

**PORT OF BROOKINGS HARBOR**  
**Special Commission Meeting**  
**Friday, May 6, 2022 • 10:00am**  
**Teleconference / Meeting Room** *(limited capacity)*  
**16350 Lower Harbor Road Suite 202, Harbor OR, 97415**

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**Teleconference Call-In Number: 1 (253) 215-8782**  
**Meeting ID: 771 205 4017      Passcode: 76242022      (to mute/unmute: \* 6)**

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**TENTATIVE AGENDA**

<b>1.</b>	<b>CALL MEETING TO ORDER</b>	<b>PAGE</b>
	• Roll Call	
	• Modifications, Additions, and Changes to the Agenda	
	• Declaration of Potential Conflicts of Interest	
<b>2.</b>	<b>APPROVAL OF AGENDA</b>	
<b>3.</b>	<b>PUBLIC COMMENTS</b> – (Limited to a maximum of three minutes per person. Please email your comments to <a href="mailto:danielle@portofbrookingsharbor.com">danielle@portofbrookingsharbor.com</a> prior to the meeting if you are calling in.	
<b>4.</b>	<b>ACTION ITEMS</b>	
	A. RV Park Change Orders and Payment Request.....	2
	B. Crab Dock on River Jetty.....	29
	C. SDAO Insurance Claim – Replacement of Broken Dock Pile.....	178
<b>5.</b>	<b>INFORMATION ITEMS</b>	
	A. Commissioner and Staff Communications and Relations.....	191
<b>6.</b>	<b>COMMISSIONER COMMENTS</b>	
<b>7.</b>	<b>NEXT REGULAR MEETING DATE</b> – Wednesday, May 18, 2022 at 2:00pm	
<b>8.</b>	<b>ADJOURNMENT</b>	

A request for an interpreter for the hearing impaired, for those who want to participate but do not have access to a telephone, or for other accommodations for persons with disabilities should be made at least 48 hours in advance of the meeting to Port of Brookings Harbor Office at 541-469-2218.

# ACTION ITEM – A

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**DATE:** May 6, 2022  
**RE:** RV Park Change Order and Payment Request  
**TO:** Honorable Board President and Harbor District Board Members  
**ISSUED BY:** Gary Dehlinger, Port Manager

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## OVERVIEW

- Since the pre-construction meeting took place on February 9, 2022, the Port has asked for Change Orders from the contractor for the delays and understanding of the change of power supply.
- The Port and Crow/Clay Associates have requested from Coos Curry Electric a written explanation on the change of power supply at this late stage of our project. We were told verbally the change came from Coos Curry Electric upper management that would even out the power supply load to the RV Park. This upgrade would provide the ability for better service for future site improvements. The Port provides the conduit and Coos Curry Electric is providing the wiring.
- McLennan Excavation, Inc. provided a request for the extension of contract and change of construction start date. The contract has liquidated damages set at \$200 for each calendar day of delay until the work is substantially completed.
- McLennan Excavation, Inc. provided Change Order No. 1 for the installation of the conduit from the existing Kite Field transformer to the RV Park transformer. This also requires a permit to cross Boat Basin Road from Curry County Road Department.
- Port Legal Counsel has reviewed this situation and has provided their recommendations. Acceptance of the change order is ultimately a business call, but a legal fight over responsibility for the delay may cost more than the change order itself. If the Board agrees to proceed with the change order, then the Port should get updated insurance certificates from Crow/Clay and McLennan evidencing that insurance will remain in place. Also request an updated performance bond that shows a penal sum equal to the increased contract price. Not sure if Crow/Clay will be seeking any additional compensation for construction administration services under the proposed new schedule, but the Port will want to know that as well.
- Crow/Clay Associates received a payment request from McLennan Excavation for permanent materials purchased and received. Travis and I took pictures of the materials received and stored at McLennan's construction yard. Electrical materials were ordered but have not been received. Payment reflects materials received only.

## DOCUMENTS

- March 7, 2022 Crow/Clay & Associates, Inc. Letter to Coos Curry Electric, 1 page
- March 7, 2022 Crow/Clay & Associates, Inc. Letter to Port of Brookings Harbor, 1 page
- April 4, 2022 McLennan Excavation, Inc. request for the extension of contract and change of work start date, 2 pages
- April 4, 2022 McLennan Excavation, Inc. Change Order No. 1, 1 page

- McLennan Excavation, Inc. Construction Schedule, 1 page
- Crow/Clay & Associates, Inc. Submittal Log, 1 page
- Curry County Road Department Permit, 4 pages
- McLennan Excavation Payment Request No. 1, 14 pages

COMMISSIONERS ACTION – there are three motions to be considered:

- **Recommended Motion 1:**  
Motion to approve the time extension and new completion date of December 7, 2022 for the RV Park Project without applying liquated damages to McLennan Excavation and authorize the Port Manager to sign the document.
- **Recommended Motion 2:**  
Motion to approve Change Order No. 1 to install new electrical conduit from the Kite Field (Basin 2) to the RV Park as directed by Coos Curry Electric for \$28,972.56 and authorize the Port Manager to sign the document.
- **Recommended Motion 3:**  
Motion to approve McLennan Excavation progress Payment No. 1 for \$87,517.76 for the purchase and received materials for the RV Park Project.



# CROW/CLAY & ASSOCIATES INC.

ARCHITECTURE AND PLANNING  
LAND USE AND INTERIORS

March 7, 2022

Mr. Walt Jurczenko  
Coos-Curry Electric Cooperative, Inc  
[walt.jurczenko@cooscurryelectric.com](mailto:walt.jurczenko@cooscurryelectric.com)

RE: Port of Brookings-Harbor - Beachfront RV Park

Dear Mr. Jurczenko,

We are concerned that the change to three phase power occurred after the sign off by Coos-Curry Electric of the plans that were already forwarded to the County and other agencies involved.

This late modification is impacting the project and its construction schedule.

Our engineer has indicated that this modification was discussed earlier in the planning process but was not approved by the utility at that time. This late change is affecting our services to the Port District, as well as construction cost.

Can you please prepare a letter to the Port to explain this modification and why this occurred.

Sincerely,

CROW/CLAY & ASSOCIATES INC.

Michael R. Crow  
Principal



# CROW/CLAY & ASSOCIATES INC.

ARCHITECTURE AND PLANNING  
LAND USE AND INTERIORS

March 7, 2022

Mr. Gary Dehlinger, Manager  
Port of Brookings Harbor  
[portmanager@portofbrookingsharbor.com](mailto:portmanager@portofbrookingsharbor.com)

RE: Delay in Work - Beachfront RV Park

Dear Mr. Dehlinger,

The delay in the arrival of materials to allow the work on the RV park to proceed is not unusual during this construction period. Most of our ongoing projects are experiencing delay in material arrivals, even though the materials may have been available when the projects were bid, due to COVID and shipping delays.

These delays are beyond the contractor's control even if they have already ordered materials. Material suppliers have quoted delivery times to contractors based on manufacturing and shipping schedules, both of which have been affected by the above-mentioned issues.

We have requested a revised schedule from McLennan and they are working on other ways to progress the work, such as, temporarily reusing the existing RV pedestals. This will involve some review of the existing pedestals, but it is possible.

I will keep you apprised of progress on this front.

Sincerely,

CROW/CLAY & ASSOCIATES INC.

Michael R. Crow  
Principal

**MCLENNAN EXCAVATION, INC.**  
CCB# 195758 CSLB#982104  
P.O. BOX 6837  
BROOKINGS, OR 97415

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Date: April 4, 2022  
Attention: Mike Crow  
Project: Port of Brookings Harbor Beachfront RV Park

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***REQUEST FOR EXTENSION OF CONTRACT AND CHANGE OF WORK START DATE***

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This project was bid on September 30, 2021. The bid was awarded to McLennan Excavation on October 22, 2021 and the contract agreement signed on October 28, 2021.

The submittals for the project and for the pipe and special equipment to be ordered were started on November 3, 2021 and were being sent back and forth between the contractor and Architect until February 8<sup>th</sup>, when final approval was received on those submittals.

At the pre-construction meeting held on February 9, 2022 it was determined that Coos Curry Electric decided it was best to upgrade the electrical to the area and that Coos Curry could not get the work done for us to start the project on February 21, 2022 as scheduled and the completion date set for May 1, 2022. It was further found out that week that the Power Pedestals would not be available until July even though they were ordered, as the lead time was so long from the one vendor that has the pedestals called out for in the plans. There are no other vendors or manufactures for the specific pedestal called out for in the plans.

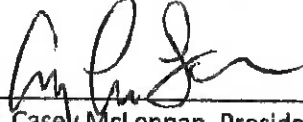
At the preconstruction meeting it was again told to McLennan that we were not allowed to do the work of the contract during the busy season for the RV Park as sites have to be shut down. All parties at the meeting agreed that the project start date would be delayed to October 1, 2022 with a completion date of December 7, 2022.

The materials for the project were ordered on February 7, 2022 and will be delivered to McLennan Excavation on April 7, 2022 for them to store until the project starts. We have a Connex on our shop site that all materials will be stored in until utilized. The price for the pedestals was locked in on the date of order and paid for in half by the pipe supplier to insure the order. There will be no price increase for the materials from the date of order on February 7, 2022 until they project starts on October 1, 2022, as the orders are already placed and coming. And pursuant to the Port request to us, we will submit a materials bill for materials on hand this month for consideration by the Architect and the Board.

Therefore, all parties hereby agree that the project start date is hereby moved to : OCTOBER 1, 2022  
Therefore, all parties hereby agree that the project completion date is hereby moved to December 7, 2022. An Updated construction schedule is attached for all parties reference.

There is no change on the contract price for this contract extension.

Submitted this 4th day of April, 2022.

BY:   
Casey McLennan, President  
McLennan Excavation Inc  
General Contractor

Accepted and Approved

This \_\_\_\_\_ day of April, 2022

BY: \_\_\_\_\_  
Printed Name: Michael Crow, Architect  
Entity: Crow/Clay & Associates, Inc.

Accepted and Approved

This \_\_\_\_\_ day of April, 2022

BY: \_\_\_\_\_  
Printed Name: Gary Dehlinger, Port Manager  
Entity: Port of Brookings Harbor - Oregon

**MCLENNAN EXCAVATION, INC.**  
 CCB# 195756 CSLB#962104  
 P.O. BOX 6837  
 BROOKINGS, OR 97415

Date: 4-4-2022  
 Attention: Mike Crow  
 Project: Port of Brookings Harbor Beachfront RV Park

**REVISED CHANGE ORDER 1**  
**Proposal & request for change order for additional work performed outside of contract:**

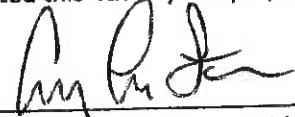
Installation of electrical conduit from transformer located in The Kite Field to the Junction Box located by the Beachfront RV Park bathrooms, crossing Boat Basin Road. Approximately 252 lineal feet. Utilizing Type III backfill inside Beachfront RV, Type IV backfill for Boat Basin Road, and native backfill when possible. Port will take care of removing and replacing the fence.

Mobilization/Demobilization	3 Each	\$750.00	each	\$ 750.00
Labor 1	80 hours	\$ 57.28	pr hr	\$ 4,582.40
Operator 4	40 hours	\$ 72.74	pr hr	\$ 2,909.60
Flaggers	10 hours	\$ 52.39	pr hr	\$ 523.90
3 - 2 1/2" Electrical Condit	252 LF	\$ 53.08	pr LF	\$13,376.16
Trench Patch	1 lump sum	\$2,190.00	LS	\$ 2,190.00
Additional conduit provided by Coos Curry Electric	252 LF	\$ 0.00	pr LF	\$ 0.00

<b>Subtotal</b>	<b>\$ 24,332.06</b>
<b>Labor Burden on \$ 8,015.90 @21.84%</b>	<b>\$ 1,750.67</b>
<b>Plus 12% Overhead &amp; Profit on Work \$24,332.06</b>	<b>\$ 2,889.83</b>

**Total Estimated Increase for McLennan Excavation Contract \$ 28,972.56**

Submitted this 4th day of April, 2022

BY:   
 Casey McLennan, President  
 McLennan Excavation Inc

Accepted and Approved

This \_\_\_\_\_ day of \_\_\_\_\_, 2022

BY: \_\_\_\_\_  
 Printed Name: Michael Crow, Architect  
 Entity: Crow/Clay & Associates, Inc

Accepted and Approved

This \_\_\_\_\_ day of \_\_\_\_\_, 2022

BY: \_\_\_\_\_  
 Printed Name: Gary Dehlinger, Port Manager  
 Port of Brookings Harbor







# CROW/CLAY & ASSOCIATES INC.

ARCHITECTURE AND PLANNING  
LAND USE AND INTERIORS

April 5, 2022

## Port of Brookings-Harbor Beachfront RV Park Submittal Log

SUBMITTAL	DATE SUBMITTED	DATE RETURNED
Required Post Bid Info.	10/29/2021	11/3/2021
Pipe Materials	11/3/2021	11/3/2021
Pipe Materials Revised & returned to us	2/2/2022	2/4/2022
Construction Schedule	11/3/2021	11/3/2021
Clean-out cover	2/2/2022	2/4/2022
Pipe Material Add'l Details	2/2/2022	2/4/2022
Water Piping and Spring- Operated Sewer Caps	2/2/2022	2/4/2022
Electrical	2/15/2022	2/16/2022



APPLICATION FOR FACILITY PERMIT

(Subject to Conditions; Revocable)

CURRY COUNTY ROAD DEPARTMENT

28425 Hunter Creek Road
Gold Beach, OR 97444

PERMIT NO. \_\_\_\_\_

DATE: 3-30-2022

TAX MAP 4113-08A-01400-00

TAX LOT 1400

PERMIT TYPE AND FEE COLLECTED:

Driveway/Road Approach \$130
[X] Road Encroachment \$250
Road Improvement
Major
[X] Minor
Special \$50
[X] Utility

I, BOAT OF BROOKINGS HARBOR hereby make application for a facility permit upon the right-of-way of
(Applicant's Name)

BOAT BASIN ROAD Milepost (s) SEE ATTACHED in strict conformity to the
(Road Name-County Road Number)

exhibits attached hereto, subject to all terms, conditions, agreement stipulations, and provisions contained in the application and permit, and the rules and regulations regarding roads and rights-of-way, as set forth by the Curry County Code Article Three, and any other applicable regulations, law or ordinance.

DESCRIPTION OF FACILITY: INSTALLING NEW ELECTRICAL CONDUIT TO UPGRADE COGS-CURRY
ELECTRIC POWER FEED TO BEACHFRONT AV PAVK FROM THE KITE FIELD BY
TRINCHING + BACKFILL.

GARY DEHUNGER, [Signature]
Signature

P.O. Box 848
Mailing Address

541-254-4162
Phone Number

BROOKINGS OR 97415
City State Zip

BOATMANAGER@BOATOFBROOKINGSHARBOR.COM
Email Address

FACILITY PERMIT

SPECIAL PROVISIONS: The terms and specifications which apply to this permit are as shown on the attachment herewith and the permit conditions listed on the reverse side of this application. Noncompliance with these terms, specifications and conditions will result in revocation of this permit.

ATTACHMENTS FOR:

Driveway/Road Approach Road Improvement Utility
Road Encroachment Special

ADDITIONAL REQUIREMENTS:

This permit shall be void unless the work herein contemplated shall have been completed before \_\_\_\_\_, 20\_\_\_\_.

APPROVED:

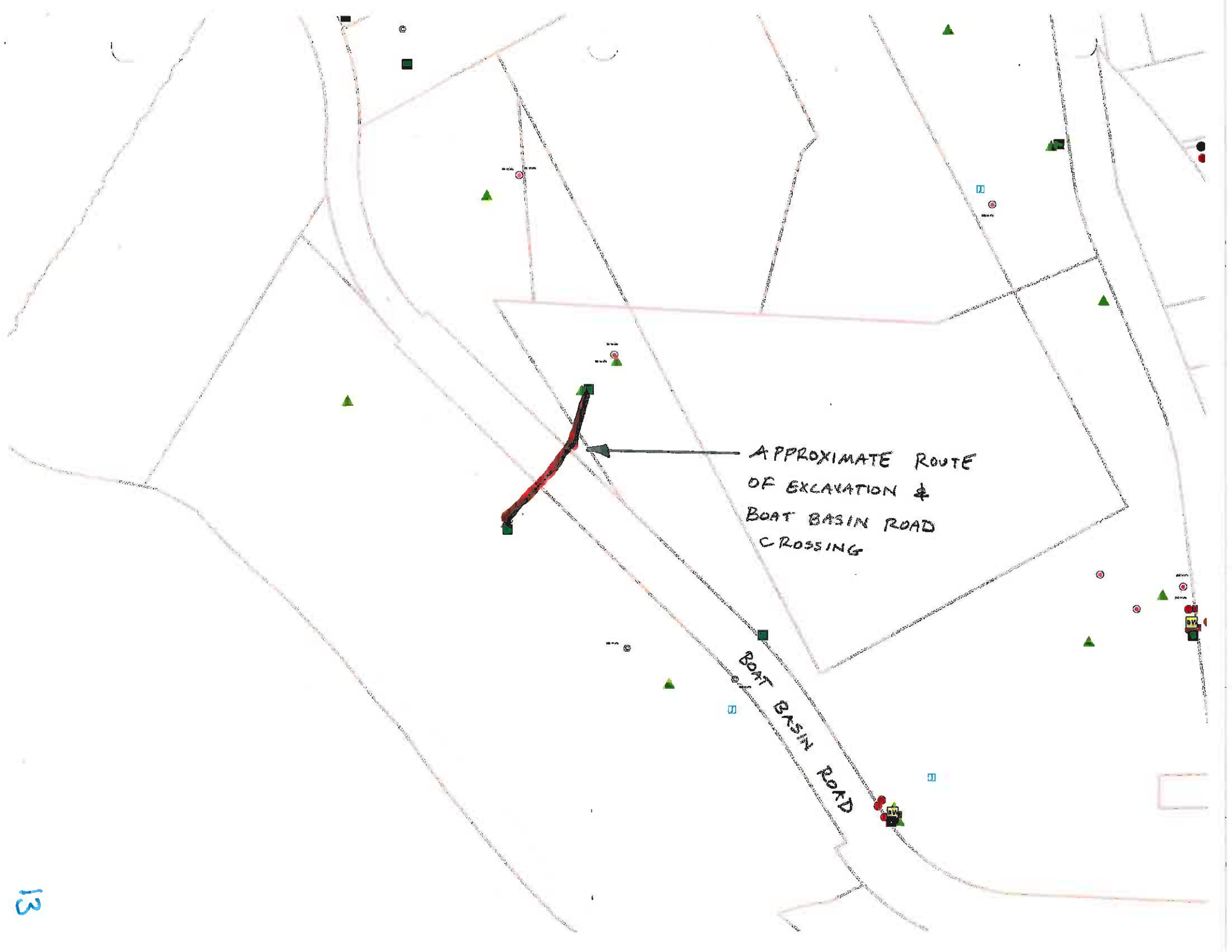
INSPECTED:

Approved \_\_\_\_\_ Date \_\_\_\_\_ Approved \_\_\_\_\_
Issue Date
Denied \_\_\_\_\_ By \_\_\_\_\_ Denied \_\_\_\_\_
Richard N. Christensen, Roadmaster

**RETURN** completed Permit Application to:

**Curry County Road Department, 28425 Hunter Creek Road, Gold Beach, OR 97444**

- A. This permit covers public right-of-way and/or County property only.
- B. It is the responsibility of the permit holder to re-establish any survey monument, moved, destroyed, etc. while working within County right-of-way. Re-establishment of survey monuments must be done by an approved registered surveyor and all costs will be borne by the permit holder.
- C. Notification to the Curry County Road Department is required 24 hours before beginning work under this permit - (541) 247-7097. Prior approval for modifications to permit specifications is required.
- D. Failure of the permit holder to ensure strict conformance with all permit conditions shall be considered good and sufficient cause for revocation of the permit allowing work within the County road rights-of-way. Permits may be terminated or suspended when the permit holder is found to have obtained a permit through misrepresentation of the facts or when, in the judgment of the Roadmaster, terms of the permit are being violated or public safety is threatened. Permits shall remain in effect until a change in land use occurs. The permit holder shall be responsible for the cost of design, installation or construction of additional roadway improvements and traffic control devices at any time in the future when the traffic generated by the use for which the access permit is authorized necessitate such installation in the interest of the public safety.
- E. **HOLD HARMLESS CLAUSE** - The permit holder agrees that their performance under this permit is at their own sole risk and that they shall indemnify Curry County, its agents and employees and hold them harmless from any and all liability for damages, costs, losses and expenses resulting from, arising out of, or in any way connected with this permit, or from the permit holder's failure to perform fully hereunder, and the permit holder further agrees to defend Curry County, its agents, and employees, against all suits, actions or proceedings brought by any third party against them for which the permit holder would be liable hereunder.
- F. The permit holder guarantees all restoration work for a period of one year from the date of completing the installation, except non-cement/sand slurry backfills under pavements shall be warranted for two years from the date of completing the installation.
- G. Any sight posts, sign posts, or mailboxes that are removed will be replaced immediately in like condition in the same location and the area around them will be restored to a like or better condition.
- H. As provided in O.R.S. 758.010 the Road Department, acting on behalf of the County Board of Commissioners, may designate where utilities may be located within a County road right-of-way and may order the location of such facility changed if deemed expedient.



APPROXIMATE ROUTE  
OF EXCAVATION &  
BOAT BASIN ROAD  
CROSSING

BOAT BASIN ROAD



1400

## Contractor's Application for Payment No. 1

APPLICATION PERIOD: February 1, 2022 to April 14, 2022		APPLICATION DATE: April 14, 2022
TO: Port of Brookings Harbor	FROM: McLennan Excavation Inc. (Contractor)	VIA: Michael Crow - Crow/Clay & Associates Inc Architecture and Planning
PROJECT: Beachfront RV Park Improvements	CONTRACT:	
OWNERS CONTRACT NO. 19005	CONTRACTOR'S PROJECT NO. 2022 - Port of Brookings	ENGINEER'S PROJECT NO.:

CHANGE ORDER SUMMARY		
Approved Change Orders		
Number	Additions	Deductions
1	\$28,972.56	
2		
3		
4		
5		
6		
7		
<b>TOTALS</b>	<b>\$28,972.56</b>	
<b>NET CHANGE BY CHANGE ORDERS</b>	<b>\$28,972.56</b>	

**Contractor's Certification**

The undersigned Contractor certifies, to the best of its knowledge, the following: (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment; (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and (3) All the work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By: Casey M. McLennan

Contractor Signature: \_\_\_\_\_

By: Casey M. McLennan, President of McLennan Excavation, Inc.      Date: 4/14/2022

1. ORIGINAL CONTRACT PRICE .....	\$	657,000.00
2. Net change by Change Orders .....	\$	28,972.56
3. Current Contract Price (Line 1 & 2) .....	\$	685,972.56
4. TOTAL COMPLETED AND STORED TO DATE (Column F total on Progress Estimates) .....	\$	87,517.76
5. RETAINAGE:		
a. 5% X \$ Work Completed .....	\$	821.25
b. 5% X \$ Stored Materials .....	\$	-9,666.03
c. Total Retainage (Line 5.a + Line 5.b) .....	\$	-8,844.78
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c) .....	\$	96,362.54
7. LESS PREVIOUS PAYMENTS (Line 6 from prior application) .....	\$	-10,487.28
8. AMOUNT DUE THIS APPLICATION .....	\$	85,875.26
9. BALANCE TO FINISH, PLUS RETAINAGE (Column G total on Progress Estimates + Line 5.c above) .....	\$	199,258.23

Payment Of: ~~\$199,258.23~~ **\$85,875.26**

(line 8 or other - attach explanation of the other amount)

Is recommended by: Michael Crow **4/21/22**

(Signature) (Date)

Payment Of: \_\_\_\_\_

(line 8 or other - attach explanation of the other amount)

Is approved by: \_\_\_\_\_

(owner) (Date)

NOTE: REESE ELECTRIC MATERIALS HAVE NOT YET ARRIVED.

15

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## Progress Breakdown for Contractor's Application for Payment No. 1

	APPLICATION PERIOD: February 1, 2022 to April 14, 2022	APPLICATION DATE: April 14, 2022
TO: Dept of Parkings/Labor (Owner)	FROM: McLennan Excavation Inc. (Contractor)	VIA: Michael Chaw - Crow/Clay & Associates Inc Architecture and Planning
PROJECT: Beachfront RV Park Improvements	CONTRACT:	
OWNER'S CONTRACT NO. 19005	CONTRACTOR'S PROJECT NO.	ENGINEER'S PROJECT NO.:

Item No.	Item Description	Contract Information				Estimated Quantity Installed this Period	Value of Work Installed this Period	Materials Presently Stored	Total Completed and Stored this Period	Quantity Previous Period	Quantity Complete to Date	Value of Work to Date (\$)	Quantity Remaining %	Value of Work Remaining (\$)
		Item Quantity	Units	Unit Price (\$)	Total Value of Item (\$)									
1	Mobilization/Demobilization													
	Floods and Insurance	1	LS	\$ 16,425.00	\$ 16,425.00	100%	\$ 16,425.00		\$ 16,425.00		100%	\$ 16,425.00		\$ -
	Preconstruction Administration	1	LS	\$ 15,000.00	\$ 15,000.00		\$ -		\$ -		100.0%	\$ 15,000.00		\$ -
	Mobilization	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -		\$ -			\$ -		\$ 5,000.00
	Demobilization	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -		\$ -			\$ -		\$ 5,000.00
	Temporary Facilities	1	LS	\$ 8,000.00	\$ 8,000.00		\$ -		\$ -			\$ -	100.0%	\$ -
	Signs	1	LS	\$ 2,000.00	\$ 2,000.00		\$ -		\$ -			\$ -	100.0%	\$ -
2	Materials to Order													
	Materials Ordered - Pipe & materials pre ordered and delivered to McLennan Excavation - Sitting in Conest Storage for Job	1	LS	\$ 91,210.25	\$ 91,210.25	78%		\$ 71,092.76	\$ 71,092.76		78%	\$ 61,132.50	22.1%	\$ 30,077.75
3	Hand Out													
	Site Clearing	1	LS	\$ 5,266.00	\$ 5,266.00		\$ -		\$ -			\$ -	100.0%	\$ 5,266.00
	Concrete and Fence Removal	1	LS	\$ 15,605.20	\$ 15,605.20		\$ -		\$ -			\$ -	100.0%	\$ 15,605.20
	Grading and Leveling	1	LS	\$ 11,599.25	\$ 11,599.25		\$ -		\$ -			\$ -	100.0%	\$ 11,599.25
	Spreading	1	LS	\$ 11,057.00	\$ 11,057.00		\$ -		\$ -			\$ -	100.0%	\$ 11,057.00
4	Sewer													
	Locate	1	LS	\$ -	\$ -		\$ -		\$ -			\$ -	100.0%	\$ -
	Trenching/Shoring	1	LS	\$ 29,453.25	\$ 29,453.25		\$ -		\$ -			\$ -	100.0%	\$ 29,453.25
	Hand Out	1	LS	\$ 9,368.78	\$ 9,368.78		\$ -		\$ -			\$ -	100.0%	\$ 9,368.78
	Placement of Pipe	1	LS	\$ 14,616.50	\$ 14,616.50		\$ -		\$ -			\$ -	100.0%	\$ 14,616.50
	Backfill & Compaction	1	LS	\$ 20,938.90	\$ 20,938.90		\$ -		\$ -			\$ -	100.0%	\$ 20,938.90
5	Water													
	Locate	1	LS	\$ -	\$ -		\$ -		\$ -			\$ -	100.0%	\$ -
	Trenching/Shoring	1	LS	\$ 12,096.60	\$ 12,096.60		\$ -		\$ -			\$ -	100.0%	\$ 12,096.60
	Hand Out	1	LS	\$ 1,356.00	\$ 1,356.00		\$ -		\$ -			\$ -	100.0%	\$ 1,356.00
	Placement of Pipe	1	LS	\$ 4,361.70	\$ 4,361.70		\$ -		\$ -			\$ -	100.0%	\$ 4,361.70
	Backfill & Compaction	1	LS	\$ 5,152.80	\$ 5,152.80		\$ -		\$ -			\$ -	100.0%	\$ 5,152.80
6	Electrical													
	Locate	1	LS	\$ -	\$ -		\$ -		\$ -			\$ -	100.0%	\$ -
	Trenching	1	LS	\$ 23,748.40	\$ 23,748.40		\$ -		\$ -			\$ -	100.0%	\$ 23,748.40
	Subcontractor - Reconnect Electric - (submitting materials ordered & on	1	LS	\$ 201,842.55	\$ 201,842.55		\$ -	\$ 123,227.75	\$ 123,227.75			\$ 123,227.75	100.0%	\$ 79,614.80
	Backfill & Compaction	1	LS	\$ 26,430.00	\$ 26,430.00		\$ -		\$ -			\$ -	100.0%	\$ 26,430.00
7	Concrete													
	Materials	1	LS	\$ 47,150.00	\$ 47,150.00		\$ -		\$ -			\$ -	100.0%	\$ 47,150.00
	Curb	1	LS	\$ 3,795.00	\$ 3,795.00		\$ -		\$ -			\$ -	100.0%	\$ 3,795.00
	Propping slabs and pedestals	1	LS	\$ 32,214.27	\$ 32,214.27		\$ -		\$ -			\$ -	100.0%	\$ 32,214.27
	Pouring and Finishing	1	LS	\$ 33,312.55	\$ 33,312.55		\$ -		\$ -			\$ -	100.0%	\$ 33,312.55
8	Clean up													
	Site Clean up and Punchlist	1	LS	\$ 5,000.00	\$ 5,000.00		\$ -		\$ -			\$ -	100.0%	\$ 5,000.00
Change Order 1	Additional Electric Upgrade - Cook Curry	1	LS	\$ 28,972.56	\$ 28,972.56		\$ -		\$ -			\$ -	100.0%	\$ 28,972.56
Change Order 2		1	LS				\$ -		\$ -			\$ -	100.0%	\$ -
Change Order 3		1	LS				\$ -		\$ -			\$ -	100.0%	\$ -
Change Order 4		1	LS				\$ -		\$ -			\$ -	100.0%	\$ -
<b>Totals</b>					\$ 685,972.56		\$ 16,425.00	\$ 193,320.51	\$ 209,748.51		30.6%	\$ 199,785.25	69.4%	\$ 467,588.06

87,517.76





# Insurance Group

A Washington Federal Company

## WAFD Insurance Group, Inc.

CAL/OR Insurance Agency  
PO Box 2725  
Brookings OR 97415  
Phone # 541-469-3510

<b>Invoice # 13009</b>	Page 1 of 1
Account Number	Date
MCLEEXC-01	2/7/2022
BALANCE DUE ON	
2/28/2022	
AMOUNT PAID	Amount Due
	\$16,425.00

**McLennan Excavation Inc. OR#195758 CA#982104**  
**PO Box 6837**  
**Brookings, OR 97415**

Bonds	PolicyNumber: HA10103438	Effective: 2/4/2022	to 2/4/2023
-------	--------------------------	---------------------	-------------

Item #	Trans Eff Date	Due DateTrans	Description	Amount
404184	2/4/2022	2/28/2022 NEWB	New BOND Effective 2/4/2022	\$16,425.00
<b>Total Invoice Balance:</b>				<b>\$16,425.00</b>

W

17

AIA Type Document  
Application and Certification for Payment

TO (OWNER): McLENNAN EXCAVATION INC  
P.O. BOX 6837  
BROOKINGS, OR 97415

PROJECT: BROOKINGS HARBOR RV PARK  
J22010  
16024 BOAT BASIN ROAD  
BROOKINGS, OR 97415

APPLICATION NO: 1  
PERIOD TO: 4/30/2022

DISTRIBUTION  
TO:  
\_ OWNER  
\_ ARCHITECT  
\_ CONTRACTOR

FROM (CONTRACTOR): g.b. Reese Electric, Inc.  
1750 Sherman Avenue  
P.O. Box 1068  
North Bend, OR 97459

VIA (ARCHITECT):

ARCHITECT'S  
PROJECT NO:

CONTRACT FOR:

CONTRACT DATE:

ITEM	DESCRIPTION	SCHEDULE VALUE	PREVIOUS APPLICATIONS	COMPLETED THIS PERIOD	STORED MATERIAL	COMPLETED STORED	%	BALANCE	RETAINAGE
1	MOBILIZATION	18,613.00	0.00	0.00	0.00	0.00	0.00	18,613.00	0.00
2	GENERAL MATERIALS	44,563.00	0.00	0.00	44,563.00	44,563.00	100.00	0.00	2,228.15
3	GEAR	94,435.00	0.00	0.00	94,435.00	94,435.00	100.00	0.00	4,721.75
4	LABOR	34,620.00	0.00	0.00	0.00	0.00	0.00	34,620.00	0.00
CO01	CO #01- DEDUCT RV PEDESTALS	-32,713.00	0.00	-32,713.00	0.00	-32,713.00	100.00	0.00	0.00
REPORT TOTALS		\$159,518.00	\$0.00	\$-32,713.00	\$138,998.00	\$106,285.00	66.63	\$53,233.00	\$6,949.90



**H.D. FOWLER  
COMPANY**

PO Box 160 \* Bellevue, WA \* 98009-0160



To: JULIE  
julie@plpeandrock.com  
MCLENNAN EXCAVATION INC (134220)  
04/04/22 08:55:16am

From: Matt Frodge  
Phone: (541) 326-0095 x2010

## Order Acknowledgement

Non-Stocks, Special Orders or Engineered Items may not be returnable. Those that are returnable are subject to a minimum 25% restock fee. Some orders may also have applicable freight charges not shown on this Order Acknowledgement.

<b>Your PO:</b> RV PARK	<b>Project:</b> BEACHFRONT RV PARK
<b>Ordered By:</b> LILY RAMIREZ	<b>Order Date:</b> 02/08/22
<b>Est. Ship Date:</b> 04/07/22	<b>Order #:</b> O7305142
<b>Shipping From:</b> Medford Warehouse	<b>Ship VIA:</b> OUR TRUCK
<b>Freight Terms:</b>	

Line#	Item	Unit	Qty	Price	Ext. Price	Tax
1	4" SDR35 3034 GASKETED PVC SEWER PIPE 20' LENGTH	FT	320	2.41	771.20	N
2	4" PSM WYE GASKETED FOR SEWER OR DRAIN	EA	7	26.81	187.67	N
3	4" PSM 45 ELBOW GASKETED FOR SEWER OR DRAIN	EA	25	15.56	389.00	N
4	4" PSM 45 ELBOW GASKETED X SPIGOT FOR SEWER OR DRAIN	EA	1	13.99	13.99	N
5	4" PSM 22-1/2 ELBOW GASKETED FOR SEWER OR DRAIN	EA	1	15.52	15.52	N
6	4" PSM CLEAN OUT ADAPTER FIPT X SW FOR SEWER OR DRAIN	EA	2	7.99	15.98	N
7	4" PSM PLUG THREADED FOR SEWER OR DRAIN	EA	2	4.86	9.72	N
9	G05TBOX 11" ROUND CONCRETE VALVE BOX 1000415 CHRISTY	EA	2	42.36	84.72	N
10	G05CT 11" ROUND CI VALVE BOX COVER MARKED "SEWER" 3001070 CHRISTY	EA	2	31.82	63.64	N
11	4" ENVIRO DESIGN ORANGE FEMALE FOOTLOOSE SEWER CAP FF104O	EA	7	31.95	223.65	N

Total	1,775.09
Freight	0.00
Tax	0.00
<b>Grand Total</b>	<b>1,775.09</b>



**H.D. FOWLER  
COMPANY**

PO Box 160 \* Bellevue, WA \* 98009-0160



To: JULIE  
julia@plpeandrock.com  
MCLENNAN EXCAVATION INC (134220)  
04/04/22 08:55:09am

From: Matt Frodge  
Phone: (541) 326-0095 x2010

## Order Acknowledgement

Non-Stocks, Special Orders or Engineered Items may not be returnable. Those that are returnable are subject to a minimum 25% restock fee. Some orders may also have applicable freight charges not shown on this Order Acknowledgement.

