

MEMORANDUM FOR: RECORD

December 23, 2015

SUBJECT: TIER 1 DETERMINATION REGARDING THE SUITABILITY OF DREDGED MATERIAL FROM THE POINT ROBERTS MARINA ENTRANCE CHANNEL FOR ON-SITE BEACH NOURISHMENT (PUBLIC NOTICE: NWS-2015-937)

1. **Introduction.** This memorandum reflects the consensus Tier 1 determination of the Dredged Material Management Program (DMMP) agencies (U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington Department of Ecology and Washington Department of Natural Resources) regarding the suitability of dredged material from the Point Roberts Marina entrance channel for on-site beach nourishment. Point Roberts Marina is located in Whatcom County, Washington (Figure 1).

2. **Background.** Point Roberts Marina currently holds three separate permits for dredging operations at its facilities. A brief summary follows:

NWS-2000-617: 10-year permit for annual dredging of 3,000 to 7,500 cubic yards (cy) of accumulated sediments in two areas adjacent to the entrance channel jetties and placement of the material in the nearshore area to the west of the entrance channel to maintain natural lateral movement of sediments along the shoreline.

NWS-2001-165: 10-year maintenance dredging (three events) of the marina entrance channel with placement in the nearshore stockpile area used for the bypass operation.

NWS-2005-833: one time dredging of the marina basin.

Permit NWS-2001-165 is up for renewal and requires evaluation of the sediment to be dredged from the entrance channel. The proposed project (Public Notice NWS-2015-937) consists of maintenance dredging a total of approximately 30,000 to 47,000 cy of material from a 5-acre area over a ten-year period, with three separate dredging events anticipated. All dredged material will be placed at the existing sediment bypass beach nourishment site (Figure 2).

3. **Exclusionary Criteria.** The Clean Water Act (CWA) Section 404(b)1 Guidelines for Specification of Disposal Sites for Dredged or Fill Material (CFR 40 Section 230.60, subparagraphs a and b) include exclusionary criteria with regard to testing. The Guidelines state that (1) dredged or fill material is most likely to be free from chemical, biological, or other pollutants where it is composed primarily of sand, gravel, or other naturally occurring inert material. Dredged material so composed is generally found in areas of high current or wave energy such as streams with large bed loads or coastal areas with shifting bars and channels; and (2) the extraction site shall be examined in order to assess whether it is sufficiently removed from sources of pollution to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants (EPA, 1980). Dredged material that meets these two guidelines may be excluded from further testing.

4. Review of Previous DMMP Determinations. Existing information from all three permitted activities was reviewed to better inform the evaluation of the entrance channel material:

Permit NWS-2005-833 (boat basin): 164,900 cubic yards (cy) of material were tested under DMMP in 2005 (DMMP, 2005). All material was found suitable for open-water disposal at the Rosario Strait site.

Permit NWS-2001-165 (entrance channel): A total of 30,000 cy of maintenance dredging was permitted over the 10-year life of the existing permit. The Dredged Material Management Office coordinated review of this project with the Department of Ecology and EPA in June 2001. No testing was required.

Permit NWS-2000-617 (bypass operation): This project was evaluated by the DMMP agencies in 2012 (DMMP, 2012). The dredged material – consisting of sand, gravel and cobble – was found to meet the exclusionary criteria under the CWA. In addition, it was noted that the bypass operation simply maintains the existing littoral transport of material within the local drift cell, placing “like on like” within a small geographic area. Therefore, no testing was required.

5. Photographic Evidence of Coarse-Grained Material. Video taken during an eelgrass survey in June 2015 provided evidence that the dredged material in the entrance channel consisted predominantly of coarse-grained material. Still photos extracted from the video were also provided for review. Due to the presence of marine vegetation in several of the photos, it was not possible to fully ascertain that the sediment throughout the entrance channel was coarse-grained, but all photos in which the substrate was visible did show a coarse-grain bottom. Figures 3 and 4 are the clearest examples. Based on the weight of evidence provided, the DMMP agencies determined that it was likely that the majority of shoaled sediment in the entrance channel met the coarse-grain exclusionary criterion under the CWA.
6. Evaluation of Potential Sources of Contamination. The primary potential source of contamination in the vicinity of the entrance channel is the marina’s boat basin itself. However, testing conducted in the boat basin in 2005 indicated that the sediment did not contain contaminants at levels of concern. A single chemical (2,4-dimethylphenol) exceeded the DMMP screening level (SL) in one dredged material management unit (DMMU). However, this DMMU passed biological testing and was found suitable for open-water disposal. There were no other SL exceedances.

