

**Request for Clean Water Act
Section 401 Water Quality Certification
Washington State Department of Ecology**
Phone: (360) 407-6076 or E-mail: ecyrefedpermits@ecy.wa.gov

AGENCY USE ONLY
Date Received: 8/24/2023
Aquatics ID No.: 133235
Team: Dredging
Valid Request: 8/31/2023

This Section 401 Water Quality Certification (WQC) Request form identifies information needed in order to review and process a Section 401 WQC Request. Please see Department of Ecology's (Ecology) [webpage](#) for more information about the Section 401 WQC Request process.

Submit this Section 401 WQC Request form along with a [Joint Aquatic Resources Permit Application \(JARPA\)](#) and supporting information¹ to ecyrefedpermits@ecy.wa.gov and copy the federal permitting agency.

A. Federal Permit or License Reference Number, if known: _____ NWS-2023-379
Department of Ecology (Ecology) Aquatics ID Number, if known: _____ 133235 _____

Project Name: _____ Cape George Marina Annual Maintenance County: _____ Jefferson _____

B. Project Proponent Name: _____ Geoff McMichael _____

C. Documentation showing that the Pre-Filing Meeting Request was submitted at least 30 days prior to submitting this Section 401 WQC Request. Attach either of the following:

- E-mail acknowledgement of receipt from Ecology
- Copy of previously submitted Pre-Filing Meeting Request Form

D. A completed, signed, and dated JARPA should be submitted with this form.

Did you attach a JARPA? Yes No

E. The following is a list of documents needed for Ecology's WQC review, along with a brief explanation. Depending on the project, additional information may be requested.

Please let us know what information you are submitting with this WQC request form.

Required for all projects:

1. State Environmental Policy Act (SEPA) determination and/or checklist:
 - Final SEPA determination attached {same scope proposed as covered in SEPA determination}
 - SEPA determination pending
 - Exempt from SEPA (see [SEPA Guidance](#))
 - SEPA is not required (e.g., federal agency projects)

2. Project drawings attached:

¹ To submit documents over 25MB, e-mail ecyrefedpermits@ecy.wa.gov to request a secure link.

To request an ADA accommodation, contact Ecology by phone at (360) 407-6076 or email at ecyrefedpermits@ecy.wa.gov, or visit <https://ecology.wa.gov/accessibility>.

For Relay Service or TTY call 711 or 877-833-6341.

Si necesita este formulario en español, por favor, llámenos a (360) 407-6076 o envíenos un correo electrónico a: ecyrefedpermits@ecy.wa.gov

- Vicinity map
- Plan view
- Cross-section(s)
- Plan set
- Other: ___Reference sheets, _____

3. Best management practices and construction methodology, provided in the attached:

- JARPA
- Water Quality Monitoring and Protection Plan (WQMPP)
- Project drawings, sheets: _____
- Mitigation Plan pages: _____
- Other document(s): _____

Notes:

- This is needed for in-water work (below ordinary high water mark), including wetlands.
- Describe best management practices to be implemented to protect water quality.
- Describe construction sequencing and methodology.

4. Water quality monitoring, provided in the attached:

- Water Quality Monitoring Plan (WQMP).
- Water Quality Monitoring and Protection Plan (WQMPP is similar to WQMP, but includes best management practices).
- Other (please identify location, such as JARPA, Part 8): _____ JARPA, Part 8 _____

Notes:

- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
- A plan is needed when conducting work in a waterbody (e.g., creek, ditch, river, lake, pond, marine, estuarine).
- Include water quality parameters such as turbidity, oil sheen, pH (e.g., poured in-place concrete, concrete demolition), etc.
- See State Water Quality Standards for Surface Waters (Chapter 173-201A-200 or -210 WAC)
- If needed, templates are available.

Required depending on the project type:

5. Erosion and sediment control for upland work (above ordinary high water mark) that addresses stormwater during construction and long-term:

This information is included in the attached:

- JARPA
- Project drawings, sheets: _____ 9-10 _____
- Stormwater Pollution Prevention Plan, pages: _____
- Mitigation Plan, pages: _____
- Other document(s): _____

6. Wetland report, including the attached:

- Wetland delineation report
- Delineation data sheets
- Wetland rating forms

Notes:

- Needed when there is a discharge (dewatering, excavation or fill) to wetlands.
- Report needs to include both a wetland delineation and rating.
- Include delineation data sheets and rating forms.
- For more information see wetland delineation resources and hiring a qualified wetland professional.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.

7. Mitigation, avoidance and minimization

- Wetland avoidance and minimization checklist
- Other aquatic resource avoidance and minimization demonstration
- Mitigation Plan
- Other: _____

Notes:

- Wetland avoidance and minimization webpage.

8. Mitigation plan, provided in the attached:

- Riparian Planting and Monitoring Plan (Needed when riparian vegetation is removed or modified)
- Wetland or stream/other aquatic resource Mitigation Plan
- Wetland Mitigation Bank Use Plan (use when proposing mitigation bank use)
- In-Lieu Fee (ILF) Use Plan (use when proposing ILF mitigation)
- Project drawings, sheets: _____
- Other: _____

Notes:

- Needed to offset impacts to wetland, stream, marine, or other aquatic habitat.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
- For more information, see wetland compensatory mitigation.

9. Dredging

- Dredging Plan attached
- Suitability Determination attached

Notes:

- Needed when sediments will be dredged for maintenance, navigation, or other purposes.
- Covers in-water disposal and sediment anti-degradation.
- Dredging Plan should include dredge footprint and depth, dredge type, best management practices, disposal plan, off-loading plan for upland disposal, etc.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.
- For information on suitability determinations, see Dredged Material Management Office.

10. Dewatering

- Dewatering Plan attached

Notes:

- Needed for complex in-water work or management of excavated/dredged material.
- Include language in the plans that allows Ecology to review and approve all substantive changes to a plan prior to implementation.

- May also be required for some excavation projects.

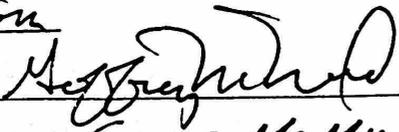
F. Required Certification Statements:

The project proponent hereby certifies that all information contained herein is true, accurate, and complete, to the best of my knowledge and belief.

Initial GM

The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.

Initial GM

Signature:  Date: 08/24/2023

Print Name: GEOFF McMICHAEL



WASHINGTON STATE
Joint Aquatic Resources Permit
Application (JARPA) Form^{1,2} [help]

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.



AGENCY USE ONLY

Date received: 8/24/2023 edoc
 Rec'd Section 401 Req Form

Agency reference #: _____

Tax Parcel #(s): _____

Part 1—Project Identification

1. Project Name (A name for your project that you create. Examples: Smith's Dock or Seabrook Lane Development) [help]
 Cape George Marina Annual Maintenance

Part 2—Applicant

The person and/or organization responsible for the project. [help]

2a. Name (Last, First, Middle)			
Woodward, Martha			
2b. Organization (If applicable)			
Cape George Colony Club			
2c. Mailing Address (Street or PO Box)			
61 Cape George Dr.			
2d. City, State, Zip			
Port Townsend, WA 98368-9403			
2e. Phone (1)	2f. Phone (2)	2g. Fax	2h. E-mail
(360) 385-1177		(360) 385-3038	manager@capegeorge.org

¹ Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

² To access an online JARPA form with [help] screens, go to http://www.epermitting.wa.gov/site/alias_resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [\[help\]](#)

3a. Name (Last, First, Middle)			
McMichael, Geoffrey, A.			
3b. Organization (If applicable)			
Cape George Colony Club			
3c. Mailing Address (Street or PO Box)			
61 Cape George Dr.			
3d. City, State, Zip			
Port Townsend, WA, 98368			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
(509)531-8065			geoff@mainstemfish.com

Part 4—Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both upland and aquatic ownership because the upland owners may not own the adjacent aquatic land. [\[help\]](#)

- Same as applicant. (Skip to Part 5.)
- Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- There are multiple upland property owners. Complete the section below and fill out JARPA Attachment A for each additional property owner.
- Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete JARPA Attachment E to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail

Part 5–Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- There are multiple project locations (e.g. linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]			
<input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input type="checkbox"/> Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)			
5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]			
360 Marina Dr.			
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Port Townsend, WA, 98368			
5d. County [help]			
Jefferson			
5e. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
12A	12	30N	02W
5f. Provide the latitude and longitude of the project location. [help]			
<ul style="list-style-type: none"> Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83) 			
48.10186 -122.88435			
5g. List the tax parcel number(s) for the project location. [help]			
<ul style="list-style-type: none"> The local county assessor's office can provide this information. 			
02 123 0030			
5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]			
Name	Mailing Address	Tax Parcel # (if known)	
See JARPA Attachment C			

5i. List all wetlands on or adjacent to the project location. [help]

None

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [help]

Discovery Bay/Salish Sea

5k. Is any part of the project area within a 100-year floodplain? [help]

Yes No Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [help]

The marina area is bounded by a gravel road/parking area on the east and south sides, jetties/breakwaters on the west side, and paved parking areas on the north side (Project Drawings, Sheet 1). Vegetation is annual grasses.

5m. Describe how the property is currently used. [help]

The property is used as a private marina for members of the Cape George Colony Club.

5n. Describe how the adjacent properties are currently used. [help]

Adjacent properties are residential lots, most of which have single family dwellings.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [help]

The marina structures include a concrete launch ramp, wood docks with plastic floats, grated fiberglass access ramps, wood pilings, steel seawall, rock jetties and breakwater. There are two adjacent buildings to the north; a workshop, and a clubhouse building including a swimming pool, exercise room, and community meeting room. The condition of the marina facilities is generally good, with periodic repairs of high-wear components.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [help]

From 104 (Hood Canal Floating Bridge) - Take Hwy 20 north to Port Townsend, turn left at Four Corners Rd., turn left onto Cape George Rd., turn left onto Cape George Dr., turn right on Palmer Dr., then turn left on Marina Dr. (See Attachment 1)

(Project Drawings, Sheet 1)

Part 6—Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

The project involves a continuation of annual maintenance dredging of the entrance channel and dock repairs, repair/replacement of selected dock segments.