<b>Your PO:</b> RV PARK	<b>Project:</b> BEACHFRONT RV PARK
<b>Ordered By:</b> LILY RAMIREZ	<b>Order Date:</b> 02/08/22
<b>Est. Ship Date:</b> 04/07/22	<b>Order #:</b> O7305143
<b>Shipping From:</b> Medford Warehouse	<b>Ship VIA:</b> OUR TRUCK
<b>Freight Terms:</b>	

Line#	Item	Unit	Qty	Price	Ext. Price	Tax
1	4" SDR35 3034 GASKETED PVC SEWER PIPE 20' LENGTH	FT	1280	2.41	3,084.80	N
2	4" PSM WYE GASKETED FOR SEWER OR DRAIN	EA	29	26.81	777.49	N
3	4" PSM 45 ELBOW GASKETED FOR SEWER OR DRAIN	EA	57	15.56	886.92	N
4	4" PSM 22-1/2 ELBOW GASKETED FOR SEWER OR DRAIN	EA	7	15.52	108.64	N
5	4" PSM CLEAN OUT ADAPTER FIPT X SW FOR SEWER OR DRAIN	EA	9	7.99	71.91	N
6	4" PSM PLUG THREADED FOR SEWER OR DRAIN	EA	9	4.86	43.74	N
7	GO5TBOX 11" ROUND CONCRETE VALVE BOX 1000415 CHRISTY	EA	9	42.36	381.24	N
8	G05CT 11" ROUND CI VALVE BOX COVER MARKED "SEWER" 3001070 CHRISTY	EA	9	31.82	286.38	N
10	4" ENVIRO DESIGN ORANGE FEMALE FOOTLOOSE SEWEREA CAP FF1040		22	31.95	702.90	N

Total	6,344.02
Freight	0.00
Tax	0.00
<b>Grand Total</b>	<b>6,344.02</b>



**H.D. FOWLER  
COMPANY**

PO Box 160 \* Bellevue, WA \* 98009-0160



To: JULIE  
julie@pipeandrock.com  
MCLENNAN EXCAVATION INC (134220)  
04/04/22 08:55:01am

From: Matt Frodge  
Phone: (541) 326-0095 x2010

## Order Acknowledgement

This order requires confirmed receipt of this acknowledgement because it contains special order items which are indicated by two asterisks (\*\*). Please approve this order by simply replying to this email message, or by printing the attachment, signing and returning it back to us.

Non-Stocks, Special Orders or Engineered Items may not be returnable. Those that are returnable are subject to a minimum 25% restock fee. Some orders may also have applicable freight charges not shown on this Order Acknowledgement.

I accept this as written. Please get this order for me as listed below.

Signature	Date	Print Name
-----------	------	------------

<b>Your PO:</b> RV PARK	<b>Project:</b> BEACHFRONT RV PARK
<b>Ordered By:</b> LILY RAMIREZ	<b>Order Date:</b> 02/08/22
<b>Est. Ship Date:</b> 04/07/22	<b>Order #:</b> 07305144
<b>Shipping From:</b> Medford Warehouse	<b>Ship VIA:</b> OUR TRUCK

**Freight Terms:**

Line#	Item	Unit	Qty	Price	Ext. Price	Tax
1	** 4" ENVIRO DESIGN ORANGE FEMALE FOOTLOOSE SEWEFEA CAP FF1040		76	31.95	2,428.20	N

Total	2,428.20
Freight	0.00
Tax	0.00
Grand Total	2,428.20



**H.D. FOWLER**  
COMPANY

PO Box 160 \* Bellevue, WA \* 98009-0160



To: JULIE  
julie@pipeandrock.com  
MCLENNAN EXCAVATION INC (134220)  
04/04/22 08:54:52am

From: Matt Frodge  
Phone: (541) 326-0095 x2010

## Order Acknowledgement

Non-Stocks, Special Orders or Engineered items may not be returnable. Those that are returnable are subject to a minimum 25% restock fee. Some orders may also have applicable freight charges not shown on this Order Acknowledgement.

<b>Your PO:</b> RV PARK	<b>Project:</b> BEACHFRONT RV PARK
<b>Ordered By:</b> LILY RAMIREZ	<b>Order Date:</b> 02/08/22
<b>Est. Ship Date:</b> 04/07/22	<b>Order #:</b> O7305145
<b>Shipping From:</b> Medford Warehouse	<b>Ship VIA:</b> OUR TRUCK
<b>Freight Terms:</b>	

Line#	Item	Unit	Qty	Price	Ext. Price	Tax
1	3/4" CTS MUNICIPEX PIPE 100' ROLL AWWA 904 ASTM F876 & F877 REHAU	FT	800	1.25	1,000.00	N
2	C14-33Q-NL 3/4" FIP X CTS QUICK JOINT COUPLING NO-LEAD FORD	EA	30	21.08	632.40	N
3	C84-33Q-NL 3/4" MIP X CTS QUICK JOINT COUPLING NO-LEAD FORD	EA	30	20.04	601.20	N
4	3/4" CTS STIFFENER #51 FORD	EA	70	1.90	133.00	N

Total	2,366.60
Freight	0.00
Tax	0.00
Grand Total	2,366.60



**H.D. FOWLER  
COMPANY**

PO Box 160 \* Bellevue, WA \* 98009-0160



To: JULIE  
julle@pipeandrock.com  
MCLENNAN EXCAVATION INC (134220)  
04/04/22 08:54:42am

From: Matt Frodge  
Phone: (541) 326-0085 x2010

## Order Acknowledgement

This order requires confirmed receipt of this acknowledgement because it contains special order items which are indicated by two asterisks (\*\*). Please approve this order by simply replying to this email message, or by printing the attachment, signing and returning it back to us.

Non-Stocks, Special Orders or Engineered Items may not be returnable. Those that are returnable are subject to a minimum 25% restock fee. Some orders may also have applicable freight charges not shown on this Order Acknowledgement.

I accept this as written. Please get this order for me as listed below.

Signature [Handwritten Signature] Date 4/7/2022 Print Name Lily Ramirez

Your PO: RV PARK Project: BEACHFRONT RV PARK  
 Ordered By: LILY RAMIREZ Order Date: 02/08/22  
 Est. Shlp Date: 06/30/22 Order #: 07305146  
 Shipping From: Medford Warehouse Ship VIA: WILL CALL

Line#	Item	Unit	Qty	Price	Ext. Price	Tax
5	** HYPOWER POWERPORT RV PEDESTAL POWERSNAP WEATHER BASE 30A 125V. 20A GFCI DUPLEX. 50A 125/250V, WHITE LID/TOP, CLEAR LENS	EA	29	1,287.00	37,323.00	N
8	** HYPOWER POWERPORT RV PEDESTAL POWERSNAP WEATHER BASE 30A 125V. 20A GFCI DUPLEX. 50A 125/250V, WHITE LID/TOP, CLEAR LENS	EA	9	1,287.00	11,583.00	N

Total 48,906.00  
 Freight 0.00  
 Tax 0.00  
 Grand Total 48,906.00



24





25



26



27



## **ACTION ITEM – B**

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**DATE:** May 6, 2022  
**RE:** Crab Dock on River Jetty  
**TO:** Honorable Board President and Harbor District Board Members  
**ISSUED BY:** Gary Dehlinger, Port Manager

---

### OVERVIEW

- Crab dock located on the river jetty was discussed during a Regular Commissioner Meeting on January 19, 2022.
  - The Board unanimously approved the motion “installing a single bar gate with a sign (Enter at Your Own Risk) at the entrance to the North Jetty and providing the US Corps of Engineers a key for access. Remove entire crab dock including piling and ramp from the North Jetty when a project warrants a barge and crane or if other means become available.”
  
- I had a meeting with U.S. Army Corps of Engineers Robin Norris, Realty Specialist for Portland District Real Estate Division and Gregory Speer, Oregon Coast Project Manager Channels & Harbors regarding the location of the river jetty crab dock to the federal channel right-of-way and the ramp attached to the jetty. The crab dock location does not create any issues with the federal dredging operations even though it is within or on the edge of the federal channel boundaries. During this conversation it was thought that the river jetty belonged to the Port and not part of the USACE maintenance authority. So, the crab dock ramp attached to the jetty was not an issue for USACE. But if the crab dock were to be removed, a 408 review would be required.
  
- After further research by the Port and USACE, Robin found that the river jetty does belong to the USACE, and no documents were found providing the Port permission to install a ramp off the jetty. Since there wasn't originally an approval for the addition of the ramp on the dike, we are now needing to go through the process to do that. Now is the time for the port/commissioners to decide if they want to do any other work on the dike so it all can be evaluated and processed for approval at the same time. Form SF-299 will need to be completed if the ramp and crab dock stays.

### DOCUMENTS

- USACE most recent survey of the Federal Channel, 1 page
- Drawing showing the Federal Channel overlaid to the crab dock location, 1 page
- Historical Google satellite photographs of Basin 1 from 1994, 2000, 2004 and 2021, 4 pages
- Email #1 from Robin Norris, USACE with attachments, 124 pages
- Email #2 from Robin Norris, USACE with attachments, 11 pages
- Email #3 from Robin Norris, USACE with attachment, 6 pages

### COMMISSIONERS ACTION – there are two motion options:

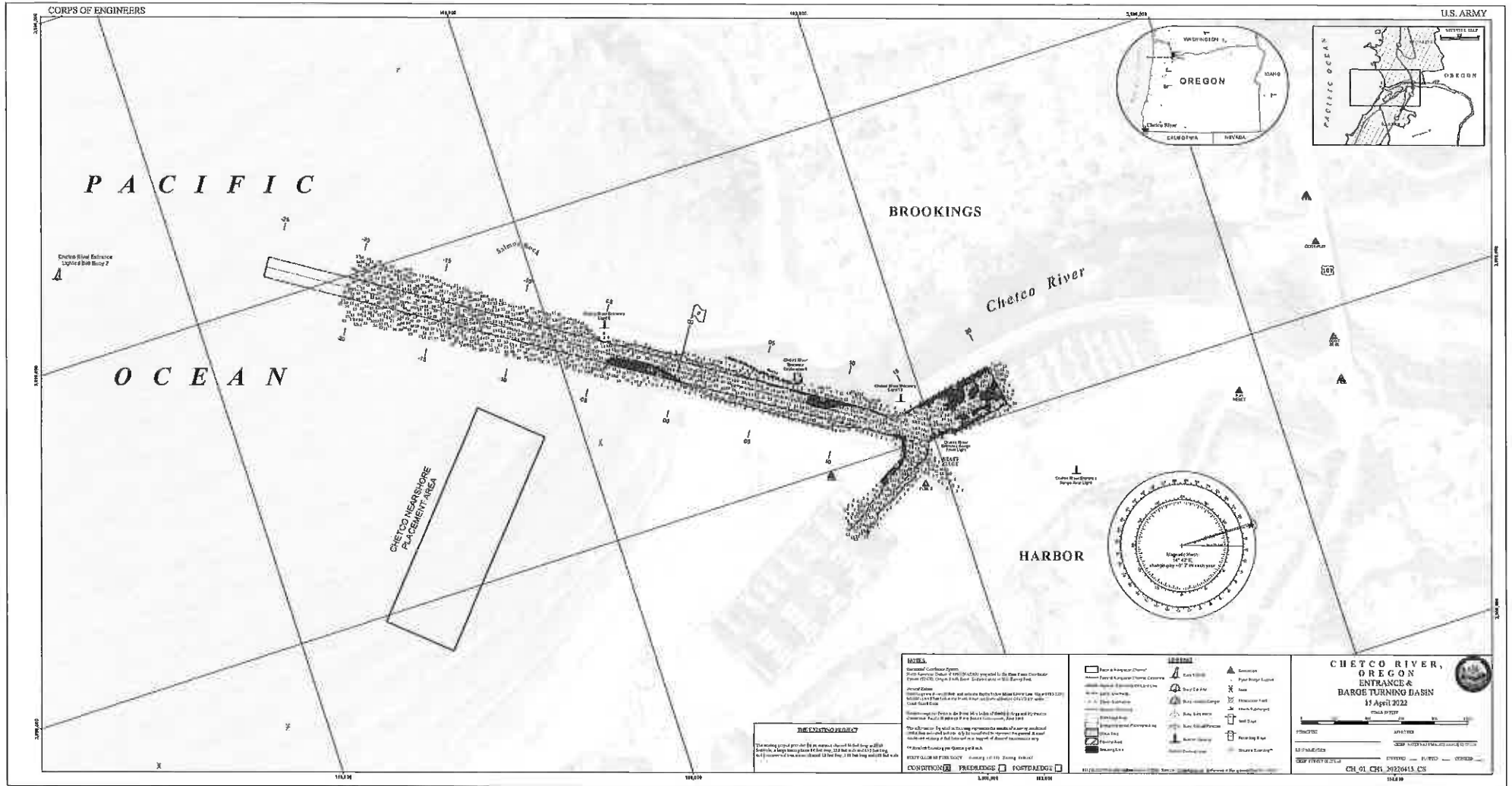
- **Recommended Motion Option 1:**

Motion to approve completing necessary U.S. Army Corps of Engineers forms to keep the crab dock at its current location and authorize the Port Manager to sign the necessary form applications.

- **Recommended Motion Option 2:**

Motion to approve completing necessary U.S. Army Corps of Engineers forms to remove the crab dock and ramp and authorize the Port Manager to sign the necessary form applications.

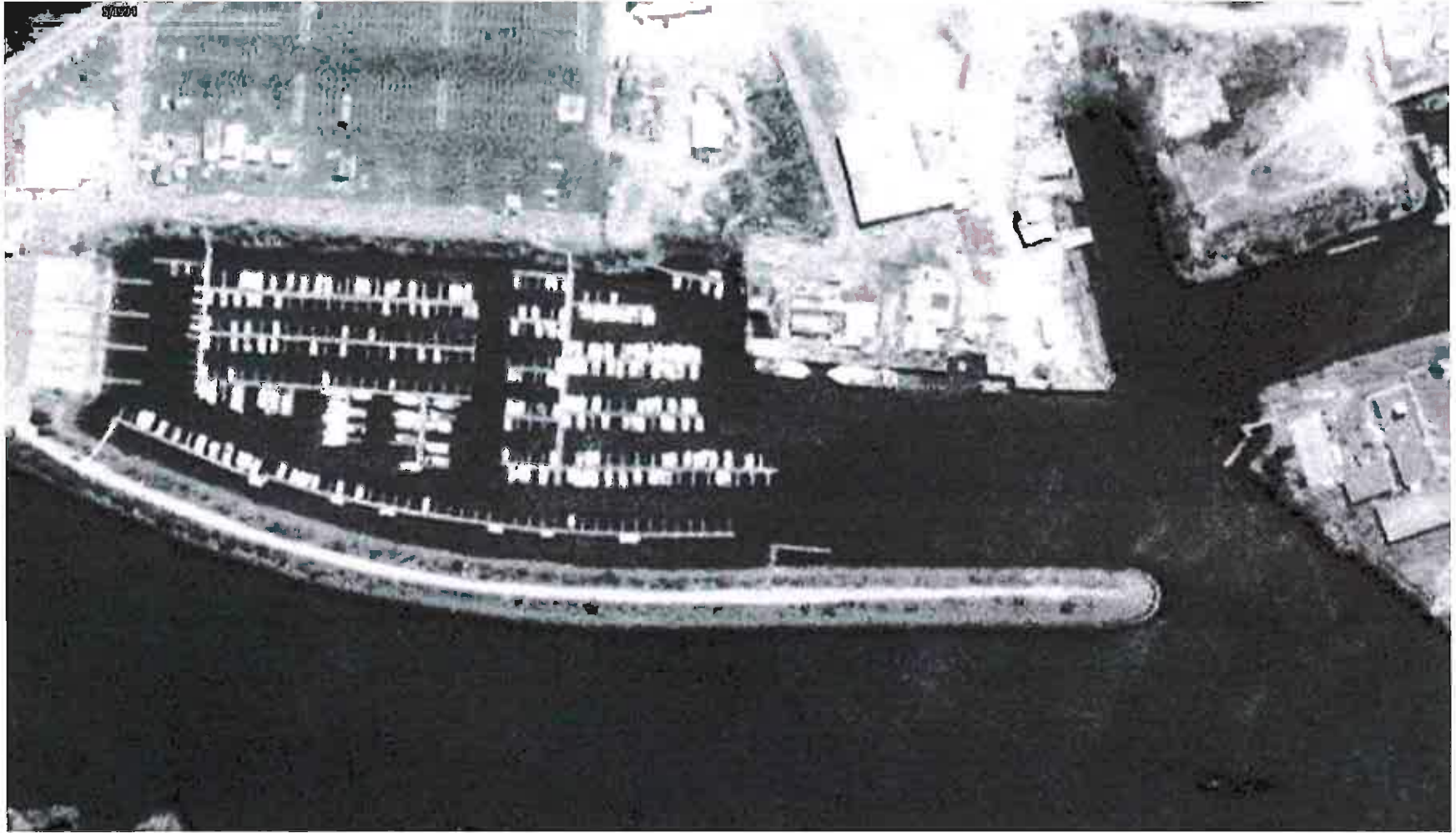
# MOST RECENT SURVEY OF THE FEDERAL CHANNEL



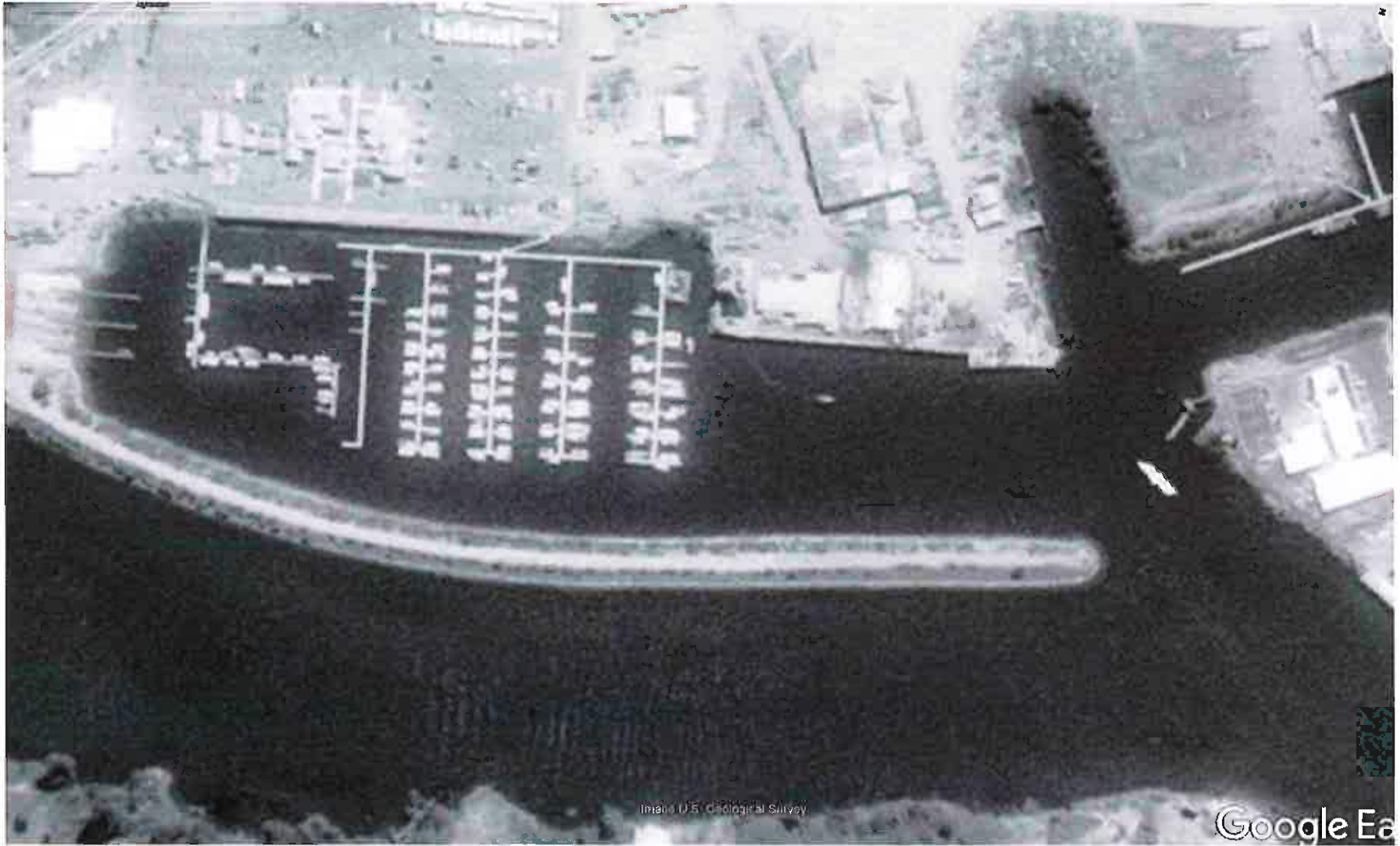




1994



2000



Imajinasi 1005, Ciriologi di Sinyo

Google Earth

2004



Ruler [Close]

Line Path Polygon Circle 3D path 3D polygon

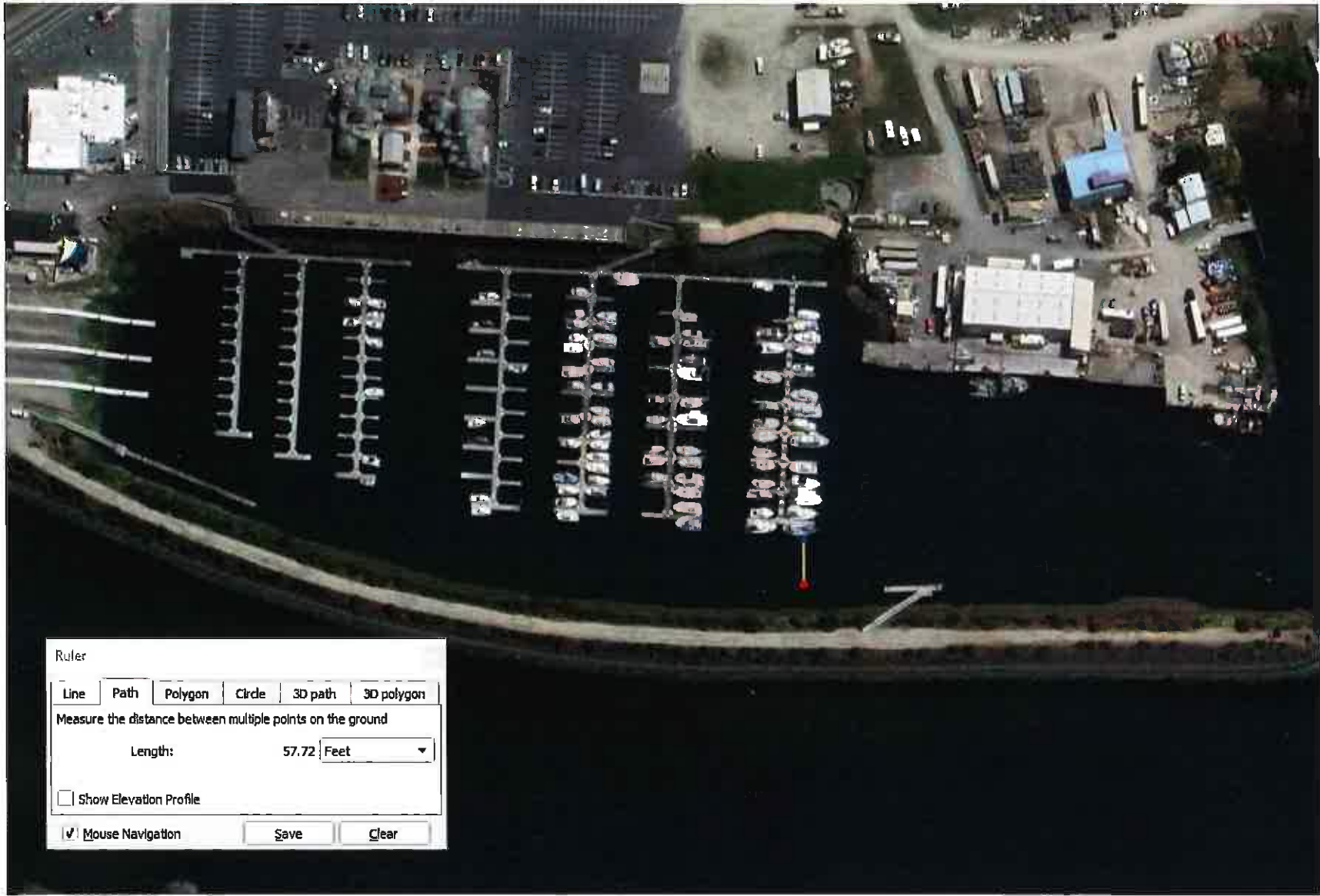
Measure the distance between multiple points on the ground

Length: 57.57 Feet

Show Elevation Profile

Mouse Navigation [Save] [Clear]

2021



Ruler

Line	Path	Polygon	Circle	3D path	3D polygon
------	------	---------	--------	---------	------------

Measure the distance between multiple points on the ground

Length: 57.72 Feet

Show Elevation Profile

Mouse Navigation    Save    Clear

310

**portmanager@portofbrookingsharbor.com**

---

**From:** Norris, Robin C CIV USARMY CENWP (USA) <Robin.C.Norris@usace.army.mil>  
**Sent:** Tuesday, March 29, 2022 12:35 PM  
**To:** portmanager@portofbrookingsharbor.com  
**Cc:** Speer, Gregory A CIV USARMY CENWP (USA)  
**Subject:** Port of Brookings Boat Basin dike  
**Attachments:** Port of Brookings\_USACE Cooperative Agmt dtd 4 Dec 1967.pdf; Chetco Improvement\_Congressional Document\_1965.pdf

Gary,

See attached for the original Local Cooperative Agreement between USACE and the Port of Brookings and the 1965 congressional support for work at the port.

I will send a 2<sup>nd</sup> email with another congressional document from the '70's (large document).

Since USACE does own the boat basin dike, any work on it has to be approved by USACE. Plans and specs would need to be reviewed (a 408 review) and a Letter of Consent given to the Port by the Portland District Real Estate Office after the review if the work is approved. Reach out to me if you have questions about this.

Sincerely,

Robin C Norris  
Realty Specialist  
U.S. Army Corps of Engineers, Portland District Real Estate Division (RE)  
333 SW 1st Avenue  
Portland, Oregon 97208

RESOLUTION OF FORMAL ASSURANCES  
FOR LOCAL COOPERATION

TO THE SECRETARY OF THE ARMY, UNITED STATES OF AMERICA:

BE IT KNOWN, That we, the undersigned members of the Board of Commissioners of the Port of Brookings of Brookings, Oregon in a regular meeting convened this 4 day of December, 1967, do hereby affirm that:

WHEREAS, the Port of Brookings is organized and existing under the laws of the State of Oregon, having five regularly elected members of the Board of Commissioners who have the power and authority to cooperate with the United States and to furnish the required assurances of local cooperation contemplated herein, and

WHEREAS, the United States, through the District Engineer, Corps of Engineers, Department of the Army, has made general plans for modification to the navigation project on the Chetco River at the Port of Brookings, Oregon in Sections 5 and 8; Township 41 South, Range 13 West of the Willamette Meridian, Curry County, Oregon, which work has been authorized by River and Harbor Act of 1965, approved 27 October 1965, and

WHEREAS, we wish to express our unqualified approval of the above work.

NOW, THEREFORE, BE IT RESOLVED, That the Port of Brookings will:

(a) Contribute in cash 6.5 percent of the first cost of the small-boat access channel and that portion of the dike adjacent thereto; such contribution, presently estimated at \$14,800.00, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined.

(b) Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the improvements and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works.

(c) Hold and save the United States free from damages due to the construction works and subsequent maintenance of the improvement.

(d) Provide and maintain at local expense adequate public terminals and transfer facilities (including a suitable barge slip) open to all on equal terms.

(e) Provide and maintain at local expense depths in berthing and mooring areas and local access channels serving the terminals commensurate with depths provided in the related project areas.

(f) Provide and maintain without cost to the United States an adequate service frontage, launching ramp, and a public landing with suitable supply facilities in the small-boat basin, necessary mooring facilities with suitable depths for local and transient boats, utilities, access roads, parking areas, and related public-use shore facilities, open to all on equal terms.

(g) Accomplish without cost to the United States such alterations as required in sewer, water supply, drainage, and other utility facilities, as well as their maintenance.

(h) Assurance of Compliance with the Department of Defense Directive under Title VI of the Civil Rights Act of 1964. The Port of Brookings (hereinafter called "Applicant-Recipient") hereby agrees that it will comply with title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements imposed by or pursuant to the Directive of the Department of Defense (32 CFR Part 300, issued as Department of Defense Directive 5500.11, December 28, 1964) issued pursuant to that title, to the end that, in accordance with title VI of that Act and the Directive, no person in the United States shall, on the ground of race, color or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant-Recipient receives Federal financial assistance from the Corps of Engineers, Department of the Army, in connection with the Port of Brookings, Chetco River, Oregon Project and hereby gives assurance that it will immediately take any measures necessary to effectuate this agreement.

If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Applicant-Recipient by the Corps of Engineers, this assurance shall obligate the Applicant-Recipient, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is so provided, this assurance shall obligate the Applicant-Recipient for the period during which it retains ownership or possession of the property. In all other cases, this assurance shall obligate the Applicant-Recipient for the period during which the Federal financial assistance is extended to it by the Corps of Engineers.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property, discounts or other Federal financial assistance extended after the date hereof to the Applicant-Recipient by the Department, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Applicant-Recipient recognizes and agrees that such Federal financial assistance will be extended in reliance on the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant-Recipient, its successors, transferees and assignees, and the person or persons whose signatures appear below are authorized to sign this assurance on behalf of the Applicant-Recipient.

THAT, This resolution shall be incorporated in the minutes of this meeting and a copy thereof be sent to the Department of the Army.

Board of Commissioners of the  
Port of Brookings

By Karl Osterberg  
Karl Osterberg, Chairman

By Leo Shurtleff  
Leo Shurtleff, Vice Chairman

By Fred Fox  
Fred Fox, Commissioner

By Frank Akin  
Frank Akin, Commissioner

By Buddy E. Smith  
Buddy E. Smith, Secretary

I, BUDDY E. SMITH, of Brookings, Oregon, do hereby certify that I am the Secretary of the Board of Commissioners of the Port of Brookings, and as such officer am the legal custodian of the minutes of its proceedings and records; that I have carefully compared the foregoing copy of the resolution dated December 4 1967, and that the foregoing is a full, true and correct transcript of the original and the whole thereof in my care and possession, and I certify that the said meeting was legally held and that said resolution was regularly and unanimously passed.

IN TESTIMONY WHEREOF, I have hereunto set my hand on this 4 day of December, 1967.

(Signed) Buddy E. Smith  
Buddy E. Smith, Secretary of the  
Board of Commissioners of the  
Port of Brookings

DATE: 15 DEC 1967

The assurances contained in this Resolution are hereby accepted for and on behalf of the United States of America.

Robert L. Bangert  
ROBERT L. BANGERT  
Colonel, Corps of Engineers  
District Engineer



RESOLUTION OF ASSURANCES FOR LOCAL COOPERATION

TO THE SECRETARY OF THE ARMY, UNITED STATES OF AMERICA:

BE IT KNOWN, that we, the undersigned members of the Board of Commissioners the Port of Brookings, a municipal cooperation organized and existing under the laws of the State of Oregon, in a <sup>special</sup> ~~regular~~ meeting convened this 8th day of January, 1957, do hereby affirm that:

WHEREAS, The Port of Brookings, was created and organized October 17, 1956, under Chapter 777 Oregon Revised Statutes, and has Five regularly ~~elected~~ (appointed) members of its Board of Commissioners, who are duly authorized to conduct the business affairs of said Port, levy assessments, and sponsor the public works contemplated hereby, and,

WHEREAS, the Rivers and Harbors Act of 1945, Public Law 14 - 79th Congress, approved March 2, 1945, authorized the Chetco River, Oregon Project for the stabilization of the channel through the bar at the mouth of the river by the construction of jetties and dredging, in accordance with the report of the Chief of Engineers dated December 23, 1941, House Document No. 817 - 77th Congress, 2nd Session, and

WHEREAS, We wish to express our unqualified approval of said project as approved in said Act of Congress.

NOW, THEREFORE, BE IT RESOLVED, that in accordance with the authorizing act, the Port of Brookings will:

- a. Furnish free of cost to the United States, all lands, easements, and rights-of-way and spoil-disposal areas for the initial work and for subsequent maintenance when and as required, and
- b. Furnish free of cost to the United States a suitable quarry or source of royalty-free rock for construction of the jetties.

THAT, this resolution shall be incorporated in the minutes of this meeting, and a copy thereof be sent to the Department of the Army.

BOARD OF COMMISSIONERS  
PORT OF BROOKINGS

By Wilson Freeman  
Chairman

By Paul Peterson  
Commissioner

By James Hubert  
Commissioner

James Hubert  
Commissioner

By Roy M. White  
Commissioner

(SEAL)

STATE OF OREGON }  
County of Curry } "

I, Roy M. White Secretary of the Port of Brookings, the municipal corporation named in the foregoing Resolution, do hereby certify that the foregoing is a true and correct copy of a Resolution passed and adopted by its Board of Commissioners at a meeting held on January 8 1957.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Port's official seal this 8th day of January, 1957.

Roy M. White  
Secretary

DATE: 14 January 1957

The assurances contained in this Resolution are hereby accepted for and on behalf of the United States of America.

[Signature]  
Colonel, Corps of Engineers  
District Engineer

**CHETCO RIVER, OREGON**

---

**LETTER**  
**FROM**  
**THE SECRETARY OF THE ARMY**  
**TRANSMITTING**

**A LETTER FROM THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, DATED MARCH 4, 1965, SUBMITTING A REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND ILLUSTRATIONS, ON A REVIEW OF THE REPORT ON CHETCO RIVER, OREGON, REQUESTED BY A RESOLUTION OF THE COMMITTEE ON PUBLIC WORKS, UNITED STATES SENATE, ADOPTED APRIL 28, 1968**



**PRESENTED BY MR. McNAMARA**

**APRIL 28, 1965.—Referred to the Committee on Public Works and ordered to be printed with illustrations**

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**U.S. GOVERNMENT PRINTING OFFICE**  
**WASHINGTON : 1965**



# CONTENTS

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	Page
Letter of transmittal.....	v
Comments of the Bureau of the Budget.....	vi
Comments of the State of Oregon.....	vii
Comments of the Department of the Interior.....	viii
Report of the Chief of Engineers, Department of the Army.....	1
Report of the Board of Engineers for Rivers and Harbors.....	2
Report of the District Engineer:	
Syllabus.....	7
Authority.....	8
Purpose and extent of study.....	8
Description:	
a. General.....	8
c. Use of entrance.....	9
d. Published charts.....	9
Tributary area:	
a. General.....	9
b. Adjacent ports.....	11
d. Resources.....	11
e. Transportation facilities.....	11
Bridges.....	11
Prior reports.....	11
Existing Corps of Engineers' project.....	12
Local cooperation on existing project.....	12
Other improvements.....	12
Terminal and transfer facilities.....	12
Improvement desired.....	16
Existing and prospective commerce:	
a. Existing commerce.....	16
b. Prospective commerce.....	17
Vessel traffic.....	17
Difficulties attending navigation:	
a. Channel.....	19
b. Harbor and turning area.....	19
c. Jetties.....	19
Water power and other special subjects.....	20
Plan of improvement:	
b. Channel dimensions.....	20
c. Jetty extension.....	20
d. Protective dike.....	21
e. Spoil disposal.....	21
f. Mooring basin.....	21
Shoreline changes.....	22
Required aids to navigation.....	22
Estimate of first cost.....	22
Estimates of annual charges:	
a. Estimate of annual maintenance.....	23
b. Estimate of annual charges.....	23

**Report of the District Engineer—Continued**

	Page
Estimates of benefits:	
a. General.....	24
b. Lumber shipments.....	24
c. Plywood shipments.....	27
d. Woodchips.....	27
e. Commercial fishing.....	27
f. Recreational boating.....	27
g. Reduction in barge and boat damages.....	27
h. Harbor of refuge.....	27
i. Summary of benefits.....	27
Comparison of benefits and costs.....	28
Proposed local cooperation.....	28
Allocation of costs among purposes.....	29
Apportionment of costs among interests.....	29
Coordination with other agencies:	
a. Fish and wildlife agencies.....	30
c. Views of local interests.....	31
Discussion.....	31
Conclusions.....	32
Recommendation.....	33
Recommendations of the Division Engineer.....	34

**APPENDIXES ACCOMPANYING THE REPORT OF THE DISTRICT ENGINEER**  
(Only Appendix A not printed)

	Page
Appendix A. Design and Cost Estimates.....	35
Appendix B. Benefit Evaluation.....	61
Appendix C. Significant Correspondence and Exhibits.....	61

Information called for by Senate Resolution 148, 85th Congress.....	107
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**ILLUSTRATION ACCOMPANYING THE REPORT OF THE DISTRICT ENGINEER**  
Plate I. Recommended Improvement.

**LETTER OF TRANSMITTAL**



IN REPLY REFER TO:

**DEPARTMENT OF THE ARMY**  
WASHINGTON 25, D.C.

April 22, 1965

Honorable Pat. McNamara  
Chairman, Committee on Public Works  
United States Senate

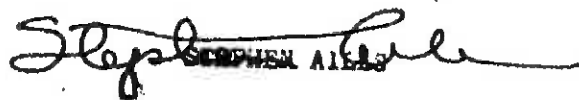
Dear Mr. Chairman:

I am transmitting herewith a favorable report dated 4 March 1965, from the Chief of Engineers, Department of the Army, together with accompanying papers and illustrations, on a review of the report on Chetco River, Oregon, requested by a resolution of the Committee on Public Works, United States Senate, adopted 28 April 1958.

The views of the State of Oregon and the Department of the Interior are set forth in the inclosed communications.

The Bureau of the Budget advises that there is no objection to the submission of the proposed report to the Congress; however, it states that no commitment can be made at this time as to when any estimate of appropriation would be submitted for construction of the project modification, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation. A copy of the letter from the Bureau of the Budget is inclosed.

