

**A REGULAR MEETING
OF THE TOWN OF LADYSMITH COUNCIL
AGENDA
6:30 P.M.**

**Tuesday, January 25, 2022
City Hall Council Chambers
410 Esplanade**

Pages

1. CALL TO ORDER

Call to Order 6:30 p.m. in Open Session, in order to retire immediately into Closed Session.

Members of the public are welcome to attend all Open Meetings of Council, but may not attend Closed Meetings.

2. CLOSED SESSION

Recommendation

That, in accordance with section 90 of the *Community Charter*, Council retire into closed session order to consider items related to the following:

- personal information about an identifiable individual who holds or is being considered for a position as an officer, employee or agent of the municipality or another position appointed by the municipality - section 90(1)(a);
- personal information about an identifiable individual who is being considered for a municipal award or honour, or who has offered to provide a gift to the municipality on condition of anonymity - section 90(1)(b);
- labour relations or other employee relations - section 90(1)(c);
- the security of the property of the municipality - section 90(1)(d);
- the acquisition, disposition or expropriation of land or improvements, if the council considers that disclosure could reasonably be expected to harm the interests of the municipality - section 90(1)(e);
- law enforcement, if the council considers that disclosure could

reasonably be expected to harm the conduct of an investigation under or enforcement of an enactment - section 90(1)(f);

- litigation or potential litigation affecting the municipality - section 90(1)(g);
- the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose - section 90(1)(i);
- negotiations and related discussions respecting the proposed provision of a municipal service that are at their preliminary stages and that, in the view of the council, could reasonably be expected to harm the interests of the municipality if they were held in public - section 90(1)(k); and
- the consideration of information received and held in confidence relating to negotiations between the municipality and a provincial government or the federal government or both, or between a provincial government or the federal government or both and a third party - section 90(2)(b).

3. OPEN MEETING AND ACKNOWLEDGEMENT (7:00 P.M.)

The Town of Ladysmith acknowledges with gratitude that this meeting takes place on the traditional, unceded territory of the Stz'uminus First Nation.

3.1. INFORMATION ON HOW TO VIEW / ATTEND THE MEETING

Members of the public may attend meetings in person in accordance with COVID-19 safety protocols. Masks are mandatory. Since space in the Council Chamber is limited, public attendance will be on a first-come, first-served basis as space permits.

View the livestream on YouTube:

<https://www.youtube.com/channel/UCH3qHAExLiW8YrSuJk5R3uA/featured>.

4. AGENDA APPROVAL

Recommendation

That Council approve the agenda for this Regular Meeting of Council for January 25, 2022.

5. RISE AND REPORT- Items from Closed Session

6. MINUTES

6.1. Minutes of the Public Hearing and Regular Meeting of Council held January 11, 2022

6

Recommendation

That Council approve the minutes of the Public Hearing and Regular Meeting of Council held January 11, 2022.

7. DEVELOPMENT APPLICATIONS

7.1. Development Variance Permit Application – 303 Chemainus Road

14

Recommendation

That Council consider issuing Development Variance Permit 3090-21-14 to vary the following regulations within the Marine Residential Moorage (W-1) and the Marine Park and Recreation (W-P) zones to facilitate construction of a dock in the Ladysmith Harbour adjacent to the upland property at 303 Chemainus Road:

1. The maximum surface area of dock structures in the W-1 zone from 20m² to 138m²;
2. The maximum height of dock structures in the W-1 zone from 2.0m to 3.1m;
3. The maximum dock length in the W-1 zone from 30m to 77m;
4. The minimum setback from the Marine Harvesting (W-4) zone in the W-1 zone from 125m to 19m;
5. The minimum clearance above the seabed in the W-1 zone from 2.0m to 1.8m; and
6. The minimum setback from the seaward extension, perpendicular to the shoreline of an adjacent upland side parcel line in the W-P zone from 6m to 0m.

8. REPORTS

8.1. Water Billing Adjustments - Methuen

113

Recommendation

That Council direct staff to adjust the water billing amounts to zero for Account Nos. 1314000, 0667000, 0666000, 1313100, 0665000, 1317000, 1317100, and 1313000 for 2021 Q4 (October to December 2021) and 2022 Q1 (January to March).

8.2. Fire Department Aerial Device

117

Recommendation

That Council:

1. Increase the proposed 2022-2026 Financial Plan budgeted amount for the Fire Department Aerial Device Truck (Ladder Truck) to \$2.1 million dollars with the additional funds to be borrowed;
2. Direct staff to proceed with the required process for an Alternative Approval Process;
3. Provide early budget approval in order to facilitate an Alternative Approval Process; and
4. Upon successful completion of an Alternative Approval Process authorize staff to waive the Town's Purchasing Policy and direct award the bid to Fort Garry Fire Trucks in the amount of \$1,899,775 plus applicable taxes.

8.3. 4th Avenue Reconstruction Update

124

Recommendation

That Council direct staff to include in the 2022-2026 Financial Plan the 4th Avenue Improvement Project (Root Street to White Street) at a cost of \$1,880,000, with the additional funding to come from the Water Reserve for \$300,000 and the Gas Tax/Canada Community Building Fund up to \$158,000.

9. BYLAWS

9.1. Bylaw Status Sheet

142

10. NEW BUSINESS

10.1. Cowichan Valley Regional District Application for UBCM Community Emergency Support Services Grant

144

Recommendation

That Council support the Cowichan Valley Regional District proposal to apply for, receive and manage the UBCM Community Emergency Preparedness Fund Emergency Support Services grant funding on behalf of the Town of Ladysmith.

11. UNFINISHED BUSINESS

11.1. Councillor Johnson's Motion Regarding a Permanent Memorial

At the January 11, 2022 Regular Council meeting Councillor Johnson provided the following notice of motion to be considered by Council at the January 25, 2022 Regular Meeting of Council:

"That the Town of Ladysmith create a permanent memorial such as a Wall of Honour, listing Citizens of the Year in the Town of Ladysmith, and others that have brought honour to, or improved our community."

12. QUESTION PERIOD

- A maximum of 15 minutes is allotted for questions.
- Persons wishing to address Council during "Question Period" must be Town of Ladysmith residents, non-resident property owners, or operators of a business.
- Individuals must state their name and address for identification purposes. Alternately, questions can be submitted via email at info@ladysmith.ca during the meeting.
- Questions put forth must be on topics which are not normally dealt with by Town staff as a matter of routine.
- Questions must be brief and to the point.
- Questions shall be addressed through the Chair and answers given likewise. Debates with or by individual Council members or staff members are not allowed.
- No commitments shall be made by the Chair in replying to a question. Matters which may require action of the Council shall be referred to a future meeting of the Council.

13. ADJOURNMENT



MINUTES OF A PUBLIC HEARING AND REGULAR MEETING OF COUNCIL

Tuesday, January 11, 2022

6:00 P.M.

This meeting was held electronically

Council Members Present:

Mayor Aaron Stone
Councillor Amanda Jacobson
Councillor Rob Johnson
Councillor Tricia McKay

Councillor Duck Paterson
Councillor Marsh Stevens
Councillor Jeff Virtanen

Staff Present:

Allison McCarrick
Erin Anderson
Chris Barfoot
Jake Belobaba
Ryan Bouma

Donna Smith
Mike Gregory
Shannon Wilson
Sue Bouma

1. CALL TO ORDER

Mayor Stone called this Regular Meeting of Council to order at 5:37 p.m., in order to retire immediately into Closed Session.

2. CLOSED SESSION

CS 2022-001

That, in accordance with section 90(1) of the *Community Charter*, Council retire into closed session in order to consider items related to the following:

- labour relations or other employee relations - section 90(1)(c)

Motion Carried

3. OPEN MEETING AND ACKNOWLEDGEMENT (6:00 P.M.)

Mayor Stone called the Public Hearing and Regular Meeting of Council to order at 6:00 p.m., recognizing with gratitude that it was taking place on the traditional unceded territory of the Stz'uminus First Nation.

4. AGENDA APPROVAL

CS 2022-002

That Council approve the agenda for this Public Hearing and Regular Meeting of Council for January 11, 2022 as amended to include additional Public Hearing submissions for item 5.1.

Motion Carried

5. PUBLIC HEARING

5.1 “Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076”

Members of the public attending: 14

5.1.1 Outline of Public Hearing Process - Mayor Stone

Mayor Stone outlined the Public Hearing process and stated that the public would have the opportunity to provide their comments to Council about Bylaw No. 2076.

He advised that staff would introduce the proposed bylaw amendment, followed by public submissions. He reminded the public that the content of submissions would be made public and form a part of the public record for the Hearing, and that the function of Council at a Public Hearing is to listen rather than to debate the merits of the proposed Bylaw, although they may ask clarifying questions. He advised that once everyone had an opportunity to be heard, the Public Hearing would be closed and no further submissions or comments could be accepted by members of Council.

5.1.2 Introduction of Bylaw and Statutory Requirements - Director of Development Services

Jake Belobaba, Director of Development Services introduced “Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076” as the subject of the Public Hearing.

Mr. Belobaba advised that the purpose of Bylaw No. 2076 is to:

1. Amend the Medium Density Residential (R-3) zone to allow “Emergency Shelter”, for up to 10 people, as a site-specific permitted use at 631 1st Avenue; and

2. Exempt 631 1st Avenue from the minimum dwelling unit floor area requirements of the R-3 zone.

Mr. Belobaba also confirmed the Public Hearing notification and engagement process. Notice of this Public Hearing was published in the Ladysmith Chronicle on December 30, 2021 and January 6, 2022 and was posted on the Town's website and community notice boards. A copy of the Notice, the proposed Bylaw, and background information were made available at the front counter of City Hall and Development Services and on the Town's website for the Notice period. Staff in the Development Services office were available to respond to questions prior to the Public Hearing. He noted that as of noon on Tuesday, January 11, nine written submissions related to the proposed bylaw had been received.

5.1.3 Submissions

5.1.4 Call for Submissions to Council (Three Times) - Mayor Stone

Mayor Stone called for submissions to Council.

Ryan Alger, 11 Buller Street, spoke in support of the shelter but suggested adding extra security for the area.

Campbell McIntyre, Owner of the Beantime Cafe at 18 High Street, spoke in support of the shelter but expressed concern that residents and business owners in the area would once again experience discarded drug paraphernalia, graffiti and vandalism. He advised that the neighbourhood felt it had not received adequate RCMP support when the shelter was previously in operation.

Richard Morencie, Owner of Red's Emporium at 26 High Street, expressed concerns that theft, debris and discarded drug paraphernalia would increase again. He enquired about RCMP plans for rectifying these problems.

Mayor Stone called for submissions to Council a second time.

Denise Bergquist and Stefan Quietsch, Owners of the Temperance Hotel at 32 High Street, stated that during the previous operation of the shelter their business had experienced multiple break-ins and the area had been littered with discarded drug paraphernalia and were concerned that those problems would return. They advised that increased police presence in the area would help.

Mayor Stone called for submissions to Council a third and final time.

No one else wished to speak regarding "Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076".

Mayor Stone asked the Corporate Officer, D. Smith, if any submissions had been received via email. The Corporate Officer advised that one submission from Ryan Alger had been received via email and read the submission which included Mr. Alger's previous comments to Council during the Hearing.

5.1.5 Declaration that the Public Hearing for Bylaw No. 2076 is Closed - Mayor Stone

Hearing no further comments and receiving no further submissions, Mayor Stone declared the Public Hearing for Bylaw No. 2076 closed at 6:17 p.m. and stated that no further submissions or comments from the public or interested persons could be accepted by members of Council.

6. BYLAWS - OFFICIAL COMMUNITY PLANNING AND ZONING (SUBJECT OF PUBLIC HEARING)

6.1 "Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076"

CS 2022-003

That Council give third reading to "Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076".

Motion Carried

7. RISE AND REPORT- Items from Previous Closed Session

Council rose from Closed Session at 5:54 p.m. without report.

The following items from the Closed Meeting of Council held November 30, 2021 were reported:

Resolution CE 2021-132

That Council direct that staff implement a COVID-19 Vaccination Policy which includes vaccination education and rapid testing for employees and Council members with undisclosed vaccination status.

CE 2021-134

That Council rise with report on Resolution CE 2021-132 when appropriate.

8. MINUTES

8.1 Minutes of the Public Hearing and Regular Meeting of Council held December 21, 2021

CS 2022-004

That Council approve the minutes of the Regular Meeting of Council held December 21, 2021.

Motion Carried

9. COMMITTEE MINUTES

9.1 Parks, Recreation and Culture Advisory Committee - December 15, 2021

CS 2022-005

That Council receive the minutes of the Parks, Recreation and Culture Advisory Committee meeting held December 15, 2021.

Motion Carried

10. REPORTS

10.1 2022 Community Banner Themes

CS 2022-006

That Council approve the following components of the 2022 Community Banner Program:

1. The theme "Community on the Coast" for the Community Public Art Banners; and
2. The inclusion of a Community Celebration Banner, to celebrate the Centennial of Aggie Hall.

CS 2022-007

AMENDMENT:

That Council amend item 2 of Resolution CS 2022-006 to include "in a way that is mindful and sensitive of our Stz'uminus First Nation neighbours".

Amendment Carried

Resolution CS 2022-006, as amended, reads:

That Council approve the following components of the 2022 Community Banner Program:

1. The theme “Community on the Coast” for the Community Public Art Banners; and
2. The inclusion of a Community Celebration Banner, to celebrate the Centennial of Aggie Hall in a way that is mindful and sensitive of our Stz’uminus First Nation neighbours.

Main Motion, as Amended, Carried

10.2 2022 Utility Bill Due Dates

CS 2022-008

That Council approve the following utility billing due dates:

- February 25, 2022 for the period October to December, 2021;
- May 30, 2022 for the period January to March, 2022;
- August 30, 2022 for the period April to June, 2022; and
- November 29, 2022 for the period July to September, 2022.

Motion Carried

11. BYLAWS

11.1 Park Dedication

CS 2022-009

That Council:

1. Give first, second and third readings to “Bylaw Revision Bylaw 2022, No. 2090”;
2. Give first, second and third readings to “Removal of Road Dedication Bylaw 2022, No. 2085”;
3. Direct staff to:
 1. provide notice to the public of Council’s intention to adopt Bylaw No. 2085 pursuant to sections 40(3)(a) and 94 of the *Community Charter*;
 2. provide notice of Council’s intention to adopt Bylaw No. 2085 to:
 1. BC Hydro
 2. Fortis
 3. Shaw
 4. TELUS;
 3. refer Bylaw No. 2085 to the Ministry of Transportation and Infrastructure pursuant to section 41(3) of the *Community Charter*, and

4. Give first and second readings to "Park Dedication Bylaw 2022, No. 2083".*

Motion Carried

11.2 Bylaw Status Sheet

12. NEW BUSINESS

12.1 2022 Conference Attendance

12.1.1 Association of Vancouver Island Coastal Communities

CS 2022-010

That Council appoint Councillors Johnson, McKay, Paterson and Stevens to join Mayor Stone at the Association of Vancouver Island and Coastal Communities annual convention to be held April 1-3, 2022 in Victoria.

Motion Carried

12.1.2 Union of British Columbia Municipalities

CS 2022-011

That Council appoint Councillors McKay, Paterson, Stevens and Virtanen to join Mayor Stone at the Union of British Columbia Municipalities annual convention to be held September 12-16, 2022 in Whistler.

Motion Carried

12.1.3 Federation of Canadian Municipalities

CS 2022-012

That Council appoint Councillor McKay to join Mayor Stone at the Federation of Canadian Municipalities 2022 Convention to be held June 2-5, 2022 in Regina.

Motion Carried

12.1.4 Vancouver Island Economic Alliance

Council requested that staff reach out to the Vancouver Island Economic Alliance to hold five spots for members of the newly elected Town Council to attend the Vancouver Island Economic Alliance convention in Nanaimo on October 26-28, 2022.

13. NOTICE OF MOTION

Councillor Johnson provided the following notice of motion to be considered by Council at its Regular Meeting scheduled for January 25, 2022:

"That the Town of Ladysmith create a permanent memorial such as a Wall of Honour, listing Citizens of the Year in the Town of Ladysmith, and others that have brought honour to, or improved our community."

14. QUESTION PERIOD

There were no questions submitted by the public.

15. ADJOURNMENT

CS 2022-013

That this Regular Meeting of Council adjourn at 7:30 p.m.

Motion Carried

CERTIFIED CORRECT:

Mayor (A. Stone)

Corporate Officer (D. Smith)

STAFF REPORT TO COUNCIL

Report Prepared By: Julie Thompson, Planner
Reviewed By: Jake Belobaba, Director of Development Services
Meeting Date: January 25, 2022
File No: DVP 3090-21-14
Re: Development Variance Permit Application – 303 Chemainus Road

RECOMMENDATION:

That Council consider issuing Development Variance Permit 3090-21-14 to vary the following regulations within the Marine Residential Moorage (W-1) and the Marine Park and Recreation (W-P) zones to facilitate construction of a dock in the Ladysmith Harbour adjacent to the upland property at 303 Chemainus Road:

1. The maximum surface area of dock structures in the W-1 zone from 20m² to 138m²;
2. The maximum height of dock structures in the W-1 zone from 2.0m to 3.1m;
3. The maximum dock length in the W-1 zone from 30m to 77m;
4. The minimum setback from the Marine Harvesting (W-4) zone in the W-1 zone from 125m to 19m;
5. The minimum clearance above the seabed in the W-1 zone from 2.0m to 1.8m; and
6. The minimum setback from the seaward extension, perpendicular to the shoreline of an adjacent upland side parcel line in the W-P zone from 6m to 0m.

EXECUTIVE SUMMARY:

A private dock is proposed for an area of the Ladysmith Harbour, to be used for moorage by the owner of the upland property, 303 Chemainus Road. Variances are required to the applicable Marine Residential Moorage (W-1) and Marine Park and Recreation (W-P) zones as the proposed dock does not meet several regulations in these zones. Council is being asked to consider issuance of Development Variance Permit (DVP) 3090-21-14 to facilitate construction of the proposed dock.

PREVIOUS COUNCIL DIRECTION:

Date	Resolution	Council Resolution
June 15, 2021	CS 2021-205	That Council recommend that the Ministry of Forests, Lands, Natural Resource Operations & Rural Development approve Crown Land Tenure Application 100305736 for private moorage at 303 Chemainus Road, provided that adequate measures are put in place to protect fisheries and aquaculture in the area.
June 3, 2013	CS 2013-203	It was moved, seconded and carried that staff be directed to provide the following comments to the Province regarding the proposal for private moorage within DL462: <ul style="list-style-type: none"> • The proposal for private moorage in DL462 is not in the community's interest and should be denied. • There has not been a dock structure within DL462 for many years and in 2008, as part of an upland development proposal for 303 Chemainus Road.

Date	Resolution	Council Resolution
		<p>(the Lands), the Owner agreed that the Lands shall not be used for a marina and any marina connected to the Lands. In addition, the Owner agreed to not redevelop the Lands until the existing building located on the beach portion of the Lands was removed.</p> <ul style="list-style-type: none"> It is important that Crown tenure decision protect the existing shellfish harvesting areas in Holland Bank which is an important local economic and business sector. The Town is currently reviewing its regulation of private moorage.
June 3, 2013	CS 2013-204	It was moved, seconded and carried that staff be directed to develop regulations for private moorage and shellfish culture use as part of the Zoning Bylaw project.

INTRODUCTION/BACKGROUND:

An application has been received to vary the W-1 zone and the W-P zone to facilitate the construction of a proposed private moorage dock located in the Ladysmith Harbour adjacent to the upland property of 303 Chemainus Road. Approximately half the dock structure is located in the W-1 zone (adjacent to the upland property) while the other half is in the W-P zone (farther out to sea). A variance is required as the proposed dock design does not meet several Zoning Bylaw regulations.



Figure 1: Subject area outlined in red.

Subject Property

The proposed dock is located on aquatic Crown Land (see Figure 1) and will provide private moorage for the upland property owner at 303 Chemainus Road. 303 Chemainus Road is surrounded by single-family residential use on the north and south side. There is an existing boathouse on the upland property which encroaches onto the foreshore (Crown Land). The subject area (see Figure 1) is adjacent to a Crown “water lot” lease to the north, where there is a shellfish farm. This area of Ladysmith Harbour is characterized by shallow waters at high tide and an exposed seabed (“mudflat”) at low tide. At low tide, the foreshore area adjacent to the upland property is part of a public pedestrian connection between the Estuary Trail (entrance located at the end of Roland Road) and Transfer Beach.

Proposed Dock Design:

The proposed dock is intended to be built over the footprint of a former dock that was removed some time ago. Deteriorated creosote timber piles, which formed the support structure for the old dock, still remain but will be removed and the new dock will be supported with new steel piles. The old piles are shown in Figure 2.



Figure 2: Former dock location showing existing deteriorated timber piles.

Key aspects of the proposed dock design are described below (see also Figure 3 and Attachment B):

- To access the dock, a 1.5m wide removable aluminum gangway ramp is proposed. The ramp is connected to an existing concrete landing which forms part of an existing boathouse that contains a dwelling. The existing boathouse and concrete landing encroach into the foreshore.
- The main part of the proposed dock will consist of a 1.8m wide timber walkway with timber guardrails. A 30.5m long section of the walkway will consist of fibreglass “mini/micro mesh” decking to reduce shading of the eelgrass beds below (see ‘Environmental Considerations’). The timber walkway will be supported by 12 steel piles.
- At the end of the walkway, a 3.66m x 3.66m roofed timber platform structure is proposed, which is intended to provide shelter to non-motorized watercraft, such as canoes or kayaks.
- A 1.2m wide aluminum gangway ramp is proposed to connect the walkway/platform structure to a proposed 3.66m x 12.2m timber float. The float forms the end of the dock and is intended to facilitate boat moorage.

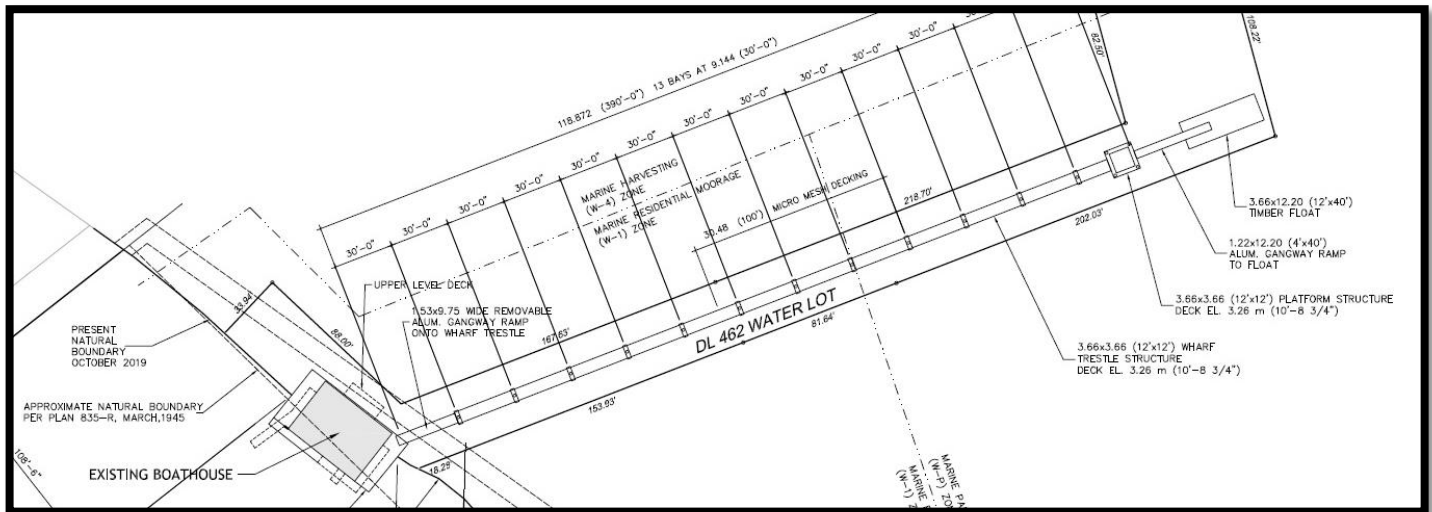


Figure 3: Proposed dock site plan. Full site plan and dock designs can be seen in Attachment B.

To locate the moorage float in deep water and prevent boats and the float from grounding on the seabed at low tide the proposed total dock length is approximately 140m. The applicant has provided a letter of rationale which is attached (see Attachment C).

DISCUSSION:

Official Community Plan (OCP):

The subject area (see Figure 1) is located within the Waterfront designation in “Official Community Plan Bylaw 2003, No. 1488”. The Waterfront designation is “applied to ocean and foreshore areas of the Ladysmith Harbour and associated upland and is intended to provide for a range of marine oriented uses, including marine industrial, marine commercial, recreation to include foreshore public trails/walkways and water recreation uses, and foreshore and estuary conservation uses.” The Waterfront designation does not provide any policies with respect to private moorage. The subject area is not within a development permit area.

Zoning Bylaw & Proposed Variances:

The subject area is split-zoned Marine Residential Moorage (W-1) and Marine Park and Recreation (W-P) in “Town of Ladysmith Zoning Bylaw 2014, No. 1860” (see Figure 4). Docks and private moorage are permitted in both zones. Approximately half of the dock length is located within the W-1 zone while the other half is located in the W-P zone. The proposed dock does not comply with several regulations in the W-1 zone and a setback in the W-P zone. The proposed variances and staff comments are provided in Tables 2 and 3.

Figure 4: Current zoning.

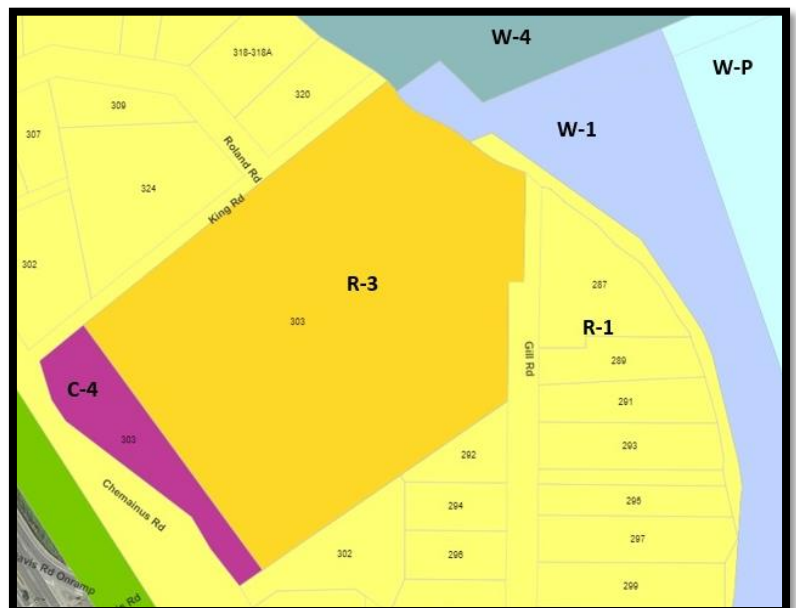


Table 2: W-1 Zone Provisions and Proposed Variances

W-1 Zoning Provision	Required	Proposed	Staff Comments	Proposed DVP
Maximum surface area of dock structures	20m ²	138m ²	<ul style="list-style-type: none"> The total surface area of the dock is approximately 280m², and of that area, 138m² is in the W-1 zone. There is no surface area restriction in the W-P zone. 	Vary to 138m ²
Maximum height of dock structures	2.0m	3.1m	<ul style="list-style-type: none"> Height is measured from the surface of the water at high tide to the highest point of the dock structure. The highest point of the dock structure in the W-1 zone portion of the subject area is the top of the guardrail. In total the height of the dock is 3.1 from the surface of the water at high tide to the top of the guardrail. The proposed gazebo structure is taller than the railing but is located in the W-P zone which does not have a height restriction. 	Vary to 3.1m
Maximum dock length	30m from the natural boundary of the upland property	73.15m	<ul style="list-style-type: none"> Total dock length is approximately 139m, with 73.15m within the W-1 zone. (Note, the variance is longer than the actual length of the dock because dock length is intended to be measured from the natural boundary, but the dock is connected to the existing boathouse which encroaches into the foreshore.) The dock's length is intended to reach deep water for moorage and to prevent the proposed float from bottoming out. The minimum clearance required between the seabed and underside of the float is 1.5m. The clearance between the seabed and the bottom of the proposed float is approximately 4m at lower low water level. There is no dock length restriction in the W-P zone. 	Vary to 77m
Minimum setback from W-4 zone	125m	19m (Approx)	<ul style="list-style-type: none"> Docks in the W-1 zone must be setback 125m from the boundary of the W-4 zone. There is no setback restriction from the W-4 zone in the W-P zone. See 'Adjacent Shellfish Harvesting Area' for more information. 	Vary to 19m
Minimum clearance above high water mark & seabed to allow pedestrian passage along the foreshore at low tide	2.0m above high water mark and seabed	1.83m above seabed	<ul style="list-style-type: none"> The minimum clearance above the high water mark is inapplicable to this dock. A small portion (1.5m length) directly adjacent to the boathouse does not meet the minimum clearance of 2m between the underside of the dock and the seabed to allow pedestrian passage at low tide. However, there will be several metres of length with a 2m+ clearance under the dock for pedestrian passage at lower low tide and mean low tide as shown in Schedule C of DVP 21-14 (Attachment A). The Zoning Bylaw requires 2.0m high pedestrian access under the dock at low tides only. 	Vary height above seabed to 1.8m for a 1.5m portion adjacent to boathouse

Table 3: W-P Zoning and Proposed Variance

W-P Zoning Provision	Required	Proposed	Staff Comments	Proposed DVP
Minimum setback from the seaward extension, perpendicular to the shoreline, of an adjacent upland side parcel line	6m	26m inside the setback (approx.)	<ul style="list-style-type: none"> Docks must be setback at least 6m from an imaginary extension of the side parcel lines of the upland parcel (303 Chemainus Road), into the sea. The south seaward extension of the side parcel line passes through the proposed dock such that the dock extends approximately 26m beyond the line. See Schedule A of DVP 21-14 (Attachment A). 	Vary to 0m

Proposed DVP Conditions:

In addition to varying the Zoning Bylaw regulations described above, DVP 21-14 (Attachment A) includes the following conditions to mitigate potential areas of concern:

- **Public access signage on the beach:** Staff conducted a site visit to the subject area on December 21, 2021. The encroachment of the existing boathouse (which contains a dwelling) creates the appearance that the beach area is private property (the boundary of the private property ends at the high water mark), which may discourage public access. Since the addition of the proposed dock may contribute to this, the DVP includes a condition requiring signage indicating that the foreshore is publicly accessible.
- **Signage related to waste disposal:** DVP 21-14 requires a sign on the proposed moorage float emphasizing the proximity of aquaculture sites and prohibitions on dumping sewage or waste. See 'Environmental Considerations' for details.

Provincial Approval:

Since the dock is located on aquatic Crown Land, approval from the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD) is required. The Ladysmith Harbour is located in an area where Specific Permission is required from MFLNRORD for moorage and docks on aquatic Crown Land. MFLNRORD granted Specific Permission for Private Moorage to allow the proposed dock for a period of 10 years on October 8, 2021. The Specific Permission and associated Management Plan for the proposed dock are attached (see Attachment D). The application for Provincial approval was forwarded to the Town and endorsed by Council on June 15, 2021 (see resolution CS 2021-205).

It is noted that the Specific Permission is for the dock only and does not address the encroachment of the boathouse into the foreshore. The Province was notified of the boathouse encroachment in a 2013 referral response for a previously proposed dock (see resolution CS 2013-203) and again when the applicant applied for a building permit to renovate the boathouse. The building permit application for the boathouse is currently on hold pending direction from the Province on what it plans to do about the boathouse encroachment.

Ministerial Order No. M329¹, which prohibits new applications for private moorage on Crown Land within the southern Gulf Islands and southeastern shoreline of Vancouver Island, came into effect on August 24, 2021 and expires on August 23, 2023. The prohibition is intended to provide the Province with time to assess the cumulative impacts of existing and proposed private moorages on the foreshore and marine environments. The provincial private moorage application appears to have been submitted prior to Ministerial Order No. M329 taking effect and is not subject to the prohibition.

The Specific Permission requires that the proposed dock comply with applicable zoning bylaw regulations. The Province has advised that if Council denies DVP 21-14, the Specific Permission will be cancelled.

Federal Government Comments:

Transport Canada

The applicant provided an approval letter from Transport Canada's Navigation Protection Program (NPP). The letter outlines conditions of NPP's approval and is attached (see Attachment E).

Fisheries and Oceans Canada (DFO)

The applicant also provided a letter of review from DFO which considers some potential environmental impacts of the proposal. DFO determined that the proposed dock would likely not result in contravention of applicable fisheries legislation provided that DFO's recommended measures are followed. DFO's letter (Attachment F) includes a number of recommendations related to environmental/water quality monitoring, appropriate construction windows, construction materials and habitat protection. One of the recommendations is to use grated-decking dock components (or similar) wherever possible to minimize shading impacts, particularly where located above eelgrass beds.

Municipal Sewer Line in the Foreshore:

The access ramp section of the proposed dock crosses a Town sanitary sewer line which is located in the foreshore and covered by a statutory right of way (SRW). The Town and the Province are both parties to the SRW. The Town's Engineering Department has requested that this section of dock be removable to allow access to the sewer line. This is a condition of the DVP and a sketch of the removable portion is provided in Schedule D of the DVP.

The existing sewer line has exceeded its planned lifespan, its condition is unknown, it's located within a sensitive environmental area, and Engineering anticipates designing and budgeting for replacement in the near future. The impact of pile removal and installation, which may cause vibrations that will damage or rupture the sewer line has been evaluated by staff and the applicant's geotechnical engineer.

¹ See: <https://www2.gov.bc.ca/gov/content/industry/crown-land-water/crown-land/land-use-application/section-10-1-closures>

The Province is unwilling to amend the Specific Permission to require the owner or the Province to bear responsibility if the line is damaged. Additionally, development variance permits cannot contain conditions related to managing construction impacts on infrastructure and related indemnifications and liabilities—i.e. the DVP cannot require the sewer line to be monitored or repaired and cannot require the applicant to post a bond that the Town can draw on to repair the line.

However, the applicant has provided a technical memo from a geotechnical engineer (Attachment G) which states that there is no significant risk to the sewer line if the memo's recommendations are followed (which includes monitoring by the engineer during construction). The Town's Engineering Department is satisfied that if the memo's recommendations are followed, the risk to the sewer line is low. The pile driving contractor has also added the Town to their liability insurance policy for up to \$5 million.

In the event of damage to the sewer line, the Town can access emergency funding to cover the cost of repairing the line and Provincial and Federal agencies would initially be responsible for environmental cleanup. These costs would then have to be recovered through legal and insurance processes.