The only changed condition reported at the marina since sediment characterization in 2005 was a fire on J dock in October 2007. J dock is located near the northerly head of the boat basin, approximately 1,200 feet from the entrance channel (Figure 5). Five boats were involved in the fire ranging in length from 20 feet to 24 feet. The boats burned to the waterline but did not sink. All were removed from the water. During the event, the U.S. Coast Guard sent a helicopter to observe and noted that they did not see any pollution in the water. The Point Roberts Fire Department along with the Delta Fire Department (Canada) responded. The area was boomed and foamed. No fuel escaped from any of the boats (Layton, 2015). Based on the information provided, the DMMP agencies determined that even in the event that the fire resulted in localized sediment contamination, it was unlikely that sediment from the location of the fire could have been transported in any significant quantity to the entrance channel.

7. **Exclusionary Status Determination.** Based on a review of previous DMMP determinations and additional information provided by the dredging proponent, the DMMP agencies determined that sediment in the Point Roberts Marina entrance channel meets the exclusionary criteria provided in the CWA. The project is located in a high-energy environment that transports significant quantities of material along the littoral zone. A portion of this sediment is trapped by the entrance channel and consists predominantly of coarse-grained material. Sediment within the boat basin was found suitable for open-water disposal in 2005 and a boat fire in 2007 was far enough removed from the entrance channel to provide reasonable assurance that the proposed discharge material is not a carrier of contaminants. Therefore, sediment testing is not required.

This determination applies to the entrance channel only, and in the absence of significant changed conditions in the project area during the life of the new permit (NWS-2015-937), this determination will remain in effect for the full 10 years covered by the permit.

This determination does not apply to sediment in the boat basin. When a new permit is needed for maintenance dredging in that area, additional evaluation may be required.

8. **References.**

DMMP, 2005. *Determination of the Suitability of Sediment Proposed to be Maintained Dredged from Point Roberts Marina, Point Roberts, Washington for Open-Water Disposal at the Washington State Department of Natural Resources (DNR) Rosario Strait PSDDA Open-Water Disposal Site, as Evaluated under Section 404 of the Clean Water Act.* Prepared by the Dredged Material Management Office for the Dredged Material Management Program agencies, December 2005.

DMMP, 2012. *Determination Regarding the Exclusionary Status of Dredged Material from the Point Roberts Marina Bypass Operation, Whatcom County, Washington.* Prepared by the Dredged Material Management Office for the Dredged Material Management Program agencies, May 2012.

EPA, 1980. *40 CFR Part 230 Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material,* Environmental Protection Agency, December 1980.

Layton, 2015. Personal Communication (email) from Jeff Layton, P.E. (Layton & Sell, Inc.) to David Fox (U.S. Army Corps of Engineers), November 15, 2015.

