

Construction Phase Report

Mooring Points Phase II Lower Yukon River



STG Incorporated



US Army Corps of Engineers



Denali Commission

USACE

Project Manager: Melanie Peterson
Resident Engineer: Ze Jong
Project Engineer: Ted Champine
Construction Rep: Eric Schneider/ Robert Hoofman

STG Inc

Project Manger: Gary Mathews
Assistance PM: Megan Borger
Superintendent: Chris Schimschat

Locations

Alakanuk
Emmonak
Nunam Iqua
Kotlik
Mountain Village
Anvik
Grayling

NOTE: The system used to ID the individual piles is as follows; If standing with the river to your back, piles are numbered from left to right, i.e. Pile 141B(1) would be the first pile to your left as your facing them. BGL=Below Grade Level / AGL=Above Grade Level

Alakanuk

1. General



2. Observations (Eric Schneider)

7/25/2011

I arrived onsite today from Anchorage at about 1430 hours. Jason, one of the SGT workers, picked me up at the airfield and took me to the city admin office where I would be staying for the next two nights. There I met with Mr. Mike James and his assistant. I checked in and got a little organized, and then Jason and I proceeded to SGT's Camp/Lay-down area in the lot where the AVEC header is located. We had a mini prep meeting and a good safety meeting prior to starting work. These meetings were held at 1530 hours. At 1550, the first piling was driven. It was for Location 111A (AVEC Fuel Point Header), Point 2. Point 1's pile had been driven previously, but some modifications to the pipe had to be made. Chris Schimschat, STG superintendent, and I toured the other two fuel header sites. A few of these sites were going to require some clearing for equipment access and pile driving. Chris and I both agreed to this.

7/26/2011

Pile driving resumed today and was completed by early evening. Welder and painter began welding caps on to the piles and painting with the fluorescent orange paint. The piles at both points 112B and 113C were painted by nightfall. Some adhesive strips were put on the pilings as well. At the Corporations Header, Chris and I installed the tape on point 3's piling. We went back to the AVEC lot to get more fluorescent strips. By the time we returned, the two strips had been removed from and the piling was a little dirty and muddy. It was evident that children and been tampering with and playing on the moorings.

7/27/2011

Painting and placing of safety strips was completed this a.m. and I departed the site. STG's personnel were departing today as well. The crane operator and one of the pile drivers departed with me and were on their way to Nome. I arrived back in Anchorage at about 1430 hours.

111A(1)	N: 62°41'08.5"	W: 164°39'50.6"	112B(3)	N: 62°41'07.1"	W: 164°39'10.7"
111A(2)	N: 62°41'10.0"	W: 164°39'56.2"	113C(1)	N: 62°41'16.0"	W: 164°37'17.0"
			113C(2)	N: 62°41'15.9"	W: 164°37'18.6"
112B(1)	N: 62°41'07.0"	W: 164°39'05.8"	113C(3)	N: 62°41'15.8"	W: 164°37'21.9"
112B(2)	N: 62°41'07.1"	W: 164°39'07.2"			

3. Photos

BEFORE



AFTER



Emmonak

1. General



A total of 8 mooring points installed. Three above grade mooring points at the AVEC tank farm fuel header, location 131C. Three above grade mooring points at the Corporation fuel header, location 131B. Two above grade mooring points at the freight landing, location 131A.

131A(1)	N:62°46'29.6"	W:164°30'58.0"	131B(3)	N:62°46'30.3"	W:164°31'17.4"
131A(2)	N:62°46'00.0"	W:164°30'53.0"	131C(1)	N:62°46'33.9"	W:164°31'50.8"
131B(1)	N:62°46'30.7"	W:164°31'22.1"	131C(2)	N:62°46'33.3"	W:164°31'48.0"
131B(2)	N:62°46'30.5"	W:164°31'18.8"	131C(3)	N:62°46'33.1"	W:164°31'46.5"

2. Observations (R. Hoofman)

6-19-11 Emmonak

At 0700 I spoke with the QC and he said the crew was working on equipment and would be ready to set the first pile around noon. I then called the PE before he left Anchorage and gave him an update. PE arrived on site at 1330 and the first pile, 131A (2), went in at 1450. Pile 131A (1) was placed at 1545, then we moved down to 131B location and drove pile 131B (3) at 1900, 131B (2) at 1927 and 131B (3) at 2037. There were no issues with today's ops and safety was discussed before work began and no issues were observed during the shift. The crew shut down for the evening and the PE and I went back to the city hotel.

6-20-11

First pile for the day went in at 0930 and the remaining three piles, 131C (1,2,3) were completed at 1022. Workers then started painting and placing the 3" reflective strips on the AGL piles and loading equipment onto the barge. PE departed site at 1040. Barge departed Emmonak at 1510 headed for Nanum Iqua.

3. Photos

Location 131B *BEFORE*

During Construction



Nunam Iqua

1. General



Installed three above grade mooring points at the Fuel header/Freight landing; location 171A.

2. Observations (R. Hoofman)

6-20-11 Nunum Iqua

Barge departed Emmonak at 1510 headed for Nunum Iqua. We arrived at 2130 and crew started off loading barge. QC and I marked three sites, 2-AGL and 1-BGL. No access issues. Placement of piles 171A (1,2,3) started at 2315 on the 20th and finished at 0100 on the 21st. *NOTE* Difficult to take pictures due to low light conditions. Barge departed site at 0300 headed for Kotlik.

