



MEMORANDUM

Date: 06/13/2024

To: John Ajax
Community Development Director – City of Chelan

From: Charley Underwood, PE
Cascade Central Construction

Re: Riverwalk Park Townhomes
SSDP2022-02 Revision Request

Mr. Ajax,

This memorandum is provided as a request for the City of Chelan to revise the Shoreline Substantial Development Permit that was previously approved for the Riverwalk Park Townhomes project (SSDP2022-02). The request is to allow the developer to construct single-family residences instead of the previously proposed townhome structures. Please note that this revision request includes documentation in support of the proposal. Included are updates to the *Vegetation Mitigation Plan*, *SMP Compliance Technical Memorandum*, and various site exhibits.

I appreciate your time and consideration, and will make myself available to discuss this request at your convenience. Please do not hesitate to contact me directly if you require further information.

Sincerely,

Charley Underwood, PE

Attachments

- *Preliminary Architectural Exhibits* (DOH Associates, PS; 05/31/2024)
- *SMP Compliance Memorandum* (Grette Associates; 06/03/2024)
- *Vegetation Mitigation Plan* (Grette Associates; 06/2024)

TECHNICAL MEMORANDUM

To: City of Chelan Shoreline Administrator
PO Box 1669
Chelan, WA 98816

June 3, 2024

From: Ryan Walker, Senior Scientist
151 South Worthen, Suite 101
Wenatchee, Washington 98801

File No.: 10605

Re: **Campbell's Lodge Revision to SSDP 2022-02**

1 Introduction

This technical memorandum provides supplemental information to demonstrate compliance with the City of Chelan Shoreline Master Program (CSMP) for Campbell's Lodge application for a revision to SDP 2022-02 to modify the project to construct single family residences instead of the approved townhomes on parcels #272213240200, #272213650005, #272213650010, #272213650015, #272213650020, #272213650025, #272213650030, #272213650035, and #272213650040.

2 Project Background

City of Chelan SSDP 2022-02 was issued on November 15, 2023, authorizing construction of a 16-unit residential townhome complex with associated parking, utilities, and a pool. This application for a permit revision requests to change the multi-family residential units single-family units while still constructing onsite residential parking for each property, utilities, and recreational amenities including a pool and hot tubs. The revised proposal includes thirteen detached single-family units.

The revision meets the requirements for residential use as detailed in the SMP Compliance Technical Memorandum dated May 23, 2022.

3 City of Chelan Shoreline Master Program

3.1 Section 3.2.C Environment Designations: Shoreline Residential-Multi-Family

The proposed project is located within C. Shoreline Residential-Multi-Family. This environment designation allows multi-family and single-family use.

3.2 Section 3.2.F. Use Matrix and Development Standards

- Single-family residential development is a permitted use within the Shoreline Residential-Multi Family environment designation.
- Local parking is permitted within this designation.
- Fill within the upland and outside of the floodplain is permitted within this designation.
- Small utilities are permitted within this designation.

3.3 Section 4.1.2.A.1. and B. Archaeological and Historic Resources

A Cultural Resources Survey Report has been conducted by Columbia Historical Consulting and is included as an attachment. The survey identified a multicomponent site with historic debris and lithic material and a historic stone retaining wall. The project specific cultural resource survey report states that there is a multicomponent portion of the site that includes historic and pre-contact elements (western quarter of the site). However, evidence suggests that these elements are in fill material that was imported from an off-site location. As such this portion of the site lacks contact and integrity and is not eligible for the National Register. The stone retaining wall along the western property boundary appears to be eligible for the National Register per the project specific cultural resource survey report (Columbia Historical Consulting, 09/17/2019). Proposed measures are per the project specific cultural resource survey report, and include recommendation that the project not disturb the existing retaining wall along the western property boundary. Additionally, the report recommends that a cultural resource monitor be onsite during excavation activities within the western quarter of the site. Preservation of the wall will meet the requirement for mitigation measures under Section 4.1.2.C. If archaeological resources are inadvertently discovered during construction, work will immediately stop and the City and DAHP will be notified.

3.4 Section 4.2 Ecological Protection and Critical Areas

B. Mitigation Sequencing

1. Avoiding the impact altogether by not taking a certain action or parts of an action.

The building site is located within the 200 ft of shoreline jurisdiction but is outside of the 35 ft standard shoreline buffer of Lake Chelan. As the building site is located outside of the shoreline buffer, impacts to the aquatic environment and shoreline buffer are avoided altogether. Additionally, the building site has been located to avoid impacts to the existing paved public access trail for the City of Chelan's Riverwalk Park.

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts.

- Excavation at the site will be the minimum necessary to install all project elements. By adhering to the recommendations of the geologic site assessment, the project minimizes the risks associated with potential steep slope geologic hazards within the vicinity of the site.
 - Impacts to the shoreline environment due to stormwater will be minimized by utilizing BMPs and installing DOE recommended erosion control measures during project construction. Appropriate weather work windows will also be utilized to minimize the chance of erosion at the site during excavation and grading.
 - Impacts to surrounding properties will be minimized during construction by adhering to standard working hours (7 AM-7PM) and avoiding work during the late evenings and on Sundays. Long-term impacts to surrounding properties are also minimized by the inclusion of on-site parking as part of project development.
 - Impacts to surrounding properties are further minimized by avoiding any impacts to the existing paved public access trail for the City of Chelan's Riverwalk Park.
- 3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project.**

As part of the project design, any significant trees removed will be replaced at a ratio of 1:1 with native tree saplings as required within CSMP 4.2.2.C. Replacement trees will meet the size specifications outlined within CSMP 4.4.2.E.3. By replacing the primarily non-native trees with native species selected from the recommended list of plants included in CSMP Appendix E: *Guidance for Development of Vegetation Mitigation Plans*, the value and function of the shoreline environment will be restored to pre-project conditions. In the long-term, the value and function of the shoreline environment will be increased from existing conditions due to the replacement of horticultural species with native species. Control of noxious weeds at the site will further enhance the restoration of the shoreline within this location. After project completion, all disturbed areas will be revegetated and restored to pre-project conditions as required within CSMP 5.1.2.D. No net loss of ecological function is expected as a result of this project.

4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

All mitigation vegetation will be maintained and monitored over a 5-year period as required within CSMP 4.4.2.D.5. Monitoring will ensure 100% survivorship of plantings within year 1, with 80% survivorship required in years 3 and 5. Any dead plants will be replaced with like and in-kind species as needed to ensure planting success. The site will be monitored for noxious/invasive weeds. Noxious/invasive weed cover will be limited to less than 20% during the monitoring period. Noxious/invasive weeds may require physical and/or chemical control in order to achieve success. It is advised that the Chelan Noxious Weed Control Board is contacted for recommendations on the best methods of weed control within this geographic region. The mitigation vegetation will be preserved for the duration of the project and in perpetuity as required in CSMP 4.4.2.D.6 and 7.

5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments, and

The impact to vegetation at the site will be compensated for by installing the proposed native vegetation mitigation planting plan (attached). This mitigation planting not only replaces the affected significant trees at a 1:1 ratio as required, but also enhances the vegetation located within shoreline jurisdiction by replacing non-native trees with native species. Further, the control of noxious weeds within the vicinity of the project site adds to the enhancement of the shoreline environment. As a result, no net loss of functions or values to the shoreline environment are expected to occur.

No impacts to public access will result from the installation of the proposed project and therefore no additional compensation is required.

6. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

All mitigation plantings will be monitored for survivorship over a 5-year period as required and as discussed above. Plants chosen for the vegetation planting have been selected from the list provided in CSMP Appendix E. Any plants requiring replacement during the 5-year monitoring period will be of a like and in-kind species. Noxious weeds will be controlled at the site by utilizing physical and/or chemical methods as recommended by the Chelan County Noxious Weed Control Board.

C. Mitigation required for impact.

A vegetation mitigation plan has been prepared by a qualified professional (attached). This plan ensures no net loss of ecological functions, with a tree replacement ratio of 1:1 as required and as discussed in detail above. Plantings will be monitored for 5 years as required, with monitoring reports submitted to the City of Chelan in years 1, 3, and 5. Planting success is expected to be 100% survival within year 1, and 80% survival in years 3 and 5. Plantings will be maintained over the life of the use and/or development as required. Noxious weeds will also be controlled at the site as outlined within the attached vegetation mitigation plan. No impacts to hydrologic connections or wetlands will result from the construction of the proposed project and therefore no additional mitigation is required.

G. Location of mitigation.

Mitigation will be located within the immediate vicinity of the project site; the preferred location.

H. Protection of critical areas and buffers.

Critical areas and buffers are protected by locating the project outside of the 35 ft standard shoreline buffer for Lake Chelan and by utilizing the recommendations provided within the

prepared geologic site assessment for potential geologic hazards associated with steep slopes located within the vicinity of the project site. No other critical areas are located within the vicinity of the project site.

3.5 Section 4.3.2. Public Access: New Development

D.3. a. and d. Specific Requirements:

Public access refers to the ability of the general public to reach, touch and enjoys the water's edge, to travel on the waters of the state and to view the water and the shoreline from adjacent locations. Public access to the shoreline is provided at the site by incorporating view corridors between the proposed buildings and by utilizing the existing access to the paved pedestrian access trail located on adjacent property owned by Chelan PUD. This paved pedestrian access trail provides existing public access between the upland and the shoreline of Lake Chelan. This public access serves the surrounding neighborhood. The City of Chelan's Riverwalk Park is located adjacent to the access trail, runs the entire length of the northern boundary of the project site and continues off-site in both directions; encompassing 1 mile of shoreline in total. This existing waterfront park provides ample opportunity and space for public recreational enjoyment within this portion of Lake Chelan. The frontage of Okanogan Avenue will be improved with a public sidewalk along the entire width of the property. The public sidewalk will connect to the Riverwalk Park Trail on the southeast corner of the project.