9. Agency Signatures.

signed copy on file in DMMO - Seattle District office

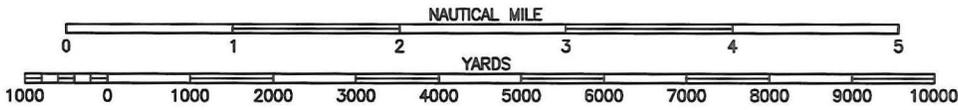
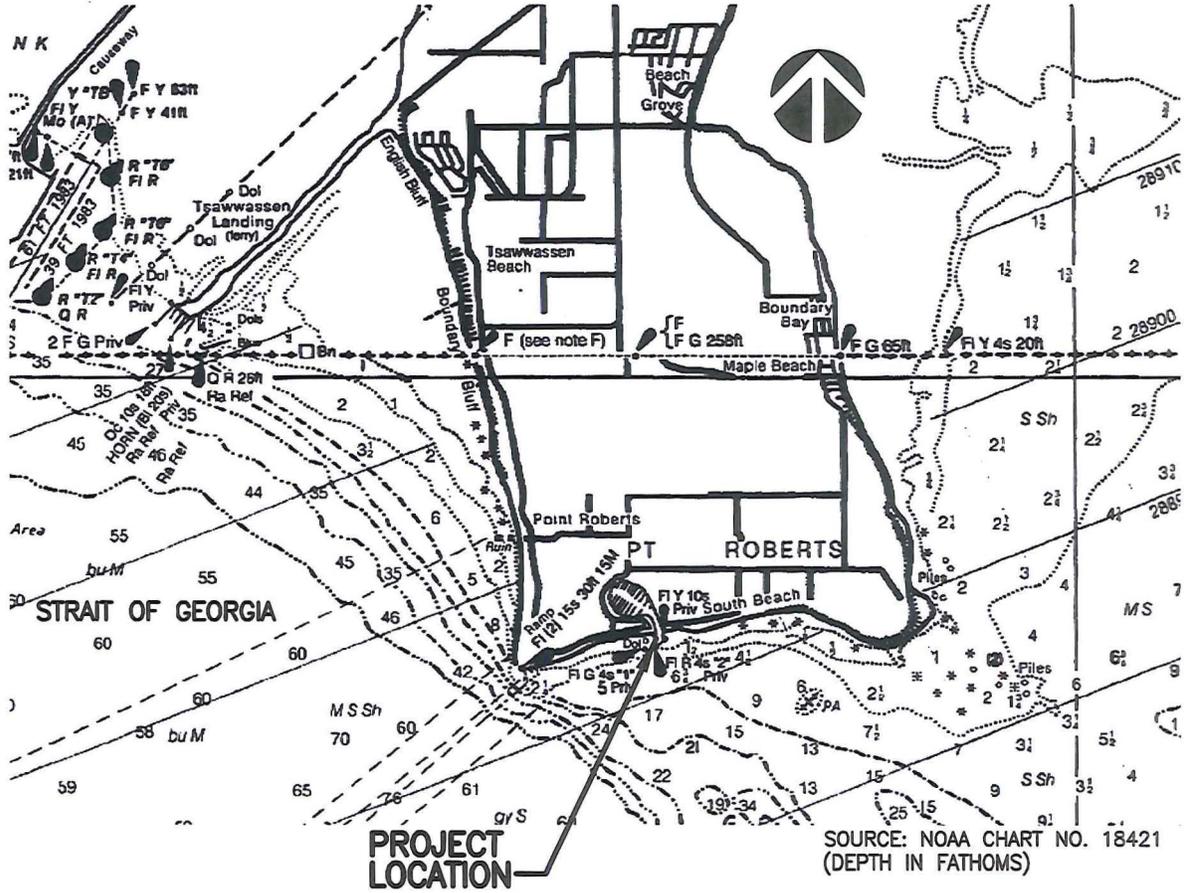
Concur:

_____ Date	_____ David Fox, P.E. - Seattle District Corps of Engineers
_____ Date	_____ Justine Barton - Environmental Protection Agency
_____ Date	_____ Laura Inouye, Ph.D. - Washington Department of Ecology
_____ Date	_____ Celia Barton - Washington Department of Natural Resources

Copies furnished:

DMMP signatories  
Randel Perry, Seattle District Regulatory  
Jeff Layton, Layton and Sell

Figure 1



APPLICANT: POINT ROBERTS RESORT LP  
713 SIMUNDSON DRIVE  
POINT ROBERTS WA 98281  
ATTN: JACQUELYNE EVERETT

PURPOSE: PROPOSED ENTRANCE CHANNEL  
MAINTENANCE DREDGING.

U.S. ARMY CORPS OF ENGINEERS REFERENCE NO:



Layton & Sell, Inc., P.S.  
12515 Willows Road NE Suite 205  
Kirkland, Washington 98034-8795  
Office: (425)825-1735 Fax: 825-1363