Sincerely yours,

  
STEPHEN ALLEN

Secretary of the Army

1 Incl  
Report

**COMMENTS OF THE BUREAU OF THE BUDGET**

**EXECUTIVE OFFICE OF THE PRESIDENT**

**BUREAU OF THE BUDGET**

**WASHINGTON, D.C. 20503**

9 April 1965

Honorable Stephen Ailes  
Secretary of the Army  
Washington, D. C. 20310

Dear Mr. Secretary:

Mr. Alfred B. Fitt's letter of April 2, 1965, submitted the favorable report of the Chief of Engineers on Chetco River, Oregon, in response to a resolution of the Committee on Public Works, United States Senate, adopted April 28, 1958.

I am authorized by the Director of the Bureau of the Budget to advise you that there would be no objection to the submission of the proposed report to the Congress. No commitment, however, can be made at this time as to when any estimate of appropriation would be submitted for construction of the project modification, if authorized by the Congress, since this would be governed by the President's budgetary objectives as determined by the then prevailing fiscal situation.

Sincerely yours,

  
Carl H. Schwartz, Jr.  
Chief, Resources and  
Civil Works Division



COMMENTS OF THE STATE OF OREGON

JOHN D. DAVIS, CHAIRMAN  
STAYTON  
MRS. W. D. HAGENSTEIN, VICE CHAIRMAN  
PORTLAND  
EMERY N. CASTLE  
CORVALLIS  
LABELLE E. COLES  
PRINEVILLE  
UIS H. FOOTZ  
FOREST GROVE  
WILLIAM L. JESS  
EAGLE POINT  
KARL W. ONTHANK  
EUGENE



STATE OF OREGON  
STATE WATER RESOURCES BOARD  
800 PUBLIC SERVICE BUILDING  
SALEM 97310

February 11, 1965

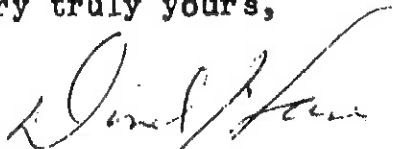
Chief of Engineers  
Corps of Engineers  
U. S. Army  
Washington 25, D. C.

Dear Sir:

We have received for comment on behalf of the State of Oregon, in accordance with Section 1 of Public Law 534, 79th Congress and Public Law 85-624, a copy of the proposed report together with the reports of the Board of Engineers for Rivers and Harbors and of the District and Division Engineers, on a review of the report on Chetco River, Oregon.

We concur with the views of the Chief of Engineers.

Very truly yours,

  
Donel J. Lane  
Executive Secretary

DJL/jc

COMMENTS OF THE DEPARTMENT OF THE INTERIOR



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

February 26, 1965

Dear General Wilson:

This is in reply to your letter of December 16, 1964, requesting our views on a review of the report on Chatco River, Oregon.

The Fish and Wildlife Service advises that the recommended project for the Chatco River, Oregon, would result in benefits to sport and commercial fishing in the area. The Service notes that the public will be permitted to fish from the north jetty extension and that the project construction schedule will be modified to the extent practicable to avoid blasting during the period June 15 to July 15 in the interest of anadromous fish conservation.

Thank you for the opportunity of commenting on the recommended improvements.

Sincerely yours,

A handwritten signature in cursive script that reads "Robert W. Nelson".

Deputy Assistant Secretary of the Interior

Lt. General Walter K. Wilson, Jr.  
Chief of Engineers  
Department of the Army  
Washington, D.C. 20315

# CHETCO RIVER, OREGON

## REPORT OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY



HEADQUARTERS  
DEPARTMENT OF THE ARMY  
OFFICE OF THE CHIEF OF ENGINEERS  
WASHINGTON, D.C. 20315

IN REPLY REFER TO

ENGCW-PD

4 March 1965

SUBJECT: Chetco River, Oregon


TO: THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress the report of the Board of Engineers for Rivers and Harbors, accompanied by the reports of the District and Division Engineers, in response to a resolution adopted 28 April 1958 by the Committee on Public Works of the United States Senate, concerning the advisability of modifying the existing project for Chetco River, Oregon, with particular reference to the development of a small-boat basin.

2. The District and Division Engineers recommend modification of the existing project for Chetco River to provide for dredging an entrance channel 14 feet deep and 120 feet wide; raising the north jetty to a height of 16 feet above mean lower low water and extending it seaward for 450 feet; dredging a turning basin 14 feet deep, 250 feet wide, and 650 feet long; constructing a protective gravel dike 1,800 feet long; and dredging an access channel 12 feet deep, 100 feet wide, and 800 feet long; at an estimated first cost of \$1,317,000 for construction, and \$25,000 annually for maintenance in addition to that now required; subject to certain requirements of local cooperation including a cash contribution of 6.5 percent of the first cost of constructing the small-boat access channel and that portion of the dike adjacent thereto, such contribution presently estimated at \$9,000. The net cost to the United States for construction is estimated at \$1,308,000. The annual charges are estimated at \$78,500 and average annual benefits at \$293,400, resulting in a benefit-cost ratio of 3.7.

3. The Board of Engineers for Rivers and Harbors concurs in general in the findings of the District and Division Engineers and recommends the improvements, subject to certain conditions of local cooperation, including the cash contribution noted above.

4. I concur in the recommendations of the Board.

  
W. K. WILSON, JR.  
Lieutenant General, USA  
Chief of Engineers

# REPORT OF THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS



CORPS OF ENGINEERS, U.S. ARMY  
BOARD OF ENGINEERS FOR RIVERS AND HARBORS  
WASHINGTON, D.C. 20315

ENGBR

16 November 1964

SUBJECT: Chetco River, Oregon

TO: Chief of Engineers  
Department of the Army

1. Authority.--This report is in response to the following resolution adopted 28 April 1958:

Resolved by the Committee on Public Works of the United States Senate, That the Board of Engineers for Rivers and Harbors, created under Section 3 of the River and Harbor Act, approved June 13, 1902, be, and is hereby, requested to review the report of the Chief of Engineers on Chetco River, Oregon, published as House Document Numbered 817, Seventy-seventh Congress, Second Session, with a view to determining the advisability of modifying the existing project at the present time, with particular reference to the development of a small-boat basin.

2. Description.--Chetco River is a small coastal stream draining a mountainous, timbered area of 365 square miles in southwestern Oregon. The river discharges into Chetco Cove, on the Pacific Ocean, about 4 miles northwest of the Oregon-California boundary. The lower 3.5 miles of the river are tidal, with controlling depths varying from 6 feet below mean lower low water in the entrance to 1 foot in the tidal reach. The mean range of tide outside the mouth is 6.9 feet and the extreme range, 12.3 feet. Streamflows vary from about 100 cubic feet per second at low water in the summer to annual average maximums of 10,000 to 15,000 cubic feet per second in winter. The maximum discharge is estimated at 80,000 cubic feet per second. The nearest improved harbors are Crescent City, California, 27 miles to the south, and Gold Beach (Rogue River), Oregon, 34 miles to the north.

3. Existing improvements.--The existing Federal project provides for stabilization of the channel through the bar at the mouth of the river by construction of two jetties and by dredging. The north jetty is about 850 feet long and the south jetty, 1,550 feet long. Extending seaward from shore on either side of the river mouth, they converge to within about 325 feet of each other at their outer ends. The jetties

were completed in 1957, and removal of rock pinnacles and abandoned bridge piers was completed in June 1959. In 1962, the outer 440-foot section of the south jetty was repaired and raised in elevation to prevent movement of sand and drift into the navigation channel. Local interests have constructed a small-boat basin along the east bank of the river and a private wharf, open to all on equal terms, for loading lumber barges.

4. Tributary area and commerce.--The town of Brookings, near the mouth of Chetco River, had a 1960 population of about 2,630. The area tributary to Brookings includes the southern portion of Curry County, Oregon, and a small part of northern Del Norte County, California. The limits of this area are governed mainly by the competitive influence of the neighboring harbors of Crescent City and Gold Beach, and by north-south rail lines and highways in the interior of the State. The economy of the area is based primarily on the wood-products industry consisting of several sawmills and a plywood and veneer plant. The fishing industry is of economic significance through offshore catches of salmon, crab, shrimp, tuna, and bottom fish. Water-borne commerce in 1960 totaled 81,254 tons, consisting of 79,331 tons of outbound lumber and 1,923 tons of inbound fish and shellfish. In 1962, the commerce amounted to 31,101 tons consisting of 29,838 tons of lumber and 1,263 tons of fish and shellfish. In 1960, there were 104 trips in and out of the harbor by tugs with barges, the tugs drawing from 7 to 10 feet of water, and the barges from 2 to 11 feet. Corresponding trips in 1962 totaled 25, at similar drafts. In 1961, the commercial fishing fleet consisted of 57 locally based boats and about 148 transient vessels. Loaded drafts of fishing boats ranged from 3 to 10 feet. About 133 recreational boats are registered in the Brookings area, most of which are trailered to the harbor for launching.

5. Improvements desired.--Local interests desire an entrance channel 14 feet deep at mean lower low water and 120 feet wide; a barge turning basin 14 feet deep, 350 feet wide, and 500 feet long; a dike about 1,200 feet long, with a height of 18 feet above mean lower low water, and with a 40-foot roadway on top; an anchorage and turning basin for small boats 12 feet deep, 375 feet wide, and 850 feet long, with access thereto; and extension of both jetties about 450 feet at an elevation of 16 feet above mean lower low water. They point out that the existing entrance channel is too shallow for economical use by lumber carriers and commercial fishing boats. Safe passage for these vessels is restricted to high tides and daylight hours. The existing small-boat basin, provided by local interests, is congested and lacks adequate space for the turning and maneuvering of commercial fishing boats. Local interests have indicated willingness to cooperate in the desired improvements.

6. Improvements proposed.--The District Engineer finds that a deeper and wider entrance channel with adequate protection is necessary to provide safe passage for lumber barges and commercial fishing boats. He finds, also, that the existing small-boat basin is congested and that the maneuvering area for barges is inadequate. He proposes a plan of improvement which provides for an entrance channel 14 feet deep at mean lower low water and 120 feet wide; raising the north jetty to a height of 16 feet above mean lower low water and extending it seaward 450 feet at that height; a turning basin for barges 14 feet deep, about 250 feet wide, and 650 feet long; a riprap-protected gravel dike about 1,800 feet long to protect both the barge turning basin and a proposed local small-boat basin against river floods; and an access channel to the small-boat basin 12 feet deep, 100 feet wide, and about 800 feet long. The improved entrance channel and barge turning basin would accommodate the larger lumber barges currently being used at other coastal ports, and would enable more economical water transportation of lumber, plywood, and woodchips. Local interests would construct a small-boat basin about 300 feet wide, 800 feet long, and 12 feet deep with facilities to accommodate at least 100 commercial fishing craft, several charter boats, and the equivalent of several permanently based recreational boats. Local interests also would provide all lands, and terminal and transfer facilities, including a barge slip 200 feet wide and 700 feet long dredged to a depth commensurate with the related project depth.

7. Cost and justification.--Excluding preauthorization study costs of \$23,000 and using January 1964 prices, the District Engineer estimates the first cost of the improvements at \$1,350,000, of which \$1,323,000 would be Federal including \$15,000 for navigation aids, and \$27,000 would be non-Federal consisting of \$18,000 for lands and \$9,000 as a local cash contribution. Terminal and other locally provided facilities are considered to be self-liquidating. Annual charges for the non-self-liquidating features are estimated at \$78,500, including \$25,000 for Federal maintenance in addition to that now required, and \$1,000 for maintenance of navigation aids. Average annual benefits are estimated at \$293,400, consisting of \$134,500 for savings in transportation costs, \$20,100 from elimination of delays and damages to vessels, \$124,300 from increased commercial fishing, \$9,500 for recreational boating, and \$5,000 from use of the harbor as a refuge. The benefit-cost ratio is 3.7 based on a 50-year period of analysis and a 3 percent rate of interest. The District Engineer recommends the improvements in accordance with his plan, subject to certain requirements of local cooperation. The Division Engineer concurs.

8. Public notice.--The Division Engineer issued a public notice stating the recommendations of the reporting officers and affording

interested parties an opportunity to present additional information to the Board. No communications have been received.

Views and Recommendations of the Board of Engineers for Rivers and Harbors.

9. Views.--The Board of Engineers for Rivers and Harbors concurs in general in the views and recommendations of the reporting officers. The proposed improvements are needed and economically justified, and the requirements of local cooperation are appropriate. The Board finds that changing the interest rate from 3 percent to 3-1/8 percent does not change the benefit-cost ratio.

10. Recommendations.--Accordingly, the Board recommends that the existing project for Chetco River, Oregon, be modified to provide for:

An entrance channel 14 feet deep and 120 feet wide;

Raising the north jetty to a height of 16 feet above mean lower low water and extending it seaward 450 feet at that height;

A turning basin 14 feet deep, about 250 feet wide, and 650 feet long;

A riprap-protected gravel dike about 1,800 feet long for protection of the turning basin and the proposed local small-boat basin against river floods; and

An access channel to the small-boat basin 12 feet deep, 100 feet wide, and about 800 feet long;

generally in accordance with the plan of the District Engineer and with such modifications thereof as in the discretion of the Chief of Engineers may be advisable, at an estimated cost of \$1,317,000 for construction and \$25,000 annually for maintenance in addition to that now required: Provided that prior to construction local interests agree to:

a. Contribute in cash 6.5 percent of the first cost of the small-boat access channel and that portion of the dike adjacent thereto; such contribution, presently estimated at \$9,000, to be paid in a lump sum prior to initiation of construction, subject to final adjustment after actual costs have been determined;

b. Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent

maintenance of the improvements and for aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and also necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works;

c. Hold and save the United States free from damages due to the construction works and subsequent maintenance of the improvements;

d. Provide and maintain at local expense adequate public terminals and transfer facilities (including a suitable barge slip) open to all on equal terms;

e. Provide and maintain at local expense depths in berthing and mooring areas and local access channels serving the terminals commensurate with depths provided in the related project areas;

f. Provide and maintain without cost to the United States an adequate service frontage, launching ramp, and a public landing with suitable supply facilities in the small-boat basin, necessary mooring facilities with suitable depths for local and transient boats, utilities, access roads, parking areas, and related public-use shore facilities, open to all on equal terms; and

g. Accomplish without cost to the United States such alterations as required in sewer, water supply, drainage, and other utility facilities, as well as their maintenance.

The net cost to the United States for the recommended improvements is estimated at \$1,308,000 for construction and \$25,000 annually for maintenance in addition to that now required.

FOR THE BOARD:



R. G. MacDONNELL  
Major General, USA  
Chairman



## REPORT OF THE DISTRICT ENGINEER

---

### SYLLABUS

The District Engineer finds that a need exists at Chetco River, Oregon, for a deeper and better-protected entrance channel and for a protected barge turning basin and small-boat access channel, and that the benefits accruing from these improvements would exceed the costs and warrant participation by the Federal Government. Net cost to the United States, exclusive of aids to navigation, is estimated at \$1,308,000 for construction and \$25,000 annually for maintenance in addition to the amount required to maintain the existing project. The foregoing improvements are subject to specified conditions of local cooperation as outlined in the report.

U. S. ARMY ENGINEER DISTRICT, PORTLAND  
CORPS OF ENGINEERS  
628 Pittock Block  
Portland, Oregon 97205

NPPEN-PP-4

6 March 1964

SUBJECT: Chetco River, Oregon

TO: Division Engineer  
U. S. Army Engineer Division, North Pacific

1. AUTHORITY. - This report is submitted in compliance with authority contained in resolution of the Committee on Public Works, United States Senate, adopted 28 April 1958, which reads as follows:

"RESOLVED BY THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE, That the Board of Engineers for Rivers and Harbors, created under Section 3 of the River and Harbor Act, approved June 13, 1902, be, and is hereby, requested to review the report of the Chief of Engineers on Chetco River, Oregon, published as House Document Numbered 817, Seventy-seventh Congress, Second Session, with a view to determining the advisability of modifying the existing project at the present time, with particular reference to the development of a small-boat basin."

2. PURPOSE AND EXTENT OF STUDY. - This report is of survey scope and considers the feasibility of modifying the existing project to provide increased channel depths, extension of jetties, a barge turning basin, and a small-boat access channel and mooring basin at the mouth of Chetco River. Studies for this report were based on data obtained from a public hearing, hydrographic surveys, subaqueous explorations, interviews and correspondence with informed local sources, and miscellaneous reports, documents, charts, and maps. During the course of the investigation, interested local port, State, and Federal agencies were consulted. Their comments and suggestions have been given full consideration.

3. DESCRIPTION. -

a. General. - Chetco River discharges into the Pacific Ocean approximately 1 mile east of Chetco Point, which lies 300 statute miles south of Columbia River entrance and 345 miles north of San Francisco Bay. Chetco River is a small coastal stream draining a mountainous,

heavily timbered area of 365 square miles located in the southern portion of Curry County, Oregon. The river has its source in the Siskiyou Mountains of the Coast Range at an elevation of 4,000 feet, and flows over 50 miles to its point of discharge in Chetco Cove. The lower 3½ miles of the river are tidal, with a mean tidal range outside the mouth of 6.9 feet and tidal variations of 12.3 feet. Streamflows have been estimated to be 100 cubic feet per second at low water in the summer months, with an annual average maximum of between 10,000 to 15,000 cubic feet per second during the winter months. Maximum discharge is estimated at 80,000 cubic feet per second.

b. Chetco Point, a rocky headland about 80 feet high, forms the western extremity of Chetco Cove and protects the river entrance from northwesterly and, to some extent, westerly storms. South of the river mouth the coastline extends in a gradual concave curve for some 18 miles, exposing the locality to winter storms from the southwest quadrant. The town of Brookings is situated north of the cove and Chetco River entrance. The mouth of Chetco River has been stabilized by twin rubblemound jetties about 300 feet apart at the outer ends. Controlling depth in the entrance channel is 6 feet below mean lower low water. The entrance to the basin periodically shoals to a depth of 4 feet below mean lower low water. The remainder of the tidal reach of the river has controlling depths of about 1 foot below mean lower low water and is suitable for navigation by skiffs and small launches only.

c. Use of entrance. - Chetco River entrance and harbor is presently used by barges and tugs for movement of lumber, and by commercial fishing craft and recreational boats.

d. Published charts. - Chetco River and the adjacent coastal and land areas are shown on U. S. Coast and Geodetic Survey chart No. 5896 and U. S. Geological Survey quadrangles for Cape Ferrello, Oregon, and Crescent City, California.

#### 4. TRIBUTARY AREA. -

a. General. - The area considered tributary to the port of Brookings generally includes the southern portion of Curry County, Oregon, and a small part of northern Del Norte County, California, containing the drainage basins of Chetco and Winchuck Rivers and the area along the coast extending from Pistol River in Oregon to Smith River in California, as outlined on plate 1. The economy of the area is based primarily on the wood-products industry which consists of several sawmills and a plywood and veneer plant. The fishing industry is of economic significance through offshore catches of salmon, crab, shrimp, tuna, and bottom fish. At the present time over 57 fishing boats are based at Brookings. Some grazing is done on the grassy slopes in the coast region but, because of the ruggedness of the terrain, only a small area is suitable for agriculture.

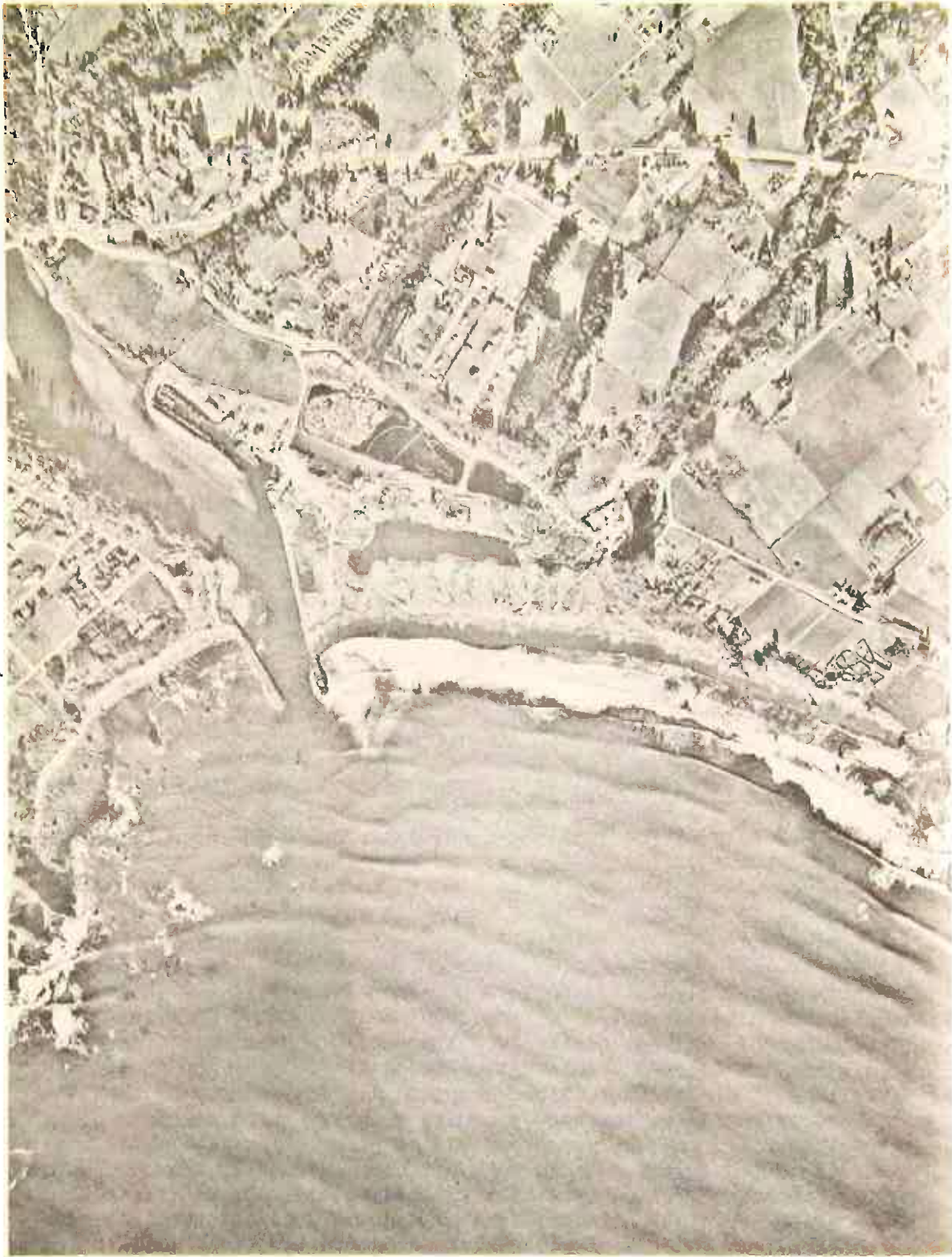


FIGURE 1. Aerial view of Chetco River entrance,  
February 1962

b. Adjacent ports. - The nearest improved harbors are Crescent City, California, 27 miles to the south, and Gold Beach, Oregon, at the mouth of Rogue River, 34 miles to the north. Crescent City, an open-roadstead port with a main breakwater 3,900 feet long and a 2,000-foot secondary breakwater, provides channel and harbor depths of 20 feet. Gold Beach Harbor has twin jetties through the entrance bar, 1,000 feet apart, with a channel 13 feet below mean lower low water and 300 feet wide. The inner harbor has a 300-foot by 13-foot channel and a 500-foot-wide turning basin. Coos Bay, Oregon, 116 miles to the north, and Eureka, California, on Humboldt Bay, 102 miles south, are the nearest deep-draft harbors. At both harbors the existing projects provide for rubblemound jetties, entrance channels 40 feet deep, and bay channels 30 feet deep.

c. Populations of Curry County, the town of Brookings, and nearby coastal ports in southwestern Oregon are shown in the following tabulation:

Area	Calendar years	
	1950	1960
CURRY COUNTY	6,048	13,983
Port Orford	674	1,171
Gold Beach	677	1,765
Brookings	1,525	2,632

d. Resources. - The principal resource of the region is timber. The sawtimber volume consists of approximately 75 percent Douglas fir and 25 percent Port Orford cedar, western red cedar, western hemlock, Sitka spruce, balsam fir, and redwood. The annual sustained timber yield of the tributary area is estimated at 143.0 million board-feet, Scribner's log scale.

e. Transportation facilities. - In general, Brookings and its tributary area are heavily dependent on highway and water transportation to move wood products to market. There are no railroad facilities within the tributary area. The closest railheads are at Coquille, Oregon, 108 miles north, and Arcata, California, 108 miles south.

5. BRIDGES. - There are no bridges that would be affected by the improvement under consideration in this report.

6. PRIOR REPORTS. - Chetco River has been the subject of two prior reports. The first, contained in House Executive Committee Document No. 92, 52d Congress, 2d session, was prepared in 1892 and was unfavorable to improvement of the river or entrance. The second, contained in House Document No. 817, 77th Congress, 2d session, was submitted to Congress 20 July 1942 and recommended improvement of Chetco River to

provide for stabilization of the channel through the bar at the mouth of the river by construction of jetties. No specific channel dimensions were established in this authorization.

7. **EXISTING CORPS OF ENGINEERS' PROJECT.** - The River and Harbor Act of 2 March 1945 (H. Doc. 817, 77th Cong., 2d sess.) authorized the project for Chetco River, Oregon, to provide for stabilization of the channel through the bar at the river mouth by construction of jetties and dredging. Construction of the jetties was initiated in June 1957 and completed in December 1957. Removal of rock pinnacles and abandoned bridge piers was accomplished in June 1959, completing the project. Total Federal costs to 30 June 1963 were \$581,254, of which \$489,548 was for new work and \$91,706 for maintenance. Average annual cost for 5 years of project duration (Fiscal Years 1959-63) was \$18,341. Cost for repairs of the south jetty during Fiscal Year 1963 amounted to about \$69,400 and accounts for a major portion of the figure for the 5-year average maintenance cost. Average annual cost for channel maintenance is estimated to be \$10,000. Cost of future repairs to both jetties on an annual basis is estimated to be \$5,000. Total estimated cost of future maintenance of the existing project is \$15,000 annually.

8. **LOCAL COOPERATION ON EXISTING PROJECT.** - Under the existing project local interests were required to furnish free of cost to the United States all lands, easements, rights-of-way, and spoil-disposal areas for initial work and subsequent maintenance when and as required; and furnish free of cost to the United States a suitable quarry or source of royalty-free rock for construction of the jetties. All requirements of local cooperation have been completed. Cost to local interests for all measures of local cooperation is estimated to amount to \$40,000.

9. **OTHER IMPROVEMENTS.** - Upon completion of the jetties by the Corps of Engineers in December 1957, local interests constructed a protective dike about 1,000 feet long and dredged a small-boat basin along the left bank of the river. In 1959 additional area landward of the protective dike was excavated to provide more space for mooring commercial fish craft and for mooring lumber barges. Subsequent to this, local interests again increased the size of the small-boat mooring area to provide, as of June 1963, an area averaging about 150 feet wide and 450 feet long. The 1961 commercial fleet consisted of 57 locally based boats and 148 transient craft. No information has been received as to the size of the fleet in 1963. In addition they have performed maintenance dredging in the entrance channel to the boat basin. See plate 1 for extent of construction accomplished by local interests.

10. **TERMINAL AND TRANSFER FACILITIES.** - Present terminal facilities consist of a lumber dock for loading barges and a fish-receiving dock about 140 feet long. Although privately owned these facilities are open to all on equal terms. The port of Brookings has provided floating piers with connecting ramps for mooring commercial fishing



FIGURE 2. Chetco River entrance and boat basin, looking south



FIGURE 3. Chetco River jetties and boat basin, June 1962.





FIGURE 4. Chetco River, March 1959, showing initial basin and dike construction by local interests

boats and a small number of sports boats, a dock and attendant facilities for fueling boats, a small-boat launching ramp, water supply, and electric service. Additional facilities which will be required to accommodate anticipated future traffic include a barge slip and dock with space for loading at least two barges simultaneously. Additional floats for small boats also will be needed.

#### 11. IMPROVEMENT DESIRED. -

a. A public hearing was held in Brookings on 18 April 1962 to determine the desires of local interests with respect to improvements to the navigation project. In attendance were 73 persons, representing local lumber and plywood industries; fishing interests; local businesses; and Federal, State, county, and port agencies. Representatives of the Brookings port commission requested that the existing project be modified to provide the following: (a) A navigation channel for barges and small boats, a minimum of 120 feet wide and 14 feet deep at mean lower low water; (b) a turning basin for barges, approximately 350 feet wide, 500 feet long, and 14 feet deep at mean lower low water; (c) a dike approximately 1,200 feet in length and elevation 18 feet above mean lower low water with a 40-foot-wide roadway on top; (d) an anchorage and turning basin for small-boat moorage area, a minimum of 375 feet wide, 850 feet long, and 12 feet deep at mean lower low water, with access thereto; and (e) extension of both jetties approximately 450 feet, to 16 feet above mean lower low water.

b. Local interests stated that modification of the project was urgently needed to provide more protection and safety for all vessels using the river entrance; to provide adequate turning basins and increased channel depths to permit use of larger lumber carriers and commercial fishboats, and to eliminate delays and damages to vessels now using the project; to provide increased small-boat mooring areas for relief of present congestion; and to accommodate additional boats desiring to locate in the Brookings harbor. Public benefits that would accrue as a result of the construction of the proposed modification were stated to amount to \$349,000 annually.

c. Local interests and representatives of the port of Brookings have stated that they will furnish the necessary lands, easements, rights-of-way, and spoil-disposal areas for construction and subsequent maintenance of the proposed improvements. They further state that they will dredge a barge-loading slip and an area suitable for the mooring of commercial fishing boats and recreational craft and provide necessary floats and related facilities.

#### 12. EXISTING AND PROSPECTIVE COMMERCE. -

a. Existing commerce. - Prior to completion of the existing project in 1959, the Chetco River entrance had been used only occasionally by fishboats and for rafting logs. Lumber, crab, shrimp, salmon,

tuna, and bottom fish represent the principal items of commerce presently moving through the Chetco River entrance. Comparative amounts of this commerce for the years 1959 through 1962 are shown in the following table.

Year	Vessel traffic (tons)			Total
	Lumber <sup>1</sup>	Fish <sup>2</sup>	Shellfish <sup>2</sup>	
1959	9,494	31	670	10,195
1960	79,331	106	1,817	81,254
1961	52,319	422	713	53,454
1962	29,838	293	970	31,101

- <sup>1</sup> From Department of the Army annual reports on Waterborne Commerce of the United States.  
<sup>2</sup> From records of the Fish Commission of Oregon.

b. Prospective commerce. - Average annual tonnages anticipated to move over the entrance channel during the 50-year period of analysis are estimated to be as follows:

<u>Commodity</u>	<u>Vessel traffic in tons</u>
Lumber	108,500 outbound
Plywood	19,000 outbound
Woodchips	126,500 outbound
Fish	1,890 inbound
Shellfish	2,600 inbound

13. VESSEL TRAFFIC. - Principal traffic through the mouth of Chetco River consists of oceangoing tugs, lumber barges, and commercial and recreational fishing craft. In 1960 about 52 inbound and 52 outbound trips were made by tugs drawing from 7 to 10 feet of water, and by barges drawing from 2 to 11 feet. In 1961 about 25 inbound and 26 outbound trips were made by tugs drawing from 7 to 11 feet and by barges drawing from 2 to 11 feet. Two sizes of barges are presently used in this trade. The smaller barge is 190 feet long, 50 feet wide, and draws 11 feet when fully loaded with 1.5 million board-feet of lumber. The larger barge is 210 feet long, 54 feet wide, and draws 12 feet 4 inches when loaded with 2.2 million board-feet of lumber. However, the larger barge must short-load to be able to use the existing project. With improvement of channel and port facilities, transportation companies would use only the larger barges. No record is available of the trips made by commercial fishboats. The larger boats based at Brookings are from 60 to 70 feet long and have loaded drafts from 7 to 10 feet. Data collected by the U. S. Coast Guard indicate that 2,066 trips by sport-fishing boats were made through the entrance during 1962.



FIGURE 5. Offshore view, looking north to Chetco River en

#### 14. DIFFICULTIES ATTENDING NAVIGATION. -

a. Channel. - The principal difficulties attending navigation arise from inadequate channel depths and lack of space for turning, maneuvering, and mooring of barges, tugs, and boats. Due to the presence of rock pinnacles in the entrance channel, with controlling depth of 6 feet below mean lower low water, operators can safely move their tugs and barges through the river mouth only during daylight, high tides. Movements of large fishing boats drawing up to 10 feet of water are also restricted to the high stages of the tide. In addition to delays incurred, vessels are subjected to the hazard of striking rock pinnacles. A number of commercial fishermen have reported their boats striking bottom on entering the river mouth, and a lumber-carrying barge was extensively damaged as a result of striking a rock pinnacle in the river entrance in 1961. Inadequate channel depths also prohibit the use of larger and more efficient navigation equipment.

b. Harbor and turning area. - The small-boat basin, constructed by local interests, is too small for the number of boats that have applied for moorage space. The protective dike, also constructed by local interests, offers only limited protection to the barge-loading area and creates a shoaling problem in the area used for maneuvering barges. Fifty-seven commercial fishing boats are based at Chetco, and the port has requests for space from other fishermen. Transients wishing to berth their boats in the basin are required to tie to other boats or are refused space. This crowded condition presents a hazard with respect to fire. If one boat should experience an explosion or catch on fire, a large loss would ensue as it would be difficult to move adjoining boats out of danger. This condition also incurs delays in turning and maneuvering the fishboats. Due to inadequate space adjacent to the single barge berth, barges are turned in Chetco Cove and moved through the entrance stern first. In order to perform this maneuver it is necessary for the tug to bring the barge to rest in open water, drop the towing bridle, pick up lines from the stern, and move through the entrance to the dock. When the barge approaches the dock, it is necessary, because of restricted room, to assist the tug in positioning the barge by means of lines and land-based donkeys. This procedure is time-consuming and also hazardous as was demonstrated when a barge got out of control and damaged several fishboats.

c. Jetties. - Jetties at the mouth of Chetco River are oriented generally in a southerly direction; however, as the over-all coastline extends north and south, the up-coast jetty is generally called the north jetty, and down-coast jetty the south jetty. Southwest winter storms generate waves which approach the north jetty at an angle with the jetty axis of about 30 to 45 degrees. During storms, these waves are washed over the low part of the north jetty, causing rough-water conditions in the entrance as well as carrying sand. Further, these waves are caught by the channelside of the south jetty, contributing to the rough-water conditions and causing minor surge in the basin.

15. WATER POWER AND OTHER SPECIAL SUBJECTS. - Inasmuch as the requested improvement is confined to the entrance channel and inner harbor, there is no possibility of developing a coordinated plan embodying improvements which would involve control and conservation of water resources.

