwater pond. The pond is labeled as the 46th and Consolidation pond BMP T10.10 wetpond in the City of Bellingham IQ Mapper. A 12 inch outlet pipe drains the pond to the upper portion of the ditch. This ditch drains into a catch basin at the west end of the unopened Consolidation Avenue ROW and continues westward within ditches and pipes along and under Consolidation Avenue (City stormwater collection system). This feature is an artificial ditch that does not carry natural waters or have any potential for fish presence. As such it is not defined as a stream per WAC 222-16-031 and is not a regulated feature in City of Bellingham Code.

The site also contains pileated woodpecker habitat, priority snags and logs and suitable habitat for big brown bat.

5.0 REGULATORY REQUIREMENTS

The wetlands identified on the property are subject to federal regulations under the Clean Water Act (CWA) Sections 404 and 401, as well as state regulations under the Growth Management Act administered by the City of Bellingham under the Critical Areas Chapter (BMC 16.55).

5.1 CWA SECTION 404- US ARMY CORPS OF ENGINEERS

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States, including wetlands. Any impacts to onsite wetlands would require a Nationwide Permit (for up to 0.5 acre of wetland fill) or an Individual Permit (for greater than 0.5 acre of wetland fill). No impacts to the onsite wetland are proposed, therefore no Corps permit is required for this project.

5.2 CWA SECTION 401- DEPARTMENT OF ECOLOGY

Ecology is the state agency responsible for administering the CWA Section 401 Water Quality Certification program. Impacts to wetlands may require approval or a waiver from the Department of Ecology. No impacts to wetlands are proposed, therefore no Ecology approval is necessary for this project.

5.3 CRITICAL AREAS ORDINANCE- CITY OF BELLINGHAM

The City of Bellingham regulates critical areas, including wetlands and their associated buffers, and fish and wildlife habitat conservation areas under Title 16, Chapter 55 of the Bellingham Municipal Code. Impacts to wetlands and buffers require a Critical Areas Permit and compensatory mitigation. Buffer widths are determined based on the proposed land use intensity, wetland category, and habitat score. Wetland A requires a 100-foot buffer and Wetland B requires a 50-foot buffer. The City of Bellingham Code (BMC 16.55.340.G) also requires building setbacks from buffers. However, the code section allows the director to reduce this setback if warranted.

6.0 PROJECT DESCRIPTION

The proposed project includes the construction of three multifamily residential buildings (106 units) with associated infrastructure: parking, roads, utilities, and stormwater vault. The

project also includes a City of Bellingham required trail within the Consolidation Avenue ROW, to connect the CityView Project with Puget Street. The trail route will avoid the existing ditch in the Consolidation ROW. The project will avoid impacts to Wetland A and B. However, a small portion of the Wetland B buffer will be impacted with the construction of a drive lane along the north side of the proposed buildings. A site plan is included in **Appendix A**.

The project includes onsite mitigation, in the form of buffer averaging, to compensate for buffer impacts to Wetland B. An area of buffer will be added adjacent to the existing Wetland A and B buffer, this area will be greater in size than the area of lost buffer. This area of added buffer will provide additional buffer area and screening between the proposed development and Wetland A to the north.

Split-rail fencing will be placed at the edge of the proposed buffer adjacent to the proposed drive lane and parking. Two "Protected Critical Areas" signs will be placed at the buffers edge. Additionally, areas of wetland, existing buffer and added buffer on the property will be protected with a conservation easement.

7.0 IMPACT ASSESSMENT

7.1 WETLANDS AND BUFFERS

The proposed project will result in no impacts to Wetland A or B. However, 3,420 square feet of buffer impact to the outer 50 percent of the Wetland B buffer will occur with the construction of the drive lane on the north side of the development. The area of proposed lost buffer currently contains forest habitat, which does not drain toward Wetland B - as Wetland B is on a slope draining to the west, and the area of lost buffer is located south of the wetland and also drains westward. Thus the buffer area proposed for impact primarily provides habitat function to Wetland B.

