

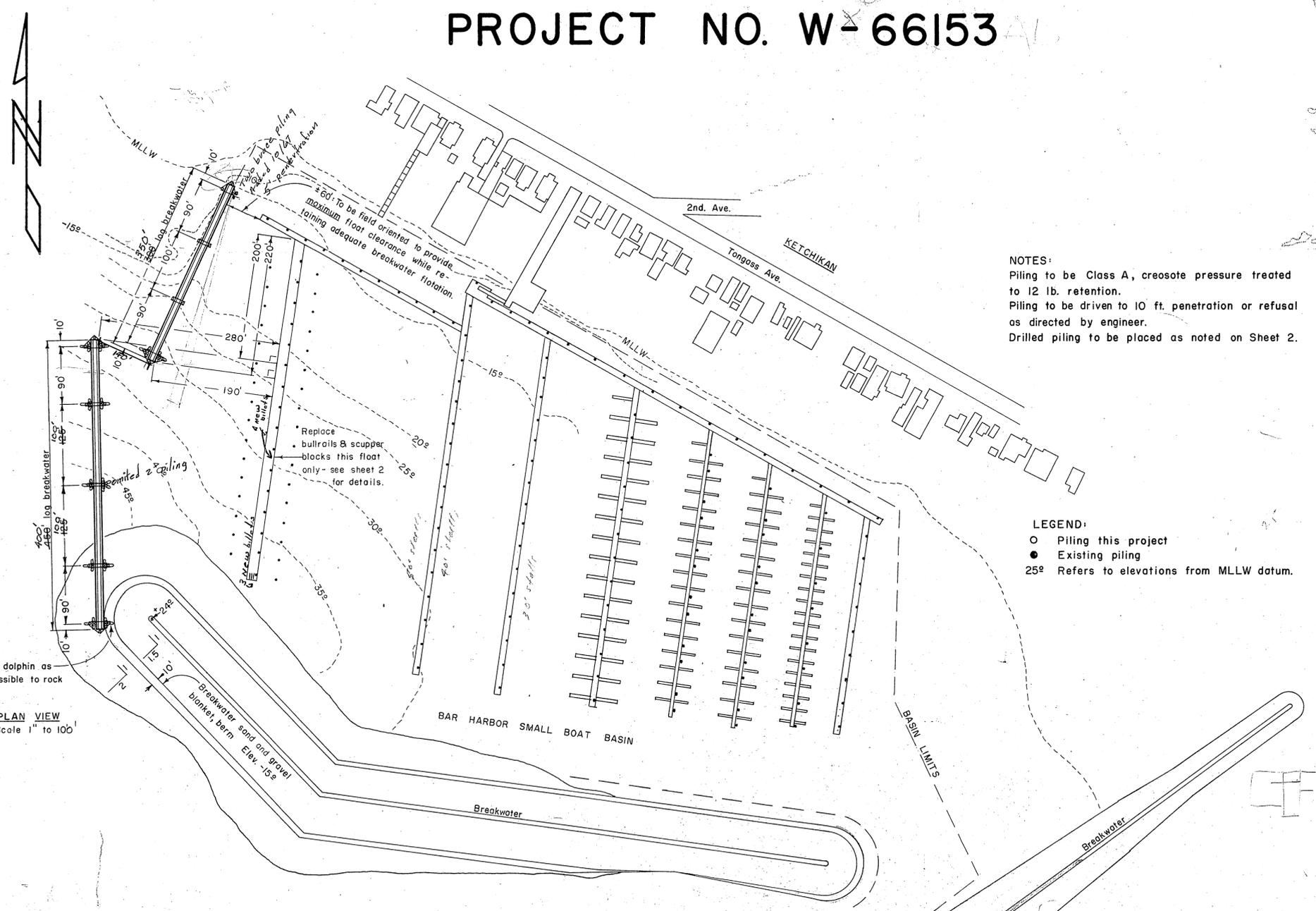