16. PLAN OF IMPROVEMENT. -

a. Improvements considered in this report consist of several items which are shown in detail on plate 1 and enumerated as follows: (1) An entrance channel 120 feet wide and 14 feet deep at mean lower low water; (2) an extension to the north jetty about 450 feet in length, with an increase in elevation of the existing portion to 16 feet above mean lower low water; (3) a barge-and-tug maneuvering area about 250 feet wide, 650 feet long, and 14 feet deep at mean lower low water; (4) a protective dike 1,800 feet long, with a top elevation of 16 feet above mean lower low water; (5) a small-boat access channel 100 feet wide and 12 feet deep at mean lower low water; (6) a barge slip about 200 feet wide, 700 feet long, and 14 feet deep, to be provided by local interests; and (7) enlargement by local interests of the small-boat mooring area to an average width of 300 feet, length of 800 feet, and depth of 12 feet.

b. Channel dimensions. - Greater channel dimensions than those specified above were considered; however, due to limited width between jetties (about 200 feet at base) the proposed dimensions are considered to be the maximum that can be constructed without causing undermining or subsidence of the existing jetties. A depth of 14 feet for channel and maneuvering area would allow unrestricted use of the harbor by larger commercial fishing craft and a majority of the barges now engaged in transporting wood products from Oregon coastal ports. Other barges with loaded drafts varying from 12 to 16 feet would be able to use the port by running the tides or light-loading. The barge maneuvering area would permit tug pilots to bring barges in bow first, then back them into the slip area for loading, and after loading proceed to sea bow first. The barge-slip berthing area would be large enough to load two barges simultaneously as well as allow the passing of a barge while another one is moored.

c. Jetty extension. - The jetty extension was located to provide a suitable channel alignment as well as to eliminate difficulties attending navigation. From studies of the direction of approach of storm waves and through visual observation of these waves it has been determined that a length of 450 feet for the jetty extension will be necessary to provide protection for vessels navigating the entrance during periods of storms. As oriented, the jetty extension will intercept a majority of waves and prevent their entry into the channel, thereby eliminating a major portion of the rough-water conditions experienced in the entrance channel. The outer 200 feet of the existing north

jetty was constructed to a crest elevation of 14 feet above mean lower low water and the remainder of the jetty to 10 feet. Observations indicate that during southwest storms the inner portion of the jetty is frequently overtopped. Raising the crest of the existing north jetty to 16 feet above mean lower low water would practically eliminate wave wash from entering the channel. Consideration was given to extending the south jetty as requested by local interests. From studies and observations of storm waves approaching the entrance, it was determined that extending the south jetty would not change or correct existing difficulties. The channelside of the jetty extension would continue to intercept storm waves and deflect them toward the basin, causing surge in the mooring area. During 1962 the outer 440 feet of the south jetty was repaired and the crest of this section was raised to 20 feet above mean lower low water. Prior to the repairs, elevation of the jetty crest varied from 8 to 12 feet above mean lower low water while the top of the adjacent foredune on the beachside of the jetty was at elevation 15. During storms, sand and drift were washed over the jetty into the navigation channel. Raising the jetty crest has proven successful in stopping sand and drift from passing over the jetty. Therefore, no recommendations were included with respect to the south jetty.

d. Protective dike. - The protective dike is necessary for prevention of shoaling of the small-boat basin, access channel, and barge maneuvering area, and for protection of moored craft from flood flows of the river. It was located so as to provide this protection and to assist in maintaining depths in the navigation channel. Although a dike with a top width of 40 feet and crest elevation of 18.0 feet above mean lower low water was requested at the public hearing, local interests readily concurred with the proposed plan for a top width of 20 feet and crest elevation of 16.0. Due to the limited area of the estuary and critical need for space for the barge maneuvering area and small-boat access channel, it was necessary to restrict the dimensions of the protective dike to the minimum that would provide a sound structure and still serve the intended purpose.

e. Spoil disposal. - Adequate areas are available adjacent to the site of the mooring basin and to the south jetty for disposal of materials excavated for construction of the improvement.

f. Mooring basin. - The proposed small-boat basin, 800 feet long by an average 300 feet wide, would adequately accommodate at least 100 commercial fishing craft and several charter and recreational boats. Local interests plan on constructing a launching ramp at the upstream end of the small-boat access channel. Most recreation boats would use the launching ramp, with only a few requiring berthing space. Service facilities are presently available at the harbor. Should requests for moorage space be greater than can be accommodated by the proposed mooring basin, local interests have stated that they would provide the required space by excavating an additional area on the east side of the basin.

17. SHORELINE CHANGES. - No appreciable change in the shoreline adjacent to the mouth of Chetco River has been evident since completion of the existing project. A small fillet has formed adjacent to the south jetty, and the foredune has increased 4 to 6 feet in elevation but has had no deleterious effect on adjacent property. No change has been noted in the shoreline adjacent to the north jetty. Due to headlands forming Chetco Cove very little beach material can be transported into the cove by littoral drift, and also due to the rugged and rocky nature of the shore within the cove there is only a small amount of material that is affected by wave action. For this reason it is believed that the relative short extension of the north jetty as proposed would have no injurious effect on adjacent shoreline and no increase in the size of the fillet at the south jetty is anticipated.

18. REQUIRED AIDS TO NAVIGATION. - The plan of improvement considered in this report was submitted to the United States Coast Guard for an estimate as to the cost of additional navigation aids that might be required. By letter (see appendix C) the Commander, Thirteenth Coast Guard District, estimated the first cost of additional aids would amount to about \$15,000, with an increase in annual maintenance of \$860 (rounded to \$1,000).

19. ESTIMATE OF FIRST COST. - First cost of the proposed improvements, based on January 1964 prices and including contingencies, engineering, inspection, supervision, and overhead, is estimated to be as follows:

Federal:

North jetty modification	\$615,000
Entrance channel	153,750)
Barge maneuvering area	101,250) <u>1</u>
Small-boat-basin access channel	57,000)
Dike	79,425
Subtotal	<u>1,006,425</u>
Contingencies	201,575
Engineering, supervision, and overhead	109,000
Subtotal	<u>1,317,000</u>
Navigation aids (U. S. Coast Guard)	<u>15,000</u>
Total Federal first cost	1,332,000

Non-Federal:

Lands, easements, and rights-of-way	<u>18,000</u>
<u>Total first cost:</u>	1,350,000

1 Includes 2 feet of overdepth dredging.



Terminal facilities, access roads, small-boat mooring areas, a barge slip, floats, and other necessary public-use shore facilities will be provided and maintained by local interests. These items are considered self-liquidating and are omitted from the costs of non-Federal work.

20. ESTIMATES OF ANNUAL CHARGES. -

a. Estimate of annual maintenance. - In maintaining the jetty extension it is estimated that major replacement of jetty stone will be required at the end of 15- and 30-year periods. These major replacements, it is believed, would provide an effective structure for a 50-year period of analysis. Construction cost of each repair is estimated at \$117,000, with a total present-worth value of \$123,300. Annual cost, with interest and amortization at 3-percent rate of interest over the 50-year period of analysis, would be \$4,800. It is believed that little maintenance dredging will be required as completion of the jetty extension and removal of rock pinnacles would allow scouring of the channel. However, to allow for unforeseen circumstances it is estimated that an average of 25,000 cubic yards of shoaled material may have to be removed at an estimated cost of \$17,400. Maintenance of the breakwater and small-boat access channel is estimated to amount to \$2,800 on an annual basis. Total annual maintenance over and above that required for the existing project, including \$1,000 for maintenance of navigation aids, is estimated to amount to \$26,000.

b. Estimate of annual charges. - The period of analysis has been limited to 50 years, which is considered to be about the practical physical life of the project and maximum period of time that future needs and technological developments in transportation can be predicted. Total annual charges for the plan of improvement are estimated as follows:

Federal first cost (less local cash contribution)

Investment		\$1,323,000
Annual charges:		
Interest at 3 percent	\$39,690	
Amortization in 50 years at 0.887 percent	11,730	
Maintenance	26,000	
Total Federal annual charges	<u>77,420</u>	

Non-Federal first cost

Cash contribution		9,000
Lands		18,000
Annual charges:		
Interest at 3 percent	810	
Amortization in 50 years at 0.887 percent	240	
Total non-Federal charges	<u>1,050</u>	

Total annual charges                      78,470; rounded to  
\$78,500

21. ESTIMATES OF BENEFITS. -

a. General. - Benefits accruing as a result of the proposed improvement would be realized through savings in transportation of lumber, plywood, and woodchips. Significant benefits would also accrue through an increase in commercial fishing and by elimination of delays to the fishing fleet at the entrance to the harbor. Other benefits accruing as a result of the improvement include (1) use of the port as a harbor of refuge; (2) an increase in recreational boating; and (3) elimination of damage to barges and commercial fishing craft. Benefit derivations are described in detail in appendix B and are briefly described below.

b. Lumber shipments. - Total annual lumber shipments available to move over the port of Brookings' dock on a long-range basis have been determined to be about 85.4 million board-feet, or about 108,500 tons. Under existing conditions, all lumber barges must await daylight high tide before entering or leaving the port; also, time losses are incurred through turning barges outside of the entrance and maneuvering to dockside by special equipment. Existing conditions also prohibit full loading of the larger, more-efficient barges. It has been determined that under the above conditions, it would be less costly to ship lumber through an alternate port. With improvement at Chetco River the benefit to be derived in moving the above amount of lumber through the port of Brookings rather than through an adjacent port would provide a transportation saving of \$94,800 annually.



FIGURE 6. Chetco River boat basin, looking ups

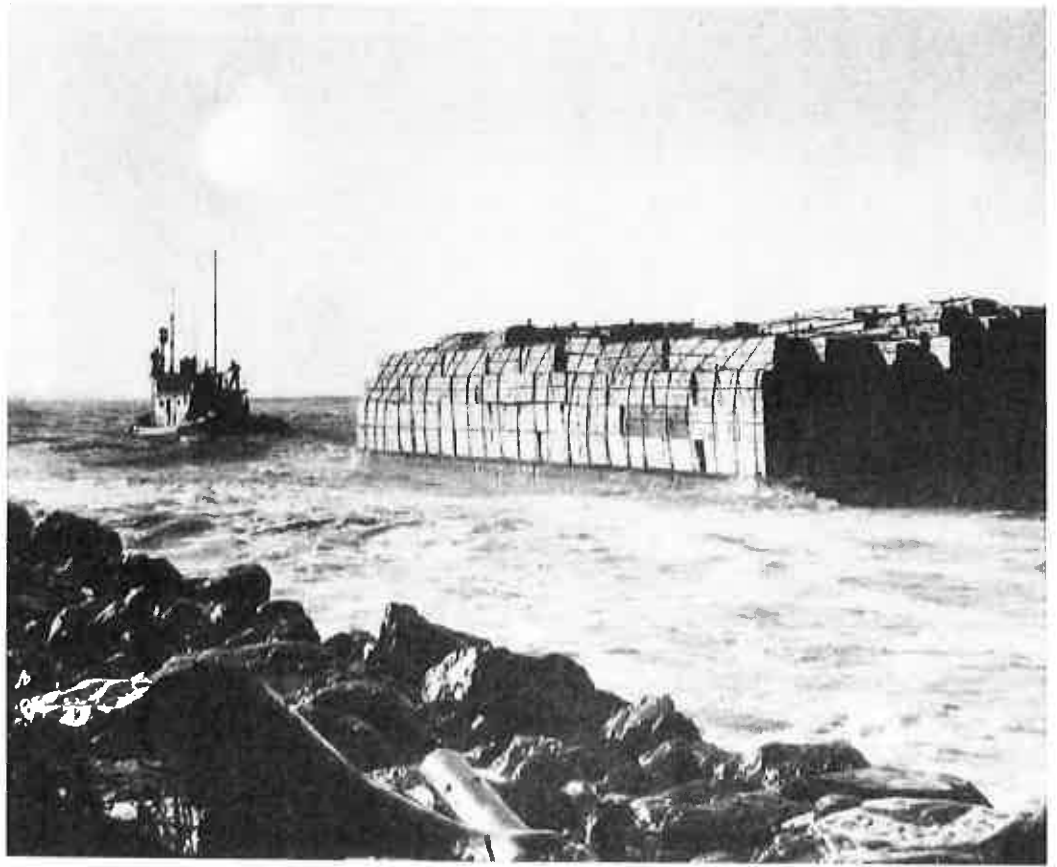


FIGURE 7. Bargeload of lumber leaving Chetco River en  
December 1960

c. Plywood shipments. - It has been estimated that about 108 million square feet of plywood, 3/8-inch-thick basis, will be produced in the Brookings tributary area on a sustained production basis. Of this amount it is anticipated that 30.24 million square feet, or about 19,000 tons, will be moved by barge from the port of Brookings to California markets. The annual transportation saving for moving 19,000 tons of plywood through the improved port is estimated to be \$16,500.

d. Woodchips. - It is believed that the veneer and plywood plants and the largest lumber mill will produce about 55,000 units of Douglas-fir chips for water shipment to one of several kraft pulpmills located on the Columbia River or ports along the Oregon coast. The annual transportation saving for moving 55,000 units, or 126,500 tons, of woodchips is estimated to be \$23,200.

e. Commercial fishing. - The proposed improvement would eliminate delays now incurred by the existing crab and salmon fleet and would permit an increased catch to fishermen working the tuna, shrimp, and bottom fisheries. Benefits resulting from activity of the commercial fishing fleet are estimated to amount to \$137,400 annually.

f. Recreational boating. - Recreational benefits would accrue to the proposed improvement through increased use of the harbor by trailer and locally based pleasure boats. These benefits, evaluated on the basis of equivalent full-time use of the waterway, are estimated to be \$9,500 annually.

g. Reduction of barge and boat damages. - Due to the existence of rock pinnacles in the entrance channel, vessel and commercial fishing craft groundings have occurred on several occasions. It is estimated that elimination of rock pinnacles would provide an annual reduction in damages of \$6,000 to barges and \$1,000 to commercial fishing craft.

h. Harbor or refuge. - The port of Brookings, with additional channel depths and extended north jetty, would provide increased use as a harbor of refuge for fishing craft and coastwise traffic during periods of storm or when mechanical failures might place the vessel in jeopardy. The annual benefit from increased use of the harbor for refuge is estimated to be \$5,000, and is considered 100 percent general as depths are adequate for recreational boats.

i. Summary of benefits. - The benefits described in the preceding paragraphs are summarized in the following tabulation in accordance with their general or local nature.

Type of benefit	Estimated annual amount		
	Total	General	Local
<b>Transportation savings:</b>			
Lumber, 108,500 tons	\$94,800	\$94,800	
Plywood, 19,000 tons	16,500	16,500	
Woodchips, 126,500 tons	23,200	23,200	
Commercial fishing	137,400	137,400	
Recreational fishing	9,500	4,750	\$4,750
<b>Reduction of damages:</b>			
Lumber barges	6,000	6,000	
Commercial fishing craft	1,000	1,000	
Harbor of refuge	5,000	5,000	
<b>Total</b>	<b>293,400</b>	<b>288,650</b>	<b>4,750</b>

Distribution of total benefits between the small-craft feature and the general navigation feature of the proposed improvement amounts to \$73,000 and \$220,400, respectively. Of the \$73,000 benefit for the small-craft feature 93.5 percent, or \$68,250, would be general and 6.5 percent, or \$4,750, would be local in nature.

22. COMPARISON OF BENEFITS AND COSTS. - The estimated average annual benefits and costs for the proposed plan of improvement are as follows:

Annual benefits	\$293,400
Annual costs	\$78,500
Benefit-to-cost ratio	3.7 to 1.0

23. PROPOSED LOCAL COOPERATION. - It is proposed as an essential feature of Federal participation in accomplishing the improvement that local interests be required to furnish assurances that they will (a) provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; (b) hold and save the United States free from damages due to construction and maintenance of the project; (c) provide and maintain at local expense adequate public terminals and transfer facilities open to all on equal terms; (d) provide and maintain without cost to the United States depths in berthing and mooring areas and local access channels serving the terminals, commensurate with the depths provided in related project areas; (e) accomplish without cost to the United States such alterations as required in

sewer, water supply, drainage, and other utility facilities, as well as their maintenance; and (f) contribute in cash 6.5 percent of the cost of construction by the Corps of Engineers of the small-boat access channel and that portion of the dike adjacent thereto, and that such contribution, presently estimated at \$9,000, be paid in a lump sum prior to commencement of construction. Local interests have the legal and financial ability to provide the specified requirements of local cooperation.

24. ALLOCATION OF COSTS AMONG PURPOSES. - Costs of facilities of the plan of improvement are allocated according to their uses. Costs of recommended jetty extension, entrance channel, barge turning basin, and that portion of the protective dike adjacent to the barge basin are allocated to general navigation and to commercial fishing. Costs of the above-proposed modification of general navigation facilities are not allocated to recreational boating as existing entrance channel depths are adequate for recreational craft and no improvement to the jetties would be necessary for satisfactory use by these craft. Costs of the recommended access channel and that portion of the protective dike adjacent to the access channel are allocated to recreational fishing and to commercial fishing as this portion of the project would only be used by these activities. See appendix A for details. Following is a table showing features, purposes, and allocated costs.

Feature	Purpose	Allocated cost
North jetty extension, entrance channel, barge turning basin, and 39 percent of cost of dike	General navigation and commercial fishing	\$1,179,000
Small-boat access channel, and 61 percent of cost of dike	Recreational boating and commercial fishing	<u>138,000</u>
Total		1,317,000

25. APPORTIONMENT OF COSTS AMONG INTERESTS. - Cost of the small-boat access channel and 61 percent of the dike are apportioned to the Federal Government and local interests on the basis of general and local benefits attributable to these features. On this basis the Federal Government has been apportioned 93.5 percent of the estimated \$138,000, or \$129,000, and local interests 6.5 percent or \$9,000. Cost of other features of the plan of improvement have been apportioned to the Federal Government.

26. COORDINATION WITH OTHER AGENCIES. -

a. Fish and wildlife agencies. - All interested Federal and State agencies have been informed of the nature of the proposed improvement and afforded an opportunity to present their views. The Oregon State Game Commission in a letter dated 19 March 1963 indicated that the proposed improvements, increased popularity of ocean fishery for both salmon and bottom fish, and the comparatively calm ocean conditions outside Chetco harbor would lead to an increase in the sport fishery of the area. The game commission also indicated that any blasting required for project construction should be restricted to the period 15 June to 15 July. The Fish Commission of Oregon in a letter dated 1 April 1963 indicated that improvement of the harbor entrance at Brookings would permit increased usage by some of the larger fishboats, that the landings of both salmon and bottom fish would increase, and that under present regulations the landings of shellfish would also increase. The fish commission stated that blasting should be confined to the period from 15 June to 15 July. The United States Fish and Wildlife Service furnished their report dated 24 July 1963 on the effects the proposed navigation improvements at the mouth of Chetco River would have on fish and wildlife services. The report contains estimates of the expected increase in recreational fishing and increase in catch of the commercial fleet which would result from construction of the project. These estimates were used as a basis for determining recreational boating and commercial fishing benefits. Following are recommendations included in the report.

"It is recommended:

"1. That the report of the District Engineer, Corps of Engineers, include conservation and development of fish and wildlife resources among the purposes for which Chetco River navigation improvement project is authorized.

"2. That public use of the North jetty extension and breakwater for sport fishing be permitted, except during periods when such use would interfere with project operation or public safety. Project constructed access or work roads to the North jetty should remain available for vehicular traffic to the landward end of the jetty, and any work road or berm constructed on the jetty should remain available for pedestrian travel for the convenience of fishermen.

"3. That blasting be confined to the period between June 15 and July 15 to avoid killing anadromous fishes."

Copies of the report and correspondence of the agencies are included in appendix C.



b. Although construction of the project will permit fuller exploitation of the offshore fisheries, it is not considered advisable to include conservation of fish and wildlife resources as a purpose for a project which is constructed primarily for navigation. The public will be permitted to sport fish from the north jetty extension but, due to hazards of climbing over jetty stones, signs will be posted at the land terminus of the jetty warning people that they enter Government property at their own risk. Based on experience at other jetties along the Oregon coast, it is anticipated that the work road used for jetty construction will be destroyed by storm waves within one or two winters. Although some jetty fishing will be done, no benefits therefrom have been evaluated. The period of time specified for blasting for rock excavation appears somewhat restrictive; however, every effort will be made to accomplish the work during the period specified.

c. Views of local interests. - Local interests were informed of the nature of the improvement to be recommended and the requirements for local cooperation. The Port of Brookings Commission, sponsor for the proposed improvement, in a letter dated 9 January 1964 expressed their willingness to provide the requirements of local cooperation.

## 27. DISCUSSION. -

a. The area tributary to the port of Brookings is in general rugged, mountainous, and heavily timbered. Only a small area is devoted to farming, dairying, and stock raising. The principal resource is the timber stand. The economy of the area is based primarily on wood-products industries and to a limited extent on the recently developed commercial fishery. As the nearest rail facilities are over 100 miles distant from Brookings, the industries are dependent on highway and water transportation to move their products to market.

b. Although no channel dimensions were specified for the existing project, it is noted from the report under review that expectations after construction of the jetties were for channel depths of 2 to 3 feet. Upon completion of the jetties in December 1957, the entrance, aided by freshets, scoured to depths varying from 8 to 14 feet except in areas where rock pinnacles projected up to within  $2\frac{1}{2}$  feet of the mean lower low water datum. Local interests, during 1958, at their own expense constructed a protective dike about 1,000 feet long and dredged a small-boat basin along the left bank of the river to accommodate commercial fishermen wishing to base their operations at Brookings. During 1959, the Corps of Engineers accomplished removal of the rock pinnacles to provide, roughly, a channel 120 feet wide with controlling depths of about 6 feet. Local interests then expanded their facilities to permit loading of lumber barges and increased moorage space for fishing craft.

c. A measure of the success of the existing project might be indicated by a comparison of expected and actual activity of the port. From information contained in the authorizing document for the existing project it is noted that expectations were for the basing of a fleet of 25 commercial fishing craft at the port, and for an operation consisting of handling and towing of a limited volume of logs to shipside during the summer months. Present activity of the port includes movement of lumber by oceangoing barges and its use as a base for a commercial fishing fleet. The lumber movement was initiated in November 1959, and shipments have averaged about 32 million board feet annually. Over 50 commercial fishing boats presently use Chetco River for moorage and as a base for landing their catch and obtaining supplies. Many other transient boats make calls for the same purpose.

d. In addition to inadequate entrance channel depths, the principal difficulties attending navigation have developed through use of the existing project for barging lumber and for the basing of a number of large fishing craft. These difficulties consist of congestion in an overcrowded harbor, resulting in delays and possible vessel damage. Further increase in port activity also is limited by lack of harbor and maneuvering area.

e. The improvements considered herein would permit the use of larger and more efficient barges resulting in transportation savings on shipments of lumber, plywood, and woodchips. Delays and damages to tugs, barges, and commercial fishboats also would be eliminated. Benefits would be realized through an increase in the commercial fishing fleet and in the increased activity of the present fleet.

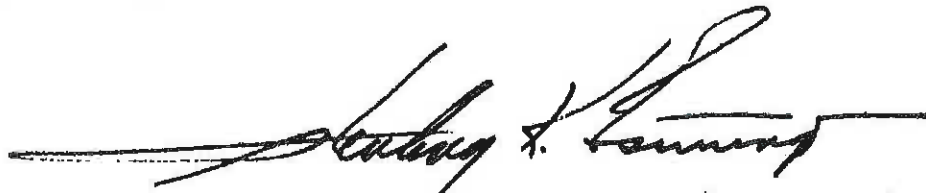
f. Due to existing construction works and natural physical limitations of Chetco River, channel dimensions as proposed are believed to be the maximum attainable. The proposed improvement is of sufficient scope to adequately handle products of timber resources, the only resources presently utilized in the tributary area.

g. The recommended plan would satisfy the needs of local interests and is acceptable to them.

h. Additional information called for by Senate Resolution 148, 85th Congress, 1st session, adopted 28 January 1958, is contained in a supplement to this report.

28. CONCLUSIONS. - The District Engineer concludes, on the basis of data presented in this report, that: (a) A need exists at Chetco River for additional protection and depth for the entrance channel and for a protected barge turning basin and small-boat access channel; and (b) benefits accruing from these proposed improvements would exceed the costs and warrant participation by the Federal Government.

29. RECOMMENDATION. - The District Engineer recommends that the existing project for Chetco River, Oregon, be modified by the United States to provide for (1) an entrance channel 120 feet wide and 14 feet deep at mean lower low water; (2) an extension to the north jetty about 450 feet in length with an increase in elevation of the existing portion; (3) a barge turning basin about 250 feet wide, 650 feet long, and 14 feet deep at mean lower low water; (4) a protective dike about 1,800 feet long with a top elevation of 16 feet above mean lower low water; and (5) a small-boat access channel 100 feet wide and 12 feet deep at mean lower low water. First cost for Corps of Engineers' construction is estimated at \$1,317,000 and annual maintenance is estimated to amount to \$25,000, in addition to that required to maintain the existing project. Adoption of the project would be subject to the provision that, prior to construction, local interests agree to (a) provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interests for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; (b) hold and save the United States free from damages due to construction and subsequent maintenance of the project; (c) provide and maintain at local expense adequate public terminals and transfer facilities open to all on equal terms; (d) provide and maintain without cost to the United States depths in berthing and mooring areas and local access channels serving the terminals, commensurate with the depths provided in related project areas; (e) accomplish without cost to the United States such alterations as required in sewer, water supply, drainage, and other utility facilities, as well as their maintenance; and (f) contribute in cash 6.5 percent of the cost of construction by the Corps of Engineers of the small-boat access channel and that portion of the dike adjacent thereto, and that such contribution, presently estimated at \$9,000, be paid in a lump sum prior to commencement of construction. The net cost to the United States for the recommended improvements, exclusive of aids to navigation, is \$1,308,000 for construction and \$25,000 annually for additional maintenance.



STERLING K. EISIMINGER  
Colonel, Corps of Engineers  
District Engineer

[First endorsement]

NPDEN-PL(6 Mar 64)  
SUBJECT: Chetco River, Oregon

U. S. Army Engr Div, Nor Pac, Portland, Ore.

15 April 1964

TO: Chief of Engineers

I concur in the views and recommendations of the District Engineer.



W. W. LAPSLEY  
Major General, USA  
Division Engineer

## APPENDIX B

### Benefit Evaluation

1. GENERAL. - Benefits accruing as a result of improving the Chetco River project include (1) savings in the cost of transporting lumber, plywood, and woodchips; (2) savings by elimination of vessel delay time and damage to equipment; (3) savings in the cost of commercial fishing; (4) a considerable expansion in recreational boating; and (5) use of the improved project as a harbor of refuge.

2. It is believed that improvements to the harbor as proposed herein would limit vessel traffic to that used in the coastwise trade as the proposed channel depth of minus 14 feet, mean lower low water, and width of 120 feet are not adequate for larger vessels used in the intercoastal and offshore trades. Greater channel dimensions than those specified above were considered; however, due to limited width between the ends of the existing jetties (about 200 feet at base) the proposed dimensions are considered to be the maximum that can be constructed without causing undermining or subsidence of the jetties. For this reason, attention has been centered upon the advantages to be derived from coastwise shipping of lumber products and the expansion and increased efficiency of the commercial fishing operations through the use of the improved entrance and harbor.

3. The economy of the area tributary to the port of Brookings is based principally on the timber industry. Commodities susceptible to water movement include lumber, plywood, and woodchips. Commercial fishing started shortly after completion of the jetties in 1957 and has increased considerably since that time.

4. TRIBUTARY AREA. - The area considered tributary to the port of Brookings generally includes the southern portion of Curry County, containing the drainage basins of Chetco and Winchuck Rivers, and an area along the coast between Pistol River in Oregon and Smith River in California.

5. TIMBER OWNERSHIP. - The Siskiyou National Forest covers approximately two-thirds, or about 251,000 acres, of the land area tributary to the port of Brookings, and the portion within this area is administered by the Chetco Ranger District. The Bureau of Land Management administers 4,058 acres of timberland, all of which falls within the Brookings tributary area. The largest private landowner in the area controls 42,000 acres, 98 percent of which is timbered, in Curry County, Oregon, and Del Norte County, California. All of this area is assumed to be tributary to the port of Brookings. Another private ownership involves 9,000 acres in Del Norte County from which a Brookings mill has been supplied with logs for extended periods of time in the past.

6. **TIMBER RESOURCES.** - A measure of the timber resources of a region is its capability of producing a constant supply of logs on a sustained-yield or annual basis. This amount is known as "allowable cut" and is the quantity of logs that can be cut each year under proper forest management without diminishing the sustained harvesting capacity of the timberlands.

7. According to the U. S. Forest Service, Pacific Northwest Region, separate timber management plans are not prepared for each ranger district or block but for the working circle as a whole. However, an allowable annual cut of 38 million board-feet, Scribner's log scale, has been assigned to the Chetco block or the Chetco Ranger District, and is considered tributary to the port of Brookings. (See letters from U. S. Forest Service, Department of Agriculture.) The office of the Columbia Basin representative, Bureau of Land Management has assigned an annual allowable cut of 3.1 million board-feet, Scribner's scale, to their 4,058 acres of timberlands, which are in the Brookings tributary area. (See letter from U. S. Bureau of Land Management, Department of the Interior.) Statements by representatives of the largest private timberland owner, Mr. S. A. Agnew, indicate an allowable cut of 100 million board-feet per year can be obtained from his land. During the past few years Mr. Agnew has constructed some 35 miles of roads into his own timber. When this road system is tied into the 48-mile loop road now being built jointly by Oregon Coast Veneer and the Bureau of Land Management in the Pistol River region of southern Curry County, it will provide ready access to Brookings mills for the timber harvest from Mr. Agnew's holdings. This road will also allow greater loads per truck, since the trucks will not have to travel the public highways which have restrictive load limits. In addition to its holdings in Curry County, one Brookings mill owns 9,000 acres of timberland in the Big Flat area of Del Norte County. For the purpose of this report it is assumed that the allowable cut for this area would amount to about 1.9 million board-feet. This estimate is based on information given for the Del Norte working circle of the Six Rivers National Forest. Summation of the above gives a total annual allowable cut of 143 million board-feet, Scribner's log scale, for the Brookings tributary area. Timber which would be obtained from numerous owners of small areas was not included as no estimate could be made as to timing or amounts of timber harvest.

8. **EXISTING MILL CAPACITY.** - The existing annual capacity of mills located in Brookings and vicinity on a one-shift basis amounts to about 130 million board-feet of lumber, 100 million square-feet of 1/10-inch veneer, and 90 million square-feet of plywood on a 3/8-inch basis. Raw material requirements for this capacity are estimated to be 137.4 million board-feet of logs, Scribner's scale. Existing mills, their capacities and log supply requirements are listed below.

Company	Capacity		Log supply requirements, million board-feet, log scale
	Lumber, million board-feet	Plywood or veneer, million square-feet	
Brown Lumber Company	13.0	None	10.8
Thompson Brothers Lumber Company	14.4	None	12.0
Oregon Coast Veneer	5.6	100.0 <sup>1</sup>	20.6
South Coast Lumber Company, Oregon Ltd.	78.0	None	52.0
Brookings Plywood Corporation	20.0	90.0 <sup>2</sup>	42.0
<b>Total</b>	<b>131.0</b>		<b>137.4</b>

<sup>1</sup> 1/10-inch basis.

<sup>2</sup> 3/8-inch basis.

9. PRESENT PRODUCTION. - From information obtained at the public hearing and through interviews with mill operators, the existing annual production and log supply requirements of mills in the Brookings area are estimated to be as shown in the following tabulation.

Company	Production		Log supply requirements, million board-feet, log scale
	Lumber, million board-feet	Plywood or veneer, million square-feet	
Brown Lumber Company	7.0	None	5.8
Thompson Brothers Lumber Company	14.4	None	12.0
Oregon Coast Veneer	4.0	72.0 <sup>1</sup>	15.0
South Coast Lumber Company, Oregon Ltd.	60.0	None	44.0 <sup>3</sup>
Brookings Plywood Corporation	20.0	90.0 <sup>2</sup>	42.0
<b>Total</b>	<b>105.4</b>		<b>118.8</b>

<sup>1</sup> 1/10-inch-thickness basis.

<sup>2</sup> 3/8-inch-thickness basis.

<sup>3</sup> Includes 4.0 million board-feet of Port Orford cedar logs which are trucked to Eureka, California, for shipment to Japan.

10. POTENTIAL PRODUCTION. - Operators of mills in the Brookings area have stated that with improvement in market and transportation

conditions they would increase the output of their mills. Presently the mills are operating on a one-shift basis and at less than full capacity. For the purposes of this report, maximum production of mills throughout the period of project analysis will be considered to be directly related to availability of log supply or to the annual allowable cut of 143.0 million board-feet of logs. Since present log consumption is at the rate of about 118.8 million board-feet, log scale, mill production could be increased by about 20 percent, which would result in use of about 143.0 million board-feet of logs.

11. Some mills would probably increase their production by more than 20 percent and others less, depending on their markets and ability to obtain logs either from their own lands or by purchase from others. For purpose of analysis it is assumed that all mills would increase the output of their items by 20 percent according to their present conversion of raw logs to finished products. It is further assumed that most logs would be milled in the tributary area rather than be shipped by barge to be processed elsewhere.

12. The following table indicates the estimated sustained mill production utilizing the total allowable cut from the Brookings tributary area.

Company	Sustained production		Log supply require- ments, million board-feet, log scale
	Lumber, million board- feet	Plywood or veneer, million square-feet	
Brown Lumber Company	8.4	None	7.0
Thompson Brothers Lumber Company	17.3	None	14.4
Oregon Coast Veneer	4.8	86.4 <sup>1</sup>	18.0
South Coast Lumber Company, Oregon Ltd.	72.0	None	53.0 <sup>3</sup>
Brookings Plywood Corporation	24.0	108.0 <sup>2</sup>	50.6
Total	126.5		143.0

<sup>1</sup> 1/10-inch-thickness basis.

<sup>2</sup> 3/8-inch-thickness basis.

<sup>3</sup> Includes 4.8 million board-feet of Port Orford cedar logs which are trucked to Eureka, California, for shipment to Japan.

13. LUMBER MARKETS. - From informal discussion with local operators, it has been determined that the present distribution of lumber produced by Brookings mills on a percentage basis by marketing area or destination is about as follows:



<u>Market area</u>	<u>Percent of total production</u>
Southern California	67.5
San Francisco and vicinity	17.3
Miscellaneous	<u>15.2</u>
Total	100.0

Lumber shipped to the southern California market area moves by water from Brookings and Crescent City to Los Angeles, San Diego, and Port Hueneme. San Francisco receives its portion by truck or combination truck and rail, although some shipments have been made via truck and barge from Crescent City. The marketing area designated miscellaneous includes shipments to foreign trade via truck to Eureka, California, and to various United States markets via truck to rail at Arcata, California.

14. FUTURE LUMBER MARKETS. - California, it is believed, will continue to be the major market for Brookings-produced lumber due to several factors. Brookings is the nearest Oregon port to southern California. Industrial expansion and increase in population in southern California can be expected to continue the demand for lumber for use by most elements of the construction industry. Brookings mills are unable to compete in eastern United States and foreign markets due to lack of rail facilities and access to deep-draft navigation. The nearest railroad to Brookings is located at Arcata, California, 108 miles south, and the nearest deep-draft harbor for foreign trade is at Eureka, California, 116 miles south.

15. Also, as the ships engaged in the offshore trade have drafts that will not permit them to use the present or proposed channel dimensions, development of a substantial foreign market is not anticipated. In view of the above it is assumed that future markets for lumber produced by Brookings mills will be substantially the same as in the past. Based on an annual sustained production of about 126.5 million board-feet, distribution of lumber by market area is estimated to be as follows:

Market area	Percent of total production	Amount in millions of board-feet
Southern California	67.5	85.4
San Francisco and vicinity	17.3	21.9
Miscellaneous	<u>15.2</u>	<u>19.2</u>
Total	100.0	126.5

16. LUMBER SHIPMENTS. - Testimony of mill operators indicates that with adequate channel depths and port facilities they would prefer to use Brookings rather than Crescent City for barging lumber to southern California. Several operators also stated that savings might be realized by water shipment to San Francisco. An indication of savings to lumber mills by use of water transportation to southern California is shown through a comparison of transportation costs. The following table shows the costs per thousand board-feet for transporting surfaced green lumber from Brookings mills to Los Angeles via different methods.

Method	:	Cost thousand board-feet
<u>Combination truck and rail:</u>		
Truck (Brookings to Arcata)		\$6.50
Loading truck to rail		3.50
Rail (Arcata to Los Angeles)		<u>11.56<sup>1</sup></u>
Total		<u>21.56</u>
<u>Water shipment:</u>		
Average truck haul to Brookings		\$0.75
Wharfage at Brookings		0.50
Handling at Brookings		0.50
Barge rate		<u>12.00</u>
Total		<u>13.75</u>

<sup>1</sup> Based on \$.455 per 100 pounds and 2,540 pounds per 1,000 board-feet.

The above potential saving is generally reduced somewhat by wharfage charges at destination, although it is apparent that for shippers and receivers located at or near tidewater, surfaced green lumber can be shipped by barge to southern California at considerably less cost than by rail. It is, therefore, assumed that with the improvement as proposed the sustained production of 85.4 million board-feet of surfaced lumber destined for southern California ports would move by barge from the port of Brookings. A similar analysis was made for shipments to the San Francisco area.

17. The following table shows the costs per thousand board-feet for transporting surfaced green lumber from Brookings mills to San Francisco area via different means.

Method	:	Cost thousand board-feet
<u>Truck haul:</u>		
Total		\$13.25
<u>Combination truck and rail:</u>		
Truck (Brookings to Arcata)		6.50
Loading truck to rail		3.50 <sup>1</sup>
Rail (Arcata to San Francisco)		<u>7.75<sup>1</sup></u>
Total		17.75
<u>Water shipment:</u>		
Average truck haul to Brookings		0.75
Wharfage and handling at Brookings		1.00
Barge rate		<u>11.00<sup>2</sup></u>
Total		12.75

- <sup>1</sup> Based on \$0.305 per 100 pounds and 2,540 pounds per 1,000 board-feet.  
<sup>2</sup> Quoted from Crescent City to San Francisco and assumed same for Brookings to San Francisco.

A comparison of the above transportation charges indicates that little if any savings would be realized through water shipments from Brookings to San Francisco and, therefore, for purposes of this analysis it is assumed that lumber destined for the San Francisco area will continue to move via a truck haul.

18. Lumber moving to the market area designated miscellaneous includes both rough and finished stock, which is transported by truck and rail to eastern United States markets or to deep-draft ports for off-shore trade. It is believed that improvement of Chetco River entrance would not affect the amount or present method of this movement; therefore, no benefits were considered for the sustained production of lumber in this category.