Private use of the Foreshore:

Foreshore areas are publicly accessible Crown Land. The proposed private dock would create additional private space in this area. This is discussed further under 'Citizen/Public Relations Implications' and 'Proposed DVP Conditions'.

Environmental Considerations:

The applicant retained a biologist who conducted a habitat assessment of the proposed dock (see Attachment H). The assessment identified the presence of ecologically significant eelgrass beds in areas underneath and adjacent to the proposed dock. Subsequently (and as recommended by DFO), the applicant altered the original design of the walkway to allow light penetration/reduce shading impacts to a section of the eelgrass beds below. The mesh decking is shown in the attached dock designs (Attachment B) and is reflected in the Management Plan (Attachment D). The mesh decking covers a portion of the dock and not the whole dock, which consists mainly of timber decking.

The applicant plans to replace the old creosote timber piles, which have been identified as having adverse impacts to aquatic organisms, with steel piles. Removal of the creosote piles will create a short-term negative impact but will create a long-term gain since the creosote piles will be removed permanently. The applicant's Management Plan proposes mitigation measures to reduce the impact in the short term of the replacement process.

Adjacent Shellfish Harvesting Area:

The applicant is proposing to vary a 125m setback from the adjacent Marine Harvesting (W-4) zone. This zoning was created and implemented when the current Zoning Bylaw was adopted in

2014 (see 'Previous Council Direction'). The principal use in the W-4 zone is Shellfish Aquaculture, and there is an existing Crown Land tenure for shellfish aquaculture within the W-4 zone approximately 19m away from the proposed dock. The 125m setback in the W-4 zone is similar to a regulation in the Canadian Shellfish Sanitation Program (CSSP) manual, which prohibits the harvesting of shellfish (except for seed, spat bait or scientific purposes) within a 125m radius of marinas, wharves, finfish net pens, float homes or other floating living accommodation facilities². The 125m prohibited area in the CSSP manual is intended to reduce human health risks associated with consumption of contaminated shellfish, which may be caused by sewage/waste release from moored boats or liveaboards.

The Province determined that the proposed dock would not automatically trigger the 125m prohibited area since the proposed moorage float cannot accommodate more than 10 boats. It is noted that the Specific Permission does not restrict the number of boats permitted to be moored but it does prohibit liveaboards and discharge of waste from boats would contravene the *Vessel Pollution and Dangerous Chemicals Regulations* pursuant to the *Canada Shipping Act*. Liveaboards are also prohibited in the W-1 and W-P zones. Staff have not investigated whether DVP 21-14 can restrict the number of moored boats, as such a condition would be difficult to enforce and may interfere with marine navigation which is Federal jurisdiction. Staff also note that the dock's size, design and tidal conditions also restrict the number of boats that can be moored to the dock.

Other Considerations:

In 2013, Council directed staff to develop regulations for private moorage and shellfish culture use as part of the development of the current Zoning Bylaw with the W-1, W-4 and W-P zones resulting from that process. A dock for private moorage does not appear possible within the subject area at all without requiring one or more variances.

In 2013, Council provided comment to the Province recommending that the proposal for private moorage at that time was not in the community's interest and should be denied. The proposed dock at the time was similar in length (136m) to the currently proposed dock but had a larger float (12x15m). The previous proposal was also for a "Commercial A" private moorage. It was unclear what the commercial use of the proposed moorage was and, at the time, commercial dock was not a permitted use in the applicable W-P zone (the area was subsequently rezoned to W-1 and W-P). The previously proposed dock was to be for the exclusive use and benefit of a proposed upland development with nine strata units. The newly proposed dock is also intended for the exclusive use of the upland property owner, and while the use of the upland property is currently for single family residential purposes, it is zoned to allow multi-family residential use.

² The [CSSP](#) is a federal food safety program jointly administered by the Canadian Food Inspection Agency, Environment and Climate Change Canada, and DFO.

The Town has received public feedback expressing concerns about the dock. This is described under 'Citizen/Public Relations Implications' (See Attachment I).

ALTERNATIVES:

Council can choose to:

1. Approve DVP 21-14.
2. Approve DVP 21-14 as amended (for example, with modified conditions).
3. Deny DVP 21-14 and direct that the Province be requested to cancel Specific Permission No. V942447 as the proposed private moorage facility does not comply with "Town of Ladysmith Zoning Bylaw 2014, No. 1860".
4. Refer DVP 21-14 back to staff or the applicant for further review as specified by Council.

FINANCIAL IMPLICATIONS:

See 'Legal Implications' below.

LEGAL IMPLICATIONS:

DVP applications are discretionary decisions of Council and do not establish a "precedence"—i.e. Council is not obliged to approve the proposed DVP, and approving the DVP does not entitle other property owners (e.g. other waterfront property owners who would like to build similar docks) to the same variances. Similarly, Council's decisions on previous crown referrals for this site (i.e. resolutions CS 2021-205 and CS 2013-203) do not oblige Council to either approve or deny the proposed DVP.

As noted above, the contractor has added the Town to their liability coverage and the risks to the Town's sewer line appear to be manageable.

It should be noted that the insurance coverage, Provincial approval and engineering oversight do not indemnify the Town or place the burden for the total cost of repairing the sewer line on another party. A bond from the applicant that the Town can draw on to cover repair costs cannot be collected as a condition of a DVP and the Town does not require building permits for docks. However, there are Town funds available for emergency use if necessary. It is possible that, in event that the sewer line is damaged, the cost to the Town of repairing the sewer line exceeds costs that can be recovered through legal processes from the applicant, contractor or insurance company.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Notice of the proposed variance was issued in accordance with the requirements of the *Local Government Act* and "Town of Ladysmith Development Approval Procedures Bylaw 2008, No. 1667". On December 23, 2021 a notice was sent to the property owners and residents within 60m of the proposed dock and the upland subject property. At the time of writing, the Town has received five submissions from the public, plus one from the applicant (in addition to the applicant's letter of rationale). Concerns with respect to DVP 21-14 are summarized in Table 4, and the submissions are provided in Attachment I. Additional submissions received after the publication of this staff report will be distributed to Council as a late agenda item.

Table 4: Summary of Public Concerns & Staff Comments

Concern/Issue	Staff Comments
Impacts to the adjacent shellfish aquaculture area due to boat traffic, increased activity in the area, and changing water flows caused by the dock	See 'Environmental Considerations'
Negative impacts to the ecosystem through shading, increased levels of human and boat activity	See 'Environmental Considerations'
Will block routes for kayaks, canoes, etc.	Staff have not evaluated the impact of the dock for non-motorized watercraft routes. The impact of the proposal on marine navigation was evaluated by the federal government but Transport Canada's letter does not specifically discuss non-motorized/small vessels.
Reduction of clearance under dock will impede pedestrian passage	The proposed clearance reduction from 2.0m to 1.8m between the underside of the dock and the seabed at low tide is for a 1.5m length adjacent to the boathouse. At lower low tide and mean low tide, there will be several metres (the tide goes out approximately 80-100m at lower low tide) of length with a 2m+ clearance under the dock for pedestrian passage as shown in Schedule C of DVP 21-14 (Attachment A). Pedestrian passage along the foreshore of the subject area is not currently available at higher tides (i.e. high tide and the higher of the low tides) due to the location of the existing boathouse within the foreshore and there is no Zoning Bylaw requirement for pedestrian access under the dock at high tide.
Proposed dock is too large, too tall, too long	The applicant has expressed that the purpose of the dock's length is to reach deep water to allow boats to moor without scouring the seabed and to prevent the moorage float from bottoming out.
View obstruction	A view study has not been submitted with the application. It is expected that the dock will be visible from neighbouring properties.
Consultation with Province, DFO, adjacent shellfish harvesting tenure	The proposed dock was reviewed by the Province and DFO prior to the applicant's DVP submission. A notice for the DVP was sent to the owner of the adjacent shellfish harvesting tenure.
Larger dock may allow more and larger vessels	The Province concluded that the proposed moorage structure could not accommodate more than 10 boats. However, the Specific Permission does not limit the number of vessels permitted at any one time.
Increase noise, pollution, boat traffic	An increase in boat traffic may be expected once the dock is complete. It is unlikely the Town will be able to enforce noise from boats, due to federal jurisdiction, the practicalities of accessing boats believed to be emitting noise and the wording of the Town's noise bylaw.
Benefit to one property owner to the detriment of many people	Aside from emergency moorage, the proposed dock has no direct benefit to the public as it is for the exclusive use of the upland property owner. The foreshore covered by the proposed dock would otherwise be accessible to the public if the dock is not constructed. The existing encroachments (i.e. the boathouse) will not be remedied as part of this proposal.
Dock will not enhance use of the area by the public	
Existing encroachments	The existing boathouse encroaches into the foreshore. The siting of the boathouse is not subject to DVP 21-14. See 'Provincial Approval' for details.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

This application was referred to the Building Inspection and Engineering Departments. The Town does not require Building Permits for docks and Engineering flagged concerns about the sanitary sewer line and SRW on the foreshore which is covered in the “Discussion” section of the report.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|---|--|
| <input type="checkbox"/> Infrastructure | <input type="checkbox"/> Economy |
| <input type="checkbox"/> Community | <input checked="" type="checkbox"/> Not Applicable |
| <input type="checkbox"/> Waterfront | |

I approve the report and recommendation.

Allison McCarrick, Chief Administrative Officer

ATTACHMENTS:

- A. DVP 21-14
- B. Dock Designs
- C. Applicant Rationale Letter
- D. FLNRORD Specific Permission and Management Plan
- E. Transport Canada Approval Letter
- F. DFO Letter of Review
- G. Geotechnical Engineer’s Technical Memo
- H. Applicant’s Habitat Assessment
- I. Public Submissions



TOWN OF LADYSMITH DEVELOPMENT VARIANCE

PERMIT

Government Act)

(Section 498 *Local*

FILE NO: 3090-21-14

DATE: January 11, 2022

Name of Owner(s) of Land (Permittee): Province of British Columbia

Applicant: Pamela Anderson

Subject Property (Civic Address): 303 Chemainus Road

1. This Development Variance Permit is issued subject to compliance with all of the bylaws of the Town of Ladysmith applicable thereto, except as specifically varied or supplemented by this Permit.

2. This Development Variance Permit applies to and only to those lands within the Town of Ladysmith described below and any and all buildings, structures and other development thereon:

Unsurveyed Crown foreshore or land covered by water being part of the bed of Ladysmith Harbour, all within Cowichan District, containing 0.182 hectares, more or less, adjacent to the upland parcel, legally described as That Part of Lot 43, Oyster District, Shown Outlined in Red on Plan 835-R Except That Part in Plans 7094 and VIP58434 (303 Chemainus Road)
(the "Land")

3. Section 16.1 "Marine Residential Moorage (W-1)" zone of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860" is varied for the Land, to allow for the construction of a dock as shown in **Schedule A – Dock Site Plan** and **Schedule B – Dock Elevations**, and **Schedule C – Pedestrian Passage** as follows:

- i. Ss. 3.b): the maximum surface area of the proposed dock is increased from 20.0 square metres to 138.0 square metres;
- ii. Ss. 4.a): the maximum height of the proposed dock is increased from 2.0 metres to 3.1 metres.
- iii. Ss. 4.c): the maximum length of the proposed dock is increased from 30 metres to 77 metres as measured from the *Natural Boundary* seaward to the W-1 zone boundary.
- iv. Ss. 4.d): the minimum setback from the adjacent W-4 zone is decreased from 125 metres to 19 metres for the proposed dock.

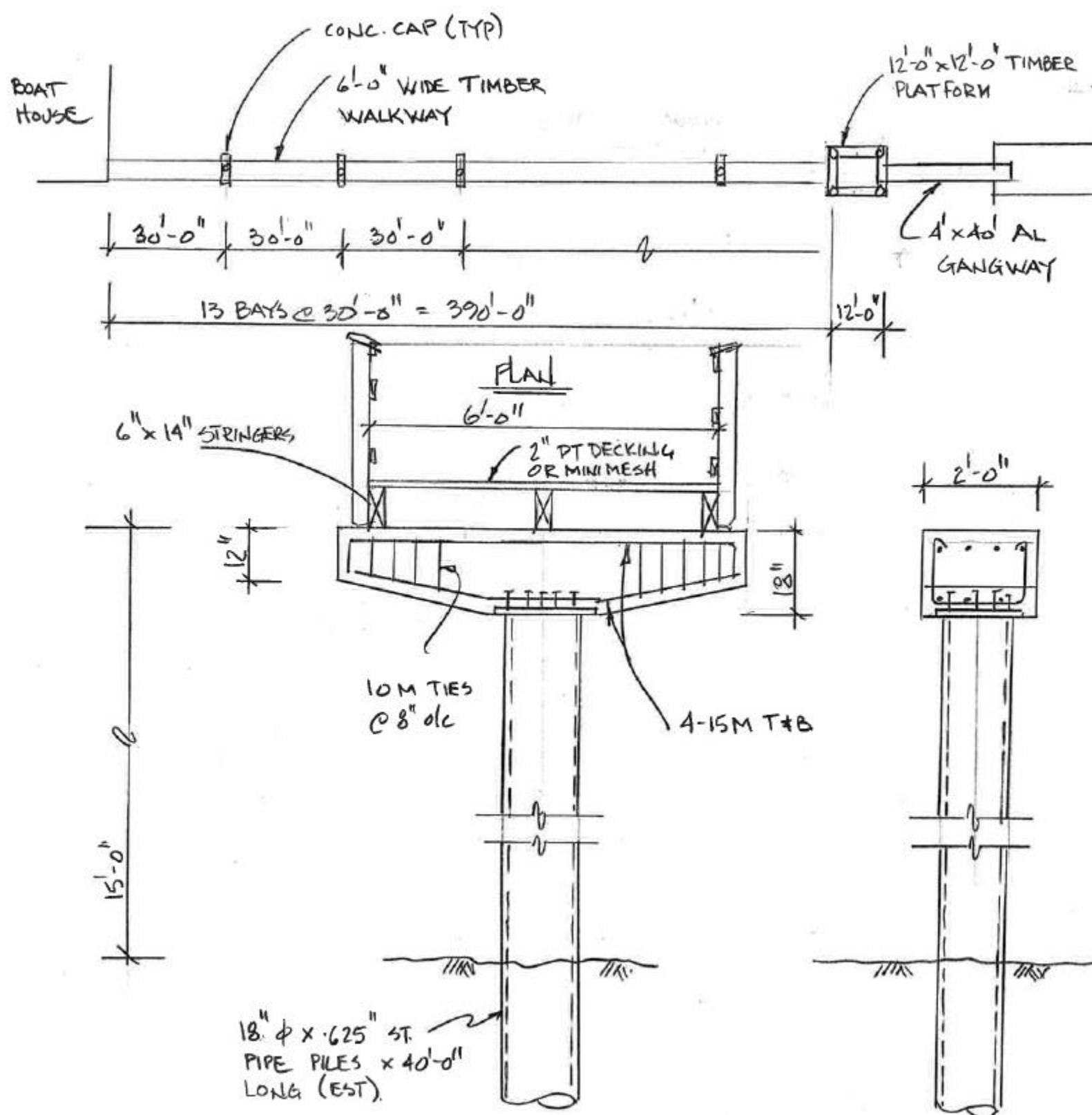
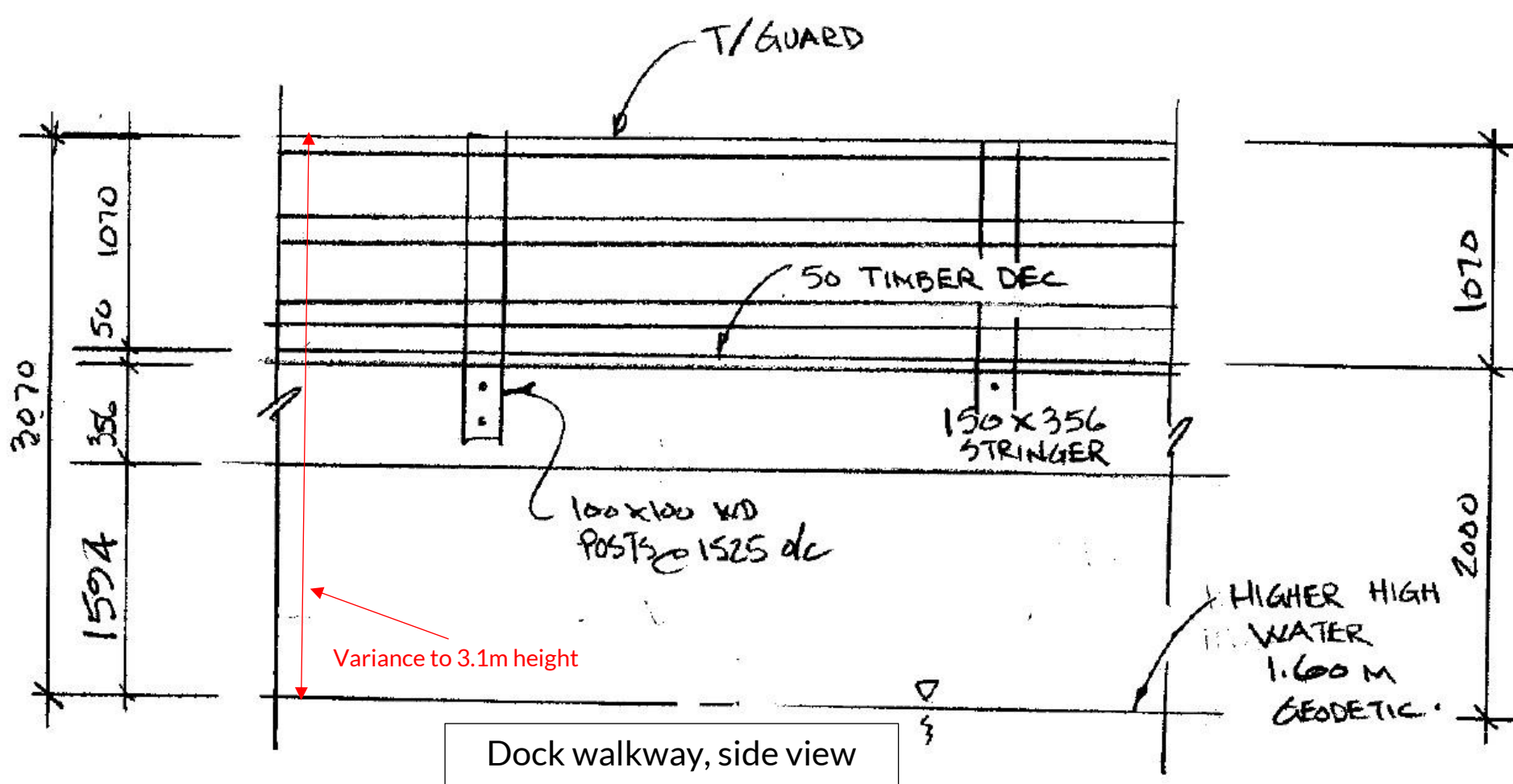
- v. Ss. 4.g): the minimum clearance between the proposed dock and the seabed is reduced from 2.0 metres to 1.8 metres for a 1.5 metres wide segment adjacent to the existing boathouse, as shown in **Schedule C – Pedestrian Passage**.
4. Section 16.6 "Marine Park and Recreation (W-P)" zone of the "Town of Ladysmith Zoning Bylaw 2014, No. 1860" is varied for the Land, by reducing the minimum setback of *Structures* from the seaward extension, perpendicular to the shoreline, of an adjacent upland *Side Parcel Line* or the water *Lot* boundary, from 6.0 metres to 0.0 metres, as shown in **Schedule A – Dock Site Plan**.
5. The applicant, as a condition of the issuance of this Permit, agrees to install, at the applicant's expense, the following signage:
- One sign on either side of the dock which indicates that the foreshore is a publicly accessible area.
 - One sign on the proposed moorage float which indicates the proximity of marine shellfish harvest sites and that dumping of sewage or waste of any kind into the marine environment is strictly prohibited.
6. The applicant, as a condition of issuance of this Permit, agrees to construct the dock with a removable section over SRW PLAN 200RW as shown in **Schedule A – Dock Site Plan** and **Schedule D – Removable Dock Section**.
7. The land described herein shall be developed strictly in accordance with terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part thereof.
8. The following plans and specifications are attached:
- Schedule A – Dock Site Plan**
 - Schedule B – Dock Elevations**
 - Schedule C – Pedestrian Passage**
 - Schedule D – Removable Dock Section**
9. Issuance of this Permit does not exempt the proposed dock from meeting all applicable Federal and Provincial restrictions and regulations.
10. Notice of this Permit shall be filed in the Land Title Office at Victoria under s.503 of the *Local Government Act*, and upon such filing, the terms of this Permit or any amendment hereto shall be binding upon all persons who acquire an interest in the land affected by this Permit.
11. THIS PERMIT IS NOT A BUILDING PERMIT. No occupancy permit shall be issued until all items of this Development Variance Permit have been complied with to the satisfaction of the Corporate Officer.

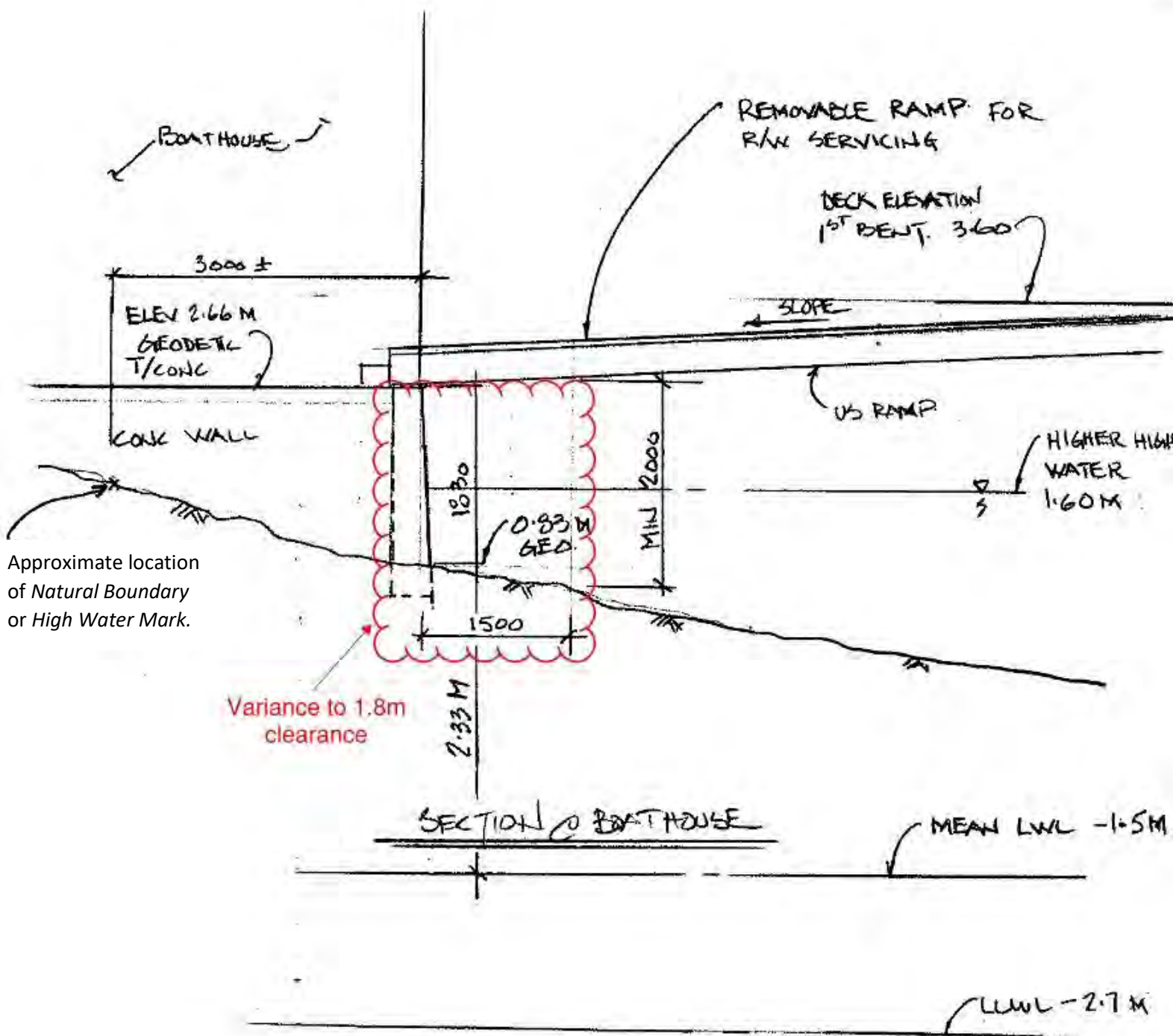
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TOWN OF LADYSMITH ON THE ____ DAY OF _____ 202__.

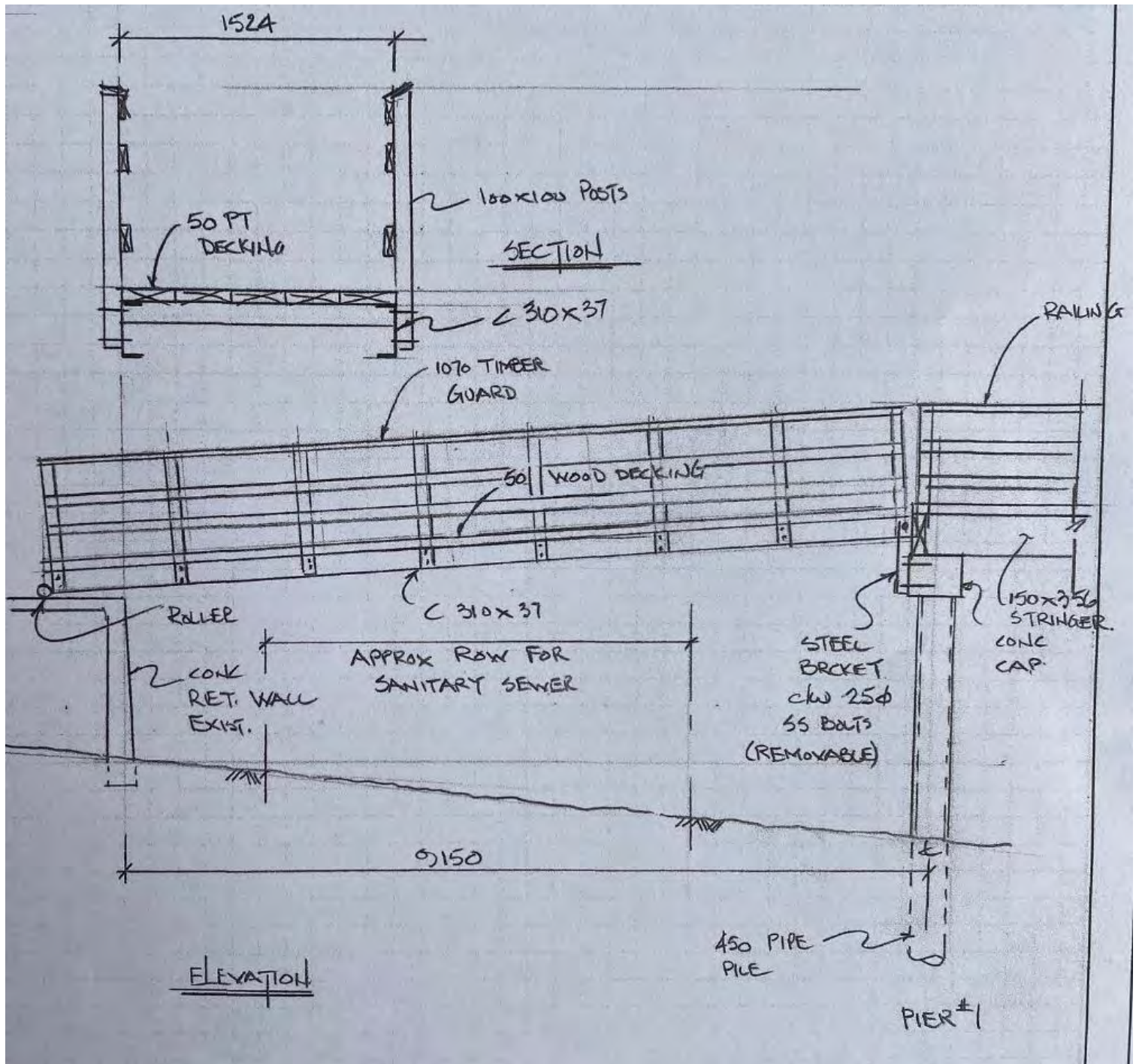
Mayor (A. Stone)

Corporate Officer (D. Smith)

DRAFT



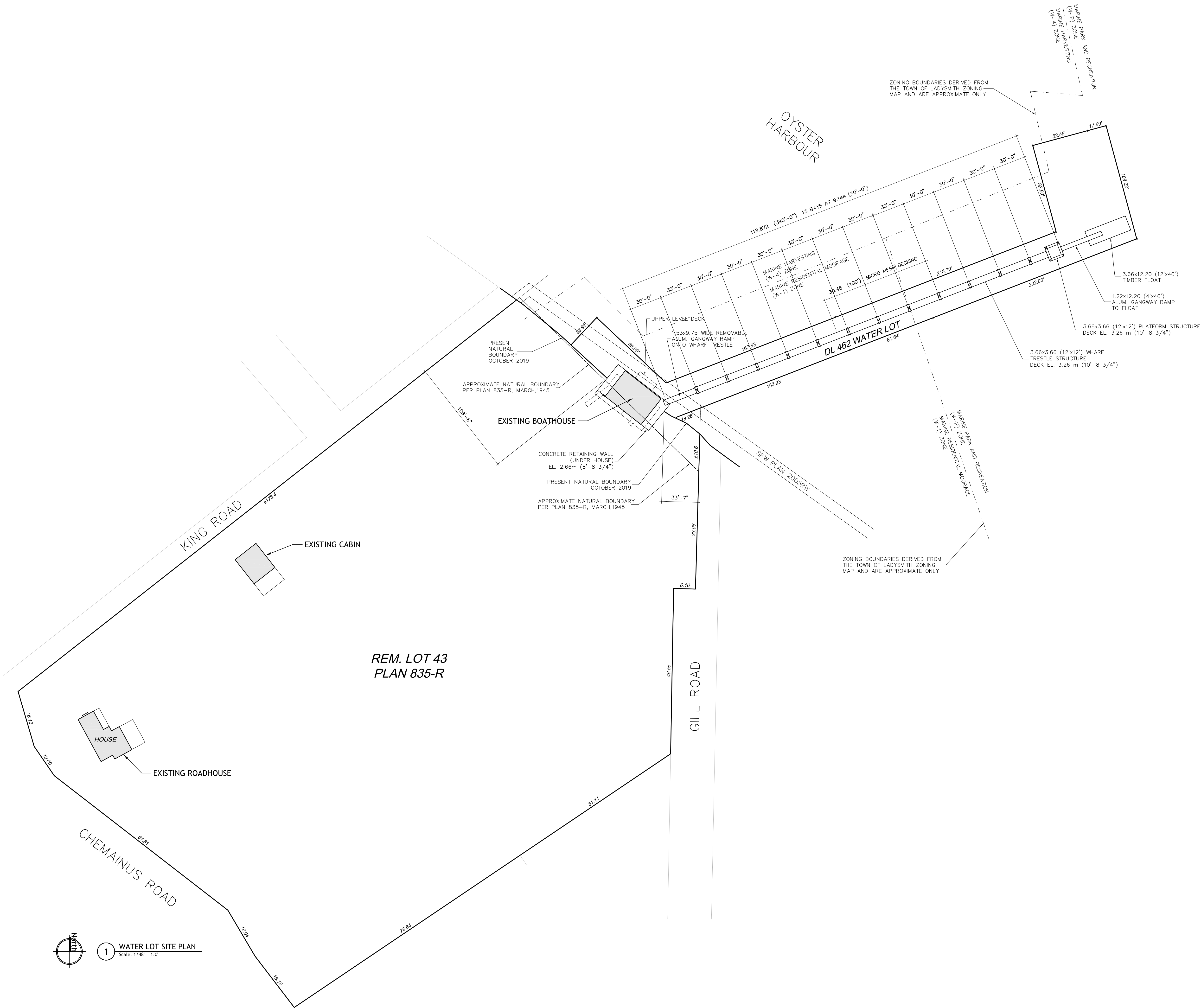




Schedule D – Removable Dock Section
DVP 3090-21-14
303 Chemainus Road

darryl jonas
ARCHITECT

AIBC | MArch BEDS NZCD (arch)
P.O. Box 235 Shawnigan Lake BC
250 743 8728 djonas@telus.net



08 November 2021
issued for review, comment
issue/revision/date/description

ARCADY
WHARF REPAIR
& REBUILD
303 Chemainus Road
Ladysmith BC

title

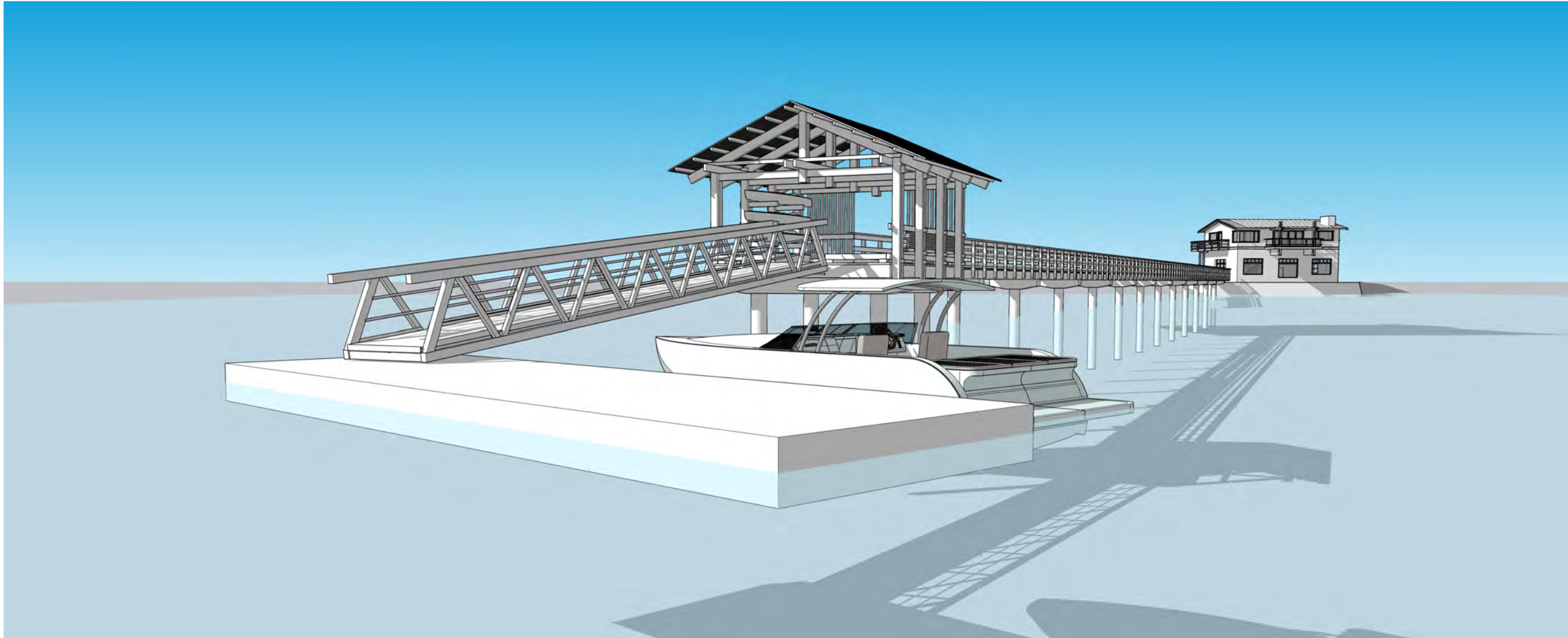
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SITE PLAN

