Appendix 'A'

Lawn Floating Docks
Samples and Probes

Lawn Floating Docks, Samples and Probes

[redacted]

Call Up # 98
Project # R.0706635.013
Standing Offer # E0224-140972/001

9/06/2015

Report Completed By: Mary-Lynn Brinson

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June 9, 2015

Arrived on Site 0800

Dive Crew

Max Hinch	Diver
Dale Edwards	Diver
Everett Brinson	Diver
Brandon Walker	Diver

Climate Conditions

Wind	West 20km/hr
Temperature	8° C
Weather	Sunny

Water Conditions

Sea State	0 m
Temperature	N/A
Visibility	3m

Scope of Work

The scope of work consisted of floating dock alignment, bottom probes and sediment samples. Three floating dock assemblies needed to be aligned. The concrete anchor blocks were to be repositioned and chains replaced where needed. Some of the bottom probes were conducted around the two floating docks. The majority of probes were conducted in the shallow basin located between the dock assemblies and the highway.

Probes were completed using a 10mm diameter steel rod (2m long) which was driven to refusal into the sea floor by the diver striking it with a 3kg hammer. Bottom sediment samples were collected from eight sites around the floating docks and in the basin area. Sites No.1 to No. 5 were composite samples. Sediment was collected at three different depths, 10cm, 50cm and 1.5m then mixed together. Two (250ml) jars were then filled using this mixture. Sites No. 6, No. 7 and No. 8 were typical samples with two 250ml jars filled at each site

Dive gear was assembled and safety checks were completed. A hazard assessment of the work site was conducted and a dive specific safety plan was written and discussed with all members of the dive team.

At low tide the basin area was exposed. This is where the bottom probes began. Approximately 70 probes were conducted before any diving activity was required. At 1124 diver Max Hinch entered the water to continue with bottom probes. All the probes in the area of the floating docks and basin were completed. Diver Hinch exited the water at 1242.

Diver Everett Brinson entered the water at 1414 to reposition two anchor blocks. These blocks needed to be moved to allow for the alignment of both of the dock assemblies located near the basin. Bottom sediment samples No. 6, No. 7 and No.8 were also collected. Diver Brinson exited the water at 1548.

At 1700 diver Brandon Walker entered the water to continue with bottom probes. The twenty one probes located in an area towards the center of the harbour were completed. Diver Walker exited the water at 1723.

June 10, 2015

Arrived on Site 0755

Dive Crew

Max Hinch	Diver
Dale Edwards	Diver
Everett Brinson	Diver
Brandon Walker	Diver

Climate Conditions

Wind	Southwest 10km/hr
Temperature	9° C
Weather	Cloudy

Water Conditions

Sea State	0 m
Temperature	N/A
Visibility	4m

Scope of Work

The scope of work consisted of the aligning of a two dock, floating dock assembly. The concrete anchor blocks were to be repositioned and chains replaced where needed.

Dive gear was assembled and safety checks were completed. A hazard assessment of the work site was conducted and a dive specific safety plan was written and discussed with all members of the dive team.

Diver Everett Brinson entered the water at 1150 to reposition anchor blocks and install chain where needed. One new chain was installed. Diver Brinson exited the water at 1225. The docks were then aligned.

Table 1: Probe Findings

Probe #	Depth of Water(m)	Depth of Probe(m)	Bottom Type
1		1.5	Silt/Mud
2		.5	Rocky/Silt/Muddy
3		1.2	Mud
4		1	Silt/Mud
5		1.3	Silt/Mud
6		1.2	Muddy
7		0.4	Muddy/Rocky
8		1	Muddy/Rocky
9		0.5	Mud/Rocky
10		0.5	Mud
11		1.4	Mud
12		1.4	Mud
13		1	Rocky/Mud
14		1.1	Muddy/Rocky
15		0.9	Mud/ Rocks
16		1	Mud/ Rocks
17		0.7	Rocky/Muddy
18		1.1	Rocky/Sandy/Mud
19		0.8	Rocks/Sand/Mud
20		1.1	Mud
21		1.1	Mud
22		1	Silt/Mud/Rocks
23		0.9	Silt/Mud/Rocks
24		1	Silt/Mud/Rocks
25		1	Silt/Mud/Rocks
26		1	Silt/Mud/Rocks
27		1.3	Silt/Mud/Rocks
28		1	Silt/Mud/Rocks
29		0.9	Silt/Mud/Rocks
30		1.2	Silt/Mud/Rocks
31		0.6	Silt/Mud/Rocks
32		0.8	Silt/Mud/Rocks
33		1.1	Silt/Mud/Rocks
34		1.4	Silt/Mud/Rocks

