

**Item H7:**

**Cell By Cell Inspection Reports**





**Port of Anchorage Expansion Team**  
Inspector's Daily Report

**DATE:** Tuesday 9-17-2008

**TO / CLIN #:** 4414/1

**CONTRACT #:** 4414-1-S100

**PROJECT NAME:** 2008 MTR

**CONTRACTOR:** QAP

**PROJECT MANAGER:** Tom Pitt - 440-0429

**SUPERINTENDENT:** Steve Stichler - 223-7591 Tim Dudley - 250-9429

**PROJECT SITE CONDITIONS**

**TEMPERATURE:** °58

**WEATHER:** Mostly Cloudy, Lt. rain.

**SHIFT:** ☒ Day ☐ Night

**HOURS:** 8:00am to 5:30pm

**DAILY REPORT NOTES:**

**Work performed**

**Inspections**

Observations by Chris Locke:

- **MKB**
  - 1) Locate and fixed the reason the vibrocompactor's was non maintaining hydraulic pressure. At approximately 1055hrs vibrocompaction/crane experienced rigging problem. Fixed rigging problem at 1530hrs and continued vibrocompaction operations. Vibrocompaction borings completed: 1-1, 2-1, 2-2, 3-6, 3-5, 3-4, 3-3, 3-2.
  - 2) Continued sheet driving operations near cells 26.
- **QAP**
  - 1) Continue earthworking activities associated with the 2008 MTR located near the south west boundary of the North backlands.
  - 2) Conducted drive by recon of 2008 NEBP to assess SWPPP issues associated with recent heavy rain fall.
- **Denali Drilling/Northern Geotechnical Engineering** – Drilled NB199.

**Discussions**

**Meetings**

1:00 – ICRC Wye Meeting with PND. Discussed possibility of switching radius back to original layout. MKB is hinting that we should change back to the consistent cell radius. Right now interlock to interlock distance is 20" (design); actual distance is 19 7/8". PND may redesign to 19 3/4" to allow for constructability. Could we hit the radius with the same number of sheets? PND will send layout. If we want to make change, should we have them change now at cell #27, or should we wait until the start of the North Extension? Would have to move too fast; need to see how driving along wet barge berth goes before we make a decision. PND will hold off till the end of this year and we then re-look at the issue. Will make change so it can be incorporated into the North Extension. PND will create a new layout option now so that we can incorporate sooner if required. - KS

2:00 – Weekly Contractor Meeting

**Potential extra costs**

**Safety**

Vapors related to welding galvanized sheet piles.

**INSPECTOR:**

**SIGNATURE & DATE:**

CHRIS LOCKE

9/16/2008

2008 MTR



# ICRC

## Port of Anchorage Expansion Team Inspector's Daily Report

**DATE:** Friday 9-19-2008

**TO / CLIN #:** 4414/1

**CONTRACT #:** 4414-1-S100

**PROJECT NAME:** 2008 MTR

**CONTRACTOR:** QAP

**PROJECT MANAGER:** Tom Pitt - 440-0429

**SUPERINTENDENT:** Steve Stichler - 223-7591 Tim Dudley – 250-9429

### PROJECT SITE CONDITIONS

**TEMPERATURE:** °58

**WEATHER:** Mostly Cloudy, Lt. rain.

**SHIFT:** ☒ Day ☐ Night

**HOURS:** 8:00am to 5:30pm

### DAILY REPORT NOTES:

#### Work performed

#### Inspections

Observations by Chris Locke:

- **MKB**
  - 1) Vibrocompaction operations. QA inspections completed: 11-6, 10-2, 10-6, 9-4, 8-1,
  - 2) Continued sheet driving operations near cells 28.
    - a) stabbing face sheet piles (in water operations 0730-1240hrs)
- **QAP**
  - 1) Continue earthworking activities associated with the 2008 MTR located near the south west boundary (progressing northward) of the North backlands. Continued earthwork activities a near the south western boundary (progressing southward) of the North backlands. Both earthworking activities are designed to meet at rendezvous point located within the North backlands. See picture.
- **Denali Drilling/Northern Geotechnical Engineering** – Decommission NB158 and NB160 as per contract requirements.

#### Discussions

Refer to Sandy Morris (PND) email regarding vibrocompaction grid spacing within the cells and vibrocompaction procedures.

#### Meetings

#### Potential extra costs

Change in vibrocompaction procedures impact upon cost?

#### Safety

Vapors related to welding galvanized sheet piles.