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Nov '21	as shown
drawn	revision
-	0
sheet	

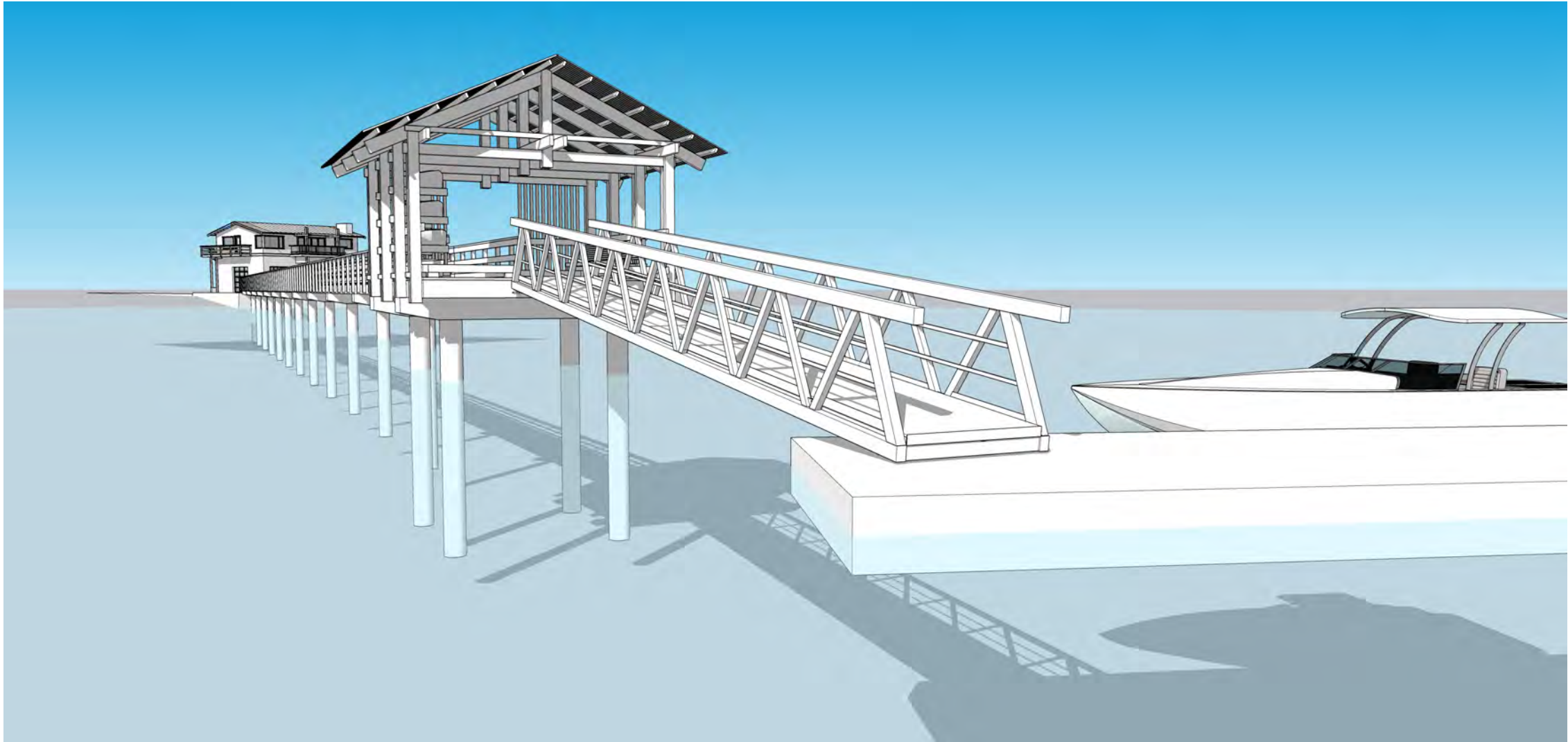
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1. View of wharf, covered area, gangway and float



3. View of wharf, covered area, gangway ramp and float



2. View of wharf, covered area, gangway ramp and float

08 November 2021
issued for review, comment
issue/revision/date/description

ARCADY
WHARF REPAIR
& REBUILD
303 Chemainus Road
Ladysmith BC

title

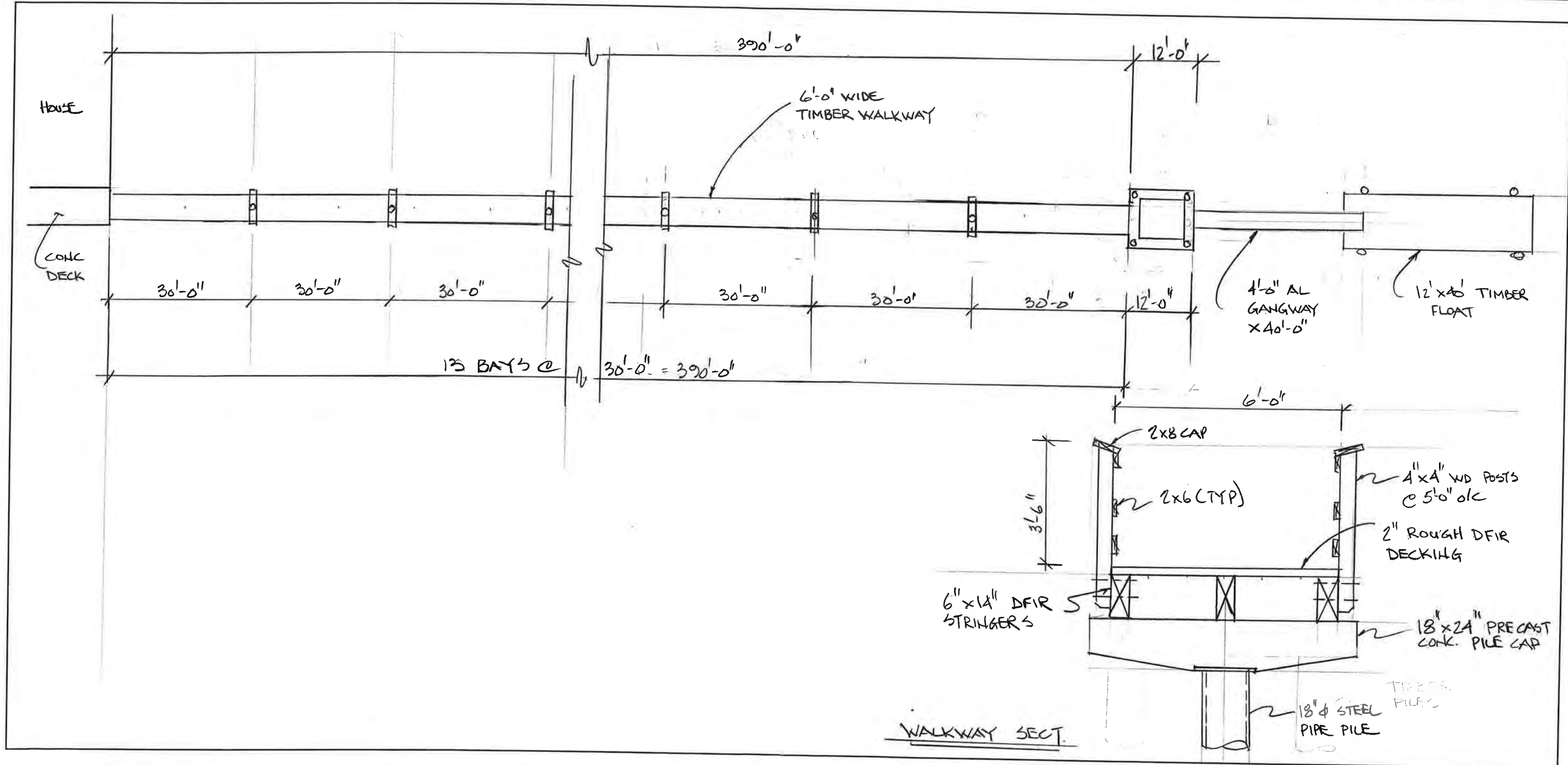
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IMAGES

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drawn	-	revision	0
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Subject:			Design: MGH	SHEET ____ OF ____
			Check:	

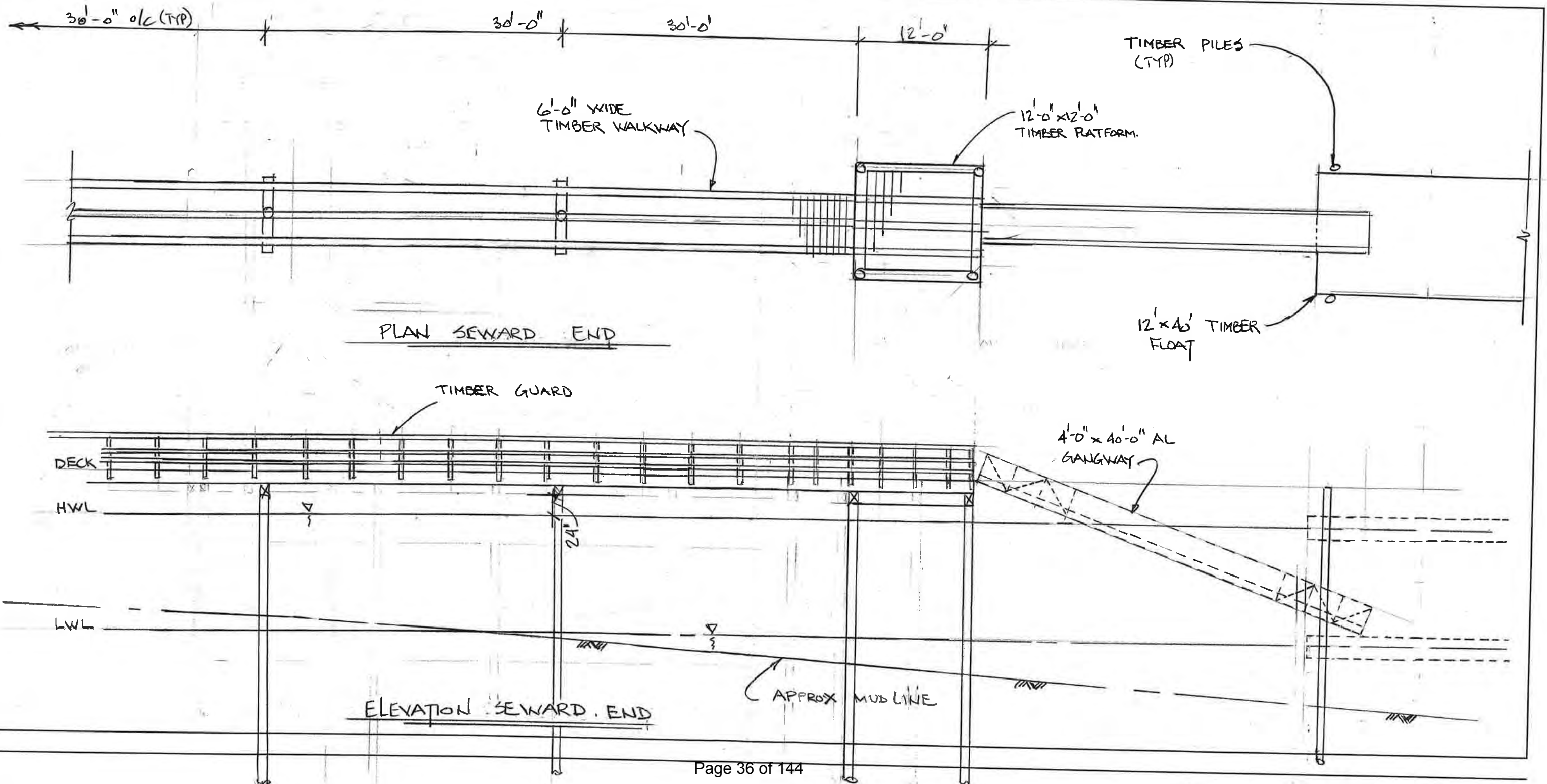
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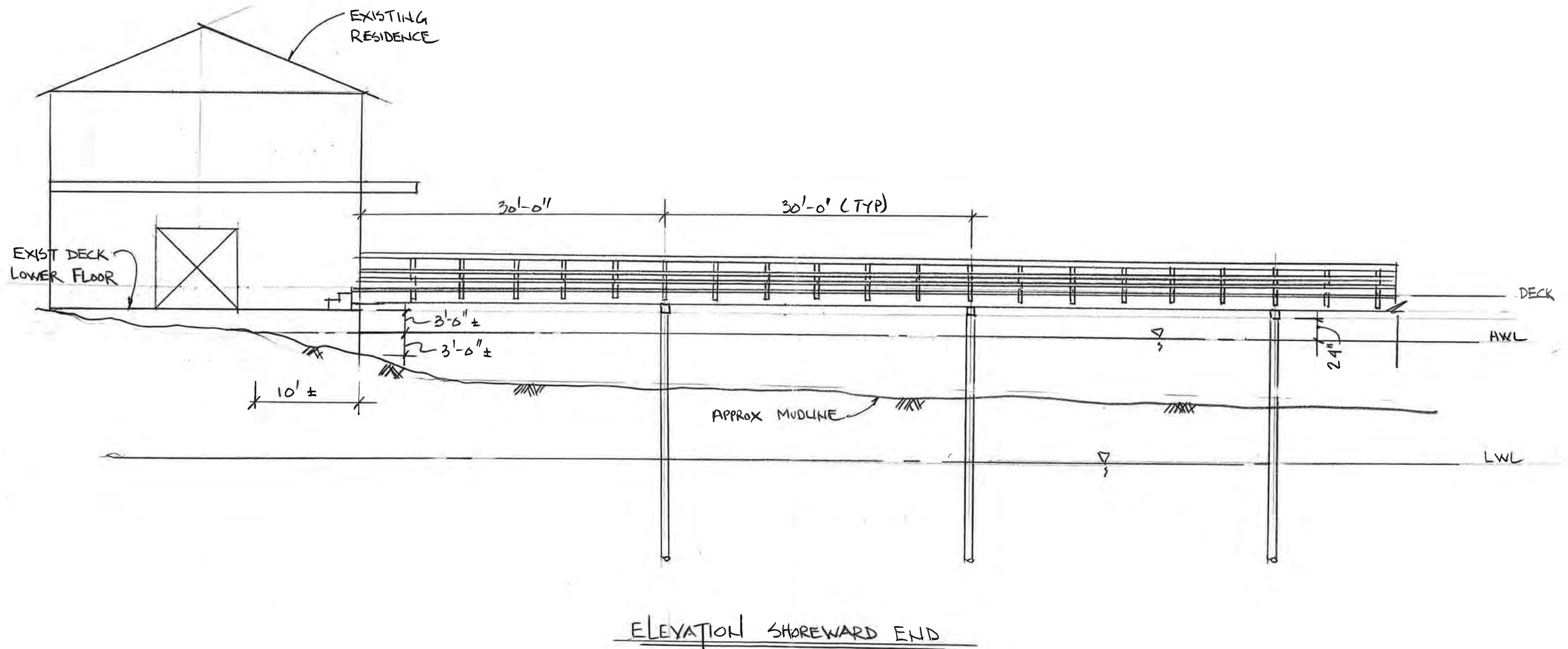
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Subject:			Design: MGH	
			Check:	

Metric Grid



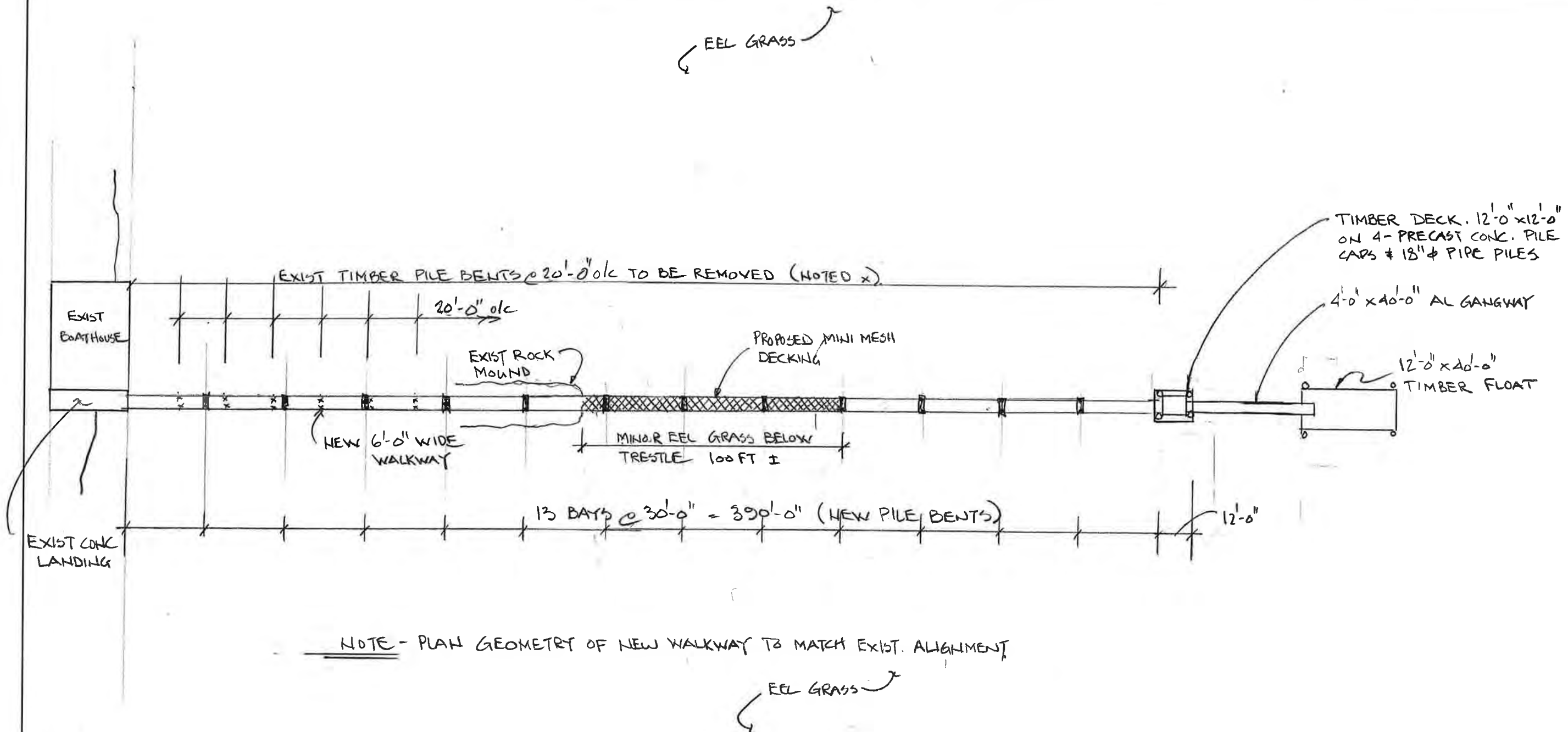
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			Check:	

Metric Grid

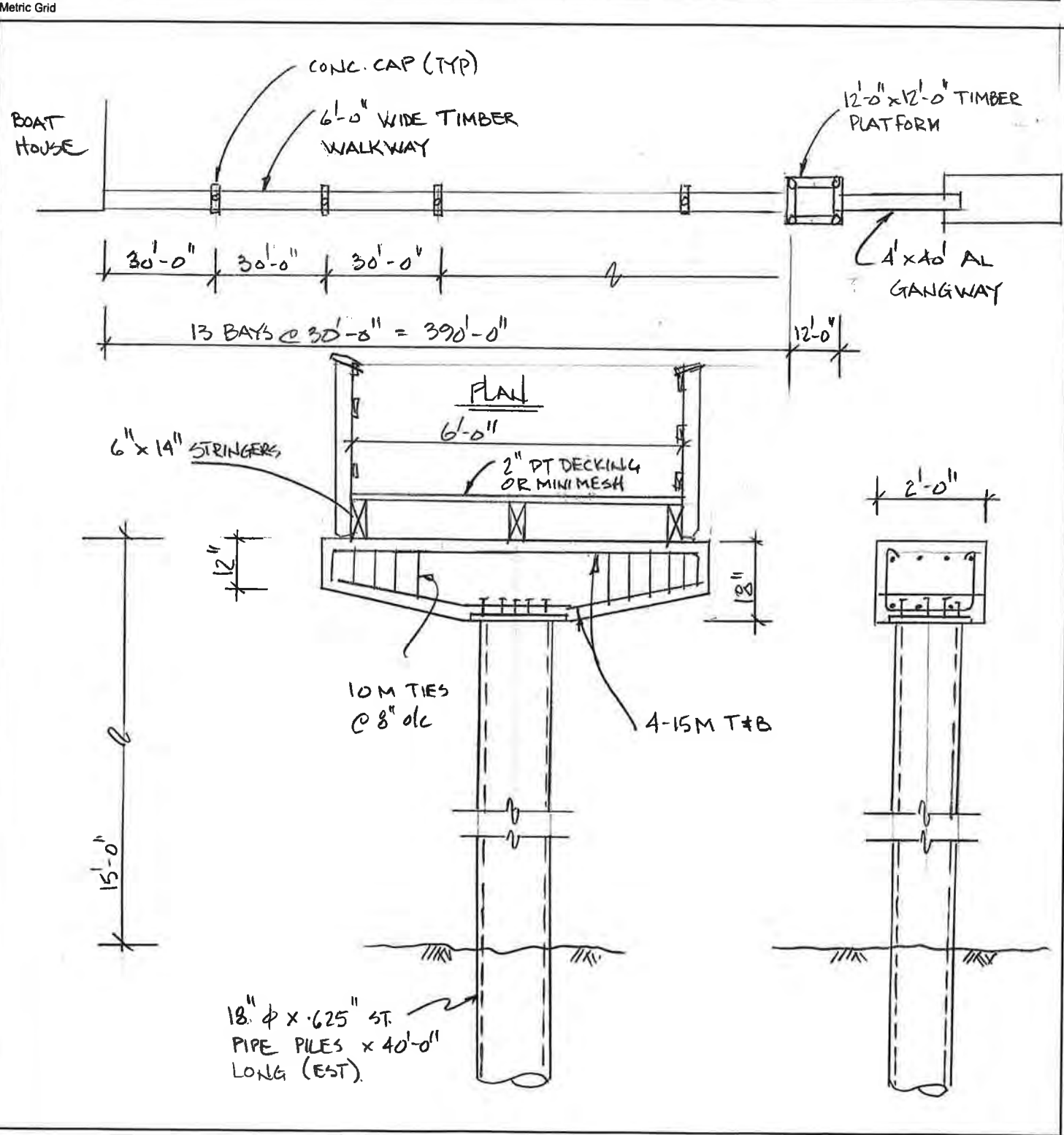


Project #: 5483-001	Client: PAMELA ANDERSON.	Discipline: <input type="checkbox"/> Structural - Buildings <input type="checkbox"/> Structural - Bridges <input type="checkbox"/> Civil - Municipal <input type="checkbox"/> Industrial - Marine <input type="checkbox"/> Building - Envelope <input type="checkbox"/> _____	Date: JULY 20 / 21	SKETCH # SK#6 REV#3
Project Title: ANDERSON RESIDENCE DOCK UPGRADE			Drawn:	
Subject: GENERAL ARRANGEMENT			Design: MGH	SHEET _____ OF _____
			Check:	

Metric Grid



Project #: 5483-001	Client: P. ANDERSON	Discipline: <input type="checkbox"/> Structural - Buildings <input type="checkbox"/> Structural - Bridges <input type="checkbox"/> Civil - Municipal <input type="checkbox"/> Industrial - Marine <input type="checkbox"/> Building Envelope	Date: JULY 20 / 21	SKETCH #
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Subject: STEEL PILE OPTION.			Design: MGH	SHEET
			Check:	7 of



123308

BLK. "B",
L. 237.

BLK. "A",
L. 261.

L. 327.

AREA OF L. 462.

From L. 261 - 0.44 Ac.

V.C.L. - 0.08 Ac.

TOTAL - 0.52 Ac.

L. 261.

OFFICIAL PLAN

SURVEY PLAN

OF

LOT 462, COWICHAN DISTRICT.

SCALE :- 1 INCH = 100 FEET.

LEGEND.

- - P.Con. - Indicates Standard Concrete Post.
- - I.P. " Standard Iron Post.
- - O.I.B. " Old Iron Bar or Pipe.
- C " Stone Cairn.
- o " Hub Set.

Bearings are derived from the West B'dy. of Lot 327.

I, John H. Drewry, of the city of Victoria, a duly authorized Land Surveyor for the Province of British Columbia, make oath and say as follows :- I commenced the survey represented by this plan on the 9th day of April, 1962 and completed it on the 12th day of April, 1962. I was present at and did personally superintend the said survey. This plan is a correct representation of the work done on the ground by me.

Sworn before me this 22nd day of May, 1962

[Signature]

A Commissioner for Taking Oaths in Brit. Col.

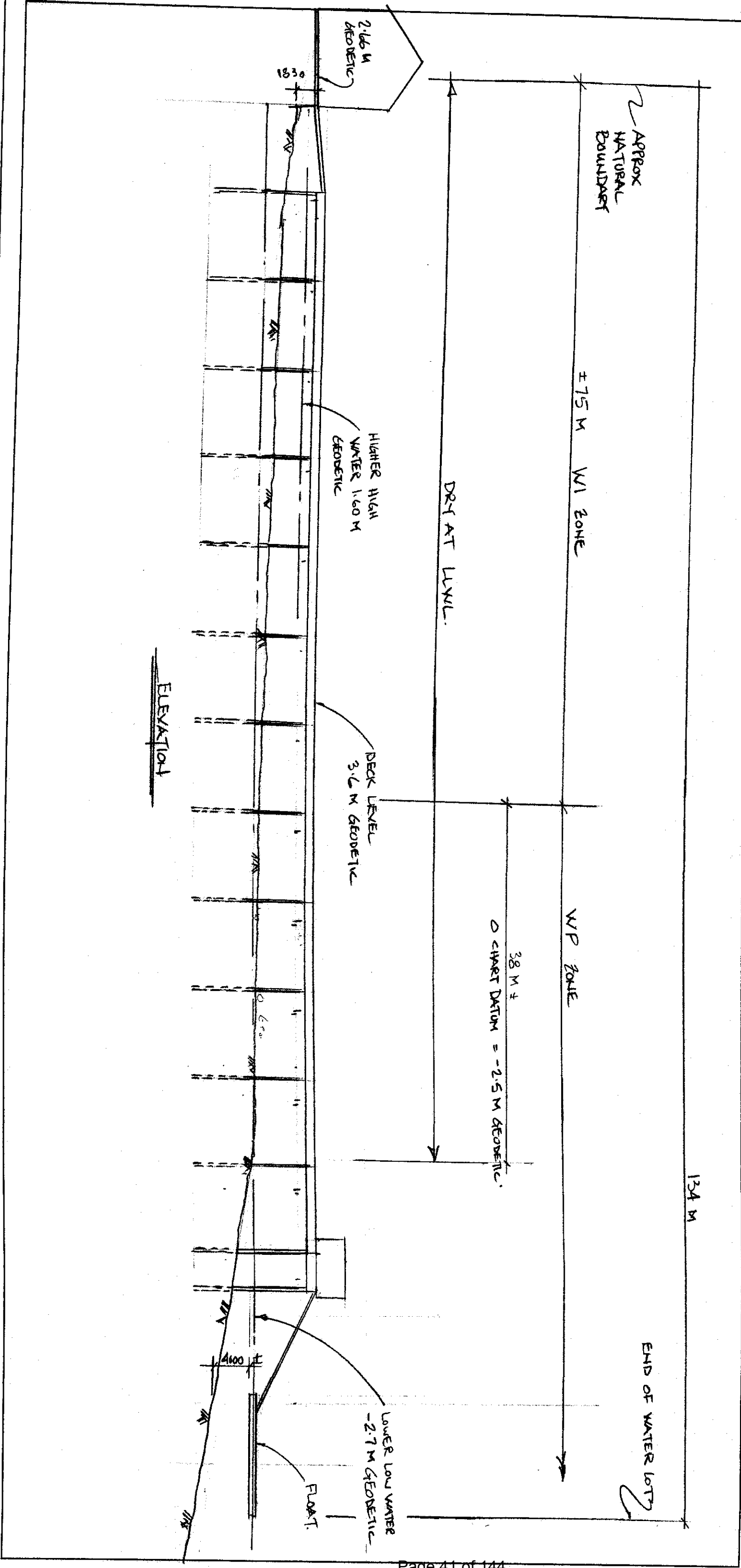
[Signature]

B.C.L.S.

F.B.2 C.B.7 PP.18-21

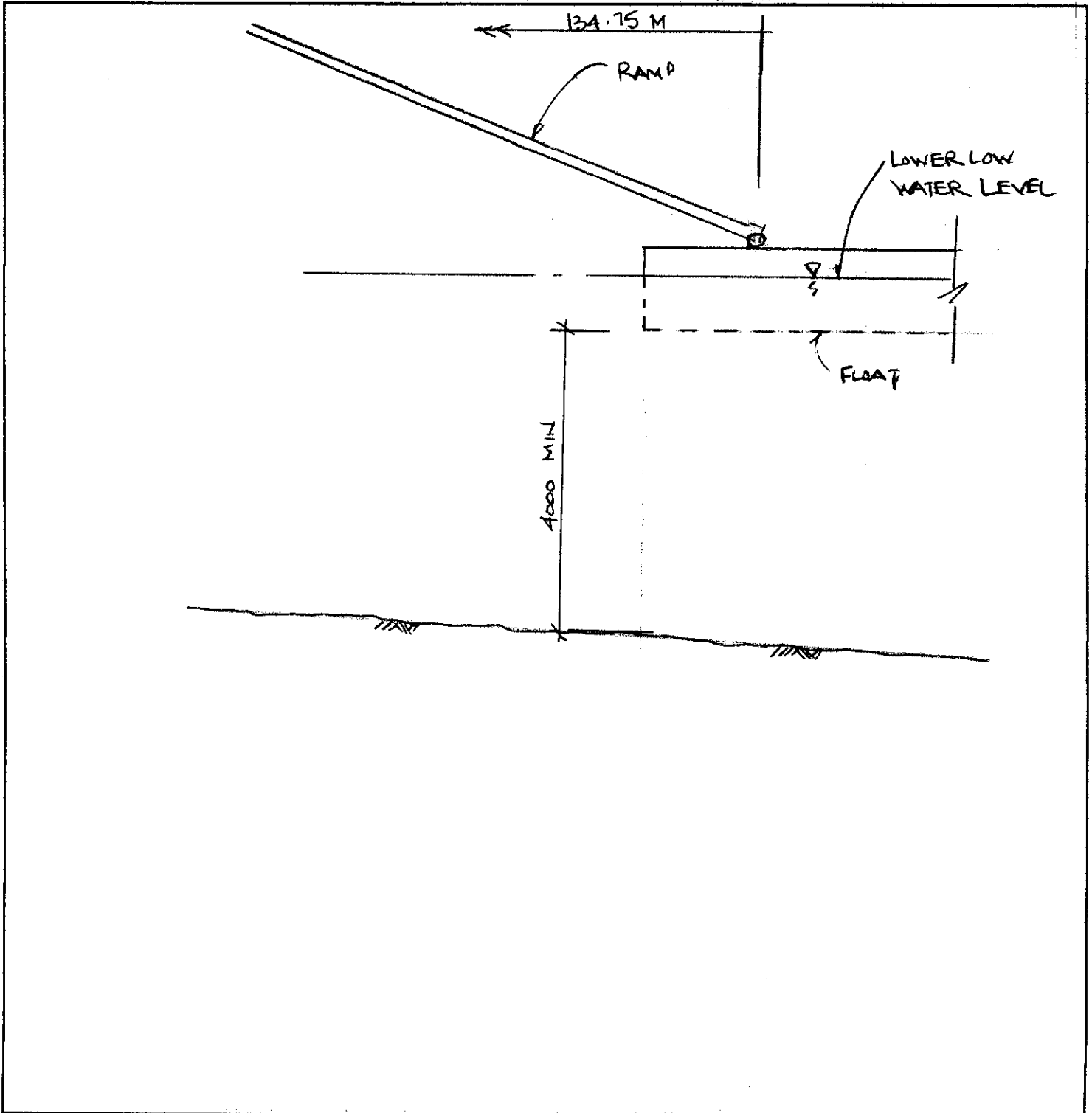
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Subject: ELEVATION VIEW OF DOCK						Design: MGH		SHEET	
Metric Grid						Check:		OF	