171A(1)	N:62°32'01.0"	W:164°50'57.8"
171A(2)	N:62°32'01.5"	W:164°51'00.4"
171A(3)	N:62°32'01.4"	W:164°51'01.5"

3. Photos

Location 171A *BEFORE*

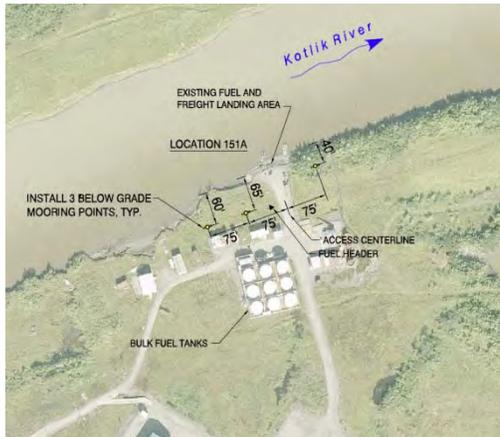


AFTER



Kotlik

1. General



Install three below grade mooring points at the fuel header/Freight landing area; Location 151A.

2. Observations (R. Hoofman)

6/21/11 cont.

We arrived in Kotlik at midnight of the 22nd and barge was offloaded. QC and I marked the locations for the points and all three are BGL. All three points had access issues. The two upstream were off the gravel pad and in a low lying area, swamp. Also there were overhead lines to deal with. The downstream location was also off the gravel pad and was in the middle of some willows. Overhead lines were dealt with and crane mats were used to walk the crane off the gravel. All three points were placed in their designated locations IAW drawings. Also worth mentioning is all three of these points are BGL and once the vegetation grows back up in these areas, the points will be very difficult to locate by barge crews unless some type of marker is placed. Also the two upstream sites are covered in water. In the fall/spring when the area is frozen, it will be difficult to attach lines to the chains. I spoke with the city fuel manager while there about this and he agreed something will need to be done. Points 151A (1,2,3) were placed between 0315 and 0619. *NOTE-difficult to take pictures due to low light and vegetation around the BGL points.* I called PE with an update at 0700hrs. Barge departed site at 0800hrs and we are headed to Mt. Village.

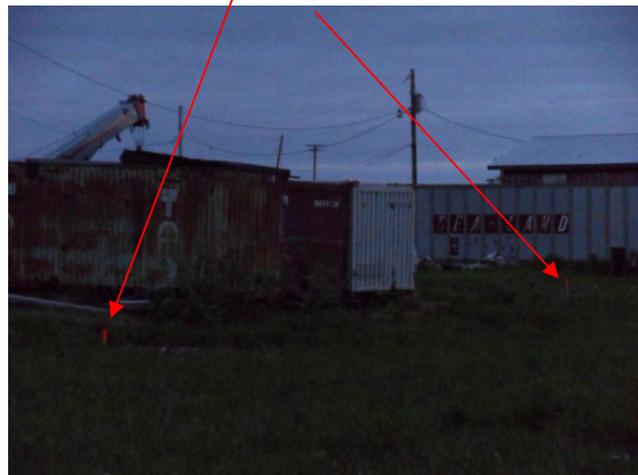
151A(1)	N:63°02'14.8"	W:163°31'40.0"
151A(2)	N:63°02'13.9"	W:163°31'43.0"
151A(3)	N:63°02'13.7"	W:163°31'44.1"

3. Photos

BEFORE

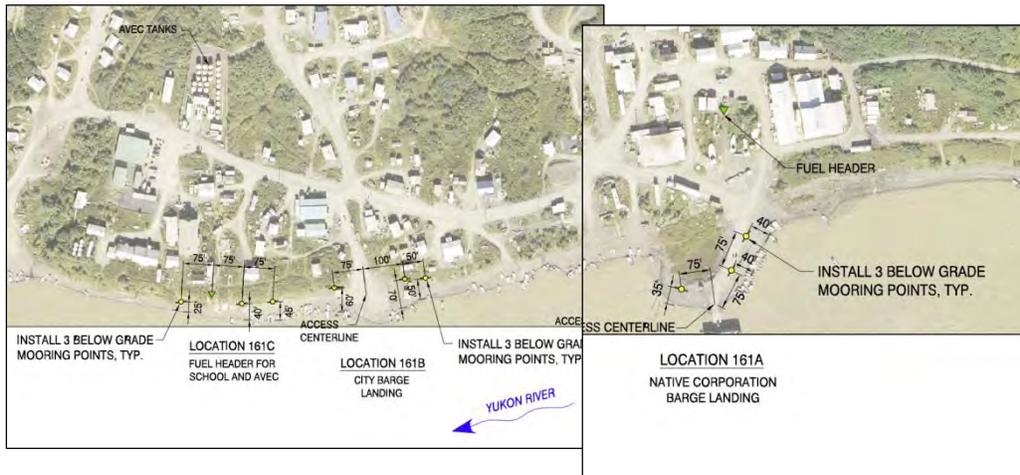


AFTER



Mountain Village

1. General



Installed three below grade mooring points at the School and AVEC fuel header; location 161C. Installed three below grade piles at the city barge landing; Location 161B. Installed two below grade and one above grade mooring points at the Native Corporation barge landing; location 161A.