19. LUMBER BENEFITS. -

a. Alternate port. - With construction of the proposed improvement, benefits would accrue from shipments of lumber through incremental savings in transportation costs by elimination of delays and through full loading of barges. Lumber shipments through the port of Brookings were initiated in the fall of 1959. During the years 1960, 1961, and 1962 these shipments have amounted to about 48, 32, and 17½ million board feet, respectively. The decline in shipments from 1960 through 1962 is due partially to the fact that, presently, only one barge operator serves Brookings while another serves Crescent City. Although terminal facilities at Brookings are open to all on equal terms, the operator serving Crescent City has elected to absorb trucking costs of lumber

from Brookings rather than use the port of Brookings, which has limited channel depth and inadequate maneuvering area. He has stated that he would use the port of Brookings after construction of the proposed improvement. The operator presently serving Brookings stated that upon completion of the improvement he would discontinue the use of his smaller barges and would be able to fully load his larger barges.

b. Due to high trucking costs to rail, as shown previously, the lowest cost for transportation of lumber from the Brookings area to Los Angeles, San Diego, and Port Hueneme is either by trucking to Crescent City or port of Brookings and barging the rest of the distance. Accordingly, a comparative analysis has been made using costs involved in shipping via Brookings under existing and improved conditions and via Crescent City. Elements included in the analysis are trucking costs, tug and barge operating costs, loading and unloading time, travel time including delays, and handling and wharfage fees.

c. Trucking costs. - Local millowners have stated their trucking costs for surfaced lumber to Crescent City (approximately 28 miles) to be \$2 per thousand board-feet, and to the Brookings dock (average under 3 miles) to be 75 cents per thousand, or a difference of \$1.25 per thousand board-feet in favor of the port of Brookings. Published rates, on a mileage basis, of the Willamette Tariff Bureau are \$4.79 per thousand board-feet (from 25 to 30 miles) and \$2.49 per thousand board-feet (from 0 to 5 miles), or a difference of \$2.30 per thousand board-feet for surfaced lumber. Since most of the lumber hauling in the area is either done by mill-owned trucks or on a contract basis, the rates indicated by published tariffs are considered unrealistic and, therefore, costs of \$2 and 75 cents per thousand board-feet to Crescent City and Brookings, respectively, will be used.

d. Delays. - Principal delays presently experienced in barging lumber from the port of Brookings are caused through waiting for tides due to insufficient channel depths and through difficulty in turning and maneuvering barges because of limited harbor area. Minor delays have occurred during periods of stormy weather. The barge operator presently serving the port has stated that entry or exit through the channel by lumber barge and tug is accomplished only at daylight high tide. He further stated that if the proposed improvements were completed the channel and harbor could be negotiated by his equipment at any time, day or night. This equipment consists of five different barges of two basic sizes. The smaller barges have a capacity of 1.5 million board-feet of surfaced green lumber and are 190 feet long and 50 feet wide, with a loaded draft of about 10 feet. The larger barges have a capacity of 2.2 million board-feet of surfaced green lumber and are 210 feet long, 54 feet wide, and have a loaded draft of about 12 feet. The tugs used in towing barges from Brookings vary in size from 675 horsepower to 1,000 horsepower, with drafts from 9 feet to 10.5 feet.

e. A study of the 1962 vessel operation reports for the port of Brookings indicates that time is lost in waiting for high tides before leaving the port with loaded barges. It must also be assumed that time is lost in waiting or adjusting arrival times to enter the port at high tide. The actual time lost in waiting for tides cannot be determined exactly as the barging company has made no statement of actual time lost, but it is assumed that 6 hours per trip would be a conservative estimate. This is considered to be half in-port time and half at-sea time.

f. Due to inadequate turning space in the present harbor, barges are turned in Chetco Cove and moved through the entrance stern first. In order to perform this maneuver it is necessary for the tug to bring the barge to rest in open water, drop the towing bridle, pick up lines from the stern, and move through the entrance to the dock. When the barge approaches the dock it is necessary, because of restricted room, to assist the tug in positioning the barge by means of lines and land-based donkeys. This procedure is time-consuming and also hazardous as was demonstrated when a barge got out of control and damaged several fishboats. With the improvement as proposed the tug could bring the barge through the entrance bow first to the turning basin. By means of a dolphin, placed at the corner of the basin, and barge slip, the barge would be held while the tug dropped the towing bridle. After this the tug would nose the barge into the slip, adjacent to loading facilities. Tug captains navigating Chetco River entrance stated that they prefer the proposed method of operating and are in agreement with the plan of improvement. They made no estimate as to amount of time which would be saved; however, it is conservatively estimated that with improvement at least one hour of operating sea time would be eliminated per tug.

g. Specific operating costs for average-type tug and barge used to service Brookings are not available; however, the barge operators have stated that the hourly rate for all tugs used in this service averages about \$50 per hour at sea or in port and that the rates for their 1,500- and 3,200-ton barges are \$200 and \$250 per day, respectively. Another operator estimated operating costs for his seagoing tugs, similar to the ones above, at \$43 per hour. For costs of towboats in the 1,000-horsepower class the Board of Engineers for Rivers and Harbors, in their report "Waterways Economics Series No. 5," has derived an operating cost of \$38.09 per hour. Considering that these costs were for 1951 and for inland waterway equipment, it is believed that an hourly operating cost of \$43 for tugs appears reasonable on a present-day basis and is used herein. In the case of operating costs as quoted for barges, the figures of \$200 and \$250 per day, or \$8.33 and \$10.42 per hour, appear high. However, by using construction costs of \$190,000 for the 1,500-ton barge and \$275,000 for the 3,200-ton barge, and allowing for depreciation, repairs, interest, marine insurance, taxes, and overhead, the hourly operating costs were computed to be \$6.51 and \$8.65 for the small and large barges, respectively. These costs appear reasonable and will be used with the average tug-operating costs in computing benefits by elimination of delays. The adjusted hourly cost for a tug and the 1,500-ton barge would be \$49.51,

rounded to \$49.50, and for the tug and 3,200-ton barge, \$51.65, rounded to \$51.60. To reflect the difference between at-sea and in-port costs for tug and barge the above costs were reduced by \$3 per hour, which is cost of fuel consumed. There would be no reduction in cost for crew as they are used in the loading and unloading operation.

h. Travel, loading, and unloading time. - According to the barge operator a round trip for tug and either their large or small barge from Crescent City to Los Angeles takes from 10 to 13 days depending on wind and weather. Additional time required for movement from Brookings and return in lieu of Crescent City amounts to 6 hours. Service to San Diego requires an additional 24 hours per trip. For the purpose of analysis, use will be made of the following travel times in hours per round trip:

	<u>Hours</u>
Crescent City to Los Angeles	240
Crescent City to San Diego	264
Brookings to Los Angeles	246
Brookings to San Diego	270

The time required to load 1.5 million board-feet of lumber on the 1,500-ton barge amounts to 16 hours, and for loading 2.2 million board-feet on a 3,200-ton barge 24 hours. However, due to limited channel depths in the Chetco River entrance, the 3,200-ton barge is not able to leave the port fully loaded even by waiting for high tide. Based on mean high tide, existing permissible load for the 3,200-ton barge is about 1.8 million board-feet. Loading time for this amount of lumber is 19 hours.

i. Incremental savings. - Following is a table showing comparative costs for shipping lumber to Los Angeles via Crescent City and Brookings using the 3,200-ton barge from both ports and a 1,500-ton barge from Brookings. No handling or loading costs were included as these costs are considered to be the same for both ports.

	Via Crescent City 3,200-ton barge		Via Brooklin Existing 1,500-ton barge		Via 3,200-t barge
Load (million board-feet)	2.2	1.5			1.8
Loading time (hours)	24	16			19
Unloading time (hours)	24	16			19
Delay (in-port time)	0	4			4
Total in-port time	48	36			42
Travel time (round trip)	240	246			246
Delay (at-sea time)	0	3			3
Total (at-sea time)	240	249			249
Cost per hour, in-port	\$48.60	\$46.50			\$48.60
Cost per hour, at-sea	51.60	49.50			51.60
Cost per trip	\$14,717	\$14,000			\$14,890
Cost per thousand board-feet	\$6.69	\$9.33			\$8.27
Truck haul cost	2.00	0.75			0.75
Total cost per thousand board-feet	8.69	10.08			9.02

From paragraph 16 of appendix B and from the above table, it is noted that with or without improvement of Chetco River the least costly alternative for shipping lumber from Brookings to Los Angeles is through Crescent City, and that by fully loading a 3,200-ton barge a saving of \$1.11 per thousand board-feet of lumber can be realized by use of the improved project. As the additional cost to San Diego would be constant for shipping through either Crescent City or improved Chetco River, the saving would be the same as for Los Angeles. Based on a saving of \$1.11 per thousand board-feet and on a sustained annual production of 85.4 million board-feet destined for the southern California market, benefits accruing as a result of the improvement would amount to ~~\$94,794~~, rounded to \$94,800. Using a conversion factor of 1.27 tons per 1,000 board feet the total tons of lumber would amount to 108,458, rounded to 108,500.

j. According to local interests, storms intense enough to close the port to barge traffic occur on the average of about three times per year and have a duration of about two days. While the plan of improvement would make the port more usable during stormy weather, it is not believed that complete protection would be afforded from all storms. Because of the present infrequency of port closures, no benefits have been evaluated due to delay because of storms.

## 20. PLYWOOD BENEFITS. -

a. Production and market. - Plywood is presently produced in the Brookings area by one company at about an annual rate of 90 million square-feet on a 3/8-inch-thick basis. Another company produced annually about 72 million square-feet of 1/10-inch-thick veneer. Capacities of these mills are greater than this. At the public hearing, the manager of the plywood company stated that 60 percent of his production moved to Arcata by truck thence to United States markets by rail; 28 percent by rail or buyer's truck from Arcata to California markets; and 12 percent by truck direct to purchaser in San Francisco. At an interview in September 1962, the plywood mill manager stated that at that time the major portion of their plywood moved to the Los Angeles market area rather than as previously stated. The veneer mill ships 80 percent of its production to the company-owned plywood plant at Grants Pass, Oregon, and the remainder is sold on the open market.

b. Future plywood shipments. - Testimony of a representative of a transportation company indicates that his firm has designed a special, covered barge capable of moving plywood from Oregon ports to ports in southern California at rates that are competitive with rates of other modes of transportation, and that with construction of the proposed improvement this barge service would be available at Brookings. Operators of the plywood mills also indicated that they were very much interested in development of a plywood water movement. In view of the above it is believed that with improvement of Chetco River entrance a barge movement of plywood would be initiated. It is also believed that future market distribution would indicate a much higher percent than the 28 percent now moving to southern California. However, it is



conservatively estimated that 28 percent of the sustained annual production of 108 million square-feet (3/8-inch basis) of plywood or 30.24 million square-feet of plywood, rounded to 30.2, would move via barge to southern California ports. Based on 1.25 pounds per square-foot, the 30.2 million square-feet of plywood amounts to about 19,000 tons. The sustained annual production of veneer of 86.4 million square-feet (1/10-inch basis) is considerably in excess of the needs of the company-owned plywood plant at Grants Pass, Oregon. Although this excess represents a potential tonnage of waterborne commerce, no barge shipments were included as the markets for veneer are numerous and indefinite.

c. Transportation savings on plywood. - As in the case of lumber, the lowest alternate cost for shipping plywood to southern California would be via truck to Crescent City and then barge to destination. No plywood shipments are presently being made by barge from Crescent City; however, it is felt that when plywood movements are initiated from Brookings, this service also would be made available at Crescent City. Therefore, any saving to be realized would be the difference in transportation costs required to move the material to destination via Crescent City or via Brookings after the improvement is completed. Using a unit savings similar to that used for lumber, and applying a factor of 1.27 tons per thousand board-feet, the unit saving per ton of plywood amounts to 87 cents. Based on an estimated movement of 19,000 tons of plywood and a unit saving of 87 cents per ton, an average annual benefit of about \$16,500 is anticipated to accrue as a result of the improvement.

d. Woodchips. - The growing demand for paper and cellulose products in recent years has stimulated widespread interest in moving woodchips by oceangoing barges to pulp plants located on tidewater. If the Brookings Harbor is improved, it is believed that the veneer and plywood plants and the largest lumber mill at Brookings will produce Douglas-fir chips for a kraft pulp mill located either at Longview, Washington, or at Gardiner, Oregon. Under present timber-processing practices, these larger mills at Brookings could produce a combined annual volume of about 55,000 units of chips, which is less than the estimated full potential of 67,000 units on a sustained-yield, timber-harvesting program amounting to 143 million board-feet annually. Mills which process less than 20 million feet of logs annually have not been included in this estimate, as the present cost of barking and chipping machines is uneconomical for small mills. The estimated annual volume of 55,000 units of chips is based on approximate ratios that a lumber mill will produce about .55 units of chips and a plywood plant about .47 units per thousand board-feet of logs processed.

e. Economics of the chip-producing industry indicate that lumber and plywood mills must receive about \$6 per unit and pulp mills can pay a top price of about \$14 per unit for Douglas-fir chips delivered at the pulp plant, leaving a maximum of \$8 per unit as the allowable total transportation cost between the chip-producing mill and the pulp plant. From a study made by a pulp plant at Longview, Washington, it has been

determined that an oceangoing barge 75 feet by 275 feet, loaded draft of 12 feet 6 inches, carrying 1,500 units, and equipped with pneumatic blowers for loading and unloading, could move chips from Brookings to Longview at a barge rate of \$6 per unit. The chips would be stockpiled and then loaded on a barge within a 24-hour period. In addition to the barge rate of \$6 per unit, there would be a wharfage cost of about 50 cents per unit and a loading and unloading cost of about 25 cents per unit. Cost of moving chips from the mills to the stockpile would vary with each mill, being about \$1 per unit for South Coast Lumber Company, 75 cents per unit for Brookings Plywood Corporation (each of which would truck their chips to the stockpile), and about 25 cents per unit for A. S. Agnew mill, which would use a conveyor and pneumatic blower.

f. Movement of woodchips would not be feasible via an alternate port. The estimated trucking cost to move chips to Crescent City, the nearest alternate port, would average about \$3.50 per unit for all mills, making a total average transportation cost from chip mill to pulp plant of \$9.50 per unit, which exceeds the allowable economical limit of \$8 by \$1.50. If chips were delivered from Crescent City to Gardiner instead of Longview, the barge rate would perhaps be reduced by as much as \$1.50 per unit, but this saving would still leave transportation costs at the \$8 maximum limit, and it is doubtful that chip production would be undertaken with transportation costs at the maximum value.

g. For conservative purposes, transportation savings have been estimated between Brookings and Longview on the assumption that the Brookings Harbor would be improved.

h. It is believed that the difference between the maximum allowable, economical transportation cost of \$8 per unit and the estimated transportation costs of moving chips by trucks, pneumatic blowers, and barges from Brookings to Longview is a conservative measure of benefits resulting from the harbor improvement. However, to allow for incentives for capital investments in transportation facilities, only 80 percent of the estimated savings have been taken as a benefit. The estimate of benefits to the three potential chip-producing mills at Brookings is summarized below, and amounts to \$23,200 annually on 55,000 units or 126,500 tons of woodchips.

Mill	Truck or blower cost	Barge, wharf- age and loading costs	Total trans- porta- tion cost	Savings per <sup>1</sup> unit	Annual produc- tion, units
S. A. Agnew (plywood mill)	\$0.25	\$6.75	\$7.00	\$1.00	14,000
South Coast Lumber Company	1.00	6.75	7.75	0.25	22,000
Brookings Plywood Corporation	0.75	6.75	7.50	0.50	<u>19,000</u>
Total					55,000

NET BENEFIT,  $.80 \times \$29,000 = \$23,200$

<sup>1</sup> Difference between total transportation cost per unit and maximum allowable t of \$8 per unit.

21. **COMMERCIAL FISHING.** - Ocean fishing grounds adjacent to Chetco River and the port of Brookings extend along the Oregon coast for a distance of about 25 miles north and south of Chetco River entrance. Each year these fishing grounds yield a significant harvest of crab, shrimp, salmon, tuna, and bottom fish.

22. **COMMERCIAL CATCH.** - Statistics furnished by the Fish Commission of Oregon for the years 1957 through 1961, and by the port of Brookings for 1962, give the following tonnages for food and shellfish landed at Brookings.

Year	Species (weight in tons)					
	Salmon		Crab	Bottom fish	Shrimp	Tuna
	Chinook	Silver				
1962	99.4		257	151	713	43
1961	237.3	58.1	585	59	128	68
1960	59.6	30.0	1,570	15	247	1
1959	3.4	9.6	525	17	145	1
1958	6.1	0.4	114	--	--	1
1957	4.1	3.2	4	--	--	--

23. **COMMERCIAL FISHING POTENTIALS.** - Statements from the U. S. Fish and Wildlife Service and the Fish Commission of Oregon indicate that the crab and salmon fisheries are fully exploited at this time. However, tuna, shrimp, and bottom fisheries are capable of greatly increased yields. (See report of the U. S. Fish and Wildlife Service, Department of the Interior, contained in appendix C.)

24. **COMMERCIAL FISHING LAWS AND PRACTICES.** - The commercial fishing season is controlled by the fish commission of the State of Oregon and varies from season to season. The length of season for 1962 for various fisheries was as follows:

Chinook salmon: 15 April to 31 October.  
 Silver salmon: 15 June to 31 October.  
 Bottom fish: No season limitations.  
 Crab: 1 January to 15 September.  
 Tuna: No season limitation but active season is August through November.  
 Shrimp: No season limitation but active season is from April through October.

Many boats used in fishing for crab in the winter and spring months also are used in fishing for salmon and tuna in the summer and fall months. Only a small percent of the boats are used in working the crab fishery during the summer months. Prior to 1962, otter trawlers working the shrimp fishery out of Brookings caught the relatively small amounts of bottom fish incidental to the shrimp operations.

25. COMMERCIAL FISHING FLEET. - According to records of the port of Brookings, the 1961 commercial fishing fleet consisted of 57 locally based boats and about 148 transient vessels. Loaded draft of boats ranged from 3 to 10 feet. The average loaded draft of locally based boats working in the crab, salmon, and tuna fishery is about 5.9 feet, whereas the average loaded draft of the transient crab, salmon, and tuna fleet is about 6.6 feet. The average loaded draft of the otter trawlers used in the shrimp fishery (and bottom fishery) is about 9 feet.

26. DELAY TIME IN MOORING BASIN. - Because of crowded conditions in the existing mooring basin, delay time, amounting to about one-half hour per trip, occurs as each boat must normally move neighboring boats in order to tie up or leave the docks.

27. DELAYS AT ENTRANCE. - Deepening of the channel to 14 feet would eliminate delays now incurred by fishing craft waiting for favorable tides, and would allow these craft to navigate the channel at any time it is permissible for a small boat to work the fishing area. In order to determine average delay time per trip, a study was made of the tidal cycle and of the drafts of boats working the different types of fisheries. Average drafts of boats were computed from data furnished by the port of Brookings. Percent of time during a day that adequate depths are available was computed, using as a basis the existing controlling depth of 6 feet and the average draft of the fishing boats with an allowance of 2 feet under the keels. The difference in the above percentage and 100 percent then represents the percentage of time for a given period that various fishing boats would be unable to navigate the existing Chetco River entrance. The number of hours of delay time per trip was computed by applying the percentage difference to one-fourth of the tidal cycle, 6.4 hours, or about one-half the average daylight time of 12 hours, assuming that delay is most likely to occur during the return of the loaded boat. The following table shows the estimated delay for boats engaged in the different fisheries.

Type of fishing	Estimated hours of delay per trip				
	Number of boats in existing fleet	Average draft (feet)	Required height of tide above MLLW (feet)	Percent of time tide exceeded required height	Percent of time loaded boats are unable to use entrance

Local boats:

Crab ) Salmon ) Tuna )	40	5.9	1.9	74	26
Shrimp	12	9.0	5.0	26	74
Bottom fish	5	9.0	5.0	26	74

Transient boats:

Salmon ) Tuna )	142	6.6	2.6	66	34
Shrimp	6	9.0	5.0	26	74

28. OPERATING COST OF COMMERCIAL FLEET. - The average operating costs of commercial fishboats (diesel powered, 30 to 50 feet long) as used in the crab and salmon fisheries on the Oregon coast, have been determined to be about \$10 per day for fuel and about \$2,700 per year for maintenance of boat, engine, and gear. For a boat fishing for crab, salmon, and tuna, the effective season would be about 180 days, 10 hours per day, and the hourly rate would be as follows:

Gear and maintenance	\$2,700
Fuel, \$10/day X 180 days	<u>1,800</u>
Total	4,500
\$4,500/1,800 hours = \$2.50/hour	

For otter trawlers working the shrimp and bottom fisheries, the average costs, based on \$15 per day for fuel, yearly maintenance for boat, engine, and gear of \$3,500 and an active season of 180 days at 10 hours per day, the hourly rate would be as follows:

Gear and maintenance	\$3,500
Fuel, \$15/day X 180 days	<u>2,700</u>
Total	6,200
\$6,200/1,800 hours = \$3.44/hour	

29. COMMERCIAL FISHING BENEFITS. - Commercial fishing benefits resulting from the proposed improvement are summarized in the following paragraphs according to type of fishery.

a. Salmon fishery. - Although the legal fishing season for Chinook salmon opens in mid-April and the season for silvers in mid-June, both continuing to the end of October, commercial fishing for these species in the Brookings area is limited to approximately 10 weeks of the year when these species are most plentiful. The average salmon troller will make about 24 trips per season to harvest the available catch, allowing for time lost due to storms and repairs. After the channel is deepened, the 40 locally based salmon trollers can reduce their delay time waiting for deep water in the entrance by 1.67 hours per trip. The saving from delay time at the entrance for 40 boats making 24 trips per year, at 1.67 hours per trip and \$2.50 per hour, amounts to \$4,000 annually.

b. The saving in delay time for the salmon fleet to disembark from the mooring basin after the improvement amounts to: 40 boats X 24 trips X .5 hour/trip X \$2.50 = \$1,200 annually.

c. Construction of the proposed improvement would eliminate delays now incurred by 142 transient salmon trollers while waiting for favorable tides to use the existing entrance channel. The benefit due to elimination of these delays would amount to: 142 boats X 1 trip/year X 2.18 hour/trip X \$2.50 per hour = \$770 annually, rounded to \$800.

d. The benefit to transient salmon trollers by elimination of delay in leaving the mooring area after the harbor improvement, would amount

to: 142 boats X 1 trip/year X .5 hour/trip X \$2.50 = \$180 annually, rounded to \$200.

e. Total annual benefits to salmon trollers, accruing from the harbor improvement, would be \$6,200.

f. Crab fishery. - Although the legal season for crab opens 1 January and extends through mid-September, the active season for most crab fishermen lasts about five months, January through May. An average crab boat could make about two trips per week, but allowing for time lost due to storms and repairs, it will average about 32 trips per season. The benefit to crab fishermen after eliminating delay at the entrance would be: 40 boats X 32 trips X 1.67 hours/trip X \$2.50/hour = \$5,340 annually, rounded to \$5,300.

g. Elimination of delay time in leaving the mooring area after the harbor improvement would yield a benefit to crab fishermen amounting to: 40 boats X 32 trips X .5 hour/trip X \$2.50/hour, or \$1,600 annually.

h. Total annual benefits to crab fishermen would be \$6,900.

i. Tuna fishery. - The commercial season for albacore tuna is controlled by appearance of the tuna off the southern Oregon coast usually in July and August. At this time, boats used in salmon and crab fishing start working in the tuna fishery. The present shallow entrance and previous lack of a cannery has discouraged larger deep-draft tuna boats from basing at Brookings. Tuna caught in southern Oregon waters, 30 to 100 miles offshore, though occasionally landed at this port are normally landed at Eureka. A cannery has been established at Brookings. After the harbor is improved, landing of tuna is expected to increase, resulting in greater activity on the fishing grounds with a significant increase in annual catch. According to estimates in the report of the U. S. Fish and Wildlife Service (see appendix C), the increased activity in the tuna fishery should increase the annual catch by an additional 387,500 pounds. At 17 cents per pound to the fishermen at the dock and allowing 60 percent of this value as a net after deductions for operating expenses, the annual benefit to tuna fishermen would be \$39,525, rounded to \$39,500.

j. Shrimp fishery. - Shrimp beds lying off the southern Oregon coast constitute a large, undeveloped resource, whereas beds located in northern California coastal waters have only been partially developed under state regulations. However, both Oregon and California shrimp grounds have contributed directly to the rapid growth of the shrimp fishery at Brookings. Shrimp landed for processing plants at Brookings are handshelled for the California fresh-shrimp market but, in general, shrimp landed by California boats are trucked to Crescent City or Eureka processing plants. The active season in Oregon normally begins about 1 April and ends about 31 October. The regulated California shrimp season opens about 1 June and closes after the allowable quota



has been harvested from the shrimp grounds but not later than 31 October. California boats, when not allowed to deliver shrimp to California ports, move to Brookings for as much as four months of the active Oregon season. This condition has stimulated growth of the Brookings-based fleet, which in 1961 consisted of two locally based boats but by the end of 1962 had increased to six, with six transient California boats basing at Brookings for part of the active Oregon season.

k. At present, shrimp boats operating from Brookings harbor have a loaded draft of about 9 feet, which causes them to encounter delays at the shallow entrance bar amounting to about 4.75 hours per trip. The harbor improvement will eliminate these delays, including delays in the mooring basin, and additional boats will be attracted to the port of Brookings, resulting in greater fishing activity and an increased catch.

l. Economic benefits to fishermen operating from Brookings also are limited by dealer-imposed regulations which require fishermen to deliver all of their catch within 24 hours of netting and to limit their catch to 1,000 to 3,000 pounds per trip to insure the quality of the shrimp landed. Because of these stringent dealer-imposed conditions governing the shrimping operations, combined with the abundance of the resource, it is believed that the net value of the increased catch taken by fishermen after the harbor improvement would average about 20 percent of the value of shrimp to fishermen at the dock.

m. Estimates furnished by the U. S. Fish and Wildlife Service indicate that the harbor improvement will allow Brookings shrimp fishermen to take an increased catch of about 2,485,000 pounds annually. Value of this catch attributable to the harbor improvement, based on a price of 9 cents per pound to the fishermen at the dock, would be: 2,485,000 pounds X 9 cents/pound X 20 percent = \$44,720, rounded to \$44,700 annually.

n. Bottom fishery. - Prior to 1962, bottom fish landed at Brookings were caught incidentally to the shrimp operations. Since 1962, with the completion of a new fish-processing plant at Brookings, five otter trawlers have based at Brookings and have worked the bottom fisheries.

o. As Brookings is close to the large California fresh-fish market and lies adjacent to an undeveloped bottom fishery of large potential, it is believed that harbor improvements at Brookings will encourage a substantial growth in the otter trawler fleet with a substantial increase in annual catch. As in the shrimp fishery, dealer-imposed limits on species and quantities which can be accepted will keep operating costs high in respect to price received by fishermen, leaving a net benefit estimated to be about 20 percent of this price as a benefit attributable to the harbor improvement.

p. Estimates of the U. S. Fish and Wildlife Service indicate that an increased catch of 2,867,000 pounds of bottom fish are expected to be landed at Brookings as a result of harbor improvement. Net economic

value of the benefit, based on a price of 7 cents per pound to fishermen at the dock, would be 2,867,000 pounds X 7 cents X 20 percent equals \$40,100 annually.

q. Summary. - Total commercial fishing benefits resulting from harbor improvement amounts to \$137,400 as follows:

<u>Fishery</u>	<u>Benefit</u>
Salmon	\$6,200
Crab	6,900
Tuna	39,500
Shrimp	44,700
Bottom	40,100
Total	<u>137,400</u>

30. RECREATIONAL BOATING. - Although Brookings Harbor is ideally suited for use by recreational boats, it is remotely located with respect to large population centers. This factor will limit the recreational benefits. Records of the Oregon State Marine Board for 1961 show that there were 133 recreational boats registered from the Brookings area. Of this number, 7 were considered to be potentially full-time users of the mooring basin during the boating season. The other 126 boats were of the outboard type which are trailered to the public launching ramp and, consequently, use the basin intermittently. Records of the U. S. Coast Guard for 1961 show that 2,066 sport-trips were made over the Chetco bar by the recreational boat fleet. From an analysis of boat-launching records of the port of Brookings, use of the basin by the trailer-boat fleet can be converted to the estimated equivalent of 17 permanently based, outboard boats which would use the basin every day of the 112-day boating season.

31. With a reduction in the overcrowded conditions of the boat basin after the harbor is improved, it is believed that recreational boating activity will increase. The U. S. Fish and Wildlife report (see appendix C) estimates that this increase will amount to an average of 11,000 recreational man-days per year. It is estimated that an additional fleet of 10 cruisers and the equivalent of 44 permanently based outboard boats would provide for the estimated increase in recreational boating days, assuming that 128 man-days would be provided by each cruiser per season and 224 man-days by each equivalent permanently based outboard boat.

32. The recreational benefits appear to be incidental to improvements for commercial navigation. The monetary value of this recreational activity has been evaluated by using the boatowner's net return from depreciated capital investment in his boat as though it were operated for hire. A summary of the recreational boating benefits to the owners of the existing and increased fleets, amounting to \$9,490, rounded to \$9,500, annually, is tabulated below. This benefit would be 50 percent local and 50 percent general.

Type of craft	Length (in feet)	No. of boats	Total depreciated value	Percent return			Per-cent gain	Value	Average days
				Ideal	Present	Future			

Net benefits from existing recreational fleet:

Outboard	12-20.9	17 <sup>1</sup>	\$17,000 <sup>2</sup>	12	85	90	0.60	\$100	--
Cruiser	21-32	$\frac{7}{24}$	$\frac{42,000^3}{59,000}$	9	85	90	0.45	$\frac{190}{290}$	10
Subtotal: \$290 - \$15 = \$275									

57

Net benefits from new boats added to fleet after improvement:

Outboard	12-20.9	44 <sup>1</sup>	44,000 <sup>2</sup>	12	0	90	10.8	4,750	--
Cruiser	21-32	$\frac{10}{54}$	$\frac{60,000^3}{104,000}$	9	0	90	8.1	$\frac{4,860}{9,610}$	10
Subtotal: \$9,610 - \$400 = \$9,210									

Total benefits: \$275 + \$9,210 = \$9,485; rounded to \$9,500

- 1 Equivalent number of permanently based boats.  
 2 Based on average depreciated value of \$1,000/boat.  
 3 Based on average depreciated value of \$6,000/boat.

33. ELIMINATION OF BOAT DAMAGE. - From conversations with local fishermen it was learned that at least seven commercial fishing craft have sustained damages in transiting the Chetco entrance channel. Inquiries were sent to last-known addresses of the boatowners. Two replies were received giving details on their damages. Owner of the boat PISCES stated that repairs to damages of keel and running gear sustained in early 1961 cost \$2,000. Owner of the boat SUNSET stated he struck a submerged rock pinnacle twice; the first time in August 1960, suffering damages of \$785, and again in July 1962 when damages amounted to \$50. See copies of replies contained in appendix C.

34. Using the above information, the average annual cost of boat damages for the 3-year period 1960 through 1962 amounts to \$945. Assuming that boatowners not reporting cost of repairs sustained some damage, it is estimated that, under present channel conditions, damages to commercial fishing craft would average about \$1,000 per year. Improvement of the entrance channel to a depth of 14 feet would provide adequate depth for the commercial fishing fleet and eliminate the possibility of incurring boat damages through striking submerged rock pinnacles.

35. GROUNDINGS. - Although a number of groundings have been reported by the barge operator in barging lumber from the port of Brookings in the three years of port operation, only two groundings have been reported as inflicting costly damages. In 1961 the barge MASTADON NO. 1 struck a rock in the entrance channel while being towed to sea and was subsequently repaired at a cost of \$18,000. In 1962 a barge was being maneuvered at the site of the lumber dock when it broke loose, damaging several fishing boats, the dock, and the barge. The improvements considered in this report would have eliminated all the known cases of groundings or damage suffered in using the present facilities. Lacking actual data and costs on all specific damage incurred in the past, it will be assumed that total damages to date would be \$18,000. On this basis, the value of elimination of grounding damages through construction of the improvement is estimated to amount to \$6,000 annually.

36. HARBOR OF REFUGE. -

a. The port of Brookings, with additional channel depths and extended north jetty, would provide increased use as a harbor of refuge for fishing craft and coastwise traffic during periods of storm, or when mechanical conditions might place the vessel in jeopardy. See appendix C for comment of the U. S. Coast Guard. Alternate ports that could provide refuge are Crescent City, California, 21 miles to the south, and Gold Beach, Oregon, 34 miles to the north.

b. The increased safety this harbor would provide to small craft is impossible to evaluate accurately in monetary terms. Nonetheless, benefits will accrue from providing an increased period of

time when the harbor may be used as a refuge where vessels in the fishing fleet and coastwise barge traffic could seek protection in time of emergency. It is believed that an annual amount of \$5,000 would be a conservative estimate of such benefits, considering only increased use as a harbor of refuge. It is estimated that 100 percent of the benefits would be derived by commercial vessels as present depths and jetties are adequate for recreational craft.

37. SUMMARY OF BENEFITS. - Following is a summary of benefits as evaluated in previous paragraphs:

Item	:	Benefit
Transportation savings:		
a. Lumber, 108,500 tons		\$94,800
b. Plywood, 19,000 tons		16,500
c. Woodchips, 126,500 tons		23,200
Commercial fishing		137,400
Recreational boating		9,500
Reduction of damages:		
a. Lumber barges		6,000
b. Commercial fish craft		1,000
Harbor of refuge		<u>5,000</u>
TOTAL BENEFITS		293,400





IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Office of  
Columbia Basin Representative  
1002 N. E. Holladay Street  
P. O. Box 3861  
Portland 8, Oregon

April 4, 1962

Colonel Sterling Eisiminger, District Engineer  
U. S. Army Engineers, District Portland  
628 Pittock Block  
Portland 5, Oregon

Dear Colonel Eisiminger:

Thank you for your notice (your reference NPPGW-4 of January 26, 1962) of Notice of Public Hearing on Chetco River, concerning a proposed project for the development of a small-boat basin.

The Bureau of Land Management has jurisdiction over high-valued timber lands tributary to the Chetco River as follows:

Total Merch. Acreage	4,058
Total Merch. Volume	159,277 M bd. ft.
Allowable Annual Cut	3.1 MM

Our District Manager, Boris T. Vladimiroff, at Coos Bay, Oregon, or a representative of his office, will attend your public hearing.

If Bureau of Land Management lands and resources are involved, our District Manager will want to work cooperatively with your field personnel in order to protect the interest of the government land under our jurisdiction. If the BLM is affected in any way, we will wish to receive copies of your project review report and any general design memorandum reports that you prepare in the future.

Sincerely yours,

E. J. Palmer  
Columbia Basin Representative

cc:  
Director 6.06  
State Dir. - Ore.  
Dist. Mgr. - Coos Bay, Ore.

111

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
PACIFIC NORTHWEST REGION  
POST OFFICE BOX 4137  
PORTLAND 8, OREGON

IN REPLY REFER TO  
2410

October 2, 1962

Mr. B. E. Wilcox, Chief  
Engineering Division  
Corps of Engineers  
628 Pittock Block  
Portland 5, Oregon

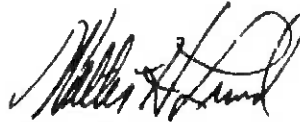
Dear Mr. Wilcox:

In reply to your letter of September 20, the Siskiyou National Forest is now one working circle. Timber management plans are no longer prepared for individual units such as the Chetco. For administrative purposes the working circle is divided into blocks. The Chetco Ranger District is one block of the Siskiyou Working Circle. Separate timber management plans are not prepared for each block. Forty-five (45) million board feet from the total Siskiyou annual allowable cut has been assigned to the Chetco Ranger District. This allowable cut may be administratively adjusted by the Forest Supervisor when such change is justified, but no changes other than minor adjustments are contemplated at present.

The Siskiyou timber management plan was approved on August 22, 1962. Pending a few minor corrections, we have not prepared duplicate copies of this plan and will probably not have this job completed until late this year. In the meantime, if you wish to verifax or otherwise duplicate portions of the plan for your report, arrangements may be made with the Division of Timber Management.

Negatives of two inch to the mile type maps by U.S.G.S. quadrangles are filed in the Division of Engineering. It is suggested that you call Mr. Victor Flach (BE 4-8211, Ext. 620) or Mr. Charles Gowan (BE 4-8211, Ext. 621) for information on procedure for requisitioning desired copies. Either of these men can probably furnish information on the Chetco, Galice, and Gold Beach Ranger District boundaries. The best information on a map of timber access roads can also be obtained through Mr. Flach or Mr. Gowan.

Sincerely yours,



WALTER H. LUND  
Assistant Regional Forester



UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE  
PACIFIC NORTHWEST REGION  
POST OFFICE BOX 4137  
PORTLAND 8, OREGON

IN REPLY REFER TO  
2410

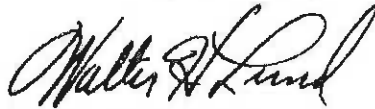
October 5, 1962

Mr. B. E. Wilcox, Chief  
Engineering Division  
Corps of Engineers  
628 Pittock Block  
Portland 5, Oregon

Dear Mr. Wilcox:

Reference is made to our letter of October 2. The portion of the Siskiyou N.F. allowable cut assigned to the Chetco Ranger District is 38 MM board feet, and not 45 MM board feet as given to you. The 45 MM board feet is the volume prior to adjustment. Please note the change.