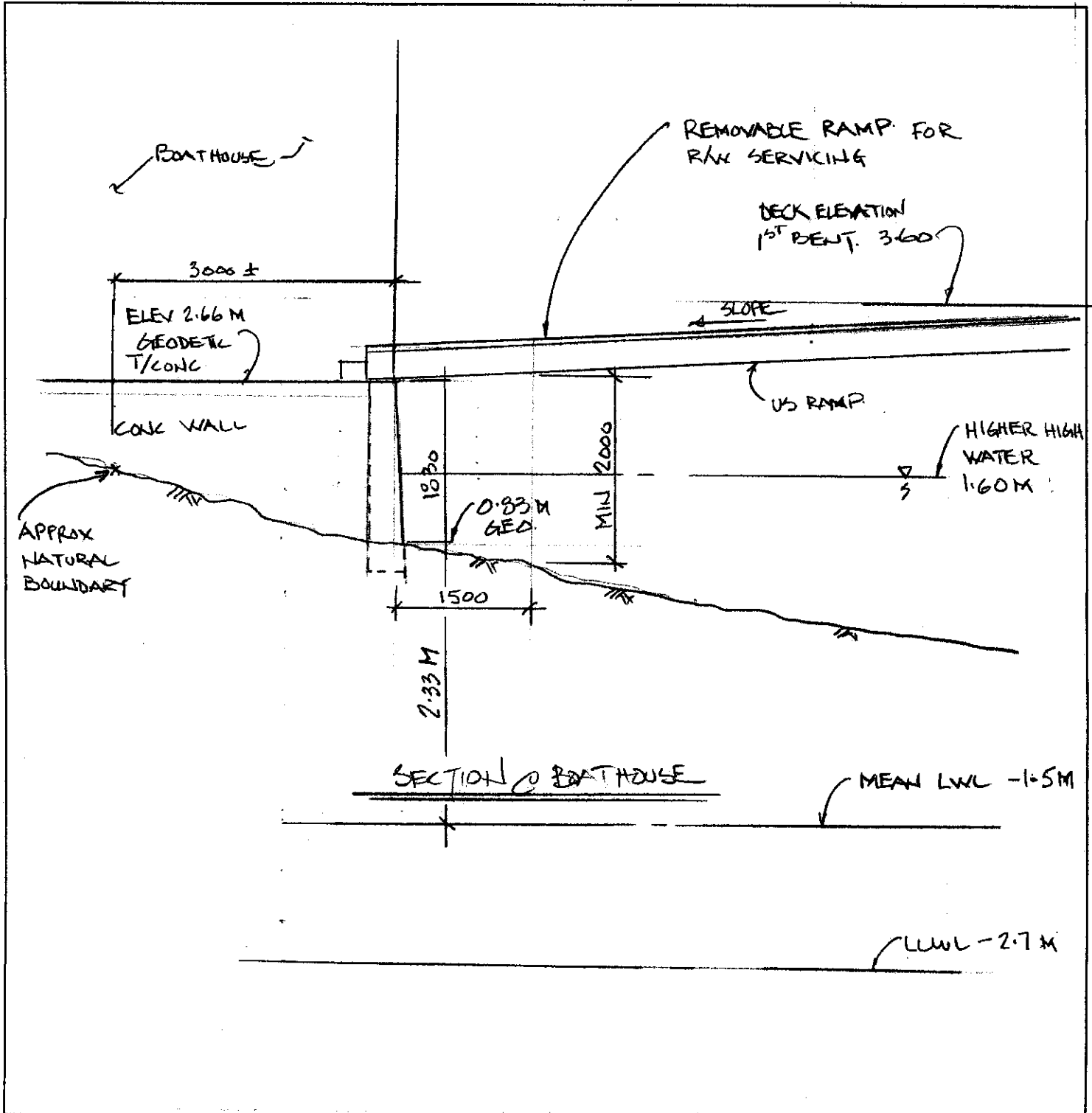
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Subject: @ LLWL		<input type="checkbox"/> Structural - Bridges	Design: MGH	SHEET
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		<input type="checkbox"/> Industrial - Marine		
		<input type="checkbox"/> Building Envelope		

Metric Grid



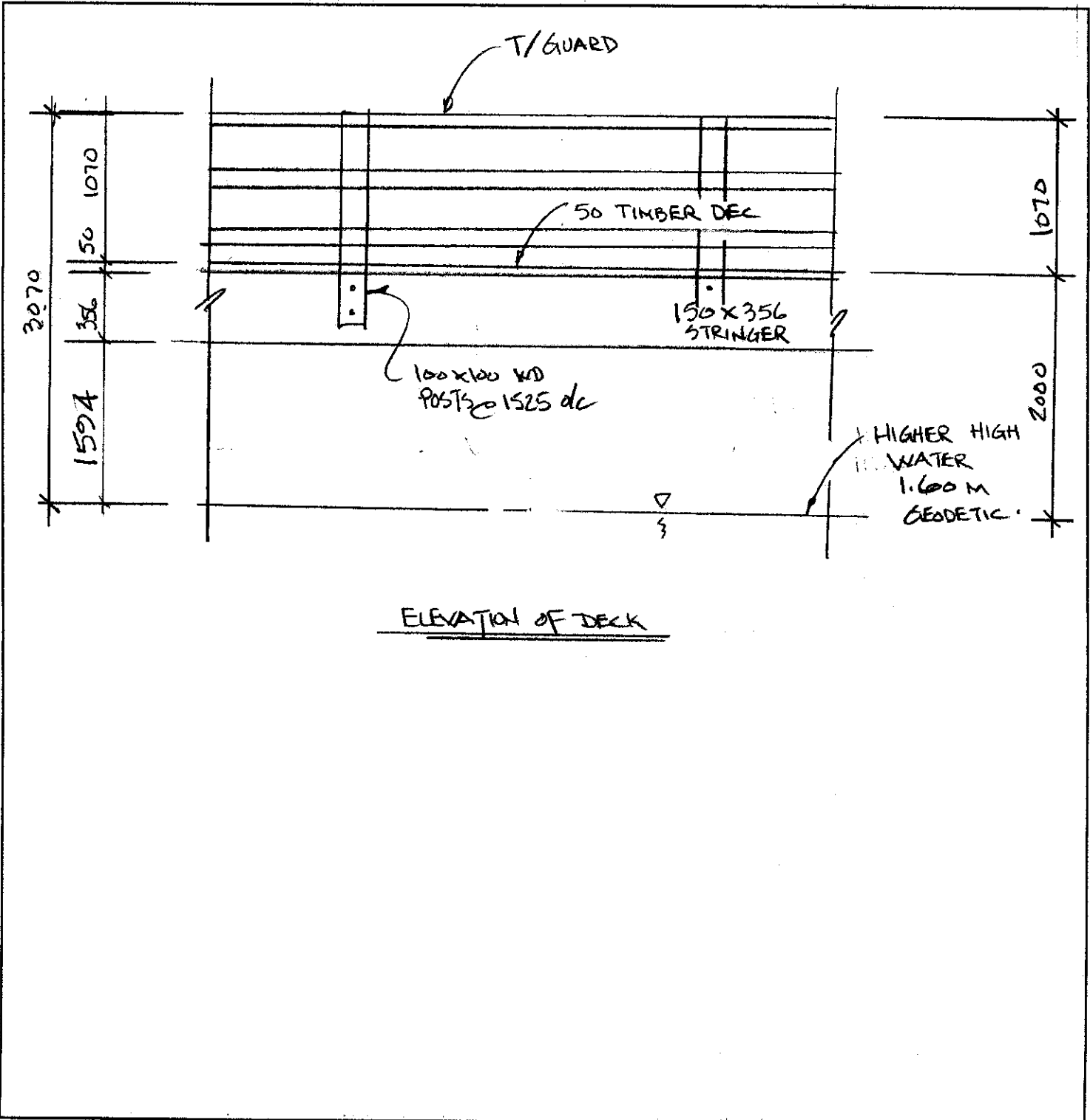
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Subject:			Design: MGH	SHEET
			Check:	____ of ____

Metric Grid



Project #: 5483-001	Client: P. ANDERSON	Discipline:	Date: DEC 7 / 2024	SKETCH #
Project Title: DOCK STRUCTURE REBUILD		<input type="checkbox"/> Structural - Buildings <input type="checkbox"/> Structural - Bridges <input type="checkbox"/> Civil - Municipal <input type="checkbox"/> Industrial - Marine <input type="checkbox"/> Building Envelope	Drawn:	SK #1
Subject:			Design: MGH	SHEET
			Check:	____ of ____

Metric Grid



ELEVATION OF DECK

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ARCHITECT

22 November 2021

Mayor and Council
Town of Ladysmith
410 Esplanade Avenue
Ladysmith, BC
V9G 1A2

Dear Mayor and Council,

Re: Development Variance Permit Application, Wharf Reconstruction, DL Water Lot 462
Upland Property: 303 Chemainus Road, Ladysmith, BC

Arcady, the property located at 303 Chemainus Road, has been in the Anderson family for seven decades. Owner, Pamela Anderson, is currently planning a small-scale residential development to provide suitable accommodations and amenities so her family can settle on the property and continue to reside in the community they treasure. Design and planning of the property is currently underway, and we anticipate a comprehensive development permit submission to be made early in 2022.

A component of the overall development is the reconstruction of an existing wharf. The wharf is located within a Water Lot lease. It extends approximately 400 feet from an existing Boathouse, located at the foreshore, over a shallow intertidal zone out to navigable waters where a float is located. The float is in water deep enough such that it maintains buoyancy at the lowest tides.



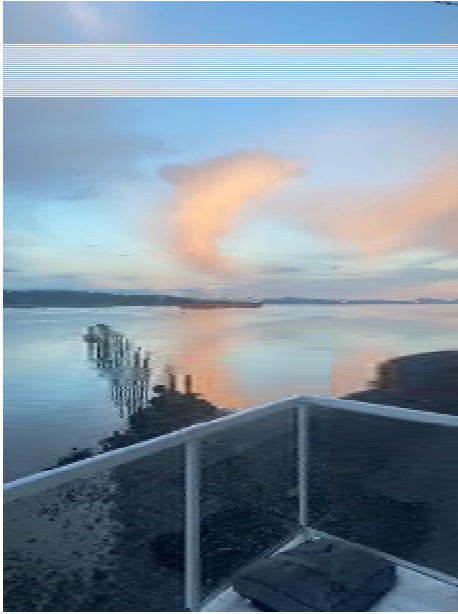
1. Historic view of wharf from neighbouring property



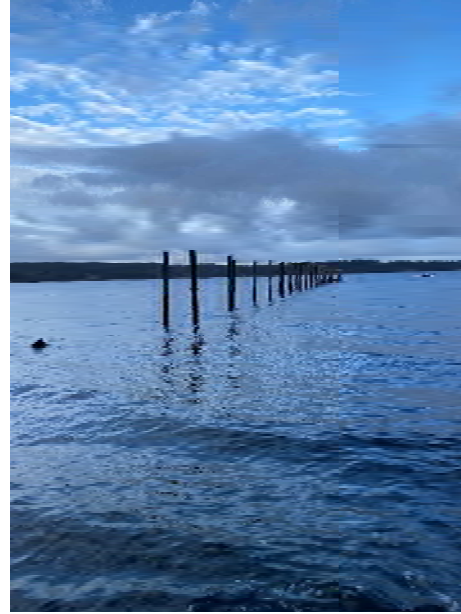
2. Historic view of wharf from neighbouring property

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1. View of existing wharf piles from the Boathouse



2. View of existing wharf piles from the beach



3. View of existing wharf pile from neighbouring property

The existing elevated wooden wharf has been in place at the property since the late 1940's. A portion of the existing elevated wharf deck surface collapsed and was removed some time ago along with the remaining deck surface for safety purposes and only the wood pile structure remains standing to date. Pamela and the Engineering team have worked closely with local First Nations and Provincial Government Agencies to propose a reconstruction that mimics the existing wharf and addresses various

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environmental matters. The proposed reconstruction is considered appropriate to the unique site conditions.

Significant reconstruction design elements include:

- Replacement of the existing paired creosote piles with single steel pipe and precast concrete piers. The new steel piers are spaced at 9.15 m (30'-0") on centre resulting in fewer supports compared to the existing wood piles. Removal of the creosote wood piles addresses long term environmental concerns.
- Rebuilding the 1.80 m (~6'-0") wide wood plank deck surface. Deck surface to be located at approximately the same elevation as the original deck; 0.60m (2'-0") above the Boathouse foundation. This maintains public access underneath the structure at low tide times.
- Use of an open metal grate for a portion of the deck surface. This surface allows sunlight to filter through the structure facilitating growth of eelgrass and other marine life in the title zone below and adjacent the wharf structure.
- An open covered shelter at the end of the wharf where a gangplank ramps down to the float. This area is for staging and preparing for marine activities. There is space for kayak and paddleboard racks.
- A 1.50 m (~5'-0") wide gangplank style ramp from the Boathouse foundation onto the wharf deck surface. The gangplank is easily removable or can be raised like a drawbridge to facilitate access to a Statutory Right-of-Way which traces a route parallel to the shoreline about 3.00 m (~10'-0") from the present Natural Boundary.
- Use of local wood resource for the trestle stringers, decking, railings and shelter at the end of the wharf.



1. View of existing Boathouse from the south



2. View of the existing Boathouse from the north

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The wharf lies within DL Water Lot 462 and the use, size and location is regulated by the Marine Residential Moorage (W1) and Marine Park and Recreation (WP) zones. There are some challenges in meeting the zone requirement, which are excerpted as follows along with some rationale and a request for a variance.

16.1. MARINE RESIDENTIAL MOORAGE (W-1)

3. Size and Density of the Use of Land, Buildings and Structures

b) The maximum surface area of all Dock Structures shall be 20.0 square metres.

Wharf area is greater than 20.0 sm (215 sf) within the W1 zone.

The proposed wharf area measures:

<i>Access ramp</i>	<i>1.50 m wide x 9.14 m long (within W1 zone)</i>	<i>13.71 sm</i>
<i>Wharf structure</i>	<i>1.80 m wide x 67.86 m long (within W1 zone)</i>	<i>124.18 sm</i>
		<i>Total 137.89 sm</i>

We seek a variance to increase maximum area so the wharf can pass over the intertidal zone.

This requirement is directly related to item c) below which limits the length of the wharf structure.

4. Siting, Sizing and Dimension of Uses, Buildings and Structures

a) No Building or Structure shall exceed a Height of 2.0 metres.

Proposed dimension from high water mark to wharf deck surface is 1.91 metres.

Proposed dimension from high water mark to the top of guardrail is 2.98 metres.

Height is measured from High Water Mark established at the Natural Boundary as defined by the Zoning bylaw.

These elevations were established such that a minimum of 2.0 metres of clearance to the seabed is provided under the wharf structure for unimpeded public access. The wharf deck complies with the height requirement however the guardrails (1.10 metres high) exceed it by 0.98 metres.

We seek a variance in height to accommodate the wharf guardrails.

c) Docks, pier/walkway, floats, ramps or other similar Structures shall not extend more than 30 metres from the present Natural Boundary of the upland Parcel.

Wharf is longer than 30.0m within the W1 zone.

The proposed wharf length measures:

<i>Access ramp</i>	<i>9.14 m long (Boathouse to first pile within W1 zone from)</i>	<i>9.14 m</i>
<i>Wharf structure</i>	<i>1.80 m long (from first pile to boundary of W1 zone*)</i>	<i>64.24 m</i>
		<i>Total 73.38 m</i>

**We understand the W1 zone boundary to be located 85 m from the current Natural Boundary.*

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The intertidal zone measures approximately 120 m (~400') from the Natural Boundary. The proposed wharf crosses this zone to access navigable water where the end of the wharf ramps down to a float. This requirement is directly related to item b) above which limits the area of the wharf structure.

We seek a variance to the maximum area of the wharf to allow access to navigable waters.

d) No Building or Structure shall be sited within 125 metres of the W-4 Zone.

Water Lot 462 is directly south of a Marine Harvesting (W-4) zone. The entire Water Lot and proposed wharf are within the 125 metre setback requirement. This requirement is similar to a Canadian Shellfish Sanitation Program (CSSP) buffer requirement which applies to marinas and wharfs, accommodating more than ten vessels, and floating accommodations. It is intended to provide protection to Harvest areas from pollution and contaminants originating from commercial activities.

The setback requirement is enforced by Fisheries and Oceans Canada (DFO), who have been involved in the review, coordination and final acceptance of the proposed wharf design and location. The proposed wharf is designed to accommodate significantly less than ten small watercraft and is providing recreational access to navigable water for the residents of the upland property only.

We seek a variance to the setback to allow the reconstruction of the wharf within the Water Lot.

g) All piers/walkways and access ramps must be a minimum of 2.0 metres above the highest High Water Mark and have a minimum clearance of 2.0 metres above the seabed to allow unimpeded pedestrian passage along the foreshore at low tide.

Proposed minimum height above highest High Water Mark:

Access ramp	1.30 metres at Boathouse foundation/1.49 metres at first pier	1.30 m
Wharf structure	to underside of deck structure	1.49 m

Proposed minimum clearances to seabed:

Access ramp	1.55 metres at Boathouse foundation/2.05 metres at first pier	1.55 m
Wharf structure	to underside of deck structure	2.05 m

To comply with this requirement access to the wharf would need to span from a steep bank across the foreshore to the wharf. The wharf would also need to be closer to the bank to allow so that ramp was not over-spanned. The bank is steep, rising over 9.00 metres from the water line and set back approximately 7.50 metres from the Natural Boundary. It is not suitable for use as a landing for the wharf ramp. The comprehensive site development plan (currently underway) includes some landscape remediation to remove invasive plants, augment native species and place sensitive retaining elements at the base of the bank, all in an effort to help stabilize the bank.

The proposed design has no impact on the foreshore and bank areas. It is shorter than a compliant design and makes use of the existing Boathouse foundation for the access ramp. It is also significantly

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shorter due to this intended landing place. Pedestrian access is maintained to beach and waters under the wharf at low tide times.

We seek a variance to the minimum height of the structure and to the clearance under the access ramp to allow the reconstruction of the wharf as designed.

16.6. MARINE PARK AND RECREATION (W-P)

4. Siting, Sizing and Dimension of Structures

a) No Structures shall be sited closer than 6 metres from the seaward extension, perpendicular to the shoreline, of an adjacent upland Side Parcel Line or the water Lot boundary.

Water Lot 462 is an irregular shape. A 10.0 (33'-0") wide area of the Lot generally follows the Natural Boundary then angles out across the intertidal zone toward navigable waters. Approximately 125.0 metres (400') out the Lot angles again and forms rectangular area measuring approximately 21.5 x 34.0 metres (70' x 112'). This rectangle is the only area within the Lot where required setbacks do not overlap.

The area of the Lot where the wharf is located is long and narrow and overlapping setbacks leave no area to build.

We seek a variance to the minimum setback to allow construction of the wharf within the Water Lot.

Please refer to additional information noted submitted in support of this application:

1. Development Variance Permit application form and related fee.
2. Darryl Jonas Architect, Water Lot Plan showing dimension and location of wharf within the Water Lot.
3. Herold Engineering, engineering documents showing reconstruction details.
4. Water Lot 462 survey plan.
5. Transport Canada approval letter.
6. Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Specific Permission for Private Moorage letter.
7. Fisheries and Oceans Canada, Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat letter.
8. Castor Consultants, construction material type benefit letter

Please contact us to discuss this information and variance request as needed. We look forward to realizing this reconstruction and related upland development project.

Sincerely

Darryl Jonas AIBC



**SPECIFIC PERMISSION FOR
PRIVATE MOORAGE**

Permission No.: V942447

File No.: 1415276

Disposition No.: 942447

THIS PERMISSION is dated for reference October 8, 2021 and is made under the *Land Act*.

BETWEEN:

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF BRITISH COLUMBIA, represented by the minister responsible for the *Land Act*, Parliament Buildings, Victoria, British Columbia

(the "Province")

AND:

PAMELA ANDERSON
303 Chemainus Highway
Ladysmith, BC V9G 1X8

(the "Owner")

WHEREAS:

- A. The Province has responsibility for the management of Crown land, including foreshore land and most submerged land;
- B. The Minister has the authority under section 11 of the *Land Act* to authorize the use of Crown land on terms and conditions which the Minister considers appropriate;
- C. The Minister wishes to provide a specific permission for the use of Crown land covered by water in British Columbia for Private Moorage Facility (as herein defined) purposes.

ACCORDINGLY, the Minister grants and the Owner accepts a specific permission for the construction and use of a Private Moorage Facility (as herein defined) on the following terms and conditions.

ARTICLE 1 - DEFINITIONS

Permission V942447

File No.: 1415276

Disposition No.: 942447

1.1 In this document,

“Improvements” includes anything made, constructed, erected, built, altered, repaired or added to, in, on or under the Land, and attached to it or intended to become a part of it, and also includes any clearing, excavating, digging, drilling, tunnelling, filling, grading or ditching of, in, on or under the Land;

“Land” means that part or those parts of the following described land shown outlined by bold line on the schedule attached to this Permission entitled “Legal Description Schedule”:

That part of District Lot 261, together with unsurveyed Crown foreshore or land covered by water being part of the bed of Ladysmith Harbour, all within Cowichan District, shown outlined on the sketch below, containing 0.182 hectares, more or less

except for those parts of the land that consist of highways (as defined in the *Transportation Act*) and subject to any changes to the area or boundaries of the Land that may be made from time to time in accordance with the terms of this Permission;

“Minister” means the minister responsible for the *Land Act*;

“Management Plan” means the most recent management plan prepared by you in a form acceptable to us, signed and dated by the parties, and held on file by us;

“Permission” means the Minister’s permission as recorded in this document;

“Private Moorage Facility” means a structure used for the purpose of mooring boats and for providing pedestrian access to and from the moored boats, and can consist of a single dock, wharf, or pier (including walkway ramp) that is permanently affixed to aquatic Crown land, and any ancillary structures such as a boat lift and anchor lines. It is for the personal and private use by one or a number of individuals or a family unit for boat moorage;

“Province” means Her Majesty the Queen in Right of the Province of British Columbia;

“Realty Taxes” means all taxes, rates, levies, duties, charges and assessments levied or charged, at any time, by any government authority having jurisdiction which relate to the Land, the Improvements or both of them and which you are liable to pay under applicable laws;

“Upland Property” means the parcel of non-aquatic land, being either privately owned or leased Crown land, which has riparian rights to the point at which the Private Moorage Facility is attached to land more particularly described as Part of Lot 43, Oyster District, Shown Outlined in Red on Plan 835-R, Except that Part in Plans 7094 and VIP58434;

“we”, “us” or “our” refers to the Province alone and never refers to the combination of the Province and the Owner: that combination is referred to as **“the parties”**; and

“you” or “your” refers to the Owner.

ARTICLE 2 - CONDITIONS OF THIS PERMISSION

2.1 The rights granted in this Permission apply only under the following circumstances:

- (a) The Owner of the Private Moorage Facility is the owner of the Upland Property or is the holder of a Crown land lease for the Upland Property.
- (b) This Private Moorage Facility will be the only Private Moorage Facility on the frontage of the Upland Property.
- (c) Ownership of and liability for a Private Moorage Facility shall pass to and be binding upon your heirs, executors and assigns of the Owner.
- (d) You must not assign, mortgage or transfer this Permission, or permit any person to use or occupy the Land, without our prior written consent, which consent we may withhold.
- (e) A Private Moorage Facility shall be and shall remain your property unless you transfer the rights and obligations in a signed agreement with another person approved by us as per subsection 2.1(d).
- (f) There are no other laws, bylaws or local government zoning restrictions which prohibit the installation and use of the Private Moorage Facility.
- (g) You understand that this Permission does not grant exclusive use and occupancy of the Land.

ARTICLE 3 - SIZE

- 3.1 The Private Moorage Facility's size must be as set out in the Management Plan, and the Management Plan must disclose the length and width of the Private Moorage Facility, the height of any proposed structures, the length and width of any connecting walkways which will be placed on Crown land and any ancillary structures or Improvements which will be part of or used with the Private Moorage Facility.
- 3.2 No increase in any dimension of the Private Moorage Facility from the description in the

Management Plan will be permitted unless you first obtain our written consent.

ARTICLE 4 - CONSTRUCTION

- 4.1 Do not interrupt or divert the movement of water or of beach materials by water along the shoreline.
- 4.2 No fill may be used in the construction or structure of the Private Moorage Facility.
- 4.3 Riparian vegetation on Crown land shall not be unduly disturbed.
- 4.4 Do not use crib foundations or solid core structures made of cement or steel sheeting in Private Moorage Facility construction.
- 4.5 The Private Moorage Facility must be either floating or suspended above the water.
- 4.6 No dredging may occur on Crown land.
- 4.7 Do not use construction materials containing toxic substances, except in marine waters where the use of a preservative-treated wood may be necessary.
- 4.8 Do not cut or remove timber on or from the Land without prior written consent and, being granted the right under the *Forest Act* to harvest Crown timber on the Land.

ARTICLE 5 - USE

- 5.1 The Private Moorage Facility shall be used for private, non-commercial moorage purposes only and the Owner of the Private Moorage Facility must not make the Private Moorage Facility available to others for a fee.
- 5.2 Do not moor or secure any boat or structure to the Private Moorage Facility for use as a live-aboard facility, whether permanent or temporary.

ARTICLE 6 - OTHER COVENANTS

- 6.1 You must
 - (a) pay, when due,
 - (i) the Realty Taxes, and

- (ii) all charges for electricity, gas, water and other utilities supplied to the Land for use by you or on your behalf or with your permission;
- (b) take all reasonable precautions to avoid disturbing or damaging any archaeological material found on or under the Land and, upon discovering any archaeological material on or under the Land, you must immediately notify the ministry responsible for administering the *Heritage Conservation Act*;
- (c) provide without compensation temporary accommodation to any vessel that is disabled or that seeks shelter in weather conditions that would render it unseaworthy;
- (d) observe, abide by and comply with
 - (i) all applicable laws, bylaws, orders, directions, ordinances and regulations of any governmental authority having jurisdiction in any way affecting your use or occupation of the Land or the Private Moorage Facility, and with
 - (ii) the provisions of this Permission;
- (e) ensure that the Private Moorage Facility does not interfere with public access over land;
- (f) keep the Private Moorage Facility and the Land in a safe, clean and sanitary condition;
- (g) not commit any willful or voluntary waste, spoil or destruction on the Land, except for the lawful discharge of wastes and emissions, or do anything on the Land that may be or become a nuisance or annoyance to an owner or occupier of land in the vicinity of the Land provided that, for the purposes of your covenant in this subsection, the lawful construction and operation and maintenance of the Private Moorage Facility allowed under this Permission will be deemed not to be a nuisance or annoyance to an owner or occupier of land in the vicinity of the Land;
- (h) dispose of raw sewage and refuse only in accordance with the requirements and regulations of appropriate federal and provincial agencies;
- (i) store bulk hazardous petroleum products and other toxic substances in accordance with the provisions of the *Environmental Management Act*;
- (j) not store logs on the Land;
- (k) pay all accounts and expenses as they become due for work performed on or materials supplied to the Land at your request, on your behalf or with your permission, except for money that you are required to hold back under the *Builders Lien Act*; and

- (l) if any claim of lien over the Land is made under the *Builders Lien Act* for work performed on or materials supplied to the Land at your request, on your behalf or with your permission, you will immediately take all steps necessary to have the lien discharged, unless the claim of lien is being contested in good faith by you and you have taken the steps necessary to ensure that the claim of lien will not subject the Land under this Permission to sale or forfeiture.

ARTICLE 7 - TERMINATION OF PERMISSION

- 7.1 We will review this Permission after a period of 10 years has expired and, if in the Minister's sole discretion it is in the public interest to do so, may revoke this Permission at that time or may agree to continue this Permission with a further review date set for the future.
- 7.2 We may revoke this Permission for the Private Moorage Facility at any time in our sole discretion without incurring any liability to you whatsoever and you must remove all parts of the Private Moorage Facility from the Land within a specified number of days as determined by us, leaving the Land in a safe, clean and sanitary condition.
- 7.3 If we revoke or terminate this Permission for any reason whatsoever, you shall have no right of compensation.
- 7.4 When you remove the Private Moorage Facility you must leave the Land in a safe, clean and sanitary condition acceptable by us. If you do not do so, we may clean and remediate the Land (including, if necessary, the removal of the Private Moorage Facility) and you will be responsible for the full cost of such cleaning and remediation.
- 7.5 If this Permission is terminated, all existing duties and responsibilities of yourself, your heirs, successors or assigns under this Permission will continue beyond the date of its termination.

ARTICLE 8 - OTHER DISPOSITIONS

- 8.1 You agree with us that
- (a) in addition to the other reservations and exceptions expressly provided in this Permission, this Permission is subject to the exceptions and reservations of interests, rights, privileges and titles referred to in section 50 of the *Land Act*;
 - (b) other persons may hold or acquire rights to use the Land in accordance with enactments other than the *Land Act* or the *Ministry of Lands, Parks and Housing Act*, including

rights held or acquired, under the *Coal Act*, *Forest Act*, *Geothermal Resources Act*, *Mineral Tenure Act*, *Petroleum and Natural Gas Act*, *Range Act* and *Water Sustainability Act* (or any prior or subsequent enactment of the Province of British Columbia of like effect); such rights may exist when this Permission takes effect and may be granted or acquired after this Permission takes effect and may affect your use of the Land;

- (c) other persons may hold or acquire interests in or over the Land granted under the *Land Act* or the *Ministry of Lands, Parks and Housing Act*; such interests may exist when this Permission takes effect; after this Permission takes effect we may grant such interests (including fee simple interests, leases, statutory rights of way and licences) however we will not grant any such interest that would result in the need to amend the Management Plan unless we have first complied with the requirements of this Permission with regard to the amendment of the Management Plan; subject to this you acknowledge your use of the Land may be affected by such interests and the area or boundaries of the Land may change as a result of the granting of such interests;
- (d) you have no right to compensation from us and you release us from all claims, actions, causes of action, suits, debts and demands that you now have or may at any time in the future have against us arising out of any conflict between your use of the Land under this Permission and the exercise or operation of the interests, rights, privileges and titles described in subsections (a), (b), and (c);
- (e) this Permission does not limit any right to notice, compensation or any other benefit that you may be entitled to from time to time under the enactments described in subsection (b);
- (f) you will not commence or maintain proceedings under section 65 of the *Land Act* in respect of any interference with your use of the Land as permitted under this Permission as a result of the lawful exercise or operation of the interests, rights, privileges and titles described in subsections (a), (b) and (c).

ARTICLE 9 - LIABILITY AND INDEMNITY

9.1 You assume all responsibility and liability associated with the Private Moorage Facility and agree to indemnify us for any loss or expense incurred by us as a result of the existence or use of the Land or Private Moorage Facility by any person, including, without limitation,

- (a) any conflict between the existence or use of the Private Moorage Facility and the land use or riparian rights of any person;
- (b) any breach or non-performance of any part of this Permission; and

Permission V942447

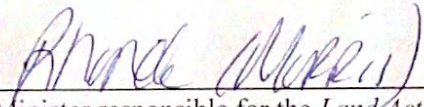
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Disposition No.: 942447

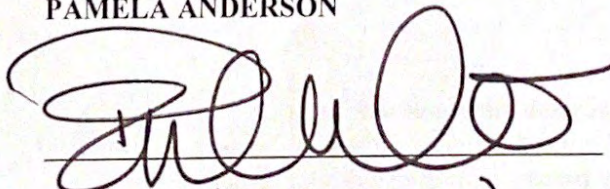
- (c) any personal injury (including death) or property damage caused in any way, wholly or partly, by the Private Moorage Facility or by your use of the Land.
- 9.2 Without limiting your obligations or liabilities under this Permission at your expense, effect and keep in force during the Term, a Homeowner's Insurance Policy or other personal lines residential insurance policy, including Comprehensive Personal Liability in an amount of not less than \$2,000,000 per occurrence.
- 9.3 You must make your insurer aware of this Permission within 30 days of signing this Permission.

The parties have executed this Permission as of the date of reference of this Permission.

SIGNED on behalf of **HER MAJESTY
THE QUEEN IN RIGHT OF THE
PROVINCE OF BRITISH COLUMBIA**
by the minister responsible for the *Land Act*
or the minister's authorized representative

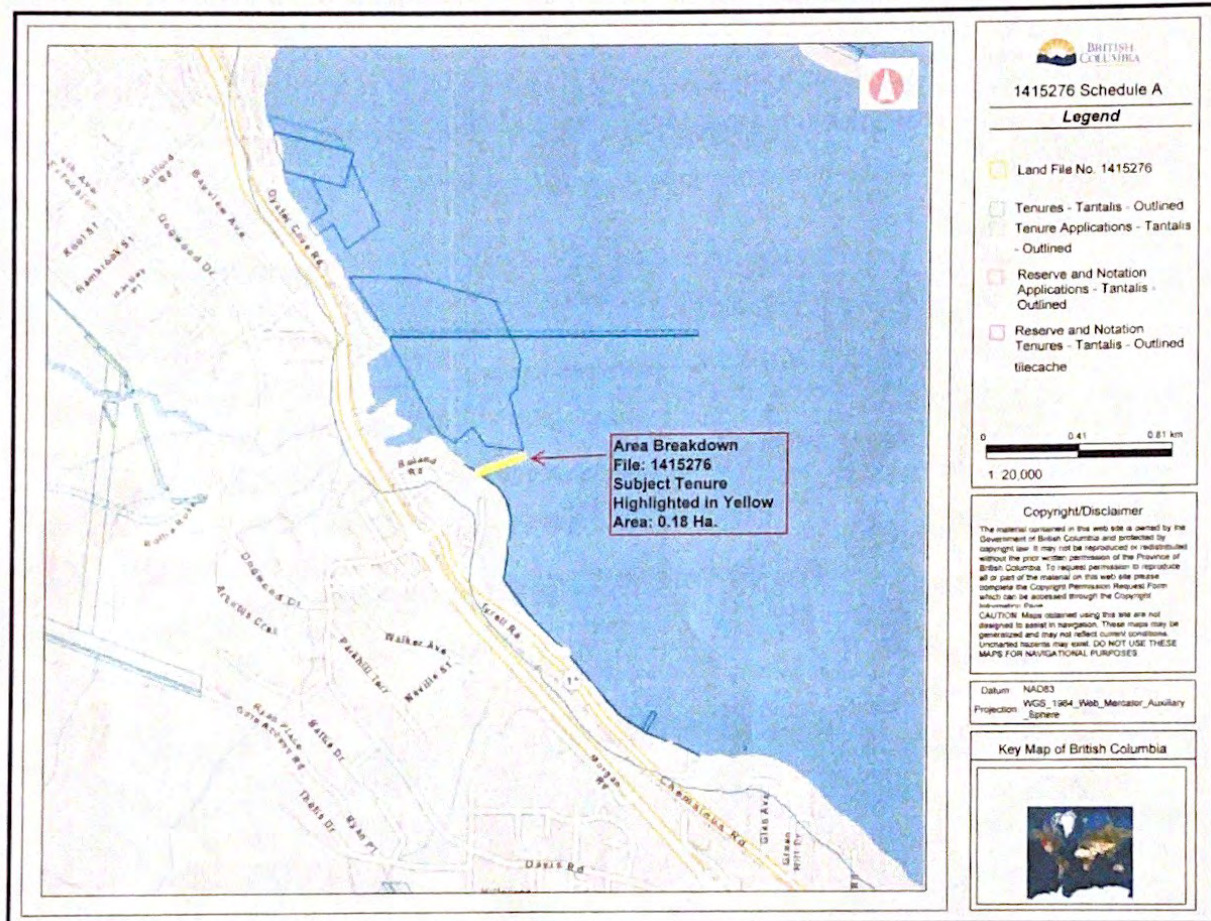

Minister responsible for the *Land Act*
or the minister's authorized representative

SIGNED BY
PAMELA ANDERSON


(D to the B).

LEGAL DESCRIPTION SCHEDULE

LEGAL DESCRIPTION: That part of District Lot 261, together with unsurveyed Crown foreshore or land covered by water being part of the bed of Ladysmith Harbour, all within Cowichan District, shown outlined on the sketch below, containing 0.182 hectares, more or less.