Probe #	Depth of Water(m)	Depth of Probe(m)	Bottom Type
35		1.5	Silt/Mud/Rocks
36		0.7	Silt/Mud/Rocks
37		0.4	Silt/Mud/Rocks
38		1	Silt/Mud/Rocks
39		0.5	Silt/Mud/Rocks
40		0.6	Silt/Mud/Rocks
41		0.7	Silt/Mud/Rocks
42		0.8	Silt/Mud/Rocks
43		0.6	Silt/Mud/Rocks
44		0.8	Silt/Mud/Rocks
45		1.1	Silt/Mud/Rocks
46		0.6	Silt/Mud/Rocks
47		0.8	Silt/Mud/Rocks
48		0.5	Silt/Mud/Rocks
49		0.5	Silt/Mud/Rocks
50		0.4	Silt/Mud/Rocks
51		0.5	Silt/Mud/Rocks
52		0.3	Silt/Mud/Rocks
53		0.9	Silt/Mud/Rocks
54		1.3	Silt/Mud/Rocks
55		1.1	Silt/Mud/Rocks
56		0.4	Silt/Mud/Rocks
57		0.2	Mud
58		0.4	Mud/Rocks
59		0.4	Mud
60		0.3	Mud
61		0.3	Mud/Rocks
62		0.3	Mud/Rocks
63		0.2	Mud
64		0.1	Mud
65		0.1	Mud
66		0.3	Mud
67		0.3	Mud/Rocks
68		0.2	Mud/Rocks
69		0.2	Mud

Probe #	Depth of Water(m)	Depth of Probe(m)	Bottom Type
70		0.1	Mud/Rocks
71		0.1	Mud/Rocks
72		0.1	Mud
73		0.1	Mud
74		0.1	Mud
75		0.2	Mud
76		0.1	Mud
77		0.2	Mud/Rocks
78		0.9	Mud
79		0.7	Mud/Rocks
80		1.5+	Mud/Rocks
81		0.7	Mud/Rocks
82		0.3	Mud
83		0.4	Mud
84		1	Mud
85		1.5+	Mud
86		1.5	Mud
87		1.4	Mud
88		1.5+	Mud
89		1.5+	Mud/Rocks
90		0.95	Mud/Rocks
91		0.1	Mud
92		0.4	Mud
93		0.2	Mud
94		0.1	Mud
95		1.1	Mud
96		1.5+	Mud
97		1.5+	Mud
98		1.4	Mud
99		0.7	Mud/Rock
100		0.7	Mud/Rocks
101		1.5+	Mud/Rocks
102		1.5+	Mud
103		1.1	Mud/Rocks
104		1	Mud

Probe #	Depth of Water(m)	Depth of Probe(m)	Bottom Type
105		1.3	Mud
106		1.5+	Mud
107		0.9	Mud
108		0.1	Mud
109		0.85	Mud
110		0.8	Mud
111		0.9	Mud
112		0.9	Mud/Rocks
Outside Area			
113		0	Rock
114		0	Rock
115		0.4	Mud/Rocks
116		0.2	Mud/Rock
117		0.2	Mud/Rocks
118		0.1	Mud/Rocks
119		0.1	Mud/Rocks
120		0	Rock
121		0	Rock
122		0.2	Mud/Rock
123		0.4	Mud
124		0.3	Mud
125		0.1	Mud
126		0	Rock
127		0	Rock
128		0.4	Mud/Rock
129		0	Rock
130		0	Rock
131		1	Mud
132		0.4	Mud/Rocks
133		1.5+	Mud