All of these activities are currently or have recently been permitted by federal, state and local authorities (Ref. WDFW:HPA 31700; USACOE:NWS-2018-494, NWS 2013-108; WDOE:10397; Jefferson Co.:MLA20-00125)

6b. Describe the purpose of the project and why you want or need to perform it. [\[help\]](#)

The overall purpose of the project is to maintain safe access to the marina and to maintain infrastructure elements in an environmentally sound way. The annual maintenance dredging is required to remove sediment that recruits into the entrance area during winter storms (see Reference Sheet 1). The completion of previously-permitted work to raise the height of the north jetty to +14 feet MHHW (completed in October 2021) was installed to reduce the recruitment of sediment into the marina entrance channel. With limited time to understand how well this heightened jetty will reduce deposition in the channel entrance, we will need additional time to assess the effectiveness. In the meantime, annual maintenance dredging will likely still be required to provide safe vessel access to the marina. Sand and gravel sediments removed from the entrance channel are relocated within 200 m (south) of the channel entrance to nourish the beach (and adjacent sand flats/shallow water littoral habitats)(see Reference Sheets 2-3). The maintenance of docks and pilings is required to protect and maintain marina infrastructure and to provide safe access to member's boats.

6c. Indicate the project category. (Check all that apply) [\[help\]](#)

- Commercial
 Residential
 Institutional
 Transportation
 Recreational
 Maintenance
 Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [\[help\]](#)

- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Culvert | <input checked="" type="checkbox"/> Float | <input type="checkbox"/> Retaining Wall (upland) |
| <input type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir | <input type="checkbox"/> Floating Home | <input type="checkbox"/> Road |
| <input type="checkbox"/> Boat House | <input type="checkbox"/> Dike / Levee / Jetty | <input type="checkbox"/> Geotechnical Survey | <input type="checkbox"/> Scientific Measurement Device |
| <input type="checkbox"/> Boat Launch | <input type="checkbox"/> Ditch | <input type="checkbox"/> Land Clearing | <input type="checkbox"/> Stairs |
| <input type="checkbox"/> Boat Lift | <input type="checkbox"/> Dock / Pier | <input type="checkbox"/> Marina / Moorage | <input type="checkbox"/> Stormwater facility |
| <input type="checkbox"/> Bridge | <input checked="" type="checkbox"/> Dredging | <input type="checkbox"/> Mining | <input type="checkbox"/> Swimming Pool |
| <input type="checkbox"/> Bulkhead | <input type="checkbox"/> Fence | <input type="checkbox"/> Outfall Structure | <input type="checkbox"/> Utility Line |
| <input type="checkbox"/> Buoy | <input type="checkbox"/> Ferry Terminal | <input checked="" type="checkbox"/> Piling/Dolphin | |
| <input type="checkbox"/> Channel Modification | <input type="checkbox"/> Fishway | <input type="checkbox"/> Raft | |

Other:

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [help]

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

Dredging:

The entrance channel requires annual dredging of up to 1000 cubic yards of sand and gravel recruited into the entrance are immediately south of the north jetty and into the channel between the seawalls to maintain safe vessel access at -3.5 foot tide elevation. Sediments typically moved south along the shoreline during heavy winter storms and deposit in the entrance area, where lateral drift velocities are reduced by the north jetty. The increased height of the north jetty (October 2021) may reduce the amount of material being deposited (April 2023), and we are hopeful that we will not need to move the full 1000 yards annually. We will perform bathymetric surveys prior to and after the dredging and work with contractors to estimate material moved to the beach for beach nourishment in each year. Equipment to be used includes a land-based excavator at extreme low tides (-2.5 ft or lower) to minimize in-water activity, with a target depth in the entrance channel of -3.5 feet. The area to be dredged is approximately 8800 square feet. In some years we have had to excavate 3 feet of deposited sand and gravel (~980 cubic yards), while in other years we have removed an average of about 1.5 feet of material (~490 cubic yards). Please see Project Drawings, Sheets 2-10). Note: this is the same location/methods used in previous permits. Excavation activities will follow requirements listed in SSNP#9 to provide safe access for vessels, and beach nourishment will follow requirements listed in SSNP#13 for beach nourishment. Dredge spoils have been placed parallel to the existing bank for approximately 40 feet to either side of the gravel ramp to the beach as shown in Project Drawings, Sheet 10. Winter storm waves and high tides typically wash the spoils away and mostly southward where they nourish the beach areas and sand flats to the south of the beach nourishment area. Monitoring of the beach nourishment site will be done with fixed point photographs on a monthly basis from immediately prior to install/sediment deposition to the end of the permit period. An SAV survey was completed by underwater video on April 21, 2023 and can be viewed at (https://youtu.be/1_PqDNchUPc). In summary, a small patch of SAV was documented in an area of about 60 square feet (near west end of south seawall) of the approximately 8,8000 square foot dredge area in the channel entrance. This area of SAV included a few stems of eel grass that appeared to be rooted, however most of the vegetation was macroalgae (Sea Lettuce, *Ulva* spp.). The estimated SAV area in this maintenance dredging area was estimated at less than 1%, however we rated the SAV as a 1 in this area (1-25% combined SAV) in the conservation calculator. A preliminary eel grass survey conducted at a -1.5 foot tide on June 20, 2023 in the sand flats south of the previous beach nourishment area (Preliminary Eel Grass survey_CGCC_Marina_06_20_2023_reduced file size.pdf) showed the closest eel grass to the work area being approximately 70 to 90 feet away. Examination of historical aerial imagery indicates the eel grass bed south of the beach nourishment area has filled in and expanded between 2011 and 2021 (Reference Sheets 4-5). We understand that the conservation calculator treats the maintenance dredging as a one-time action, while we are applying for a 5-year HPA and a 10-year standard permit with the U.S. Army Corps. Nissa Rudh (NOAA) informed Geoff McMichael on April 19, 2023 that a multiplier may be applied to the maintenance dredging action in the calculator for this annual maintenance work, based on the assumption that negative environmental effects of dredging persist for 3 years. We assume the positive effects of beach nourishment will likewise persist for multiple years, thus if a multiplier is applied to negative dredging effects, one should also be applied to positive beach nourishment effects.

Dock/Piling Maintenance:

Occasionally, dock boards or sections of wooden docks need to be replaced because wood has deteriorated due to use or rot. As dock sections (typically 16 feet in length) require surface repair/replacement, the deck surface will be replaced with fiberglass grated decking (at least 60% open area; please see Attachments 18-20). Note: In cases where we are replacing just the decking (from solid wood 2 x12s to fiberglass grate, we did not enter these into the conservation calculator, per communication with Nissa Rudh, NOAA on April 19, 2023). All dock repair/replacement will be within the existing dock footprint. Dock areas that will have existing wood docks with plastic floats replaced with aluminum substructure and fiberglass grate decking (see Project Drawings, Sheets 11-15) are identified in Attachment D. Areas of docks ('floats' in the conservation calculator) that will be converted from wood substructure and decking to aluminum substructure and fiberglass grating were entered into the conservation calculator. Over time, we hope to transition most of our non-light-

penetrating wooden dock area to the grated surface, allowing much greater light penetration (Project Drawings, Sheet 14). We will also be replacing solid wood decking on two overwater surfaces at the top of existing grated access ramps (combined area of these two surfaces is 230 square feet; Project Drawings, Sheet 15). These overwater areas are well above (8 to 18 feet, depending on tide) the water surface. The 39 pilings in the marina (creosote-treated wood) are generally in good condition and UHMW rub strips or plastic rollers are or will be installed in all high-wear areas to increase piling and dock life and reduce abrasion of treated materials. In some cases, pilings may be wrapped or encapsulated in plastic or fiberglass to reduce biofouling and abrasion risks.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start Date: June 15, 2023 End Date: Varies See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

\$800,000

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If yes, list each agency providing funds.

Yes No Don't know

Part 7–Wetlands: Impacts and Mitigation

- Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.) [\[help\]](#)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

Not applicable

7b. Will the project impact wetlands? [\[help\]](#)

Yes No Don't know

7c. Will the project impact wetland buffers? [\[help\]](#)

Yes No Don't know

7d. Has a wetland delineation report been prepared? [\[help\]](#)

- If Yes, submit the report, including data sheets, with the JARPA package.

Yes No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [\[help\]](#)

- If Yes, submit the wetland rating forms and figures with the JARPA package.

Yes No Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 7g.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Don't know

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [\[help\]](#)

Activity (fill, drain, excavate, flood, etc.)	Wetland Name ¹	Wetland type and rating category ²	Impact area (sq. ft. or Acres)	Duration of impact ³	Proposed mitigation type ⁴	Wetland mitigation area (sq. ft. or acres)

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [\[help\]](#)

<p>7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [help]</p>

Part 8–Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, "waterbodies" refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

<p>8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [help]</p>
<p><input type="checkbox"/> Not applicable</p>
<p>Annual dredging of the marina channel entrance will relocate sediment approximately 200 m to the south to provide beach nourishment in an area of Discovery Bay where productive shallow water habitats are limited. The dredging activity will only take place at very low tides (< -2.5 feet) to minimize in-water disturbance. The dredge work will occur for a maximum of 4 hours/day over a 2-to-3 day period each year. A monitor will watch for marine mammals in the immediate work area when any work is underway and operators will be notified if marine mammals are in or approach the work area. All equipment used will be land-based and only the arm of the excavator will be in the water (max depth of -3.5 feet below the water surface). Temporary short-duration increases in turbidity may occur on flood tides upon inundation immediately following sediment movement from the entrance channel area to the beach nourishment area. This beach nourishment provides sand and gravel in an area south of the marina where some shallow flats exist and where winter south easterlies will redistribute the sediment to these dynamic habitats.</p> <p>Maintenance of the docks and pilings will reduce inputs of creosote and/or chemicals associated with the pressure treating of wood as dock segments are replaced with aluminum and fiberglass grating. Gradual replacement of dock decking from 2 x 12 lumber to fiberglass grating will greatly increase light penetration through the dock surfaces in the marina; reducing light-dark interfaces where predators may intercept juvenile salmonids and also providing more sunlight input for aquatic vegetation and primary productivity. Gradual replacement of dock substructure from pressure-treated lumber to aluminum will reduce the contact of chemically treated wood with water in the marina basin.</p>
<p>8b. Will your project impact a waterbody or the area around a waterbody? [help]</p>
<p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>

8c. Have you prepared a mitigation plan to compensate for the project's adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 8d.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Don't know

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [\[help\]](#)

See 8c, above.