MANAGEMENT PLAN

File #1415276




Document #V942447

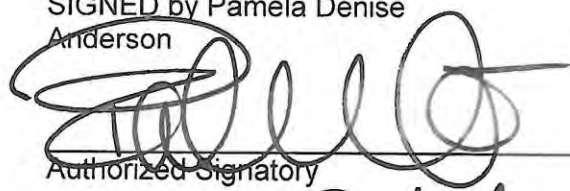
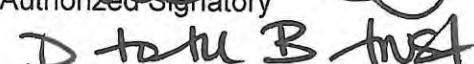
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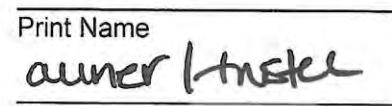
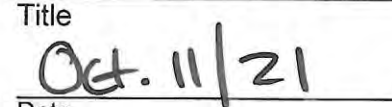
SIGNED on behalf of HER MAJESTY THE QUEEN IN RIGHT OF THE **PROVINCE OF BRITISH COLUMBIA** by the minister responsible for the *Land Act* or the Minister's authorized representative.

The signature of the Province's authorized representative is solely for the purpose of acknowledging the Province's acceptance of this document as the Management Plan for the purposes of the tenure document and does not represent a certification by the Province or its signatory of any factual content or acceptance of professional responsibility by the Province's signatory for any advice or analysis contained in this document.


Authorized Signatory
Ministry of Forests, Lands, Natural Resource
Operations & Rural Development


Print Name

Title

Date

SIGNED by Pamela Denise
Anderson

Authorized Signatory



Print Name

Title

Date

containing 12 pages (including this page)

Management Plan

Please describe the details of your project to the extent known. Consult the guidance document for further information on regulatory requirements, rational for why the information is required, and how to find required information.

The scope and the timing for response will be provided. If information is requested and not received, it may result in the disallowance of the application.

Information on these topics may be required as part of the application processing and if further detail is necessary that is not part of the application and management plan received, you will be contacted and requested to provide additional information. In some circumstances, the use of a qualified professional to complete the plan may be required.

1.0 Background

1.1 Project Overview

Describe project for which authorization is requested, including construction and/or phased development details:

The existing dock and water lot has been in the family for generations. Time has taken a toll on the structure and a complete rebuild is necessary. In order to facilitate the float, it was recently removed for rebuilding the Boathouse on shore and shore abutment was previously rebuilt. Attached are pictures of the Boathouse buildings as requested.

The Anderson family maintained a Water Lot lease on the foreshore since 1962 which was recently cancelled without Pam Anderson's knowledge, when it was not renewed by the people looking after her business affairs. The dock structure had deteriorated over the years and Pam wants to rebuild it from its deteriorated condition for her own personal use. The nearest public marina is approximately 3kms away.

The existing boathouse is a two storey structure constructed of concrete block masonry on the lower boat storage area and wood frame above. It is constructed on concrete foundations to ground level.

The planned construction is to rebuild the timber trestle and float in the same location as the existing deteriorated structure. The construction will incorporate new steel pipe piles at 30 ft. centres to support a 6 ft. wide timber trestle that starts at the existing concrete deck at the boathouse and extends seaward to a timber platform supporting an aluminium gangway down to a timber float secured by timber piling.

The timber trestle is 6 ft. wide x 390 ft. long and includes 13 piled bents at 30 ft. centres. The platform measures 12'-0" x 12'-0", the aluminium gangway is 4 ft. wide x 40 ft. long and the timber float is 12 ft. x 40 ft.

Public access is maintained along the shoreline since the underside of the trestle will be high enough to allow pedestrian traffic under the structure.

Yearly maintenance will be completed by the owners which are expected to be minimal.

The boat size that will be tied up to the float from time to time will be in the 10 ft.-35 ft. range with a maximum beam of 10 ft. and an expected maximum draught of 3 ft.

The upland property is owned by the applicant and has the following legal description. That part of Lot 43, Oyster District, shown outlined in red on Plan 835-R, except that part in Plans 7094 and VIP 58434 (PID: 005-068-002).

A Habitat Assessment has been completed by Castor Consultants and has been submitted to FLYNRORD as part of the referrals process.

The assessment indicated eel grass species towards the end and to the right of the trestle when looking seaward.

The water is deep enough during low tide that the float will not bottom out.

If the structure is destroyed by fire, storm or other means, the new dock will conform to the General Permission guidelines to reduce environmental impacts on the ecosystem except that the General Permission Guidelines will be exceeded in that the requirement for the dock being a maximum of 60 m from the intertidal area extends well past the 60 m requirement due to the shallow mudflats and that the 60 m maximum distance needs to be extended to obtain deep water for the float.

Best Management Practices will be completed by our marine Construction Contractor using vibro installation for pile driving. The piles used are new steel piles.

The dock will not be moved or added to without prior written approval.

There will be no paint, fuel or other hazardous materials stored on the dock.

The proposed alignment for the dock re-build will follow the existing alignment of the timber pile bents for the full 390 ft. of dock re-build.

There is very little presence of eel grass directly below the 6 ft. wide trestle, aluminium gangway and timber float.

There is however a minor amount of eel grass for a length of 80-100 ft. starting approximately 180 ft. from the start of the dock at the existing Boathouse.

It is proposed to use fibreglass Mini Mesh grating for the deck material in this area rather than solid timber decking to allow light penetration to any eel grass below. It is noted that with the trestle approximately 20 ft. high above the mud line and only 6 ft. wide, it is expected that shadowing will be very minimal along the 80-100 ft. length and the installation of the mini mesh will mitigate any residual shadowing.

The existing timber piles at approximately 20 ft. o/c will be removed coincidentally with the new pile installation.

The existing timber piles are in various conditions due to their deterioration and it is not known how they will fair during removal.

It is proposed that the existing timber piles be removed slowly using a vibratory extractor and placed on the barge in a containment basin to mitigate deleterious materials from re-entering the water.

If any piles break off during removal and cannot be removed by pulling, they will be cut off 2 ft below the mud line at the lowest practical tide elevation.

Best Management Practices developed by the Washington Department of Natural Resources for Derelict Creosote Piling Removal and Disposal will be generally followed.

1.2 Investigative Work

If any preliminary investigative work has been carried out, with or without an investigative authorization, provide details on work completed, incomplete or on-going from previous term.



Attachment C

Activity	Brief Description of Activity	Status (e.g. Complete, incomplete, ongoing)	Comments / Milestones
Depth Measurement	Measurement to facilitate pile lengths necessary	Complete	Used pilings ordered
Habitat Assessment	Castor Consultants has completed a Habitat Assessment of the proposed dock replacement and has submitted to DFO.	Complete	Waiting comments from DFO.
Add Row			

1.4 First Nations Consultation

Describe any contact you may have had, including the name of the First Nation(s) and representatives contacted.



The following First Nations communities have been contacted through the Referrals Process by both the Applicants consultant and FLYNRORD with letters of no objection from First Nations.

Primary First Nation - Stz'uminus First Nation - Ray Guthier

Hul'quminum Tribal Group -

Ts'uubaa-asatx Nation - Aaron Hamilton

Cowichan Tribes - Candace Charlie

Lyackson First Nation - Karyn Scott

Halalt First Nation - Raven August

Penelekut Tribe - Robert Sam

- Denise James

2.0 Location

2.1 Description

Provide a general description of the location of the project:



Ladysmith Harbour
Rebuild existing approach and dock at old water lot private residence.

2.2 Location Justification

Provide your reasons/justification of the need for this type of project at this location:



The water lot has been in the family for generations and in need of refurbishment.

2.3 Seasonal Expectations of Use

When will the Project require use of the land? Include information on key works during construction phases as well as operations phase. Please reference [reduced risk fish windows](#) as required by DFO:



Project Phase (Construction / Operations)	Brief Description of Activity / Works	Season
Const. Summer/Fall 2021	Pile driving/wood placing Work will be done during the late summer/ early fall using Best Management Practice for pile driving.	Summer/Fall
	Monitor if necessary Castor Consultants Ladysmith	

Add Row

3.0 Infrastructure and Improvements

3.1 Facilities and Infrastructure

Detail any new and existing facilities, infrastructure or processes proposed and any ancillary uses. Provide details of planned construction methods and materials, and construction scheduling.

Facility/Infrastructure/Process	Construction Methods/Materials	Construction Schedule
Use new steel piles and precast concrete pile caps	vibratory hammer	Summer/Fall 2021
Add Field		

3.2 Access

Identify existing and proposed roads used for access and their use by season. Include any proposed connections to public or Forest Service Roads; traffic information including volume of traffic during construction/operation and phase or season that the traffic is expected:

Roadway/Proposed Connection	Existing/Proposed	Existing Road Classification	Road Permittee Information and Road Use Agreements	Traffic Volume		Mitigation of Traffic Effects
				Construction Phase	Operations Phase	
n/a						
Add Field						

3.3 Utility Requirements and Sources

Describe utility requirements and sources, include agreements in place or underway allowing access to utilities.

None.

3.4 Water Supply

Identify water requirements for construction and operation phases (e.g. surface water and/or groundwater), including sources, location, volume and a general description of infrastructure planned to meet water supply requirements, include any agreements outside of Water Act Authorizations identified above (Section I, Authorizations, Permits or Approvals), such as Municipal water supply.

Project Phase (Construction/ Operation)	Water Requirement (e.g. Surface water or ground water, etc)	Source/location	Volume	Infrastructure Description	Agreements
None.					
Add Field					

3.5 Waste Collection Treatment and Disposal

Identify any waste disposal (note septic system required), sewage, sanitation facilities and refuse disposal proposed.

Project Phase (Construction/ Operation)	Is there a water requirement (e.g. Surface water or ground water, etc)	Discharge distance to closest body of water (well, lake, etc.)	Volume of daily discharge	Infrastructure Description	Existing Agreements
There will be no waste collection or discharge at the dock which will be only used for temporary moorage during favourable weather conditions.					
Add Field					

4.0 Environmental

Describe any significant impacts and proposed mitigation for the following environmental classes:

4.1 Land Impacts

4.1.1 Vegetation Removal

Is any timber removal required?

☒ Yes ☐ No

Are any areas of vegetation to be cleared, outside of timber removal?

☐ Yes ☒ No

4.1.2 Soil Disturbance

Will there be any areas of soil disturbance, including clearing, grubbing, excavation and levelling?

☒ Yes ☐ No

Is the area to be excavated a Brownfield site or has the potential to be contaminated?

☐ Yes ☒ No

Is there potential for disturbance of archaeological, paleontological fossils or historical artifacts?

☐ Yes ☒ No

4.1.3 Riparian Encroachment

Will any works be completed within or adjacent to the riparian zone of any water body?

☐ Yes ☒ No

4.1.4 Pesticides and Herbicides

Will there be any use of pesticides or herbicides during construction, operations and/or maintenance?

☐ Yes ☒ No

4.1.5 Visual Impacts

Will there be any adverse effects of the projects, and any potential adverse effects on sight lines to the project area from surrounding areas likely to be used for scenic viewing by residents or other users?

☐ Yes ☒ No

4.1.6 Archaeological Sites

Are there any known or high potential (Arch Procedure) archaeological sites within the project area?

☐ Yes ☒ No

Have you conducted an AIA or engaged an archaeologist to assist with your investigations?

☐ Yes ☒ No

4.1.7 Construction Methods and Materials

Identify the types of construction materials, the methods used, their impacts, and any mitigations:

Construction Material/Method	Impacts	Mitigations
New piling, vibratory hammer, precast concrete pile caps and timber trestle.	None.	Not Necessary. Monitor by Castor Consultants.
Add Field		

4.2 Atmospheric Impacts

4.2.1 Sound, Odor, Gas or Fuel Emissions

Will the project construction or operation cause any of the following to disturb wildlife or nearby residents:

Sound? ☐ Yes ☒ No

Odor? ☐ Yes ☒ No

Gas? ☐ Yes ☒ No

Fuel Emissions? ☐ Yes ☒ No

4.3 Water or Land Covered by Water Impacts

4.3.1 Drainage Effects

Will the project result in changes to land drainage?

☐ Yes ☒ No

4.3.2 Public Access

Will the project result in changes to public access?

☐ Yes ☒ No

4.3.3 Flood Potential

Will the project result in a potential for flooding?

☐ Yes ☒ No

4.4 Fish and Wildlife Habitat Impacts

4.4.1 Disturbance to Wildlife and Wildlife Habitat

Will the project result in adverse effects to wildlife or wildlife habitat?

(BC Wildlife Act)

☐ Yes ☒ No

Will the project (construction or operations phase) occur in and around streams, lakes, estuarine or marine environments?

☒ Yes ☐ No

Is the project (construction or operations phase) likely to increase erosion or sedimentation?

☐ Yes ☒ No

Will the project (construction or operations phase) require water diversion?

☐ Yes ☒ No

Will the project threaten or endanger species at risk in the area?

(Species At Risk Act)

☐ Yes ☒ No

5.0 Socio-Community

5.1 Land Use

Describe the current community setting on or near the project area, including the location of non-aboriginal and aboriginal communities or known use areas.

Rebuilding existing approach and dock. No other community activity in the area.

5.1.1 Land Management Plans and Regional Growth Strategies

Are there any land and resource management plans, coastal plans, provincial, regional growth strategies or local government plans with zoning, or management policies or use restrictions in place that could limit or preclude your proposed use of the land? (Please refer to the [Union of BC Municipalities \(UBCM\)](#), and check the websites of the municipality, regional district or other organization with jurisdiction including your project area.)

☐ Yes ☒ No

5.2 Socio-Community Conditions

5.2.1 Adjacent Users or Communities

Is the project likely to restrict public access, or the ability, or the ability of adjacent land owners or tenure holder to access their property or tenures?

☐ Yes ☒ No

5.2.2 Existing Services

Provide a description any increased demand on fire protection and other health facilities and emergency services arising from your Project, including proposed management or mitigation measures.



None. Water access only.

END OF FORM

Attachment E

Navigation Protection Program (NPP)
820-800 Burrard Street
Vancouver BC
V6Z 2J8

APPROVAL

OWNER: Pamela Anderson D to the B Trust
303 Chemainus Rd
Ladysmith British Columbia V9N1X8
Canada

WORK(S): Dock (residential)

SITE LOCATION: Located on Ladysmith Harbour, approximately at 48° 58' 47.13" N, 123° 47' 56.16" W, on unsurveyed foreshore or land covered by water being part of the bed of Ladysmith Harbour, DL 262, Cowichan District, containing 0.18 hectares more or less, Ladysmith, in the Province of British Columbia.

As per the application (detailed above) to the Minister of Transport, submitted pursuant to the *Canadian Navigable Waters Act*, for an approval of the work per the attached six (6) plans, the Minister hereby approves the work pursuant to subsection 7(6) for the construction of the above mentioned work, in accordance with the following terms and conditions:

1. The works are to be constructed or installed in accordance with the reviewed plans.
2. Construction equipment used in conjunction with this project shall be stored in such a manner that it does not obstruct charted Aids to Navigation and does not obstruct navigation.
3. Any piles to be removed shall be completely extracted to remove the entire length of the pile from the bed of the waterway.
4. Any mooring lines are to be fabricated of non-buoyant material or must be counterweighted to prevent them from floating.
5. Any dock lighting to be installed must not be red or green, and must not interfere with the ability of mariners to navigate during hours of darkness or reduced visibility.

SIGNED ON May 12, 2021
at the NPP regional office of Pacific

Eric Leung

NPP Officer
Programs Group
Transport Canada
Pacific Region
For the Minister of Transport

Attachment F



Fisheries and Oceans
Canada

Pacific Region
Ecosystem Management Branch
3190 Hammond Bay Road
Nanaimo, BC
V9T 6N7

Pêches et Océans
Canada

Région du Pacifique
Direction de la gestion des écosystèmes
3190, rue Hammond Bay
Nanaimo, (C.-B.)
V9T 6N7

September 27, 2021

Our file Notre référence
21-HPAC-00280

Pamela Anderson
303 Chemainus Road
Ladysmith, BC V9G 1X8

Dear Pamela Anderson:

Subject: Dock Replacement, Ladysmith Harbour, Ladysmith – Implementation of Measures to Avoid and Mitigate the Potential for Prohibited Effects to Fish and Fish Habitat

The Fish and Fish Habitat Protection Program (the Program) of Fisheries and Oceans Canada (DFO) received your proposal on March 3, 2021. We understand that you propose to:

- Build a trestle, roofed gazebo, gangway, and floating dock at a private residence in Ladysmith, BC. Works involve creosote timber pile removal, steel pile installation, and installation of a timber trestle walkway, aluminum gangway, and floating timber dock.

Our review considered the following information:

- *Request for Review* form submitted by email on March 3, 2021;
- *Habitat Assessment*, dated March, 2020, prepared by Castor Consultants Ltd., submitted by email on March 3, 2021;
- *Review of Proposed Anderson Dock Replacement relative to Marine Habitat Conditions*, dated March, 2021, prepared by Castor Consultants Ltd., submitted by email on March 3, 2021;
- *Addendum to Castor Consultants Ltd. Report Review of Proposed Anderson Dock Replacement relative to Marine Habitat Conditions*, prepared by Castor Consultants Ltd., submitted by email on May 5, 2021; and
- Email correspondence between Mike Herold (Herold Engineering Ltd.) and Hailey O'Neill (DFO) from July 20 to August 4, 2021 regarding project design changes and clarification on construction materials and installation methods.

Your proposal has been reviewed to determine whether it is likely to result in:

- the death of fish by means other than fishing and the harmful alteration, disruption or destruction of fish habitat which are prohibited under subsections 34.4(1) and 35(1) of the *Fisheries Act*;

- effects to listed aquatic species at risk, any part of their critical habitat or the residences of their individuals in a manner which is prohibited under sections 32, 33 and subsection 58(1) of the *Species at Risk Act*; and
- the introduction of aquatic species into regions or bodies of water frequented by fish where they are not indigenous, which is prohibited under section 10 of the *Aquatic Invasive Species Regulations*.

The aforementioned outcomes are prohibited unless authorized under their respective legislation and regulations.

We understand the following aquatic species listed under the *Species at Risk Act* may use the area in the vicinity of where your proposal is to be located:

- Killer Whale (Northeast Pacific Southern Resident Population) listed as Endangered;
- Killer Whale (Northeast Pacific Transient Population) listed as Threatened; and
- Yelloweye Rockfish (Pacific Ocean Inside Waters Population), Harbour Porpoise (Pacific Ocean Population), Humpback Whale (North Pacific Population), Olympia Oyster, and Steller Sea Lion, all listed as Special Concern.

In addition, the following aquatic species are subject to the *Aquatic Invasive Species Regulations* and may be found in the vicinity of your proposed work, undertaking or activity:

- European Green Crab

To avoid and mitigate the potential for prohibited effects to fish and fish habitat (as listed above), we recommend implementing the measures listed below:

- Conduct environmental monitoring, including water quality monitoring, during all project activities that may result in potential negative effects to fish and fish habitat.
- Complete pile removal and installation works within the least risk timing window for Area 17 – Nanaimo (Summer window: June 1 –September 1; Winter window: December 1 – February 15).
- Conduct works during daylight hours and weather conditions that permit visual observations of fish and marine mammals.
- Minimise the duration of in-water works.
- Salvage motile invertebrate species in association with pile extraction and return to nearby waters.
- Ensure vessels are not operating in shallow water causing direct physical disturbance to the seabed/habitat from propeller scour.
- Water-based equipment used for pile removal and installation is not to ground upon the seabed except for the use of anchors or spuds needed to keep the equipment in place.
- Minimize movements/repositioning of the barge and subsequent spudding to minimize physical disturbance to the seabed. No spudding or anchoring is to occur within the eelgrass beds.

- Direct pull and vibratory extraction are the preferred method for pile extraction and contractors should be experienced in creosote pile removal. Piles should be removed slowly to minimize turbidity in the water column as well as sediment disturbance.
- Dispose of removed creosote piles so that deleterious substances do not enter the marine environment. Deploy containment booms around creosote piles prior to removal.
- Piles should not be dragged on the seabed following removal but rather lifted clear by machine.
- If piles are required to be cut and left in place, it is recommended that they are cut off below the mudline.
- Manage sediment that may be adhered to removed timber piles by disposing of the sediment in an appropriate location (e.g., at an upland facility approved to take the material) rather than depositing in fish habitat or in any area where it may re-enter fish-bearing waters.
- If there is a risk of harm to a marine mammal from direct contact, temporarily suspend construction until there is no longer a risk of harm from direct contact or the individual has not been sighted for 30 minutes.
- The use of a vibratory hammer is recommended as the primary method for pile installation. If impact driving is used, the following additional mitigation measures are recommended:
 - Conduct impact pile driving during daylight hours and when weather conditions permit visual assessments for marine mammals.
 - Conduct hydroacoustic monitoring during impact pile driving to monitor underwater sound. Peak sound pressure levels should not exceed 206 dB re: 1 μ Pa and a SEL_{cum} of 186 dB re: 1 μ Pa²s to protect fish and pinnipeds.
 - Establish a cetacean exclusion zone (e.g. perimeter around the noise source) prior to impact pile driving where sound levels are not to exceed 160 dB_{RMS} re: 1 μ Pa at the edge of the marine mammal exclusion zone during impact pile driving.
 - Monitor for cetaceans within the cetacean exclusion zone for at least 30 minutes prior to the start of impact pile driving. If a cetacean enters the cetacean exclusion zone, temporarily suspend impact pile driving until the individual has left the exclusion zone or has not been sighted for 30 minutes.
 - The use a soft start procedure is recommended where the impact energy is gradually increased over a 10 minute period. The soft start procedure is also recommended any time after there is a break of 30 minutes or more during impact pile driving.
 - If hydroacoustic monitoring indicates sound levels in excess of the above-mentioned thresholds, impact pile driving should cease and only resume after additional measures are implemented to effectively reduce sound levels below the thresholds.
- Use grated-decking dock components (or similar) wherever possible to minimize shading impacts, particularly where located above eelgrass beds.
- Develop and implement a site-specific debris management plan designed to avoid and mitigate the introduction of materials associated with dock installation.

- Avoid the use of expanded polystyrene (Styrofoam) floats for docks and other floating infrastructure unless the foam is encapsulated to prevent its release into the marine environment.
- Develop and implement a response plan to avoid a spill of deleterious substances.
- Ensure equipment is in good working condition, and free of leaks prior to conducting works in or near fish habitat.
- Inspect the project areas for the presence of European Green Crab prior to starting work. Immediately report any aquatic invasive species (AIS) to DFO: AISPACIFIC@dfo-mpo.gc.ca. If no European Green Crab are detected, take the following precautionary measures to avoid the introduction and/or transportation of AIS into other waters by:
 - Clean – Inspect and clean plants, animals, mud and sediment from all equipment used below the HWM.
 - Drain all water from equipment used below the HWM.
 - Dry all parts of equipment completely before leaving the site.
 - All organic matter and wash water generated during cleaning must be disposed of on land.

Provided that you incorporate these measures into your plans, the Program is of the view that your proposal is not likely to result in the contravention of the above mentioned prohibitions and requirements.

Should your plans change or if you have omitted some information in your proposal, further review by the Program may be required. Consult our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>) or consult with a qualified environmental consultant to determine if further review may be necessary. It remains your responsibility to remain in compliance with the *Fisheries Act*, the *Species at Risk Act* and the *Aquatic Invasive Species Regulations*.

It is also your Duty to Notify DFO if you have caused, or are about to cause, the death of fish by means other than fishing and/or the harmful alteration, disruption or destruction of fish habitat. Such notifications should be directed to the DFO-Pacific Observe, Record and Report phone line at 1-800-465-4336 or by email at DFO.ORR-ONS.MPO@dfo-mpo.gc.ca.

We recommend that you notify this office at least 10 days before starting your project and that a copy of this letter be kept on site while the work is in progress. It remains your responsibility to meet all other federal, provincial and municipal requirements that apply to your proposal.

Please note that the advice provided in this letter will remain valid for a period of one year from the date of issuance. If you plan to execute your proposal after the expiry of this letter, we recommend that you contact the Program to ensure that the advice remains up-to-date and accurate. Furthermore, the validity of the advice is also subject to there being no change in the relevant aquatic environment, including any legal protection orders or designations, during the one year period.

If you have any questions with the content of this letter, please contact Hailey O'Neill at our Nanaimo office by phone at 250-327-3197 or by email at Hailey.Oneill@dfo-mpo.gc.ca. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



Andrew MacInnis
Senior Biologist
Fish and Fish Habitat Protection Program

c.c.: Rob Waters, Castor Consultants Ltd., robwaters@shaw.ca



ISSUED FOR REVIEW

To:	Pam Anderson (Arcady Holdings Ltd.)	Date:	January 14, 2021
c:	Mike Herold (Herold Engineering Ltd.)	Memo No.:	01
From:	Andrew Walker Kurt Schluessel	File:	704-ENG.VGEO04186-01
Subject:	Geotechnical Monitoring Services - 303 Chemainus Road, Ladysmith, BC		

This 'Issued for Review' document is provided solely for the purpose of client review and presents our interim findings and recommendations to date. Our usable findings and recommendations are provided only through an 'Issued for Use' document, which will be issued subsequent to this review. Final design should not be undertaken based on the interim recommendations made herein. Once our report is issued for use, the 'Issued for Review' document should be either returned to Tetra Tech Canada Inc. (Tetra Tech) or destroyed.

1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) was retained by Arcady Holdings Ltd. (Arcady) to provide geotechnical engineering services to assist with the planning related to a proposed series of steel pipe pile installations for a residential dock development. Tetra Tech understands that the Town of Ladysmith (the Town) has requested that a plan be developed to ensure that the pile installations do not damage a nearby 150 mm diameter asbestos-concrete sanitary sewer (the AC line). Tetra Tech understands that Herold Engineering Ltd. (Herold) is designing the dock and pile foundations.

This development is located within the DL 462 Water Lot in Ladysmith, BC (the Site), as shown in the "Site Plan Showing Proposed Foreshore Lot Within Part of District Lot 462, Cowichan District" (the Site Plan), provided to Tetra Tech via email on January 6, 2022, by Herold. The Site is accessed via the adjoining property located at the civic address 303 Chemainus Road, Ladysmith, BC. The building located within the Site area is supported by a concrete retaining wall structure as shown in the Site Plan.

The AC line right-of-way (ROW) runs along the shoreline as illustrated by the SRW PLAN 2005RW area in the Site Plan. The Town provided Tetra Tech with camera survey footage dated March 8, 2021, and Plan and Profile drawings dated August 1965 (drawing number: LSS/3/58 & LSS/3/59) for the AC line via email on January 13, 2022. The Plan and Profile drawings indicate that the AC line is approximately 1.2 m below ground surface (mbgs) at the Site. The nearest proposed pile installation location is approximately 6 m to the northeast from the AC line (assuming the AC line is within the center of the ROW).

2.0 BACKGROUND REVIEW

2.1 Surficial Geology Maps

A review of the map Soils of South Vancouver Island, BC, Soil Survey No. 44, Sheet 1, indicates soils at the Site are composed of the Somenos soil association. The Somenos moraine soils are described as a moraine deposit that is moderately to strongly cemented. The Soils of Southern Vancouver Island, BC Ministry of Environment

(MOE) Technical Report 17 further describes the Somenos soils as yellowish-brown gravelly sandy morainal (till) deposits where cobbles and boulders are common.

To the northwest of the Site along the shoreline is Holland Creek. A review of the BC Soil Information Finder Tool characterizes the Holland Creek deltaic deposit as Corydon Soils. The Corydon soil association is described in the Soils of Southeast Vancouver Island, BC MOE Technical Report 15 as silty to sandy fluvial materials. A review of Google Earth satellite imagery indicates that the the outer marine edges of the Holland Creek delta appear to intersect a portion of the Site in the lower tide areas and/or marine portions.

3.0 GEOTECHNICAL EXPLORATION METHODS

Tetra Tech completed a limited shallow probing and Wildcat Dynamic Cone Penetrometer Testing (Wildcat DCPT) on January 12, 2022. The probing and Wildcat DCPT were completed by Andrew Walker and Kurt Schluessel of Tetra Tech. Prior to completing the probing and Wildcat DCPT, Herold confirmed that the proposed exploration area would be clear of underground utilities. The two areas selected for probing and Wildcats DCPT were on either side of the AC line. The locations and results are summarized in Table A below.

Table A: Summary of Wildcat DCPT

Location ID	Location Description	Wildcat DCPTs		Other Observations
		Refusal Depth (mbgs)	Blows per 0.1 (mbgs)	
21WC01	Approximately 2.7 m to the southeast from the southeast corner of the buildings retaining wall	0.45	23 / 24 / 17 / 21 / Refusal	Shallow hand-dug testpit (post Wildcat DCPT) indicated a soil gradation and consistency change at approximately 0.45 mbgs. The soil is described in Section 4.1.
21WC02	Approximately 6.0 m to the northeast from the approximate center of the ROW	0.85	6 / 22 / 14 / 11 / 10 / 17 / Refusal	Dug approximately 0.2 mbgs by shovel prior to commencing Wildcat DCPT.
21WC03	Approximately 1.0 m to the northeast from 21WC02 (7 m from center of ROW)	1.00	9 / 4 / 12 / 10 / 14 / 9 / 10 / 22 / 40 / 28 / Refusal	Wildcat DCPT deflected at approximately 16 degrees from center. Rod length in ground was 1.05 m.

4.0 GEOTECHNICAL CONDITIONS

4.1 Soil Conditions

The surficial soil for most of the Site is beach deposits consisting of variable gradations of SAND, GRAVEL, and/or COBBLES.

Based on the background review, till-like soils are expected at the Site. Till-like soils are inferred to be underlying the beach deposits at approximately the depth of refusal encountered during the Wildcat DCPT exploration (approximately 0.45 mbgs near the AC line and 1.00 mbgs near the first pile installation location). The gradation of

the inferred till-like soils was not determined due to the rapid infiltration of groundwater into the testpit, but observations during testpitting indicated that the top of the inferred till-like soils is marked by a very dense sandy yellow-brown soil.

Deltaic marine deposits are expected in the lower tidal areas and marine portion of the Site. The thickness and gradation of the marine deposits are unknown but are inferred to consist primarily of very soft to soft fine-grained soils. The marine deposits will be overlying the inferred till-like soils assuming that the till-like soils are laterally continuous across the length of the Site.

4.2 Groundwater

Most of the Site area is located within an intertidal zone and is inundated during high tide. During low tide, shallow groundwater is expected to be present over most of the Site area.

5.0 DISCUSSION AND RECOMMENDATIONS

Based on our findings, we infer that the AC line is founded in till-like soils at the Site. The nearest pile installation (relative to the AC line) is expected to also penetrate the till-like soils at a shallow depth (i.e. approximately 1 m).

Tetra Tech recommends the following with regards to the pile installations at the Site:

- Vibration monitoring should be completed congruently with pile installation to ensure vibrations don't exceed a conservative trigger level for protection of the AC line. A plan should be developed for a vibration monitoring program that will take place during pile installation;
- The contractor should adjust his installation technique (e.g. lower vibrations or churn drilling) under real time vibration monitoring guidance if trigger levels for the protection of the AC line are met or exceeded; and
- A camera survey of the AC line should be completed after pile installation.

Based on the inferred ground conditions from the limited geotechnical exploration program and contingent upon the recommendations above, vibration from pile installation is not anticipated to pose a significant risk to the AC line.

Tetra Tech can provide a detailed work plan for completing the geotechnical monitoring upon request.

6.0 LIMITATIONS OF REPORT

This report and its contents are intended for the sole use of Arcady Holdings Ltd. and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Arcady Holdings Ltd., or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

7.0 CLOSURE

We trust this technical memo meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,
Tetra Tech Canada Inc.

704-ENG.VGEO04186-01
ISSUED FOR REVIEW
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704-ENG.VGEO04186-01

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/sy

Enclosure: Limitations on the Use of this Document

LIMITATIONS ON USE OF THIS DOCUMENT

GEOTECHNICAL

1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

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1.7 ENVIRONMENTAL AND REGULATORY ISSUES

Unless stipulated in the report, TETRA TECH has not been retained to explore, address or consider and has not explored, addressed or considered any environmental or regulatory issues associated with development on the subject site.

1.8 NATURE AND EXACTNESS OF SOIL AND ROCK DESCRIPTIONS

Classification and identification of soils and rocks are based upon commonly accepted systems, methods and standards employed in professional geotechnical practice. This report contains descriptions of the systems and methods used. Where deviations from the system or method prevail, they are specifically mentioned.

Classification and identification of geological units are judgmental in nature as to both type and condition. TETRA TECH does not warrant conditions represented herein as exact, but infers accuracy only to the extent that is common in practice.

Where subsurface conditions encountered during development are different from those described in this report, qualified geotechnical personnel should revisit the site and review recommendations in light of the actual conditions encountered.

1.9 LOGS OF TESTHOLES

The testhole logs are a compilation of conditions and classification of soils and rocks as obtained from field observations and laboratory testing of selected samples. Soil and rock zones have been interpreted. Change from one geological zone to the other, indicated on the logs as a distinct line, can be, in fact, transitional. The extent of transition is interpretive. Any circumstance which requires precise definition of soil or rock zone transition elevations may require further investigation and review.

1.10 STRATIGRAPHIC AND GEOLOGICAL INFORMATION

The stratigraphic and geological information indicated on drawings contained in this report are inferred from logs of test holes and/or soil/rock exposures. Stratigraphy is known only at the locations of the test hole or exposure. Actual geology and stratigraphy between test holes and/or exposures may vary from that shown on these drawings. Natural variations in geological conditions are inherent and are a function of the historical environment. TETRA TECH does not represent the conditions illustrated as exact but recognizes that variations will exist. Where knowledge of more precise locations of geological units is necessary, additional exploration and review may be necessary.

1.11 PROTECTION OF EXPOSED GROUND

Excavation and construction operations expose geological materials to climatic elements (freeze/thaw, wet/dry) and/or mechanical disturbance which can cause severe deterioration. Unless otherwise specifically indicated in this report, the walls and floors of excavations must be protected from the elements, particularly moisture, desiccation, frost action and construction traffic.

1.12 SUPPORT OF ADJACENT GROUND AND STRUCTURES

Unless otherwise specifically advised, support of ground and structures adjacent to the anticipated construction and preservation of adjacent ground and structures from the adverse impact of construction activity is required.

1.13 INFLUENCE OF CONSTRUCTION ACTIVITY

Construction activity can impact structural performance of adjacent buildings and other installations. The influence of all anticipated construction activities should be considered by the contractor, owner, architect and prime engineer in consultation with a geotechnical engineer when the final design and construction techniques, and construction sequence are known.

1.14 OBSERVATIONS DURING CONSTRUCTION

Because of the nature of geological deposits, the judgmental nature of geotechnical engineering, and the potential of adverse circumstances arising from construction activity, observations during site preparation, excavation and construction should be carried out by a geotechnical engineer. These observations may then serve as the basis for confirmation and/or alteration of geotechnical recommendations or design guidelines presented herein.