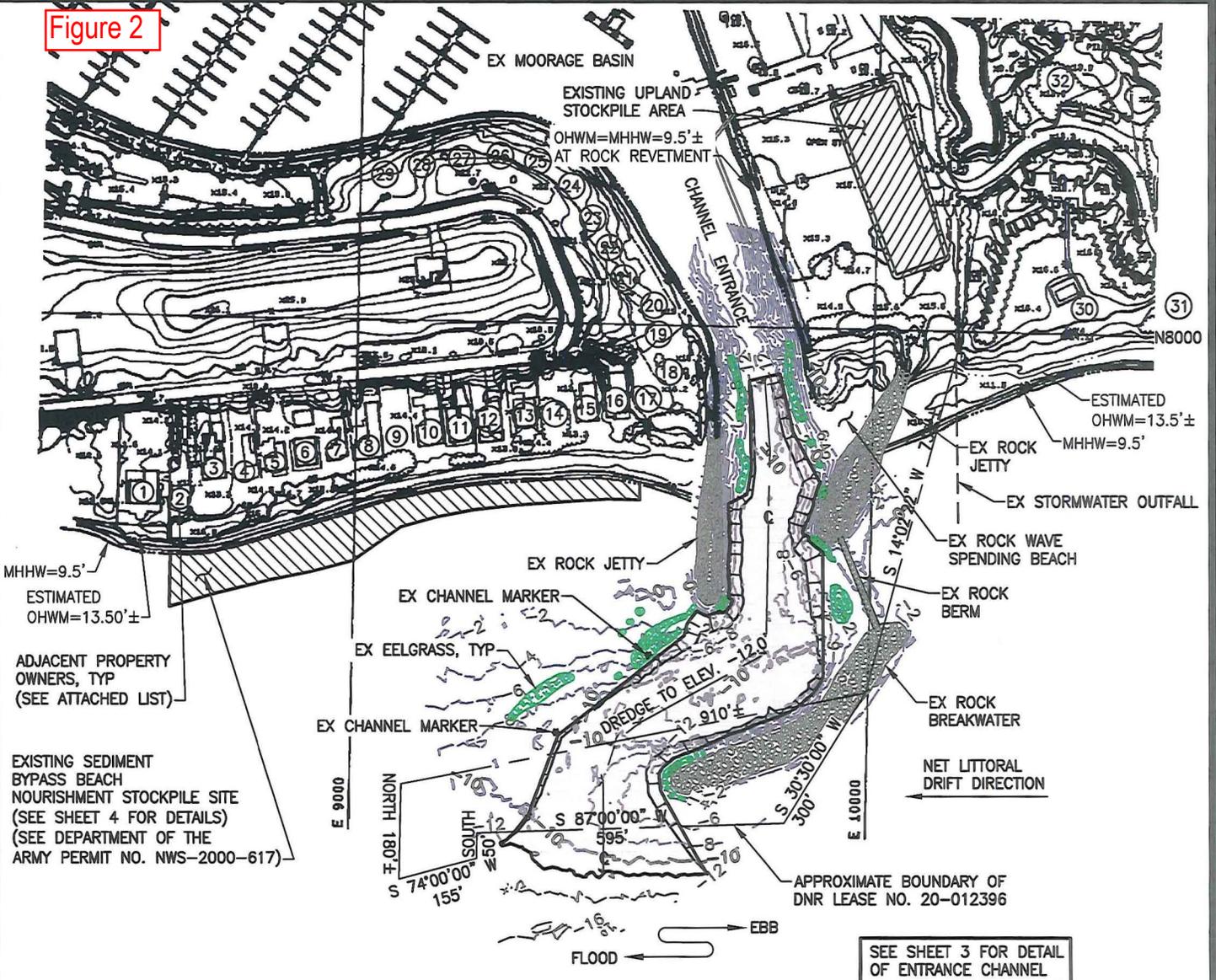
IN: STRAIT OF GEORGIA  
AT: POINT ROBERTS  
COUNTY: WHATCOM  
STATE: WASHINGTON  
DATUM: MLLW = 0.00'  
LATITUDE: 48.974167°N  
LONGITUDE: 123.063056°W

VICINITY MAP

Figure 1

DATE:  
10/07/2015  
REVISION DATE:  
SHEET:  
1 of 8

**Figure 2**



MHHW=9.5'  
ESTIMATED  
OHWM=13.50'±  
ADJACENT PROPERTY  
OWNERS, TYP  
(SEE ATTACHED LIST)  
EXISTING SEDIMENT  
BYPASS BEACH  
NOURISHMENT STOCKPILE SITE  
(SEE SHEET 4 FOR DETAILS)  
(SEE DEPARTMENT OF THE  
ARMY PERMIT NO. NWS-2000-617)

**STRAIT OF  
GEORGIA**

- NOTES:**
1. EELGRASS SURVEY UPDATED BY BIOAQUATICS INTERNATIONAL ON JULY, 2015.
  2. HYDROGRAPHIC SURVEY OF ENTRANCE CHANNEL BY WILSON ENGINEERING, JULY, 2015.