**INSPECTOR:**

CHRIS LOCKE

**SIGNATURE & DATE:**

9/19/2008

2008 MTR







**Port of Anchorage Expansion Team**  
Inspector's Daily Report

**DATE:** Tuesday, 9-23-2008

**TO / CLIN #:** 4414/1

**CONTRACT #:** 4414-1-S100

**PROJECT NAME:** 2008 MTR

**CONTRACTOR:** QAP

**PROJECT MANAGER:** Tom Pitt - 440-0429

**SUPERINTENDENT:** Steve Stichler - 223-7591 Tim Dudley - 250-9429

**PROJECT SITE CONDITIONS**

**TEMPERATURE:** °58

**WEATHER:** Mostly Cloudy, Lt. Rain.

**SHIFT:** ☒ Day ☐ Night

**HOURS:** 8:00am to 5:30pm

**DAILY REPORT NOTES:**

**Work performed**

**Inspections**

Observations by Chris Locke:

- **0800hrs** – arrived on site (out of water)
  - **MKB**
    - 1) Vibrocompaction operations within the cells
    - 2) Servicing sheet pile crane.
  - **QAP**
    - 1) I inspected the area where the damaged haul truck occurred on 9-22-08. No evidence of hydraulic etc spill evident.
    - 2) Continue earthworking activities associated with the 2008 MTR located near the south west boundary (progressing northward) of the North backlands. Continued earthwork activities a near the south western boundary (progressing southward) of the North backlands. Both earthworking activities are designed to meet at rendezvous point located within the North backlands. See picture.
  - **Denali Drilling/Northern Geotechnical Engineering:** Mobed on to site. I instructed Northern Geotechnical Engineering geologist to call Sandy Morris (PND) for instructions.
- **0930hrs** (out of water)
  - **ANT:** off-shore acoustic survey.
  - **MKB:** Soil vibrocompaction operations shut down for the remainder of the day to allow Denali Drilling to bore holes within the vibrocompaction area.
- **1000hrs** (out of water) **MKB** begins impact hammer work within cells 27 and 28 (face sheets).
- **1145** – in water
  - **MKB** Continue impact hammer operations within cells 27 and 28.
  - **Denali Drilling/Northern Geotechnical Engineering:** Commence Drilling operations within cell 11 after TWA survey laid out the pre-existing vibrocompaction locations.
  - **QAP:** Continue earthworking activities as described in 0800hrs entry.
  - **ANT:** Continue off-shore acoustic survey
- **1200-1235hrs** MKB lunch
- **1600hrs** (in water)
  - **MKB** Impact hammer work of cells 27/28/29
  - **Denali Drilling/Northern Geotech:** Continue drilling within cell 11
  - **TWA:** Continued site survey work
  - **ANT:** Continued off-shore acoustic survey
  - **QAP:** Continued earthworking activities as described in 0800hrs entry.

Vibrocompaction borings QA inspected today: 3-11, 3-8.

**Discussions**

Northern Geotechnical Engineering geologists called Sandy Morris (PND) infer about today's drilling plan. She instructed him to drill within cell 11. Last week PND/ICRC instructed (by email) MKB to implement an 8 foot center vibrocompaction, instead of a 10 foot center, within one of the cells. MKB choose cell 11. PND is testing the effectiveness of the 8 foot grid vs. the 10 foot grid.

**Meetings**

**Potential extra costs**

Change in vibrocompaction procedures impact upon cost?

**Safety**

Keeping unnecessary personal way from the job site.

**INSPECTOR:**

CHRIS LOCKE

**SIGNATURE & DATE:**

9/23/2008

2008 MTR





**Port of Anchorage Expansion Team**  
Inspector's Daily Report

**DATE:** Wednesday, 9-24-2008

**TO / CLIN #:** 4414/1

**CONTRACT #:** 4414-1-S100

**PROJECT NAME:** 2008 MTR

**CONTRACTOR:** QAP

**PROJECT MANAGER:** Tom Pitt - 440-0429

**SUPERINTENDENT:** Steve Stichler - 223-7591 Tim Dudley - 250-9429

**PROJECT SITE CONDITIONS**

**TEMPERATURE:** °48

**WEATHER:** Mostly Cloudy, Lt. Rain.

**SHIFT:** ☒ Day ☐ Night

**HOURS:** 8:00am to 5:30pm

**DAILY REPORT NOTES:**

**Work performed**

**Inspections**

Observations by Chris Locke:

- **1040hrs** – arrived on site (in water)
  - **MKB**
    - 1) Vibrocompaction probe operations within the cells
    - 2) Impact hammer cell on cell 30 tail wall sheet piles
  - **QAP**
    - 1) Continue earthworking activities associated with the 2008 MTR located near the south west boundary (progressing northward) of the North backlands. Continued earthwork activities a near the south western boundary (progressing southward) of the North backlands. Both earthworking activities are designed to meet at rendezvous point located within the North backlands. See picture.
  - **Denali Drilling/Northern Geotechnical Engineering:** Not on site today
  - **ANT:** Continue off shore acoustic survey work
- **1339hrs** (in water)
  - **MKB**
    - 1) Soil vibrocompaction probe operations within the cells.
    - 2) Impact hammer of cell 30 face sheet pile
  - **QAP:** Continue earthwork as described at 1040hrs.
  - **ANT:** Continue off shore acoustic survey work
- **1500hrs** (in water)
  - **MKB**
    - 1) Soil vibrocompaction probe operations within the cells.
    - 2) Placement of “template” for future sheet pile diving operation near cell 30.
  - **QAP:** Continue earthwork as described at 1040hrs.
  - **ANT:** Continue off-shore acoustic survey work
- **1700hrs** (in water)
  - **MKB:** Continuation of 1500hrs activities.
  - **QAP:** Continue 1040hrs activities.
  - **ANT:** Continue off-shore acoustic survey work

Vibrocompaction boring QA inspected today: 5-15, 5-12, 5-9, 4-13, 4-10, 4-17, 5-8, 5-11, 5-14

**Discussions**

**Meetings**

2:00 pm – Weekly Contractor Meeting. See minutes.

**Potential extra costs**

**Safety**

Keeping unnecessary personal way from the job site.

**INSPECTOR:**

CHRIS LOCKE

**SIGNATURE & DATE:**

9/23/2008

2008 MTR



<b>Project: POA North Extension- OCSP®</b>			<b>Date: 8-23-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Sunday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Cloudy, Rainy by departure		<b>SHEET PILE</b> <b>CELL #'s</b>	23, 26, 38-39, 57 - 58
Project Manager	Andy Romine	<b>WIND</b>	Light Wind		<b>TAIL WALL #'s</b>	V, X
Superintendant	Steve Stensler	<b>TEMP</b>	58			
Foreman	Larry/Paul	<b>TIME ON JOBSITE</b>	<b>(5 hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane		Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift		<b>X</b>
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer		<b>X</b>
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer		<b>X</b>
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	<b>X</b>
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 10:15am - beluga whale sighting forced stoppage of less than one hour ~11:00AM</li> <li>• MKB South pad, South End - 2500 Blue on arrival moving soldier piles from cell 57 to 58 w/ APE 200-6 vibratory hammer</li> <li>• MKB South pad, South End - ground crew on arrival working on gangways, templates to prepare for cell 58</li> <li>• QAP South pad, South End - Hitachi 450lc on arrival excavating cell 58 to prepare for pile placement</li> <li>• MKB South pad, North End - 4100W Orange Tip on arrival jetting outside of cells 38/39</li> <li>• MKB North pad, South End - 2500 Orange on arrival driving sheets tail wall X w/ APE 200-6 vibratory hammer</li> <li>• MKB North pad, South End - 4100W Black Tip on arrival driving face sheets cel 23 w/ BSP SL30</li> <li>• MKB Wet Barge Berth – 2500 Yellow on arrival idle w/ JM 115 picked, lying on ground <ul style="list-style-type: none"> <li>◦ Some driving progress ~1ft or less made later on southerly end wall sheets</li> </ul> </li> <li>• MKB Wet Barge Berth - 4000W Vibracompactor idle throughout shift, repair efforts active</li> <li>• MKB loader pairing and staging sheets</li> <li>• MKB South pad, South End - 2500 Blue at departure w/ man basket/crew working on cell 58 prep - soldier piles/braces</li> <li>• MKB South pad, North End - 4100W Orange Tip at departure idle</li> <li>• MKB North pad, South End - 2500 Orange at departure w/ man basket/crew working on cell 23, tail wall V</li> <li>• MKB North pad, South End - 4100W Black Tip idle w/ BSP SL30 atop tail wall sheets V awaiting sheet trimming/welding</li> <li>• MKB Wet Barge Berth – 2500 Yellow at departure idle w/ JM 115 picked, lying on ground, awaiting bent sheet trimming</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes and interlock fit issues at wye welds and splices.</b>						

PND is not responsible for Contractors safety programs, QC program, Contractors equipment, methods or procedures of operation.