K. Compatibility with Private Property.

The existing public trail along Lake Chelan is separated from the proposed development by existing vegetation on the Chelan County PUD property.

L. Connectivity.

The existing paved public access trail to Riverwalk Park will intersect and become physically connected to the proposed Okanogan Avenue sidewalk. This sidewalk will service the surrounding neighborhoods, including the subject property. Okanogan Avenue meets the definition of a public right-of-way.

O. Environmental Protection.

As the public access trail already exists, this does not apply. No net loss of ecological functions will be associated with connecting the access trail to the proposed public sidewalk along Okanogan Avenue.

Q. Conspicuous permanent signage.

Conspicuous permanent signage is already located within the vicinity of the public access trail. This signage will remain unaffected by the proposed development. Should the signage become

inadvertently affected during project construction, it will be replaced with like and in-kind signage indicating the location of the public access to the waterfront.

3.6 Section 4.4.2 Vegetation Conservation and Shoreline Setbacks: General Regulations

C. Adverse impacts on vegetation.

The proposed project will require the removal of existing vegetation during project construction. This impact is unavoidable and is the result of the limited amount of space available within the site for construction. 44 significant trees primarily composed of non-native horticultural species, and a sparse mix of native and non-native weedy herbaceous plants will be removed during project construction. The trees and herbaceous vegetation are located outside of the shoreline buffer and do not overhang the water. The location of vegetation removal is within the upland and is separated from the lakeshore by the presence of the paved Riverwalk trail and the existing City of Chelan Riverwalk Park. These existing improved features are located within the highly modified shoreline buffer and prevent vegetation on the subject property from providing functions identified in Section 4.4.2A. A vegetation mitigation plan has been designed to compensate for the loss of trees at the site and is included as an attachment. This replacement vegetation will be composed of native trees known to grow well in the area.

The proposed development has also been designed so that impervious surfaces are infiltrated, treated and/or detained as necessary to control potential adverse impacts to water quality or quantity. These treatment options are outlined within the stormwater management plan and have been designed in accordance with DOE recommendations for stormwater management within eastern Washington. Although adverse impacts to vegetation will occur as a result of this project, they have been minimized to the greatest extent possible and compensatory mitigation will be provided.

D. Mitigation required.

A vegetation mitigation plan has been designed for the proposed project. This vegetation mitigation plan proposes a 1:1 replacement of the primarily non-native significant trees removed during construction with native tree saplings. Replacement trees will meet the size guidelines outlined within CSMP 4.4.2.E.3. The mitigation vegetation will be monitored over the course of 5 years as required. Survivorship is expected to be 100% during year one, with 80% survivorship required in years 3 and 5. The mitigation will be identified and protected as required and monitoring reports will be submitted as required.

No loss of ecological functions is expected to occur as a result of vegetation removal. Due to the highly modified nature of the shoreline within this portion of Lake Chelan, vegetation within the project site is not contributing any additional buffer function. Trees at the site are primarily non-native and the herbaceous layer is a sparse mix of native and non-native weedy species including four Class B noxious weeds. Removed significant trees will be replaced with native species and

noxious weeds will be controlled as part of the implementation of the proposed vegetation mitigation plan. Any impact to slopes will be addressed within the required geologic assessment. Erosion control measures will be implemented consistent with the DOE stormwater management manual for eastern Washington.

E. Tree Retention

3. Approximately 44 significant trees will be removed as result of this project. The removal of trees is unavoidable given the limited space for construction at the site. Removed trees will be replaced at a ratio of 1:1 as required and will meet the required size guidelines outlined within this section.

4. A vegetation mitigation plan is attached. Mitigation trees will be located within the immediate vicinity of the project site; the preferred location.

5. Replacement trees have all been chosen from a list of native vegetation known to grow well in the area. Non-native trees will be replaced with native trees at a ratio of 1:1 as required.

G. Clearing and grading.

Clearing and grading will be the minimum necessary in order to complete project construction, as designed. BMPs and erosion control methods will be utilized during project construction in accordance with DOE requirements for stormwater management within eastern Washington. All clearing and grading at the site will be associated with the construction of the proposed project.

I. Non-native vegetation.

Noxious weed removal has been addressed above. Removal will utilize physical and/or chemical controls as recommended by the Chelan County Noxious Weed Control Board. All noxious weed control will occur within the upland and outside of the shoreline buffer. No erosion is expected to occur as a result of noxious weed control at the site.

3.7 Section 4.4.3. Shoreline Setback Regulations

The project site is located within the Lower Lake Chelan basin. As such, the standard setback for Shoreline Residential-Multi Family development is 35 feet from the OHWM as defined in CSMP Table 4.4-1. All project elements will occur outside of this setback.

3.8 Section 4.5.2. Water Quality, Stormwater and Nonpoint Pollution

B. Requirements for new development.

The project includes a stormwater management plan compliant with the requirements in the current Stormwater Management Manual for Eastern Washington. Stormwater will be retained or infiltrated on-site and will not directly discharge to Lake Chelan without treatment.

C. Lake Chelan Water Quality Plan

The proposed project shall implement applicable provisions of the Lake Chelan Water Quality Plan as required within this section.

D. Maintain storm drainage facilities.

The property owner will be responsible for maintaining storm drainage facilities at the site as required within this section.

E. Sewage management.

This project will connect to one of the existing municipal sewer service systems as required within this section.

3.9 Section 5.1.2. General Upland Shoreline Modification and Use: Regulations

A. Design features for compatibility.

The project has been designed to minimize noise and glare, and minimize impacts to view corridors. The project will comply with height restrictions within this zoning designation; 35 ft. All mechanical equipment will be incorporated into the building architectural features. All outdoor storage will be screened from public view utilizing design features.

B. Preference for water-oriented facility location.

The project has been designed to locate all open space, outdoor living areas, and the pool along the shoreline side of the site, and to locate onsite parking, refuse collection facilities, sidewalks, and stairways on the landward side of the development.

C. Minimize changes in topography.

To the greatest extent feasible, grading and excavating at the site, including cut and fill slopes, will be limited to the minimum necessary as required within this section.

D. Soil disturbance.

All disturbed areas will be immediately restored and protected from erosion as required within this section.

F. Lighting.

All lighting shall comply with the requirements within this section in order to avoid impacts to neighboring properties, public areas, and critical areas.

G. Sign regulations.

Any signage associated with the proposed project will comply with the requirements within this section.

H. No Net Loss of Ecological Function.

The project has been designed so that no net loss of ecological function or significant adverse impacts to other shoreline resources is expected to result. Detailed discussion on how no net loss is achieved through project design is included in the relevant sections listed above. A corresponding vegetation mitigation plan is attached.

3.10 Section 5.9.2 Fill and Excavation: Regulations

A. Protect ecological functions.

Fill and excavation shall be minimized to the maximum extent practicable. All fill and excavation activities will occur within the upland and no sensitive areas will be affected. A geologic hazard assessment has also been prepared for the site. Recommendations within the geologic assessment will be observed during construction in order to minimize adverse impacts to ecological functions. Adverse impacts to ecological functions shall be addressed through the attached vegetation mitigation plan, and as discussed in detail within the relevant sections listed above.

C. Permissible upland excavations and fills.

All upland excavations and fills will occur outside of the required 35 ft shoreline setback. A geologic assessment has been prepared for the site to address any risks associated with steep slopes in the vicinity of the project area. A cultural resources study has also been prepared for the site and has determined that no cultural resources are present. No hydrology will be altered as a result of this project and no sensitive areas will be excavated or filled as part of this project.

F. Maximum slopes

All cut and fill slopes will not exceed the required ratio of (1:2) as outlined within this section unless recommended within a qualified engineering analysis of the site.

G. Erosion control.

As stated above, BMPs, silt fencing and appropriate weather work windows will be utilized during project construction in order to minimize the potential for erosion. All disturbed areas will immediately be protected as required within this section.

3.11 Section 5.14.2 Residential Development: Regulations

A. Subdivisions and plats.

The proposed project has been designed to comply with this portion of the CSMP. The development conforms to the zoning regulations within this portion of the City of Chelan; TMU zone within the City of Chelan Municipal Code (CMC) Chapter 17.14 Chelan Downtown Land Use and Development Code, and Shoreline Residential-Multi Family (MF) within the CSMP. The project will utilize existing utilities within this portion of the City for water and sewer. A stormwater management plan has been designed to comply with DOE requirements within eastern Washington. Solid waste disposal will utilize Waste Management. Electrical will be provided by Chelan PUD. Phone will be provided by Verizon or Wave. No shoreline stabilization will be required as the project is located no less than 45 ft from the OHWM of Lake Chelan. The project has been designed so that no net loss of ecological function will result. All structures will be located outside of critical areas and units have been clustered to preserve areas of open space. Community access to the shoreline already exists on the neighboring parcel to the east and will not be impacted by the proposed project.

B. Environmental protection.

This section has already been addressed in multiple sections above.

C. Public Access.

This section has already been addressed in multiple sections above.

F. Accessory uses.

The pool, onsite parking, and all accessory uses associated with this development will be located within the upland and outside of the 35 ft shoreline buffer.

F. Underground Utilities.

See Section 3.13 below.

3.12 Section 5.17.2.H. Transportation and Parking: Parking facilities.

Local parking is an allowed use within the use matrix for this environmental designation; however, no common parking facility is proposed. All parking onsite will be located on the residential lots with each private garage and driveway. Parking associated with this development is the minimum necessary to support the residential use of the properties.