Sincerely yours,



WALTER R. LUND  
Assistant Regional Forester



ADDRESS ONLY THE  
REGIONAL DIRECTOR

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE  
BUREAU OF SPORT FISHERIES AND WILDLIFE

FEDERAL BUILDING  
1002 N. E. HOLLADAY STREET  
P. O. BOX 3737  
PORTLAND 8, OREGON

(1-RB)

July 24, 1963

District Engineer  
Portland District, Corps of Engineers  
628 Pittock Block  
Portland 5, Oregon

Your file: NPPEN-PR-7

Dear Sir:

This is our Bureau's report on effects your proposed navigation improvements at the mouth of the Chetco River, Oregon, would have on fish and wildlife resources. The report has been prepared under the authority and in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and is based on data furnished us by your letter of January 28, 1963.

Personnel of Oregon State Game Commission and Fish Commission of Oregon, as well as interested local individuals, furnished information used in this study. Oregon State Game Commission and Fish Commission of Oregon have reviewed and endorsed this report, as indicated in the attached copies of letters from Director P. W. Schneider, dated June 21, 1963, and Director Robert W. Schoning, dated May 31, 1963. We agree with Director Schneider's comment concerning access by fishermen and Recommendation No. 2 has been revised accordingly. The Bureau of Commercial Fisheries has reviewed this report and concurs in our findings.

Project Area and Description. The Chetco River empties into the Pacific Ocean. Its mouth is located in Curry County, Oregon, about 6 miles northwest of the California border. Brookings, population 2,637, <sup>1/</sup> is located near the river's mouth immediately adjacent to the proposed navigation improvement area. Chetco River is considered to be one of the most undeveloped natural areas in Oregon. It drains a section of the Coast Range that is largely inaccessible, and is relatively isolated from population centers. Recent relocation of U.S. Highway 101 in the vicinity

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<sup>1/</sup> 1960 Federal census.

has improved accessibility of this coastal area. Principal industries in the area are lumbering, commercial fishing, and catering to sport fishermen and tourists. Chetco River flows into Chetco Cove, the placid waters of which are particularly attractive to sport fishermen.

Your agency completed construction of two rock jetties at the river's mouth in 1957, and removed rock pinnacles from the entrance channel during 1958-1959. Placement of necessary range markers, range lights, buoys, and a harbor entrance light was accomplished by the U.S. Coast Guard. Local interests constructed a paved launching ramp and a basin for mooring commercial and sport fishing boats, and installed stationary and floating wharves, moorage piling, a camping and parking area, and other facilities. The area is known as the Port of Brookings.

Proposed navigation improvements include: (1) construction of a 400-foot extension to the North jetty and a breakwater 1,800 feet in length; (2) provision of an entrance channel 14 feet in depth and 120 feet in width; (3) provision of a barge turning basin 300 feet by 700 feet and 14 feet in depth at mean lower low water; and (4) a small boat access channel 100 feet in width by 12 feet in depth at mean lower low water. Local interests would provide a small boat basin 12 feet in depth inside the breakwater. In addition to dredging sand, gravel, and silt, excavation of approximately 3,000 cubic yards of rock would be necessary. Spoil and excavated material would be deposited on land adjacent to or near the basin, at a location that would preclude return of such material to the river.

## FISH

### Without the Project

Sport Fishing. Steelhead and searun cutthroat trout, chinook and coho salmon, and many species of bottom fishes attract fishermen to the mouth of the Chetco River. The Oregon State Game Commission stocks about 3,000 cutthroat and 6,000 rainbow trout annually in the river, and has also stocked chinook and coho salmon. Razor clams and some crabs are harvested on nearby sand beaches.

Sport fishing has increased rapidly in the area during recent years, particularly for chinook salmon and bottom fishes, but angling pressure is still moderate compared to most other coastal areas. Fishing from the South jetty has been very popular since its construction, but the North jetty, being less accessible, has received little angler use. Full angling potential of the area is yet to be realized. Data collected by the U.S. Coast Guard indicate that 2,066 sport fishing boats entered Chetco Cove from the mouth of the river in 1962. During the same period, 103 charter boat trips were made from the port. The eight small rental boats available are fully used during most of the tourist season.

Without navigation improvements, all sport fishing is expected to increase in intensity to a certain extent, particularly jetty fishing and ocean fishing for bottom fishes. Ocean fishing and river fishing for resident and anadromous fishes are also expected to increase but to a lesser degree.

Commercial Fishing. Commercial fish landings at the mouth of the Chetco River increased slowly during the first 6 years of the last decade, but landings accelerated rapidly after provision of navigation improvements and construction of boat docking and fish processing facilities during the period 1957-1959. In 1952, the only recorded landings consisted of 2,341 pounds of salmon. In 1957, 14,726 pounds of salmon and 8,325 pounds of crab were landed. Table 1 shows commercial landings at the Port of Brookings in 1961, the latest year for which complete statistics are available. The landings of tuna, salmon, and bottom fishes are above average and those of shrimp and crab are below average.

Table 1. Commercial fish landings at the Port of Brookings in 1961.

Species	Weight of landings (pounds)
Bottom fishes <u>1/</u>	37,000
Tuna	136,259
Chinook salmon	474,563
Coho salmon	116,247
Crab	1,166,425
Shrimp	257,263

1/ Petrale, rex, Dover, and English sole, starry flounder, rockfish, lingcod.

Coast Guard records indicate that 60 commercial craft regularly use port facilities. This is probably the maximum use obtainable with present improvements.

#### With the Project

Sport Fishing. Extension of the North jetty and construction of the proposed breakwater would provide potentially usable fishing space on the North jetty and also afford protection from wave action for fisherman using the South jetty and those entering or leaving the port by boat. Increasing the mooring and launching facilities would also result in increased use of the area by sport fishermen (table 2).

Table 2. Projected angler-day use, without and with the project.

Type of fishing	Without the project-days	With the project-days
Jetty	11,400	14,900
Private Boat	13,300	24,300
Charter Boat	2,100	2,100
Rental Boat	4,400	4,400

Estimated annual increase in fisherman use of lowermost Chetco River and adjacent ocean waters attributable to proposed navigation and harbor improvements is estimated to be 14,500 angler-days, valued at \$59,000. This value would not accrue without provision of adequate public access.

Commercial Fishing. Use of the Port of Brookings by commercial fishermen is expected to increase considerably with proposed navigation and harbor improvements. Since salmon and crab are probably harvested at near maximum sustained harvest rate now, increases in landings of these species would mostly be catches that would otherwise be landed at some other port, not actual increases in total production. Stocks of tuna, shrimp, and bottom fishes are, however, capable of greater exploitation and actual net increases in harvest would probably come from these or other species relatively little exploited at the present time. Table 3 presents estimated average annual increases in commercial catch and value anticipated during project life.

Table 3. Estimated average annual increase in commercial catch and total value with the project

Species	Increase in catch (pounds)	Value
Bottom fishes	2,867,000	\$201,000
Tuna	387,500	77,500
Chinook salmon	7,700	4,400
Coho salmon	1,700	600
Crab	17,900	5,700
Shrimp	2,485,900	223,600
	Total	\$512,800
	Rounded	(\$513,000)

## WILDLIFE

The proposed navigation and harbor improvements are expected to have no appreciable effect on wildlife resources of the area.

## DISCUSSION

Generally, the fisheries of the Brookings-Chetco River area are capable of much greater exploitation than now occurs. With proposed navigation improvements and harbor developments, substantial benefits would accrue to both sport and commercial fishing during project life. The value of sport fishing is based on use with the project and estimated net value per day of fishing, and presupposes that public access to jetties be continued and launching and mooring facilities for sport fishing boats be provided in sufficient quantity to meet the demand. Value of the commercial fishery is estimated gross value of the catch to the fishermen.

Blasting of rock during the seasons of the year when anadromous fish are ascending or descending the river could cause large losses of adult and juvenile migrant fish. If blasting were confined to the period June 15 to July 15, when the least number of anadromous fish are present in the project area, losses from blasting would be minor.

## RECOMMENDATIONS

It is recommended:

1. That the report of the District Engineer, Corps of Engineers, include conservation and development of fish and wildlife resources among the purposes for which Chetco River navigation improvement project is authorized.

2. That public use of the North jetty extension and breakwater for sport fishing be permitted, except during periods when such use would interfere with project operation or public safety. Project constructed access or work roads to the North jetty should remain available for vehicular traffic to the landward end of the jetty, and any work road or berm constructed on the jetty should remain available for pedestrian travel for the convenience of fishermen.

3. That blasting be confined to the period between June 15 and July 15 to avoid killing anadromous fishes.

Please advise our Bureau of any change in engineering plans.

Sincerely yours,

*Richard E. Griffith*

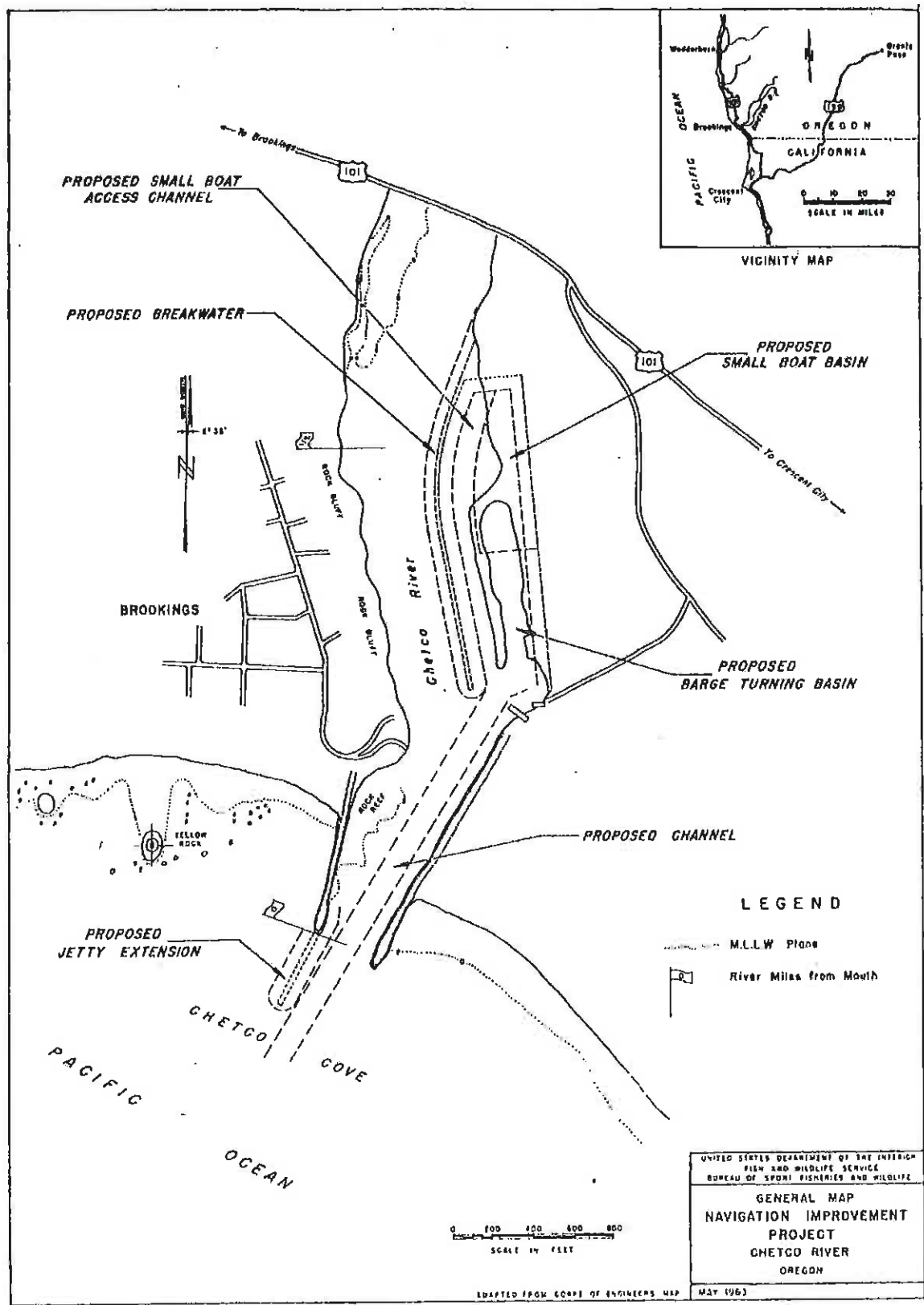
Richard E. Griffith  
Acting Regional Director -

Attachments

Copies (10)

Distribution:

- (2) Division Engineer, Corps of Engineers, Portland, Oregon
- (4) Fish Commission of Oregon, Portland, Oregon
- (4) Oregon State Game Commission, Portland, Oregon
- (4) Public Health Service, Portland, Oregon
- (1) Pacific Northwest Field Committee, Portland, Oregon
- (1) National Park Service, Portland, Oregon
- (3) Director, Bureau of Sport Fisheries and Wildlife, Washington, D. C.
- (8) Bureau of Commercial Fisheries, Portland, Oregon
- (1) River Basin Studies, Boise Area Office, Boise, Idaho
- (2) River Basin Studies, Portland Area Office, Portland, Oregon
- (1) River Basin Studies, Sacramento Area Office, Sacramento, California
- (1) River Basin Studies, Spokane Area Office, Spokane, Washington
- (1) River Basin Studies, Kalispell Field Office, Kalispell, Montana





COMMISSIONERS:

GERMAN F. MEIERJUNSEN, CHAIRMAN, BEAVERTON  
EDW. G. HUFFSCHMIDT, PORTLAND  
LEONARD H. HALL, CHARLESTON



STATE OF OREGON  
FISH COMMISSION OF OREGON  
307 STATE OFFICE BLDG., 1400 S. W. 5TH AVENUE  
PORTLAND 1

May 31, 1963

Mr. Irving B. Hazeltine  
Acting Regional Supervisor  
River Basin Studies  
Bureau of Sport Fisheries and Wildlife  
P.O. Box 3737  
Portland 8, Oregon

Dear Mr. Hazeltine:

Your report on the effects the proposed navigation improvements at the mouth of Chetco River would have on fish and wildlife resources has been reviewed by our staff.

We feel that your recommendation to confine any required rock blasting to the period June 15 to July 15 will keep losses to the fishery resources to a minimum. We concur with the report in general, and the recommendations therein. We cannot substantiate or refute your specific figures since no analysis of data pertaining to economic values has been made by this agency.

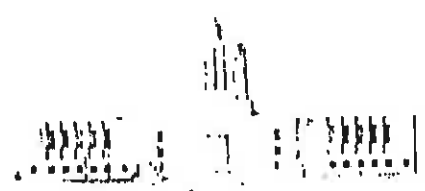
The opportunity to review and comment on your draft report is appreciated.

Sincerely,

*Robert W. Schoninc*  
ROBERT W. SCHONINC  
STATE FISHERIES DIRECTOR

cc: Oregon Game Commission  
Columbia Fisheries Program Office  
Sams

Hollis E. Bowles, Chairman  
Portland  
John P. Amacher, Winchester  
Tallant Greenough, Coquille  
Wayne E. Phillips, Baker  
Joseph W. Smith, Klamath Falls



STATE OF OREGON  
OREGON STATE GAME COMMISSION  
1834 S. W. ALDER STREET  
P. O. BOX 3503  
PORTLAND 8

June 21, 1963

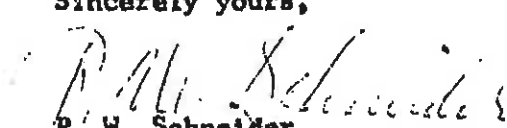
Regional Director  
U. S. Fish and Wildlife Service  
Bureau of Sport Fisheries and Wildlife  
Box 3737  
Portland 8, Oregon

Dear Sir:

I have reviewed your preliminary draft of a proposed report to the Corps of Engineers on the proposed navigation improvements at the mouth of the Chetco River and am in substantial agreement with this report as written. I believe your Recommendation No. 2, however, should include the additional provision that any work or access roads to the north jetty should remain available for vehicular traffic to the landward end of the jetty and that any work road or berm which may be constructed on the jetty remain available for pedestrian travel for the convenience of anglers.

I appreciate this opportunity to review your report in this preliminary form and to submit these comments to you.

Sincerely yours,



P. W. Schneider  
Director

cc: Fish Commission of Oregon

UNITED STATES COAST GUARD

ADDRESS REPLY TO:  
COMMANDER  
13TH COAST GUARD DISTRICT  
618 SECOND AVENUE  
SEATTLE 4, WASH.



GO/89  
Ser. oan-1113

From: Commander, 13th Coast Guard District  
To: District Engineer, Corps of Engineers, U. S. Army, Portland, Oregon

Subj: Chetco River, Oregon; harbor improvements

Refa (a) Your ltr dtd 5 March 1963, file NPPEN-PR-4

1. Reference (a) requested this office advise the estimated cost of construction and annual maintenance of any aids to navigation involved in subject project. We would propose to:

a. Establish electric gong fog signal at site of present Chetco River Entrance Light 1 (LL 793/868). This signal would be controlled from shore.

b. Establish flashing green light at southerly end of proposed 1800 foot breakwater at small boat basin.

c. Relocate Chetco River Entrance Range Front (LL 791/866) structure. This work would cost approximately \$15,000.00. Increase in annual maintenance would be \$860.00.

2. The improvement of Chetco River entrance would definitely enhance rescue operations in the area. As a result of the proposed improvement, it is anticipated that rescue craft could exit and enter the harbor under more adverse wind and sea conditions, thereby providing greater service to the boating public in cases of distress or imminent peril.

3. The enlargement of the boat basin, in association with the increased depth and jetty extension would provide increased facilities for vessels required to take refuge during storms or make a safe harbor due to mechanical or other conditions which might place the vessel in jeopardy.

  
E. V. CARLSON  
By direction

Rollin E. Bowles, Chairman  
Portland  
John P. Amacher, Winchester  
Tallant Greenough, Coquille  
Wayne E. Phillips, Baker  
Joseph W. Smith, Klamath Falls



STATE OF OREGON  
OREGON STATE GAME COMMISSION  
1634 S. W. ALDER STREET  
P. O. BOX 4136  
PORTLAND 8

March 19, 1963

District Engineer  
Portland District  
U. S. Army Corps of Engineers  
628 Pittock Block  
Portland 5, Oregon

Dear Sir:

Reference is made to Public Notice NPPEN-PR-7 dated 28 January 1963 in which you invite our comments on your review of proposed navigation improvements at the mouth of the Chetco River.

Important runs of anadromous fish use the Chetco River and our chief concern is with the timing of the project work schedule so as to do the least possible damage to upstream runs of adults and to downstream migrating young fish. The maximum range of time in which we expect minimum damage to anadromous fish populations is from June 1 to September 1; however, it would be desirable if blasting were restricted to a period between June 15 and July 15.

Sports fishing within the Chetco harbor is important for bottom fish and salmon. Up to 50 anglers per day fish for bottom fish in the lower harbor area from the banks, and later in the summer some salmon are also taken by bank anglers.

A charter service for anglers seeking salmon or bottom fish in the ocean outside the harbor is located at the Chetco Basin. The operator presently fishes two boats capable of handling 33 anglers per trip.

The Chetco bar and the area outside remains relatively calm when most other Oregon coastal ports are adversely affected by strong northwesterly summer winds. We believe that the proposed harbor improvements, increased popularity of the ocean fishery for both salmon and bottom fish and the

comparatively calm ocean conditions outside the Clatsop harbor will lead to a considerable increase in the sport fishery of the area.

Sincerely yours,

*P. W. Schneider*  
P. W. Schneider  
Director

cc: Fish Commission of Oregon  
U. S. Fish and Wildlife Service, Bureau of Sport Fisheries  
and Wildlife  
U. S. Fish and Wildlife Service, Bureau of Commercial Fisheries

COMMISSIONERS:  
HERMAN P. MEIERJURGEN, CHAIRMAN, SEASVERTON  
EDW. G. HUFFSCHMIDT, PORTLAND  
LEONARD N. HALL, CHARLESTON



STATE OF OREGON  
FISH COMMISSION OF OREGON  
307 STATE OFFICE BLDG., 1400 S. W. 5TH AVENUE  
PORTLAND 1

April 1, 1963

Mr. B. E. Wilcox, Chief  
Engineering Division  
U. S. Army Corps of Engineers  
628 Pittock Block  
Portland 5, Oregon

Dear Mr. Wilcox:

Reference is made to your letter of January 28, 1963 requesting a statement from this agency regarding effects the proposed navigation improvements at the mouth of Chetco River would have on the increased harvest of ocean-caught fish. Your letter was acknowledged by our correspondence of February 5, 1963. You requested that our comments be broken down into crab, shrimp, tuna, salmon, and bottom fish.

The overall effect of harbor improvement on the crab and shrimp industries would, in large part, depend on future regulations adopted by California and Oregon. At the present time, a lack of uniformity in the regulations of the two states results in increased landings at Brookings during certain parts of the seasons. If this situation should continue, improved harbor conditions would permit more boats to fish out of Brookings during these times, since the boat basin is often filled to capacity. This, of course, would mean increased landings. On the other hand, adjustment of the regulations could reduce the fleet at Brookings and also the landings. Improvement of the harbor entrance would permit increased usage by some of the larger boats under the present regulations.

There is some question that tuna landings would increase significantly. A principal deterrent to this would be the distance from the processing centers presently located in Astoria and Eureka, which would be expected to reduce the intensity of tuna fishing effort in the Brookings area.

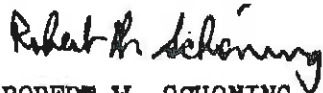
We would expect the landings of both salmon and bottom fish to increase. The relatively high economic value of salmon allows this product to be hauled a relatively long distance for processing and marketing. Bottom fish are presently processed in a plant located at Brookings. This operation could be expanded to accommodate an increased catch.

We believe that under present regulations the improvement of Brookings harbor would increase the landings of shellfish. If seasons or regulations are altered to coincide in the two states, these landings could decrease.

Market conditions and the abundance of fish and shellfish will affect all of the landings.

In regard to timing of the project construction schedule to reduce hazards to upstream and downstream migrant salmonids, we concur with the March 19, 1963 letter of the Oregon Game Commission which indicates a period of lesser potential damage extending from June 1 to September 15, and a period of minimum damage from June 15 to July 15. We recommend that blasting be accomplished during the latter period. This, of course, can be discussed further at the time of application to this agency for a blasting permit.

Sincerely,



ROBERT W. SCHONING  
STATE FISHERIES DIRECTOR

cc: Commissioners

STATEMENT

of

Brookings Plywood Corporation

In Support Of

Port Improvements to Chetco River, Oregon

April 4, 1962

---

My name is Jack Baker and I am Sawmill Superintendent of the Brookings Plywood Corporation. Our organization employs nearly 400 people, of which about 250 are shareholders in cooperative ownership.

We appear here in support of what we understand will be Federally sponsored improvements to our harbor at the mouth of the Chetco River. It is our understanding that these improved port facilities can in turn attract more adequate water carrier service from the Brookings harbor.

Brookings Plywood Corporation produces 90 million feet of plywood on a 3/8" basis and approximately 20 million board feet of lumber per year. Our operations require approximately 42 million feet of logs per year to sustain these productions.

Although our plywood is sold on a nationwide basis, better than 40% is currently going into California. With the exception of a small amount of cargo shipment to Hawaii out of Crescent City, the remaining nearly 60% is shipped by rail from Arcata, California. Shipment of the 40% into California is split



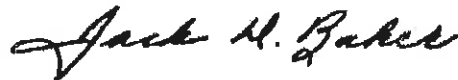
about 28% by rail or buyer's truck from Arcata, and 12% by our own trucks direct to the purchaser, principally in the San Francisco Bay area. All trucking to railhead is by our own trucks. No attempt has yet been made to move plywood by barge to California ports. We understand that Sause Bros., in collaboration with U. S. Plywood, has a covered, conveyORIZED barge in the design stage, intended for the shipment of plywood from Gold Beach to the California market. We too are very much interested in the development of such a vessel as Sause Bros. has informed us that, when and if built, service will also be available out of Brookings at rates very competitive with rail.

Nearly 60% of our lumber production now moves to the Southern California Ports of Los Angeles, Port Hueneme and San Diego by water carrier. About 50% is shipped through our own Port of Brookings while the remaining 10% is shipped via Crescent City. Another 10% also has moved by water, from Crescent City to the San Francisco Bay area. The local dock is 1 1/2 miles from our mill but it is some 27 or 28 miles to the docks at Crescent City. We figure our trucking cost at \$2.00 per thousand board feet to Crescent City whereas it is only \$.75 per thousand feet to the Brookings dock. Another 20% of our lumber is shipped to the San Francisco Bay area by truck, about half by our trucks and half by customers' trucks. We have for some time found it increasingly difficult to compete in the San Francisco Bay area due to the substantially lower freight costs (by rail) available to mills in Central and Southern Oregon and Northern California.

We realize the local dock has now been opened to all carriers, which should eliminate some of the extra cartage to Crescent City. However the present depth of the channel into our harbor still limits the type of vessel which can use our port. Improved harbor facilities should attract the type and frequency of water carrier service which would assist local shippers in their efforts to render better service to customers and at the same time reduce shipping costs.

Again, due to transportation problems, plants in our area have been unable to utilize our mill wastes for the manufacture of wood chips. Industry experts now estimate that within another two or three years our potential production of chips will be required by the pulp industry. When this market does become available it is a virtual certainty that the chips will have to be shipped by water carriers. The potential production of wood chips by our operation has been estimated at 20,000 units per year.

We respectfully request favorable action on the Port of Brookings' request for improvements to our local harbor, not only for the help it should give our industry, but also for its assistance to the other users of the facility, our commercial and sports fishermen.



Jack D. Baker  
Sawmill Superintendent  
BROOKINGS PLYWOOD CORPORATION

STATEMENT

of

MR. S. A. AGNEW

In Support of

PORT IMPROVEMENTS TO CHETCO RIVER, OREGON

April 18, 1962

---

My name is C. D. Cunningham, member of the firm of Cunningham & Cunningham, Attorneys at Law, Centralia, Washington, and I am presenting this statement in behalf of S. A. AGNEW, an extensive timber owner in Southwestern Oregon.

Mr. Agnew's holdings in Curry County consist of approximately 42,000 acres of land, 98% of which is timbered. The bulk of the acreage lies in the region between Gold Beach, Oregon and the southern boundary of the county. Practically all of this volume will move into Brookings, Oregon. If logging operations are to be conducted upon a sustained yield basis these lands could produce approximately a minimum of 100,000,000 feet of logs each year, barring any catastrophe, of course. It is estimated that approximately 50% of this timber will be peeler logs, which are used to manufacture veneer and plywood.

Mr. Agnew is the owner of two Oregon Coast Veneer Plants in the Brookings area. The Brookings Division Plant is located just a few miles north of the city limits of Brookings; the Harbor Division Plant is located less than a mile from the lumber dock on the Chetco River. He is also the owner of a stud mill located near the Brookings Division Plant.

At the present time our annual productions approximate 30 million feet of logs, 72 million feet of 1/10 veneer, and 4 million feet of studs.

While we now produce approximately 72 million feet of veneer in our two plants, the maximum production capacity of these two plants is 100 million feet per year. Any increase in the production capacity of veneer would, of course, mean an increase in our production of studs.

We utilize approximately one-half of the logs we cut each year in our own plants and sell the other half, primarily to local mills. Our present annual log production should be considered as preliminary only since we are now doing only selective logging; that is the clearing of rights of way, cutting out overripe and bug infested timber, and the like. During the past few years we have built some 35 miles of roads into our own timber. When this road system is tied into the 48 mile loop road now being built jointly by Oregon Coast Veneer and the Bureau of Land Management (U.S. Department of Interior) in the Pistol River region of southern Curry County,

it will open up some 1 1/2 to 2 billion feet of timber to the Brookings area. This jointly built road will not only make it possible to move these logs into Brookings, it will also allow greater loads per truck, since the trucks will not have to travel the public highways.

The potentials for the outbound movements on barges from our holdings in the Brookings region are: veneer, studs, logs and wood chips. As stated, our minimum annual production of veneer is 72 million feet. We have moved this veneer to both Grants Pass and Coquille, Oregon, on trucks. That which is trucked to Coquille is reloaded there onto rail cars for rail movement north to Tillamook.

In approximately one month of this year, January, 50 carloads were trucked to Coquille and reloaded to rail for Tillamook. Our cost of this trucking and reloading is \$200 per carload of 200,000 feet 1/10 veneer. This measure converted to weight on the basis of 400 pounds per 1,000 feet equals a cost of \$5.00 per ton. The rail costs from Coquille to Tillamook are costs borne by the consignee and are over and above our trucking costs. We feel that this combination truck and rail rate from Brookings to Tillamook could be substantially lower if barge transportation for this type of movement is available. In addition, a barging operation would assist us materially in alleviating the problems we've faced during the annual seasonal shortages of rail cars.

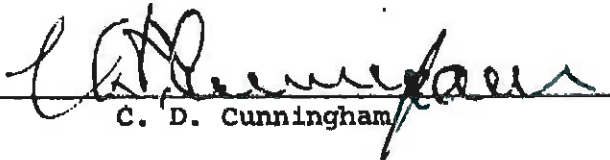
Our studs which now move by truck to Crescent City could also be a potential business for barges serving Brookings. We could

also move logs out on barges, the volume depending, of course, on markets and types required in areas served by barges.

Perhaps the last, but the most significant potential for a barging operation out of Brookings is in the movement of wood chips. The amount of wood fibre going to waste in our burners is tragic. Without rail service being available to us, and the high cost of trucking chips to existing pulp mills, we have no alternative at present. However, the construction of new pulp mills on tidewater in California and Oregon ports makes a low-cost barge movement of chips from Brookings practical and probable. We could convey chips direct from our Harbor Plant to a barge, a storage bin, or stockpile on the dock by a blower system. The chips from the Brookings plant would have to be trucked to the dock storage.

With the large volume of standing timber that we have, and the critical need to practice forest utilization and conservation to provide timber for the future, it is going to become an absolute necessity that there be no more waste of wood products.

Mr. Agnew not only supports the port improvements being requested for the Chetco River to make better barge service available, he also urges that these improvements be made as soon as possible so that the complete utilization of the timber resources of this area can be expedited.

  
C. D. Cunningham



## SOUTH COAST LUMBER CO. OREG. LTD.

P. O. BOX 1036

BROOKINGS, OREGON

PHONE 5671

### STATEMENT

of

C. L. Fallert, Co-owner

SOUTH COAST LUMBER CO. OREG. LTD.

In Support of

Port Improvements to Chetco River, Oregon

April 18, 1962

---

My name is C. L. Fallert. I am co-owner of the South Coast Lumber Co. Oreg. Ltd. We operate a sawmill located three miles north of the Chetco River Port facilities at Brookings. Our total employment in the sawmill and affiliated companies is about 200. We manufacture about 60 million board feet of lumber per year during normal operations. Our production capacity is greater than this amount. We can produce a greater volume on an overtime or extra shift basis when the market and price warrants the increased production.

Our annual log requirement is approximately 40 million feet which we acquire through purchase from both private and public timberlands. In 1961 practically our entire log supply came from our own timber holdings in the Big Flat area of Del Norte County, California, approximately 55 miles south of our mill.

Our production of 60 million board feet of lumber per year could be shipped by water carriers serving the Brookings port. When we began mill operations in Brookings some 13 years ago, we shipped all of our production by truck to points in California and Nevada. When the port at Crescent City, California opened up to Coastwise shippers in the early 50's, we trucked over 80% of our annual volume there and loaded it on Coastwise vessels. In early 1960, when barges started a service out of Brookings, we started shipping from this port.



## **SOUTH COAST LUMBER CO. OREG. LTD.**

**P. O. BOX 1038      BROOKINGS, OREGON      PHONE 5871.**

The largest percentage of the lumber we produce is sold in the Southern California port areas of San Diego and Los Angeles; and some in Port Hueneme. All of these points could be served directly by barge from Brookings if facilities were adequate. In addition, we truck 10 to 12 million feet a year into the San Francisco Bay area. If this business could be handled by barge from Brookings, it would mean quite a sizeable savings to us. What little lumber we ship by rail is trucked to the nearest railroad at Arcata, California; 107 miles south of Brookings for loading to rail cars. We cannot compete in the rail markets due to this excessive cost of hauling to rail, which means that efficient and frequent water carrier service is a necessity for the local mills to survive.

At the present, we do not manufacture wood chips. We burn the slab left-overs, which are the residue after the lumber is cut from the log. However, we are very anxious to get into the chipping business and we plan to do so if good port facilities could be afforded the area, and the markets for our chips are available and the freight costs make it economically feasible. We estimate that under normal operating conditions we could produce about 100 units of chips per day, which means our annual volume would be about 25 thousand units per year.

With the two new pulp mills planned for Humboldt Bay, California, and one for Gardiner, Oregon; also the potential markets of chips that could be shipped to Antioch, California, the chip market will be much more favorable in the future than it has been in the past. With the economic need for better utilization of wood by-products, we will have to find a way to ship our residue out for use, and water transportation is the most economical way.

The need to get every cent of return possible out of every log, especially in these days of depressed prices in the domestic lumber market and particularly so since the Canadian lumber has started to invade the Southern California market.





**SOUTH COAST LUMBER CO. OREG. LTD.**

P. O. BOX 1038

BROOKINGS, OREGON

PHONE 5671

The above stated facts clearly indicate that we are in dire need of an adequate port and shipping facilities to guarantee continuous and reliable shipping schedules out of the Port of Brookings.

SOUTH COAST LUMBER CO. OREG. LTD.

*C. L. Fallert*

C. L. Fallert

# THOMPSON BROS. LUMBER CO.

Box 67

Phone 3031

HARBOR, OREGON

## STATEMENT

of

Walter Thompson, Co-owner

Thompson Bros. Lumber Company

In Support of

Port Improvements to Chetco River, Oregon

April 18, 1962

---

My name is Walter Thompson. I am Co-owner of the Thompson Bros. Lumber Company located in Harbor, Oregon, about one-half mile south of the port's lumber dock on the Chetco River.

We cut about 6 million feet of lumber a year, all of which is sold in the Southern California port areas of Los Angeles and Port Hueneme. We use about 5 million feet of logs a year to maintain our lumber production.

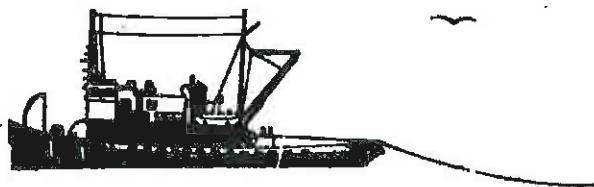
Since the port has been operating here at Brookings, we have shipped approximately seventy-five per cent of our production over the dock.

We would, however, prefer to ship all of our stock out of Brookings because of the terrific savings in truck hauling. We estimate our savings in hauling to be between \$1.25 and \$1.50 per thousand, which would represent an annual savings of between \$7,500 and \$9,000. In addition to the cost saving, there is the added advantage of better and easier control of stock, being in your own backyard.

Improvements in the Brookings port, such as a deeper channel and a more protected entrance, would make possible the use of larger barges and should make its use attractive to other carriers and thereby broaden our markets and outlets.



Walter Thompson



# SAUSE BROS. OCEAN TOWING CO., INC.

MANAGING OFFICE: TERMINAL SALES BLDG., PORTLAND, OREGON  
OPERATING OFFICES: CRESCENT CITY AND SAN PEDRO, CALIFORNIA

CABLE ADDRESS: SBOTCO

## STATEMENT

OF

HENRY SAUSE, JR., PRESIDENT

SAUSE BROS. OCEAN TOWING Co., INC.