## Photographs



South pad, South end upon arrival



South pad, South end at departure



South pad, North end upon arrival



South pad, North end at departure

## Photographs



North pad, South end upon arrival



North pad, South end at departure



Wet Barge Berth upon arrival – note active repairs upon 4000w Vibracompactor



Wet Barge Berth upon departure



## Photographs



Wet Barge Berth – 2500 Yellow w/ JM 115 - Before



Wet Barge Berth – 2500 Yellow w/ JM 115 – After – Some progress made on 4 sheets shown, cutoff required on bent sheets to the north



Note uneven hard driving sheet depth north of 53/54 wye, surrounding area



Note tailwall AX flex beneath contraption template

BY Ben Piccioni TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.



<b>Project: POA North Extension- OCSP®</b>			<b>Date: 8-30-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Sunday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Sunny, Partly Cloudy		<b>SHEET PILE</b>	28, 55, 56, 59 WBB
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light Wind		<b>TAIL WALL #'s</b>	WBB
Superintendant	Steve Stinsler	<b>TEMP</b>	56* F			
Foreman	Larry/Paul	<b>TIME ON JOBSITE</b>	<b>(4.75hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane		Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift		<b>X</b>
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer		<b>X</b>
Manitowoc 4100W Crane orange tip		Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer		<b>X</b>
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	<b>X</b>
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 10:30AM – whale sighting just earlier, brief work stoppage</li> <li>• MKB South pad, South End - 2500 Yellow on arrival idle, later stabbed sheets face cell 59 – but removed them</li> <li>• MKB South pad, South End – 4100W Black tip idle on arrival idle w/ BSP SL30 impact hammer picked, on ground <ul style="list-style-type: none"> <li>◦ MKB crewmen (2) welding/working on hammer – resumed driving ~12:30PM</li> </ul> </li> <li>• MKB South pad, North End - 4100W Orange Tip on arrival idle (broken axle), repairs active, idle throughout shift</li> <li>• QAP South pad, North End – Hitachi 700 excavator on arrival idle</li> <li>• MKB South pad, North End – 2500 Blue idle on arrival, later picked Ape 200-6 and moved powerpack to cell 38 area</li> <li>• MKB North pad, South End - 2500 Orange on arrival driving soldier piles in cell 28 <ul style="list-style-type: none"> <li>◦ Later moved braces and gangways to prepare cell 28 for sheet installation</li> </ul> </li> <li>• MKB North pad, North End - 4000W Vibracompactor on arrival idle, repairs active, appeared idle throughout shift</li> <li>• MKB Wet Barge Berth – White Sandstrom ‘Lima’ crane on arrival idle w/ JM 115 picked</li> <li>• MKB loader pairing and staging sheets</li> <li>• QAP compactor compressing new fill stockpile on north end, QAP loader later bermed the edge of the pile</li> <li>• MKB South pad, South End - 2500 Yellow at departure idle, sheets removed after attempted installation still on ground</li> <li>• MKB crewman heating sheets/sticks, applying galvanizing material to sheet splices</li> <li>• MKB South pad, South End - 4100W Black Tip at departure driving sheets face cell 56 w/ BSP SL30 impact hammer</li> <li>• MKB South pad, North End - 2500 Blue at departure driving h-pile probe outside face of cell 38</li> <li>• MKB North pad, South End – 2500 Orange at departure picking template to install in cell 28</li> <li>• MKB Wet Barge Berth – White Sandstrom ‘Lima’ driving sheets w/ JM 115 impact hammer</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>  <b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes and interlock fit issues at wye welds and splices.</b>						

PND is not responsible for Contractors safety programs, QC program, Contractors equipment, methods or procedures of operation.

## Photographs



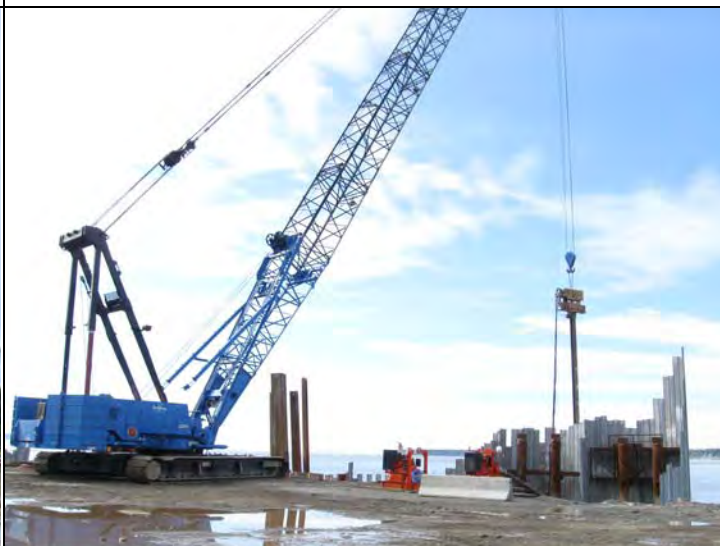
South pad, South end upon arrival – 2500 Yellow idle, 4100w Black tip idle w/ repairs to BSP SL30