1. The onsite parking area cannot be sited outside of shoreline jurisdiction because the entire project site lies within the 200 ft of shoreline jurisdiction. No feasible alternative location exists to support the required residential parking needs of the proposed development. The parking areas will be located on the landward side of each property in order to minimize impacts to the shoreline environment.
2. The parking areas are located outside of critical areas and shoreline setbacks as required within this section. Parking is located on the landward side of each residence, adjacent to Okanogan Avenue.

3.13 Section 5.18.C. Utilities: Undergrounding.

Utilities associated with this project will be located underground as required within this section.

3.14 Section 7.14 Amendments to Permits

A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes which are not substantive in effect do not require approval of a revision. Proposed changes must be within the scope and intent of the original permit, otherwise a new permit is required, pursuant to Section 7.14.2.

A. "Within the scope and intent of the original permit" means all of the following:

1. No additional over water construction is involved except that pier, dock, or float construction may be increased by five hundred (500) square feet or ten percent (10%) from the provisions of the original permit, whichever is less;

There is no overwater coverage proposed as part of this project.

2. Ground area coverage and height may be increased a maximum of ten percent (10%) from the provisions of the original permit;

The original site plan included approximately 15,150 sq ft of ground coverage. The revised site plan included approximately 12,300 sq ft of ground coverage. The reduction in ground coverage meets the requirement for approval of a revision. There is no change in the height of the structures proposed.

3. The revised permit does not authorize development to exceed height, lot coverage, setback, or any other requirements of this SMP except as authorized under a Shoreline Variance granted as the original permit or a part thereof;

The project is not proposed to exceed height, lot coverage, setback or any other requirement of the CSMP. A Shoreline Variance is not proposed or necessary.

4. Additional or revised landscaping is consistent with any conditions attached to the original permit and with this SMP;

A revised mitigation plan is included with the revision application.

5. The use authorized pursuant to the original permit is not changed; and

The residential use proposed for the project will remain unchanged.

6. No adverse environmental impact will be caused by the project revision.

There will be no increase in environmental impacts compared to the approved SDP. The revision will result in fewer residential units and will still exceed the required shoreline setbacks. No negative environmental impacts will be caused by the revision.

4 Conclusion

As detailed in this document, the proposed project meets the requirements of the CSMP for a revision to a permit. The proposed project has been approved and the revision will only change the number of residential units. The proposed project has been designed to conform with the requirements of the CSMP.

5 Qualified Professional

Eron Drew is a professional biologist who meets the qualifications for Wetlands, Habitat Conservation Areas and Vegetation Management qualified professional. Eron holds a Bachelor of Science in Geology, Conservation Biology, and Zoology from the University of Wisconsin, Madison with a focus on geomorphology, conservation ecology, and limnology. Professional experience includes over 8 years of natural resource management experience in limnology, fisheries, freshwater ecology, wetland ecology, ESA species protection, and wildlife habitat assessment, management, and mitigation. She is an Army Corps of Engineers certified wetland delineator and has completed the Department of Ecology training for Using the Revised Washington State Wetland Rating System (2014) in Eastern Washington. She is also a Cornell Lab of Ornithology eBird data contributor. Eron has over 13 years of professional experience in agriculture and landscape management within Central Washington, and 6 years of experience as a WSU Chelan-Douglas Master Gardener and Master Gardener instructor; with over 75 hours of continuing education through the WSU Research Extension in vegetation management including soils, tree and shrub identification, pruning, site and variety selection, trellising and support, fire-wise landscaping, forest health, xeric and native vegetation, plant health diagnosis, and disease and pest management.

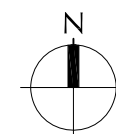
Ryan Walker is a Senior Biologist who meets the qualifications for Wetlands, Habitat Conservation Areas and Vegetation Management with experience in shoreline permitting, forestry, wetland biology, riparian restoration, fish and wildlife habitat and code administration. He is an Army Corps of Engineers certified wetland delineator and is on Ecology's qualified list for wetland

ratings in eastern and western Washington and use of the credit/debit mitigation system. His background includes natural resource management, land-use planning, ESA compliance, storm water management planning and Shoreline Management Act permitting. Ryan manages a team of employees whose work includes designing projects to meet the requirements of the Clean Water Act (Section 404 and 401), Rivers and Harbors Act, construction stormwater regulations, Washington State Hydraulic Code Rules and local jurisdiction Shoreline Master Programs and critical area regulations. His work also includes bid administration, contracting and construction management of restoration and salmon recovery projects. He holds a B.S. degree in Natural Resource Management from Washington State University and has completed the Department of Ecology's course on determining the ordinary high water mark. He has worked with federal, state, and local agencies in north-central Washington on environmental permitting issues for over 23 years. Ryan can be reached at 509-630-7917.

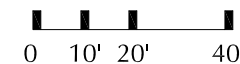
6 References

Chelan Municipal Code. Title 17 Zoning. Current through ordinance 2024-1620, passed February 13, 2024. https://library.municode.com/wa/chelan/codes/code_of_ordinances retrieved 5/04/2024.

City of Chelan Shoreline Master Program.
https://cityofchelan.us/pdffdocs/2016/12/Final.City_of_.Chelan.Integrated.SMP_2016_1013_wit_h.Appendices.pdf . Effective Date: May 22, 2022. Retrieved 05/04/2024.