8e. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Dredging Entrance Channel	Discovery Bay	Channel	12 h/yr	Up to 1000/yr	7938 sq. ft. 8800 ft ²

¹ If no official name for the waterbody exists, create a unique name (such as "Stream 1") The name should be consistent with other documents provided.

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter "permanent" if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

There will be no addition of fill material. The source material for the beach nourishment will be the sand and gravel deposited into the entrance channel from littoral drift (primarily from eroding high bluffs to the north/northeast).

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

The methods for dredging and excavating are described in 6e and 8a, above. The amounts to be removed/moved are also listed in 6e and 8a, above. The type of material is listed in 8f, above. The location of disposal/beach nourishment is on the south beach approximately 200 m to south of the excavation area (~~Attachments 6-11~~). This is the same area that has been used annually on previous permits.

*Project Drawings,
Sheets 9-10*

Part 9—Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
US Army Corps	Pamela Sanguinetti	(206) 764-6904	March 2023
WDFW	Danielle Zitomer	(360)764-0866	March 2023
WDFW	Naomi Gebo	(360)701-7705	August 2023
Jefferson County	Donna Frosthalm	360-379-4466	March 2023
NOAA/NMFS	Nissa Rudh	360-701-9699	April 2023

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology's 303(d) List? [\[help\]](#)

- If Yes, list the parameter(s) below.
- If you don't know, use Washington Department of Ecology's Water Quality Assessment tools at: <https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-Improvement/Assessment-of-state-waters-303d>.

Yes No

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [\[help\]](#)

- Go to <http://cfpub.epa.gov/surf/locate/index.cfm> to help identify the HUC.

17110020

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [\[help\]](#)

- Go to <https://ecology.wa.gov/Water-Shorelines/Water-supply/Water-availability/Watershed-look-up> to find the WRIA #.

18

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [\[help\]](#)

- Go to <https://ecology.wa.gov/Water-Shorelines/Water-quality/Freshwater/Surface-water-quality-standards/Criteria> for the standards.

Yes No Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [\[help\]](#)

- If you don't know, contact the local planning department.
- For more information, go to: <https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Shoreline-coastal-planning/Shoreline-laws-rules-and-cases>.

Urban Natural Aquatic Conservancy Other: _____

9g. What is the Washington Department of Natural Resources Water Type? [\[help\]](#)

- Go to <http://www.dnr.wa.gov/forest-practices-water-typing> for the Forest Practices Water Typing System.

Shoreline Fish Non-Fish Perennial Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology's most current stormwater manual? [\[help\]](#)

- If No, provide the name of the manual your project is designed to meet.

Yes No

Name of manual: _____

9i. Does the project site have known contaminated sediment? [\[help\]](#)

- If Yes, please describe below.

Yes No

9j. If you know what the property was used for in the past, describe below. [\[help\]](#)

This property has been a marina for Cape George Colony Club members since 1961.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- If Yes, attach it to your JARPA package.

Yes No

9i. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

Puget Sound (PS) Chinook salmon (*Oncorhynchus tshawytscha*), Hood Canal summer-run (HCSR) chum (*O. keta*), PS steelhead (*O. mykiss*), Puget Sound/Georgia Basin (PSGB) yelloweye rockfish (*Sebastes ruberrimus*), PSGB bocaccio (*S. paucispinis*), Southern Resident killer whales (SRKW) (*Orcinus orca*), Central America or Mexico humpback whales (*Megaptera novaeangliae*), the southern DPS of green sturgeon (*Acipenser medirostris*), the southern distinct population segment (DPS) of eulachon, (*Thaleichthys pacificus*) may occur in the project area (Discovery Bay, Eastern Strait of Juan de Fuca, Puget Sound).

All proposed work will follow guidelines presented in the Salish Sea Nearshore Programmatic (SSNP), which resulted in the 'not likely to jeopardize' opinion from NOAA Fisheries on June 29, 2022 (~~Please see Attachment 19~~). Further, a ~~previous Biological Evaluation by Marine Surveys & Assessments (dated September 30, 2019) reviewed the listed species and the assessments from that evaluation are listed below. This document is provided as Attachment 20.~~

After reviewing the appropriate data and surveys, the determination of effect is:

1. Puget Sound Chinook - "May affect, not likely to adversely affect"
2. Rockfish - "May affect, not likely to adversely affect"
3. Bull trout - "May affect, not likely to adversely affect"
4. Steelhead - "May affect, not likely to adversely affect"
5. Hood Canal Summer-run chum - "May affect, not likely to adversely affect"
6. Green Sturgeon - "May affect, not likely to adversely affect"
7. Southern Eulachon - "No effect"
8. Marbled murrelet - "May affect, not likely to adversely affect"
9. Humpback whale - "May affect, not likely to adversely affect"
10. Leatherback sea turtle - "No effect"
11. Southern Resident Killer Whale - "May affect, not likely to adversely affect"

9m. Name each species or habitat on the Washington Department of Fish and Wildlife's Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

Please see list in 9I, above.

Part 10–SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.oria.wa.gov/opas/>.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on [agency addresses for completed JARPA](#).

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [help]

- For more information about SEPA, go to <https://ecology.wa.gov/regulations-permits/SEPA-environmental-review>.

A copy of the SEPA determination or letter of exemption is included with this application.

A SEPA determination is pending with _____ (lead agency). The expected decision date is _____.

I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [help]

This project is exempt (choose type of exemption below).

Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?
WAC 197-11-600

Other: _____

SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [help]

LOCAL GOVERNMENT

Local Government Shoreline permits:

Substantial Development Conditional Use Variance

Shoreline Exemption Type (explain): Jefferson County, MLA20-00125, Expires 11/10/2025

Other City/County permits:

Floodplain Development Permit Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

- Hydraulic Project Approval (HPA) Fish Habitat Enhancement Exemption – Attach Exemption Form

Washington Department of Natural Resources:

- Aquatic Use Authorization

Complete JARPA Attachment E and submit a check for \$25 payable to the Washington Department of Natural Resources.

Do not send cash.

Washington Department of Ecology:

- Section 401 Water Quality Certification
 Authorization to impact waters of the state, including wetlands (Check this box if the proposed impacts are to waters not subject to the federal Clean Water Act)

FEDERAL AND TRIBAL GOVERNMENT

United States Department of the Army (U.S. Army Corps of Engineers):

- Section 404 (discharges into waters of the U.S.) Section 10 (work in navigable waters)

United States Coast Guard:

For projects or bridges over waters of the United States, contact the U.S. Coast Guard at:

- Bridge Permit: D13-SMB-D13-BRIDGES@uscg.mil
 Private Aids to Navigation (or other non-bridge permits): D13-SMB-D13-PATON@uscg.mil

United States Environmental Protection Agency:

- Section 401 Water Quality Certification (discharges into waters of the U.S.) on tribal lands where tribes do not have treatment as a state (TAS)

Tribal Permits: (Check with the tribe to see if there are other tribal permits, e.g., Tribal Environmental Protection Act, Shoreline Permits, Hydraulic Project Permits, or other in addition to CWA Section 401 WQC)

- Section 401 Water Quality Certification (discharges into waters of the U.S.) where the tribe has treatment as a state (TAS).

Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

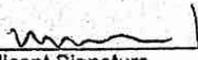
11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. mw (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. mw (Initial)

Martha Woodward
Applicant Printed Name


Applicant Signature

8/24/2023
Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

Geoffrey McMichael
Authorized Agent Printed Name


Authorized Agent Signature

08/24/2023
Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

Property Owner Printed Name

Property Owner Signature

Date

18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2018



WASHINGTON STATE
Joint Aquatic Resources Permit
Application (JARPA) [\[help\]](#)



US Army Corps
of Engineers®
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

TO BE COMPLETED BY APPLICANT [\[help\]](#)

Project Name: Cape George Marina

Location Name (if applicable): Cape George Colony Club, Port Townsend

Attachment C:
Contact information for adjoining
property owners. [\[help\]](#)

Use this attachment only if you have more than four adjoining property owners.

Use black or blue ink to enter answers in white spaces below.

1. Contact information for all adjoining property owners. [\[help\]](#)

Name	Mailing Address	Tax Parcel # (if known)
Stephen & Anne McFarland	72 Sunset Blvd, Port Townsend WA 98368	946100003
Denise Dowd	PO Box 369, Carpinteria CA 93014	946100004
Docile Enterprises LLC	3219 E Camelback Rd., Phoenix AZ 85018	946100005
Asmury Ladimar Burgin	65 W Vancouver Dr., Port Townsend WA 98368	946100006
Cathy Graczyk	73 W Vancouver Dr., Port Townsend WA 98368	946100007

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at

(800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-014 rev. 10/2016



WASHINGTON STATE
Joint Aquatic Resources Permit
Application (JARPA) [\[help\]](#)



US Army Corps
of Engineers®
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

Attachment D:
Construction sequence [\[help\]](#)

TO BE COMPLETED BY APPLICANT [\[help\]](#)

Use this attachment only if your project will be constructed in phases or stages. Complete the outline showing the construction sequence and timing of activities, including the start and end dates of each phase or stage.

