Agency: Other State Agencies Status: Released Printed On: 7/9/2021 Program Mgr: Evan M Grimm CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05 Release Date: 7/9/2021 Br. Name STEILACOOM MOORING FLOAT SID 00200437 Br. No. DOC-2 Mile Post Route On Carrying Mile Post **Route Under** Intersecting PUGET SOUND Co-Inspector's Signature ABK Cert Exp Date 1/12/2022 Cert # G1112 Inspector's Signature LAW Inspections Performed Inspection Type Date Freq Hours Inspector Cert No Co-Insp. Report Type G0911 LAW 4/26/2021 48 2.0 JRWH Underwater G1112 **ABK** 1.0 LAW 4/26/2021 24 Primary Safety No Utilities (2675)(1684)Operating Tons (1552) Bridge Rails Alignment (1661)45 (1685)Asphalt Depth (2610) Transition Op RF (1553) Deck Overall (1663)7 1996 Year Built (1332)27 Inventory Tons (1555) Guardrails (1686)Superstructure (1671) 7 0 Year Rebuilt (1336)Inv RF (1556) **Terminals** (1687)Substructure (1676)Bridge Rail Ht (2612) Operating Level (1660) Culvert (1678)Design Curb Ht (2611) Chan/Protection (1677) Open/Closed (1293)8 Structural Eval (1657) Pier/Abut/Prot (1679)**NBIS Risk Category** Deck Geometry (1658) (1662)9 Waterway Routine: No Risk Category Underclearance (1659) T Scour (1680)9 Underwater: No Risk Category Inspection Flags

		mab	ection Flag	ys				
	Soundings (2693)	Measure Clearance (2694)	Revise F	Rating (268	88)	Photos (2691)		A Flag (2695)
		BM	S Element	s				
Element	Ele	ment Description	Total	Units	CS 1	CS 2	CS 3	CS 4
8361	Scour		4	EA	4	0	0	0
8390	Fixed Bearing		2	EA	1	0	1	0
8391	Moveable Bearing (r	roller, sliding, etc.)	2	EA	2	0	0	0
8640	Moveable Pedestria	50	LF	50	0	0	0	
8701	Ferry Concrete Floa	/ Concrete Floating Pontoon		CELL	0	0	7	1
8703	Spud Piling & Wells		12	EA	0	0	12	0
8902	02 Protective Coating - Piling		2200	SF	1230	0	970	0
8910	Safety Access Ladd	ers	1	EA	1	0	0	0

# **Notes**

#### 0 ORIENTATION:

The Steilacoom Mooring Float includes the float, gangplank, and the steel spud piles. For location reference: Offshore is north, shore is south, left side is west, and right side is east.

# **BRIDGE INSPECTION REPORT**

Page 2 of 5

Status: Released

Printed On: 7/9/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Carrying

Intersecting PUGET SOUND

Route On

Mile Post

**Route Under** 

Mile Post

# **Notes (Continued)**

9 The WSDOT Dive Team performed an underwater inspection of the Steilacoom Mooring Float on April 26, 2021. Twelve steel pipe piles and the concrete floating pontoon exterior were inspected by diving.

In general, the steel pipe piles that position the floating concrete pontoon (spud piles) are in fair condition. The epoxy coating is failing in large areas underwater, exposing the steel substrate to corrosion and subsequent section loss. An ultrasonic thickness meter was used to check spot metal thicknesses on the piles and small localized areas exhibited losses of up to 50% of the pipe wall thickness. Since these piles are not bearing vertical loads, this condition does not require repair but will be monitored during future inspections. The concrete floating pontoon had thick marine growth covering up to 80% of the surface area, however spot cleanings of the growth revealed no defects.

No underwater repairs are required at this time. Recommend retaining the 48-month frequency for underwater inspections.

1676 SUBSTRUCTURE:

Substructure set to '4' due to pontoon cells in Condition State 4. See Element 8701

1677 CHANNEL:

This structure abuts another structure and does not connect to the shoreline directly. No bank issues noted. No restrictions to water flow past the structure.

1680 SCOUR:

Structure is in tidal waters with weak and variable tidal currents. Scour code set to "T - tidal" and is considered a low risk for scour. See note 8361.

8361 SCOUR (Field):

There are four spud pile groups.

Underwater Inspection Findings:

Water flow in the vicinity is tidal. No scour patterns or scour countermeasures were observed around the float or spud piles.