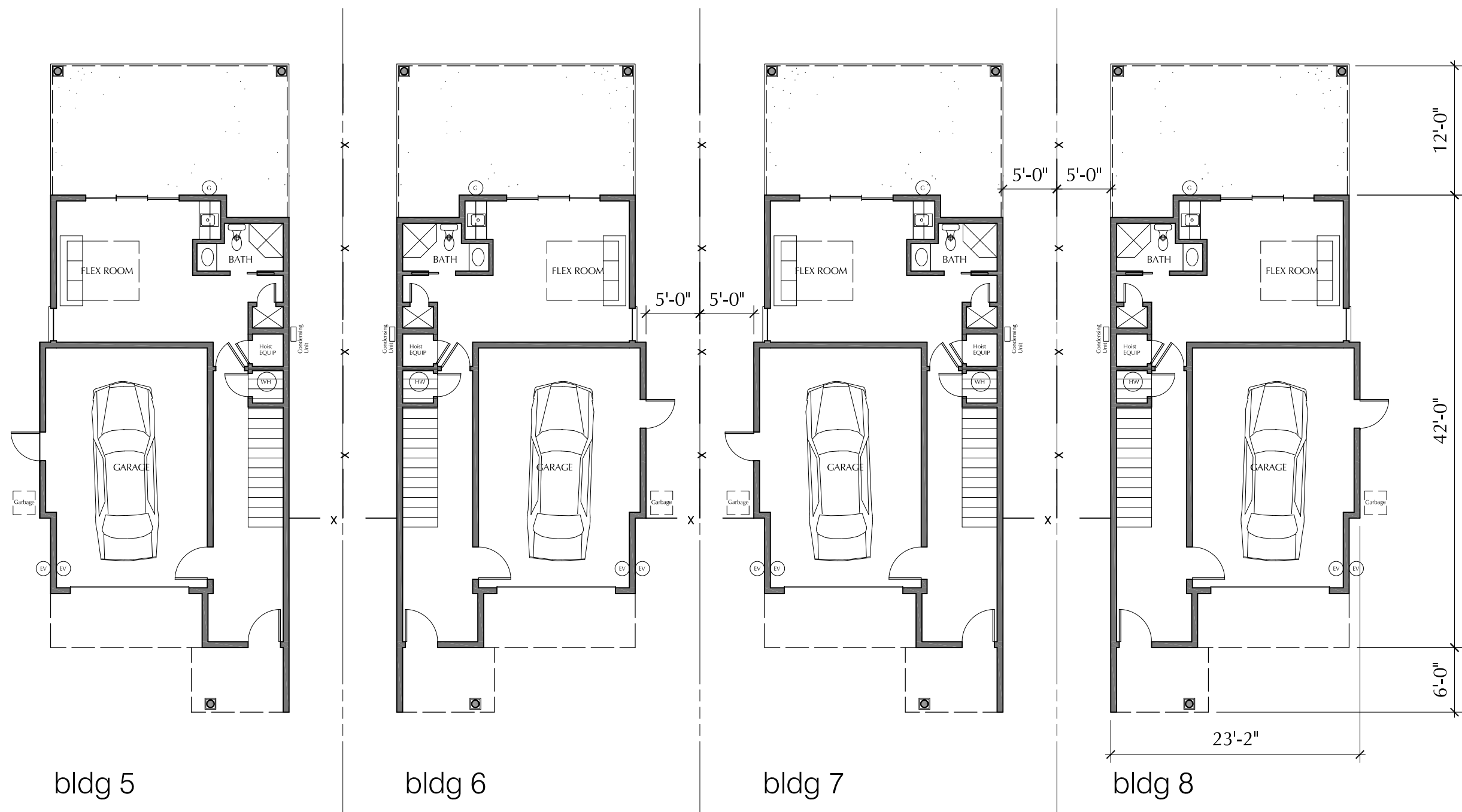
Site Plan

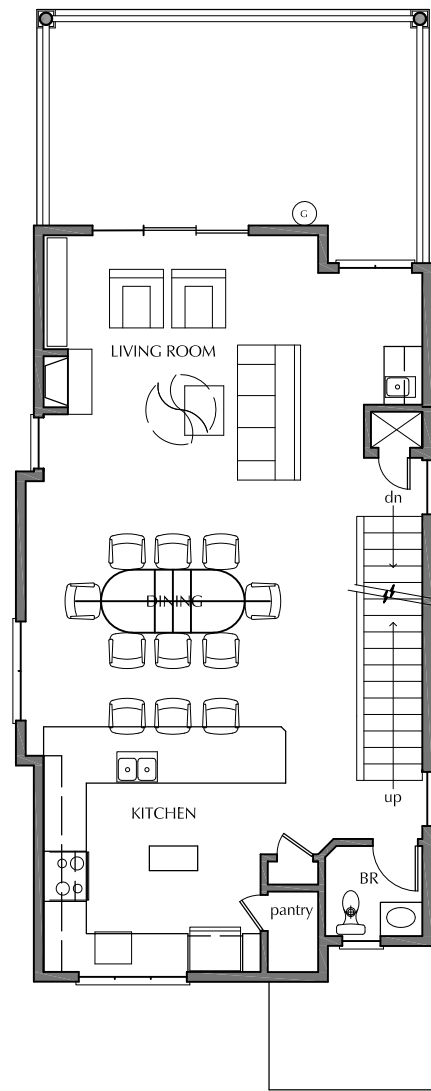


The DOH Associates, PS
ARCHITECTS and PLANNERS
DOH Job No.: 1926 Date: 5/31/2024

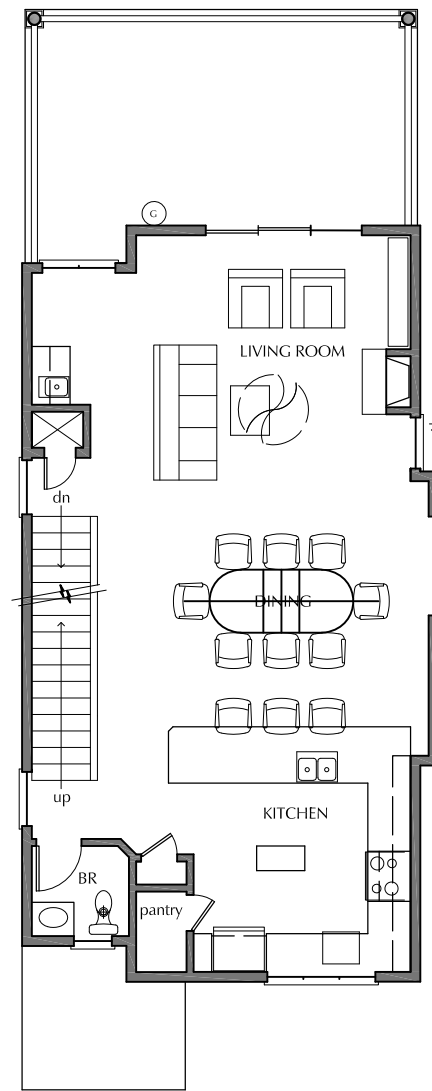
RIVERWALK PARK SINGLE-FAMILY RESIDENCES
Cascade Central Construction, LLC
Chelan, WA

A1

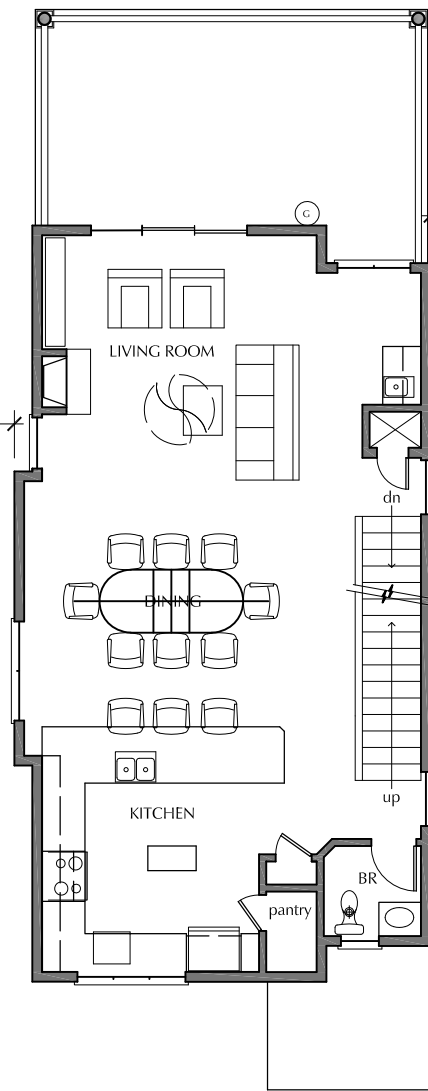




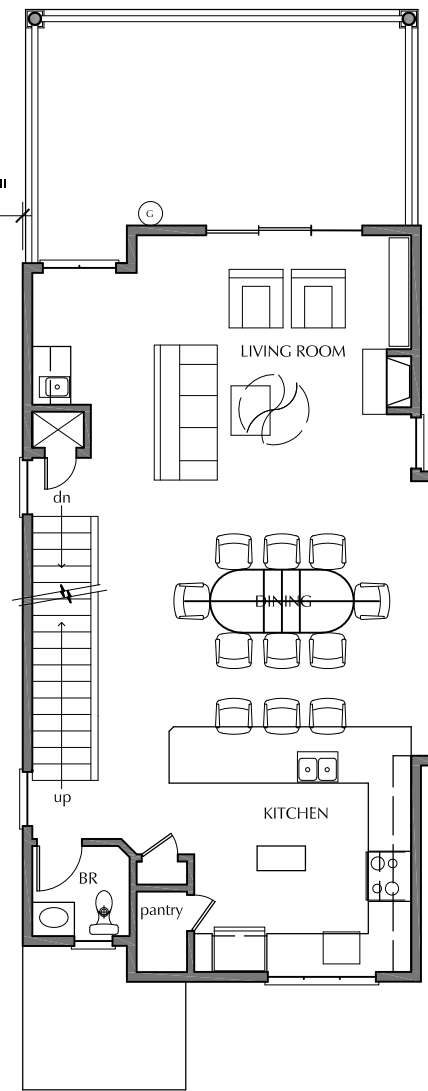
bldg 5



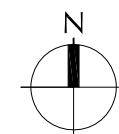
bldg 6



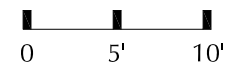
bldg 7



bldg 8

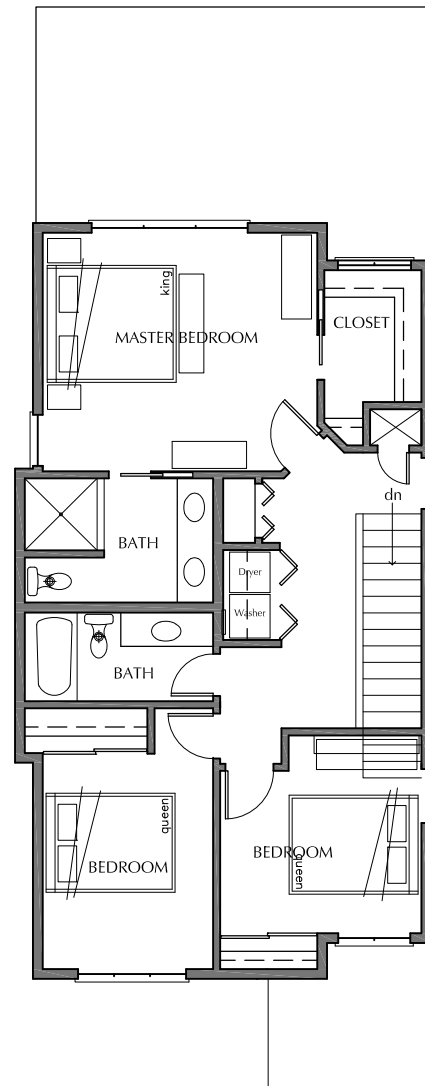


2nd Floor Plan - A

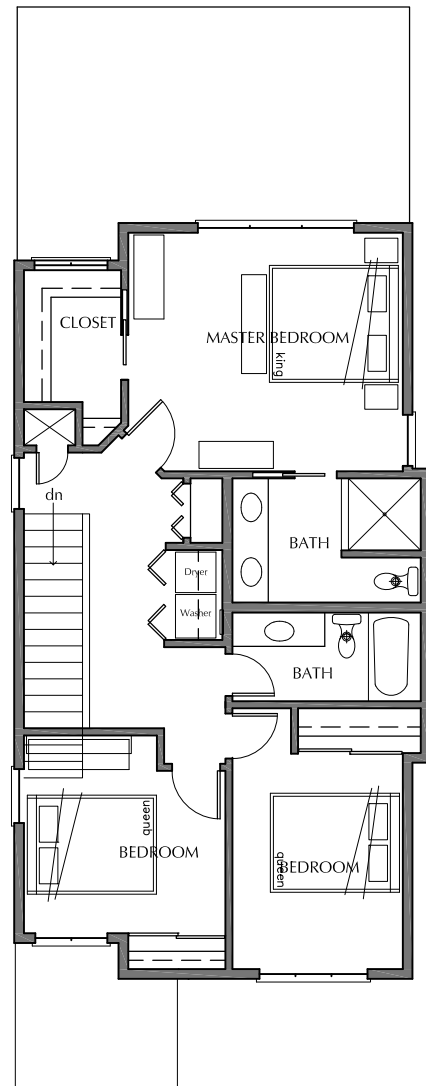


The DOH Associates, PS
ARCHITECTS and PLANNERS
DOH Job No.: 1926 Date: 5/31/2024

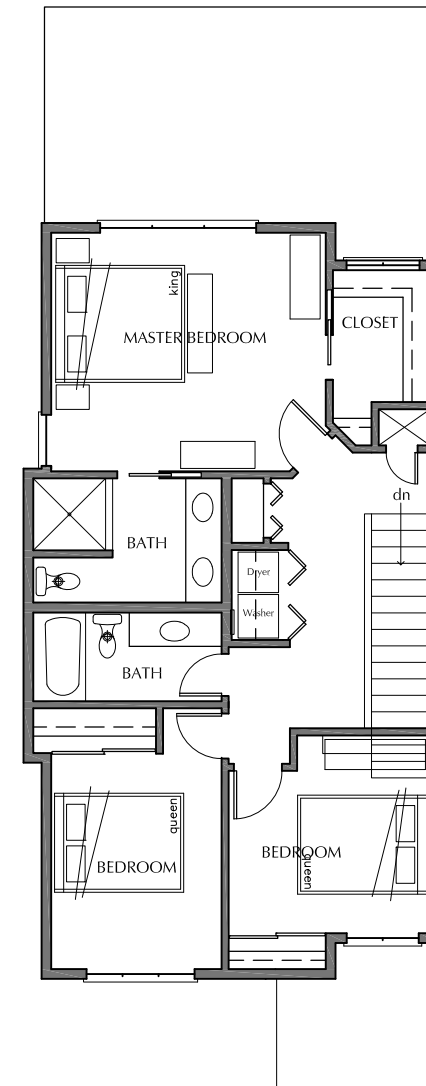
RIVERWALK PARK SINGLE-FAMILY RESIDENCES
Cascade Central Construction, LLC
Chelan, WA