Project Name: Cape George Marina

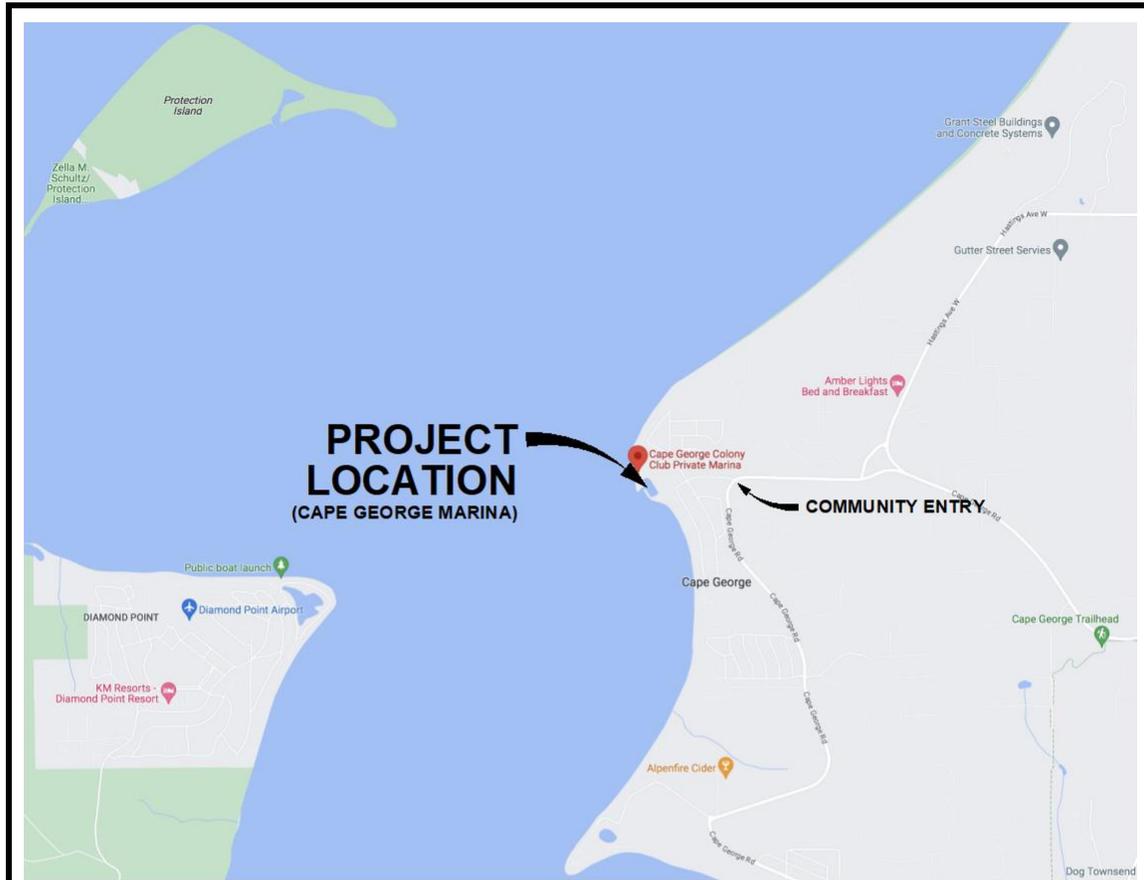
Location Name (if applicable): Cape George Colony Club, Port Townsend

Use black or blue ink to enter answers in white spaces below.

Phase or Stage	Start Date	End Date	Activity Description
1	June 10, 2023	Feb 15., each year	Annual maintenance dredging of marina entrance channel and beach nourishment. We request that the U.S. Army Corps modify condition d to allow alignment with Washington Department of Fish and Wildlife and previous Corps amendments to our permit because of unique tidal and biological factors (please see Attachment 17).
2	June 10, 2023	Feb. 15, each year	All other dock/infrastructure maintenance will be ongoing over the life of the permit(s).
3	June 10, 2023	Sep. 30, 2024	Install anchored log sediment retention structures in beach nourishment area.
4	June 10, 2023	Feb. 15, 2024	Remove 515 square feet of solid wood decked floats and replace with aluminum substructure and fiberglass grating (>60% open area). Remove 230 square feet over overwater pier/dock solid wood-decked surface and replace with fiberglass grating (>60% open area).
5	June 10, 2024	Feb. 15, 2025	Remove 3730 square feet of solid wood decking on floats and replace with fiberglass grating (>60% open area).
6	June 10, 2025	Feb 15. 2026	Remove 3407 square feet of solid wood decking on floats and replace with fiberglass grating (>60% open area).
7	June 10, 2026	Feb 15. 2027	Remove 3504 square feet of solid wood decking on floats and replace with fiberglass grating (>60% open area).

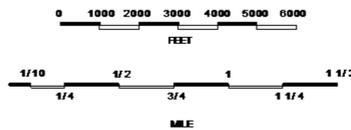
If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-015 rev. 10/2016

Sheet 1: Overview of Cape George Marina



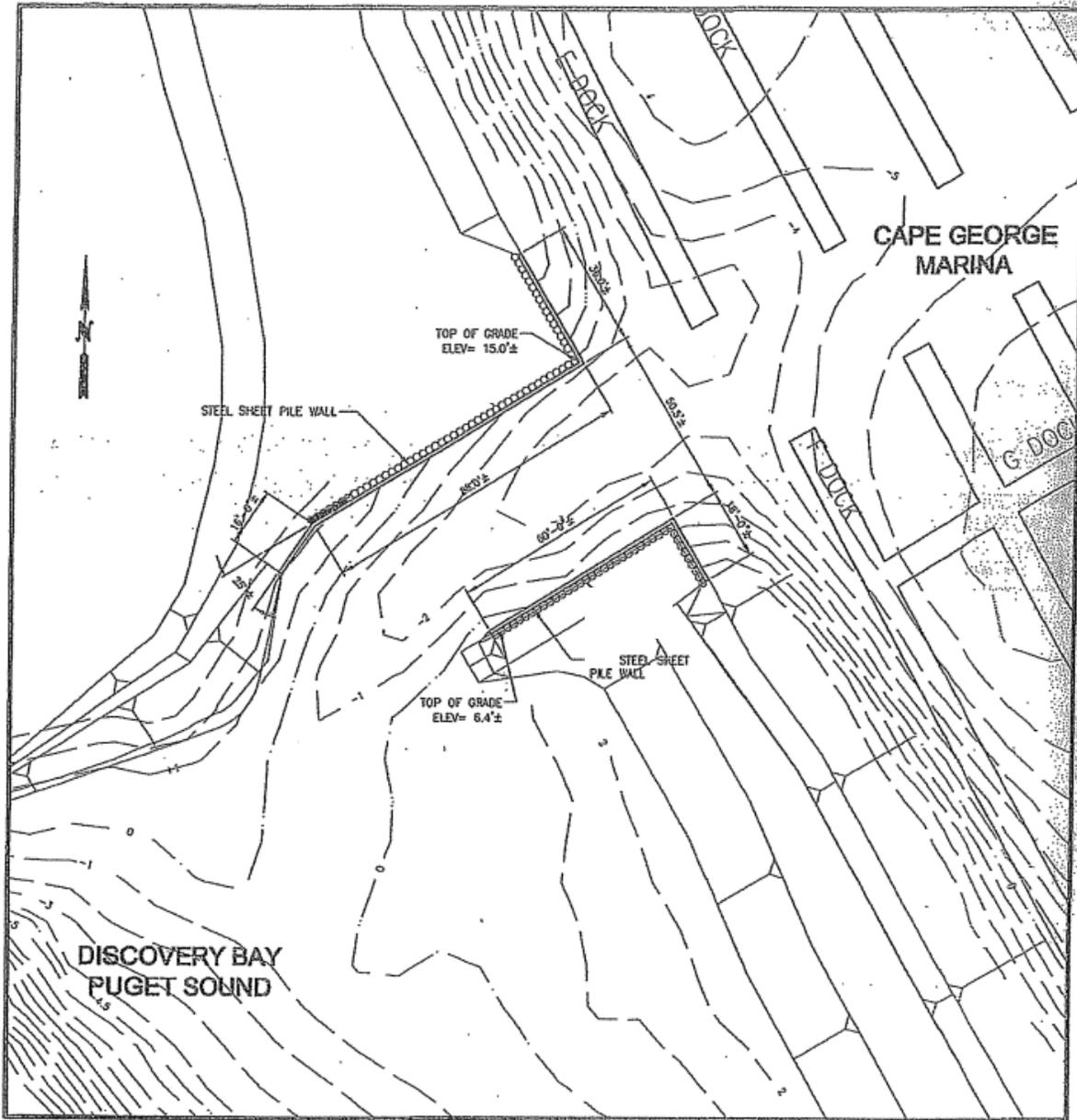
IN SECTION 13, TOWNSHIP 30 N, RANGE 2 W, W.M.
JEFFERSON CO., WA

SOURCE: GOOGLE MAPS



<p>APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368</p>	<p>PURPOSE: EXISTING MARINA MAINTENANCE</p>	<p>NWS-2023-379</p>	
 <p>PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG</p>	<p>IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/ 11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°</p>	<p>VICINITY MAP</p>	<p>DATE: 07/11/2023</p> <p>SHEET: OF</p>

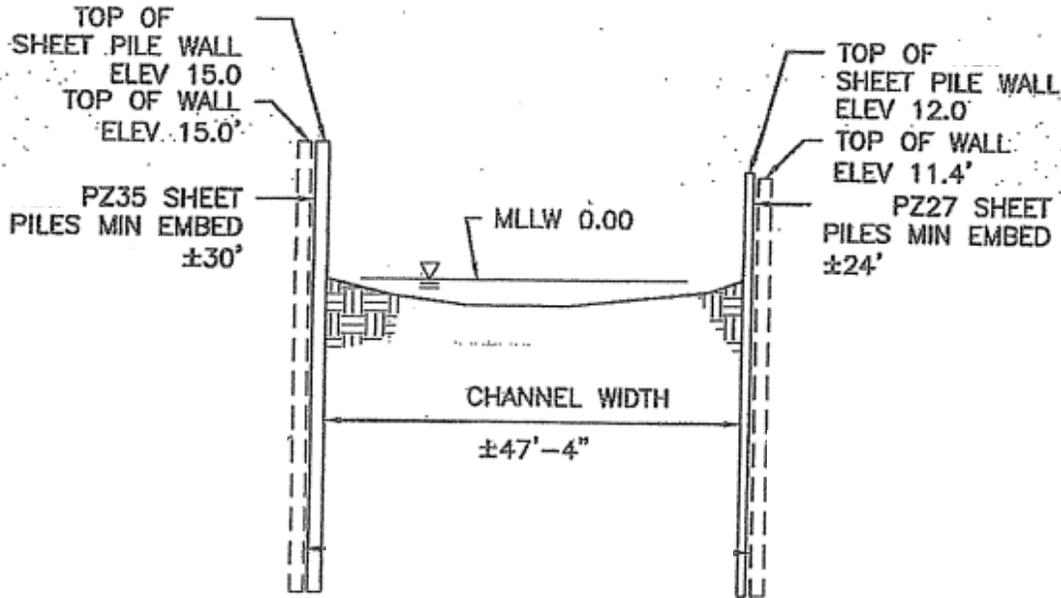
Sheet 2: Plan view Cape George Marina channel entrance area.