South pad, South end at departure – 4100w Black tip driving face sheets cell 56



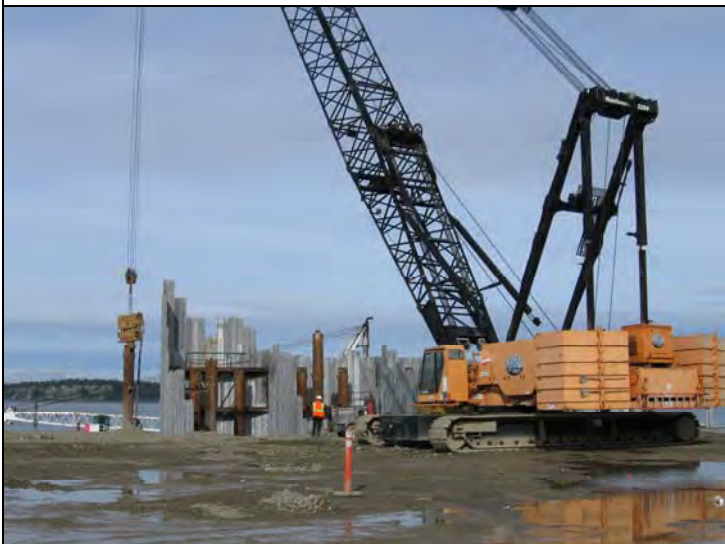
South pad, North end upon arrival – 2500 Blue picks Ape 200-6 in preparation for h-pile probing of problematic cells 38-39



South pad, North end at departure – 2500 Blue drives h-pile probe outside face of cell 38 in attempt to loosen material and allow the sheets to move



## Photographs



North Pad, South end upon arrival – 2500 Orange driving soldier pile cell 28



North Pad, South end at departure – Orange 2500 picking template to install at cell 28 face



North Pad, North end & Wet Barge Berth upon arrival – 4000w Vibracompactor and White Sandstrom 'Lima' idle



Wet Barge Berth at departure – White Sandstrom 'Lima' driving sheets w/ JM 115 impact hammer

## Photographs



Sheet set down by 2500 Yellow after fitment & interlock interference issues prevent sheet installation



Ape 200-6 lifted out of flooded cell 38 where the hammer was partially immersed to allow for more rapid cooling



Repairs continue on 4100w Orange tip while QAP compactor compresses new fill stockpile to the North



Repairs continue on 4000w Vibracompactor while QAP loader moves vibrocompaction fill back to the stockpile

BY Ben Piccioni TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.