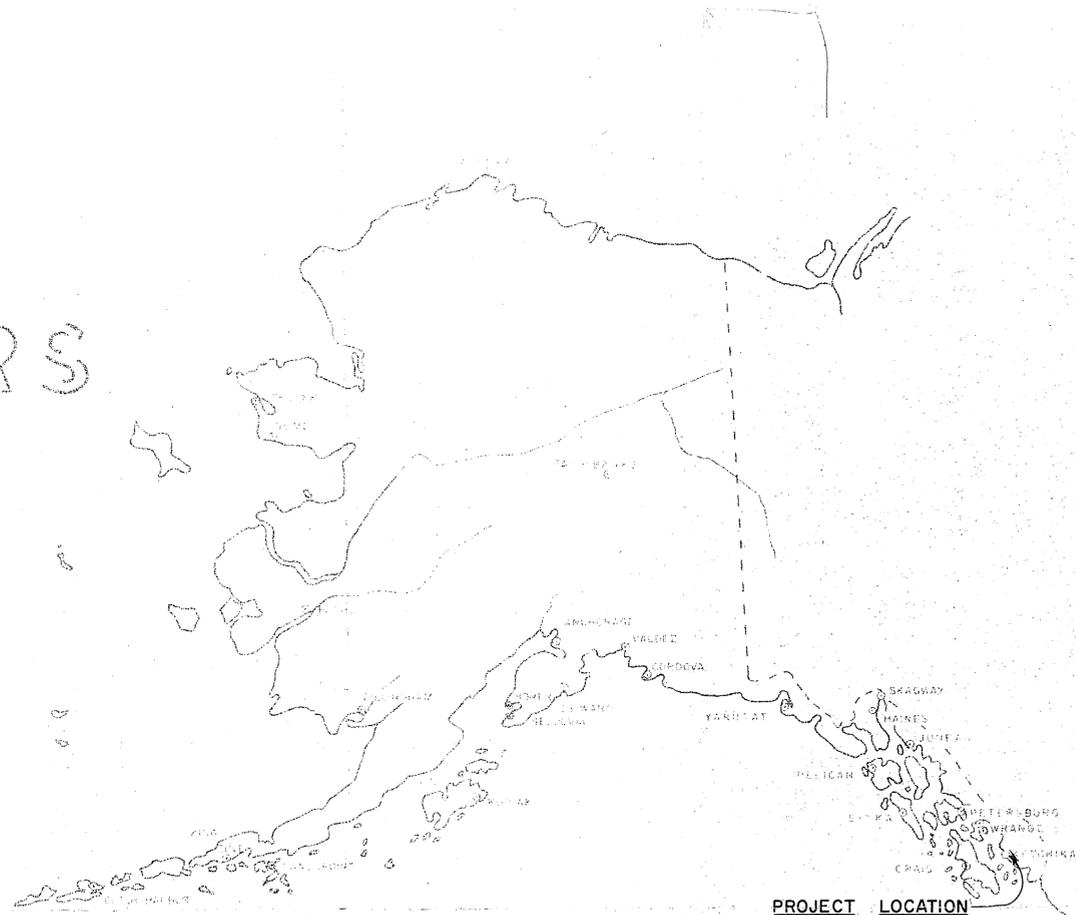
STATE OF ALASKA