8390 FIXED BEARING:

The top of the gangplank connection to the building consists of two hooks and keeper bolts for holding in place. The left side keeper bolt head is broken off (photos #3 - #5). REPAIR #10000.

8391 MOVEABLE BEARINGS:

Two slider bearings under the floater side of the gangplank.

8640 MOVEABLE PEDESTRIAN GANGPLANK:

Aluminum welded truss; all welds visually inspected in 2021.

## **BRIDGE INSPECTION REPORT**

Page 3 of 5

Status: Released

Printed On: 7/9/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Carrying

Intersecting PUGET SOUND

Route On

Mile Post

**Route Under** 

Mile Post

# **Notes (Continued)**

# 8701 FERRY CONCRETE FLOATING PONTOON:

#### INTERIOR:

All eight cells of the mooring float were entered during the 2021 inspection (see layout sheet for cell numbering) (photo #7). The spud well connections have been caulked. There are signs of past leakage, due to moisture in the cells it could not be determine if still actively leaking.

Water appears to be able to come through the hatches of each cell.

DOC employees told the inspectors that all cells are pumped regularly. All cells pumped during the 2021 inspection. The pumping depths should be tracked, REPAIR #10001.

Cell #4 has a broken hold down bolt stuck in the base tab and Cell #5 has a broken hold down tab (photos #11 and #12). REPAIR #10003.

Cell #5 spud pile well connections have rust and some section loss.

Cell #8 also has spud pile well connection plates on the interior. These plates are slightly undersized resulting in the bolts not having a solid anchor base (photo #14).

WATER DEPTH TRACKING (T = some ponding to <1" deep, D = Dry)

Date	Cell 1	Cell 2	Cell 3	Cell 4	Cell 5	Cell 6	Cell 7	Cell 8
5/22/2013	1"	T	Т	T	2"	1"	T	T
4/24/2017	T	1-1/4"	1-1/2"	1-1/2"	3"	1-1/2"	1"	1"
4/08/2019	*	*	*	*	4"	*	*	*
4/26/2021	1"	1"	1"	6"	T**	T**	T**	T**

<sup>\*</sup>cell hatches not opened in 2019 (48 month frequency), Cell #5 water depth measured from deck.

Cell 4 considered CS4. REPAIR #10007 new gaskets added at exterior connection of Spud Pile group 4 (element 8703 photo #34), 6" water accumulation in cell, appears to still be actively leaking.

Remaining cells considered CS3 due to water accumulation.

## EXTERIOR:

Offshore exterior top edge is spalled 10' of its length with patching of half its length.

Many of the bumper attachments have minor distortions, repairs, or have been replaced (photo #37).

Hatch bolts missing on all hatches in 2021. Holes have been corked (photo #33). Also noted in photo #33 of Cell #7, hatch lift handle is broken. REPAIR #10003.

#### FLOATER FOUR CORNER DRAFT MEASUREMENTS

Date	OFFSHORE RT	OFFSHORE LT	SHORE RT	SHORE LT
5/22/2013	30"	30"	29.5	29"
4/20/2015	28.5"	29-3/4"	28"	28.5"
4/24/2017	29"	27"	29"	27.5"
4/08/2019	29.5"	29"	29"	27"
4/26/2021	30"	28"	28"	29.5"

No significant change found between 2013 and 2021.

#### Underwater Inspections Findings:

The concrete pontoon surface below the waterline is typically about 80% covered in marine growth up to 1-ft. thick. Spot cleaning of growth revealed no defects (photo UW-5).

<sup>\*\*2021</sup> Cells pumped prior to inspection, measurement not taken prior.

#### **BRIDGE INSPECTION REPORT**

Page 4 of 5

Status: Released

Printed On: 7/9/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Carrying

Intersecting PUGET SOUND

Route On

Mile Post

Route Under

Mile Post

# **Notes (Continued)**

#### 8703 SPUD PILING & WELLS:

Spud Pile #3 (SP3), typical well connection (photo #19).

Spud Pile #4 (SP4), new gasket and bolts added, now sits flush to concrete float (photo #34).

Spud Pile #4 well (SP4) collar is slightly tipped, bolt are tight and no signs of movement (photos #35 and #31). REPAIR #10008 VERIFIED.