<b>Project: POA North Extension- OCSP®</b>			<b>Date: 9-02-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Wednesday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Cloudy, Rainy		<b>SHEET PILE</b>	21, 28, 40, 56, 57, 59
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light Wind		<b>TAIL WALL #'s</b>	AA, BB, BE
Superintendant	Steve Stinsler	<b>TEMP</b>	50* F			
Foreman	Larry/Paul	<b>TIME ON JOBSITE</b>	<b>(5.75hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane		Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift		<b>X</b>
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer		<b>X</b>
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer		<b>X</b>
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 8:00AM</li> <li>• MKB South pad, South End - 2500 Blue on arrival idle, later picked Ape 200-6 and set sheets tail wall BE <ul style="list-style-type: none"> <li>◦ Later set add'l sheets in tail wall BE (cell 59)</li> </ul> </li> <li>• MKB South pad, South End – 4100W Orange tip on arrival driving sheets faces of cells 56 and 57 w/ BSP SL 30 impact</li> <li>• MKB South pad, North End – 2500 Yellow – man basket/1 crew on face of cell 40 trimming, welding plates to sheets <ul style="list-style-type: none"> <li>◦ Later picked Ape 200-6, pulled a single sheet tip w/ plate off, pulled jaws loose on a double sheet/stiffener pick</li> </ul> </li> <li>• QAP North pad, South End – Hitachi EX700 exc. tail wall AA, placing fill in dump truck, delivering to nearby fill stockpile</li> <li>• MKB North pad, South End – 2500 Orange on arrival driving sheets/Intermediate anchor tail wall AA w/ Ape 200-6</li> <li>• MKB North pad, North End – 4100w Black tip on arrival idle, 2 crew working on nearby BSP SL30 impact hammer</li> <li>• MKB North pad, North End - 4000W Vibracompactor on arrival idle, appeared idle throughout shift</li> <li>• MKB Wet Barge Berth (WBB) – 1500 White Lima on arrival idle, later carried man basket/crew to trim sheets</li> <li>• QAP North of WBB – Hitachi 450, loader, 2 dumps present – hole dug to drain inlet, compacting hole w/ hand compactor, testing density of hole – later filled back in w/ concrete pipe cap, metal drain grate</li> <li>• MKB loader pairing and staging sheets</li> <li>• MKB South pad, South End - 2500 Blue at departure driving sheets tail wall BE w/ Ape 200-6, Hitachi 450 exc. BE</li> <li>• MKB South pad, South End - 4100W Orange tip at departure driving sheets tail wall BB w/ BSP SL30 impact hammer</li> <li>• MKB South pad, North End – 2500 Yellow at departure idle w/ Ape 200-6 picked, on ground</li> <li>• MKB North pad, South End - 2500 Orange at departure set h-pile/brace cell 28 w/ Ape 200-6, then put gangway on brace</li> <li>• DD North pad, North End – Denali Drilling AF80 Auger drilling holes marked earlier by TWA surveyor</li> <li>• MKB North pad, North End – 4100 Black tip at departure w/ man basket/2 crew installing brace on cell 21</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes and interlock fit issues at wye welds and splices.</b>						

PND is not responsible for Contractors safety programs, QC program, Contractors equipment, methods or procedures of operation.

## Photographs



South pad, South end upon arrival – 2500 Blue idle, 4100w Orange tip w/ BSP SL30 impact hammer driving face sheets cells 56-57



South pad, South end at departure – 2500 Blue drives sheets tail wall BE w/ Ape 200-6, 4100w Orange tip drives sheets tail wall BB w/ BSP SL30, Hitachi 450 excavates south of BE



South pad, North End upon arrival – 2500 Yellow carries man basket/1 crew to cell 40 where crewman trims sheets, welds plates to sheets in attempt to stiffen – TWA surveyors right



South pad, North End at departure – 2500 Yellow idle w/ Ape 200-6 on ground, crew 'cussing and discussing' failure to move sheets cell 40 despite add'l material welded to plates

## Photographs



North pad, South End upon arrival – 2500 Orange finished driving sheets tail wall AA, Hitachi 700 trenches for extended tail wall



North pad, South end at departure – Orange 2500 picks gangway, lifts onto support brace, 4100w Black tip carries man basket to cell 21 for tail wall brace installation



North pad, North End upon arrival – 4100w Black tip idle, crew work on BSP SL30 impact hammer, 4000w Vibracomp. Idle, Denali Drill rig idle



North pad, North End at departure – 4000w Vibe idle, Denali Drilling AF80 Auger boring holes in pad



## Photographs



Wet Barge Berth upon arrival – 1500 White Lima idle



Wet Barge Berth at departure – 1500 White Lima idle, QAP compactor rolling, Hitachi EX700 idle



North Pad Drainage inlet – excavated, under compaction prior to density testing



North Pad Drainage inlet – finished, covered up w/ cement cap and drainage grate installed

## Photographs



2 buckets+ fill removed from vibrocompaction fill stockpile and placed on ground by QAP loader



Grader fills holes and puddles and makes the approach more even



Tractor trailers w/ side dumps arrive w/ shot rock, form stockpile



New shot rock stockpile north of vibrocompaction fill pile

BY Ben Piccioni TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.