DEPARTMENT OF PUBLIC WORKS

# DIVISION OF WATER & HARBORS

## KETCHIKAN BAR HARBOR PHASE NO. 5

### PROJECT NO. W-66153



NOTES:  
 Piling to be Class A, creosote pressure treated to 12 lb. retention.  
 Piling to be driven to 10 ft. penetration or refusal as directed by engineer.  
 Drilled piling to be placed as noted on Sheet 2.

#### WORK SUMMARY

Major units of this project shall consist of the construction and installation of two 3-log boom breakwaters (750 lin. ft.), furnishing and driving 48 breakwater piling (3250 lin. ft.); drilling 17 piling holes (170 lin. ft.) and furnishing and replacing 1075 lin. ft. of tie down rail on existing floats.

#### INDEX TO SHEETS

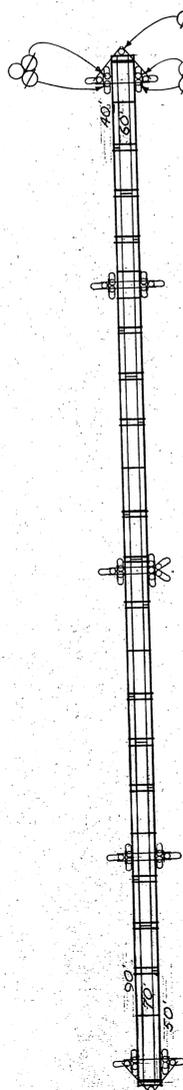
TITLE & PLAN LAYOUT	SHEET 1
CONSTRUCTION & DRILLING DETAILS	SHEET 2

LEGEND:  
 ○ Piling this project  
 ● Existing piling  
 25° Refers to elevations from MLLW datum.

DATE 10/22/65 APPROVED Tracy A. Kaldor  
 Acting COMMISSIONER

Piling requiring drilling  
(See Drilling Detail)

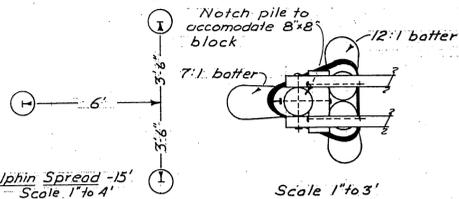
All logs 80' lengths  
except as noted.



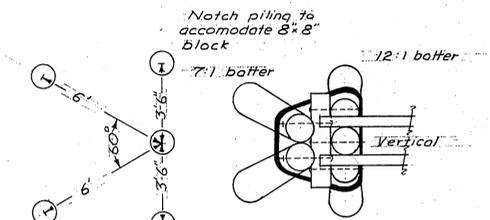
**SUGGESTED BREAKWATER LOG  
LAYOUT & LASHING DIAGRAM**  
Scale 1" to 40'

Notes:  
Breakwater logs shall be butt joined & lashed using 4 wraps (6 wraps on ends) of 7/8" galvanized plow steel cable securely tightened & stapled to each log at each turn. Turn ends back and double staple. Breakwater to be lashed at intervals of not less than 20'. Lashing & splices not to coincide with retaining piling or dolphins. Provide additional lashing where logs butt together (one 4 wrap lashing either side of joint). Trap logs may be utilized if, in the opinion of the engineer, the logs are sufficiently sound and possess adequate flotation. Breakwater logs to be a minimum of 30" least diameter. Contractor shall submit a proposed breakwater log layout and lashing diagram for approval if other than that as indicated. Logs should conform, as closely as is practicable, to the lengths shown.

Dolphin Spread -15'  
Scale 1" to 4'

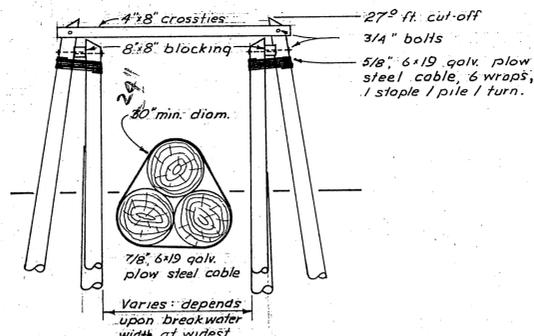


**3 PILE DOLPHIN DETAILS**

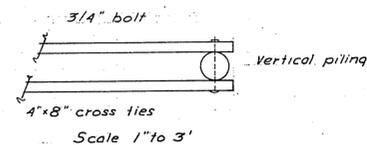


Dolphin Spread -15'  
Scale 1" to 4'