## Underwater Inspection Findings:

Spud piling are in generally fair condition underwater. Coating failure with section loss was the most common defect noted. Thickness measurements of the steel were taken in localized areas of corrosion and pitting as well as in good areas for comparison. Up to 50% metal thickness has been lost in some of the small pitted areas. These section losses are not a structural concern since the spud piles do not carry vertical loads and are for pontoon positioning only although future inspections will monitor these losses (photos UW-3, UW-4, UW-7 and UW-8). Refer to attached Layout drawing and Pile Inspection Data Sheets for more location and defect information.

#### 8902 INORGANIC ZINC VINYL PAINT:

Spud pile coating is missing with laminar rust in the intertidal zone (photo #20).

## **Underwater Inspection Findings:**

Spud piles have varying degress of coating failure and loss underwater. The coatings have adhesion failure in areas up to 75% of the pile surface area (coating in place but ineffective). Coating is missing in large areas as well, exposing the metal substrate which is corroding and losing section (photos UW-4, UW-6 and UW-7). Refer to attached Layout drawing and Pile Inspection Data Sheets for more location and defect information.

## 8910 SAFETY ACCESS LADDERS:

Safety access ladder located between SP3 and SP4 found with new paint in 2021.

			Repairs				
Repair No	Pr	R	Repair Descriptions	BMS	Noted	Maint	Verified
10000	1	В	Gangplank top left connection has a broken keeper bolt. Remove and replace.	8390	5/22/2013		
10001	М	В	Pumping records of the float cells should be recorded and tracked. This should include cell # (see layout sheet), date, and depth of water removed. Infiltration rates can be tracked and used for future repair work scheduling.	8701	5/22/2013		
10003	1	В	All eight cell lids are missing hold down bolts and are corked. Replace corks with bolts. Cell #4 has a broken hold down bolt in the base tab. Remove broken bolt. Cell #5 lid base has a broken hold down tab. Weld in new hold down tab. Cell #7 lid lift handle is broken. Weld in new handle.	8701	5/22/2013		
10007	1	В	Cells #4 (west cell) is leaking at the spud pile well connections. This leak needs to be sealed. 2021 LAW - New rubber gasket added at the exterior connection. Due to water in the cell it appears to still be leaking. Water also comes through the hatch.	8701	4/24/2017		
10008	2	В	Spud Pile #4 well (SP4) collar is tipped due to loose sliding bolts, worn bolts, or worn slots.  Remove and replace bolts, increase washer diameter, and double nut bolts. Do not clamp tight to channel allowing for movement.  2021 - LAW VERIFIED Complete. New bolts added with gasket at the pontoon connection. This lifted up the collar. All bolts are tight on the colar with no signs of movement.	8703	4/8/2019		4/26/2021

# Inspections Performed and Resources Required

Printed On: 7/9/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2 SID 00200437 Br. Name STEILACOOM MOORING FLOAT

Carrying Route On Mile Post

Intersecting PUGET SOUND Route Under Mile Post

miersecun	g PUG	E I SOUND							Route Und	ier Mille Post
Report Type		<u>Date</u>	Freq	<u>Hrs</u>	<u>Insp</u>	<u>CertNo</u>	Coinsp			Note
Underwater		4/26/2021	48	2.0	JRWH	G0911	LAW			tion by WSDOT Dive Team. Frequency set respond with every-other routine inspection.
Resources	Hours	Min	Pref	Ma	x Fre	q Date	Need	d Date	Override	Notes
Boat		M	М	M	ľ					Used Munson dive boat for access.
Third Party Notification	tv	4/26/2021	24	1.0	Ι Δ\Λ/	G1112	ΔRK			Schedule inspection with Greg Buikema (DOC) 253-328-3229 or 253-588-5281 (cell). A security clearance must be done for all inspectors prior to landing on the island. This can be done via Greg.
Resources	Hours	Min	Pref					J Data	Oussells	Mater
Resources	nours	IVIIII	Prei	Ma	х гге	q Date	Need	d Date	Override	Notes
Boat										Boat needed for inspection.
Special Equipment										Enter the eight float cells with an electronic winch on a tripod provided by DOC maintenance personnel. Harness and air monitor is required.  Last done in 2021, DOC enters these on a regular basis, inspect in 2025. Arrange with Greg Buikema.
Third Party										Schedule inspection with Greg Buikema (DOC)

Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

UW-0

0 Orientation

Photo Type:

E - Elevation

Orientation:

Shore

Date:

4/26/2021

Repairs:

Elevation of floating pontoon dock.