Figure 1: Probe Location Drawing

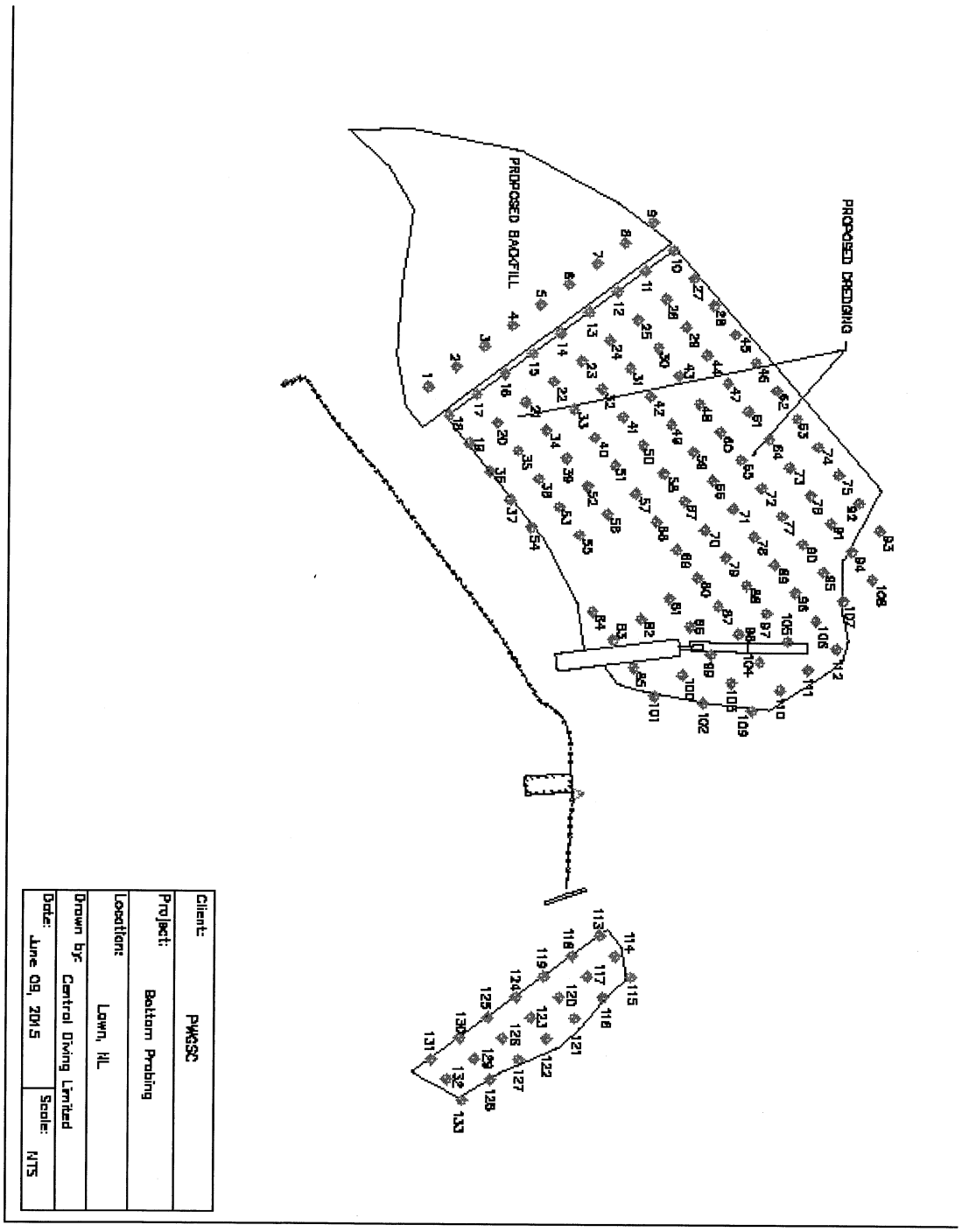


Figure 2: Sediment Samples Location Drawing

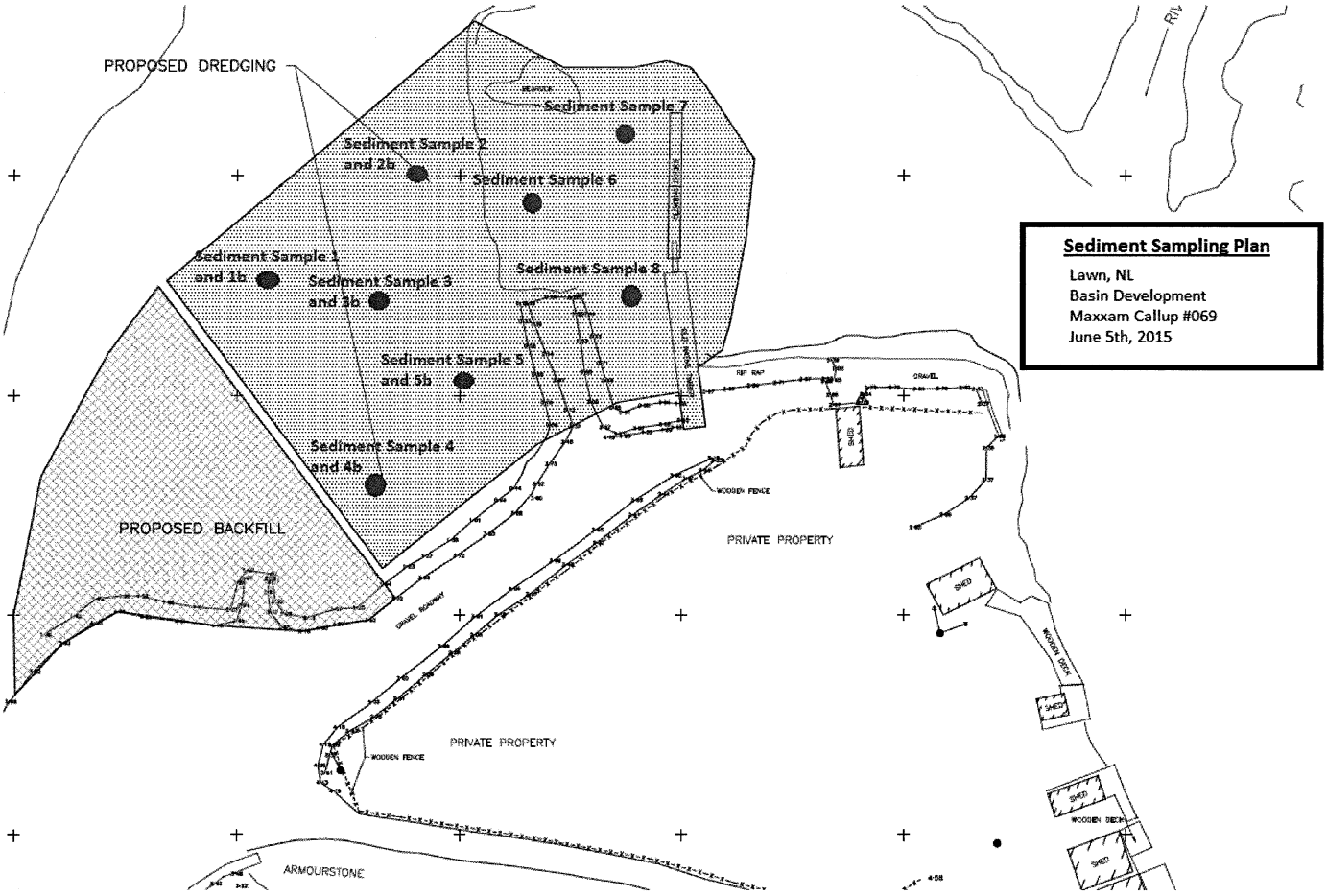


Table 2: Chain Observations (From Last Inspection: April 25, 2014)

Block #	Chain Length (ft)	Chain Condition (% of wear)
Docks from Wharf		
1	75	10
2	75	20
3	100	10
4	60	NEW (2015)
5	80	15
Chains From Head Block	20 (20)	15 (Both)
	NOTE: The chain from Block No.4 was replaced June, 2015	
Docks from Concrete Block		
1	30	10
2	50	25
3	50	15
4	50	10
5	50	10
6	50	15
7	50	15
Chains From Head Block	20 (Both)	10 (Both)
Docks from Finger Wharf		
1	50	NEW
2	50	10
3	40	10
4	40	10
5	70	NEW
Chains from Head Block	20 (Both)	One is NEW One is 15% Worn

Figure 3: Sketch of Three Dock Assembly from Concrete Block (2014)