2. Observations (R. Hoofman)

6/22/11

We arrived in Mt. Village at 2200hrs, 6/22/11. Upon arrival observed lots of boats and drift wood along the beach possibly causing access issues with the lower points. Shortly after arriving, the Mayor came on site and started calling other locals to move their boats. After offloading equipment, work started on the upper point, 161A. Pile 161A (1) was set and started at 0147hrs, 6-23-11. Pile hit refusal at about the 20' mark. QC and I discussed and we moved on to next pile with similar results and also with the 3rd pile for this area. I told the QC I would call in a few hours once people were in and seek guidance. Contractor moved down to location 161C which took awhile due to the logs and boats along the shore. Around 0700 I talked to the PE about the three refusal piles and soon after spoke with John Rajek, GEO-TEC. After a teleconference with the QC, it was decided to cut the piles and weld them back to BGL at a later date. All three piles at 161C went to full depth while all three at 161B did not. I called PE and informed him. We loaded the equipment back onto the barge and departed at 1700hrs.

7-8-2011

Departed Anchorage at 1000 and arrived in Mt. Village to make the corrections on 6 piles. Flew into St. Mary's with contractor personnel and they said they expect their equipment/material to arrive at 1600 and that they would probably wait till next morning to drive over and start work. I asked them to call me and keep me posted. Contractor showed up in Mt. Village at 0800 7-9-11 and after work plan and safety was discussed, they started work on the middle the mooring points, 161B. Work went good on these points. Toughest part was hand digging around the piles with a shovel and pick. Work was completed on these 3 piles around 1900.

During my site walk thru I observed pile 161A (1) was under about 6" of water. Contacted PE and the discussion process started as to what needed to be done.

7-10-11

Talked with PE and RE early AM about the underwater pile. I was told by PE that he would try to get a solution by early Monday but that I would probably leave and have to come back out. Contractor arrived back onsite around 0800 and after a short safety meeting work began on the 3 piles at 161A. The contractor managed to acquire a small excavator to dig around the piles. Piles 161A (2&3) were completed and after no solution to the pile under water was made, contractor and I decided to call it a day and will probably fly out tomorrow.

7-11-11

Received word from PE that Pile 161A (1) would be cut to 5' mark and left as a AGL pile. Contractor had received the same info from their home office. Work was done on this pile, minus the reflective tape, around 1700. I flew out of St. Mary's on 7-11-11 and returned to Anchorage.

161A(1)	N:62°05'04.2" W:163°43'22.1"	161B(3)	N:62°05'04.0" W:163°43'33.4"
161A(2)	N:62°05'04.1" W:163°43'19.5"	161C(1)	N:62°05'03.3" W:163°43'46.0"
161A(3)	N:62°05'04.8" W:163°43'18.9"	161C(2)	N:62°05'03.4" W:163°43'42.8"
161B(1)	N:62°05'03.6" W:163°43'37.9"	161C(3)	N:62°05'00.5" W:163°43'41.1"
161B(2)	N:62°05'04.0" W:163°43'34.2"		

3. Photos

BEFORE

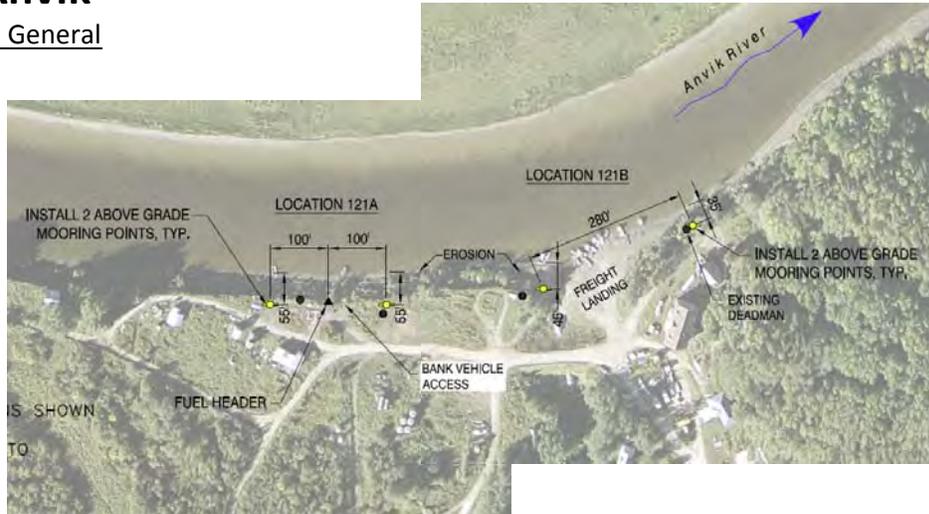


During Construction/AFTER



Anvik

1. General



Installed two above grade mooring points at the fuel header; location 121A. Installed two above grade mooring points at the freight landing; location 121B.