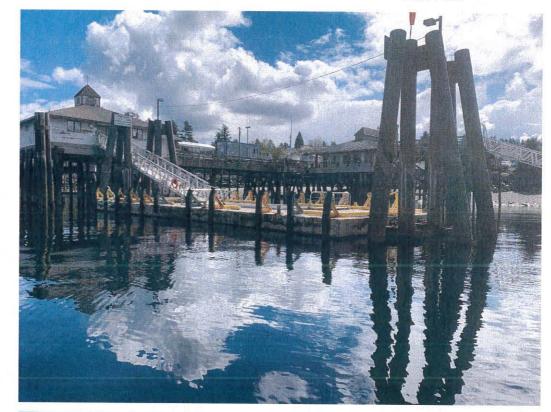
SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

**Route Under** 

Mile Post Mile Post



#### SI-36

0 Orientation

Photo Type:

D - Deck

Orientation: Date:

Left

4/26/2021

Repairs:

View looking down gangplank. Asphalt shingles have been replaced with aluminum surface.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-3

8390 Fixed Bearing

Photo Type: R - Repair

Orientation: Shore

ilontation. O

Date:

5/22/2013

Repairs:

10000

Typical gangplank connection.

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

Route Under

Mile Post

Mile Post



# SI-4

8390 Fixed Bearing

Photo Type:

R - Repair

Orientation:

Shore

Date:

5/22/2013

Repairs:

10000

Keeper bolt is broken on left side

gangplank connection.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-5

8390 Fixed Bearing

Photo Type: R - Repair

Orientation:

Sea

Date:

5/22/2013

Repairs:

10000

Keeper bolt in place on right side

gangplank connection.

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

On M

Route Under

Mile Post Mile Post



SI-7

8701 Ferry Concrete Floating Pontoon

Photo Type:

G - General

Orientation:

Sea

Date:

5/22/2013

Repairs:

Floater cell entry.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-11

8701 Ferry Concrete Floating Pontoon

Photo Type: R

R - Repair DN

Orientation: Date:

5/22/2013

Repairs:

10003

Cell #4 has a broken hold down bolt

stuck in the base tab.

## SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

Mile Post

**Route Under** 

Mile Post



# SI-12

8701 Ferry Concrete Floating Pontoon

Photo Type:

R - Repair

Orientation:

Shore

Date:

5/22/2013

Repairs:

10003

Cell #5 has a broken hold down tab.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-14

8701 Ferry Concrete Floating Pontoon

Photo Type:

G - General

Orientation:

Right

Date:

5/22/2013

Repairs:

Cell #8 spud pile well connection plates are undersized, some bolts not fully on base plate. 2021-Caulking added to seal connection (not pictured)

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

Mile Post

**Route Under** 

**Mile Post** 



# SI-37

8701 Ferry Concrete Floating Pontoon

Photo Type:

G - General

Orientation:

Left

Date:

4/26/2021

Repairs:

Replaced bumpers are galvanized

instead of painted.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

7. NO. DOC-2

**SID** 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

**Mile Post** 

**Route Under** 

**Mile Post** 



8701 Ferry Concrete Floating Pontoon

Intersecting PUGET SOUND

Photo Type:

R - Repair

Orientation:

DN

Date:

4/8/2019

Repairs:

10003

Hatch bolts missing on all hatches in 2019. Holes have been corked. Cell #7 hatch shown, lift handle broken

on hatch.



# UW-5

8701 Ferry Concrete Floating Pontoon

Photo Type:

I - In Depth

Orientation:

UP

Date:

4/24/2017

Repairs:

Heavy marine growth on concrete

pontoon.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-19

8703 Spud Piling & Wells

Photo Type:

R - Repair

Orientation:

Sea

Date:

5/22/2013

Repairs:

Spud Pile #3 well (SP3), typical well

connection.

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

**Route Under** 

Mile Post Mile Post



## SI-34

8703 Spud Piling & Wells

Photo Type:

C - Completed

Orientation:

Left

Date:

4/26/2021

Repairs:

10007

Spud Pile #4 well (SP4) base plate has had rubber gasket and new bolts installed, and it now sits flush to the

pontoon.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

**Route Under** 

Mile Post **Mile Post** 

# Intersecting PUGET SOUND SI-35

8703 Spud Piling & Wells

C - Completed Photo Type:

Orientation: Left

4/26/2021

Date: Repairs:

10008

Spud Pile #4 well (SP4) collar is slightly tipped. Ladder has been repainted.