1.15 DRAINAGE SYSTEMS

Unless otherwise specified, it is a condition of this report that effective temporary and permanent drainage systems are required and that they must be considered in relation to project purpose and function. Where temporary or permanent drainage systems are installed within or around a structure, these systems must protect the structure from loss of ground due to mechanisms such as internal erosion and must be designed so as to assure continued satisfactory performance of the drains. Specific design details regarding the geotechnical aspects of such systems (e.g. bedding material, surrounding soil, soil cover, geotextile type) should be reviewed by the geotechnical engineer to confirm the performance of the system is consistent with the conditions used in the geotechnical design.

1.16 DESIGN PARAMETERS

Bearing capacities for Limit States or Allowable Stress Design, strength/stiffness properties and similar geotechnical design parameters quoted in this report relate to a specific soil or rock type and condition. Construction activity and environmental circumstances can materially change the condition of soil or rock. The elevation at which a soil or rock type occurs is variable. It is a requirement of this report that structural elements be founded in and/or upon geological materials of the type and in the condition used in this report. Sufficient observations should be made by qualified geotechnical personnel during construction to assure that the soil and/or rock conditions considered in this report in fact exist at the site.

1.17 SAMPLES

TETRA TECH will retain all soil and rock samples for 30 days after this report is issued. Further storage or transfer of samples can be made at the Client's expense upon written request, otherwise samples will be discarded.

1.18 APPLICABLE CODES, STANDARDS, GUIDELINES & BEST PRACTICE

This document has been prepared based on the applicable codes, standards, guidelines or best practice as identified in the report. Some mandated codes, standards and guidelines (such as ASTM, AASHTO Bridge Design/Construction Codes, Canadian Highway Bridge Design Code, National/Provincial Building Codes) are routinely updated and corrections made. TETRA TECH cannot predict nor be held liable for any such future changes, amendments, errors or omissions in these documents that may have a bearing on the assessment, design or analyses included in this report.

Habitat Assessment of Proposed Dock Replacement in Ladysmith Harbour, Ladysmith, B.C.

March 2020

Introduction

Castor Consultants Ltd. was retained, on behalf of the owner, by Vertex 8 Ventures Ltd. to undertake a habitat assessment of a proposed dock replacement in Ladysmith Harbour (Location Figures 1 & 2). The street address is 303 Chemainus Road, Ladysmith, B.C. The owner proposes to rebuild a trestle and associated dock. Due to the lapse of the existing provincial water lot lease the owner is in the process of applying for a renewal. Based on the provincial iMapBC service the district lot number of record is 462, Cowichan District and the survey parcel ID is 519980. As a part of the renewal process the province requires a biological assessment to examine the site for important habitat features. The assessment included the inspection of intertidal and subtidal habitats along the existing alignment where the works are proposed. No riparian inspection was conducted, as the proposed works would use an existing concrete trestle abutment so that the riparian zone will not be affected.

The intertidal zone at the site was assessed on March 14, 2020 between 14:00 and 16:00 hr with a low tide of 0.9 m at 15:53 and on March 16, 2020 between 16:30 and 18:00 with a low of 0.9 at 17:51 hr. The subtidal zone inspection by underwater drop camera was carried out at high water on March 16, 2020 between 10:00 and 12:30 when the tide was 3.4 m at 10:06. During the subtidal assessment, the day was sunny with a moderate breeze and the water visibility was moderately good.

The site falls within DFO Management Area 17-7 at 48° 58' 47" N and 123° 47' 55" W.

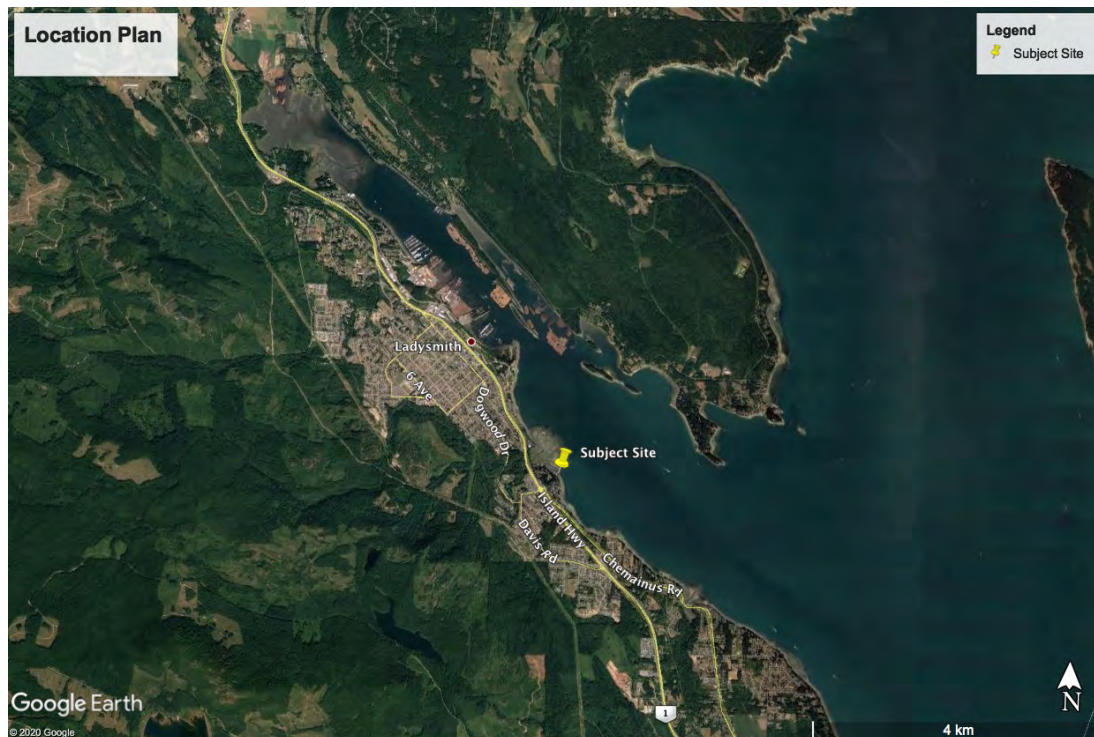


Figure 1. General Location

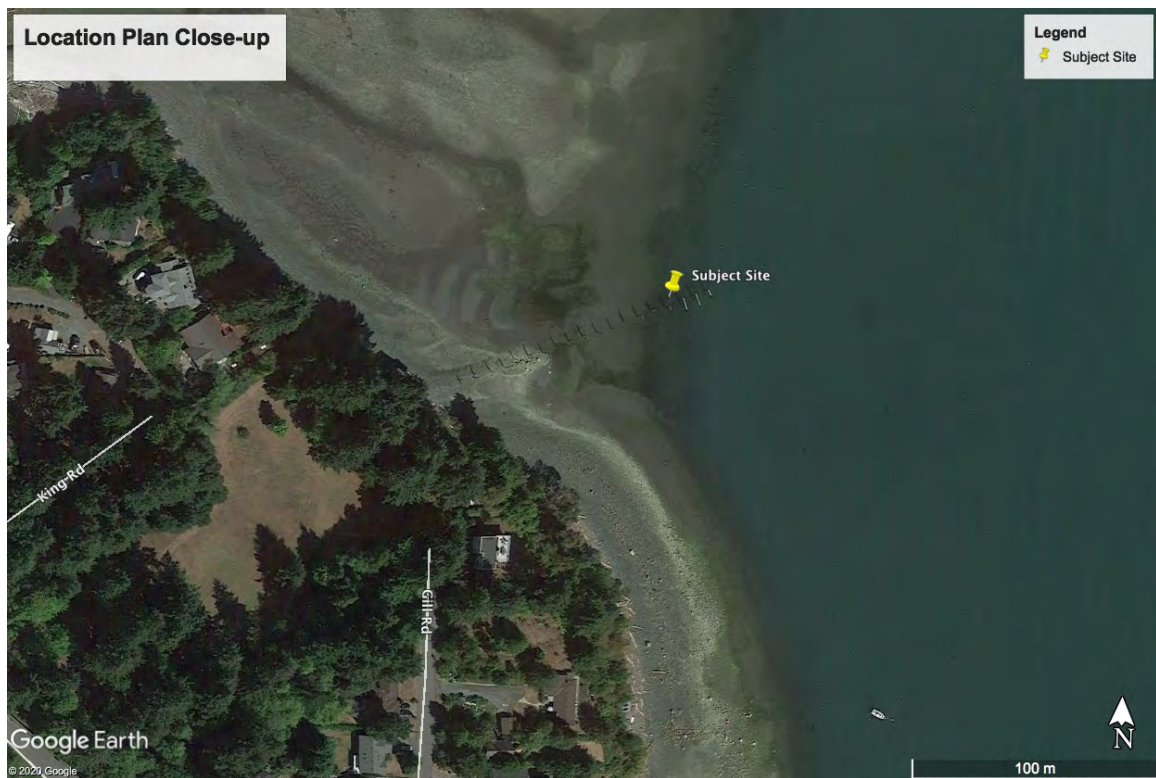


Figure 2. Location of Site depicting Existing Trestle Bents in Ladysmith Harbour, B.C.



View of site depicting remains of former trestle.



Figure 3. Detailed Site Plan depicting Intertidal and Subtidal Transect Locations

Methods

The habitat assessment concentrated on the intertidal and subtidal habitats. The locations of the intertidal beach transects and subtidal drop camera transects are shown in Figure 3.

As depicted on Figure 3 intertidal transects (IT-1, -2 and -3) were aligned parallel to the existing trestle. IT-1 was located about 10-12 m off the trestle on the south side of the trestle, IT-2 along the centre of the pile bents and IT-3 about 10-12 m off the north side. Observations of surface and 0.25 m² quadrat biophysical features were made at 10 m intervals along a cloth tape to the tide line. Each of the intertidal transects was extended seaward beyond the tide line by using chest waders and general observations of substrate and visible macro-biota recorded.




The subtidal underwater drop camera transects ST-1, -2 and -3 ran parallel to the existing trestle on a small craft provided by Vertex (Figure 3). As a result of finding eelgrass, one more cross transect, ST-4 was run. All distances were measured using a laser ranger (+/- 1 m accuracy) and recorded along with the camera recording digital numeric readout for later reference. Soundings were measured using a Lowrance sounder on the small craft.

Intertidal still photos of the site were taken using an iPhone digital camera. Underwater drop camera video records were reviewed in detail in the office, and representative still photos were taken off the video for inclusion in this report (Appendix 1). Details of the findings were mapped onto the Google Earth photo depicted in Figure 3.




Results





A detailed record of the intertidal observations made at the three transects at the site is in Table 1 below.



Table 1. Intertidal Assessment Transects at the Subject Site in Ladysmith Harbour, B.C. March 14 & 16, 2020

Transect	Metres from Conc. Abutment (m)	Observations	Representative Photo
IT-1 south side of trestle			
	10	Quadrat 1. Cobble over coarse sand, gravel, shell hash. Few Acorn barnacles (<i>Balanus glandula</i>) and Periwinkles (<i>Littorina</i> sp.), 2 Varnish clams (<i>Nuttallia obscurata</i>).	
	20	Quadrat 2. Cobble over coarse sand, gravel, fine shell hash. 4 Varnish clams, 1 Littleneck clam (<i>Protothaca staminea</i>).	
	30	Quadrat 3. Few cobbles on sand and shell hash, moist with seepage. 10 Pacific oysters (<i>Crassostrea gigas</i>), Acorn barnacles, few sea lettuce (<i>Ulva</i> sp.). No infauna.	
	32	Substrate transition to	











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		predominantly sand.	
	40	Quadrat 4. Fine sand, few cobbles, coarse shell hash & fragments. Moist. A few small red ribbon worms, 1 Butter clam (<i>Saxidomus gigantea</i>).	
	46.5	Eelgrass starts (5% cover).	
	50	Quadrat 5. Very fine moist sand, few shell fragments. Eelgrass (<i>Zostera japonica</i>) (5% cover) with relatively numerous rhizomes beneath. 5 Bent-nose clam (<i>Macoma</i> sp.), Numerous red ribbon worms, one ribbon worm (<i>Cerebratulus</i> sp.).	
	53.5		Tide line at 1725
	75	Eleventh pile bent.	Very sparse eelgrass 12 to 24 m south of bent 10/11. 30 cm of water at 1730.
	80		Dense eelgrass
	90	1 Lewis' moon snail.	Dense eelgrass
IT-2 (centre line)	0	Gravel, coarse sand; transition to cobble at 3 m.	
Slope Upper zone to 50 m 2.5°	3	Cobble with few boulders. A few Acorn barnacles.	
Lower zone from 50 m 0.5°	5.5	Cobble with a few boulders. A few Acorn barnacles, Periwinkle snails present.	
	10	Quadrat 1. Boulders and cobble overlying sand, gravel, shell hash. No infauna.	
	11	Boulders and cobble. Abundant Acorn barnacles, few Rockweed (<i>Fucus</i> sp.).	
	16	First pile bent.	

	20	Quadrat 2. Cobbles, few boulders. Abundant barnacles and Periwinkles, 2 Pacific oysters, 27 Varnish clams, 5 Littleneck clams, 1 limpet (<i>Tectura</i> sp.), filamentous algae, sea moss.	
	22	Second pile bent.	
	28.7	Third pile bent.	
	30	Quadrat 3. Terrestrial detritus (leaves) over sand with boulder and cobble. Abundant Acorn barnacles and Periwinkles; 4 Pacific oysters, 31 Varnish clams, 2 Littleneck clams.	
	31	Dense encrustations of Pacific oysters and abundant Acorn barnacles on boulders. Filamentous algae, sea moss (<i>Endocladia</i> sp.).	
	35	Fourth pile bent.	
	40	Fifth pile bent. Quadrat 4. Boulders predominate, compact. Subsurface sediment not accessible. 30 Pacific oysters, abundant Acorn barnacles, a few Periwinkles, mussels (<i>Mytilus</i> sp.) present, 15 limpets (<i>Tectura</i> sp.), 2 shore crabs (<i>Hemigrapsus</i> sp.), filamentous algae and sea moss prevalent. Photo view to south over rock groyne.	
	46	Sixth pile bent.	

	50	Quadrat 5. Few boulders, cobble adjacent, fine sand and shell hash with dense rock 5 cm beneath. 5 Pacific oysters, 2 Graceful crabs (<i>Cancer gracilis</i>), 2 Bent-nose clams (<i>Macoma</i> sp.), numerous red ribbon worms, few filamentous algae, sea moss and sea lettuce, dark sea lettuce (<i>Ulvaria</i> sp.)	
	52	Seventh pile bent.	
	53.5	End of rock groyne.	
	58	Eighth pile bent. 10 cm water at 1552 hr March 14, 2020.	
	60	No Quadrat due to water level. See 62 m. Few decaying <i>Z. japonica</i> eelgrass fronds, few sea lettuce.	
	62	Quadrat 6. Fine sand. <i>Z. japonica</i> eelgrass (10% cover), eelgrass rhizomes abundant. Some green algae.	
	63.5	Ninth pile bent. Sand substrate.	
	~69	Tenth pile bent.	
	75.5	Eleventh pile bent. Sand substrate. A few filamentous algae, sea moss clumps.	
IT - 3 north side			
	80	Sparse <i>Z. japonica</i> eelgrass starts about 6 - 8 m off N side of trestle in 51 - 80 m zone. Sandy bottom with some filamentous algae apparent through area adjacent trestle.	
	52	Tide line at 17:40.	
	51	Shoreward edge <i>Z. japonica</i> eelgrass.	

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	50	Quadrat 1. Fine silty sand. 1 Neridae polychaete, 1 Butter clam.		
	40	Quadrat 2. Very fine moist silty sand substrate. Small polychaetes, 2 Butter clams, 2 Cockles (Clinocardium nuttallii).		
	30	Quadrat 3. Few cobble on coarse sand, shell hash. 6 Neridae Polychaetes, numerous red ribbon worms.		
	20	Quadrat 4. Coarse sand and shell hash. Pacific oysters noted on groyne rocks adjacent. 5 Bent-nose clams, 3 Littleneck clams.		
	10	Quadrat 5. Cobble over coarse sand, gravel, shell hash with cobble below. Few Acorn barnacles and Periwinkles, 2 Pacific oysters, 19 Varnish clams, 3 Littleneck clams.		

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A detailed record of drop camera observations at the site is in Table 2 below. Representative photos of the subtidal fish habitat characteristics and substrate composition at the site are shown in Appendix 1.

Table 2. Subtidal Assessment Transects at the Subject Site in Ladysmith Harbour, B.C. March 16, 2020.

Transect	Distance to Shore to old Concrete Abutment	Tape time	Comments
ST-1	148	1:48	silty sand, diatomaceous film
south side	141	2:15	silty sand, diatomaceous film
	138	2:22	small patch eelgrass (<i>Zostera marina</i>)
	127	3:05	sand
	122	3:30	gravel sand, shell frags few eelgrass fronds at 3:35
	119	3:43	sparse eelgrass
	113	4:10	sand, dense eelgrass
	105	4:45	sand, shell frags, patchy eelgrass
	101	5:00	sand, dense eelgrass
	95	5:33	sand, dense eelgrass
	91	6:00	eelgrass transition to boulder cobble, both covered with filamentous algae; Redrock crab (<i>Cancer productus</i>)
	86	6:54	cobble, gravel, sand with patchy filamentous algae
		7:30	view of shore - end of run
ST-2			
south adj. centre	90	8:42	fine eelgrass , filamentous algae
	93	8:53	dense eelgrass
	98	9:14	dense eelgrass
	104	9:40	dense eelgrass
	111	10:30	dense eelgrass
	122	11:03	edge of eelgrass
	125	11:10	sand, diatomaceous film
	138	11:45	sand, diatomaceous film, detritus
	142	12:15	sand, diatomaceous film
	150	12:36	silty sand, shell fragments
ST-3			
north side		13:31	dense eelgrass
	70	13:45	dense eelgrass
	77	14:11	transition from dense eelgrass to sand

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	80	14:20	sand, filamentous green algae
	87	14:45	silty sand, patchy filamentous algae & green (Enteromorpha sp.)
	95	15:11	eelgrass starts
	97	15:18	eelgrass ends
	99	15:25	silty sand, filamentous & green algae
	101	15:30	silty sand, filamentous & green algae, Lewis's moon snail
	102	15:38	eelgrass starts
	105	15:47	dense eelgrass
	111	16:10	dense eelgrass
	115	16:30	dense eelgrass
	120	17:00	dense eelgrass
	126	17:30	dense eelgrass
	132	18:02	sparse eelgrass
	134	18:08	edge of eelgrass
ST-4			
X section between Bents 15 & 16	Distance from trestle, N to S		
	24	21:15	dense eelgrass
	13	21:50	dense eelgrass
	0	22:20	dense eelgrass
	7	22:40	dense eelgrass
	15	23:10	dense eelgrass
	23	23:31	dense eelgrass
	30	24:00	dense eelgrass
Bent 19			
Terminal bent	Distance to concrete abutment		
	128	26:55	seaward edge eelgrass estimated 3 m from terminal bent

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A summary of the marine fauna and flora observed during the intertidal and under water drop camera inspections is presented in Table 3 below.

Table 3. Summary of Marine Fauna and Flora Observed

Species	Number/ Density	Comments
Fauna: Invertebrates		
Acorn Barnacles (<i>Balanus glandula</i>)	100 +	Common on intertidal rocks
Limpets (<i>Tectura sp.</i>)	16	Few on intertidal rocks
Lewis's moon snail	2	Rare in low intertidal and subtidal
Littleneck clam (<i>Protothaca staminea</i>)	23	Occasional in intertidal sediments
Varnish clams (<i>Nuttallia obscurata</i>)	83	Common in high intertidal sediments
Bent-nose clam (<i>Macoma sp.</i>)	12	Occasional in intertidal sediments
Cockle (<i>Clinocardium nuttalli</i>)	2	Occasional in intertidal sediments
Butter clam (<i>Saxidomus sp.</i>)	4	Occasional in intertidal sediments
Shore crab (<i>Hemigrapsus sp.</i>)	2	Few among intertidal rocks
Periwinkle snails (<i>Littorina sp.</i>)	100+	Common on intertidal rocks
Pacific oyster (<i>Crassostrea gigas</i>)	100+	Common on intertidal rocks
Blue mussel (<i>Mytilus sp.</i>)	5	Few on intertidal rocks
Rock crab (<i>Cancer productus</i>)	1	Rare in subtidal
Graceful crab (<i>Cancer gracilis</i>)	2	Rare in low intertidal sediments
Ribbon worm (<i>Cerebratulus sp.</i>)	1	Rare in low intertidal sediments
Red ribbon worms (unidentified)	100+	Common in lower intertidal sediments
Neridae	7	Occasional in lower intertidal sediments
Flora: Algae		
Brown		
Rockweed (<i>Fucus sp.</i>)		Few on intertidal rocks
Red		
Filamentous algae (Antithamnion, Pterosiphonia & related species)		Common on substrate
Sea Moss (Endocladia sp.)		Common on substrate
Green		
Enteromorpha (sp.)		Common in the intertidal
Dark Sea lettuce (Ulvaria sp.)		Occasional in the intertidal
Ulva (Ulva sp.)		Common in the intertidal
Eelgrass		
Eelgrass (<i>Zostera japonica</i>)		Common in low intertidal zone
Eelgrass (<i>Zostera marina</i>)		Common in subtidal zone

Results (cont'd)

Intertidal Zone

The gently sloping intertidal zone substrate consists mainly of a mix of cobble, gravel and sands on the upper shore and fine sands on the lower shore. The coarser materials occur mainly within 50 m of the HWM (high water mark); this area has a slope of about 2.5 degrees. The lower zone of fine sands extends to the subtidal zone. In addition to the above substrate features there is a rock groyne in the upper 50 m of the intertidal zone that lies within and adjacent to the first few trestle bents. The groyne contains boulders and some very large rocks (1 m diameter) that lie mainly along and parallel to the south side of these bents. These substrate characteristics are depicted in the photographs in Table 1.

As noted in Tables 1 and 3 the site supports a variety of common intertidal biota. These include numerous oysters encrusted on rocks and on a few of the piles, and several clam species. As noted there were a few shore crabs and Graceful crabs in the lower zone. The lower intertidal zone supports Japanese eelgrass (*Zostera japonica*) and native eelgrass (*Zostera marina*). The interpolated areas of these two species are shown on Figure 3. At the time of the inspection the *Z. japonica* growth was undeveloped and showed only last season's decaying leaves. The native eelgrass (*Z. marina*) was generally well developed forming dense bottom cover.

Subtidal Zone

As indicated in Table 2 the transects indicate the subtidal zone substrate consists mainly of sand until about 125 to 130 m off shore where the substrate appears to transition to a finer silty sand. In general, as shown in Table 2 and depicted in Figure 3 the subtidal zone is dominated by two species of eelgrass, *Zostera marina* and *Zostera japonica*, which form an extensive eelgrass meadow along and around the old trestle alignment. The current eelgrass distribution indicates that there appear to be some voids in the Japanese eelgrass meadow, particularly between bents 10 and 15. This may reflect areas where *Z. japonica* occurs and has not started new growth. For the most part, where the observed fronds of *Z. marina* occur, it appears to exhibit fairly dense and well developed growth. As the season progresses it is expected the *Z. japonica* will develop and in the areas now exhibiting last year's detrital fronds will become green and frond densities increased. Few algae were represented in the transects except for filamentous algae on eelgrass or where there was a suitable substrate for algal attachment.

Discussion

The intertidal habitat features relatively common biota, typical of those found in the harbour and the east coast of the island. The low intertidal and subtidal observations reveal that the main habitat of value at the site is the eelgrass meadow. As this eelgrass meadow was observed early in the growing season (March) some seasonal growth might be expected by summer. Specifically, the later growth is characteristic of *Z. japonica*, and it may well develop in the areas not showing last years fronds.

Conclusion

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Based on our habitat assessment the site exhibits a low profile foreshore characterized by shingle and coarse substrates in the upper intertidal, giving way to sandy substrates, which form the dominant shoreline substrate characteristic. The assessment demonstrated that the site supports characteristic marine biota and associated habitats.

The intertidal zone supports Acorn barnacles, Pacific oysters, Littorine snails and limpets on hard substrates, as well as several species of clams in the substrate. Although Bent-nose, Littleneck and Butter clams were represented, the numerically predominant species were Varnish clams. A few crabs including Shore crabs and Graceful crabs were observed.

Among the site attributes the intertidal and subtidal zones were found to support a well-developed native eelgrass meadow (*Zostera marina*) along with the more intertidally adapted exotic Japanese eelgrass (*Zostera japonica*).

Prepared by

A handwritten signature in blue ink, appearing to read "Rob Waters", with a horizontal line extending from the end of the signature.

Rob Waters, R.P.Bio.

Appendix 1. Subtidal Photographs

Distances indicated are from the concrete abutment.

Transect ST-1



Views at 141 m and 113 m



Views at 105 and 101 m



View at 91 m

Transect ST-2



Views at 98 m and 122 m

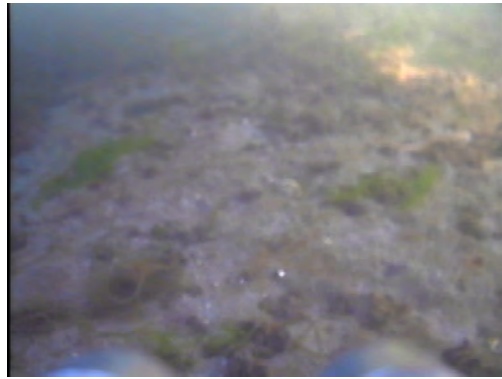


Views at 125 and 138 m



View at 150 m

Transect ST-3



Views at 70 m and 80 m



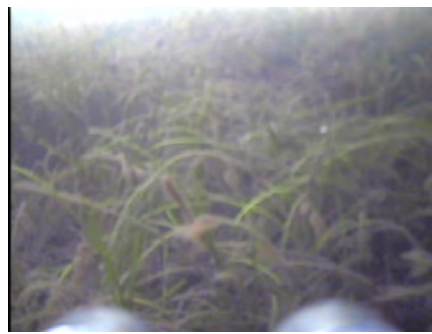
Views at 105 m and 126 m



View at 134 m

Transect ST-4

Transect perpendicular to existing trestle between bents 15 and 16.



Views at 24 m N of trestle and at 0 m on trestle alignment



View at 23 m on S side of trestle

CASTOR CONSULTANTS LTD.

November 4, 2021

Herold Engineering Ltd.
3701 Shenton Rd,
Nanaimo, BC
V9T 2H1

Attention. Mr. Mike Herold, P. Eng.

Dear Mike,

Further to our discussion on Ms. Anderson's dock in Ladysmith Harbour we offer some comments on the proposal to replace the existing creosote timber piles with new steel piles. The proposed upgrade was approved by DFO in the letter of advice under DFO file number: 21-HPAC-00280, dated September 27, 2021 provided specific mitigation measures are employed, as detailed in the letter.

As noted in the Castor Consultants Ltd. habitat assessment report (March 2020) in the location of the proposed dock replacement there exist old timber pile bents, making up a total of 38 creosoted timber piles. The creosoted treated timber pile pairs (bents) will be removed and replaced with 12 18" steel single piles on 30-foot centres, which will form the trestle support (Herold Engineering Sketch Sheet 5483-001). At the trestle terminus an additional 4 steel piles will support a small deck from which the gangway will lead to the float in deep water. As shown in the sketch plan another 2 steel piles will be employed to anchor the float.

Creosote is a commonly used timber pile preservative that prevents marine growth, and marine borers in particular, from compromising the structural nature of timber piles. The creosote has a negative effect on the broader environment and the use of alternatives such as steel is beneficial.

In summary, the removal of the old creosote treated timber piles and the use of steel piles will constitute an improvement as it will remove a local source of creosote exposure to the marine water column and the associated negative impact on nearby marine biota.

Yours truly,

A handwritten signature in blue ink, appearing to read "Rob Waters", with a horizontal line extending from the end of the signature.

Rob Waters, R.P.Bio.

Received December 30, 2021

Within Circulation Area

From: Don Mercer

Sent: December 30, 2021 7:59 PM

To: Town of Ladysmith <info@ladysmith.ca>; Don Mercer

Subject: File DVP 3090-21-14 Development Variance Permit adjacent to 303 Chemainus Road

To the Town of Ladysmith:

Thank you for the notice, left at our front door advising us of this permit and informing us re how to provide written submissions:

We as property owners and residents at 318 Roland Road, Ladysmith have comments as follows re DVP 21-14:

1. Since the earlier notice, mostly focused on the beach area below the upland property, there have already been a number of impacts our neighbourhood and our enjoyment of our property which overlooks the dock area and beach area to the west and southwest of us:

- previously we could not see the cottage on the waterfront; now there is a constant stream of light in evenings from there.

- three mooring buoys and the float dock at the ocean end of the legacy pilings resulting in up to three larger powered vessels coming and going as well as small craft traffic between the beach and the float dock and related recreational activities with resulting noise levels. This noise plus propellor action will be having as well impact on the adjacent seeded Marine Harvesting Zone which our property overlooks and which is a source of employment and of shell fish - clams and oysters. We note this dramatic increase in activity with the existing float dock, beach arrangements and the three mooring buoys.

2. Several years ago the neighbourhood dealt with two zoning applications for apartments on the 303 Chemainus Road property, the first of which also sought to have as we recall a public as opposed to private marina. The marina was rejected in the first of those processes. We wonder if this DVP 21-14 and its recent predecessor process is in fact a way to gain by a back door that which could not be achieved by a front door. We say this in the context of much increased activity both on the upland property and in the adjacent ocean and beach including a film crew and company permanently there and many vehicles and personnel for this purpose as well as for changes to the property for purposes of this filming.

3. In short the activity to date has already impacted the neighbourhood - some positive including rejuvenation of a previously run-down property with the keeping of historical property elements and some negative with cutting of 80 trees, increase of noise level from the highway resulting therefrom, site line changes as well from that tree cutting that bring Gill Road into view and which removed the buffer of trees between neighbourhood on the King Road side and 303 Chemainus Road.

4. Right now we have in front of our home a float dock and pilings that resulted from a long-abandoned fixed dock. Judging by the five points proposed for the private dock, the result will be:

- a dock almost seven times the area of the existing dock and extending close to or to the beach.

- a dock over 50% higher than the existing dock with a guardrail. This will potentially obstruct views/site lines and impact wind flows in the area.

- a dock over 2.5 times longer and as noted coming much closer to the shore. If a float dock it will negatively impact water flows and currents which will inevitably impact on the beach area and the Marine Harvesting zone. This is already noticeable from the float dock added in the past year. We hope

that the Town has fully consulted with the Province of BC environmental and conservation authorities and Fisheries and Oceans Canada as well as the managers, employers and employees utilizing the Marine Harvesting zone.

-reduction of the minimum setback from the Marine Harvesting zone from 125m to be 19m will impact and disrupt ocean currents, sand formation and current flows from Holland Creek. If the lengthened dock is on floats this could create a significant dead zone. It will also block a route well used by kayakers and canoeists. If the dock is on the pilings it will also block their routes and disrupt wind flows. And:
5. an uncertain impact of reducing the clearance between the dock and the seabed from 2.0m to 1.8m "only for a 1.5m segment adjacent to the existing boathouse". For one thing this looks to mean further disruption of both the beach at low tide and flow of people in the area.

6. With a larger dock how many and how large will be the vessels docking in the private marina is of great concern. The design shows 13 boat slips -marine residential moorage, and aluminum bridge to the dock and micro mesh decking plus the float dock and gangway. The three vessels that show up now can already be disruptive and pose as well a noise pollution and direct ocean and beach contamination risk and impact enjoyment of the ocean throughout low and high tides. So 13 slips plus activity on the float dock is to us alarming. What also is the meaning of marine residential zone - is it boats or boat houses or both? A huge difference to noise levels, pollution risk and sight line destruction plus traffic is to be the result. Looks much more like a very public marina even if private space with related boat traffic and risks. Benefit to one property owner to the potential detriment of many people - employers, employees, citizens and residents.

In conclusion, disruption to people using the beach and the water, to the Marine Harvesting zone and to those using that zone, to sight lines that impact enjoyment of property and noise and water pollution would all be results of what is proposed. And, the Town of Ladysmith has an obligation to protect the interests of all citizens and residents. Accordingly, we recommend the rejection of the DVP 14-21 application.

Thank you for this opportunity to respond to the application.

Regards

Don and Susan Mercer
318 Roland Road
Ladysmith BC

Received January 10, 2022

Inside Circulation Area

From: MIKE TIPPETT
Sent: January 10, 2022 12:39 PM
To: Town of Ladysmith <info@ladysmith.ca>
Cc: Julie Thompson <jthompson@ladysmith.ca>
Subject: DVP 21-14 303 Chemainus Road

Dear Mayor and Council,

Thank you for referring the proposed Development Variance Permit for 303 Chemainus Road to us for comment.

We have the following comments:

1. It is absolutely top priority that any docks or other private features on the foreshore area not impede in any way shape or form the passage of the public on foot at low tide. Any proposed structure that would do that is at odds with the common law right to pass through such areas unimpeded and must be avoided.
2. the proposed increase to the surface area of the dock is excessive, roughly 6-fold. This seems to be far out of proportion to reason, at least within that particular zone. Covering foreshore areas damages the intertidal communities of plants and animals of one of the most productive biomes by virtue not only of construction disturbances but also by increased shading and increased levels of human and boat activity associated with larger docks. We would respectfully suggest that a far smaller increase be considered, and further, that if any dock replacement or expansion is approved, that the docks and associated floats be composed of translucent expanded metal, in order to reduce the shading effect upon the benthos.
3. the proposed increase to the maximum height of the dock seems reasonable.
4. the proposed 47 m increase to the length of the dock from the maximum of 30 is also excessive, on a par with or larger than most commercial docks such as Fishermans Wharf in Cowichan Bay.. One wonders how many boats or yachts could tie up against a 77 metre dock and the attendant effects upon the aforementioned ecology. A reasonable dock length for a parcel of land such as this should be in line with the expectation of perhaps a maximum of two vessels for private use, and a 30 m dock surely will fit that need. The only exception that in our consideration that would justify such a large increase would be if the foreshore was so shallow that the extension is necessary so that a normal pleasure boat without a keel could not moor within the first 30 metres.
5. The tenure holder for the shellfish area (W-4 Zone) should be notified of the proposed setback reduction, but insofar as 125 metre setback was considered adequate, the 5-fold reduction does seem massively excessive.
6. As noted earlier, clearance to the seabed and the shading effects of structures over the water is an important limiting factor for the benthos and associated ecological productivity and such structures should be minimized if not totally avoided.

Thank you for the opportunity to comment on this.

Sandra and Mike Tippett

294 Gill Road

Received January 12, 2022

Within Circulation Area

From: Debby Baker
Sent: January 12, 2022 12:56 PM
To: Council <towncouncil@ladysmith.ca>
Subject: 303 Chemainus Road dock

Thank you for the opportunity to comment on the proposed dock.