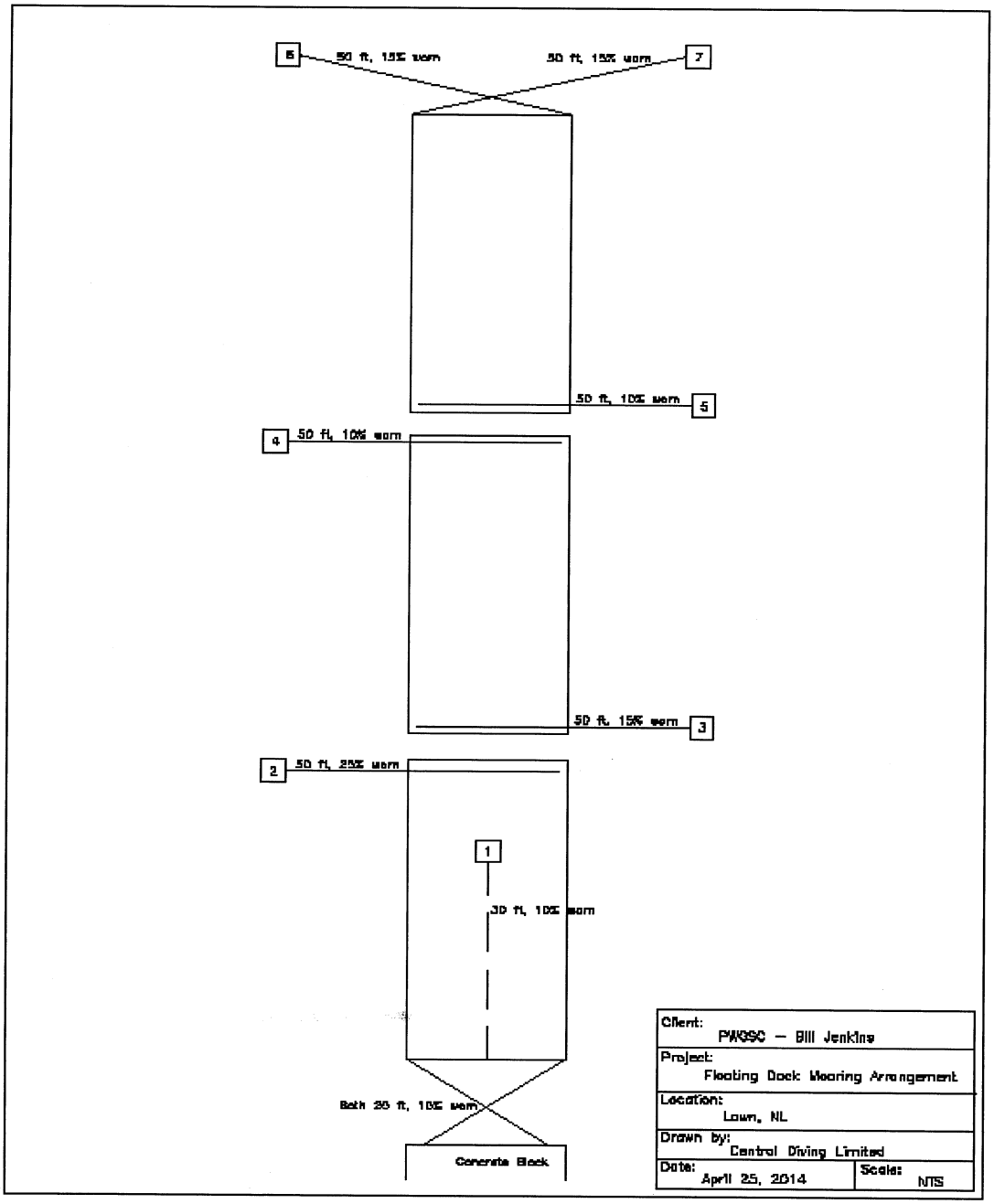


Figure 4: Sketch of Two Dock Assembly from Finger Wharf (2014)