2. Observations (R. Hoofman)

6-26-11, at 1030hrs departed Anchorage and arrived in Anvik around 1300hrs. Spoke with the QC who was in Bethel and he said he and his crew were going to charter to Holy Cross and meet the barge there. I waited in Anvik and the barge arrived at 0500 on 6-27-11. QC and I walked the site and marked the locations for the piles. 4 ea, AGL piles were placed starting at 0700 without issue and we departed at 1210 heading toward our last stop, Grayling.

121A(1)	N:62°39'22.1"	W:160°12'22.9"	121B(1)	N:62°39'22.9"	W:160°12'13.4"
121A(2)	N:62°39'22.3"	W:160°12'27.4"	121B(2)	N:62°39'22.2"	W:160°12'18.4"

3. Photos

BEFORE



During Construction/AFTER



Grayling

1. General



Install three below grade mooring points at the Fuel barge landing; location 141A. Install two below grade mooring points at the freight barge landing; location 141B.

2. Observations (R. Hoofman)

6-26-11

We arrived in Grayling at 1700 and since this was our last stop, all of the contractor's equipment was off loaded. QC and I walked the site and marked the locations for each of the 5 BGL piles. 2 piles had to be adjusted slightly, 141B (1&2), due to park bench and a garden. Pile placement began at 1850 and the last one was finished at 2146. All piles went to required depth. I spent the night in the city building and flew out the next morning at 1000. All contractors' equipment was left in Grayling, 2ea CONNEXs, crane, loader, dozer, bobcat, hammer. Plan is for the tug/barge to pick up the equipment when it passes back through, sometime mid-July, and take it to Alakanuk where there is still 7 moorings to be placed.

141A(1)	N:62°54'16.6"	W:160°03'45.4"
141A(2)	N:62°54'18.2"	W:160°03'45.4"
141A(3)	N:62°54'18.8"	W:160°03'45.3"

141B(1)	N:62°54'13.5"	W:160°03'46.4"
141B(2)	N:62°54'15.0"	W:160°03'45.8"

3. Photos

BEFORE



During Construction/AFTER



PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/27/11

Location: Anvik PAGE 1 of 2

File #: 121A-1

File #: 121A-2

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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/27/11

Location: Anvill PAGE 2 of 2

File #: **121B-1**

File #: **121B-2**

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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/27/11

Location: Crayling PAGE 1 of 2

File #: 141A-1

File #: 141A-2

File #: 141A-3

File #:

File #:

File #:

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21 ft	19
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26 ft	19
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Depth	Blows
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7 ft	10
8 ft	10
9 ft	12
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Depth	Blows
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Depth	Blows
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Depth	Blows
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46 ft	
47 ft	
48 ft	
49 ft	
50 ft	

PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/27/11

Location: Cravling PAGE 2 of 2

File #: 141B-1

File #: 141B-2

File #:

File #:

File #:

File #:

Depth	Blows
1 ft	
2 ft	
3 ft	
4 ft	
5 ft	8
6 ft	9
7 ft	9
8 ft	9
9 ft	10
10 ft	14
11 ft	13
12 ft	12
13 ft	12
14 ft	14
15 ft	19
16 ft	23
17 ft	22
18 ft	25
19 ft	27
20 ft	25
21 ft	27
22 ft	25
23 ft	30
24 ft	24
25 ft	24
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Depth	Blows
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9 ft	8
10 ft	9
11 ft	10
12 ft	9
13 ft	13
14 ft	16
15 ft	22
16 ft	25
17 ft	27
18 ft	25
19 ft	24
20 ft	25
21 ft	28
22 ft	28
23 ft	30
24 ft	24
25 ft	24
26 ft	24
27 ft	21
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Depth	Blows
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Depth	Blows
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Depth	Blows
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Depth	Blows
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37 ft	
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46 ft	
47 ft	
48 ft	
49 ft	
50 ft	

PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/23/11

Location: Mt. Village PAGE 1 of 3

File #: 161A-1

File #: 161A-2

File #: 161A-3

File #:

File #:

File #:

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	
6ft	2
7ft	2
8ft	4
9ft	5
10ft	6
11ft	8
12ft	6
13ft	6
14ft	8
15ft	10
16ft	33
17ft	63
18ft	73
19ft	105
20ft	108
21ft	
22ft	
23ft	
24ft	
25ft	
26ft	
27ft	
28ft	
29ft	
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31ft	
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Depth	Blows
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3ft	
4ft	
5ft	
6ft	6
7ft	5
8ft	5
9ft	8
10ft	6
11ft	7
12ft	7
13ft	8
14ft	8
15ft	9
16ft	11
17ft	27
18ft	52
19ft	68
20ft	82
21ft	
22ft	
23ft	
24ft	
25ft	
26ft	
27ft	
28ft	
29ft	
30ft	
31ft	
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Depth	Blows
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4ft	
5ft	7
6ft	8
7ft	5
8ft	6
9ft	8
10ft	8
11ft	9
12ft	10
13ft	12
14ft	12
15ft	12
16ft	26
17ft	49
18ft	68
19ft	46 in 6"
20ft	
21ft	
22ft	
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Depth	Blows
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Depth	Blows
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Depth	Blows
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39ft	
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41ft	
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43ft	
44ft	
45ft	
46ft	
47ft	
48ft	
49ft	
50ft	

PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/23/11

Location: *Mt. Village* PAGE 2 of 3

File #: 161B-1

File #: 161B-2

File #: 161B-3

File #:

File #:

File #:

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	16
6ft	19
7ft	22
8ft	33
9ft	48
10ft	53
11ft	57
12ft	55
13ft	58
14ft	61
15ft	64
16ft	66
17ft	66
18ft	72
19ft	88
20ft	94
21ft	96
22ft	99
23ft	100
24ft	112
25ft	115
26ft	122
27ft	88 in 6"
28ft	
29ft	
30ft	
31ft	
32ft	
33ft	
34ft	
35ft	
36ft	
37ft	
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46ft	
47ft	
48ft	
49ft	
50ft	

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	12
6ft	12
7ft	16
8ft	22
9ft	26
10ft	28
11ft	33
12ft	36
13ft	36
14ft	44
15ft	49
16ft	51
17ft	55
18ft	58
19ft	68
20ft	75
21ft	78
22ft	88
23ft	105
24ft	121
25ft	144
26ft	101 in 6"
27ft	
28ft	
29ft	
30ft	
31ft	
32ft	
33ft	
34ft	
35ft	
36ft	
37ft	
38ft	
39ft	
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47ft	
48ft	
49ft	
50ft	

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	12
6ft	9
7ft	10
8ft	16
9ft	23
10ft	33
11ft	32
12ft	38
13ft	41
14ft	45
15ft	53
16ft	58
17ft	66
18ft	69
19ft	69
20ft	72
21ft	73
22ft	92
23ft	109
24ft	143
25ft	104 in 6"
26ft	
27ft	
28ft	
29ft	
30ft	
31ft	
32ft	
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Depth	Blows
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Depth	Blows
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Depth	Blows
1ft	
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37ft	
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40ft	
41ft	
42ft	
43ft	
44ft	
45ft	
46ft	
47ft	
48ft	
49ft	
50ft	

PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/24/11

Location: Mt. Village PAGE 3 of 3

File #: **161C-1**

File #: **161C-2**

File #: **161C-3**

File #:

File #:

File #:

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	5
6ft	6
7ft	8
8ft	9
9ft	12
10ft	12
11ft	15
12ft	18
13ft	18
14ft	22
15ft	24
16ft	27
17ft	35
18ft	42
19ft	44
20ft	45
21ft	48
22ft	48
23ft	62
24ft	66
25ft	74
26ft	76
27ft	83
28ft	88
29ft	88
30ft	92
31ft	84 in 6"
32ft	
33ft	
34ft	
35ft	
36ft	
37ft	
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41ft	
42ft	
43ft	
44ft	
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Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	6
6ft	6
7ft	8
8ft	8
9ft	9
10ft	10
11ft	12
12ft	14
13ft	15
14ft	18
15ft	22
16ft	24
17ft	27
18ft	32
19ft	33
20ft	35
21ft	38
22ft	44
23ft	47
24ft	54
25ft	57
26ft	52
27ft	66
28ft	75
29ft	79
30ft	88
31ft	66 in 6"
32ft	
33ft	
34ft	
35ft	
36ft	
37ft	
38ft	
39ft	
40ft	
41ft	
42ft	
43ft	
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47ft	
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Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	8
6ft	8
7ft	8
8ft	8
9ft	13
10ft	16
11ft	21
12ft	24
13ft	24
14ft	28
15ft	33
16ft	35
17ft	35
18ft	35
19ft	41
20ft	41
21ft	42
22ft	44
23ft	48
24ft	53
25ft	57
26ft	55
27ft	68
28ft	72
29ft	77
30ft	77
31ft	82
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Depth	Blows
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Depth	Blows
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Depth	Blows
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43ft	
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45ft	
46ft	
47ft	
48ft	
49ft	
50ft	

PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/19/11

Location: Emmonak PAGE 1 of 3

File #: 131A-1

File #: 131A-2

File #:

File #:

File #:

File #:

Depth	Blows
1ft	
2ft	
3ft	
4ft	
5ft	4
6ft	3
7ft	4
8ft	5
9ft	7
10ft	7
11ft	6
12ft	8
13ft	9
14ft	8
15ft	8
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Depth	Blows
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Depth	Blows
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/19/11

Location: Emmonak PAGE 2 of 3

File #: **131B-1**

File #: **131B-2**

File #: **131B-3**

File #:

File #:

File #:

Depth	Blows
1ft	
2ft	
3ft	
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5ft	5
6ft	5
7ft	5
8ft	7
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10ft	9
11ft	9
12ft	8
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14ft	6
15ft	8
16ft	8
17ft	9
18ft	9
19ft	12
20ft	13
21ft	12
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23ft	13
24ft	16
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Depth	Blows
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15ft	10
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19ft	8
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Depth	Blows
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/20/11

Location: Emmonak PAGE 3 of 3

Pile #: **131C-1**

Pile #: **131C-2**

Pile #: **131C-3**

Pile #:

Pile #:

Pile #:

Depth	Blows
1ft	
2ft	
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5ft	3
6ft	3
7ft	4
8ft	3
9ft	4
10ft	5
11ft	4
12ft	5
13ft	5
14ft	5
15ft	6
16ft	6
17ft	7
18ft	8
19ft	7
20ft	8
21ft	8
22ft	8
23ft	8
24ft	7
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26ft	9
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Depth	Blows
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11ft	5
12ft	6
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14ft	6
15ft	6
16ft	8
17ft	8
18ft	7
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Depth	Blows
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Depth	Blows
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/21/11

Location: Nunam Iqua PAGE 1 of 1

File #: 171A-1

File #: 171A-2

File #: 171A-3

File #:

File #:

File #:

Depth	Blows
1ft	
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6ft	5
7ft	6
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9ft	4
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Depth	Blows
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Depth	Blows
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 6/22/11

Location: Kotik PAGE 1 of 1

Pile #: 151A-1

Pile #: 151A-2

Pile #: 151A-3

Pile #:

Pile #:

Pile #:

Depth	Blows
1ft	
2ft	
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5ft	6
6ft	6
7ft	5
8ft	6
9ft	7
10ft	7
11ft	9
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16ft	9
17ft	10
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Depth	Blows
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 111A-2 ON 7/25/2011
111A-1 ON 6/18/2011

Location: Alakanuk PAGE 1 of 3

File #: 111A-1

File #: 111A-2

File #:

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File #:

Depth	Blows
1ft	
2ft	
3ft	
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16ft	8
17ft	9
18ft	10
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River
 Location: Alakanuk PAGE 2 of 3

Date: 112B-3 ON 7/25/2011
112B-1 & 2 ON 7/26/2011

File #: **112B-1**

File #: **112B-2**

File #: **112B-3**

File #:

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Depth	Blows
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17ft	7
18ft	6
19ft	6
20ft	7
21ft	8
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Depth	Blows
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8ft	2
9ft	4
10ft	3
11ft	5
12ft	5
13ft	4
14ft	6
15ft	6
16ft	7
17ft	6
18ft	7
19ft	7
20ft	7
21ft	10
22ft	10
23ft	11
24ft	9
25ft	11
26ft	10
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PILE DRIVING BLOW LOG

Project Name: Mooring Points Phase 2 Yukon River

Date: 7/26/11

Location: Alakanuk PAGE 3 of 3

File #: 113C-1

File #: 113C-2

File #: 113C-3

File #:

File #:

File #:

Depth	Blows
1ft	
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24ft	10
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PICTURE LOG				
PROJECT: MOORING POINTS- LOWER YUKON RIVER PH II				
CONTRACTOR: STG Inc.				
CONTRACT NO: W911KB-11-C-0005				
DATE	PHOTO #	DESCRIPTION	PHOTO TAKEN BY:	HYPER LINK
ALAKANUK				
6/18/2011	419	Piling loaded on barge	Hoofman	SDC10419.JPG
6/18/2011	420	Crane/equip. on barge	Hoofman	SDC10420.JPG
6/18/2011	421	Site for Pile 111A(1)	Hoofman	SDC10421.JPG
6/18/2011	422	Pile hood	Hoofman	SDC10422.JPG
6/18/2011	423	pile driving shoe	Hoofman	SDC10423.JPG
6/18/2011	424	standing up pile	Hoofman	SDC10424.JPG
6/18/2011	425	Alakanuk upstream 111A	Hoofman	SDC10425.JPG
6/18/2011	426	pile ops (1)	Hoofman	SDC10426.JPG
6/18/2011	427	pile ops (2)	Hoofman	SDC10427.JPG
6/18/2011	428	pile ops (3)	Hoofman	SDC10428.JPG
6/18/2011	429	cutting pile	Hoofman	SDC10429.JPG
7/25/2011	P7250001	AVEC Lot - Location 111A Point 2	Schneider	P7250001.JPG
7/25/2011	P7250002	AVEC Lot - Location 111A Point 2	Schneider	P7250002.JPG
7/25/2011	P7250003	AVEC Lot - Location 111A Point 2	Schneider	P7250003.JPG
7/25/2011	P7250004	AVEC Shoreline - erosion	Schneider	P7250004.JPG
7/25/2011	P7250005	AVEC Shoreline - erosion	Schneider	P7250005.JPG
7/26/2011	P7260006	School Header - Loc 112B Point 3	Schneider	P7260006.JPG
7/26/2011	P7260007	School - View toward Loc 112B, Points 1 and 2	Schneider	P7260007.JPG
7/26/2011	P7260008	School Header	Schneider	P7260008.JPG
7/26/2011	P7260009	Hammer Prep - Loc 112B, Pt 3	Schneider	P7260009.JPG
7/26/2011	P7260010	Hammer Prep - Loc 112B, Pt 3	Schneider	P7260010.JPG
7/26/2011	P7260011	Hammer Ready - Loc 112B, Pt 3	Schneider	P7260011.JPG
7/26/2011	P7260012	Corporation Header - Loc 113C, Pt 3	Schneider	P7260012.JPG
7/26/2011	P7260013	Corporation Header - Loc 113C, Pt 3	Schneider	P7260013.JPG
7/26/2011	P7260014	Corporation Header - Loc 113C, Pt 3	Schneider	P7260014.JPG
7/26/2011	P7260015	Corporation Header	Schneider	P7260015.jpg
7/26/2011	P7260016	Corporation Header	Schneider	P7260016.JPG
7/26/2011	P7260017	Corporation Header - Loc 113C, Pt 2	Schneider	P7260017.JPG
7/26/2011	P7260018	Corporation Header - Loc 113C, Pt 1	Schneider	P7260018.JPG
7/26/2011	P7260019	Corp Header and Pts 1 and 2	Schneider	P7260019.JPG
7/26/2011	P7260020	Corporation Header Pt 2	Schneider	P7260020.JPG
7/26/2011	P7260021	Corporation Header Pt 2	Schneider	P7260021.JPG
7/26/2011	P7260022	Corporation Header Pt 3	Schneider	P7260022.JPG
7/26/2011	P7260023	School Header Pt 1	Schneider	P7260023.JPG
7/26/2011	P7260024	School Header Pt 2	Schneider	P7260024.JPG