Given that Ms. Anderson's "boat house" property already impedes on the public's ability to walk the waterfront at high tide, I do not believe that the proposed dock will enhance use of area by the public.

Ms. Anderson's boat house does not have an occupancy permit, however, it appears that it is being lived in.

The size of the proposed project leads one to believe that the use is much more than that of a residential owner.

Thank you for the opportunity to comment.

Debby A. Baker

Received January 12, 2022

January 12, 2022

5483-001

Via email: jthompson@ladysmith.ca

Town of Ladysmith
410 Esplanade,
PO Box 220
Ladysmith, BC
V9G 1A2

Attn: Mayor Stone and Council

**Re: Development Permit Variance Application
Anderson Dock Re-Build
303 Chemainus Road, Ladysmith, BC**

Dear Mayor Stone and Council,

I am acting on behalf of my client, Ms. Pamela Anderson to firstly thank Mayor and Council in considering Ms. Anderson's application for a Development Permit Variance at the above property that would allow her to rebuild her dock that has deteriorated over the years that both Ms. Anderson and her family have owned for over 60 years.

Secondly, we would like to thank the excellent Staff at Ladysmith who we have been working with for the last five months in preparing this application.

For the past two years, we have been working diligently with the BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), the Department of Fisheries and Oceans, Transport Canada, Stz'uminus First Nation and the Five Hul'qumi'num Treaty Group Nations in our application to rebuild the dock.

Our outreach to First Nations and other Government Departments was done concurrently with FLNRORD's Referral Process which included public notices posted locally in Ladysmith.

Due to the very shallow nature of the foreshore, the dock needs to be re-built at a distance out into the channel and similar to where the dock was originally constructed to avoid the floating dock from resting on the seabed. This was at variance to FLNRORD requirements but was accepted by FLNRORD and all of the other Departments and subsequently approval to rebuild the dock was granted by FLNRORD about five months ago.

A Contractor was lined up to start driving piles in October 2021 to take advantage of driving piles at high tides during day light hours but unknowingly we missed submitting to the Town for their approval.

Unfortunately, the geometry and siting of the dock upgrade could not meet certain criteria in the Towns Zoning Bylaw for Marine Residential Moorage (W-1) due to the shallow nature of the foreshore and some variances are required in order to reconstruct the dock in the same position it was for the past 60 years.

All of the above along with the due diligence completed by Staff and letters received from the Public will help Council to make an informed decision on our DP Variance application.

We are hopeful that Council will have enough information to make a decision at the January 25, 2022 Council Meeting.

Without trying to rush the process, I would like to point out that again we are hoping to start construction in early February since we have a Contractor available to start pile driving to take advantage of the higher spring tides during day light hours.

If the marine pile driving work is not completed in February, it could force the marine work to complete in the Fall of 2022 and could risk the cancellation of the project altogether.

Thank you for your consideration.

Yours truly,

HEROLD ENGINEERING LIMITED



Mike Herold, P.Eng., Struct.Eng., M.I.Struct.E., LEED AP

Cc: amccarrick@ladysmith.ca
jbelobaba@ladysmith.ca

From: John Hill, 295 Gill Road, Ladysmith BC, V9G 1X9

16 January 2022

Dear Ladysmith Town Council members,

Regarding the application to develop a jetty at 303 Chemainus Road—This significant development is wanted because of the shallowness of the water, but the water is shallow because it is on the edge of the Holland Creek estuary. There is an extensive area of the ecologically vital eel grass (these are known as “salmon highways”) in the zone impacted by the jetty: the Islands Trust report on eel grass (<https://islandstrust.bc.ca/document/nearshore-eelgrass-inventory-fr-2012-2014/>) describes the damage done to the species by boat propellers and dock construction. Nature Conservancy Canada describe it as a species “highly susceptible to human interference” and mention “shade from docks” as one threat.

The Ladysmith town website links to this “great resource:” [Biodiversity BC: Nature’s Pulse, and Atlas, and Ecological Principles](#) which points out that

Even though estuaries make up only 2.3% of the length of B.C.’s coastline, they are used by an estimated 80% of all coastal wildlife. B.C.’s 440 plus estuaries are rare ecosystems, threatened by conversion to human uses and by potential impacts of climate change such as erosion, sedimentation and flooding.

Holland Creek is a salmon stream, and it supports a wide range of wildlife in addition, from the harbor seals that feed on the fish, to the shellfish in the mudflats, to the otters that feed on the shellfish, and to the herons (a species at risk) that hunt there too. We are lucky to have an example of this rare ecosystem in our town. It is a valuable resource for community members who live nearby and who visit (a small town park allows access), and it contributes significantly to the health and variety of the local ecosystem, but beyond this, it has a value in and of itself. The days of elevating our own benefits over that of the wider natural environment are surely over-- not least in that we now recognize the powerful relationship between the two.

We should be extending our protection of the estuary rather than encroaching on it. At almost 3 times the length and 7 times the area of the existing ruin, with a much-reduced setback from the shellfish harvesting area, and with accommodation for up to ten boats, the proposed jetty will necessarily result in additional impacts on the estuarine environment.

The development will also have an intrusive and negative aesthetic and emotional impact on community members who enjoy the beach and ocean in this area. It is public not private property and we should have a very strong reason for building there. I see no such reason in this application.

It also sets a bad example for others: perhaps I should ask for a permit to build a jetty from my property since it seems that the only reason needed is the wish for such a thing. We could have a forest of jetties along the beach here. In practice, other boatowners manage with buoys and rowing between boat and shore. I want my neighbours to be able to enjoy their property, but I do

not see the need to grant this special and very significant divergence from normal practice in this ecologically important intertidal estuary zone. I recommend the rejection of development permit FILE NO: 3090-21-14.

Yours faithfully

John Hill

Ann Rogers
295 Gill Road

17 January 2022

Dear Mayor and Council

**Re: proposed Development Variance Permit
for 303 Chemainus Road**



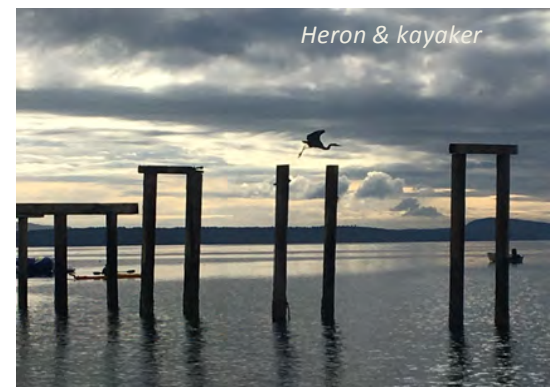
Writing not as a property owner, but as one of the hundreds of kayakers, rowers, canoeists, swimmers, paddleboarders, dog walkers, photographers and beachcombers who know the shallow waters around Hwsaaqw'um (Holland creek and its estuary) as a place of tranquillity and abundance, I ask the Council to refuse this application. More importantly, I'm asking this on behalf of the countless species who rely on this complex local ecosystem for their survival. While the estuary is hardly pristine or untouched, its location — shielded by a sewage treatment plant, a highway and disused railway, and high bank waterfront properties — has allowed it to sustain an amazing variety of plant and animal life in spite of constant human encroachment. This proposal poses a massive threat to the waters and lands around the estuary at a time when our priorities are shifting to water sustainability, wildlife recovery and species at risk management.



Most immediately, the removal of the existing pilings and the construction of a large, new structure will destroy and damage important parts of the forage fish habitat, notwithstanding the feeble gestures made towards “protecting” the eel grass that is key to marine species survival. Longer term, concentrating a large amount of power boat activity in a hitherto quiet area will drive off the birds, mammals and fish who frequent the area, as well as destroy its serenity and beauty — all for the pleasure use of a single private household.

For years federal, provincial and state governments have failed to protect the Salish Sea, and despite countless studies and programs, the number of marine species at risk continues to rise. Conservationists point out that the reason is not lack of scientific evidence but political will.

If the Mayor and Council define their responsibility simply as weighing the whims of taxpayers and property owners, it could feel that this application, by satisfying provincial and federal regulations, is fit to go forward. Increasingly, however, community leadership means managing how we interact with each other on the land and water. Through your work on Council you serve because you know and love the community, and you have already demonstrated a far bigger sense of responsibility that includes stewardship of the harbour, along with the creeks, forests and mountains, often in partnership with the Stz'uminus





people. You are, with every decision, defining Ladysmith not just for now, but for future generations.

The applicant already has a large floating dock for tying up to, along with easy access to it from their home. Their interests will be only lightly impacted by your refusal of their application, yet this refusal will deliver significant, tangible benefits to the wider community of all our relations going forward.

Yours sincerely

Ann Rogers



The existing boathouse with living quarters (above) and raft (left) already provide ample, convenient private access and moorage to the applicant.

STAFF REPORT TO COUNCIL

Report Prepared By: Erin Anderson, Director of Financial Services
Ryan Bouma, Director of Infrastructure Services
Reviewed By: Allison McCarrick, CAO
Meeting Date: January 25, 2022
File No:
Re: **Water Billing Adjustments - Methuen**

RECOMMENDATION:

That Council direct staff to adjust the water billing amounts to zero for Account Nos. 1314000, 0667000, 0666000, 1313100, 0665000, 1317000, 1317100, and 1313000 for 2021 Q4 (October to December 2021) and 2022 Q1 (January to March)

EXECUTIVE SUMMARY:

Staff were unable to complete the frequent flushing of a portion of the Methuen Street water main due to significant weather events over the last few weeks. The effect of reduced water main flushing is disagreeable water discoloration, though it does not affect water safety. There are eight properties affected by this water issue and staff are recommending the water billing accounts are adjusted to zero for those properties.

PREVIOUS COUNCIL DIRECTION:

N/A

INTRODUCTION/BACKGROUND:

The watermain that serves eight residences on Methuen Street between 4th and 5th Avenue was installed in 1962 and consists of a 100mm diameter cast iron pipe. Cast iron pipes are prone to developing tuberculation resulting in iron oxide (rust) on the interior walls of the pipe. With consistent flushing, Town forces have managed to maintain an acceptable level of water clarity; however, at times discolored water has been delivered to the residents.

Residents in the area have reported the discoloration to staff frequently (see photos below) and staff have followed up with watermain flushing. In general, the water clarity has immediately returned and considered acceptable. Staff tested the water as recent as November 9, 2021, and found the water to be within the necessary limits for healthy drinking water.



Residents requested that water charges be refunded given the intermittent water quality. Staff agree that the water discoloration doesn't meet the water clarity standards we normally provide.

This watermain capital project was approved by Council and is to be completed in 2022. Staff anticipate the work to begin in early February provided materials can be obtained without delays. The contractor has 7 weeks to complete the work without penalty. Residents will be notified once a mobilization date is confirmed.

ALTERNATIVES:

Council can choose to:

1. Not issue a reduction in the water billings.
2. Adjust the accounts to base rates only. There would still be a minimum charge of \$52.66 for each account in 2021 Q4 and \$55.29 for each account in 2022 Q1.

FINANCIAL IMPLICATIONS:

If approved, the Town will see a reduction in 2021 water revenues of \$535. Using the same consumption amounts, it is anticipated that a further \$563 will be adjusted for 2022 Q1.

LEGAL IMPLICATIONS:

N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Reducing the water consumption charges will allow residents to flush their personal water systems without worrying about the additional water (consumption) costs.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

If approved, Finance will complete the necessary billing adjustments.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

☐ Complete Community Land Use ☐ Low Impact Transportation

- ☐ Green Buildings
- ☐ Innovative Infrastructure
- ☒ Healthy Community
- ☐ Not Applicable

- ☐ Multi-Use Landscapes
- ☐ Local Food Systems
- ☐ Local, Diverse Economy

ALIGNMENT WITH STRATEGIC PRIORITIES:

- ☒ Infrastructure
- ☒ Community
- ☐ Waterfront
- ☐ Economy
- ☐ Not Applicable

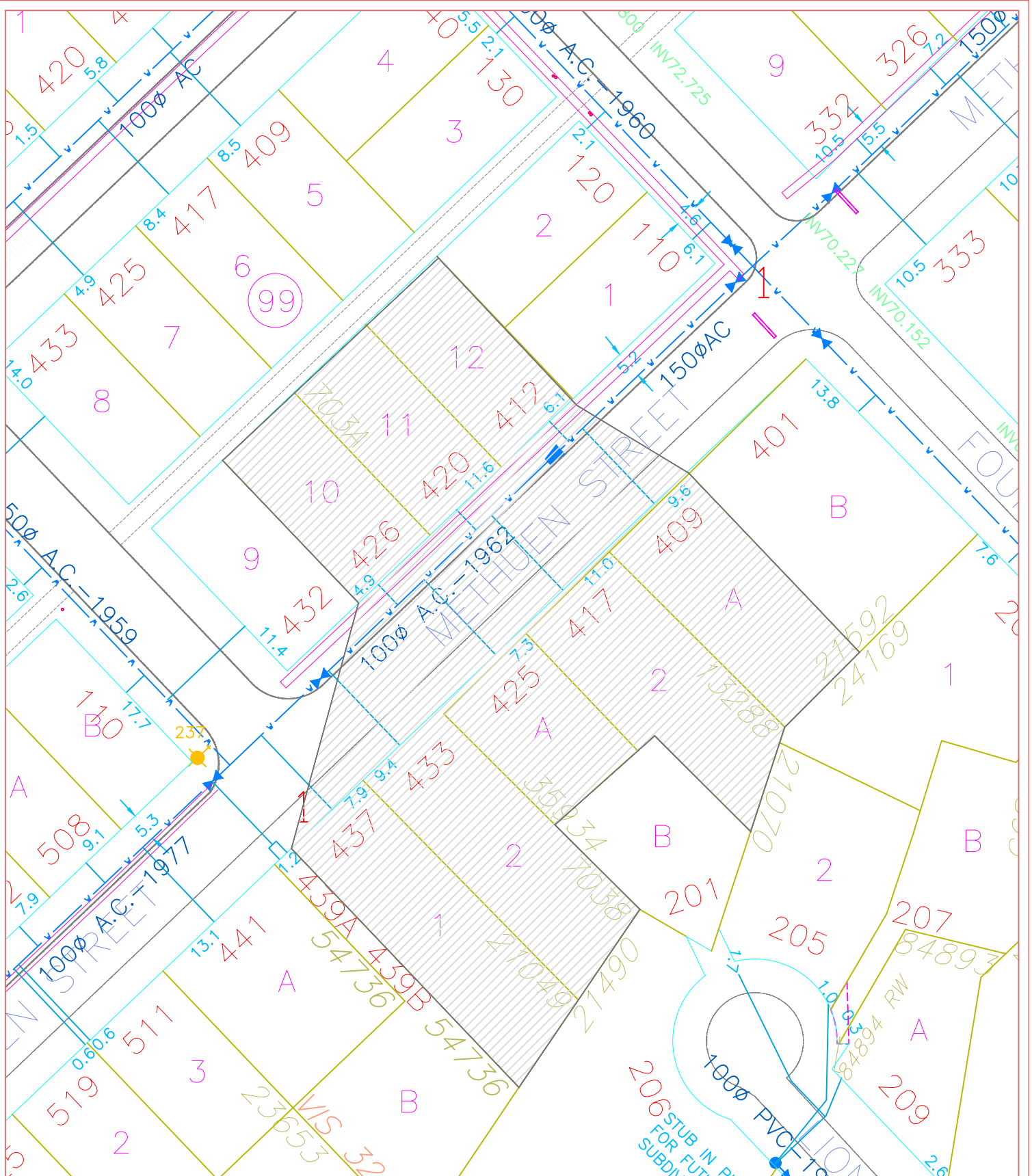
I approve the report and recommendation.

Allison McCarrick, Chief Administrative Officer

ATTACHMENT

- A. Map of affected parcels

APPENDIX A



TOWN OF LADYSMITH

TITLE:

Methuen Properties

SHEET No: 1

SCALE: N.T.S

FILE: BASE MAPPING\LADYSMITH

DRAWN BY: RB

DATE: January 12, 2022

STAFF REPORT TO COUNCIL

Report Prepared By: Chris Geiger, Fire Chief
Reviewed By: Allison McCarrick, Chief Administrative Officer
Meeting Date: January 25, 2022
File No:
Re: **Fire Department Aerial Device**

RECOMMENDATION:

That Council:

1. Increase the proposed 2022-2026 Financial Plan budgeted amount for the Fire Department Aerial Device Truck (Ladder Truck) to \$2.1 million dollars with the additional funds to be borrowed;
2. Direct staff to proceed with the required process for an Alternative Approval Process;
3. Provide early budget approval in order to facilitate an Alternative Approval Process; and
4. Upon successful completion of an Alternative Approval Process authorize staff to waive the Town's Purchasing Policy and direct award the bid to Fort Garry Fire Trucks in the amount of \$1,899,775 plus applicable taxes.

EXECUTIVE SUMMARY:

The Town of Ladysmith has been offered an opportunity to purchase a Sutphen demonstration aerial device at a reduced cost which could be delivered this year, as opposed to an 18-22 months build time for a new device.

This aerial device is being held for Ladysmith in a very competitive market, therefore staff recommends proceeding with an Alternative Approval Process to authorize borrowing because of its relatively shortened timeline.

Staff requests waiving the Town Purchasing Policy to direct award the bid because Fort Garry is the exclusive dealer for Sutphen in Canada.

PREVIOUS COUNCIL DIRECTION:

N/A

INTRODUCTION/BACKGROUND:

Ladysmith Fire/Rescue is in the process of replacing its aged out aerial device truck (known as Ladder 1). During the time that the LFR New Truck committee, comprised of FC Geiger, DC Johnston, Cpt Giles, Lt Smith, A/Lt King, FF Moore, and FF VanZandwyk, was writing the specifications for a future ladder truck, a vendor asked if there would be interest in purchasing

a Sutphen demonstration apparatus. This apparatus is in production now, would be completed in March, and be available for delivery in September or October.

ALTERNATIVES:

Council can choose to:

1. Not approve the recommendations and direct the Fire Department to continue the original process to replace Ladder 1.

FINANCIAL IMPLICATIONS:

Included in the 2022-2026 draft Financial Plan is a ladder truck for \$1.7million. This cost is based on preliminary estimates of similar trucks in 2020. Like most of the Town's fire vehicles, this large purchase is funded using borrowing, and the debt payments would start in 2023.

The Sutphen demonstration vehicle is being offered for \$1,899,775.00 CAD + applicable taxes. Currently this vehicle would sell for \$2,100,000, and will reach approximately \$2,250,000 by the end of 2022.

If Council approves the increased budget, the debt payment could start as early as September. Assuming a principal amount of \$2.1 million amortized over 25 years at 0.97% the payment amount would be \$31,545 for 2022, September to December and annually at \$94,630 for at least 5 years. After 5 years, the debt will be re-amortized and a new annual payment will be calculated. The debt payment for 2022 of \$31,545 was not included in the financial plan presented to Council in November of 2021. This would be an increase of approximately 0.42% to municipal taxation.

LEGAL IMPLICATIONS:

Electoral approval is required prior to executing any borrowing. Staff recommend utilizing the Alternative Approval Process (AAP) which is consistent with all other fire vehicle purchases over the last 15 years.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

There is general support in the Town of Ladysmith when it comes to updating fire apparatus. This purchase could send the message that the Town is investing in public safety in respect to fire suppression and rescue capabilities.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The Fire Department will lead the discussions with the vendor; Legislative Services will lead the AAP and Financial Services will prepare a borrowing bylaw and liaise with the Municipal Finance Authority.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |

- ☒ Innovative Infrastructure
- ☒ Healthy Community
- ☐ Not Applicable

- ☐ Local Food Systems
- ☐ Local, Diverse Economy

ALIGNMENT WITH STRATEGIC PRIORITIES:

- ☒ Infrastructure
- ☐ Community
- ☐ Waterfront

- ☐ Economy
- ☐ Not Applicable

I approve the report and recommendations.

Allison McCarrick, Chief Administrative Officer

ATTACHMENTS:

- A. Sutphen SPH100 brochure
- B. Sutphen SPH100 Supplement



ATTACHMENT A

FAMILY OWNED
SINCE 1890

SPH 100 Mid-Mount Aerial Platform



Shown with Optional Equipment

The SPH 100 Aerial Platform is the most demanded mid-mount aerial platform on the market. Once you drive and operate it, you'll understand why. The shorter wheelbase and overall length results in a more maneuverable apparatus. The industry's fastest set up time will have you in the air for rescue or attack in less than a minute.



APPARATUS BODY

CONSTRUCTION:	Heavy duty, corrosion resistant, #304 Stainless Steel body, Huck-bolted to the frame
DOORS:	Roll up doors painted or satin finish, hinged doors optional
HOSEBED:	Capacity for up to 900' of 5" LDH
LADDERS:	Can accommodate NFPA pumper or Quint, or Aerial compliment of ladders
TANK:	300 gallons
AIR BOTTLE STORAGE:	Capacity for up to (8) air bottles stored in the fender wells
COMPARTMENT SPACE:	Up to 300 cubic feet of usable compartment space

PUMP FEATURES

Hale or Waterous pumps available
1500-2000 gpm mid-ship mounted pump.

STANDARD DISCHARGES: (2) 2.5" left, (1) 2.5" right,
(1) 3" right, (1) 2.5" crosslay,
(2) 2" crosslay

PLATFORM EQUIPMENT: Twin monitors mounted outboard, up high; allow the front of the platform to remain open allowing better access to the face of the platform for rescue or ventilation. Manual or remote monitors are available.

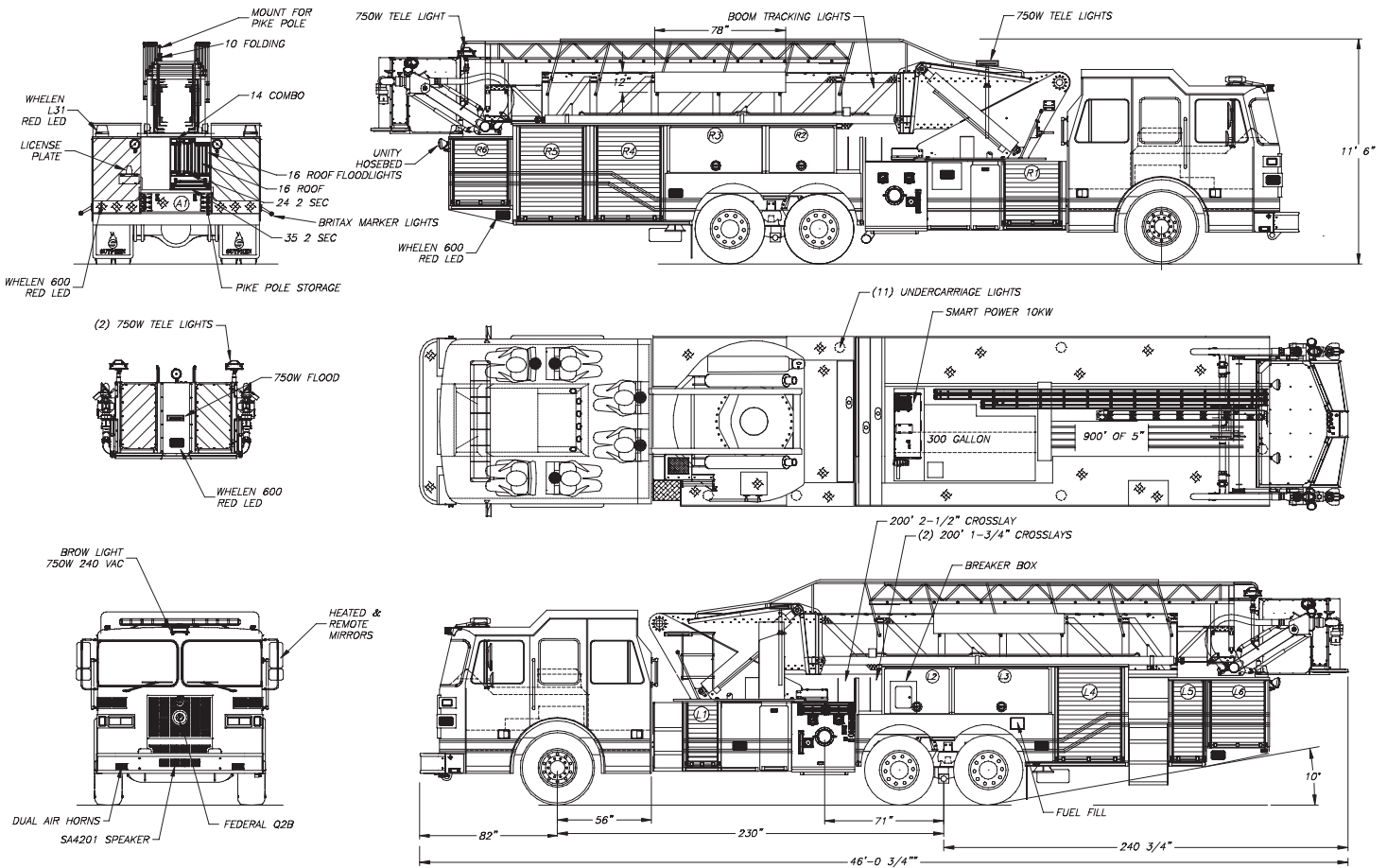
APPARATUS / PLATFORM FEATURES

- Mid-mount design allows for a lower center of gravity, resulting in a more stable and better handling apparatus.
- Huck-bolted, 4-sided box design boom provides superior strength and rigidity, and results in a 3:1 safety factor.
- The Sutphen waterway, electrical cables, and breathing air hoses are completely enclosed inside the box boom, providing excellent protection for those systems.
- Low, open hose bed for easy deployment and loading of hose.
- The Sutphen aerial tower may be rested against a roof cornice or building, if necessary, without causing costly repairs to the waterway unlike most other designs.

- Aerial is constructed of #6061-T6 aluminum that will withstand extreme climate and intense heat situations. The aerial is left unpainted for ease of maintenance and lower repair cost.
- The Sutphen SPH 100 is rated for 35 MPH winds; a direct testament to the box boom's strength.
- The aerial device is rated with a 1000# tip load when dry, and 500# while flowing water.
- Fastest set-up time in the industry. Only one out and down jack each side. All control stations are located within 12 feet of each other. After setting the parking brake at the scene, the Sutphen platform can be deployed in 40 seconds or less.
- Sutphen aerials have full capability for over the cab operation.
- Large bucket with room for equipment and personnel. 73" wide x 40" deep, 19.5 sq. ft.
- Enclosed rear ladder storage, and up to 228' of ground ladders (Truck Company configuration).
- Sutphen SPH100 stabilizers are out and down "H-style" with a total set up width of 18'.

SUTPHEN

SPH 100 Mid-Mount Aerial Platform



LEFT SIDE

DOOR OPENINGS

COMP'T	HEIGHT	WIDTH
L1	31 1/2	13 1/2
L2	23	33 1/4
L3	23	50 1/4
L4	48 1/2	38 3/4
L5	40 1/2	15 1/2
L6	32 1/2	30 7/8

LEFT SIDE

COMP'T DIMENSIONS

HEIGHT	WIDTH	DEPTH
38 1/2	20 1/4	20 1/4
27 1/2	41 1/2	12 1/2
27 1/2	58	12 1/2
56 1/2	45 3/4	26 1/2
48 1/2	22	26 1/2
40 1/2	34 3/4	26 1/2

RIGHT SIDE

DOOR OPENINGS

COMP'T	HEIGHT	WIDTH
R1	31 1/2	33 1/2
R2	23	33 1/4
R3	23	50 1/4
R4	48 1/2	38 3/4
R5	48 1/2	38 3/4
R6	32 1/2	30 7/8

RIGHT SIDE

COMP'T DIMENSIONS

HEIGHT	WIDTH	DEPTH
38 1/2	40	26 1/2
27 1/2	21 1/2	26 1/2
27 1/2	58	26 1/2
56 1/2	45 3/4	26 1/2
56 1/2	45 3/4	26 1/2
40 1/2	34 3/4	26 1/2

REAR COMPARTMENT

DOOR OPENINGS

COMP'T	HEIGHT	WIDTH
A1	9 1/2	24 1/2

REAR COMPARTMENT

COMP'T DIMENSIONS

HEIGHT	WIDTH	DEPTH
9 7/8	26	88



SUTPHEN™

SUTPHEN CORPORATION 6450 Eiterman Rd., Dublin, OH 43016

Tel: 614.889.1005 • Toll Free: 800.848.5860 • Fax: 614.889.0874

Web: www.sutphen.com • E-mail: sutphen@sutphencorp.com



SPH 100 Mid-Mount Aerial Platform 2019

ATTACHMENT B

Example SPH100 with over cab operation while setup on steep grade. Full range operation within entire aerial envelope.



Example SPH100 with over cab operation while setup on steep grade. Full range operation within entire aerial envelope.



STAFF REPORT TO COUNCIL

Report Prepared By: Ryan Bouma, Director of Infrastructure Services
Reviewed By: Allison McCarrick, Chief Administrative Officer
Meeting Date: January 25, 2022
File No:
Re: 4th Avenue Reconstruction Update

RECOMMENDATION:

That Council direct staff to include in the 2022-2026 Financial Plan the 4th Avenue Improvement Project (Root Street to White Street) at a cost of \$1,880,000, with the additional funding to come from the Water Reserve for \$300,000 and the Gas Tax/Canada Community Building Fund up to \$158,000.

EXECUTIVE SUMMARY:

The 4th Avenue reconstruction project was previously delayed to provide funding for the 4th Avenue culvert (Rocky Creek Culvert project), completed in 2019. Recent updates to the Engineer's estimate have pushed anticipated costs above the budgeted amount due to increases in construction costs and changes to the original scope of work. In order to proceed with construction additional funding is required, therefore staff are recommending those funds come from the Water Reserve and through Gas Tax funds. Included in the report is an update to the scope of work and schedule.

PREVIOUS COUNCIL DIRECTION:

CS 2018-142	05/07/2018	FINAL RESOLUTION (AS AMENDED BY CS 2018-143) That Council: 1. Endorse Options 2-5 outlined in the report from the Director of Infrastructure Services dated May 7, 2018 as the typical cross-sections for the reconstruction of Fourth Avenue. 2. Confirm that the bicycle path is to be located on Sixth Avenue from Symonds Street to Methuen and on Jamison to Root Street. 3. Direct staff to present the Fourth Avenue Reconstruction Plan to the public at an open house. 4. Direct staff to proceed with design drawings for the first phase from Belaire Street to White Street.
CS 2016-262	07/18/2016	That Council direct staff to: 1. Complete a functional design for configuration of the 4th Avenue corridor with timelines and budget for Council's consideration; and 2. Investigate options for intersections along 4th Avenue, as well as options for street beautification including boulevards, landscaping and other amenities.

CS 2016-114	03/21/2016	<ol style="list-style-type: none"> 1. Proceed with the design phase of the 4th Ave/4th Ave Extension Upgrading Project for construction in late 2016, including the repaving of 4th Ave/4th Ave Extension; 2. Direct that the work start at Hambrook, and continue north; 3. Direct that the road cross section include the construction of a new three meter wide shared use bike lane/walkway on the west side, and new curbs on both sides; 4. Direct that construction include various underground utility replacements as outlined in Appendix "B"; 5. Waive the purchasing policy and contract with Herold Engineering Ltd. to provide the design work.
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INTRODUCTION/BACKGROUND:

Budget

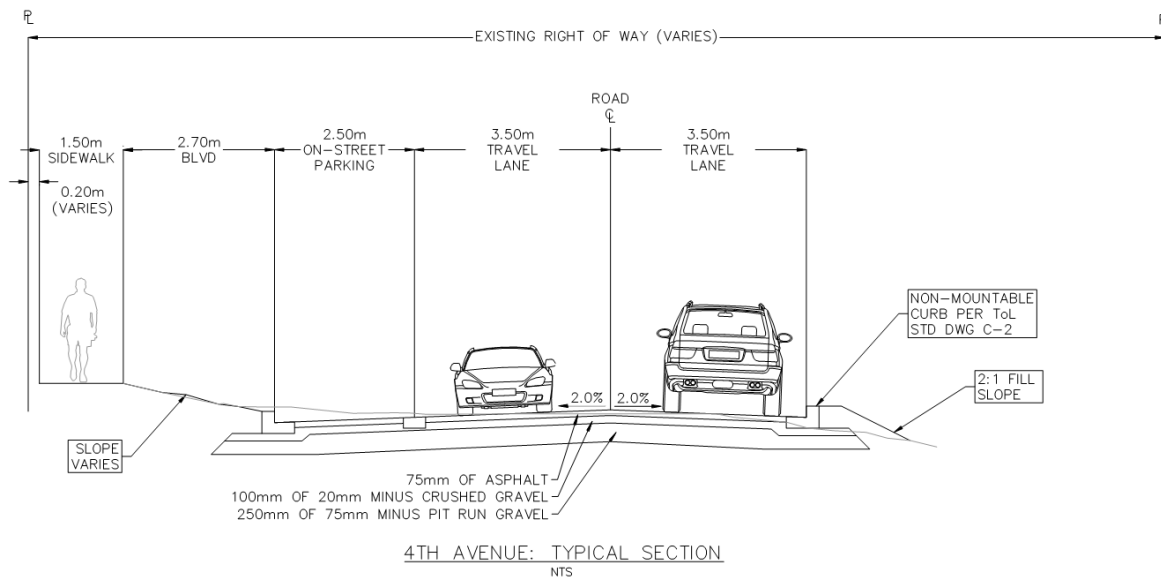
The 4th Avenue reconstruction project has been contemplated since 2015; however, the project had been deferred in order to fund the culvert repair on Rocky Creek. Since the original budget was established, construction costs and project scope have led to an increase in the Engineer's estimate provided by Herold Engineering. The most recent estimate (Dec 3, 2021) is \$1,501,964 before contingencies are applied. Included in the 2021-2025 Financial Plan was a budgeted amount of \$1,502,410 including \$300,000.00 for improvements to the 4th and Belaire intersection.

Staff have reviewed the estimate and believe that given the variable nature of road work, scheduling constraints, and material price fluctuations a contingency of 25% (\$375,491) or greater is necessary. Staff recommend \$1,880,000 be included in the 2022-2026 Financial Plan.

Scope

Though this project spans all of 4th Avenue, it has been broken into various phases. Originally the project zone ranged from Hambrook to White Street, but the updated project scope is from Root to White Street. This increased scope allows connections for underground utilities to be made at logical places in the system. Additionally, in consultation with a transportation engineer it was determined that a roundabout could fit into the 4th and Belaire intersection. The roundabout would provide a more intuitive intersection to navigate while continuing to allow fluid and unimpeded right-turn movements from Belaire onto 4th Avenue.