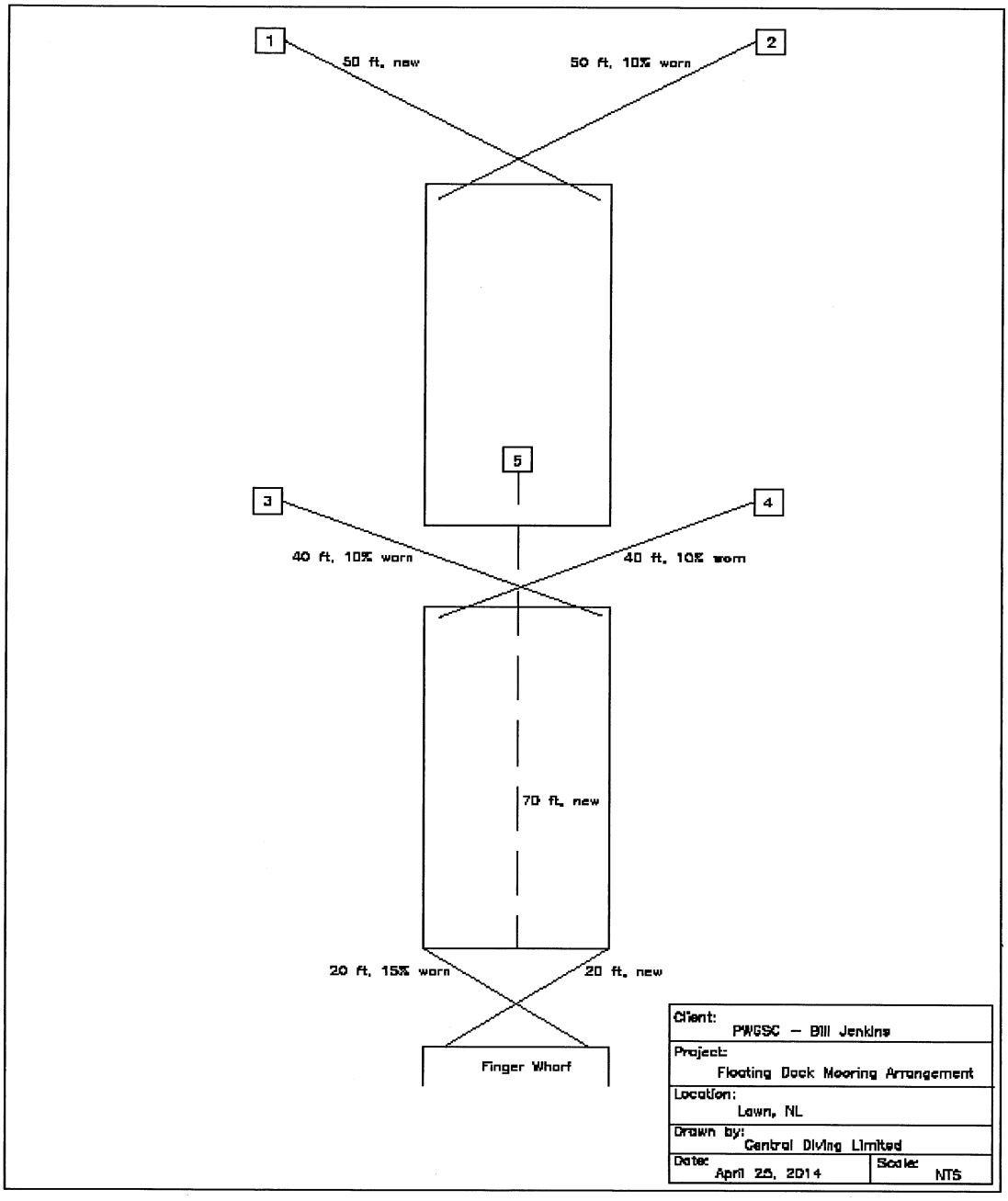
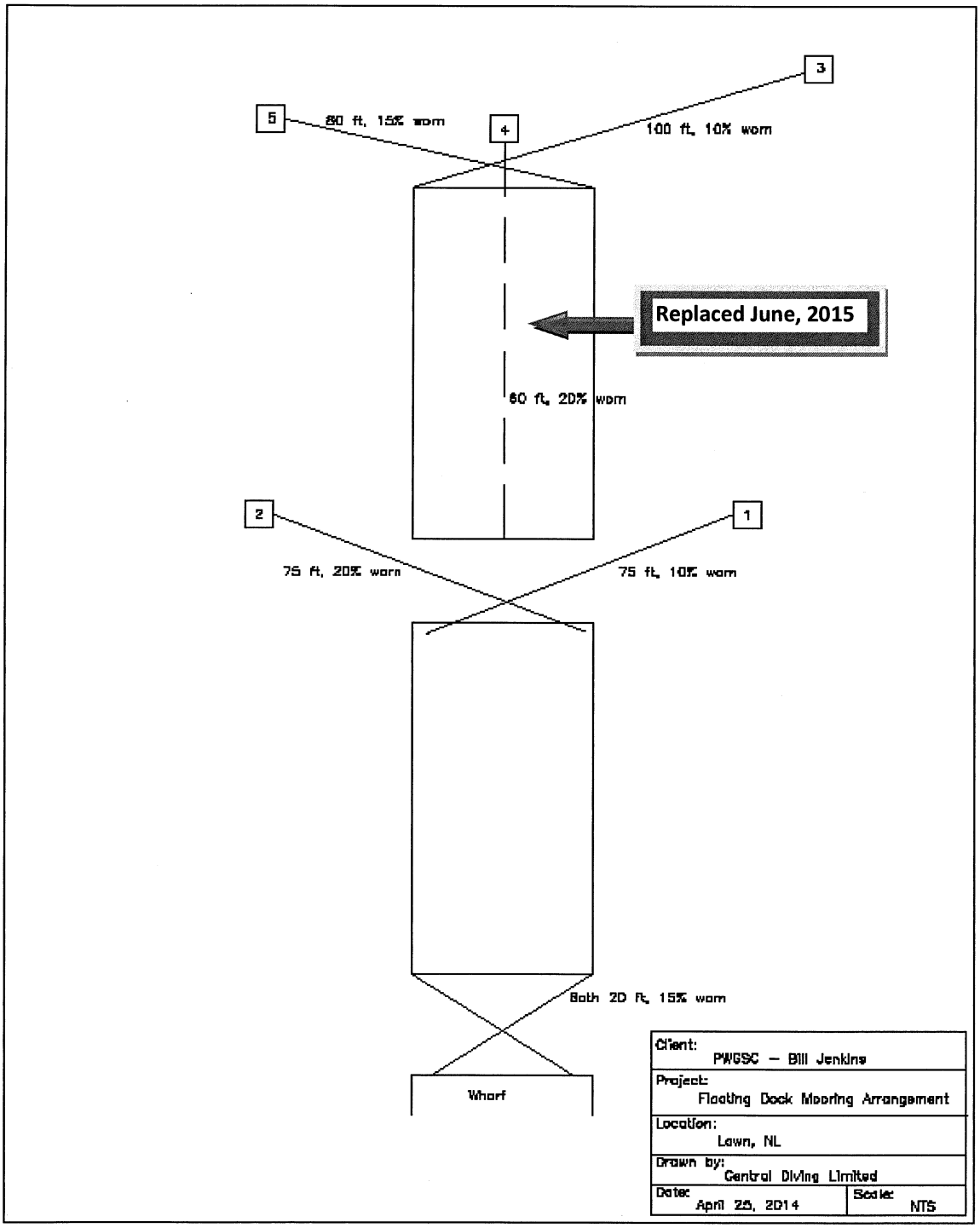