The construction of the proposed development is not anticipated to affect hydrology of Wetland B. Wetland B is located on a hillslope that slopes downhill to the west. The proposed development will be located south of the wetland, also on a slope that drains westward. The area proposed for development does not provide any significant hydrology to Wetland B. Additionally, the primary source of hydrology for Wetland B appears to be the drainage in the center of the property that carries stormwater to the wetland from a stormwater pipe outlet located on the east side of the property, on the west side of Puget Street. The proposed project will not affect this existing stormwater outlet.

A separate tree retention plan will describe the project impacts to significant trees within the project footprint and along the proposed wetland buffer.

7.2 PILEATED WOODPECKER AND PRIORITY SNAGS/LOGS

The subject property contains a mixture of deciduous forest and younger coniferous forest habitat, with numerous large snags and decaying live trees. With the construction of the proposed residential buildings and associated infrastructure approximately 50 percent of the property will be cleared and graded. This will include snags, logs and pileated woodpecker habitat. However, the remainder of the property, approximately 50 percent including wetland and buffer, will be preserved – retaining snags, logs and pileated habitat in those areas. Additionally, the wetland buffer to be preserved on the north side of the property is contiguous

with a large forested habitat area to the north, that is within City ownership (Hawley Open Space). With the preservation of large areas of forest on the property, no significant impacts are anticipated to pileated woodpecker habitat or priority snags and logs.

7.3 STREAMS/DRAINAGES

No streams are located on the property. The unregulated drainage in the center of the property that feeds Wetland B will not be disturbed. Additionally, the ditch in the unopened Consolidation Avenue ROW will not be disturbed with the proposed project, including trail construction within the Consolidation Avenue ROW. Required Consolidation Avenue street improvements may require the ditch to be collected near 45th Street and routed westerly via the existing City storm system.

7.4 BIG BROWN BAT

The property contains habitat that may be used by big brown bat. The project will remove areas of forest in the southwest portion of the property for the construction of the project. This will remove a portion of this potential habitat on the property. However, the north and east sides of the property will be left as undisturbed forest. With the preservation of large areas of forest on the property, no significant impacts are anticipated to big brown bat habitat.

8.0 MITIGATION

The loss of Wetland B buffer will be offset with the increase in Wetland A and B buffer in an greater amount – 3,584 square feet. The area proposed as added buffer has a canopy consisting of forest habitat that is similar to the lost buffer. This area of added buffer will be between the proposed development and Wetland A and B. The added buffer will provide additional screening, noise attenuation and habitat function for Wetlands A and B.

Additionally, a split-rail fence and critical areas protection signs will be placed between the drive lane and parking on the north side of the proposed residential buildings. These are shown on the site plan in **Appendix A**.

With the proposed buffer averaging (at more than a 1:1 ratio), split-rail fencing, and critical areas signs, no net loss in wetland or buffer function is anticipated.

This proposed buffer averaging is consistent with City Code 16.55.340.2 – averaging buffer widths. Wetland buffer averaging may be allowed when all the following criteria are met:

a. *The buffer averaging does not reduce the functions or values of the wetland;*

   The proposed buffer averaging will not reduce the functions or values of Wetland B.

b. *The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer, and all increases in buffer dimension for averaging must be parallel to the wetland boundary;*

   The total area contained within the added buffer is equal or greater than the area of lost buffer; 3,420 square feet of buffer will be lost and 3,584 square feet of buffer will

1.0 INTRODUCTION

At the request of the applicant, Madrona Bay Real Estate Investments, LLC, Miller Environmental Services, LLC (MES) completed this mitigation plan for proposed wetland buffer impacts associated with the CityView Apartment Project. The project site is located on an 11.15 acre property (tax parcel 380332-172175) between Puget Street and East Nevada Street in the City of Bellingham, Washington; Section 32, Township 38 N, Range 03E, W.M. The project location is shown below on **Figure 1.** A map of the properties and critical areas is included as **Appendix A.** A separate critical areas report was completed for wetlands and habitat conservation areas on the property (MES; June 12, 2019)

1.1 PURPOSE

This Critical Areas Mitigation Plan was conducted as required within the City of Bellingham Critical Areas Chapter [Bellingham Municipal Code (BMC) 16.55]. This report documents proposed project impacts to wetland buffers and includes mitigation to offset potential loss in critical area function. A wetland delineation was conducted and documented by MES in June 2019 and is documented in the *Critical Areas Report: Wetlands and Habitat Conservation Areas for the CityView Project*, (MES, June 12, 2019).