ENTRANCE TO CAPE GEORGE COLONY MARINA
SCALE= 1:40

APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	NWS-2023-379	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°		DATE: 07/11/2023
			SHEET: OF
		2 of 15	

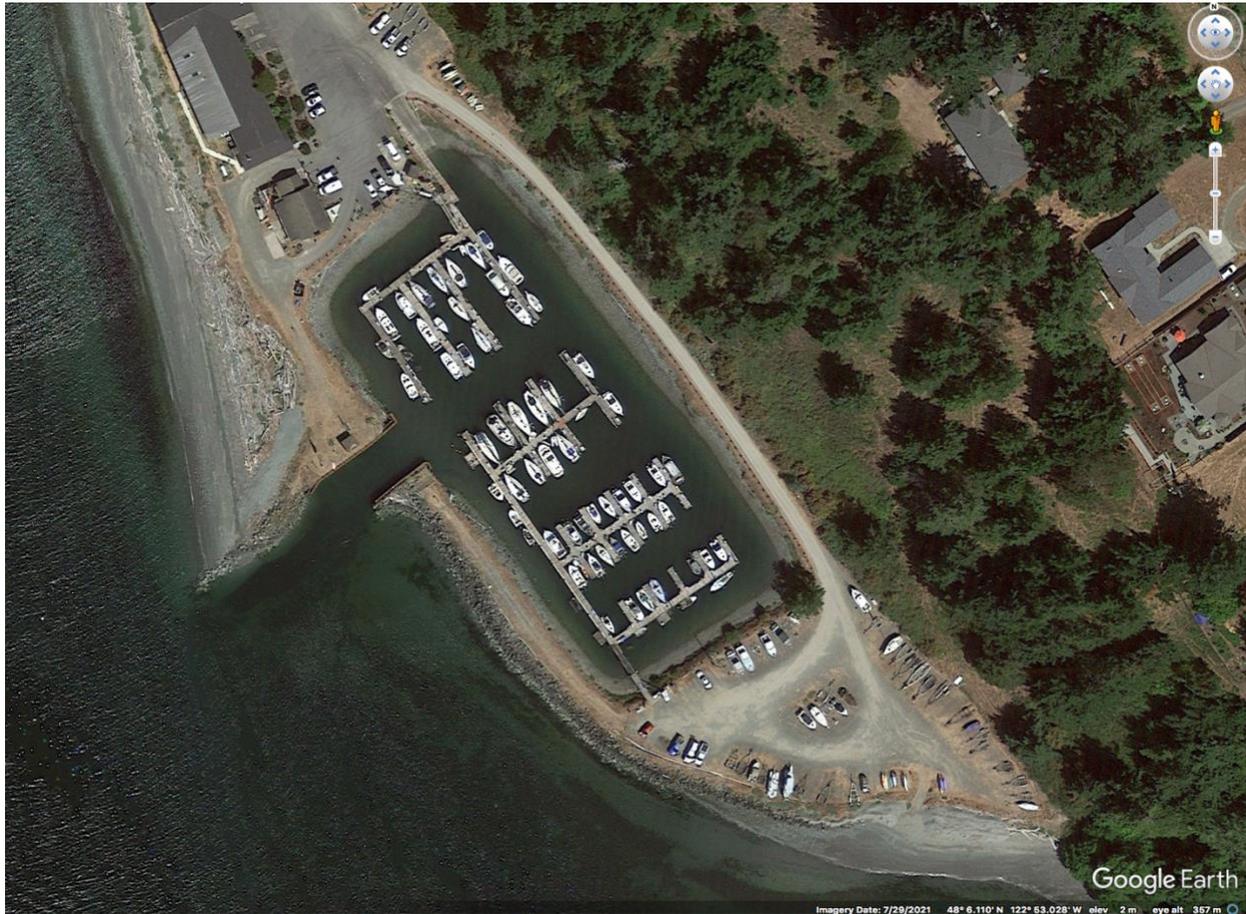
Sheet 3: Cape George Marina channel entrance cross section.



CHANNEL CROSS SECTION
 LOOKING EAST 1:20

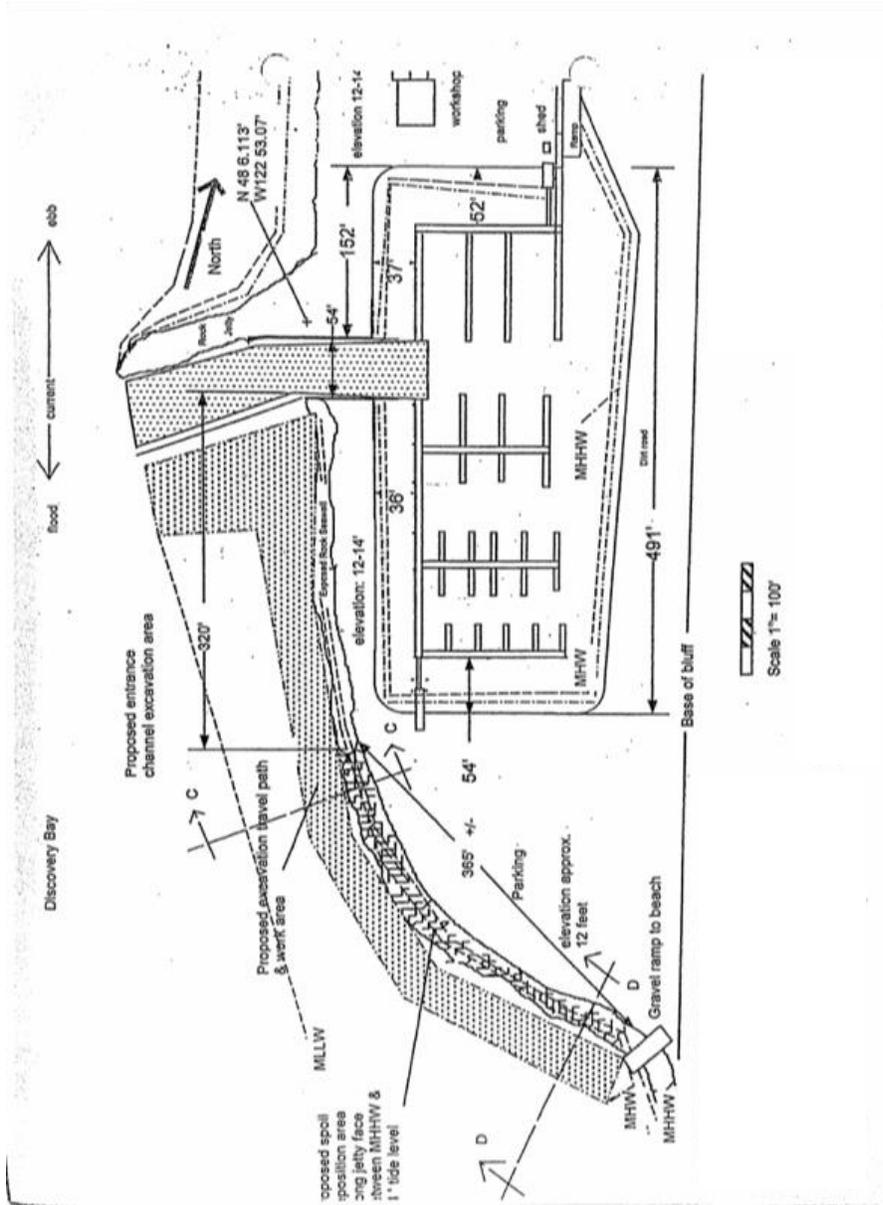
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	<div style="border: 1px solid black; padding: 5px; display: inline-block;">NWS-2023-379</div>	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	DATE: 07/11/2023	
		SHEET: OF 3 of 15	

Sheet 4: Satellite image of Cape George Marina on July 29, 2021.