## SI-31

8703 Spud Piling & Wells

Photo Type:

R - Repair

Orientation:

Date:

4/8/2019

Repairs:

10008

Pre-repair photo. See Photo #35. Spud Pile #4 well (SP4) collar is tipped due to loose sliding bolts. Archive next

inspection.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

UW-3

8703 Spud Piling & Wells

Photo Type: I - In Depth

Orientation:

Date:

5/22/2013

Repairs:

Typical coating failure/rust blooming on spud piles (SP1A shown).

## SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

**Route Under** 

Mile Post

**Mile Post** 



## UW-4

8703 Spud Piling & Wells

Photo Type:

I - In Depth

Orientation:

Date:

5/22/2013

Repairs:

More advanced corrosion and section loss on steel spud pile. SP3B thickness

reading 0.300"



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SID 00200437

Br. Name STEILACOOM MOORING FLOAT

Route On

Mile Post

**Route Under** 

Mile Post

UW-7

8703 Spud Piling & Wells

Photo Type: I - In Depth

Sea

Orientation:

4/26/2021

Date: Repairs:

SP4 Pile B has 50% coating failure from

MDL to MDL +3.



## **UW-8**

8703 Spud Piling & Wells

Photo Type:

I - In Depth

Orientation:

DN

Date:

4/26/2021

Repairs:

SP4 Pile B has deep pitting at MDL +2.



Printed On: 7/21/2021

Agency: Other State Agencies

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2

Carrying

Intersecting PUGET SOUND

SI-20

8902 Inorganic Zinc Vinyl Paint

Photo Type:

G - General

Orientation:

Shore

Date: 5/22/2013

Repairs:

Steel Spud piles have lost protective coat

in the intertidal zone.

## SID 00200437

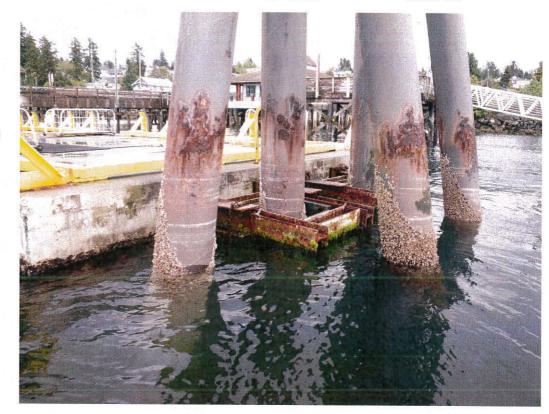
Br. Name STEILACOOM MOORING FLOAT

Route On

Mile Post

**Route Under** 

Mile Post



## UW-6

8902 Inorganic Zinc Vinyl Paint

Photo Type:

G - General

Orientation:

Date:

4/24/2017

Repairs:

Typical coating failure and corrosion occuring on spud piling underwater (approx. 50% failure shown).



**UW-8** 

SI-20

UW-6

Printed On: 7/21/2021

Agency: Other State Agencies

G

11

11

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05

8703 Spud Piling & Wells

8902 Inorganic Zinc Vinyl Paint

8902 Inorganic Zinc Vinyl Paint

Release Date: 7/9/2021

Program Mgr: Evan M Grimm

Br. No. DOC-2 SID 00200437 Br. Name STEILACOOM MOORING FLOAT Route On Mile Post Carrying Intersecting PUGET SOUND **Route Under** Mile Post **Entry Name Folder Name** Type Repairs Page UW-0 0 Orientation E D SI-36 0 Orientation 8390 Fixed Bearing R 10000 2 SI-3 8390 Fixed Bearing R 10000 SI-4 2 R SI-5 8390 Fixed Bearing 10000 3 G SI-7 8701 Ferry Concrete Floating Pontoon 3 R SI-11 8701 Ferry Concrete Floating Pontoon 10003 4 R 10003 SI-12 8701 Ferry Concrete Floating Pontoon 4 G 5 SI-14 8701 Ferry Concrete Floating Pontoon G 5 SI-37 8701 Ferry Concrete Floating Pontoon R SI-33 8701 Ferry Concrete Floating Pontoon 10003 6 UW-5 8701 Ferry Concrete Floating Pontoon 6 R 7 SI-19 8703 Spud Piling & Wells 8703 Spud Piling & Wells C 10007 7 SI-34 C SI-35 8703 Spud Piling & Wells 10008 8 8703 Spud Piling & Wells 10008 SI-31 8 **UW-3** 8703 Spud Piling & Wells 9 UW-4 8703 Spud Piling & Wells 9 8703 Spud Piling & Wells 10 UW-7 10