PORTLAND, OREGON

IN SUPPORT OF

PORT IMPROVEMENTS TO CHETCO RIVER PROJECT, OREGON

APRIL 18, 1962

MY NAME IS HENRY SAUSE, JR., AND I AM PRESIDENT OF SAUSE BROS. OCEAN TOWING Co., INC. OUR COMPANY OPERATES FIVE SHALLOW DRAFT TUG BOATS AND SIX SHALLOW DRAFT LUMBER BARGES IN A CONTRACT CARRIER SERVICE BY WATER FROM OREGON AND WASHINGTON PORTS TO PORTS IN SOUTHERN CALIFORNIA, AND PRINCIPALLY TO LOS ANGELES HARBOR. WE HAVE BEEN IN THIS BUSINESS BEGINNING WITH 1951. IN THE PAST OUR COMPANY, WE BELIEVE, HAS PIONEERED AND PROVEN THE NEED FOR DEVELOPMENT OF SMALL COASTAL HARBORS, PRINCIPALLY BY THE PROVIDING OF SERVICE BEFORE HARBOR IMPROVEMENTS THAT ESTABLISHED THE BASIC EXPORT TONNAGE AVAILABLE WHICH WAS THEN USED TO JUSTIFY THE NECESSARY EXPENDITURES FROM FEDERAL FUNDS AND AS RECOMMENDED BY THE UNITED STATES ARMY ENGINEERS. THIS PIONEER POLICY WAS INITIATED AT CRESCENT CITY, CALIFORNIA DURING 1951 AND IN OREGON AT THE SIUSLAW RIVER BEGINNING WITH 1955, AND AT GOLD BEACH IN 1958. WE NOW URGE FURTHER IMPROVEMENT OF THE CHETCO PROJECT IN OREGON. THE ARMY ENGINEERS RECORDS AT PORTLAND, OREGON WILL SHOW THAT OUR COMPANY HAS TRANSPORTED APPROXIMATELY 116,440 SHORT TONS OF LUMBER FROM THE CHETCO PROJECT TO SOUTHERN CALIFORNIA PORTS. THE CHETCO PROJECT WAS NOT DEVELOPED BY THE ARMY ENGINEERS AS A COMMERCIAL HARBOR TO ACCOMMODATE COAST-WISE LUMBER TUGS AND BARGES. HOWEVER, WE BELIEVE THAT THE PROVEN COMMERCIAL FEASIBILITY AND THE PUBLIC INTEREST NOW DEMANDS FUTURE FEDERAL EXPENDITURE IN THE INTEREST OF MAKING THE CHETCO PROJECT COMPETITIVE AS A COMMERCIAL BARGE SHIPPING HARBOR WITH THE PORTS OF CRESCENT CITY, CALIFORNIA AND THE PORT OF GOLD BEACH, OREGON. TO ACCOMPLISH THIS WILL REQUIRE POSSIBLY AN ENGINEERED EXTENSION OF THE PRESENT TRAINING JETTIES, THE REMOVAL OF TWO MINOR ROCK PINNACLES IN THE WAY OF THE NAVIGATION CHANNEL, PLUS AN ENGINEERED

### RESPONSIBILITY

THE COMPANY IS FULLY RESPONSIBLE AND DOES NOT EXCEPT TO RESPONSIBILITY FOR ANY CONTRA-  
DICTED IN WRITING BY ITS PRESIDENT OR SECRETARY OR AN ATTORNEY IN FACT DESIGNATED AND /  
BY THE COMPANY'S DIRECTORS AND OFFICERS.—THE COMPANY HEREBY EXCEPTS TO ANY RESPONSE  
WITH CLAIMS OR DAMAGES OF ANY TYPE OR KIND CLAIMED AS PART OF AN UNDERSTANDING NOT AT

AUTHORIZED I.D.B WATER BARRIER, BREEDON, WASHINGTON AND CALIFORNIA

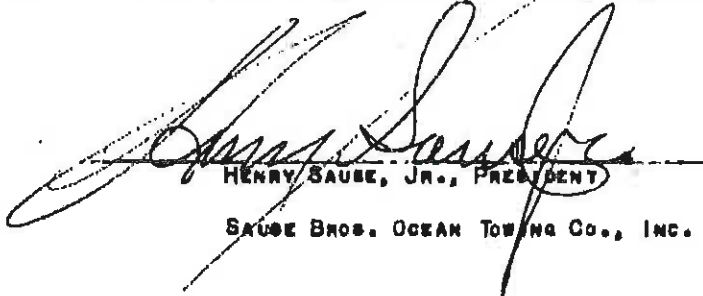


**SAUSE BROS.**  
OCEAN TOWING CO., INC.  
ROOM 217, TERMINAL BLDG.  
PORTLAND, OREGON

TURNING BASIN. ALSO, A NAVIGABLE CHANNEL AND TURNING BASIN DEPTH OF 14' AT MEAN LOW WATER WOULD ALLOW COMPETITIVE COASTAL BARGES AND SHALLOW DRAFT TUGS TO COMPETE WITH CRESCENT CITY, CALIFORNIA HARBOR AND GOLD BEACH, OREGON HARBOR, WHICH IS PRESENTLY NOT POSSIBLE ON A ECONOMIC BASIS AS REGARDS THE WATER TRANSPORTATION COMPANIES POSITION.

OUR COMPANY HAS DESIGNED A SPECIAL PLYWOOD TRANSPORTING BARGE THAT IS MORE THAN COMPETITIVE WITH TRUCKS FROM OREGON COASTAL PORTS TO SOUTHERN CALIFORNIA CONSUMING AREAS AND WILL TRANSPORT PLYWOOD WITHOUT DAMAGE AND AT A COMPETITIVE RATE TO ALL SOUTHERN CALIFORNIA PORTS. THIS BARGE IS SCHEDULED TO OPERATE BEGINNING WITH JUNE OF 1962 FROM THE PORT OF GOLD BEACH AND SIUBLAS RIVER, BECAUSE OF THE PRESENT INHERIT DANGER IN OPERATING FROM THE CHETCO PROJECT, BECAUSE OF WATER DEPTH AND ROCK PINNACLES ADJACENT TO THE NAVIGABLE CHANNEL. THE PLYWOOD BARGE CARGO IS SUBJECT TO WATER DAMAGE, AND THE VALUE OF EACH CARGO WILL EXCEED \$300,000 PER TRIP; WHEREAS, LUMBER CARGO VALUES SELDOM EXCEED \$180,000 PER TRIP, AND THE LUMBER IS NOT SUBJECT TO WATER DAMAGE, IN THE EVENT A BARGE TANK IS PUNCTURED BY ROCKS WHILE CROSSING OUT TO SEA FROM THE CHETCO PROJECT. OUR BARGE, MASTADON I, STRUCK A ROCK PINNACLE AND OPENED A FORWARD TANK WHILE CROSSING OUT OF CHETCO DURING EARLY 1961 AND WAS BEACHED AT CRESCENT CITY FOR COSTLY TEMPORARY REPAIRS, AND THEN CONTINUED HER VOYAGE TO DESTINATION. COMPLETE DRY DOCK REPAIRS WERE COMPLETED AT A COST IN EXCESS OF \$18,000. NO DISTRIBUTION OF CHARGES WAS MADE FOR THE LOST TIME AND TEMPORARY REPAIRS AT CRESCENT CITY HARBOR IN THE COMPANY RECORDS. HAD THE BARGE BEEN LOADED WITH PLYWOOD THIS ACCIDENT WOULD HAVE BEEN A CATASTROPHY OF MAJOR PROPORTIONS THAT COULD HAVE ELIMINATED THE PORT FOR SERVICE UNDER THE CONDITIONS OF OUR HULL AND CARGO INSURANCE POLICIES.

ACCORDINGLY, OUR COMPANY RECOMMENDS TO THE UNITED STATES DISTRICT ENGINEER AT PORTLAND, OREGON THAT ALL POSSIBLE IN THE PUBLIC INTEREST BE DONE TO ACCOMPLISH ECONOMIC SECURITY FOR THE BROOKINGS COMMUNITY THROUGH NECESSARY, HARBOR IMPROVEMENTS THAT WILL ALLOW THIS COMMUNITY TO COMPETE ON A EQUAL BASIS IN THE SOUTHERN CALIFORNIA LUMBER AND PLYWOOD MARKET BY WATER SHIPMENT. WE ARE CERTAIN THAT THE COMMUNITY WILL BUFFER SERIOUS FUTURE ECONOMIC DAMAGE IF IT IS IMPOSSIBLE TO OBTAIN THE NEEDED ADDITIONAL EXPENDITURES TO INCREASE THE PROJECT AS PRESENTLY PETITIONED FOR BY THE PORT OF BROOKINGS AND THE COMMUNITY.

  
HENRY SAUSE, JR., PRESIDENT  
SAUSE BROS. OCEAN TOWING CO., INC.

# STATEMENT

of

Robert S. Clarke

In Support of

Port Improvements to Chetco River, Oregon

April 18, 1962

---

My name is Robert S. Clarke, and I am the owner-operator of the fishing vessel "JEFFERSON", a sixty-one foot combination shrimp and crab boat, with a replacement value of \$35,000. I am also a part owner of a fish processing plant located in Eureka, California.

Prior to the construction of jetties and a boat basin in the Chetco River, only small boats of the 20 to 30 foot one man boat class could operate from the Chetco River, and then only coming and going at high tides.

At that time, we were able to fish only during the summer months and our gross annual earnings were \$4,000 to \$5,000. Work on shore during the winter months was necessary in order to secure an adequate income.

In contrast with the construction of jetties, the use of larger boats and the ability therefore to be employed in the fisheries on a yearly basis, my gross for the three years we've had jetties has averaged in excess of \$30,000 per year.

This average gross since the jetties were built is still inadequate to maintain my expanded business. The larger boat to work on a year-round basis necessitates a working force of three men directly involved in the boat's operation. During the crab season the products delivered by the boat requires the employment of thirty-seven people to process the crab, and during the shrimp season the number of people involved in processing the boat's catch is expanded to employ sixty-eight persons. You can see that with a working force like this dependent on the boat's operation, it is vital for that boat to operate as many days as possible in order to efficiently utilize the personnel.

The existing jetties and channel, while being responsible for my expanded business, are the major causes in limiting my boat's production. The existing jetties and lack of channel depth prohibit my fishing as often as possible.

During inclement weather, the existing jetties are not adequate to allow me a safe bar crossing when commercial fishermen in other ports nearby are able to work. On many days when the weather is good and the low tides are timed wrong, we lose considerable fishing time by leaving the grounds early enough to get in because of lack of channel depth. I estimate that the lack of channel depth and the existing jetties cost me at least \$15,000 per year in gross income.

This loss in income represents the difference between keeping a full time crew on a year-round basis which in itself leads to a more efficient operation and thus increased income. The improvements asked for would make the Chetco River a more dependable port, and therefore, would attract processing plants which would increase the boat gross by eliminating the freight deductions necessary to ship fish to out of town processing plants.

These plants would increase the portion of income retained within the area where the fish were produced.

We want improvements to the Chetco River so that we can get out to fish more often. By comparing the Chetco River with the Port of Crescent City, you can see what I mean by a more usable port. During January, February, and March, 1961; the good production months in crab, the boats in Crescent City operated 41 days more than the boats in the Chetco River. While the comparison shows 41 days more fishing time, I don't feel that the requested improvements would have allowed us to fish all of these days. However I feel that we could have fished 30 of these days with the improvements. My crab limit for these days was 3,000 pounds per day. This represents a loss of 90,000 pounds of crab, or at the dock price of 15 cents a pound, \$13,500.00 in gross income in the first three months of the year.



Robert S. Clarke

STATEMENT

of

John Hewitt

In Support of

Port Improvements to Chetco River, Oregon

April 18, 1962

---

My name is John Hewitt, and I own and operate a 40' troll boat, the "ZILLAH B", from Brookings. I have been a commercial fisherman for eleven years, and have resided in Brookings for nine years. I am also the owner of Hewitt's Anchorage located on the west side of the Chetco River, immediately south of the U. S. Highway bridge.

About eighty percent of my annual catch is delivered to the Halibut Producers Cooperative, a cooperative with coastwise facilities, of which I am a member.

A comparison of the fish landing records at the Coop's station in Brookings and Crescent City revealed that in 1961 the members fishing out of Crescent City were on the grounds twenty-eight days more than the members out of Brookings. The prime reason for not getting out at Brookings is insufficient depth in the channel, and inadequate entrance protection, especially on the north side.

The size and type of my boat is representative of about thirty such boats moored at Brookings. Our operation consists of



trolling for salmon and albacore, from about May twenty-seventh to the end of September, and fishing crabs during the winter months, December through March.

The attached company log records of a boat comparable to mine, fishing from Crescent City for the period of December 15 to May 2 indicate that the poundage landed at that port was 43% greater than from my boat at Brookings. However, during the period from November 27 through December, these same two boats fished side by side from Brookings and the poundage landed was practically the same.

Our boats are tied to a plant production schedule and when we miss a day's fishing, that production cannot be made up.

My boats gross earnings from November 27, 1960, to October 30, 1961, was \$43,000. Thirty thousand dollars of the before mentioned figure was made on crab. And, 50% is taken off for boat and crew -- 20% for the boat and 30% for the crew -- about 5% for gear. The balance is my net. Of the remaining \$13,000, 20% is paid to the boat and 20% paid to a crew, leaving 60% to me. It is my estimate that one-third of the boats moored at Brookings fall within this same category, and a number of others could if the improvements now being sought for the Chetco are made.

In addition to supporting the proposed improvements, which will enhance the commercial fishing industry, I am particularly interested in the construction of the proposed dike in the river, which will narrow the river and in turn should cause a scouring action on the shoal area located in front of my anchorage.

Attached are the Halibut Producers Cooperative log records of the "ZILLAH B" fishing from Brookings, and the "JEANNIE MARIE" fishing from Crescent City.



John Hewitt

Record of  
"ZILLAH B"  
 Fishing Days & Pounds Landed  
 From November 26, 1960 to May 4, 1961  
 Brookings, Oregon

Period	Days Actually Fished	Pounds Landed
11-26-60 to 11-27-60	2	3,401
12-1-60 to 12-3-60	3	11,098
12-4-60 to 12-9-60	5	14,838
12-11-60 to 12-15-60	5	15,000
12-20-60 to 12-22-60	3	6,348
1-10-61 to 1-12-61	2	7,184
1-18-61 to 1-21-61	4	12,897
1-22-61 to 1-29-61	7	19,346
2-1-61 to 2-3-61	2	10,789
2-7-61	1	3,796
2-16-61 to 2-18-61	3	11,754
2-19-61 to 2-22-61	4	8,221
2-28-61 to 3-3-61	4	13,038
3-4-61 to 3-12-61	2	4,738
3-27-61 to 4-2-61	4	12,739
4-13-61	1	1,456
4-21-61	1	3,382
5-4-61	<u>1</u>	<u>3,435</u>
TOTAL	54	163,460

Record of  
"JEANNIE MARIE"  
 Fishing Days & Pounds Landed  
 From November 26, 1960 to May 2, 1961  
 Crescent City, California

Period	Days Actually Fished	Pounds Landed
11-26-60 to 11-28-60	3	8,349
12-1-60 to 12-3-60	3	20,573
12-4-60 to 12-9-60	6	21,017
12-11-60 to 12-16-60	6	18,700
12-19-60 to 12-22-60	4	10,434
12-26-60 to 12-29-60	4	6,745
1-9-61 to 1-13-61	5	20,859
1-16-61 to 2-3-61	19	96,179
2-5-61 to 2-7-61	3	16,053
2-12-61 to 2-18-61	5	18,286
2-19-61 to 2-24-61	6	19,942
2-28-61 to 3-3-61	4	8,799
3-7-61	1	4,165
3-19-61 to 3-22-61	3	2,674
3-27-61 to 3-29-61	3	3,073
3-30-61 to 4-7-61	3	7,056
4-8-61 to 4-23-61	5	20,390
4-25-61 to 4-26-61	2	9,739
5-2-61	<u>1</u>	<u>9,720</u>
TOTAL	86	322,753

U. S. ARMY ENGINEER DISTRICT, PORTLAND  
CORPS OF ENGINEERS  
622 FITZGERALD BLOCK  
PORTLAND 8, OREGON

NPPEN-PR-4

10 June 1963

Mr. Harry Howard  
2205 - 2d  
Eureka, California

Dear Mr. Howard:

We are presently preparing a report on proposed improvements for navigation at Chetco River to include provision of an entrance channel 14 feet deep at mean lower low water, and extension of the north jetty out to the rock pinnacle supporting the U. S. Coast Guard light.

From conversations with local fishermen it is our understanding that several commercial craft, including yours, have sustained damage in navigating the entrance channel of Chetco River. Provision of a 14-foot channel depth should eliminate the possibility of further damage to the commercial fishing craft using this harbor. Elimination of this damage is a benefit occurring to the proposed improvement. In order to properly evaluate these benefits and include the information in our report, we would appreciate your furnishing us the following information; (a) Name of your boat; (b) date that damage occurred; (c) description of damage; (d) cost of repairs; and (e) description of any difficulties now experienced in using the project.

Your assistance in furnishing the above information will help us assess the economic benefits resulting from construction of the proposed improvement. A self-addressed envelope is inclosed for your convenience.

Sincerely yours,

1 Incl  
Envelope

B. E. WILCOX  
Chief, Engineering Division

Boat Pinner - PISCES

Damage to Boat, Feb or March 1961

Cost 2000<sup>00</sup>

Tore Keel, Bent Propeller, new re-  
duction gear, and new line shaft bearings.

Harry A. Howard

2205 - 2nd St

Emery Calif

you still can't get in there unless you  
have high Tide.

U. S. ARMY ENGINEER DISTRICT, PORTLAND  
CORPS OF ENGINEERS  
628 FITTICK BLOCK  
PORTLAND 8, OREGON

NPPEN-PR-4

10 June 1963

Mr. Chester L. Hall  
1144 Vernon  
Eureka, California

Dear Mr. Hall:

We are presently preparing a report on proposed improvements for navigation at Chetco River to include provision of an entrance channel 14 feet deep at mean lower low water, and extension of the north jetty out to the rock pinnacle supporting the U. S. Coast Guard light.

From conversations with local fishermen it is our understanding that several commercial craft, including yours, have sustained damage in navigating the entrance channel of Chetco River. Provision of a 14-foot channel depth should eliminate the possibility of further damage to the commercial fishing craft using this harbor. Elimination of this damage is a benefit occurring to the proposed improvement. In order to properly evaluate these benefits and include the information in our report, we would appreciate your furnishing us the following information: (a) Name of your boat; (b) date that damage occurred; (c) description of damage; (d) cost of repairs; and (e) description of any difficulties now experienced in using the project.

Your assistance in furnishing the above information will help us assess the economic benefits resulting from construction of the proposed improvement. A self-addressed envelope is inclosed for your convenience.

Sincerely yours,

1 Incl  
Envelope

B. E. WILCOX  
Chief, Engineering Division

*Dear Sir:*

*Twice I struck a rock point inside of the jetties. The first time cost \$785.00 for damage to the fathometer and keel. Aug-1960  
The second time was July 1962, but only*

amounted to \$50<sup>00</sup> damage to Beel.

My boat draws 1 foot of water, but I cannot cross the bar on less than half tide. Therefore I am unable to visit the port during the winter months.

Sincerely

C. L. Hill

M.V. "Sunset"

# 725-721

**SPORTHAVEN, INC.**

**Box 126, Harbor, Oregon**

**STATEMENT**

**of**

**B. A. McVay, President**

**Supporting**

**Port Improvements to Chetco River, Oregon**

**April 18, 1962**

---

My name is Archie McVay. I am one of the owners of Sporthaven, Inc. Before the jetties were constructed, I owned all the flat land adjacent to the south side of the river. On this land I donated easements to construct the South Jetty, a spoil area, and a roadway to and from the jetty site. After the jetties were constructed, Noble Ellison and I formed a corporation, which we called Sporthaven. We then leased a dragline and started excavating a small basin and constructed a protective dike just to take care of our own charter boats. Before the middle of the first summer, the area we had dug was filled with commercial boats, and more wanted in. By the fall of 1958 we had constructed a dock and fish hoist, and in a limited way took care of the boats then using the Port.

By this time I could see that the business was growing too rapidly for us to keep up with, so Sporthaven donated to the Brookings Port Commission part of the basin already dug, plus an additional 15 1/2 acres of ground. The Port Commission immediately went ahead and dug more basin, but it soon became obvious that it was beyond their means to keep ahead of the demand for boat moorage space.

In the fall of 1959 we constructed a lumber dock for barges, and a fish unloading dock. Warrenton Sea Food Co. leased 80 feet of the fish dock and built a processing plant. Tom Lazio



Fish Co. of Eureka, California leased the other 60 feet of dock at which it receives fish and crab.

In 1961 Sporthaven donated an additional 7 1/2 acres of ground so that a better long range plan could be formulated with some provision to take care of the sport boats that have been coming into the river in ever increasing numbers.

On February 20 of this year a tariff was filed with the Federal Maritime Commission which guarantees that the lumber dock on our property is to be open to the public on an equal basis, so that any barge company may use the dock facilities.

We have always cooperated with the Port of Brookings in the past, and will continue to do so in the future. We can grant additional easements for necessary access to any new improvements being requested here. Or, we can make additional spoil disposal areas available if necessary.

The immediate use, and the overloaded capacity of facilities that we built for small boats within the past few years indicates the need for additional facilities just to take care of the boats that want to use these facilities now, to say nothing of the future.

Sporthaven fully supports the Port of Brookings in its request for additional port improvements and we stand ready to assist in the future just as we have done in the past.

B. A. McVay

B. A. McVay



# THE PORT OF BROOKINGS

BROOKINGS, OREGON

COMMISSIONERS:  
KARL OSTENBERG, Chair  
FRANK AKIN  
L. P. HEIN  
LEO SHURTLEFF  
FRANK BUTTON

January 10, 1964

The District Engineer  
Corps of Engineers  
Pittock Block  
Portland, Oregon

RE: Chetco River, Oregon  
Review Report 1963

Dear Sir:

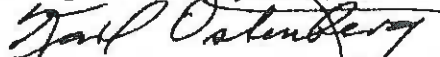
On January 9th, 1963, representatives from this Port conferred your staff regarding local participation in the project if recommended by the Corps of Engineers. Your staff gave us a draft of proposed language which describes the local participation expected from the Port in this connection. This language read as follows:

\*Adoption of the project would be subject to the provision that, prior to construction, local interests agree to (a) provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; (b) hold and save the United States free from damages due to construction and subsequent maintenance of the project; (c) provide and maintain at local expense adequate public terminals and transfer facilities open to all on equal terms; (d) provide and maintain without cost to the United States depths in berthing and mooring areas and local access channels serving the terminals, commensurate with the depths provided in related project areas; (e) accomplish without cost to the United States such alterations as required in sewer, water supply, drainage, and other utility facilities, as well as their maintenance; and (f) contribute in cash 6.1 percent of the cost of construction by the Corps of Engineers of the small-boat access channel and that portion of the break-water adjacent thereto, and that such contribution,

presently estimated at \$8,400, be paid in a lump sum prior to commencement of construction."

This is to advise you that at a special meeting of this Port held on January 10, 1964, the above language was approved and this Port by resolution has and does hereby agree to the requirements above quoted.

Respectfully yours,

  
Karl Ostenberg, President

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CHETCO RIVER, OREGON  
Information Called for by  
Senate Resolution 148, 85th Congress  
Adopted 28 January 1958

1. Existing project description. - The existing project provides for stabilization of the channel through the bar at the mouth of Chetco River by construction of jetties and by dredging. No specific channel dimensions were authorized. The existing project was completed in 1959.

2. Navigation problem. - The principal difficulties attending navigation arise from inadequate channel depths and lack of space for turning, maneuvering, and mooring of barges, tugs, and boats. Due to the presence of rock pinnacles in the entrance channel, with controlling depth of 6 feet below mean lower low water, operators can only move their tugs and barges through the river mouth safely during daylight, high tides. Movements of large fishing boats also are restricted to the high stages of the tide. In addition to delays incurred, vessels are subjected to the hazard of striking rock pinnacles. A number of commercial fishermen have reported their boats striking the pinnacles, and a lumber carrying barge was extensively damaged in 1961. Inadequate channel depths also prohibit the use of larger and more efficient navigation equipment.

3. Plan of improvement. - The proposed improvement includes the following items: (a) An entrance channel 120 feet wide and 14 feet deep at mean lower low water; (b) an extension to the north jetty about 450 feet in length, with an increase in elevation of the existing portion to 16 feet above mean lower low water; (c) a barge-and-tug maneuvering area about 250 feet wide, 650 feet long, and 14 feet deep at mean lower low water; (d) a protective dike 1,800 feet long, located within the river estuary; (e) a small-boat access channel 100 feet wide and 12 feet deep at mean lower low water; (f) a barge slip about 200 feet wide, 700 feet long, and 14 feet deep, to be provided by local interests; and (g) enlargement of the small-boat mooring area to 12-foot depth by local interests. Greater entrance channel dimensions than those specified above were considered; however, due to limited width between existing jetties the proposed dimensions are considered to be the maximum attainable without causing undermining or subsidence of the jetties.

4. Estimated first costs, annual costs, and annual benefits based on January 1964 prices, a 50-year period of analysis, and an interest rate of 3 percent for Federal and non-Federal investments are as follows:

Estimated first cost of recommended improvement:

Federal	\$1,323,000 <sup>1</sup>
Non-Federal	27,000 <sup>2</sup>
TOTAL	<u>1,350,000</u>

<sup>1</sup> Does not include \$23,000 for preauthorization studies and local cash contribution of \$9,000.

<sup>2</sup> Includes cash contribution of \$9,000.

<u>Estimated annual costs:</u>	<u>Federal</u>	<u>Non-Federal</u>	<u>Total</u>
Interest and amortization	\$51,420	\$1,050	\$52,470
Maintenance	26,000	0	26,000
TOTAL	<u>77,420</u>	<u>1,050</u>	<u>78,470</u>
(rounded to)			\$78,500

Estimated annual benefits:

Transportation savings	134,500
Commercial fishing	137,400
Recreational fishing	9,500
Reduction of damages	7,000
Harbor of refuge	5,000
TOTAL	<u>293,400</u>

Benefit-to-cost ratio: 3.7 to 1.0

5. Apportionment of cost and local cooperation. - Local interests would be required to contribute 6.5 percent of the construction costs of the small-boat access channel and that portion of the dike adjacent thereto in recognition of the recreational benefits expected, which are considered equally local and general. Recommended requirements for local requirements are as follows: (a) Provide without cost to the United States all lands, easements, and rights-of-way required for construction and subsequent maintenance of the project and of aids to navigation upon the request of the Chief of Engineers, including suitable areas determined by the Chief of Engineers to be required in the general public interest for initial and subsequent disposal of spoil, and necessary retaining dikes, bulkheads, and embankments therefor or the costs of such retaining works; (b) hold and save the United States free from damages due to construction and maintenance of the project; (c) provide and maintain at local expense adequate public terminals and transfer facilities open to all on equal terms; (d) provide and maintain without cost to the United States depths in berthing and mooring areas and local access channels serving the terminals, commensurate with the depths provided in related project areas; (e) accomplish without cost to the United States such alterations as required in sewer, water supply, drainage, and other utility facilities, as well as their maintenance; and (f) contribute in cash 6.5 percent of the cost of construction by the Corps of Engineers of the small-boat access channel and that portion of the

dike adjacent thereto, and that such contribution, presently estimated at \$9,000 be paid in a lump sum prior to commencement of construction. Net cost to the United States for the recommended improvements, exclusive of aids to navigation, is \$1,308,000 for construction and \$25,000 annually for additional maintenance. Local interests have the financial ability to provide the specified requirements of local cooperation.

6. Analysis for 100-year period of analysis. .. Following is an analysis of estimated first cost, annual costs, and annual benefits based on January 1964 prices, a 100-year period of analysis, and an interest rate of 3 percent for Federal and non-Federal investments.

<u>Estimated first cost:</u>	
Federal	\$1,323,000 <sup>1</sup>
Non-Federal	27,000 <sup>2</sup>
TOTAL	<u>1,350,000</u>

- 1 Does not include \$23,000 for preauthorization studies and local cash contribution of \$9,000.  
2 Includes cash contribution of \$9,000.

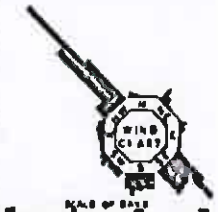
<u>Estimated annual costs:</u>	
Federal:	
Interest and amortization at 0.03165	\$41,900
Maintenance	26,350
Total	<u>68,250</u>
Non-Federal:	
Interest and amortization at 0.03165	840
Maintenance	0
Total	<u>840</u>
Total annual costs (rounded to)	<u>69,090</u> \$69,100

<u>Estimated annual benefits:</u>	
Transportation savings	134,500
Commercial fishing	137,400
Recreational fishing	9,500
Reduction of damages	7,000
Harbor of refuge	5,000
TOTAL	<u>293,400</u>

Benefit-to-cost ratio: 4.2 to 1.0

7. Discussion. - The project is considered amply justified on the basis of studies and criteria in the report. Proposed local cooperation is consistent with other similar projects.



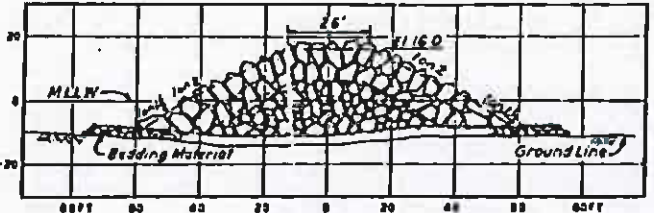
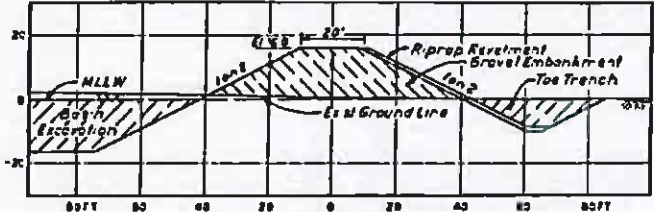
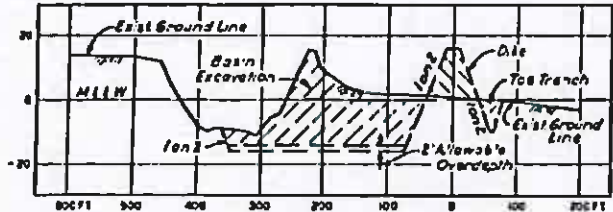


SCALE OF BAFFS

Mean Annual Velocity and Duration of prevailing winds at Bantol Island, Oregon for the years 1934 to 1938, inclusive

Duration in days for average year shown by length of lines  
Velocity in miles per hour shown by width of lines

0 to 10 m.p.h.	1/4" line
10 to 15 m.p.h.	3/8" line
15 to 20 m.p.h.	1/2" line
20 to 25 m.p.h.	5/8" line
25 or more	1" line
No level days	0 length



TYPICAL SECTIONS

RECOMMENDED SMALL BOAT ACCESS CHANNEL 100 FEET WIDE BY 12 FEET DEEP AT MLLW.

RECOMMENDED DIKE 1800 FEET LONG.

BROOKINGS

RECOMMENDED JETTY EXTENSION 450 FEET LONG.



PLAN  
SCALE IN FEET



**portmanager@portofbrookingsharbor.com**

---

**From:** Norris, Robin C CIV USARMY CENWP (USA) <Robin.C.Norris@usace.army.mil>  
**Sent:** Tuesday, March 29, 2022 12:41 PM  
**To:** portmanager@portofbrookingsharbor.com  
**Cc:** Speer, Gregory A CIV USARMY CENWP (USA)  
**Subject:** Port of Brookings - email #2  
**Attachments:** Chetco Improvement\_Congressional Document\_1979.pdf; Chetco River\_Existing Project\_1979\_Plate 1\_zoom.pdf

Gary,

See attached for more documentation. See page 87 of the larger document under item #2 – it notes “Construction of the protective dike, entrance channel, turning basin and smallboat basin on the sheltered side of the protective dike was completed in 1969.” See also “Plate 1” that is referred to.

Sincerely,

Robin C Norris  
Realty Specialist  
U.S. Army Corps of Engineers, Portland District Real Estate Division (RE)  
333 SW 1st Avenue  
Portland, Oregon 97208

415 PAGE DOCUMENT

CHETCO RIVER, OREGON

LETTER

FROM

THE SECRETARY OF THE ARMY

TRANSMITTING

A LETTER FROM THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY, DATED MAY 2, 1977, SUBMITTING A REPORT, TOGETHER WITH ACCOMPANYING PAPERS AND AN ILLUSTRATION, ON CHETCO RIVER, OREGON. THE REPORT HAS BEEN PREPARED IN RESPONSE TO A RESOLUTION OF THE COMMITTEE ON PUBLIC WORKS OF THE UNITED STATES SENATE ADOPTED JULY 1, 1970



FEBRUARY, 1979.—Referred to the Senate Committee on Environment and Public Works

U.S. GOVERNMENT PRINTING OFFICE  
WASHINGTON : 1979

[Printed under authority of title 33, USC, section 701-1(a)]

# CONTENTS

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	Page
Letter of Transmittal .....	vii
Comments:	
Office of Management and Budget .....	ix
Governor of Oregon .....	x
Departments:	
Interior .....	xi
Letter to the Secretary of the Interior .....	xiii
Commerce.....	xiv
Letter to the Secretary of Commerce.....	xxiv
Transportation .....	xxvi
Health, Education, and Welfare .....	xxix
Environmental Protection Agency.....	xxx
Reports:	
Chief of Engineers .....	1
Board of Engineers for Rivers and Harbors.....	2
District Engineer:	
Syllabus .....	7
Authority.....	8
Purpose and Extent of Study .....	8
Environmental Setting and Natural Resources.....	8
a. Description .....	8
b. Chetco Point and entrance conditions .....	9
c. Tributary Area .....	9
d. Resources .....	10
e. Adjacent ports.....	10
f. Population .....	11
g. Transportation.....	11
h. Use of navigation project .....	11
i. Published maps and charts.....	11
Bridges .....	11
Power .....	11
Prior Reports .....	12
Existing Project.....	12
Local Cooperation .....	12
Other Improvements .....	13
Terminal and Transfer Facilities .....	13
Improvements Desired .....	13
a. Input from public meeting, 25 June 1974 .....	13
b. Reasons for proposed modifications.....	13
c. Capability of local cooperation .....	14
Existing and Prospective Waterborne Commerce .....	14
a. Existing waterborne commerce.....	14
b. Prospective waterborne commerce .....	15
Vessel Traffic.....	15
Existing Conditions .....	16
a. Entrance channel.....	16
b. Jetties .....	17

Report of the District Engineer—Continued	Page
Future Conditions Without New Navigation Improvements .....	17
a. Future maintenance dredging program .....	17
b. Future dredging quantities .....	17
c. Incremental cost and benefit analysis .....	17
d. Baseline case .....	17
Problem Identification .....	18
a. Public concerns .....	18
b. Problems and needs .....	18
Plan Formulation .....	18
a. Study objectives .....	18
b. Possible solutions .....	18
c. Screening of alternatives .....	19
d. Alternatives selected for further study .....	21
e. Evaluation of selected alternatives .....	22
1. Technical Criteria .....	22
2. National Economic Development Criteria .....	22
3. Environmental Quality Criteria .....	22
4. Social Well-Being and Regional Development Considerations .....	23
5. Technical Criteria for Jetty Extension .....	23
f. Further screening of alternatives .....	23
g. Alternatives retained for detailed study .....	24
h. Incremental costs and benefits of alternatives .....	24
i. Maximized economic development plan .....	25
j. Environmental quality plan .....	26
The Selected Plan .....	26
a. General .....	26
b. Jetty extension .....	27
c. Disposal of dredged material .....	27
Shoreline Changes .....	27
Aids to Navigation .....	27
Estimate of First Cost .....	28
Estimates of Annual Charges .....	28
Estimates of Benefits .....	29
a. General .....	29
b. Lumber, plywood, and miscellaneous cargo .....	29
c. Commercial fishing .....	29
d. Reduced vessel damage .....	30
e. Charter boats .....	30
f. Recreational boating .....	30
g. Reduction in annual maintenance dredging costs .....	30
h. Harbor of refuge .....	30
i. Area redevelopment .....	30
j. Summary of benefits .....	31
Comparison of Benefits and Costs .....	31
Proposed local cooperation .....	31
Apportionment of Costs .....	32
Coordination with Other Agencies .....	32
Environmental Considerations .....	36
a. Environmental impacts from project .....	36
b. Social well-being .....	37

Report of the District Engineer—Continued

	Page
Discussion .....	37
a. Tributary area .....	37
b. Existing improvements .....	37
c. Success of existing project .....	37
d. Navigation problems .....	38
e. Annual dredging program .....	38
f. Selected plan of improvements .....	38
g. Accomplishments of the plan of improvements .....	39
h. Recommended plan .....	39
Statement of Findings .....	39
a. Coordination .....	40
b. Environmental considerations .....	40
c. Social well-being considerations .....	40
d. Economic considerations .....	41
e. Engineering considerations .....	41
f. Other consideration .....	41
Conclusions .....	42
Recommendation .....	42
Recommendation of the District Engineer .....	43
Appendix: Project Design and Cost Estimates .....	56
—————	
Final environmental statement .....	159
—————	
Statement of findings .....	384

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LETTER OF TRANSMITTAL



SECRETARY OF THE ARMY  
WASHINGTON

Honorable Jennings Randolph  
Chairman, Committee on Environment  
and Public Works  
United States Senate  
Washington, D. C. 20510

NOV 30 1978

Dear Mr. Chairman:

I am transmitting herewith a favorable report dated 2 May 1977, from the Chief of Engineers, Department of the Army on Chetco River, Oregon, together with other pertinent reports. The report is in response to a Senate Public Works Committee resolution adopted 1 July 1970.

The views of the State of Oregon; the Departments of the Interior; Transportation; Commerce; and Health, Education, and Welfare; and the Environmental Protection Agency are set forth in the inclosed communications, together with the replies of the Chief of Engineers where appropriate. The environmental statement required by the National Environmental Policy Act of 1969 has been submitted to the Environmental Protection Agency.

The President, in his June 6, 1978 water policy message to Congress, proposed several changes in cost sharing for water resources projects to allow states to participate more actively in project implementation decisions. These changes include a cash contribution from benefiting states of 5% of construction (first) costs associated with nonvendible outputs and 10% of costs associated with vendible outputs.