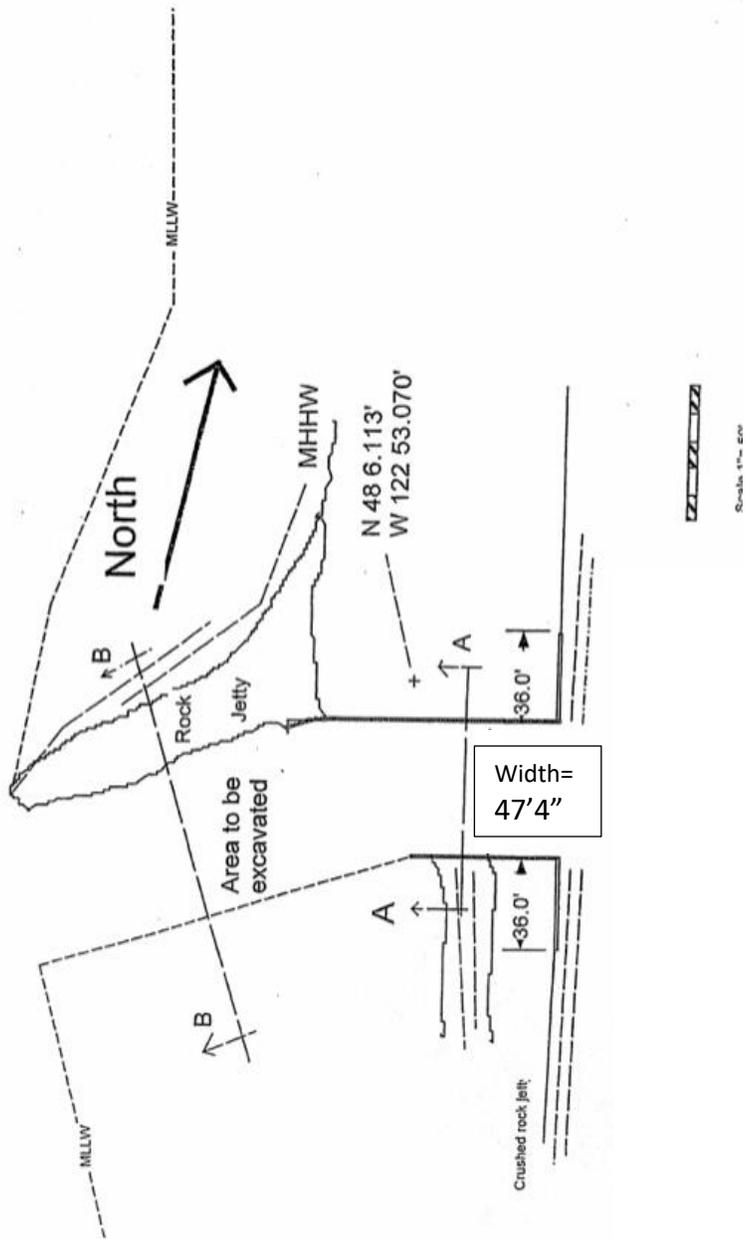
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368		PURPOSE: EXISTING MARINA MAINTENANCE		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> NWS-2023-379 </div>	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG		IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°		DATE: 07/11/2023	
				SHEET: OF	
				4 of 15	

Sheet 5: Proposed work area for Cape George Marina entrance channel dredging and beach nourishment areas.



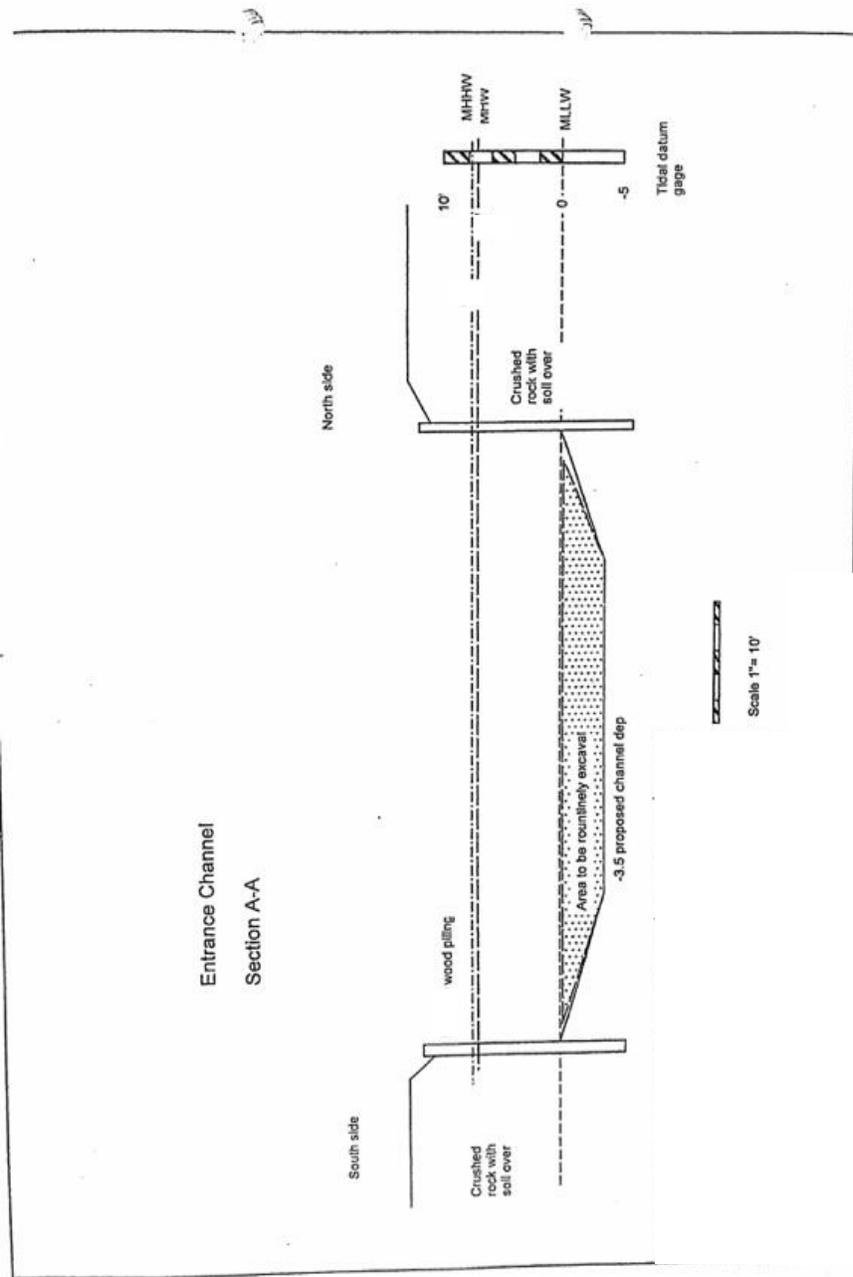
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	<div style="border: 1px solid black; padding: 5px; display: inline-block;">NWS-2023-379</div>	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	Nearby Tidal Datum: Port Townsend (9444900) MHHW=8.52 ft; MHW=7.84 ft.; MLLW=0.00 ft; HAT= 9.99ft	DATE: 07/11/2023
	SHEET: OF		
5 of 15			

Sheet 6: Plan view of Cape George Marina entrance area where proposed annual maintenance dredging will occur.



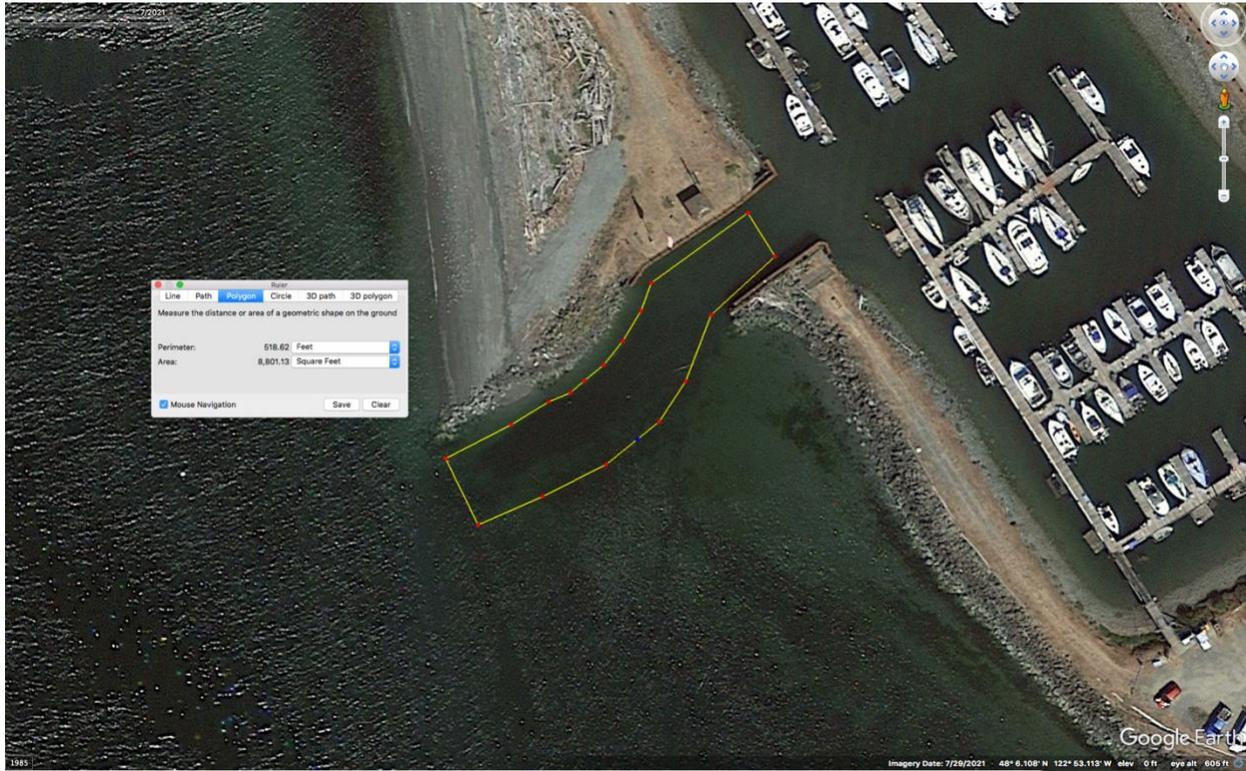
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	NWS-2023-379	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	Nearby Tidal Datum: Port Townsend (9444900) MHHW=8.52 ft; MHW=7.84 ft.; MLLW=0.00 ft; HAT= 9.99ft	DATE: 07/11/2023
			SHEET: OF
6 of 15			

Sheet 7: Cross-section of Cape George Marina entrance area where proposed annual maintenance dredging will occur to a depth of -3.5 feet.