# Steilacoom Floating Dock DOC-2 / 00200437 Pile Inspection Data Sheets

Underwater		4/26/2021	4/26/2021 Lead: JRV		Co: LAW		
Routine Pile Location		4/26/2021 Lead: LAW Co: ABK					
			Inspection Type				
Bent	Pile	Pile Type MDL Defect El. Location		Defect Location	Details/Remarks	Routine/UW	Date
					PILE INSPECTION DATA - Float Spud Pile Groups		
SP1	Α	Steel	-19.5		25% coating failure/loss. Thickness readings 0.455"/0.300" See Photo #UW-3 (typical coating failure/loss).	UW	4/26/2021
	В	Steel	-17		50% coating failure/loss. Thickness readings 0.445"/0.315"	UW	4/26/2021
	С	Steel	-18	MDL+3	50% coating failure/loss. Thickness readings 0.465"/0.340" (2021)	UW	4/26/2021
SP2	A	Steel	-16		25% coating failure/loss. Thickness reading 0.250" in small corroded area. Good area reading 0.485"	uw	4/26/2021
	В	Steel	-15.5	MDL+16	25% coating failure/loss. Up to 50% area adhesion failure. Thickness readings 0.470"/0.415"  Up to 0.125" pitting in the dent in the pile.	UW	4/26/2021
	С	Steel	-15.5	MDL+1	25% coating failure/loss. Up to 50% area adhesion failure. Thickness reading 0.450"/0.255" (2021).	UW	4/26/2021
SP3	Α	Steel	-18.5	MDL+1	25% coating failure/loss. 50% area adhesion failure. Thickness reading 0.470"/0.350" (2021).	uw	4/26/2021
	В	Steel	-16.5		50% coating failure. Thickness reading 0.300" in pitted area. Photo #UW-4.	UW	4/26/2021
	С	Steel	-15		10% coating failure. Up to 50% adhesion failure. Thickness readings 0.470" (good)/0.370" (in pitted area).	uw	4/26/2021
SP4	Α	Steel	-14.5	MDL+1	25% coating failure/loss. Up to 75% area adhesion failure. Thickness readings 0.410"/0.300" (2021)	UW	4/26/2021
	В	Steel	-15	MDL to +3 MDL +2	25% coating failure/loss. 50% coating failure. Thickness readings 0.480"/0.290" (2021).	UW	4/26/2021
	С	Steel	-14		25% coating failure/loss. 0.390"/0.250" (in small pitted area).	UW	4/26/2021
Counts	Steel =	12			Annual Control of the		