Figure 1: Vicinity Map

be added. The increase is parallel to the Wetland A boundary, between the wetland and the proposed development.

c. *The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation.*

   The wetland buffer contains slight variations in slope and vegetation.

d. *The buffer width is not reduced in any location to less than 50 percent of the standard width or 35 feet, whichever is greater, except for buffers for Category IV wetlands, and low intensity land uses in which case the narrowest buffer width can be determined on a case-by-case basis, using the best available science;*

   Wetland B is a Category IV wetland that requires a standard 50 foot buffer. The proposed buffer is 25 feet on the south edge of the wetland. The area of lost buffer does not slope toward the wetland and provides little to no potential reduction of potential water quality impacts to the wetland. The proposed development will not release any stormwater to Wetland B. Additionally, buffers provide terrestrial habitat for wetland-dependent species that require both aquatic and terrestrial habitats. However, Wetland B is a very small, steeply sloped wetland that contains no seasonal ponding that might provide aquatic habitat for wetland dependent species. As such, no significant or measurable habitat loss is anticipated.

e. *The buffer has not been reduced in accordance with this section. Buffer averaging is not allowed if the buffer has been reduced;*

   The area proposed for buffer averaging has not been reduced.

f. *There were no feasible alternatives to the site design without buffer averaging.*

   Design of the project include iterations that reduced impacts to wetland and buffers through the process. Earlier project designs include direct impacts to Wetland B. However, by shifting the proposed footprint away from the wetland, all direct impacts were avoided. There are no feasible alternatives that meet project criteria and City requirements without buffer averaging.

8.1 MITIGATION APPROACH

The project design followed a series of steps in accordance with the State Environmental Policy Act (Chapter 197-11-768) and BMC 16.55.250 as follows:

1. **Avoid the impact.** The project avoids directly impacting Wetland A and B. No impacts are proposed to the Wetland A buffer. However, to construct the proposed project footprint with associated infrastructure a small amount of buffer impact to the outer portion of the Wetland B buffer is required. The project design included several iterations, that reduced critical areas impacts. Prior versions included the fill of Wetland B. However, by moving the development as far south as possible and utilizing a stormwater vault instead of a pond, direct wetland impacts were avoided.

2. **Minimize the impact.** Potential impacts were minimized through an iterative design process. This included shifting the project footprint away from critical areas and placing stormwater control features in an underground vault minimizing the impacts to Wetland B.

3. **Rectify the impact.** No temporary impacts are proposed.

4. **Minimize or eliminate the hazard.** No hazards are located on the property.

5. **Reduce or eliminate the impact or hazard.** No impact to steep slopes is proposed.

6. **Compensate for impacts.** Compensation for lost Wetland B buffer will include the addition of a greater area of wetland buffer, providing additional screening and habitat value to Wetlands A and B between the wetlands and the proposed development.

7. **Monitor the hazard or other required mitigation.** No monitoring will be required.

8.2 TYPE AND LOCATION OF MITIGATION

The proposed buffer averaging would occur onsite – extending the existing Wetland A and B buffers southward at the west edge of the property. The added buffer area will be greater in size to the area of lost buffer and consists of forest habitat. The area of buffer averaging, 3,584 square feet in size, is shown on the site plan within **Appendix A.**

A split-rail fence will be placed along the north edge of the proposed project and the final buffer. Two "Protected Critical Areas" signs shall be placed along the edge of the buffer. The area of existing wetland, buffer and added buffer on the property will be placed within a conservation easement. A map of the proposed conservation easement area is in **Appendix A.**

9.0 REFERENCES

Miller Environmental Services. 2019. *Critical Areas Report: Wetland & Habitat Conservation Areas for the CityView Project.* Bellingham WA. June 12, 2019.