Figure 5: Sketch of Two Dock Assembly from Wharf (2014)



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Maxxam — Maxxam Analytics International Corporation o/a Maxxam Analytics, 49-55 Elizabeth Ave, St. John's, NEWFOUNDLAND Canada A1A 1W9 Tel (709) 754 0203 Toll-Free 800-563-6266 Fax (709) 754 8612 www.maxxam.ca

Chain Of Custody Record — Page of

INVOICE TO:
Company Name: #18835 Public Works & Government Services Canada
Contact Name: Tammy Delaney
Address: PO Box 4600 10 Barter's Hill, St. John's NL A1C 5T2
Phone: (709) 772-6252 x Fax: (709) 772-0916 x
Email: tammy.delaney@pwgsc.gc.ca

Report Information
Company Name: PWG-SC
Contact Name: Megan Vivian
Address:
Phone: Fax:
Email:

Project Information
Quotation #: B35772
P.O. #: Callup#CUA
Project #: R.076685.013
Project Name: Lawn Docking
Site #:
Sampled By:

Laboratory Use Only
Maxxam Job #:
Bottle Order #: 491995
Chain Of Custody Record: C#491995-10-01
Project Manager: Heather Macumber

Regulatory Criteria
Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Regulated Drinking Water ? (Y / N)
Metals Field Filtered ? (Y / N)

Analysis Requested

#	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	MARINE SEDIMENT PACKAGE	TCLP + ABN	Lead in Paint	Lead and Mercury in Paint	General Chemistry + Metals	# of Bottles	Comments
1		Sample 1	June 9		Sed	✓						
2		Sample 1B	"		"	✓						
3		Sample 2	"		"	✓						
4		Sample 3	"		"	✓						
5		Sample 3B	"		"	✓						
6		Sample 4	"		"	✓						
7		Sample 4B	"		"	✓						
8		Sample 5	"		"	✓						
9		Sample 5B	"		"	✓						
10		Sample 6	"			✓						