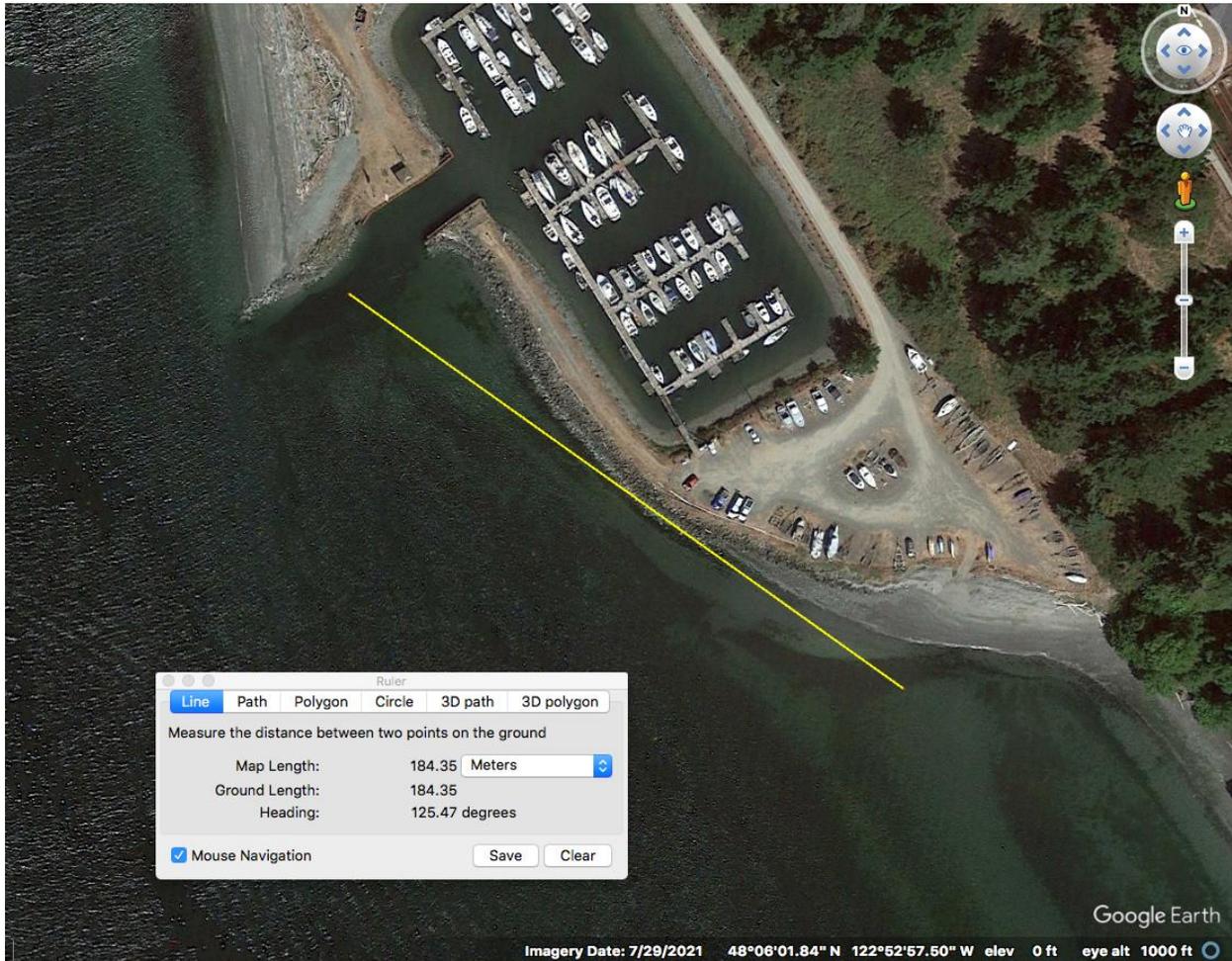
<p>APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368</p>	<p>PURPOSE: EXISTING MARINA MAINTENANCE</p>	<p>NWS-2023-379</p>	
<p>PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG</p>	<p>IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°</p>	<p>Nearby Tidal Datum: Port Townsend (9444900) MHHW=8.52 ft; MHW=7.84 ft.; MLLW=0.00 ft; HAT= 9.99ft</p>	<p>DATE: 07/11/2023</p> <p>SHEET: OF</p>
		<p>7 of 15</p>	

Sheet 8: Area polygon of proposed annual entrance channel maintenance dredging at Cape George Marina.



<p>APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368</p>	<p>PURPOSE: EXISTING MARINA MAINTENANCE</p>	<p>NWS-2023-379</p>	
 <p>PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG</p>	<p>IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°</p>		<p>DATE: 07/11/2023</p> <p>SHEET: OF</p>
		<p>8 of 15</p>	

Sheet 9: Plan view of Cape George Marina channel entrance dredging area (north) to beach nourishment area (south).



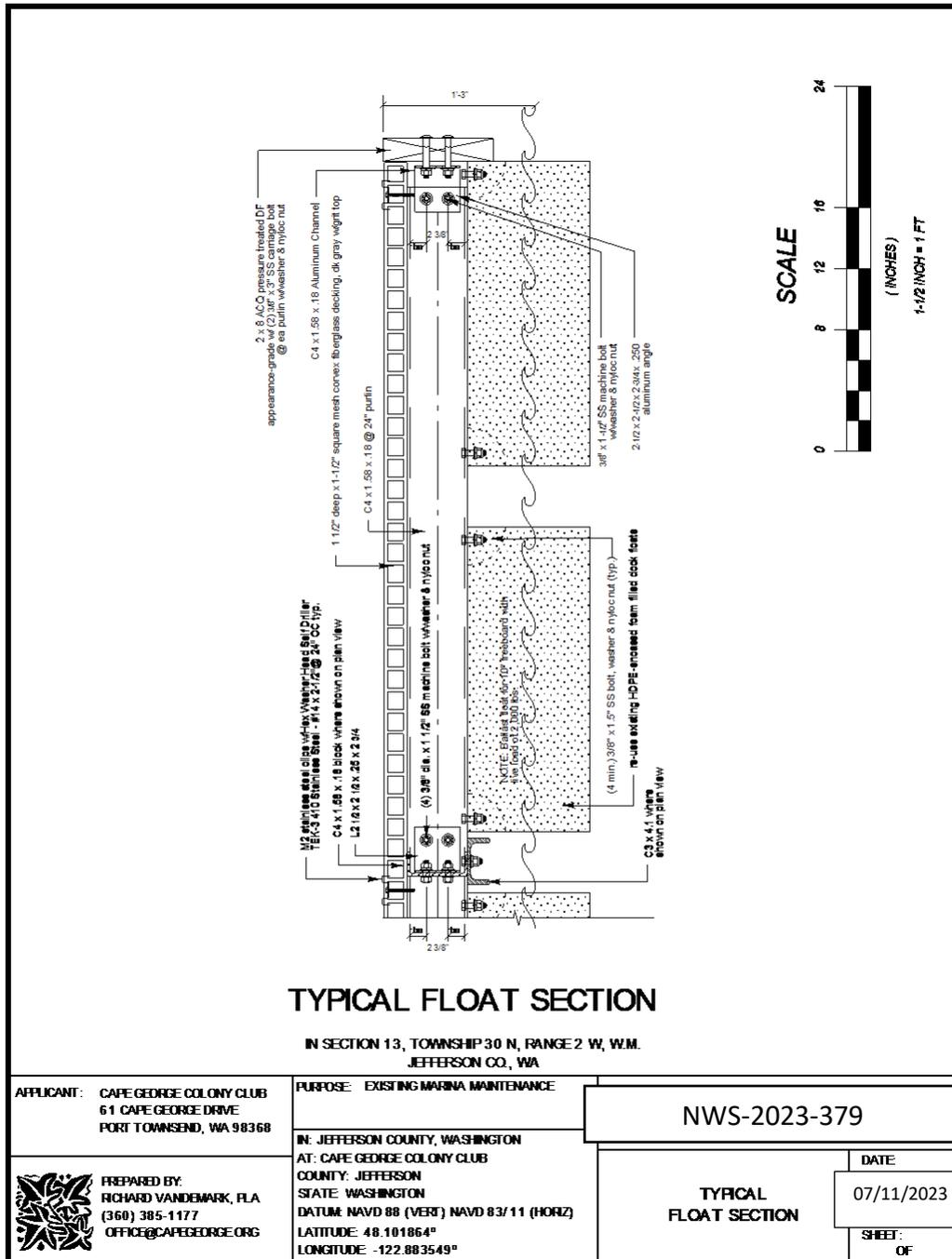
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	<div style="border: 1px solid black; padding: 5px; display: inline-block;">NWS-2023-379</div>	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	DATE: 07/11/2023	
		SHEET: OF	
			9 of 15

Sheet 10. Plan view showing beach nourishment areas adjacent to access ramp at south end of gravel boat storage area. Sediment will be deposited on each side of the access ramp (cross-hatched areas on left of figure).

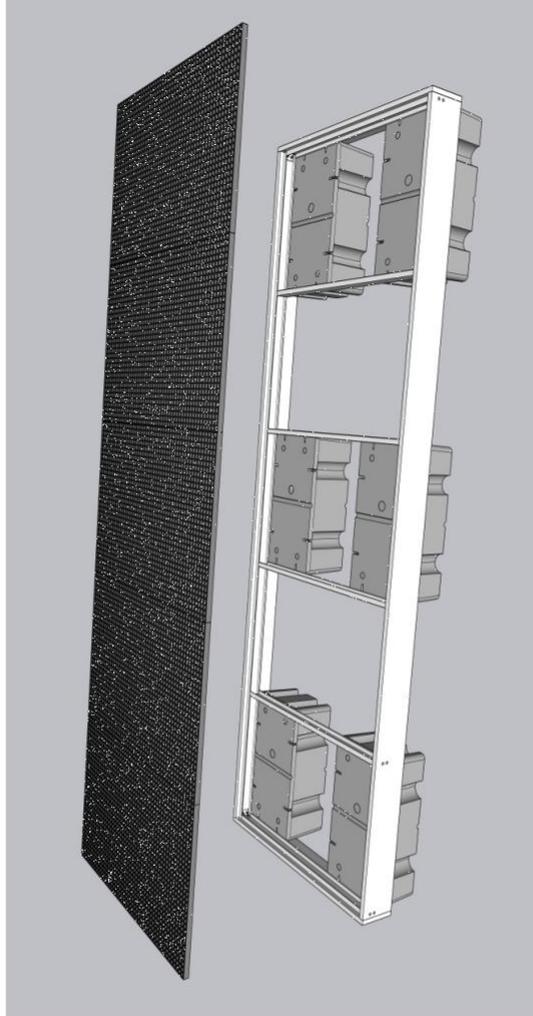


APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	<div style="border: 1px solid black; padding: 5px; display: inline-block;">NWS-2023-379</div>	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	DATE: 07/11/2023	
		SHEET: OF	
		10 of 15	

Sheet 11: Section schematic for dock replacement segments with plastic floats, aluminum sub-structure, fiberglass grating, and wood fascia boards to be installed in place of wooden dock sections with solid wood decking.