EMMONAK				
6/19/2011	430	site for pile 131A(2) Emmonak	Hoofman	SDC10430.JPG
6/19/2011	431	pile ops (4)	Hoofman	SDC10431.JPG
6/19/2011	432	pile driving ops (5)	Hoofman	SDC10432.JPG
6/19/2011	433	pile driving ops (6)	Hoofman	SDC10433.JPG
6/19/2011	434	finished AGL pile	Hoofman	SDC10434.JPG
6/19/2011	436	placing pile 131B(3)	Hoofman	SDC10436.JPG
6/19/2011	437	painted AGL pile	Hoofman	SDC10437.JPG
6/19/2011	438	welding cap onto AGL pile	Hoofman	SDC10438.JPG
6/19/2011	439	Piles 131B(2&3)	Hoofman	SDC10439.JPG
6/19/2011	440	Pile 131B(1)	Hoofman	SDC10440.JPG
6/19/2011	442	stuck loader	Hoofman	SDC10442.JPG
6/19/2011	443	Type of paint used	Hoofman	SDC10443.JPG
6/19/2011	444	Pile 131C(1)	Hoofman	SDC10444.JPG
6/19/2011	446	Piles 131C(2&3)	Hoofman	SDC10446.JPG
6/19/2011	447	Placing 3" reflective tape on AGL pile	Hoofman	SDC10447.JPG
6/19/2011	448	Reflective tape being placed on AGL pile	Hoofman	SDC10448.JPG
6/19/2011	449	Pile131A(2) in use	Hoofman	SDC10449.JPG
6/19/2011	450	131A(2) pile being used	Hoofman	SDC10450.JPG
NUNAM IQUA				
6/20/2011	451	center stud cut out of chain on BGL pile	Hoofman	SDC10451.JPG
6/20/2011	452	chain attached to pile on BGL pile	Hoofman	SDC10452.JPG
6/20/2011	453	chain laid out on BGL pile	Hoofman	SDC10453.JPG
6/21/2011	456	Pile 171A(3) in Nunam Iqua	Hoofman	SDC10456.JPG
KOTLIK				
6/22/2011	457	Pile locations 151A(2&3) KOTLIK	Hoofman	SDC10457.JPG
6/22/2011	458	Pile locations 151A(2&3) KOTLIK	Hoofman	SDC10458.JPG
6/22/2011	459	Pile location for Pile 151A(1)	Hoofman	SDC10459.JPG
6/22/2011	464	Drying chain w/torch prior to painting	Hoofman	SDC10464.JPG
6/22/2011	465	Painted BGL chain	Hoofman	SDC10465.JPG
6/22/2011	467	Cutting BGL pile with torch	Hoofman	SDC10467.JPG
6/22/2011	471	Tug boat	Hoofman	SDC10471.JPG
6/22/2011	472	Site for pile 151A(1), behind crane	Hoofman	SDC10472.JPG
6/22/2011	473	Site for pile 151A(2)	Hoofman	SDC10473.JPG
6/22/2011	474	Kotlic Sign at tank farm	Hoofman	SDC10474.JPG