Websites

City of Bellingham. 2019. *CityIQ GIS Mapper.* Accessed November 6, 2019 at: http://www.iqmap.org/gc/Html5Viewer/?viewer=cityiq

City of Bellingham. 2016. *Chapter 16.55 Critical Areas.* Bellingham WA.

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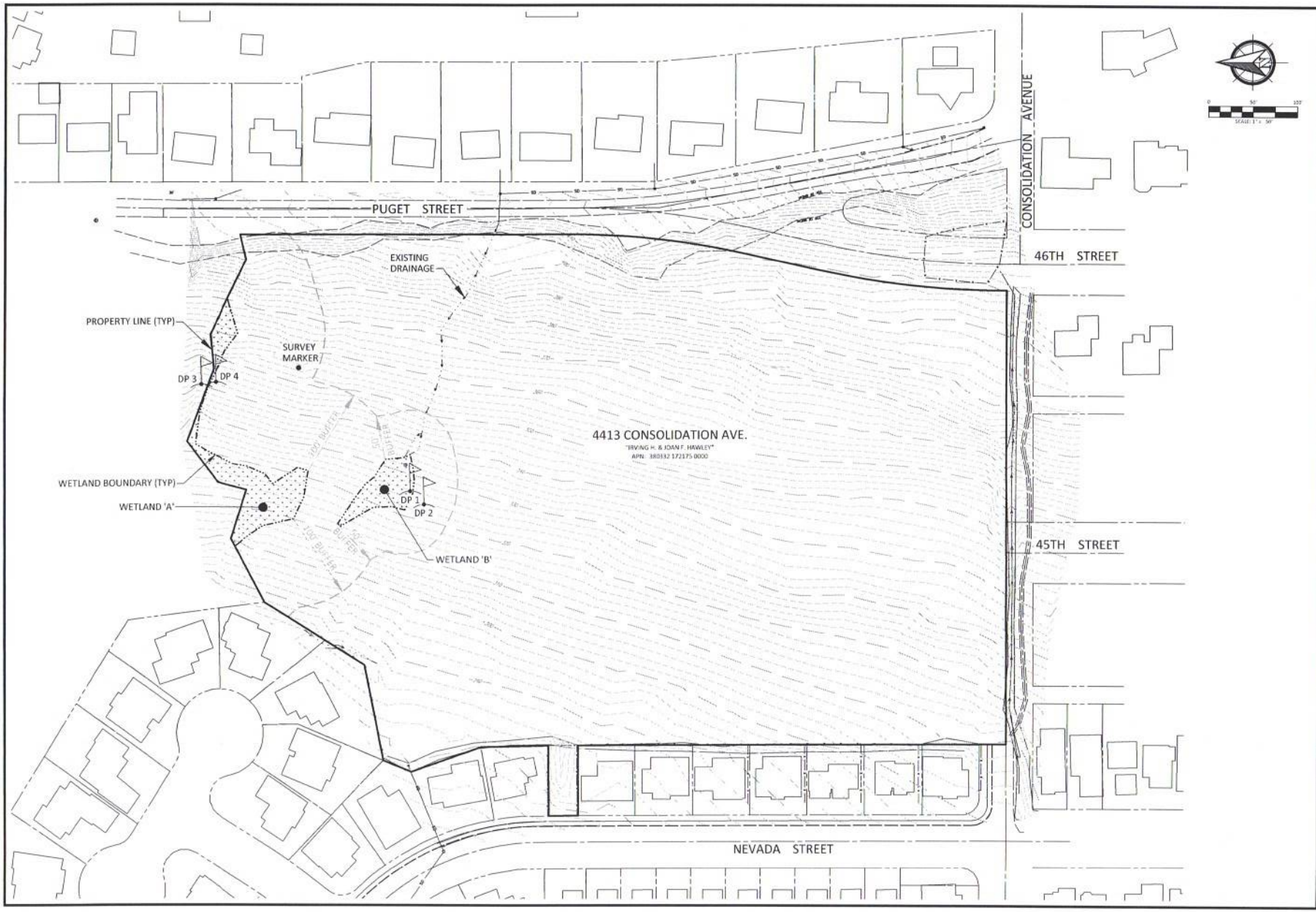
APPENDICES