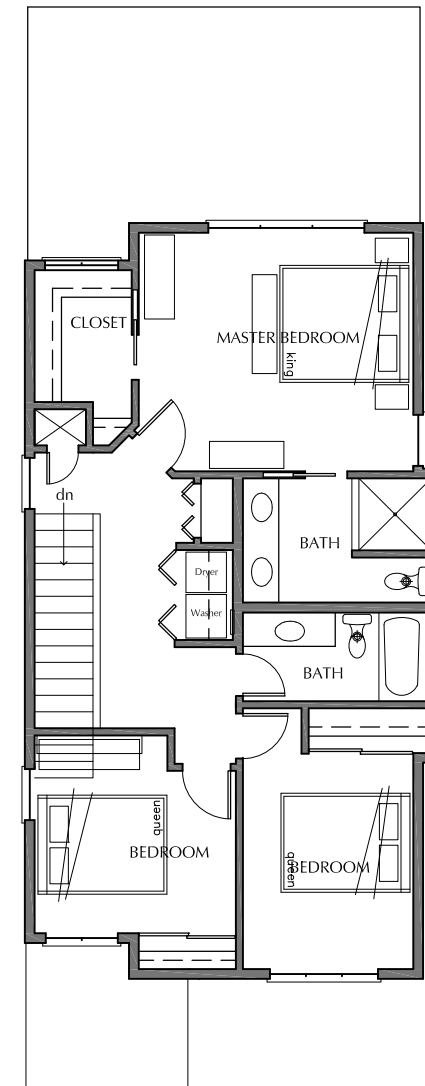
bldg 5



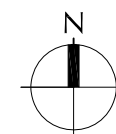
bldg 6



bldg 7



bldg 8



3rd Floor Plan - A

0 5' 10'

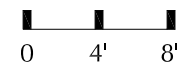


The DOH Associates, PS
ARCHITECTS and PLANNERS
DOH Job No.: 1926 Date: 5/31/2024

RIVERWALK PARK SINGLE-FAMILY RESIDENCES
Cascade Central Construction, LLC Chelan, WA

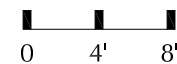


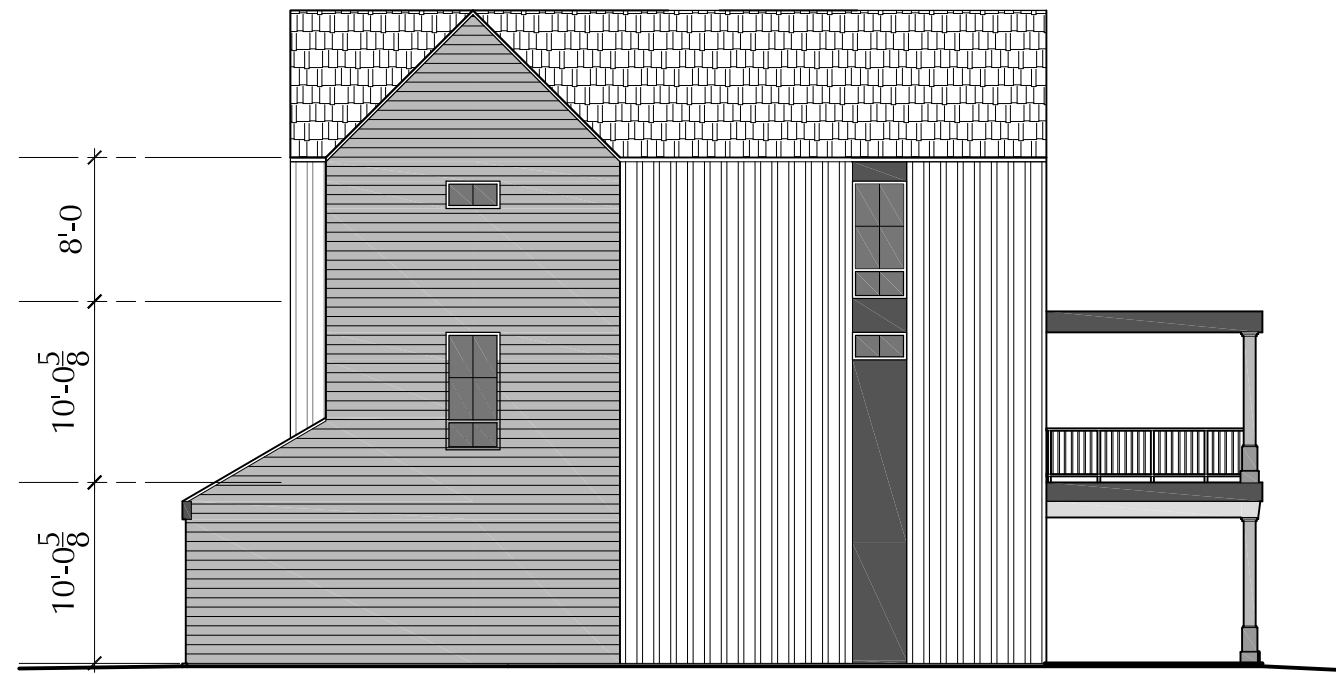
South Elevation



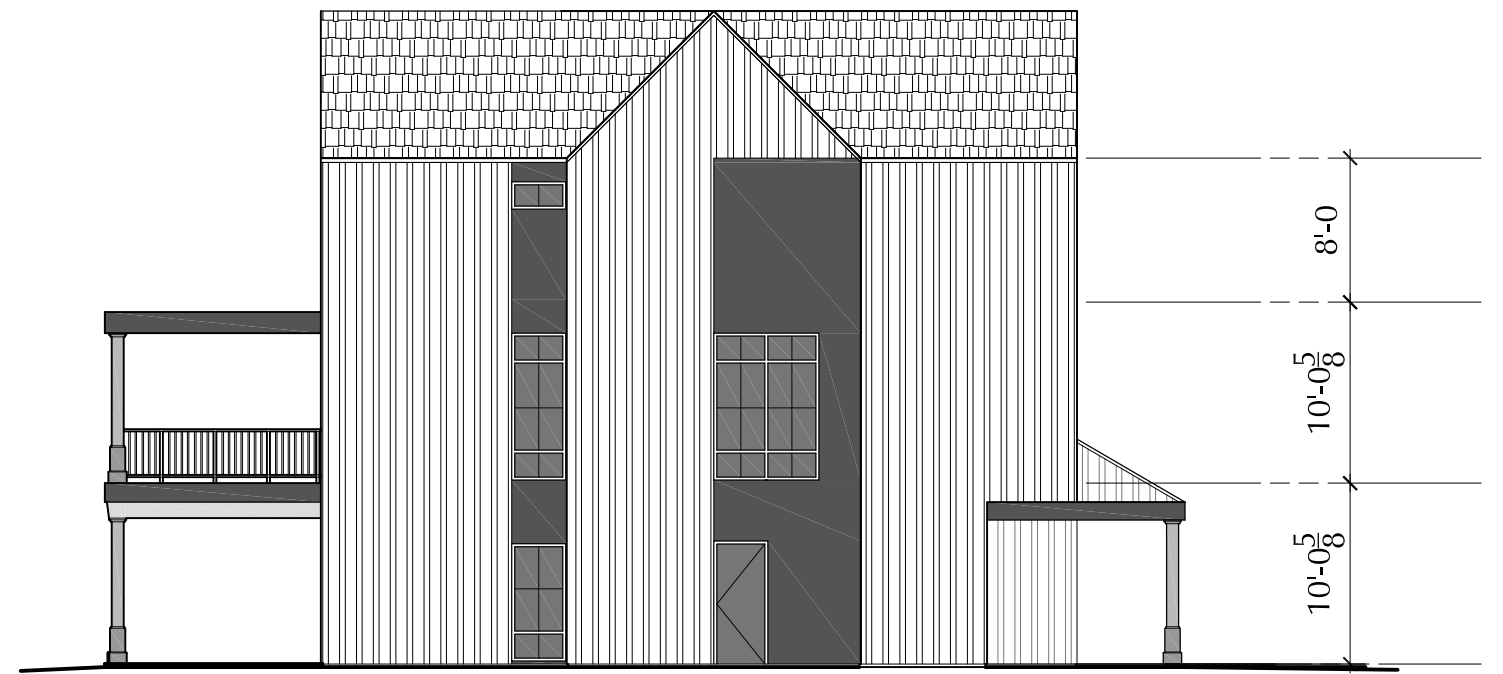
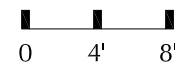