These changes are an improvement to the originally contemplated scope, but are partly responsible for the increased project costs. A project site plan is attached (Attachment A) and a cross section of the proposed road is illustrated below. Previously, bike lanes and parking on both sides of the road were contemplated. A staff report from May 7, 2018 (Attachment B) detailed the challenges of a complete road section and recommended several alternative sections based on the crossfall of 4th Avenue. The following cross section resembles Option 2 from that report. Future phases should be able to use cross sections displayed in Options 3 - 5.



Schedule

The engineering design is currently 95% complete. If Council approves a budget increase, the Engineer will complete the design and tender the project in the early spring for construction in the early summer (June/July).

It is difficult to estimate the project duration as the schedule is contractor-dependent. The paving is one of the last project milestones to be completed. Staff prefer that paving is completed during mild weather; therefore a completion date of October 31st will likely be required as part of the contract. Often delays outside of the contractor's control will result in an extension to the contract schedule. An earlier completion time may be desirable, but a restrictive schedule could significantly increase the cost.

ALTERNATIVES:

Council can choose to:

1. Refer the project back to staff to reduce the scope. This will add additional time to an already delayed project.
2. Remove the Roadway Lighting and utilize the existing leased lighting. This would see a reduction in the budget of approximately \$65,800.
3. Postpone the project and re-budget in a future year. Additional inflationary costs may be required.

FINANCIAL IMPLICATIONS:

With the volatility of pricing and inflation, it is recommended that \$1.880 million be included in the 2022-2026 Financial Plan.

The 2021-2025 Financial Plan included \$1.5 million for this project:

Original Project	
DCC Roads	168,000
Gas Tax	240,000
Carry Forward Reserve	794,410
Belaire Roundabout	
DCC Roads	89,100
Infrastructure Reserve	200,000
Taxation	10,900
Spent to date in 2021	10,000
Total funding available	1,492,410

This leaves the project \$387,590 unfunded. Staff recommend using:

- An additional \$300,000 (originally \$150,000) from the Water Reserves as the new water estimate is closer to \$450,000 for water work as well as a percentage of the shared general, trenching, landscaping and a portion of the paving.
- Returning \$70,000 to the sewer reserve as the estimates are lower than the committed funding.
- Using up to \$158,000 from Gas Tax funds by deferring Phase 2 of the Lot 108 project.

LEGAL IMPLICATIONS:

N/A

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

Some interruptions during construction are anticipated over the summer and fall months. Commuters to the schools may be impacted during shoulder construction periods and traffic may be diverted to other routes not normally used.

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

The Director of Parks and Recreation has been consulted regarding the use of funds from the Lot 108 project. As the first phase of the Lot 108 project was not complete in 2021 the remaining phases of the project are already delayed.

If approved, this project will be overseen by Infrastructure Services.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|--|--|
| <input type="checkbox"/> Complete Community Land Use | <input type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input checked="" type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

☒ Infrastructure

☐ Community

☐ Waterfront

☐ Economy

☐ Not Applicable

I approve the report and recommendation.

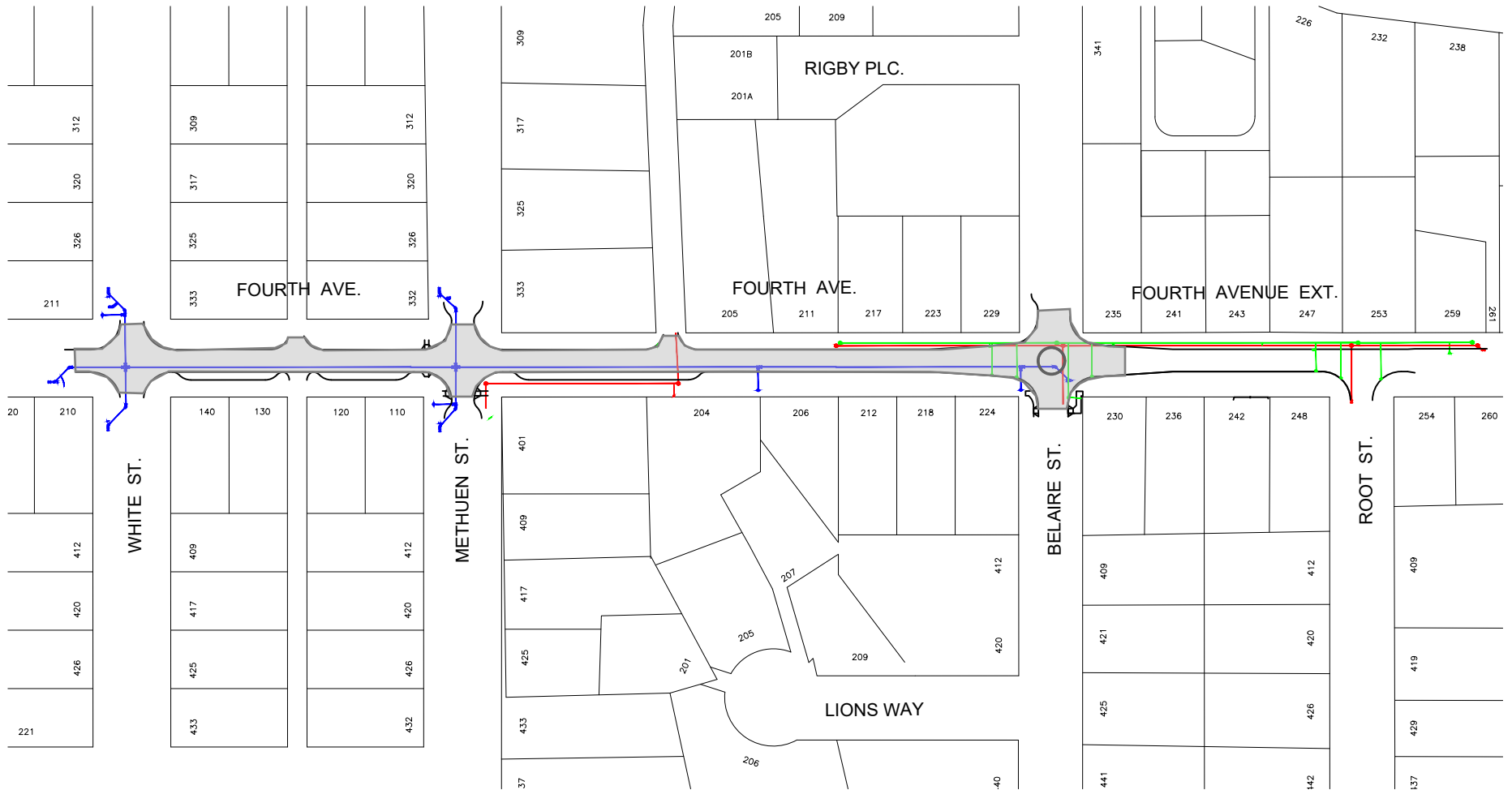
Allison McCarrick, Chief Administrative Officer

ATTACHMENTS:

A. Project Site Plan

B. 2018 Staff Report - Fourth Avenue Reconstruction Plan

ATTACHMENT A



STAFF REPORT TO COUNCIL

From: Geoff Goodall, Director of Infrastructure Services
 Meeting Date: May 7, 2018
 File No:
 RE: **FOURTH AVENUE RECONSTRUCTION PLAN**

RECOMMENDATION:

That Council:

1. Endorse Options 2-5 as the typical cross-sections for the reconstruction of Fourth Avenue.
2. Confirm that the bicycle path is to be located on Sixth Avenue from Symonds Street to Metheun and on Jamison to Root Street.
3. Direct staff to present the Fourth Avenue Reconstruction Plan to the public at an open house.
4. Direct staff to proceed with design drawings for the first phase from south of Hambrook Street to Belaire Street.

PURPOSE:

To have Council provide direction on the reconstruction plan for Fourth Ave.

PREVIOUS COUNCIL DIRECTION

Resolution	MeetingDate	ResolutionDetails
CS 2016-262	2016-07-18	That Council direct staff to: <ol style="list-style-type: none"> 1. Complete a functional design for configuration of the 4th Avenue corridor with timelines and budget for Council's consideration; and 2. Investigate options for intersections along 4th Avenue, as well as options for street beautification including boulevards, landscaping and other amenities.
CS 2016-114	03/21/2016	That Council: <ol style="list-style-type: none"> 1. Approve proceeding with the design phase of the 4th Ave/4th Ave Extension Upgrading Project for construction in late 2016, including the repaving of 4th Ave/4th Ave Extension; 2. Direct that the work start at Hambrook, and continue north; 3. Direct that the road cross section include the construction of a new three metre wide shared use bike lane/walkway on the west side, and new curbs on both sides; 4. Direct that construction include various underground utility replacements as outlined in Appendix "B"; 5. Waive the purchasing policy and contract with Herold Engineering Ltd. to provide the design work.

INTRODUCTION/BACKGROUND:

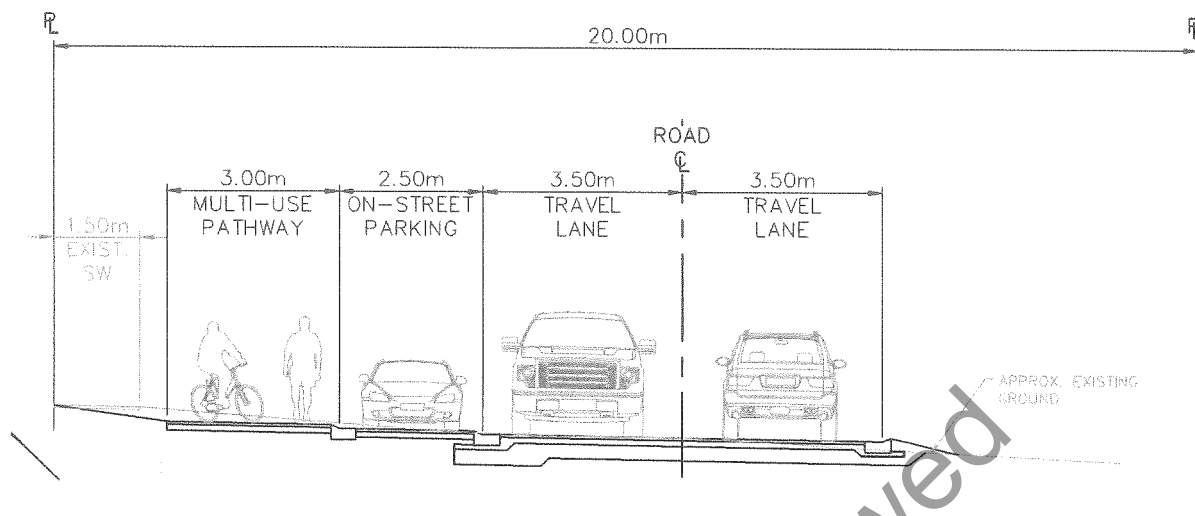
In 2016 Council held a public open house for residents to review a proposed design for the reconstruction of Fourth Avenue. As a result of the feedback received, Council directed staff to do a more extensive review of the proposed changes across the entire Fourth Ave corridor, with the objective to confirm what cross section would best meet the needs of the corridor.

Fourth Ave. traverses in generally a north-south orientation, the corridor width varies over the length of the corridor with the widest width of 24.4m between Symonds St and Methuen St and the narrower width 20m in newer sections on the north and south end of the corridor. The cross sectional grade also varies considerably over the length of the corridor with the highest grades being in the old section of the corridor from Methuen St to Buller St.

The objective of the option review was to find a cross section that provided efficient movement of traffic, safe pedestrian access, appropriate cyclist movement, provided on-street parking opportunities, enhanced the general aesthetics of the corridor and was cost effective.

The most significant challenge with the corridor is dealing with the cross sectional grades. The road right-of-way width generally provides sufficient width to accommodate many options, but the cross sectional grades restrict the general width of the improvements in order to eliminate the need for construction of significant retaining structures. Compounding the issues with grades is dealing with driveway access and transitioning this into the new cross section. Fortunately most driveways through the steeper grade areas enter lots on the side streets.

Early on in the design review it became obvious that a single design would not work well along the entire corridor and there would need to be some design flexibility. These design approaches are provided below as options 1-5. Intersection designs will be considered in the next phase of work.

Option 1 (Original 12.5m)

4TH AVENUE: TYPICAL SECTION
1:100

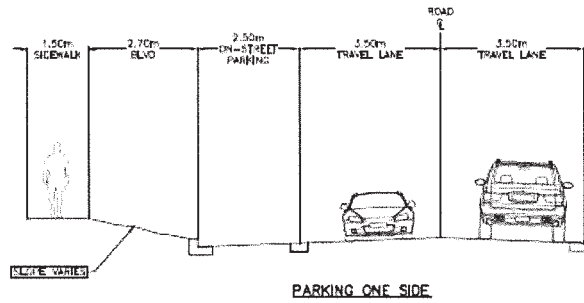
Option 1 was the original option that was considered through the corridor, this option has a total construction cross section of 12.5 meters. When this option was applied in the corridor there were many areas where retaining walls would be required and the wider multi-use path created some conflicts with existing driveways. In addition, this option largely removes the grass boulevard on the west side of the corridor and results in 12.5 m of continuous paved surface which has less aesthetical appearance. It was found the even creating a boulevard between the parking lane and the multi-use pathway increased the need for retaining walls.

After reviewing the original option, staff developed a second series of options which are largely the same but provides for variations that can be applied across different sections of the corridor.

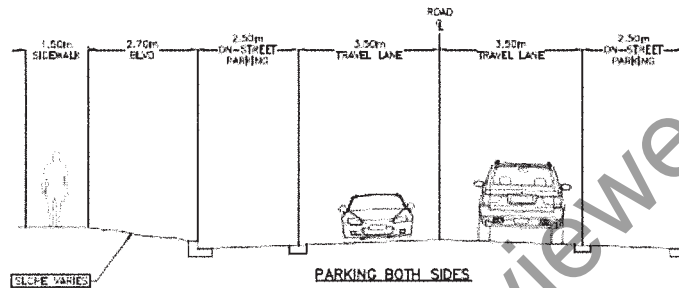
The main consideration for the practicality of these options is moving the bike lane from Fourth Ave. to Sixth Ave. between Symonds and Metheun and joining to Jamison to Root St. The extra 3m required to accommodate dedicated bike movements is very difficult to achieve through the Fourth Ave. area where cross sectional slopes are greater. Sixth Ave. on the other hand has a relatively flat cross section as does this section of Symonds. The bike path on Sixth could utilize the existing trail connecting the south end of Sixth Ave with Jamison Road and then reconnecting with Fourth Ave. at Root St. A plan of a bike route on Sixth Ave. is shown on Attachment A. The 2009 Bike Plan identified Sixth Ave as the primary bike route as it connects to schools, FJCC and other institutions. The Plan did include an option for a bike facility on Fourth Ave. which is reflected in the cross section options 4 and 5.

Attachment B

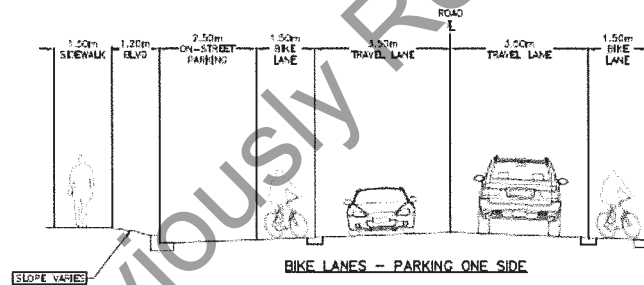
Option 2



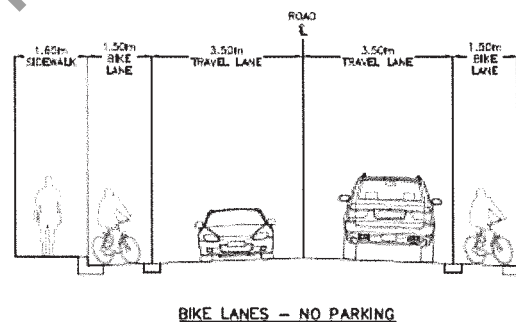
Option 3



Option 4



Option 5



The other main feature of this group of options is that it retains the existing sidewalk on Fourth Ave. in its current location. The existing sidewalk is generally in good shape but there will be small sections that need replacement due to deterioration.

Attachment B

The overall plan for Fourth Ave. is shown in Attachment B. On road bike lanes are provided from the southern project start, just south of Hambrook St to Root St and then from Symonds to the end of the project at Greenhorn Place. Parking is then applied as the cross section permits. Steeper areas get parking on the west side and flatter areas get parking on both sides. Parking is not provided for from Walkem Rd to the north end of the project.

In order to reduce retaining structures, the options held the east road shoulder in approximately the same location as it exists today, this does vary in flatter portions of the corridor where parking opportunities exist on both side.

ALTERNATIVES:

Council can choose to:

1. Consider moving forward with option 1 but this option will have a significant cost increase due to retaining structures being required between Bel Aire and Buller and may also cause other driveway conflicts elsewhere in the corridor.
2. Although parking was popular topic during the open house, Council could consider removing parking from the steeper areas of the route.

FINANCIAL IMPLICATIONS:

Cost implications for the Options are as follows:

Option	Cost/m
Option 1	\$2,150*
Option 2	\$2,030
Option 3	\$2,220
Option 4	\$2,260
Option 5	\$2,070
Retaining walls	\$500

*This cost does not include retaining structures

The existing budget for the 2018 project is \$1,233,542 made up of funding from DCC Roads (\$168k), Gas Tax (\$240k) and Reserves (\$825,542). Considering the above costs, a contingency including engineering would be 25%. The distance between the southerly start of the project south of Hambrook St. to Belaire St is approximately 350m resulting in a cost of approximately \$1,000,000.

LEGAL IMPLICATIONS:

Staff have not identified any legal issues.

CITIZEN/PUBLIC RELATIONS IMPLICATIONS:

There is significant interest in the project from the public. The original open house was attended by over 80 people. All participants appreciated the opportunity to comment on the project and staff feel that it is important to go back to the public with the new information presented.

Attachment B

INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS:

This project has required significant input from staff in both engineering and development services. The project will be designed utilizing a consulting engineer (Herold Engineering) and the construction portion of the project will be tendered.

ALIGNMENT WITH SUSTAINABILITY VISIONING REPORT:

- | | |
|---|---|
| <input type="checkbox"/> Complete Community Land Use | <input checked="" type="checkbox"/> Low Impact Transportation |
| <input type="checkbox"/> Green Buildings | <input type="checkbox"/> Multi-Use Landscapes |
| <input checked="" type="checkbox"/> Innovative Infrastructure | <input type="checkbox"/> Local Food Systems |
| <input type="checkbox"/> Healthy Community | <input type="checkbox"/> Local, Diverse Economy |
| <input type="checkbox"/> Not Applicable | |

ALIGNMENT WITH STRATEGIC PRIORITIES:

- | | |
|--|--|
| <input type="checkbox"/> Employment & Tax Diversity | <input checked="" type="checkbox"/> Natural & Built Infrastructure |
| <input type="checkbox"/> Watershed Protection & Water Management | <input type="checkbox"/> Partnerships |
| <input type="checkbox"/> Communications & Engagement | <input type="checkbox"/> Not Applicable |

SUMMARY:

In 2016 Council held a public open house for residents to review a proposed reconstruction of Fourth Ave. As a result of the feedback received Council directed staff to do a more extensive review of the proposed changes across the entire Fourth Ave corridor, with the objective to confirm what cross section would best meet the needs of the corridor. Five options were considered across the corridor and the options vary as the width and cross sectional slopes change. The basis for the selected options rely on moving the bike lane from Fourth Ave to Sixth Ave from Symonds to Root. In addition, the sidewalk on Fourth Ave is retained in its existing location. Parking is applied across the corridor as the cross sectional slope permits, avoiding the need for retaining structures.



Geoff Goodall, Director of Infrastructure Services

May 1, 2018

I concur with the recommendation.

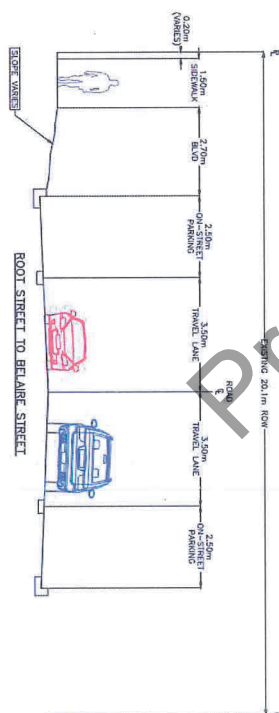


Guillermo Ferrero, City Manager

ATTACHMENTS:

Herold Engineering: 4th Avenue Reconstruction Options

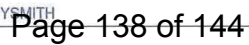
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END OF 4TH AVENUE TO BELAIRE STREET

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ISSUES	
DATE	ISSUED FOR
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2	2024/01/01
3	2024/01/01

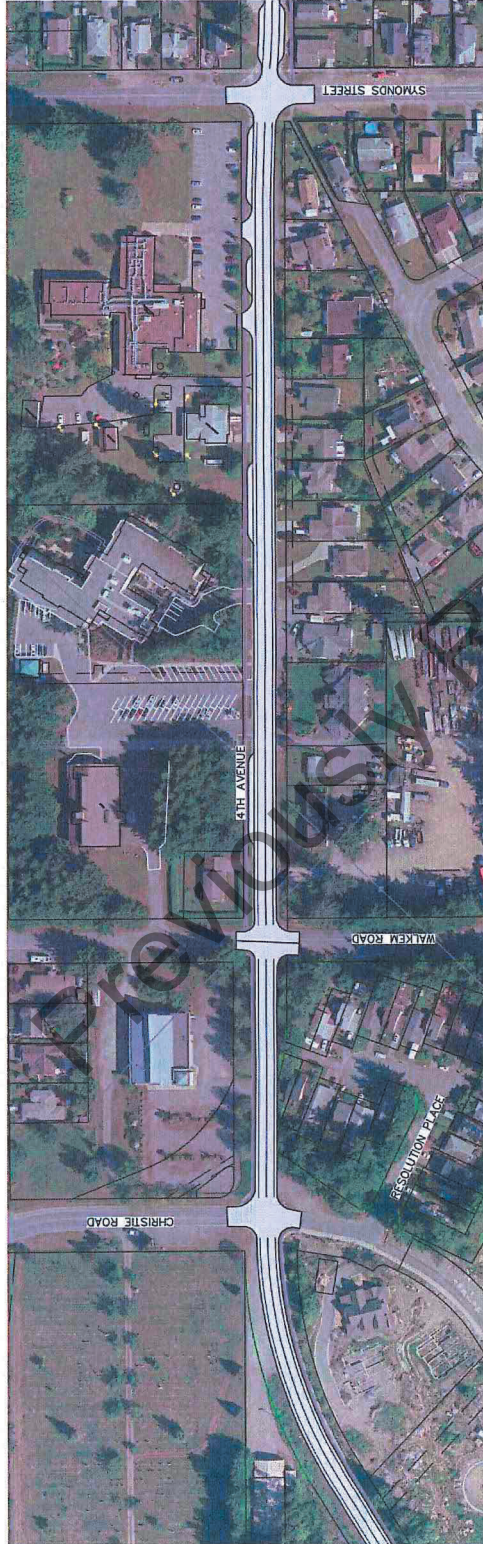
4TH AVENUE RECONSTRUCTION
LADYSMITH, BC
TOWN OF LADYSMITH

HEROLD ENGINEERING
2010 Dundas St. E., Burnaby, BC V3J 2H1
Tel: 604-291-1111 Fax: 604-291-1112
www.herold-engineering.com

SYMONDS STREET TO CHRISTIE ROAD

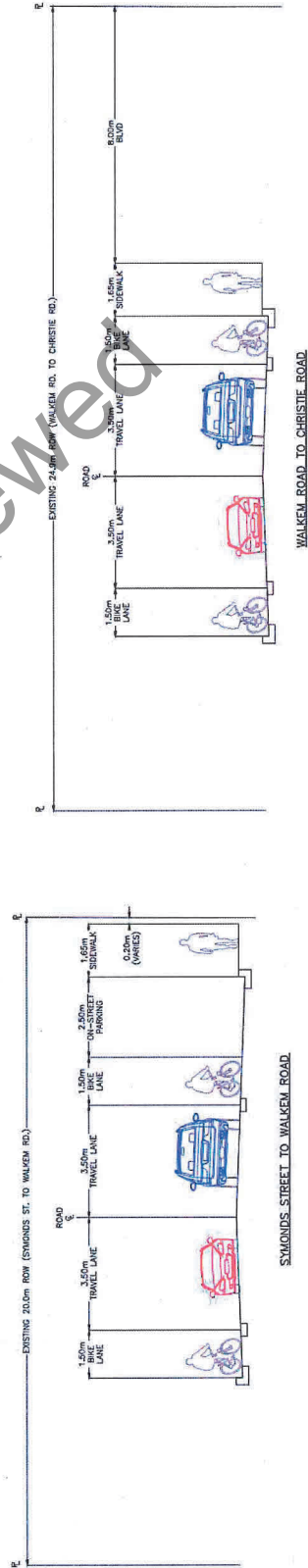
DESIGNED	DATE
CHECKED	DATE
APPROVED	DATE
PROJECT NO.	0037-054
PROJECT NAME	4TH AVENUE RECONSTRUCTION
SCALE	1:1000
DATE	1/1/24

SK-4
4 OF 6
B



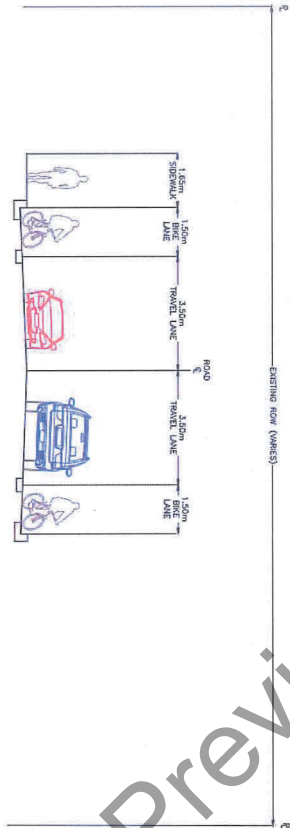
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SYMONDS STREET TO CHRISTIE ROAD



Attachment B

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CHRISTIE ROAD TO GREENHORN PLACE



0537-054 4th Avenue Reconstruction - Civil\04C Drawings\0537-054 04C Drawings.dwg

ISSUES	DATE	BY	APP'D
1. SUBMITAL REVIEW			
2. SUBMITAL REVIEW			
3. SUBMITAL REVIEW			

REVISION	DATE	BY	APP'D
1. SUBMITAL REVIEW			
2. SUBMITAL REVIEW			
3. SUBMITAL REVIEW			

REVISION	DATE	BY	APP'D
1. SUBMITAL REVIEW			
2. SUBMITAL REVIEW			
3. SUBMITAL REVIEW			

REVISION	DATE	BY	APP'D
1. SUBMITAL REVIEW			
2. SUBMITAL REVIEW			
3. SUBMITAL REVIEW			

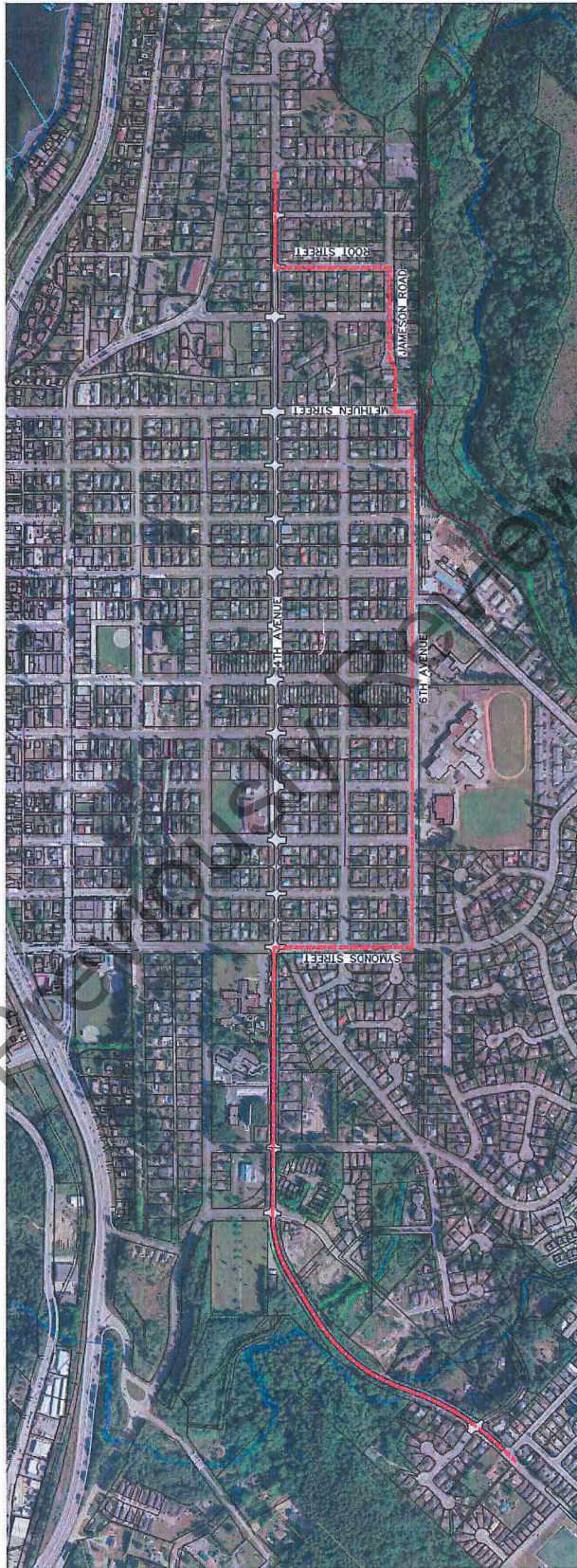
Attachment B

ISSUES	DATE	ISSUED FOR
1. DESIGN REVIEW		
2. PERMIT REVIEW		

4TH AVENUE RECONSTRUCTION
LADYSMITH, BC
TOWN OF LADYSMITH

HEROLD ENGINEERING
2015 Seawall Rd, Nanaimo, BC V9T 2N1
P: 250-753-1000 F: 250-753-1001
www.herold-engineering.com

BICYCLE PATH ROUTE	
DESIGNED	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
PROJECT No.	0032-004
CLIENT NAME	Herold Engineering
PERMIT No.	
DATE	2020-09-01
BY	J.H.A.
PROJECT No.	SK-6
6 of 6	B



BICYCLE PATH ROUTE

BYLAW STATUS SHEET
January 25, 2022

Bylaw #	Description	Status
2068	"Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 65) 2021, No. 2068" (to designate 1130 Rocky Creek Rd. as "General Commercial" to permit a commercial plaza with drive-through coffee shop)	First and second readings, June 1, 2021. Public Hearing and third reading June 15, 2021. Conditions to be met prior to adoption.
2069	"Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 37) 2021, No. 2069" (to rezone 1130 Rocky Creek Rd. to "Shopping Centre Commercial" to permit a commercial plaza with drive-through coffee shop)	First and second readings, June 1, 2021. Public Hearing and third reading June 15, 2021. MOTI approval received July 27, 2021. Conditions to be met prior to adoption.
2076	"Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 38) 2021, No. 2076" (to rezone 631 1 st Avenue as an emergency shelter and amend minimum finished floor area)	First and second readings, December 21, 2021. Public Hearing and third reading January 11, 2022. MOTI approval required.
2083	"Park Dedication Bylaw 2022, No. 2083" (to dedicate eight previously undedicated properties as parkland and consolidate existing park dedication bylaws into a single bylaw)	First and second readings, January 11, 2022. Requires 2/3 majority approval.
2085	"Removal of Road Dedication Bylaw 2022, No. 2085" (to remove the road dedication from Queen's Park, allowing it to be formally rededicated as park)	First, second and third readings, January 11, 2022. MOTI approval required.
2087	"Official Community Plan Bylaw 2003, No. 1488, Amendment Bylaw (No. 68) 2021, No. 2087" (to change the permitted land uses at 1260 Churchill Place from single-unit residential to a mix of multi-family residential, single family residential and park)	First and second readings, October 5, 2021. Public Hearing and third reading November 2, 2021.
2088	"Town of Ladysmith Zoning Bylaw 2014, No. 1860, Amendment Bylaw (No. 44) 2021, No. 2088" (to change the permitted land uses at 1260 Churchill Place from single-unit residential to a mix of multi-family residential, single family residential and park)	First and second readings, October 5, 2021. Public Hearing and third reading November 2, 2021. MOTI approval received November 29, 2021.

**BYLAW STATUS SHEET
January 25, 2022**

2089	"Housing Agreement Bylaw 2021, No. 2089" (to establish an agreement and covenant scheme related to the affordable housing unit identified for 1260 Churchill Place)	First, second and third readings, October 5, 2021.
2090	"Bylaw Revision Bylaw 2022, No. 2090" (to give the Town greater "housekeeping" abilities for all Town bylaws)	First, second and third readings, January 11, 2022.

UBCM Community Emergency Preparedness Fund

Emergency Support Services (ESS) Grant – Regional Approach for 2022

What is ESS

Under the Emergency Program Act, municipalities and regional districts are responsible for responding to emergencies in their areas, including providing Emergency Support Services (ESS). ESS are services provided on a short-term basis (generally 72 hours) to preserve the emotional and physical well-being of evacuees in an emergency or disaster. ESS includes such services as food, lodging, clothing, reuniting families, emotional support and other specialized services as required. ESS may use reception centres and group lodging as needed in larger events where multiple families are evacuated.

The Current Cowichan ESS Program

The CVRD administers and operates the ESS program for all local authorities and several First Nations in the Cowichan Area. There are several primary reception and secondary centres in the Cowichan area. The capacity and resiliency of these centres vary widely.

Intent of the UBCM Funding

To support eligible applicants to build local capacity to provide emergency support services including the purchase of ESS equipment.

Regional Approach

As we move to a regional emergency management model, where possible emergency management grants will be used to support the growth and improvement of the full program benefiting all local authority and First Nation members. Under CEPF, the regional emergency management program is eligible for the maximum funding available is based on the number of eligible applicants included in the regional application.

Cowichan's 2022 ESS Grant Proposal

To ensure power availability at as many reception centre options as possible, the Cowichan Emergency Program would purchase two (2) towable large generators (50kwh). Generators would be mounted on towable trailers. These deployable generators could also be dropped by helicopter if accessibility to an area became a challenge. Estimated cost of the project is \$100,000.00. Buildings identified as potential reception centres could (outside of the grant) be fitted with a transfer switch allowing them to 'plug-in' to the generator when needed.

FOR ACTION:

Each municipality to resolve “*for the Cowichan Valley Regional District to apply for, receive, and manage the UBCM Community Emergency Preparedness Fund Emergency Support Services grant funding on behalf of insert Municipality or First Nation name*”.
This resolution can be received anytime before March 1, 2022.

Your commitment to the project by reply to April.diver@cverd.bc.ca is required by January 18, 2022.