# WASHINGTON STATE DEPARTMENT OF TRANSPORTATION NBI STRUCTURE INVENTORY AND APPRAISAL REPORT

CD Date: 7/8/2021

Printed on: 7/9/2021

CD Guid: 0bc5266b-4d84-438a-bda9-6b69f979af05 (ENGLISH UNITS) IDENTIFICATION **WSBIS DATA** (1) STATE NAME - WASHINGTON 530 **BRIDGE NUMBER** DOC-2 (8) STRUCTURE NUMBER # 002004370000000 BRIDGE NAME STEILACOOM MOORING FLOAT (5) INVENTORY ROUTE (ON/UNDER) - Under 0 8 0 10210 CUSTODIAN Other State Agencies STATE ROUTE MILEPOST 5.96 CROSSING DESC (2) HIGHWAY AGENCY DISTRICT -MAIN LISTING FLAG (3) COUNTY CODE 53 - Pierce County (4) PLACE CODE 00000 SUFFICIENCY RATING (6) FEATURES INTERSECTED **PUGET SOUND** CLASSIFICATION (7) FACILITY CARRIED (112) NBIS BRIDGE LENGTH (9) LOCATION (104) HIGHWAY SYSTEM - Not on the NHS (12) BASE HIGHWAY NETWORK - Not part of network (26) FUNCTIONAL CLASS -(13) LRS INV ROUTE AND SUB ROUTE 0 (100) DEFENSE HIGHWAY - Not a STRAHNET route (11) LRS MILEPOST (101) PARALLEL STRUCTURE -(16) LATITUDE 47 Deg 10 Min 21.98 Sec (102) DIRECTION OF TRAFFIC -(17) LONGITUDE 122 Deg 36 Min 13.89 Sec (103) TEMPORARY STRUCTURE - Not Applicable (98A) BORDER BR. -(98B) (99) BORDER BR. SID (105) FEDERAL LANDS HIGHWAY -STRUCTURE TYPE AND MATERIAL (110) DESIGNATED NATIONAL NETWORK - Not part of network (43) STRUCTURE TYPE MAIN: MATERIAL -(20) TOLL -DESIGN -(21) MAINTENANCE -(44) STRUCTURE TYPE APPR: MATERIAL -(22) OWNER -DESIGN -(37) HISTORICAL SIGNIFICANCE -(45) NO. OF SPANS IN MAIN UNIT CONDITION (46) NO. OF APPROACH SPANS (58) DECK (107) DECK STRUCTURE TYPE -(59) SUPERSTRUCTURE (108) WEARING SURFACE / PROTECTIVE SYSTEM: (60) SUBSTRUCTURE (A) TYPE OF WEARING SURFACE -(61) CHANNEL AND CHANNEL PROTECTION (B) TYPE OF MEMBRANE -(62) CULVERTS (C) TYPE OF DECK PROTECTION -LOAD RATING AND POSTING **AGE AND SERVICE** (31) DESIGN LOAD -(27) YEAR BUILT 1996 (63) OPER RATING METHOD -(106) YEAR RECONSTRUCTED (64) OPERATING RATING (42) TYPE OF SERVICE ON - Other 0 (65) INV RATING METHOD -UNDER - Other 0 (66) INVENTORY RATING (28) LANES: ON STRUCTURE 0 UNDER STRUCTURE 0 (70) BRIDGE POSTING -(29) AVERAGE DAILY TRAFFIC 0 (41) STRUCT OPEN, POSTED, CLOSED -(30) YEAR OF ADT (109) TRUCK ADT 0% APPRAISAL (19) BYPASS, DETOUR LENGTH 000 (67) STRUCTURAL EVALUATION **GEOMETRIC DATA** (68) DECK GEOMETRY (48) LENGTH OF MAXIMUM SPAN (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL (49) STRUCTURE LENGTH (71) WATERWAY ADEQUACY (50) CURB OR SIDEWALK: LEFT RIGHT (72) APPROACH ROADWAY ALIGNMENT (51) BRIDGE ROADWAY WIDTH CURB TO CURB (36) TRAFFIC SAFETY FEATURES (52) DECK WIDTH OUT TO OUT (113) SCOUR CRITICAL BRIDGE (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) PROPOSED IMPROVEMENTS (33) BRIDGE MEDIAN -(75) TYPE OF WORK -(34) SKEW Deg (35) STRUCTURE FLARED (76) LENGTH OF STRUCTURE IMPROVEMENT (10) INVENTORY ROUTE MIN VERT CLEAR 99 ft 99 in (94) BRIDGE IMPROVEMENT COST (47) INVENTORY ROUTE TOTAL HORIZ CLEAR (95) ROADWAY IMPROVEMENT COST (53) MIN VERT CLEAR OVER BRIDGE RDW (96) TOTAL PROJECT COST (54) MIN VERT UNDERCLEAR (97) YEAR OF IMPROVEMENT COST ESTIMATE (55) MIN LAT UNDERCLEAR RT (114) FUTURE ADT (56) MIN LAT UNDERCLEAR LT (115) YEAR OF FUTURE ADT **NAVIGATION DATA** INSPECTIONS (38) NAVIGATION CONTROL -(90) INSPECTION DATE (91) FREQUENCY MO (111) PIER PROTECTION - Not Applicable (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE (39) NAVIGATION VERTICAL CLEARANCE (A) FRACTURE CRIT DETAIL - NO -Month (A) /

(B) UNDERWATER INSP - NO -

(C) OTHER SPECIAL INSP - NO -

Month

Month

(B) \_\_/\_\_

(C) \_/\_

(116) VERT-LIFT BRIDGE NAV MIN VERT CLR

(40) NAVIGATION HORIZONTAL CLR