North Elevation

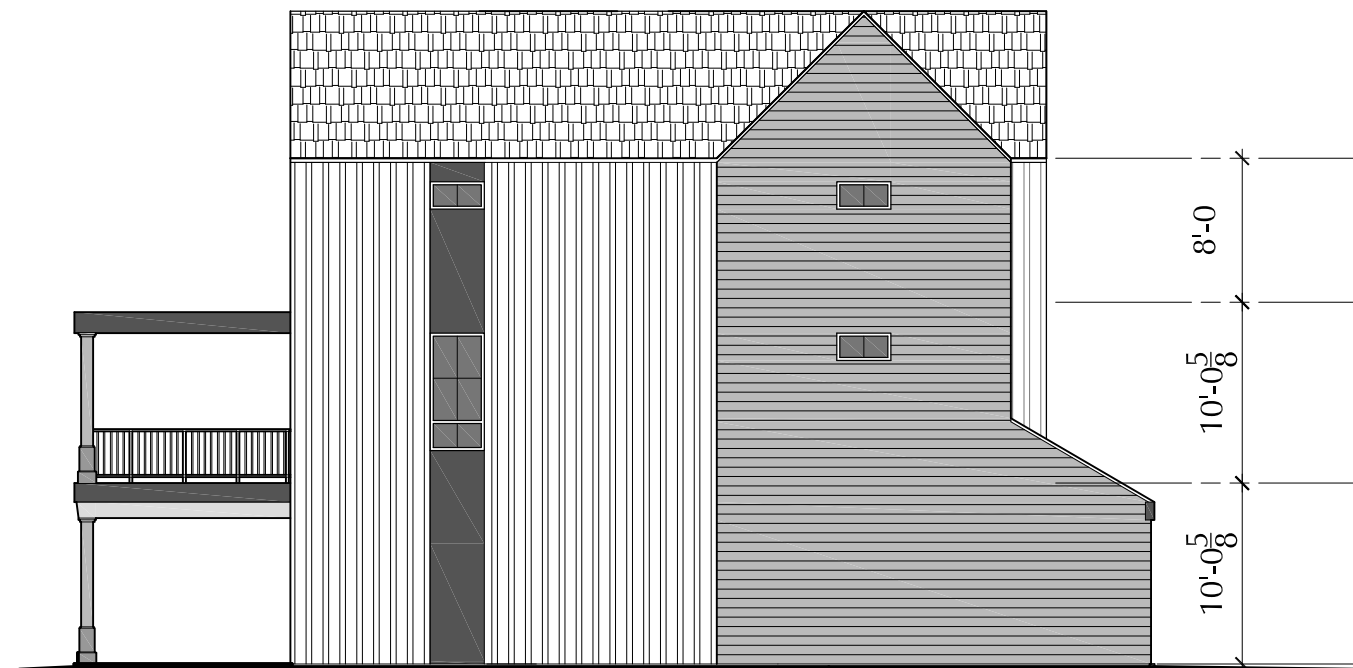
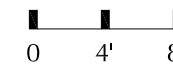




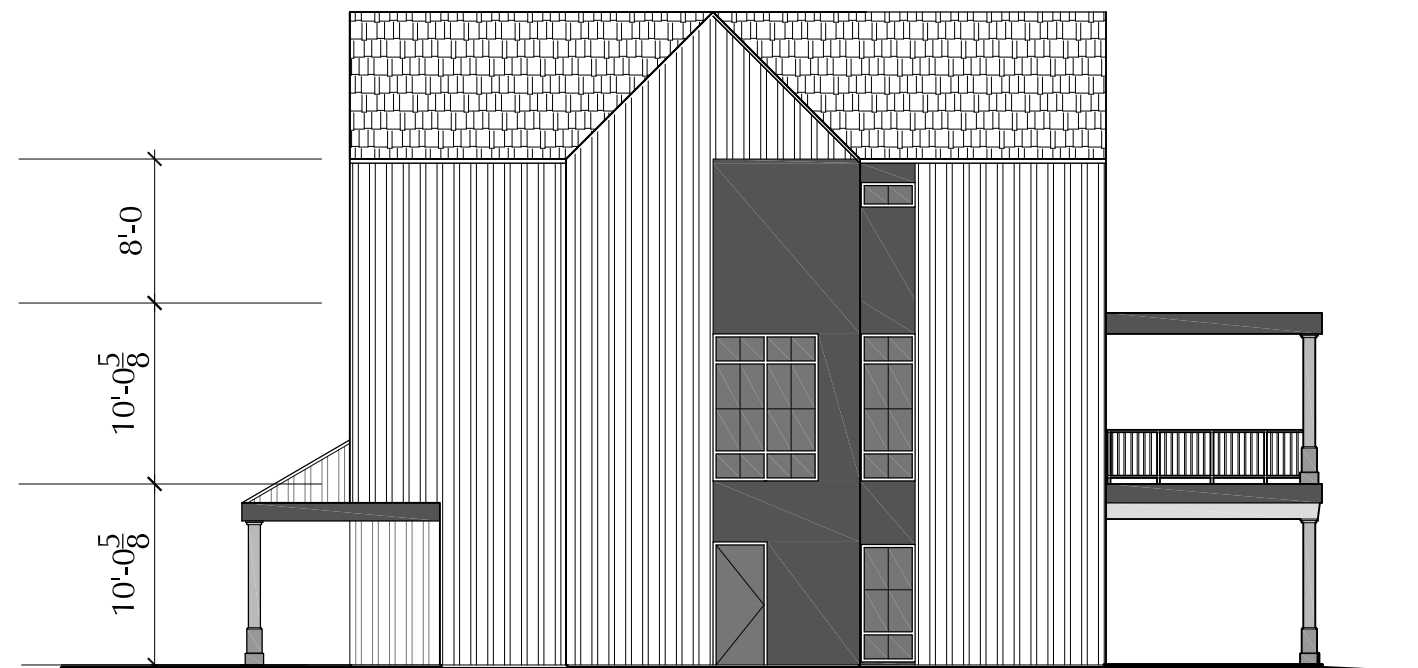
bldg 7 East Elevation



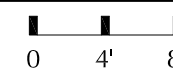
bldg 7 West Elevation



bldg 6 West Elevation



bldg 6 East Elevation



The DOH Associates, PS
ARCHITECTS and PLANNERS
DOH Job No.: 1926 Date: 5/31/2024

RIVERWALK PARK SINGLE-FAMILY RESIDENCES
Cascade Central Construction, LLC Chelan, WA

RIVERWALK PARK SINGLE-FAMILY RESIDENCES

VEGETATION MITIGATION PLAN

PREPARED FOR:
CASCADE CENTRAL CONSTRUCTION
PO Box 119
WENATCHEE, WA 98801

PREPARED BY:
GRETTE ASSOCIATES,
A DIVISION OF FARALLON CONSULTING^{LLC}
151 SOUTH WORTHEN STREET, SUITE 101
WENATCHEE, WASHINGTON 98801
(509) 663-6300

MAY 2022
REVISED MAY 2024



Table of Contents

1	INTRODUCTION.....	3
2	BACKGROUND	4
2.1	PROJECT SITE.....	4
2.2	CRITICAL AREAS.....	4
2.3	HABITAT OVERVIEW.....	4
2.4	PROJECT DESCRIPTION.....	5
2.5	PROJECT IMPACTS.....	6
3	MITIGATION ACTIONS.....	8
3.1	MITIGATION SEQUENCING	8
3.2	MITIGATION ACTION	10
3.2.1	<i>Irrigation</i>	<i>11</i>
3.2.2	<i>Noxious Weed Control.....</i>	<i>11</i>
3.2.3	<i>Monitoring.....</i>	<i>11</i>
3.2.4	<i>Planting Plan Assumptions.....</i>	<i>12</i>
3.2.5	<i>Site Protection Instrument.....</i>	<i>12</i>
4	BIOLOGIST QUALIFICATIONS.....	13

1 INTRODUCTION

The applicant proposes to construct residential development on nine existing residential parcels located on the north side of West Okanogan Avenue within the City of Chelan, WA. The project includes the development of 13 single-family residences, a pool, parking, and utilities. The project site is located within the 200 ft of shoreline jurisdiction but outside of the 35 ft standard shoreline buffer. The entire northern boundary of the site runs adjacent to the City of Chelan's Riverwalk Park; which separates the project site from the shoreline of Lake Chelan. An existing paved public access point for the Riverfront Trail is located adjacent to the eastern end of the site.

The purpose of this document is to outline the extent of the proposed project and identify the associated design features that have been incorporated into the project to offset potential negative impacts and ensure no net loss of shoreline ecological function. This Vegetation Mitigation Plan has been prepared pursuant to the City of Chelan Shoreline Master Program (CSMP) Section 4 and Appendix B.

2 BACKGROUND

2.1 Project Site

The Project Site is located on West Okanogan Avenue on the south side of the City of Chelan; Parcels #272213240200, #272213650005, #272213650010, #272213650015, #272213650020, #272213650025, #272213650030, #272213650035, and #272213650040, Township 27 N, Range 22 EWM, Section 13. The project site does not have an assigned address. The site is located within the upland and is separated from Lake Chelan by the presence of the City of Chelan's Riverwalk Park and the paved Riverfront Trail. A majority of the upland is relatively flat within the vicinity of Okanogan Avenue, with steep slopes separating the site from Riverfront Park and the shoreline of Lake Chelan. Vegetation within the upland is comprised of a number of significant non-native horticultural tree species and a sparse herbaceous layer comprised of native and non-native weedy species, including four Class B noxious weeds. No portion of the project site sits adjacent to the lake.