Appendix A

Project Site Maps



EXHIBIT

NO.	DATE	DESCRIPTION
1	XX/XX/XXXX	XXX

REVISIONS

JEPSON & ASSOC'S
REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS
222 GRAND AVE, SUITE C, BELLINGHAM, WA 98225
PHONE: (360) 733-1760 | FAX: (360) 647-8939
EMAIL: mjepson@jepsonengineering.com

PREPARED FOR: MORGAN BARTLETT

CITYVIEW PROJECT - EXISTING CONDITIONS

MADRONA BAY
4412 CONSOLIDATION AVENUE
BELLINGHAM, WASHINGTON

CLIENT:	M. BARTLETT
PROJ. NO.:	19041
DATE:	08-06-2019
FIELD BK:	
DRWN BY:	M. SPARLING
CHK'D BY:	C. JEPSON
SHEET:	1 of 1

SITE PLAN

1"=40'

ARCHITECTURAL NORTH

NORTH

SITE DEVELOPMENT:

TOTAL SITE:	485,694 SF	=11.15 ACRES
PROPOSED:	249,407 SF	51.4%
UNDISTURBED:	236,287 SF	48.6%

COMMON USABLE AREA:

PARKING: LOTS A-F:

REQUIRED: 10\6x2: 212 /318=.66

ACTUAL: LOTS A-F: 249

VIA CONSOLIDATION AVE IMPROVEMENTS: 8

TOTAL PROVIDED: 257 257/318=.81

ACCESSIBLE:	7
VAN:	2
EVCS (20%):	50
EVCS (5%):	13

(14 DEVCS + 1 EVCS)

BICYCLE SPACES:

REQUIRED: 248 x 10%=	25
PROVIDED:	
EXTERIOR:	78
INTERIOR:	82
TOTAL PROVIDED:	160

* 4 BICYCLE SPACES PROVIDED ADJACENT TO EACH WEST FACING GROUND FLOOR UNIT.