Sheet 12: Perspective schematic for dock replacement segments with plastic floats, aluminum sub-structure, fiberglass grating, and wood fascia boards to be installed in place of wooden dock sections with solid wood decking.



TYPICAL FLOAT PERSPECTIVE

IN SECTION 13, TOWNSHIP 30 N, RANGE 2 W, W.M.
JEFFERSON CO., WA

APPLICANT: CAPE GEORGE COLONY CLUB
61 CAPE GEORGE DRIVE
FORT TOWNSEND, WA 98368

PURPOSE: EXISTING MARINA MAINTENANCE

NWS-2023-379



PREPARED BY:
RICHARD VANDEMARK, P.L.A.
(360) 385-1177
OFFICE@CAPEGEORGE.ORG

IN: JEFFERSON COUNTY, WASHINGTON
AT: CAPE GEORGE COLONY CLUB
COUNTY: JEFFERSON
STATE: WASHINGTON
DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ)
LATITUDE: 48.101864°
LONGITUDE: -122.883549°

FLOAT PERSPECTIVE

DATE:

07/11/2023

SHEET:
OF

12 of 15

Sheet 13: Structural notes for replacement dock sections.

GENERAL STRUCTURAL NOTES

1. ALL MATERIALS WORKMANSHIP DESIGN AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE UNIFORM BUILDING CODE (CURRENT EDITION).
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM HIS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR, THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
3. FLOATS SHALL BE MODEL #2072-8 AS MANUFACTURED BY PREMIER FLOATS OR APPROVED EQUAL. FLOATS SHALL BE 20" X 72" X 8" AND SHALL WEIGH APPROXIMATELY 35 LBS. EA.
4. STRUCTURAL STEEL: CONNECTION BOLTS SHALL CONFORM TO ASTM A307 STAINLESS STEEL
5. ALUMINUM: PLATES SHALL BE 5052 ALLOY. SHAPES SHALL BE 6061-T6 OR T52 ALLOY. WELDS SHALL BE 1/8" FILLET UNLESS OTHERWISE NOTED CONFORMING WITH APPLICABLE STANDARDS. ALL WELDING TO BE PER AWS SPECIFICATIONS BY CERTIFIED WELDERS.
6. FIBERGLASS DECKING:
 1-1/2" DEEP X 1-1/2" SQUARE MESH CORVEX FIBERGLASS DECKING, DK GRAY W/GRIT TOP
 M2 STAINLESS STEEL CLIPS W/HEX WASHER HEAD SELF DRILLER TEK-3 410 STAINLESS STEEL - #14 X 2-1/2"@ 24" OC TYP.

DESIGN CRITERIA:

GOVERNING CODE : AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2009 (GUIDE) AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2015 (AASHTO).

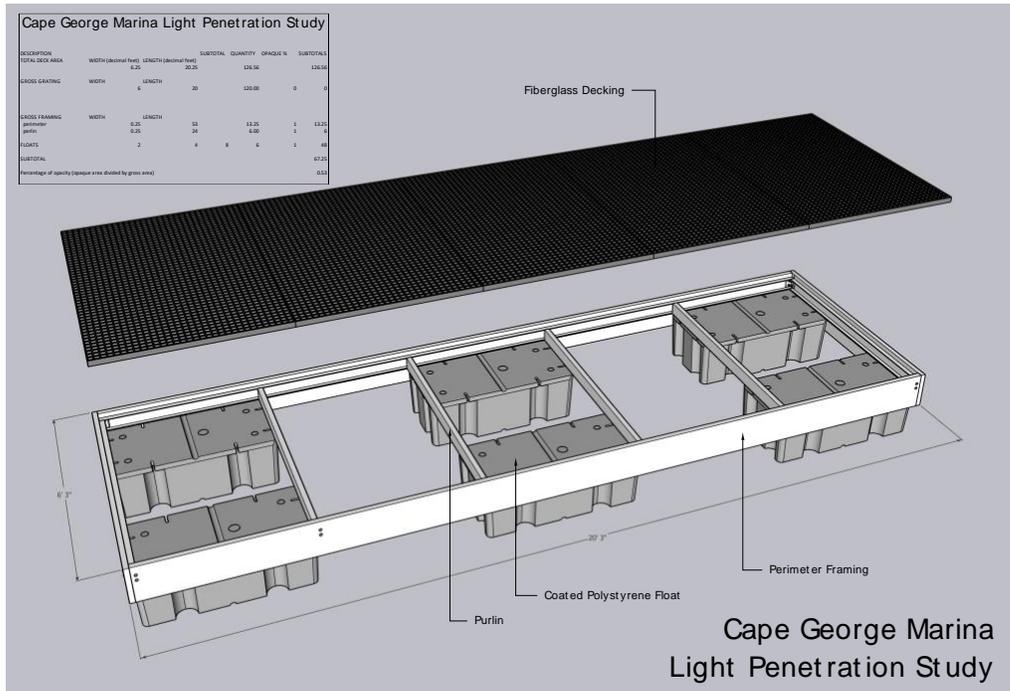
PEDESTRIAN LOAD: 90 PSF
 WIND LOAD: 90 MPH (SIGNS FIGURE 3-2B)

FLOAT SPECIFICATIONS

IN SECTION 13, TOWNSHIP 30 N, RANGE 2 W, W.M.
 JEFFERSON CO., WA

APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	NWS-2023-379	
 PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°	FLOAT SPECIFICATIONS	07/11/2023 REVISION DATE: SHEET: 13 of 15

Sheet 14: Light Penetration calculations for Cape George Marina.

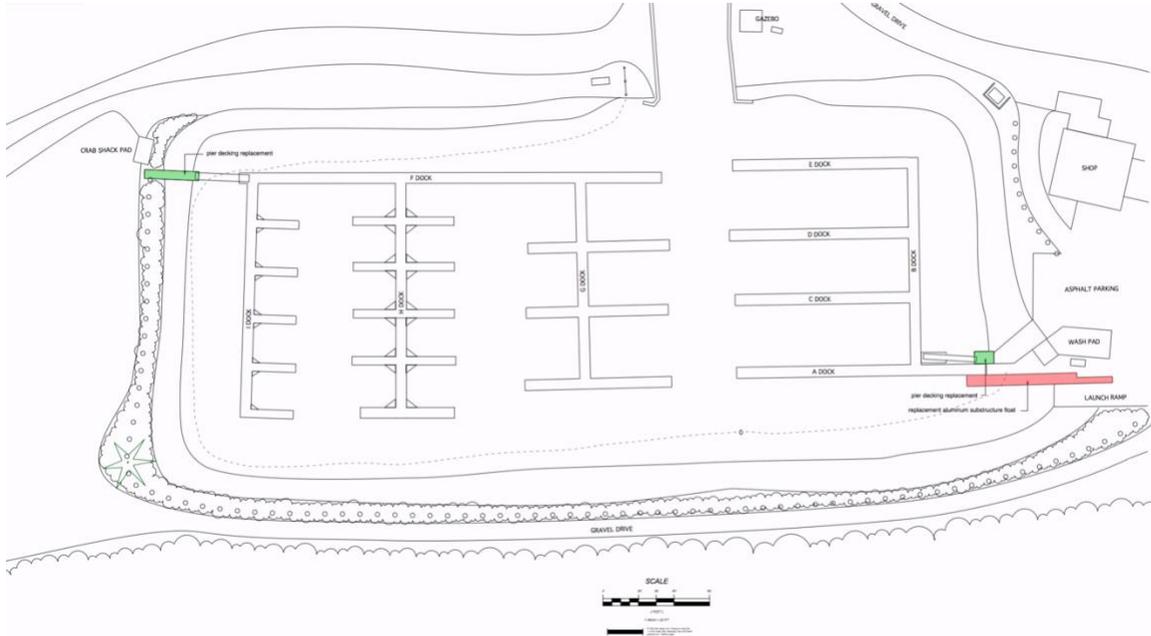


Cape George Marina Light Penetration Study

DESCRIPTION	WIDTH (decimal feet)	LENGTH (decimal feet)	SUBTOTAL	QUANTITY	OPAQUE %	SUBTOTALS
TOTAL DECK AREA	6.25	20.25	126.56			126.56
GROSS GRATING	WIDTH	LENGTH				
	6	20	120.00	0	0	0
GROSS FRAMING	WIDTH	LENGTH				
perimeter	0.25	53	13.25	1	13.25	
perlin	0.25	24	6.00	1	6	
FLOATS	2	4	8	6	1	48
SUBTOTAL						67.25
Percentage of opacity (opaque area divided by gross area)						0.53

JEFFERSON CO., WA		NWS-2023-379	
APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368	PURPOSE: EXISTING MARINA MAINTENANCE	FLOAT SPECIFICATIONS	
PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG	IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°		
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Sheet 15: Plan view of Cape George Marina showing dock/float (pink) and pier (green) work areas.



<p>APPLICANT: CAPE GEORGE COLONY CLUB 61 CAPE GEORGE DRIVE PORT TOWNSEND, WA 98368</p>	<p>PURPOSE: EXISTING MARINA MAINTENANCE</p>	<p>NWS-2023-379</p>	
<p>PREPARED BY: RICHARD VANDEMARK, PLA (360) 385-1177 OFFICE@CAPEGEORGE.ORG</p>	<p>IN: JEFFERSON COUNTY, WASHINGTON AT: CAPE GEORGE COLONY CLUB COUNTY: JEFFERSON STATE: WASHINGTON DATUM: NAVD 88 (VERT) NAVD 83/11 (HORIZ) LATITUDE: 48.101864° LONGITUDE: -122.883549°</p>	<p>Nearby Tidal Datum: Port Townsend (9444900) MHHW=8.52 ft; MHW=7.84 ft.; MLLW=0.00 ft; HAT= 9.99ft</p>	<p>DATE: 07/11/2023</p> <p>SHEET: OF</p>
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