Turnaround Time (TAT) Required
Regular (Standard) TAT ☐ (will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: (call lab for #) ☐

RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Everett Brinson (signature) / Everett Brinson	15/06/12		[signature]	2015/06/12	14:30		☐	6,8,7,4,7,7	☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

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Chain of Custody-Page 2

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49-55 Elizabeth Ave, St. John's, NEWFOUNDLAND Canada A1A 1W9 Tel (709) 754 0203 Toll-Free 800-563-6266 Fax (709) 754 8612 www.maxxam.ca

Chain Of Custody Record Page of

INVOICE TO:		Report Information		Project Information	
Company Name	#18936 Public Works & Government Services Canada	Company Name	PWGSC	Quotation #	B36772
Contact Name	Tammy Delaney	Contact Name	Megan Vivian	P.O. #	Callup #069
Address	PO Box 4600 10 Barter's Hill	Address		Project #	R.076635.013
	St. John's NL A1C 5T2			Project Name	Lawn Dredging
Phone	(709) 772-6252 x Fax: (709) 772-0916 x	Phone	Fax:	Site #	
Email	tammy.delaney@pwgsc.gc.ca	Email		Sampled By	

Laboratory Use Only	
Maxxam Job #	Bottle Order #: 491999
Chain Of Custody Record: C#491999-10-01	Project Manager: Heather Macumber

Regulatory Criteria

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to maxxam

Analysis Requested

Turnaround Time (TAT) Required
Please provide advance notice for rush projects
Regular (Standard) TAT
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.
Job Specific Rush TAT (if applies to entire submission)
Date Required: Time Required:
Rush Confirmation Number: (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	MARINE SEDIMENT PACKAGE	TCLP + ABN	Lead in Paint	Lead and Mercury in Paint	General Chemistry + Metals						# of Bottles	Comments
1		Sample 7	June 9		Sed			✓											
2		Sample 8	"		"			✓											
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
Everett Brinson (signature) / Everett Brinson	15/06/12		(signature)	2015/6/12	14:30		☐	6/8/4, 7.7	☐ Yes ☐ No

Lab Use Only

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

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Lawn Emergency Numbers

- Diving will be done in accordance with D.C.E.I.M dive tables.
- Diver will have surface supplied air, video, bail out and communication.
- Standby will have surface- supplied air, bailout and communication.
- A site specific hazard assessment will be conducted by dive supervisor and the written dive plan will be discussed with all persons associated with the dive activities.
- All dive gear will undergo pre-dive checks and Medicor will be notified of diving operations. The number for the Queen Elizabeth 2 hospitals hyperbaric support facility will be included in the list of emergency numbers.

Proper P.P.E. will be worn by all members of the dive crew at all times.

Medicor	**709-777-6433**
R.C.M.P	**1-800-709-7267 (RCMP)**
Fire Dept	**709-873-2000**
Q.E.2	**1-902-473-7998**
O .H. & S.	**709-722-7121**
Environmental Emergency	**709- 772-2083**
Industrial Accidents	**709-729-4444**
Hospital	**709-873-2220**
Ambulance	**709-873-3251**

Hazard Assessment

HAZARD ASSESSMENT

	Job Docks, Probes, Samples		**Assessment Team** Central Diving 4		
	Location Lawn		**Date** June 9/15		
	Signature of Manager Everett Brinson				
✓	**Hazards Identified**	**Hazards Rank A/B/C**	**Recommended Controls**	**Completed by:**	**Date**
✓	Boat Traffic	A	Flagging/Visual/Notify HA of Activities	E.B	June 9/15
✓	Equipment Failure	A	Pre-Dive Checks / Abort Dive if Failure	EB	"
✓	Entanglement	A	Carry Knife/Avoidance	EB	"
✓	Slips/Trips	A	Tidy Work Area/Aided Movement/Proper Footwear	E.B	"
✓	Pinch Point	A	Use of Proper Tools for Measuring/Avoid Placing Hands or Feet Near Potential Pinching Hazards	EB	"
✓	Exit/Entry	A	Aided Movement/Ladder	EB	"
	Hazard Ranking: A-Controls must be put in place before work commences B-Controls must be put in place within two days C-Controls must be put in place within one week				