INTERIOR STORAGE LOCKERS: 10

G+R

architecture

104 Front Street

Lynden, WA 98264

PRELIMINARY NOT FOR CONSTRUCTION

Design Review

CityView Apartments

4413 Consolidation Avenue

Bellingham, Washington

ISSUED FOR:	DATE:
POC RFI Submittal	2/20/20
POC RFI Resubmittal	2/22/21

PROJECT NO.: 19-035

DRAWN: r,b,g

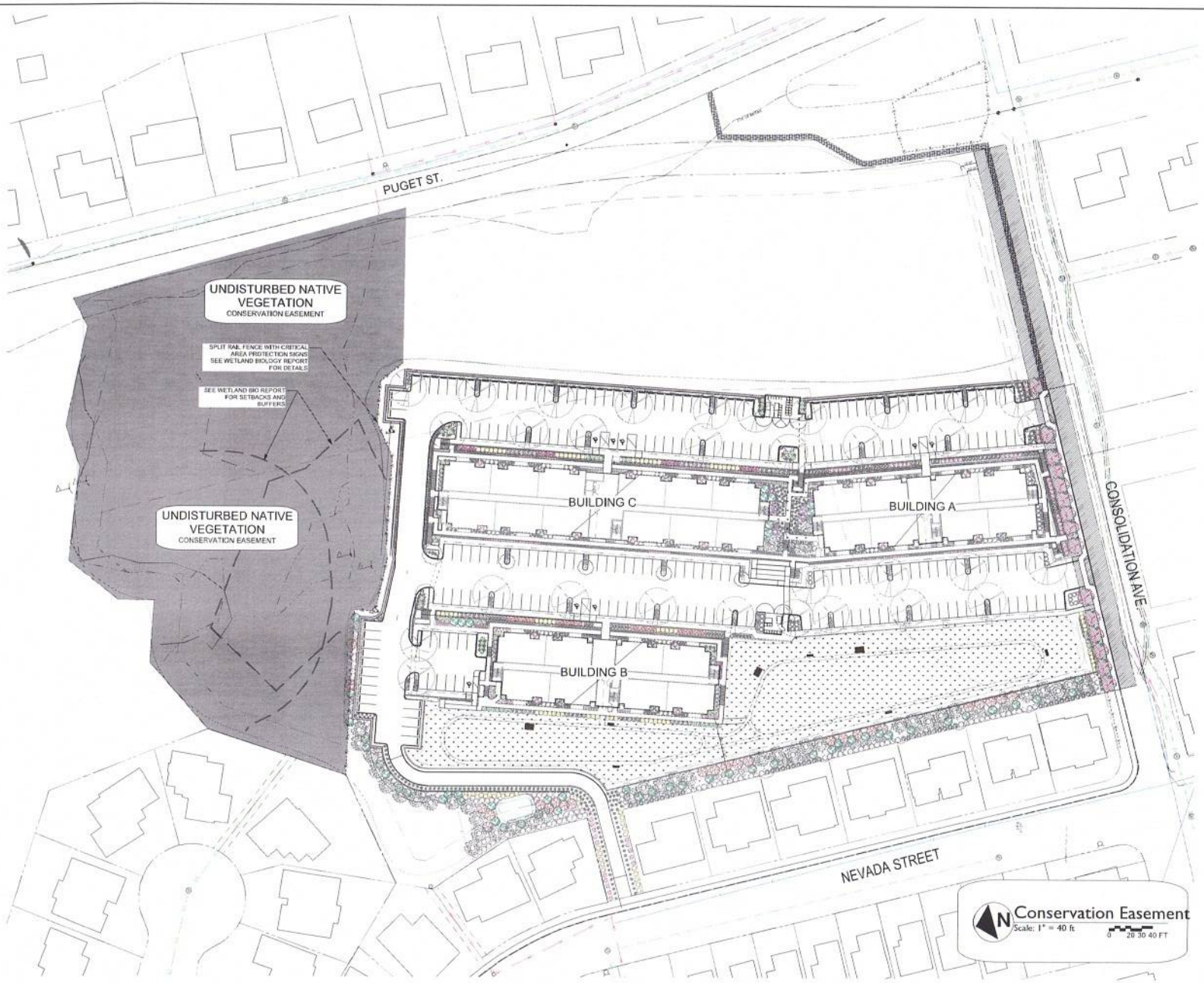
SCALE: 1"=40'-0"

Existing Site w/ Proposed Buildings & Improvements

DRAWING TITLE

DRAWING NUMBER

dr1.1



STATE OF WASHINGTON
REGISTERED LANDSCAPE ARCHITECT
PAUL M. GEORGE
CERTIFICATE NO. 511

Cascade Design Group
P.O. Box 5938
Bellingham, WA 98227
Paul George
Landscape Architect
360-715-2119
paul@cascadedesigngroup.net

CityView

4413 Consolidation Avenue Bellingham, WA

PROJECT START DATE
4/25/2019
REVISIONS
6/24/2019
7/17/2019
1/8/2020
1/16/2020
1/17/2020
1/20/2020
1/22/2020
1/24/2020

Appendix B

Site Photographs

Site Photographs

Photo 1. Typical upland forest onsite, east side of property (4/29/19).

Photo 2. View northeast over Wetland B (4/29/19).

Site Photographs

Photo 3. View southwest over the lower end of Wetland B and its adjacent buffer (4/29/19).

Photo 4. View north into Wetland A near the western portion of the wetland on the property (4/29/19).

Site Photographs

Photo 5. View east into Wetland A at the north end of the property (4/29/19).

Photo 6. Stormwater culvert flowing onto the property under Puget Street (4/29/19).

Site Photographs

Photo 7. View north into the 46th and Consolidation Wetpond at the upper (eastern) end of the unopened Consolidation Avenue ROW (8/30/19).

Photo 8. 46th and Consolidation Wetpond outlet to the upper end of the ditch in the Consolidation Avenue ROW (4/29/19).