<b>Project: POA North Extension- OCSP®</b>			<b>Date: 9-03-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Thursday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	AM Fog, Partly Cloudy, Sunny		<b>SHEET PILE</b>	24, 38-40, 58, 59
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light Wind		<b>TAIL WALL #'s</b>	W, AB, AY, BD, BE
Superintendent	Steve Stinsler	<b>TEMP</b>	45* F			
Foreman	Larry/Paul	<b>TIME ON JOBSITE</b>	<b>(5.5hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane	<b>X</b>	Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift	<b>X</b>	
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer	<b>X</b>	
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer	<b>X</b>	
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	<b>X</b>
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 8:15AM – fog reduced visibility throughout the morning, at times stopping impact and vibratory hammering</li> <li>• MKB South pad, South End - 2500 Blue on arrival idle, later picked Ape 200-6 and drove sheets tail wall BE <ul style="list-style-type: none"> <li>◦ Later drove face sheets in cells 58 and 59</li> </ul> </li> <li>• MKB South pad, South End – 4100W Orange tip on arrival idle, repairs to BSP SL30 hammer underway</li> <li>• MKB South pad, North End – 2500 Yellow on arrival man basket/crew on face of cells 39/40 welding material to sheets</li> <li>• QAP North pad, SE – Hitachi 450, loader w/ fill present – hole dug to drain inlet, compacting hole w/ hand compactor, testing density of hole – later filled back in w/ concrete pipe cap, metal drain grate, added corps log, smoothed grade</li> <li>• MKB North pad, South End – 2500 Orange on arrival driving sheets/Intermediate anchor tail wall AB w/ Ape 200-6</li> <li>• MKB North pad, South End – 4100w Black tip on arrival idle, repairs to JM 115 hammer underway <ul style="list-style-type: none"> <li>◦ Later picked JM 115 impact hammer and drove sheets tail wall W</li> </ul> </li> <li>• MKB North pad, North End - 4000W Vibracompactor on arrival active, QAP loader feeding gravel fill</li> <li>• DD North pad, North End – AF80 auger drilling holes on locations marked by TWA surveyors</li> <li>• MKB Wet Barge Berth (WBB) – 1500 White Lima on arrival moving JM 115 power pack, later moved off WBB, idle</li> <li>• MKB loader pairing and staging sheets</li> <li>• MKB South pad, South End - 2500 Blue at departure driving sheets tail wall BD w/ Ape 200-6</li> <li>• MKB South pad, South End - 4100W Orange tip at departure driving sheets tail wall AY w/ BSP SL30 impact hammer</li> <li>• MKB South pad, North End – 2500 Yellow at departure lifting man basket/welder outside of face sheets 38-40</li> <li>• MKB North pad, South End - 2500 Orange at departure driving sheets tail wall AB w/ Ape 200-4 &amp; Pogo</li> <li>• DD North pad, North End – Denali Drilling AF80 Auger drilling holes marked earlier by TWA surveyor</li> <li>• MKB North pad, North End – 4100 Black tip at departure w/ man basket/Terracon inside face of cell 24</li> <li>• MKB North pad, North End – 4000w Vibracompactor idle, repairs underway, 1500 Lima w/ man basket above 4000w boom, man lift/loader w/ forks adjacent/idle</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes and interlock fit issues at wye welds and splices.</b>						



PND is not responsible for Contractors safety programs, QC program, Contractors equipment, methods or procedures of operation.

## Photographs



South pad, South end upon arrival – 2500 Blue idle w/ Ape 200-6 in position, 4100w Orange tip idle



South pad, South end at departure – 2500 Blue positions Ape 200-6 to drive sheets tail wall BE, 4100w Orange tip drives sheets tail wall AY w/ BSP SL30



South pad, North End upon arrival – 2500 Yellow carries man basket/1 crew to cells 39/40 where crewman trims/weld sheets



South pad, North End at departure – 2500 Yellow returning welder to the outside of cells 38-40 in man basket

## Photographs



North pad, South End upon arrival – 2500 Orange driving sheets tail wall AB, 4100w Black tip idle in background



North pad, South end at departure – Orange 2500 drives sheets tail wall AB w/ Ape 200-4 & Pogo, 4100w Black tip carries man basket to cell 24 for Terracon to repair/connect sensor wiring



North pad, North End upon arrival – 4100w Black tip idle, crew work on JM 115 impact hammer, 4000w Vibracompactor active, Denali AF80 auger active



North pad, North End at departure – 4000w Vibe idle, repairs underway w/ 1500w Lima crane, Manlift



## Photographs



Wet Barge Berth upon arrival – 1500 White Lima moving JM 115 power pack



Loader moves sheet w/ just forks, resulting in extreme flex of sheet



South Pad Drainage inlet – excavated, prior to compaction, density testing and cap/grate installation



South Pad Drainage inlet – finished, covered up w/ cement cap and drainage grate, corps log installed, QAP Hitachi 450 finishing up grade – actively draining water in ditch

BY Ben Piccioni TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.