MOUNTAIN VILLAGE				
6/23/2011	475	Site for Piles 161A(2&3) Mt. Village	Hoofman	SDC10475.JPG
6/23/2011	476	Piles 161A(1&2&3) at refusal	Hoofman	SDC10476.JPG
6/23/2011	477	Piles 161A(1&2&3) at refusal	Hoofman	SDC10477.JPG
6/23/2011	478	Piles 161A(1&2&3) at refusal	Hoofman	SDC10478.JPG
6/23/2011	479	Crane walking to Pile location 161C(1)	Hoofman	SDC10479.JPG
6/23/2011	480	Crane setup at pile 161C(2)	Hoofman	SDC10480.JPG
6/23/2011	481	BGL pile @ 161C(1)	Hoofman	SDC10481.JPG
6/23/2011	483	pile 161B(1) @ refusal	Hoofman	SDC10483.JPG
6/23/2011	484	setting pile 161B(3)	Hoofman	SDC10484.JPG
6/23/2011	485	pile 161C(3) location	Hoofman	SDC10485.JPG
6/23/2011	486	locations for piles 161B(2&3)	Hoofman	SDC10486.JPG
6/23/2011	487	locations for piles 161B(2&3)	Hoofman	SDC10487.JPG
6/23/2011	488	location for pile 161C(3)	Hoofman	SDC10488.JPG
6/23/2011	489	location for pile 161C(2)	Hoofman	SDC10489.JPG
6/23/2011	490	location for pile 161C(1)	Hoofman	SDC10490.JPG
7/9/2011	533	Modified Pile in Mt. Village	Hoofman	SDC10533.JPG
7/9/2011	534	Modified Pile in Mt. Village	Hoofman	SDC10534.JPG
7/9/2011	535	Welder mounted on Trailer	Hoofman	SDC10535.JPG
7/9/2011	536	Cut pile	Hoofman	SDC10536.JPG
7/9/2011	537	Excavationg down to grade	Hoofman	SDC10537.JPG
7/9/2011	538	ATV w/ mobile welder	Hoofman	SDC10538.JPG
7/9/2011	539	Modified Pile in Mt. Village	Hoofman	SDC10539.JPG
7/9/2011	540	Painting chain	Hoofman	SDC10540.JPG
7/9/2011	541	Painting chain	Hoofman	SDC10541.JPG
7/9/2011	542	Pile 161A(1) base below waterline	Hoofman	SDC10542.JPG
7/9/2011	543	Piles 161A(2&3)	Hoofman	SDC10543.JPG
7/9/2011	544	Pile 161A(1) base below waterline	Hoofman	SDC10544.JPG
7/9/2011	545	Pile 161A(1) base below waterline	Hoofman	SDC10545.JPG
7/9/2011	546	Pile 161A(1) base below waterline	Hoofman	SDC10546.JPG
7/10/2011	550	Pile 161A(1) base below waterline	Hoofman	SDC10550.JPG
7/10/2011	552	Modified Pile in Mt. Village	Hoofman	SDC10552.JPG
7/10/2011	553	Cutting Pile	Hoofman	SDC10553.JPG
7/10/2011	554	Cutting hole in Pile for cross pipe	Hoofman	SDC10554.JPG
7/10/2011	555	Hole cut for cross pipe	Hoofman	SDC10555.JPG
7/10/2011	556	Cutting hole in Pile for cross pipe	Hoofman	SDC10556.JPG
7/10/2011	557	Painted chain drying on rack	Hoofman	SDC10557.JPG
7/11/2011	558	Modified Pile in Mt. Village	Hoofman	SDC10558.JPG
7/11/2011	560	Piles 161A(2&3) completed	Hoofman	SDC10560.JPG
7/11/2011	562	Pile 161A(1) cut and capped @ 5'	Hoofman	SDC10562.JPG
7/11/2011	563	Pile 161A(1) cut and capped @ 5'	Hoofman	SDC10563.JPG
7/11/2011	565	Pile 161A(1) cut and capped @ 5'	Hoofman	SDC10565.JPG
7/11/2011	566	Painting Pile 161A(1)	Hoofman	SDC10566.JPG

ANVIK				
6/27/2011	493	Pile 121B(2) location, Anvik	Hoofman	SDC10493.JPG
6/27/2011	494	Pile 121A(2) location	Hoofman	SDC10494.JPG
6/27/2011	495	Pile 121A(1) location	Hoofman	SDC10495.JPG
6/27/2011	496	Pile 121B(2) location	Hoofman	SDC10496.JPG
6/27/2011	500	Location for pile 121B(1)	Hoofman	SDC10500.JPG
6/27/2011	503	Pile 121B(1) location	Hoofman	SDC10503.JPG
6/27/2011	504	Pile 121B(2)	Hoofman	SDC10504.JPG
GRAYLING				
6/27/2011	505	Location for pile 141B(1) Grayling	Hoofman	SDC10505.JPG
6/27/2011	506	Location for pile 141B(1)	Hoofman	SDC10506.JPG
6/27/2011	507	Driving pile 141B(2)	Hoofman	SDC10507.JPG
6/27/2011	508	Driving pile 141B(2)	Hoofman	SDC10508.JPG
6/27/2011	509	Cutting off top of pile, 141B(2)	Hoofman	SDC10509.JPG
6/27/2011	510	M/V YUKON pushing three wide	Hoofman	SDC10510.JPG
6/27/2011	512	Pile 141A(3) site	Hoofman	SDC10512.JPG
6/27/2011	513	Location of pile 141A(2)	Hoofman	SDC10513.JPG
6/27/2011	514	Painting chain	Hoofman	SDC10514.JPG
6/27/2011	515	Location of pile 141B(1) behind outhouse	Hoofman	SDC10515.JPG
6/27/2011	516	Tug/Barge leaving Grayling	Hoofman	SDC10516.JPG
6/27/2011	518	Cutting pile 141A(3) and placing 141A(2)	Hoofman	SDC10518.JPG
6/27/2011	519	Driving Pile 141A(2)	Hoofman	SDC10519.JPG
6/27/2011	520	Setting Pile 141A(1)	Hoofman	SDC10520.JPG
6/27/2011	521	Locations for Piles 141A(1,2,3)	Hoofman	SDC10521.JPG
6/27/2011	522	Finished driving pile 141A(1)	Hoofman	SDC10522.JPG





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