**5 PILE DOLPHIN DETAILS**

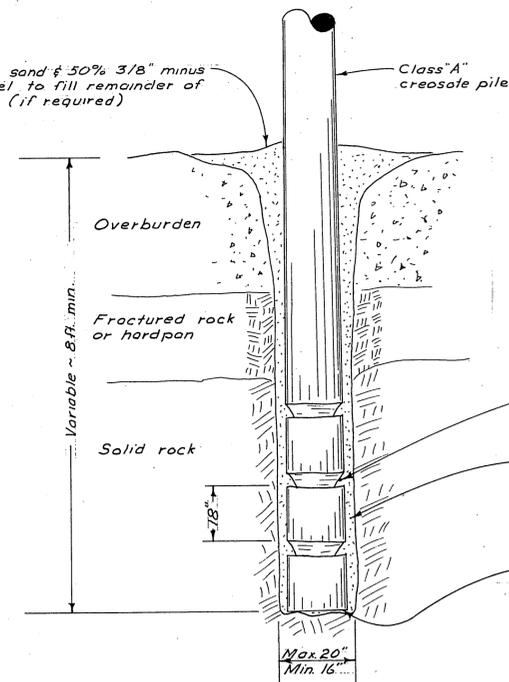


**BREAKWATER & DOLPHIN DETAILS**  
Scale 1" to 6'

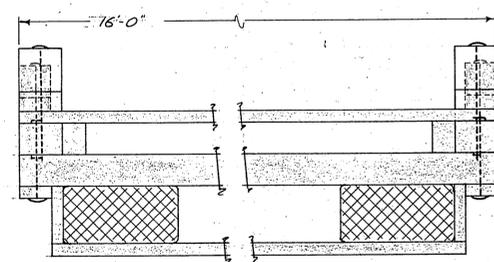


**SINGLE PILE RETAINER DETAIL**

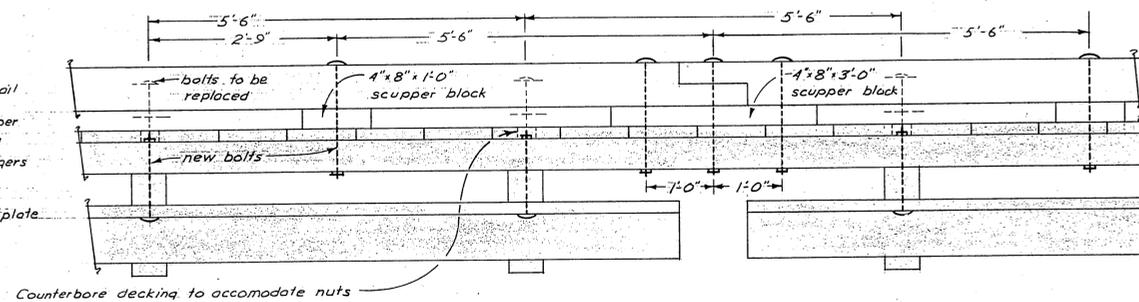
50% sand & 50% 3/8" minus gravel to fill remainder of hole (if required)



**TYPICAL DRILL HOLE & PILING INSTALLATION**  
Scale 1" to 2'



Note: Bullrail replacement  
Scope of work: Existing galvanized 6x6 bullrails & 3" scupper blocks to be replaced with 8" creosote re-tian 345 8x8 bullrails & 4" scupper blocks. Existing bullrail through sill bolts to be replaced with short bolts securing sill stringer & bolt plate. New bullrails to be secured with 3/4" bolts as shown. All bolts to be 3/4" economy head type with malleable washers.



**BULLRAIL REPLACEMENT DETAILS**  
Scale 3/4" to 10'

STATE OF ALASKA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATER AND HARBORS

**CONSTRUCTION &  
DRILLING DETAILS**

SCALE: As Shown  
DATE: October 1963  
PROJ. NO. W66153  
APPROVED: *Don Stettin*  
DIRECTOR  
SURVEYED BY: *PS*  
DRAWN BY: *PS*  
CHECKED BY: *DS*



FOREST SERVICE

U. S. SURVEY  
No. 1079

City of Ketchikan

RADIO TOWER



TONGASS

AVENUE

1" = 100'

BAR HARBOR

Approx. Locations  
of Existing Active  
Communications  
Cables

New log breakwaters (This Contract)

Existing Rock Breakwater

ADDENDUM NO. 2

KETCHIKAN BAR HARBOR-PHASE NO.5  
PROJECT NO. W66153

This cable is reported to  
have been moved to dashed  
line position.