- LEGEND:**
- AREA OF PROPOSED MAINTENANCE DREDGING OF ENTRANCE CHANNEL
  - UPLAND STOCKPILE AREA
  - EXISTING SEDIMENT BYPASS BEACH NOURISHMENT STOCKPILE SITE
  - EXISTING EELGRASS BED

ADJACENT PROPERTY OWNERS:  
SEE ATTACHED LIST  
FOR ADJACENT  
PROPERTY OWNERS

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GENERAL SITE PLAN  
ENTRANCE CHANNEL  
MAINTENANCE DREDGING

DATE:  
10/07/2015  
REVISION DATE:  
SHEET:  
2 of 8

Figure 3

N 48 58.395  
W123 03.836

Hdg: 134.6  
Speed: 0.4

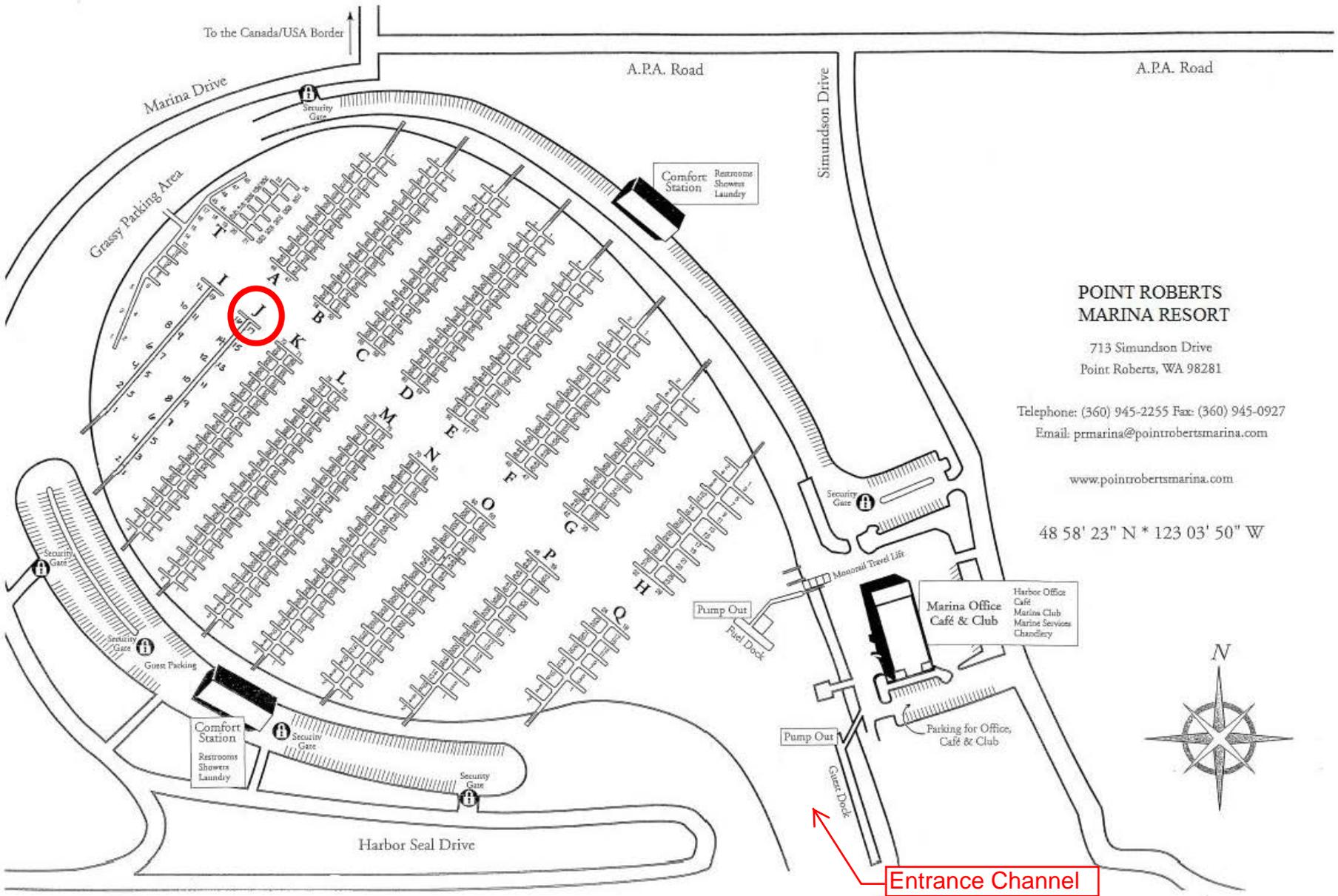
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06-24-15

Figure 4



Figure 5



**POINT ROBERTS  
MARINA RESORT**

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Point Roberts, WA 98281

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48 58' 23" N \* 123 03' 50" W

**Entrance Channel**