2.2 Critical Areas

Critical areas are defined as areas with a critical recharging effect on aquifers used for drinking water; fish and wildlife habitat conservation areas; frequently flooded areas; geologically hazardous areas; and wetlands. The property is mapped as having steep slopes on the City of Chelan GIS mapping tool; however, the property is relatively flat and only a portion of the site meets the definition of a geologically hazardous area. Any critical areas related to geologic hazards are addressed within the required geologic site assessment and are not included within the scope of this document.

The Washington Department of Fish and Wildlife Priority Habitats and Species (PHS) database was also queried to determine if any mapped resources meeting the definition of fish and wildlife habitat conservation areas are present on the properties. There are no PHS species mapped on the project site, therefore there are no critical areas related to fish and wildlife present. No additional critical areas are located within the vicinity of the project site.

2.3 Habitat Overview

Lake Chelan serves as the reservoir for the Lake Chelan Hydroelectric Project, operated by the Chelan County Public Utility District. Water levels in the lake vary, depending on seasonal runoff and hydropower operations. The reservoir is operated at a maximum water surface elevation of 1,100 feet above mean sea level (AMSL) and a minimum elevation of 1,079 feet AMSL (Chelan County PUD 2000). Annual drawdown begins in September, and typically ends in April. Refilling of the reservoir occurs from April to June, when warmer temperatures melt accumulated winter snowpack.

One of the most important factors affecting the aquatic habitat and shoreline ecological function is the annual drawdown of the lake that results in the lake being full for only two

months of the year (Chelan PUD 2010). During the remainder of the year the water level recedes, exposing the rocky, unvegetated lakebed. The annual recession of the lake precludes establishment and function of true riparian vegetation along the shoreline and persistent aquatic vegetation within the zone of water fluctuation.

In general, there is little habitat complexity in Lake Chelan, and as a result, low ecological function (USACE 2010). This is due to a variety of natural and human influenced factors including the oligotrophic nature of the lake, removal of natural large woody debris and the annual drawdown of the lake. The hardened nature of the shoreline within the vicinity of the project area (riprap adjacent to Riverwalk Park), including relatively simple in-water structures such as public viewing platforms and boardwalks, and the highly modified shoreline environment resulting from the presence of the lawngrass-dominated public park and the paved pedestrian trail, result in very low ecological functions of the shoreline within the vicinity of the project site.

On the subject properties, the lack of regular irrigation and the proximity to the surrounding residential areas and downtown corridor, causes the establishment of plant life within the parcels to be both horticultural and opportunistic in nature. Species are limited to those that can persist in an environment of low and unpredictable precipitation, low humidity, and high summer temperatures with desiccating winds. Several species identified were limited to a single specimen. No threatened or endangered species were found on the site. Significant trees are present but are primarily comprised of non-native horticultural varieties.

2.4 Project Description

The applicant proposes to construct 13 single-family residences with associated parking, utilities, and a pool within the City of Chelan, Washington. The project area is composed of 9 individual residential lots located within the 200 ft shoreline jurisdiction of Lake Chelan, but outside of the 35 ft standard shoreline buffer. Lots are zoned as Tourist Mixed Use (TMU) within the City of Chelan municipal code (CMC) Chapter 17.14 Chelan Downtown Land Use and Development Code and are designated as Shoreline Residential-Multi-Family (MF) Shoreline Environment within the CSMP.

Prior to project construction the site was surveyed for existing vegetation, including herbaceous cover and significant trees. Significant trees on the site are primarily composed of non-native horticultural species. A sparse herbaceous herb layer comprised of native and non-native species is also present and includes four Class B noxious weeds. As part of project construction, the site will be cleared of existing vegetation, including 44 significant trees. Vegetation clearing work will be completed using commercial equipment such as tracked excavators and backhoes. After clearing is completed, the site will be leveled and graded using commercial equipment such as tracked excavators and graders. The volume of cut and fill within the project site is not yet known. However, any fill material required will be used from onsite sources. Erosion will be minimized during project construction by installing BMPs and temporary and permanent erosion and sediment control structures

consistent with Ecology requirements for stormwater management within eastern Washington. After the site has been prepared and earthwork is completed, thirteen (13) single-family residences will be constructed. The proposed residences will be constructed in compliance with the City of Chelan municipal code for areas zoned Tourist Mixed Use (TMU) 2* as defined within Chapter 17.14 Figure 3 and shall comply with the requirements outlined within the CSMP for areas of the shoreline classified as MF, including any height and setback restrictions. No shoreline stabilization will be required as part of this project, as the site is located no less than 40 ft landward of the OHWM of Lake Chelan and outside of the 35 ft standard shoreline buffer. A pool and associated infrastructure will be installed in the northern center of the property. Sidewalks and residential parking will be installed on-site.

After project completion, the site will be planted with 44 native tree saplings at a replacement ratio of 1:1 in order to mitigate for any significant trees removed during project construction, and as required within CSMP 4.2.2.C. Noxious weeds will also be controlled within the vicinity of the site. This document serves as the required Vegetation Mitigation Plan. This vegetation mitigation plan has been designed in compliance with the recommendations of CSMP Appendix E: *Guidance for Development of Vegetation Mitigation Plans*.

2.5 Project Impacts

Impacts commonly associated with development within shoreline jurisdiction include the removal of riparian vegetation, the increase of stormwater runoff and sedimentation, removal of woody debris, the increase in sewage effluents, the increase in water pollution, and the installation of shoreline armoring. Based on the physical location of the property within the upland of the lower basin of Lake Chelan and within the residential and mixed-use tourist areas adjacent to the commercial downtown corridor, the site has less potential to cause negative impacts from development compared to undeveloped properties in less urban areas of the lake.

The site will be serviced by city sewer and water utilities, thereby eliminating any potential impacts associated with sewage effluents. Stormwater runoff and sedimentation are addressed within the Stormwater Management Plan that will be submitted as part of the project application. This plan has been designed in conformance with the Department of Ecology Stormwater Management Manual for Eastern Washington and is not included within the scope of this document.

Significant recreational uses are ongoing in the area. The site is located adjacent to the Riverwalk Park and Riverfront Trail and is located in the vicinity of numerous high density residential and commercial developments; all of which are popular for water dependent recreation. Shoreline armoring is already present within Riverwalk Park and woody debris is already absent within the vicinity of the site. The drawdown of the lake prevents the

establishment of beneficial aquatic vegetation that could support macroinvertebrate communities within the vicinity of the site.

After considering the existing conditions and proposed development, it was determined that the greatest potential impact of the project to the shoreline environment is the removal of significant trees from within shoreline jurisdiction. The mitigation actions proposed below are intended to address potential negative impacts associated with adverse impacts to vegetation at the site and to discuss mitigation for these impacts by increasing ecological function through the replacement of removed non-native trees with native species as suggested within Appendix E of the CSMP, and the removal and monitoring of noxious and invasive species within the vicinity of the project area. Project elements are discussed in detail below.

3 MITIGATION ACTIONS

The proposed mitigation actions are intended to increase the extent and viability of native vegetation within shoreline jurisdiction that will contribute to increased ecological function and improve visual and aesthetic qualities within the vicinity of the project site. Design elements are discussed in further detail in the remainder of this chapter.

3.1 Mitigation Sequencing

PER SMP Section 4.2.2 applicants shall demonstrate all reasonable efforts have been taken to avoid, minimize and then mitigate likely adverse impacts to ecological function resulting from new development utilizing a sequence of six steps: avoiding, minimizing, rectifying, reducing or eliminating, compensating and monitoring. The steps are a hierarchy ranked in order of preference beginning with avoidance. In determining appropriate mitigation measures applicable to shoreline development, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable.

1. Avoiding the impact altogether by not taking a certain action or parts of an action.

The building site is located within the 200 ft of shoreline jurisdiction but is outside of the 35 ft standard shoreline buffer of Lake Chelan. As the building site is located outside of the shoreline buffer, impacts to the aquatic environment and shoreline buffer are avoided altogether. Additionally, the building site has been located to avoid impacts to the existing paved public access trail for the City of Chelan's Riverwalk Park.

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts.

- Excavation at the site will be the minimum necessary to install all project elements. By adhering to the recommendations of the geologic site assessment, the project minimizes the risks associated with potential steep slope geologic hazards within the vicinity of the site.
- Impacts to the shoreline environment due to stormwater will be minimized by utilizing BMPs and installing DOE recommended erosion control measures during project construction. Appropriate weather work windows will also be utilized to minimize the chance of erosion at the site during excavation and grading.
- Impacts to surrounding properties will be minimized during construction by adhering to standard working hours (7 AM-7PM) and avoiding work during the late evenings and on Sundays. Long-term impacts to surrounding properties are also minimized by the inclusion of on-site parking as part of project development and

the installation of an aesthetically pleasing visual barrier between the parking area and Okanogan Avenue.

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project.

As part of the project design, any significant trees removed will be replaced at a ratio of 1:1 with native tree saplings as required within CSMP 4.2.2.C. Replacement trees will meet the size specifications outlined within CSMP 4.4.2.E.3. By replacing the primarily non-native trees with native species, the value and function of the shoreline environment will be restored to pre-project conditions. In the long-term, the value and function of the shoreline environment will be increased from existing conditions due to the replacement of horticultural species with native species. Control of noxious weeds at the site will further enhance the restoration of the shoreline within this location. After project completion, all disturbed areas will be revegetated and restored to pre-project conditions as required within CSMP 5.1.2.D. No net loss of ecological function is expected as a result of this project.