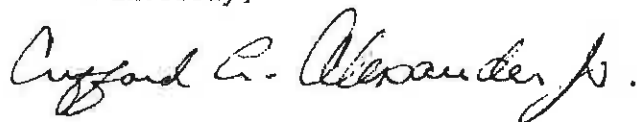
Application of this policy to the Chetco River requires a contribution from the State of Oregon of an estimated \$236,200 in cash (5% of \$4,723,000 total estimated project first cost based on May 1978 price levels). Other items of local cooperation would not be affected by this additional requirement. I recommend construction authorization for the Chetco River project in accordance with the President's proposed cost-sharing policy.

The Office of Management and Budget advises that there is no objection to submission of the Chief of Engineers report to the Congress or to authorization of the proposed project as amended to conform with the President's water policy. However, it states that no commitment can be made at this time as to when appropriations would be requested for the



project, if authorized by the Congress, since this would be subject to review in the President's annual budget process. A copy of the letter from the Office of Management and Budget is inclosed as part of the report.

Sincerely,

A handwritten signature in cursive script that reads "Clifford L. Alexander, Jr." The signature is written in dark ink and is positioned above the typed name.

Clifford L. Alexander, Jr.

1 Incl  
As stated

APPENDIX A  
PROJECT DESIGN AND COST ESTIMATES

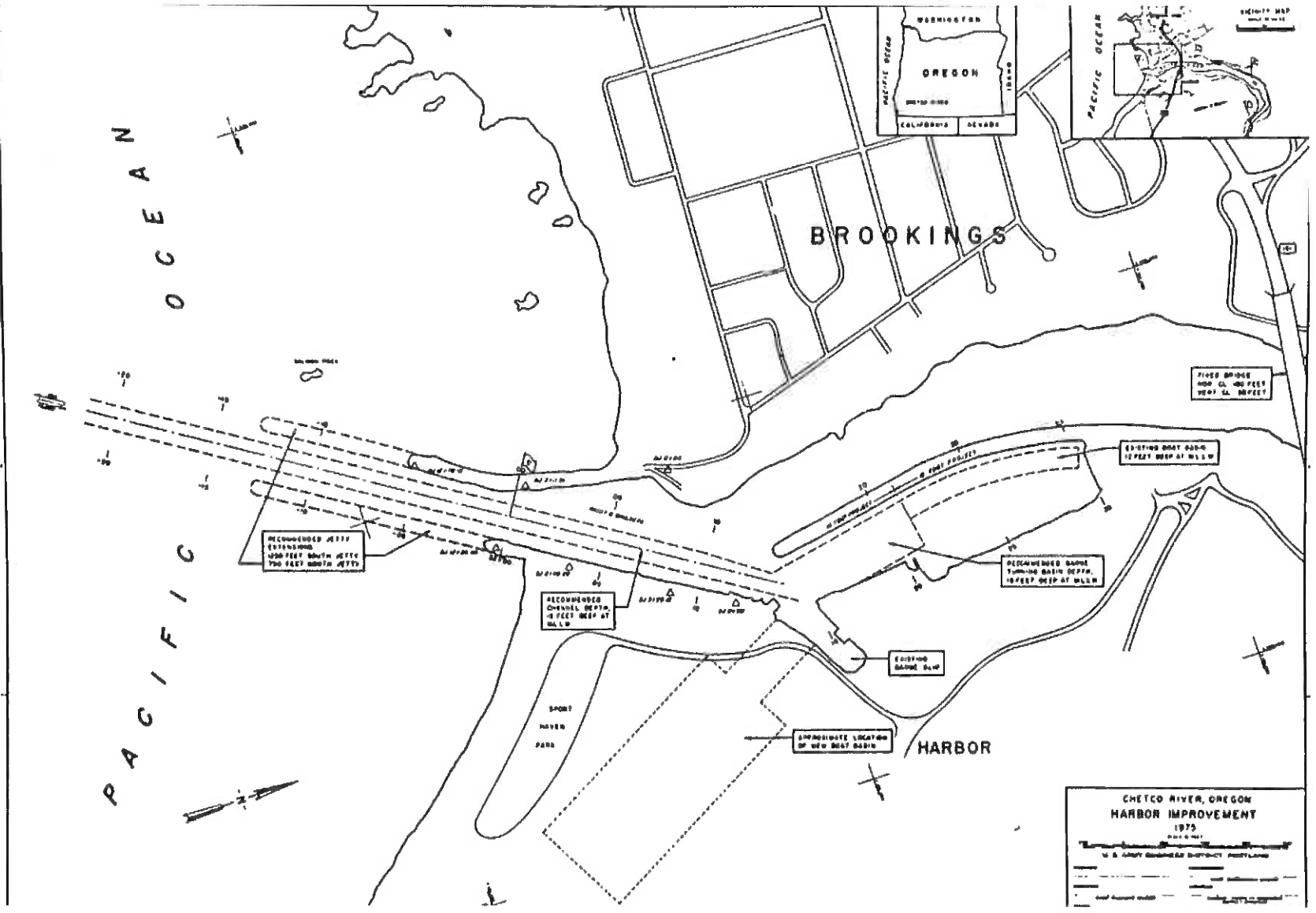
1. INTRODUCTION. - Presented in this appendix is the formulation of plans for improving navigation at the Chetco River entrance. To assure that an optimum plan would be obtained, alternative plans were formulated, in light of pertinent benefits and costs, both tangible and intangible, and with regard to engineering and environmental aspects of the problem. The plan of improvement ultimately selected is believed to best respond to the problems and needs of local interests and the community.

2. EXISTING PROJECT. - The authorized Federal navigation project for Chetco River, Oregon, provides for two rubblemound jetties at the mouth of the river; an entrance channel 120 feet wide and 14 feet deep; a barge turning basin 14 feet deep, 250 feet wide, and 650 feet long; a protective dike 1,800 feet long to elevation +18 feet; and a small-boat access channel 100 feet wide and 12 feet deep. (Mean lower low water, MLLW, datum is the plane of reference for all depths and elevations.)

Construction of the jetties was completed in December 1957. Constructed length of the north jetty was about 900 feet and the south jetty was about 1,350 feet. In 1962, the outer 440-foot section of the south jetty was repaired and raised in elevation to prevent movement of sand and drift into the navigation channel. In 1968, the north jetty was extended 450 feet in length and raised to elevation +16 feet. In spite of their similar constructed length, the north jetty now extends about 500 feet farther out to sea than the south jetty does. Construction of the protective dike, entrance channel, turning basin and small-boat basin on the sheltered side of the protective dike was completed in 1969. The Port of Brookings is constructing a new small-boat basin at a site almost directly across from the entrance to the existing basin. The project as it exists is shown on plate 1.

3. HYDROLOGY. - Chetco River discharges into the Pacific Ocean approximately 1 mile east of Chetco Point, which lies 300 miles south of the Columbia River entrance and 345 miles north of San Francisco Bay. Formed in the Klamath Mountains at an elevation of 4,000 feet, Chetco River flows about 58 miles to its point of discharge into Chetco Cove. The drainage basin, 359 square miles, is comprised of forests. Some of the area around the estuary is used for pasture and hay, with range lands located upstream of the estuary. Most of the inland portion of the basin is Siskiyou National Forest.

a. Annual rainfall averages from 80 inches along the coast to 120 inches near the headwaters. Monthly precipitation at Brookings averages from less than an inch (July and August) to almost 14 inches (December and January). The annual stream runoff pattern for Chetco River closely follows the annual precipitation pattern: About 85 percent of the annual runoff occurs during November through April, while only about



ATTACHMENT # 2

171

**From:** Norris, Robin C CIV USARMY CENWP (USA) <Robin.C.Norris@usace.army.mil>  
**Sent:** Wednesday, March 30, 2022 10:55 AM  
**To:** portmanager@portofbrookingsharbor.com  
**Cc:** Speer, Gregory A CIV USARMY CENWP (USA)  
**Subject:** RE: [Non-DoD Source] RE: Port of Brookings Boat Basin dike  
**Attachments:** SF-299 OMB Control Number 0596-0249.pdf

Gary,

Since there wasn't originally an approval for the addition of the ramp on the dike, we are now needing to go through the process to do that.

Now is the time for the port/commissioners to decide if they want to do any other work on the dike so it all can be evaluated and processed for approval at the same time.

See attached form SF-299. Submit information related to the most recent ramp installation (2011?) as well as any other planned work in the near future (removal of the ramp and crab dock?)

The process to give a Letter of Consent takes a few months. As soon as I have the completed form back I'll get working on it.

Let me know if you have any further questions.

Robin C Norris  
Realty Specialist  
U.S. Army Corps of Engineers, Portland District Real Estate Division (RE)  
333 SW 1st Avenue  
Portland, Oregon 97208

---

**From:** portmanager@portofbrookingsharbor.com <portmanager@portofbrookingsharbor.com>  
**Sent:** Tuesday, March 29, 2022 12:54 PM  
**To:** Norris, Robin C CIV USARMY CENWP (USA) <Robin.C.Norris@usace.army.mil>  
**Cc:** Speer, Gregory A CIV USARMY CENWP (USA) <Gregory.A.Speer@usace.army.mil>  
**Subject:** [Non-DoD Source] RE: Port of Brookings Boat Basin dike

Thank you Robin and Greg for digging into this matter.

Amongst the paperwork you have found, is there anything about authorizing a ramp on the dike? Or because its already there its considered grandfather in? My commissioners will be asking me this question.

Thank you,

**STANDARD FORM 299**  
**APPLICATION FOR TRANSPORTATION, UTILITY SYSTEMS, TELECOMMUNICATIONS AND FACILITIES**  
**ON FEDERAL LANDS AND PROPERTY**

FORM APPROVED  
 OMB Control Number: 0596-0249  
 Expiration Date: 02/28/2023

**FOR AGENCY USE ONLY**

Application Number

Date Filed

3. Applicant telephone number and email:

Authorized agent telephone number and email:

NOTE: Before completing and filing the application for an authorization (easement, right-of-way, lease, license or permit), the applicant should completely review this package, including instructions, and schedule a pre-application meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the pre-application meeting.

1. Name and address of applicant

2. Name and address of authorized agent if different from item 1

4. As applicant are you? (check one)

- a.  Individual
- b.  Corporation\*
- c.  Partnership/Association\*
- d.  State Government/State Agency
- e.  Local Government
- f.  Federal Agency

\* If checked, complete supplemental page

5. Specify what application is for: (check one)

- a.  New authorization
- b.  Renewing existing authorization number
- c.  Amend existing authorization number
- d.  Assign existing authorization number
- e.  Existing use for which no authorization has been received \*
- f.  Other\*

\* If checked, provide details under item 7

6. If an individual, or partnership, are you a citizen(s) of the United States?  Yes  No

7. Project description (describe in detail): (a) Type of use or occupancy, (e.g., canal, pipeline, road, telecommunications); (b) related structures and facilities; (c) physical specifications (Length, width, grading, etc.); (d) term of days/years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for activity/construction (Attach additional sheets, if additional space is needed.)

8. Attach a map covering area and show location of project proposal.

9. State or Local government approval:  Attached  Applied for  Not Required

10. Nonrefundable application fee:  Attached  Not required  To be determined by agency

11. Does project cross international boundary or affect international waterways?  Yes  No (if "yes," indicate on map)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

---

13a. Describe other alternative locations considered.

---

b. Why were these alternatives not selected?

---

c. Give explanation as to why it is necessary to use or occupy Federal assets (lands or buildings).

---

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. (Specify number, date, code, or name)

---

15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.

---

16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

---

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability; and, (g) historic or archaeological resources or properties.

---

18. Describe the probable effects that the proposed project will have on (a) populations of fish, plant life, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

---

19. State whether any hazardous material, as defined in this paragraph, would be used, produced, transported or stored on or in a federal building or federal lands or would be used in connection with the proposed use or occupancy. "Hazardous material" shall mean (a) any hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws. The holder shall not store any hazardous materials at the site without prior written approval from the authorized officer. This approval shall not be unreasonably withheld. If the authorized officer provides approval, this permit shall include (or in the case of approval provided after this permit is issued, shall be amended to include) specific terms addressing the storage of hazardous materials, including the specific type of materials to be stored, the volume, the type of storage, and a spill plan. Such terms shall be proposed by the holder and are subject to approval by the authorized officer.

---

20. Name all the Federal Department(s)/Agency(ies) where this application is being filed.

---

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

Signature of Applicant

Date

---

Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

---

GENERAL INFORMATION  
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation utility systems telecommunication installations facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.
2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.
3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.
4. Systems for the transmission and distribution of electric energy.
5. Wired and wireless systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.
6. Improved right-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.
7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture  
Regional Forester, Forest Service (USFS)  
P.O. Box 21628  
Juneau, Alaska 99802-1628  
Telephone: (907) 586-7847 (or a local Forest Service Office)

Department of the Interior  
Bureau of Indian Affairs (BIA)  
Alaska Regional Office  
709 West 9th Street  
Juneau, Alaska 99802  
Telephone: (907) 586-7177

Department of the Interior  
Alaska State Office  
Bureau of Land Management  
222 West 7th Avenue #13  
Anchorage, Alaska 99513  
Public Room: 907-271-5960  
FAX: 907-271-3684  
(or a local BLM Office)

U.S. Fish & Wildlife Service (FWS)  
Office of the Regional Director 1011  
East Tudor Road Anchorage, Alaska  
99503 Telephone: (907) 786-3440

National Park Service (NPS)  
Alaska Regional Office  
240 West 5th Avenue  
Anchorage, Alaska 99501  
Telephone: (907) 644-3510

Note - Filings with any Interior agency may be filed with any office noted above or with the Office of the Secretary of the Interior, Regional Environmental Officer, P.O. Box 120, 1675 C Street, Anchorage, Alaska 99513.

Department of Transportation  
Federal Aviation Administration  
Alaska Region AAL-4, 222 West 7th Ave., Box 14  
Anchorage, Alaska 99513-7587  
Telephone: (907) 271-5285

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual department/agencies may authorize the use of this form by applicants for transportation, utility systems, telecommunication installations and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS  
(Items not listed are self-explanatory)

- 7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.
- 8 Generally, the map must show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions.
- 9, 10, and 12 The responsible agency will provide additional instructions.
- 13 Providing information on alternate locations in as much detail as possible, discussing why certain locations were rejected and why it is necessary to use Federal assets will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate locations as related to current technology and economics.
- 14 The responsible agency will provide instructions.
- 15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.
- 16 through 19 Providing this information with as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative.

### EFFECT OF NOT PROVIDING INFORMATION

Disclosure of the information is voluntary. If all the information is not provided, the proposal or application may be rejected.

### DATA COLLECTION STATEMENT

The Federal agencies collect this information from proponents and applicants requesting a right-of-way, permit, license, lease, or certification for use of Federal assets. The Federal agencies use this information to evaluate a proponent's or applicant's proposal to use Federal assets.

### BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0249. The time required to complete this information collection is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The authority to collect this information is derived from 47 U.S.C. 1455(c)(3) and 16 U.S.C. 3210.

### USDA NONDISCRIMINATION STATEMENT

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.



**SUPPLEMENTAL**

NOTE: The responsible agency(ies) will provide instructions	CHECK APPROPRIATE BLOCK	
<b>I - PRIVATE CORPORATIONS</b>	ATTACHED	FILED*
a. Articles of Incorporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Corporation Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	<input type="checkbox"/>	<input type="checkbox"/>
f. If application is for an oil or gas pipeline, describe any related right-of-way or temporary use permit applications, and identify previous applications.	<input type="checkbox"/>	<input type="checkbox"/>
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	<input type="checkbox"/>	<input type="checkbox"/>
<b>II - PUBLIC CORPORATIONS</b>		
a. Copy of law forming corporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Proof of organization	<input type="checkbox"/>	<input type="checkbox"/>
c. Copy of Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>
<b>III - PARTNERSHIP OR OTHER UNINCORPORATED ENTITY</b>		
a. Articles of association, if any	<input type="checkbox"/>	<input type="checkbox"/>
b. If one partner is authorized to sign, resolution authorizing action is	<input type="checkbox"/>	<input type="checkbox"/>
c. Name and address of each participant, partner, association, or other	<input type="checkbox"/>	<input type="checkbox"/>
d. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>

\*If the required information is already filed with the agency processing this application and is current, check block entitled "Filed." Provide the file identification information (e.g., number, date, code, name). If not on file or current, attach the requested information.

## ACTION ITEM – C

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**DATE:** May 6, 2022  
**RE:** SDAO Insurance Claim – Replacement of Broken Dock Pile  
**TO:** Honorable Board President and Harbor District Board Members  
**ISSUED BY:** Gary Dehlinger, Port Manager

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### OVERVIEW

- A wooden dock pile was found broken at Basin 2 O-Dock finger 22. We submitted the following incident report to SDAO to see if the Port had any insurance coverage for repairs.
- SDAO adjuster requested three repair quotes from the Port. The Port contacted three contractors that had prior experience doing similar projects. Billeter Marine, Legacy Contracting and West Coast Contractors provided the quotes. This project would include a barge, crane and one 12' diameter steel pile 60' long fusion bond epoxy coated. Removal of the broken pile and installation of the new steel pile.
- SDAO/SDIS approved the claim for the repairs at Billeter Marine quote amount. Port reconfirmed the price with Billeter Marine. The Port has already received the initial check from SDIS for this repair. The Port will be responsible for the deductible amount.
- A Public Improvement Contract would be needed with Billeter Marine to perform the repair work. It would be a good idea to secure the repair costs now and order the piling for the work to be completed during the in-water work period (October 15 through March 15).

### DOCUMENTS

- Port Incident Report with pictures, 5 pages
- Contractor Quotes, 5 pages
- SDAO Email Approval, 2 pages

### COMMISSIONERS ACTION

- **Recommended Motion:**  
Motion to approve repairing the broken wood piling in Basin 2 at O-Dock finger 22 and authorize the Port Manager to prepare a draft Public Improvement Contract with Billeter Marine to perform the work for Board approval.



## Port of Brookings Harbor

16330 Lower Harbor Road / PO Box 848  
Brookings, Oregon 97415  
Phone (541) 469-2218  
Fax (541) 359-3999  
www.portofbrookingsharbor.com

### Board of Commissioners

Richard Heap, President  
Joseph Speir, Vice-President  
Sharon Hartung, Secretary/Treasurer  
Kenneth Range  
Larry Jonas

## Incident Report

Date of Incident: 1/24/22

Time: \_\_\_\_\_

Location of Incident: Basin II O 22

What Happen? Received a call from Mrs. Vanderpool that the wood piling next to her vessel is broken


Who was Involved?



Name: Kathryn Vanderpool  
Address: 4000 Lower River Road  
Phone Number: Grants Pass OR 97526

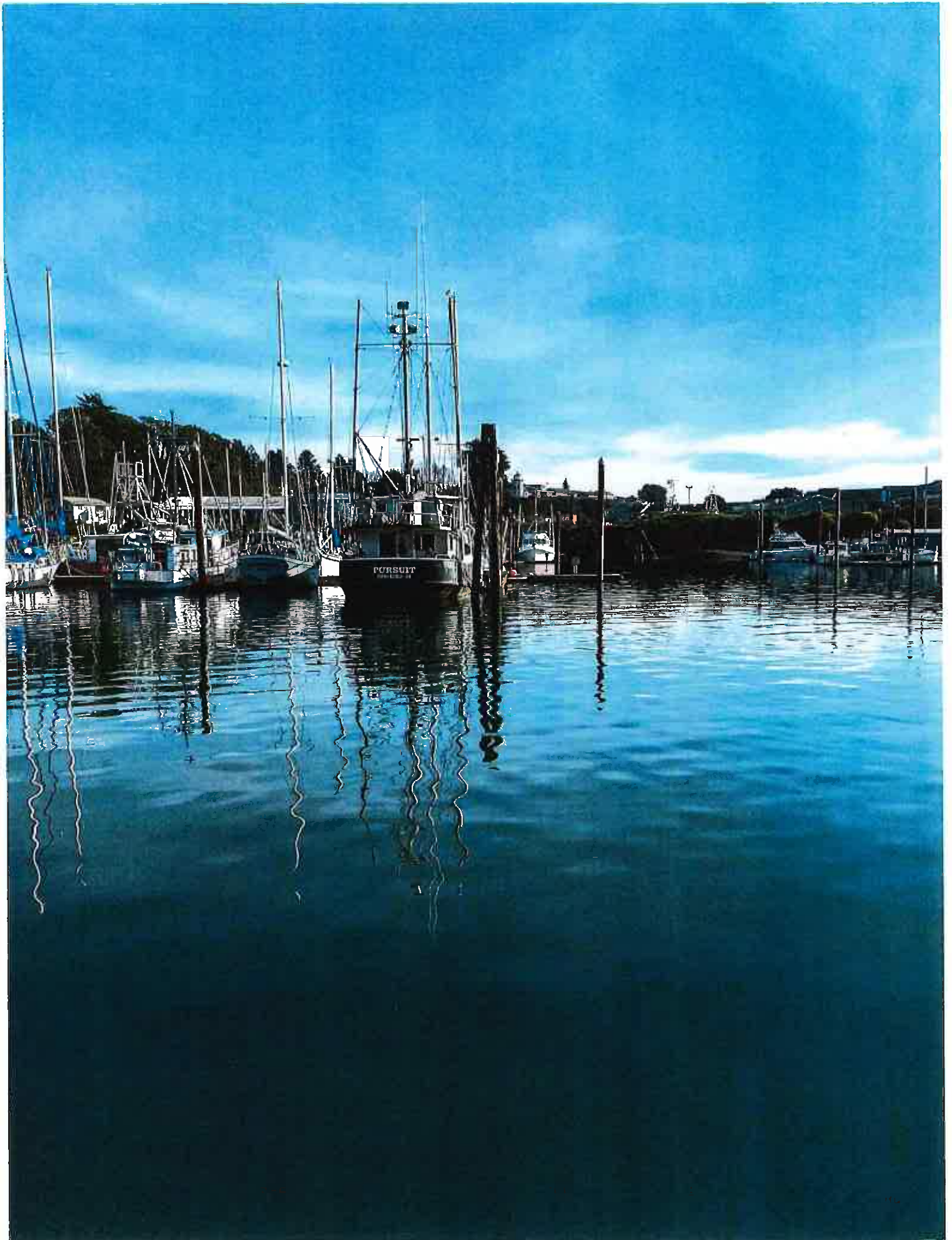
Witness (if any)

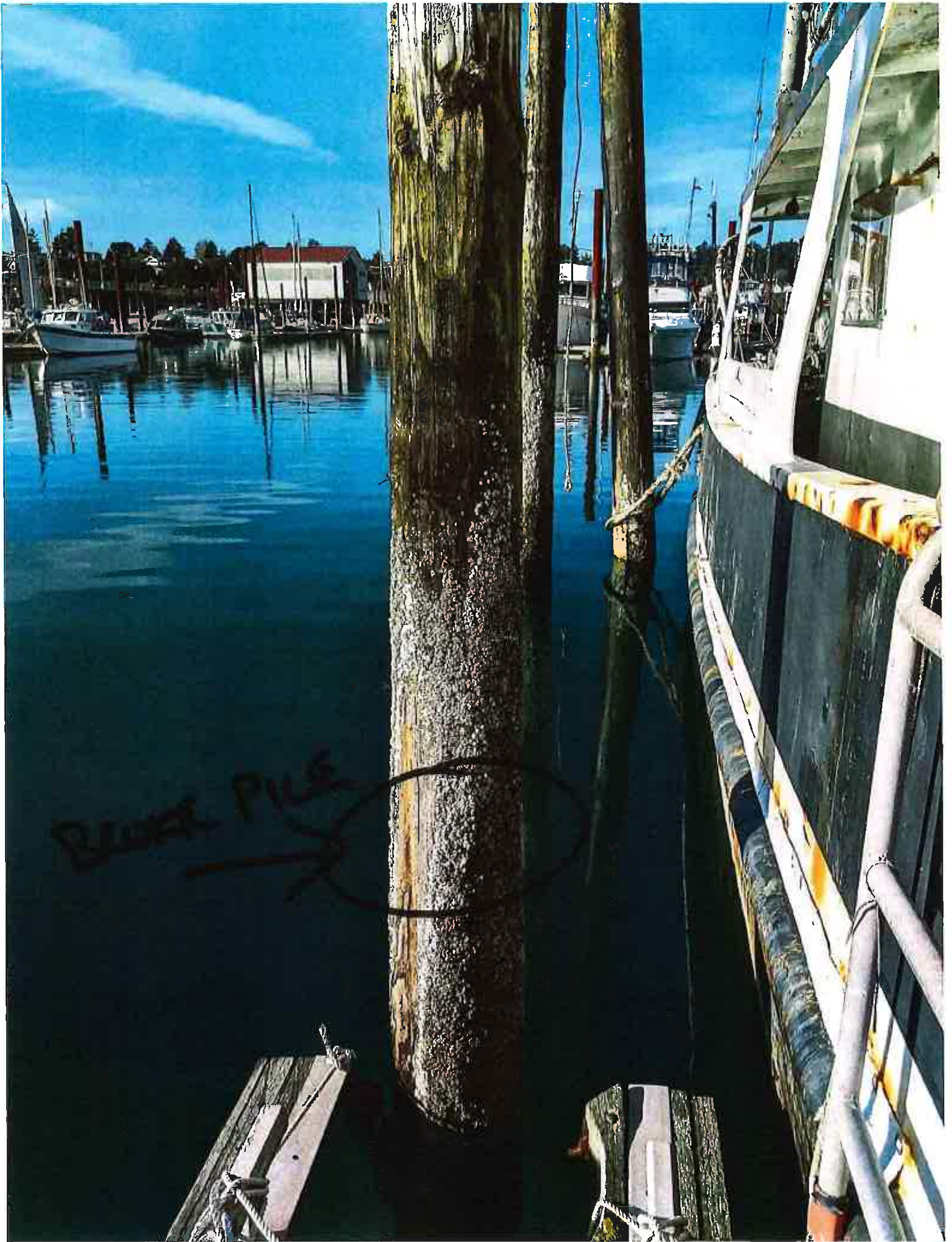
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

Corrective Action: \_\_\_\_\_

Report Written By:	
Name:	Danielle King
Signature:	

Reviewed By:		
Safety Supervisor	Danielle King	
Harbormaster	Travis Webster	
Port Manager	Gary Dehlinger	





**Port of Brookings Harbor  
Location of Broken Pile  
Basin 2 – Dock O, Slip 20-22**





08:52:59 AM

Billeter Marine, LLC  
 520 3rd Court  
 Coos Bay, OR 97420  
 CCB# 166653



Office: 541-269-8600  
 Fax: 1-266-0532  
 www.billetermarine.com

### Billeter Marine Project Quote

Date: 3/22/2022

To: Port of Brookings Address: P.O. Box 848 16330 Lower Harbor Rd Brookings OR 97415	Contact: Travls Webster Phone: (541) 469-2218 Email:
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**Project: Piling Replacement**

Description of work:
Remove 1 existing wood piling on dock finger, Basin 2, O Dock per map provided, Install 1 new .5 x 12 x 60' Pipe Pile with fusion bond epoxy coating in same location. Disposal of existing wood piling by others.

Item #	Item Description	Quantity	Unit	Unit Price	Total Price
1	Pull Existing Piling	1	Each	\$400.00	\$400.00
2	.5x12x50' Pipe Pile Epoxy Coated	60	LF	\$165.00	\$9,900.00
3	100 Ton Truck Crane - Mobilization	1	LS	\$2,400.00	\$2,400.00
4	45 Ton Crawler Crane - Mobilization	1	LS	\$2,400.00	\$2,400.00
5	Flex Float Mobilization from Seattle to Brookings and Back	1	LS	\$2,800.00	\$2,800.00
6	Vibro Hammer Mobilization From Fife to Brookings & Back	1	LS	\$2,400.00	\$2,400.00
7	Small Tug Mobilization	1	LS	\$500.00	\$500.00
8	Flex Float Rent	1	MO	\$13,950.00	\$13,950.00
9	Vibro Hammer Rental	1	MO	\$4,200.00	\$4,200.00
10	Small Tug Rental	3	DY	\$350.00	\$1,050.00
11	Build up Barge, load Crane, Drive Pile, Tear Down & Load	3	DY	\$3,850.00	\$11,550.00
12					
13					
14					
15					
16					
17					
<b>Total Bid Price:</b>					<b>\$51,550.00</b>

Not Included	
Permits Survey Engineering Special Inspections Testing - Including but not limited to, compaction, concrete, gravel, rock, asbestos, lead, water Site Utilities -Water, power, lighting or sanitary facilities Bonds, payment or performance. If bonds required add 3% Asbestos or lead based paint abatement Landscaping	Drafting of plans either original or "as built" unless required by contract Contract retainage Traffic control Diver or tender for underwater inspections or work Access to work site

184



Billeter Marine, LLC  
520 3rd Court  
Coos Bay, OR 97420  
CCB# 166653



Office: 541-269-8600  
Fax: 1-266-0532  
www.billetermarine.com  
Date: 3/22/2022

Port of Brookings  
P.O. Box 848  
16330 Lower Harbor Rd

Brookings | Project: Piling Replacement

**Please sign and return one copy of this proposal to signify an acceptance of this quote and its terms and conditions as stated or feel free to call me if you have any questions.**

**Notes:**

1. Billeter Marine, LLC reserves the right to pass on any material price increases that occur between the time this quote was given and the time of construction.
2. Billeter Marine, LLC is not liable for any possible damages to underground utilities not located by others prior to our work.
3. Quote good if accepted in writing within 15 days.

**Payment Terms:**

1. Any additional work will be billed on a cost plus 10% basis.
2. All material is guaranteed to be as specified. All work is to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications involving extra costs will be executed only upon written orders and will become an extra charge over and above the agreed upon price. All agreements contingent upon strikes, accidents or delay beyond our control. Owner to carry fire, tornado, and other necessity insurance. Our workers are fully covered by Workmen's Compensation Insurance.
3. Billeter Marine, LLC reserves the right to make progress billings on projects with durations greater than 1 month. This contract is to be paid in full within 30 days from the date the work has been substantially completed. Interest at the rate of ONE & ONE-HALF (1-1/2%) PER MONTH (18% PER ANNUM) will be charged on all balances not paid when due. In the event legal action is necessary to enforce the contract, the prevailing party will be entitled to court costs and reasonable attorney fees.
4. The prevailing party in any action or suit is entitled to costs and attorney fees. This receipt evidences a purchase as provided for in the ACCOUNT Plan Agreement between Billeter Marine, LLC and the above-named Purchaser. All provisions and agreements contained in the Account Plan Agreement, if applicable, are hereby incorporated by reference.
5. I hereby acknowledge that I have received the forms "Information to Owners About Construction Liens", "Consumer Protection Notice" and "Notice of Procedure", as provided for by ORS 87.025 and as adopted by the Builders Board

**ACCEPTED**

The above prices, specifications and conditions are satisfactory and are hereby accepted.

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Date of Acceptance: \_\_\_\_ / \_\_\_\_ / 20\_\_

**CONFIRMED**

Billeter Marine, LLC  
Authorized Signature

Jeff Brown, Estimator  
jeff@billetermarine.com



Danielle King <danielle@portofbrookingsharbor.com>

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## Port of Brookings Harbor - Broken Piling

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Chris Rau <ChrisR@legacycontractinginc.com>

Wed, Mar 16, 2022 at 5:05 PM

To: Danielle King <danielle@portofbrookingsharbor.com>

Cc: Bids <Bids@legacycontractinginc.com>, Travis Webster <travis@portofbrookingsharbor.com>

Danielle,

Sorry for the delay, we were waiting on piling pricing. Our supplier quoted us a 3/8" wall instead of a 1/2" wall pile initially.

Attached is our Item Price Summary which includes:

Mobilization to the Site with Crane and Floats

Removal of 1 EA broken existing timber pile

Installation of 1 EA Coated 12" x .500

Installation of Pile Cap

Demobilization from site.

Pricing assumes we can pull the pile and does not include a diver if it breaks and has to be cut at mudline.

Please let me know if you have any questions or need more information.

[Quoted text hidden]

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 Port of Brookings - Broken Pile Replacement.pdf  
64K

186

# Legacy Contracting, Inc.

41850 Kingston Jordan Rd.  
PO Box I  
Stayton, OR 97383  
U.S.

Phone: 503-749-1818  
Fax: 888-249-2203

## Item Price Summary

<b>Project Name:</b> BROKEN PILE REPLACEMENT	<b>Customer:</b> PORT OF BROOKINGS-HARBOR
<b>Job Number:</b>	<b>Billing Address:</b> 16408 LOWER HARBOR ROAD
<b>Bid As:</b>	BROOKINGS, OR 97415 USA
<b>Estimator:</b>	<b>Phone:</b> 541-469-2218
<b>Project Address:</b>	<b>Contact:</b>
<b>Completion Date:</b>	

## Pay Items

Description	Job Cost ID	Task JCID	Bid Quantity	UM	Unit Bid Price	Total Bid Price
<b>D</b> 1 - GENERAL EXPENSES			1.00	LS	\$124,658.32	\$124,658.32
<b>D</b> 2 - REMOVE AND REPLACE PILE			1.00	EACH	\$17,704.79	\$17,704.79
<b>Pay Items Total:</b>						\$142,363.11



Building Strong Foundations for a Better Future

April 4, 2022

61050 Highway 101  
Coos Bay, Oregon 97420

p. 541.267.7689  
f. 541.269.1600

[westcoastcontractors.com](http://westcoastcontractors.com)

OR Contractors Board #63710  
CA Contractors License 511500 Class A, B  
WA Contractors License WestEC199207

Port of Brookings  
16330 Lower Harbor Rd  
Brookings Oregon 97415

Attn: Travis Webster [travis@portofbrookingsharbor.com](mailto:travis@portofbrookingsharbor.com)  
RE: Port of Brookings Pile Replacement Dock O Slip 20-22

We are pleased to quote the following items:

- Install 1 – New 12"x.5"x60' Steel Piles To Replace Existing Pile \$ 175,314.00
  - o Piles will be bare steel
  - o Removal and Disposal of Existing Wood Pile
  - o Access to assemble portable barge, equipment and materials will be Provided by the Port (40'x60' barge)
  - o Piles will be driven to full penetration or refusal with Vibratory Hammer

General Contractor/Owner is to provide a staging area and access to the work locations for our equipment and materials. Above quoted price is based on straight-time labor.

Obstructions encountered during driving will be considered and billed for as a change in the scope of work. Price is based on contractor and owner agreeing on a mutually agreeable schedule.

Price based on a mutually agreeable schedule.

Prices Exclude:

- Permit
- Survey, Layout, & Staking
- Locate and/or relocate of utilities
- Engineering
- Traffic Control

TERMS:

Payment is due 30 days from date of invoice. Customer agrees to pay 1.5% interest per month (18% APR) for late payment.

This Proposal is good for 30 days.

Thank you for the opportunity to provide a proposal for this project. Please call if you have any questions.

Sincerely,

Chad Walker



**portmanager@portofbrookingsharbor.com**

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**From:** Tim Bauer <tbauer@sdao.com>  
**Sent:** Saturday, April 9, 2022 1:44 PM  
**To:** portmanager@portofbrookingsharbor.com  
**Subject:** GCPR2022069548 \* Port Of Brookings Harbor - piling impact  
**Attachments:** 2022.04.09.PBH.PMNT.pdf

I've attached the payment letter for the damaged piling. Payment should go out next week. Please send the support when the contract is accepted and I can release the withheld amounts.

**Tim Bauer**  
Executive General Property Adjuster  
S|D|A|O  
**Direct:**



*The content of this e-mail message and any attachments are confidential and may be legally privileged, intended solely for the addressee. If you are not the intended recipient, be advised that any use, dissemination, distribution, or copying of this e-mail may be unlawful. If you receive this message in error, please notify the sender immediately and destroy the message and its attachments.*

April 9, 2022

Port Of Brookings Harbor  
Attn. Gary Dehlinger  
PO Box 848  
Brookings, OR 97415

**SDIS Member:** Port Of Brookings Harbor  
**Incident Date:** 01/24/2022  
**Claim Number:** GCPR2022069548

Gary,

Please find enclosed payment of \$31,050.00 for the Actual Cash Value of the piling damages less recoverable depreciation and \$5000 deductible. This amount is based on estimates, photos, and discussions. Per your coverage, the depreciation is recoverable once the property is replaced and the expenses are incurred.

Replacement Cost - Piling	\$ 51,500.00
Less recoverable depreciation	\$ (15,450.00)
Actual Cash Value	\$ 36,050.00
Less deductible	\$ (5,000.00)
Total Claim	<u>\$ 31,050.00</u>
less prior payment	
Balance Due	\$ 31,050.00

To claim the recoverable depreciation, please provide support (invoices, receipts, etc.) for the actual incurred expenses to replace the property. Thank you for your assistance in resolving this claim.

Sincerely,



Tim Bauer  
Executive Property General Adjuster  
**S | D | A | O**  
Administrators for SDIS and PACE

## INFORMATION ITEM – A

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**DATE:** May 6, 2022  
**RE:** Commissioner and Staff Communications and Relations  
**TO:** Honorable Board President and Harbor District Board Members  
**ISSUED BY:** Gary Dehlinger, Port Manager

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### OVERVIEW

- Board discussion.

### DOCUMENTS

- None