4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

All mitigation vegetation will be maintained and monitored over a 5-year period as required within CSMP 4.4.2.D.5. Monitoring will ensure 100% survivorship of plantings within year 1, with 80% survivorship required in years 3 and 5. Any dead plants will be replaced with like and in-kind species as needed to ensure planting success. The site will be monitored for noxious/invasive weeds. Noxious/invasive weed cover will be limited to less than 20% during the monitoring period. Noxious/invasive weeds may require physical and/or chemical control in order to achieve success. It is advised that the Chelan Noxious Weed Control Board is contacted for recommendations on the best methods of weed control within this geographic region. The mitigation vegetation will be preserved for the duration of the project and in perpetuity as required in CSMP 4.4.2.D.6 and 7.

5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments, and

The impact to vegetation at the site will be compensated for by installing the proposed native vegetation mitigation planting plan (this document). This mitigation planting not only replaces the affected significant trees at a 1:1 ratio as required, but also enhances the vegetation located within shoreline jurisdiction by replacing non-native trees with native species. Further, the control of noxious weeds within the vicinity of the project site adds to the enhancement of the shoreline environment. As a result, no net loss of functions or values to the shoreline environment are expected to occur.

No impacts to public access will result from the installation of the proposed project and therefore no additional compensation is required.

6. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

All mitigation plantings will be monitored for survivorship over a 5-year period as required and as discussed above. Plants chosen for the vegetation planting are native to the area. Any plants requiring replacement during the 5-year monitoring period will be of a like and in-kind species. Noxious weeds will be controlled at the site by utilizing physical and/or chemical methods as recommended by the Chelan County Noxious Weed Control Board.

3.2 Mitigation Action

Riparian areas are transition zones between land and water environments. When healthy, riparian areas can provide a number of valuable functions including bank stabilization, flood reduction, shade, fine litter inputs, contribution of large woody debris, water quality improvement, wildlife enhancement and water temperature regulation. In general, the ability of the riparian area to provide these functions is highest immediately adjacent to the lake and diminishes as the distance from the water increases.

The applicant proposed to plant 44 native trees at a 1:1 replacement ratio within shoreline jurisdiction and to control noxious weeds within the vicinity of the project area in order to increase ecological function within the upland adjacent to the shoreline buffer of Lake Chelan. Additional areas at the project site and within shoreline jurisdiction will be planted with lawngrass and native and non-native shrubs as part of the project's landscaping plan. The native vegetation will provide the important functions mentioned above and stabilize the entire area so that precipitation does not cause runoff and sedimentation of the lake.

A planting plan is shown on the attached drawing. Selected plant species that will be installed in the planting areas include the following as identified in Table 1.

Table 1: Selected plant species for shoreline plantings

Plant Species		Plant Size	Minimum spacing	Number of Plants to be installed
Common Name	Scientific Name			
Tree species				
Smooth sumac	<i>Rhus glabra</i>	1-gallon	10-ft on-center	15
Douglas maple	<i>Acer douglasii</i>	1-gallon		18
Beaked hazelnut	<i>Corylus cornuta</i>	1-gallon		7
Quaking aspen	<i>Populus tremuloides</i>	1-gallon		4

An early spring or fall installation schedule (April 15th – May 31st, or October 1st – November 30th) is preferred for lower mortality rates of new plantings. In the event that an early spring or fall installation is not possible, the applicant may choose to plant during the summer months and irrigate as necessary to promote plant establishment.

Plant installation will be performed in accordance with the specifications provided below. Any alterations to the planting plan due to site conditions will require prior approval from the project biologist and may also require approval from regulatory agencies.

All plant materials to be used on the site will be nursery grown stock from a reputable, local dealer. Only native species are to be used; no hybrids will be allowed.

Plant material provided will be typical of their species or variety; all plants will exhibit normal, densely-developed branches and vigorous, fibrous root systems. Plants will be sound, healthy, vigorous plants free from defects, and all forms of infestation.

The contractor tasked with plant installation shall verify the location of all elements of the landscape plan prior to installation. If necessary, a project biologist may adjust the locations of landscape elements during the installation period as appropriate. If obstructions are encountered that are not shown on the drawings, planting operations will cease until alternate plant locations have been selected by and/or approved by the project biologist and associated regulatory agencies as necessary.

Circular plant pits with vertical sides will be excavated for all container stock. The pits should be at least 12 inches in diameter, and the depth of the pit should accommodate the entire root system. The bottom of each pit will be scarified to a depth of 4 inches.

Broken roots should be pruned with a sharp instrument and root balls should be thoroughly soaked prior to installation. Set plant material upright in the planting pit to proper grade and alignment. Water plants thoroughly midway through backfilling. Water pits again upon completion of backfilling. No filling should occur around trunks or stems. Do not use frozen or muddy mixtures for backfilling. Form a ring of soil around the edge of each planting pit to retain water, and install a 2-1/2 inch layer of mulch around the base of each container plant.

3.2.1 Irrigation

In order to maintain all the vegetation on the property, underground irrigation controlled by automated timers will be installed.

3.2.2 Noxious Weed Control

Noxious weeds within planting areas will be maintained at 20% cover or less. Noxious weeds may be controlled by physical and/or chemical controls as recommended by the Chelan County Noxious Weed Control Board. Noxious weed control should be done in a manner that does not cause an increase in sedimentation or erosion at the site.

3.2.3 Monitoring

To ensure the success of the planting areas, the mitigation planting area will be monitored for a five-year period to determine percent survival. Monitoring of trees and shrubs will

occur by a count to determine percent survival. A performance standard of 100 percent survival for the first year of growth post installation, with no less than 80 percent survival at the end of the third and fifth years is required for the project. Monitoring will occur in September or October of the required years. Percent cover of noxious weeds will also be estimated for all planted areas during annual monitoring. A performance standard of less than 20% cover of noxious weeds at the end of the first, third, and fifth year is required for the project.

Monitoring reports will be prepared by a qualified professional at the end of years 1, 3 and 5. The report will fully address the performance standards and any other maintenance requirements prescribed by the mitigation plan and provide as-built plans and comprehensive photo documentation.

3.2.4 Planting Plan Assumptions

Success of the proposed planting plan is based on several assumptions:

- temperature and precipitation will be within normal ranges,
- unforeseen natural events, such as floods, earthquakes, windstorms, or other acts of God, will not impact the mitigation site,
- vandalism will not occur,
- animal damage will be minimal, and
- plant materials will be readily available.

In the event that the performance standards established by this document cannot be met due to any of the above-listed occurrences, the project proponent will coordinate with the regulatory stakeholders to resolve the mitigation requirement in a manner that adequately reflects the good faith effort to fulfill this planting plan.

3.2.5 Site Protection Instrument

Upon completion of the vegetation installation, a copy of the planting plan and permit conditions regarding mitigation will be recorded at the Chelan County Auditor's office to ensure that future owners are aware of the requirement to maintain the vegetation over the life of the development. The instrument will be recorded within 60 days of completion of the site, or as soon as is feasible.

4 **Biologist Qualifications**

Eron Drew is a professional biologist who meets the qualifications for Wetlands, Habitat Conservation Areas, and Vegetation Management qualified professional. Eron holds Bachelor of Science degrees in Geology, Conservation Biology, and Zoology from the University of Wisconsin, Madison with a focus on geomorphology, conservation ecology, and limnology. Professional experience includes over 12 years of natural resource management experience in limnology, fisheries, freshwater ecology, wetland ecology, ESA and PHS species protection, and wildlife habitat assessment, management, and mitigation. She is an Army Corps of Engineers certified wetland delineator with 5 years of professional delineation expertise and has completed the Department of Ecology training for Using the Revised Washington State Wetland Rating System (2014) in Eastern and Western Washington. She has completed the Department of Ecology training for Using the Credit-Debit Method for Estimating Wetland Mitigation Needs, the Department of Ecology training for Determining the Ordinary High Water Mark, and the WDNR Ecological Integrity Assessment training. She is also a Cornell Lab of Ornithology eBird data contributor and a member of the Washington Native Plant Society. Eron has over 13 years of professional experience in agriculture and landscape management within Central Washington, and 6 years of experience as a WSU Chelan-Douglas Master Gardener and Master Gardener instructor; with over 75 hours of continuing education through the WSU Research Extension in vegetation management including soils, tree and shrub identification, pruning, site and variety selection, trellising and support, fire-wise landscaping, forest health, xeric and native vegetation, plant health diagnosis, and disease and pest management. Eron can be reached at erond@gretteassociates.com or by phone at (509) 881-1495.





RIVERWALK PARK SINGLE-FAMILY RESIDENCES

VEGETATION MITIGATION PLAN

FIGURES



MITIGATION PLANT LIST- 44 PLANTS

-  BEAKED HAZELNUT (*Corylus cornuta*) - 7 Plants
-  SMOOTH SUMAC (*Rhus glabra*) - 15 Plants
-  DOUGLAS MAPLE (*Acer glabrum* var. *douglasii*) - 18 Plants
-  QUAKING ASPEN (*Populus tremuloides*) - 4 Plants

1N 60 FT 120 FT

SCALE IN FEET
1 INCH=60 FT

ADJACENT PROPERTY OWNERS:

- ① CHELAN COUNTY PUD
P.O. BOX 1231
WENATCHEE, WA 98807
- ② MOSER ROSA M ETAL
P.O. BOX 781
CHELAN, WA 98816

MITIGATION

47.8383 N LAT. / -120.0217 W LONG.

AT: LAKE CHELAN
UNASSIGNED WEST OKANOGAN AVENUE
CHELAN, WA 98816

COUNTY OF: CHELAN
STATE: WA
APPLICATION BY: CAMPBELL'S LODGE, INC.

SHEET NO. 1 OF 1 DATE: REVISED 6/4/24