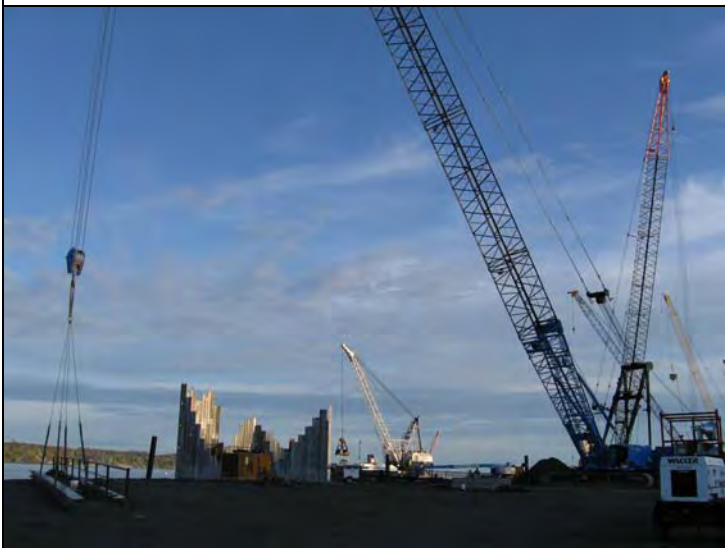


<b>Project: POA North Extension- OCSP®</b>			<b>Date: 9-18-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Friday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Sunny, Partly Cloudy		<b>SHEET PILE</b>	15-22, 31, 58, 59, 61, WBB
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light Wind		<b>TAIL WALL #'s</b>	AE, BD, BG
Superintendant	Steve Stinsler	<b>TEMP</b>	43-60* F			WBB
Foreman	Larry/Paul	<b>TIME ON JOBSITE</b>	<b>(6hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane	<b>X</b>	Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift	<b>X</b>	
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer	<b>X</b>	
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer	<b>X</b>	
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b>						
<ul style="list-style-type: none"> <li>• Arrival on site 8:15AM</li> <li>• MKB South pad, South End - 2500 Blue on arrival idle, gangway for intermediate tail wall BG (61 South) picked, on ground <ul style="list-style-type: none"> <li>◦ Later set gangway in place and stabbed sheets beyond intermediate anchor</li> </ul> </li> <li>• MKB South pad, South End – 4100W Orange Tip on arrival idle, later picked BSP SL30, tested, set back down for repairs</li> <li>• MKB South pad, North End – 2500 Orange on arrival w/ Man Lift outside face cell 39, crew adding doubler plates <ul style="list-style-type: none"> <li>◦ Later picked up Ape 200-6, pulled on strengthened sheet, and ripped it off at the double plate weld seam</li> </ul> </li> <li>• MKB North pad, South End – 2500 Yellow on arrival driving sheets tail wall AE (31 South) w/ Ape 200-6 vibratory hammer</li> <li>• MKB North pad, South End – 1500SC Lima on arrival idle, BSP SL30 picked, held just above ground for repairs</li> <li>• MKB North pad, North End - 4000W Vibracompactor on arrival working around cell 15</li> <li>• QAP North pad, North End – Volvo loader feeding vibracompaction fill atop 4000W probe assembly, + QAP water truck</li> <li>• MKB North pad, North End – 4100W Black tip on arrival idle, boom on ground, service/repairs underway</li> <li>• QAP North pad, North End – Komatsu 61px filling cells ~15-22, later joined by EX450, D10n, Volvo loader + Dumptrucks</li> <li>• NSES Wet Barge Berth – New Auger on arrival idle, later entered south WBB cell after tide receded, drilled inside face</li> <li>• MKB South pad, South End - 2500 Blue at departure stabbing intermediate tail wall BG sheets</li> <li>• MKB South pad, South End - 4100W Orange Tip driving sheets tail wall BD (cell 58/59) w/ BSP SL30 impact hammer</li> <li>• MKB South pad, North End - 2500 Orange at departure moving Ape 200-6 back towards cell 39</li> <li>• MKB North pad, South End – 2500 Yellow at departure driving sheets tail wall AE w/ Ape 200-6 vibratory hammer</li> <li>• MKB North pad, South End – 1500SC Lima at departure carrying man basket outside cell 22 w/ 2 crewmen</li> <li>• MKB North pad, North End – 4000w Vibracompactor working east of cell 14 w/ QAP loader and water truck attending</li> <li>• NSES Wet Barge Berth – New Auger drilling inside of south cell, southerly end</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes, driving with hammers out of plumb, interlock fit issues at wye welds and splices, and cells without bracing.</b>						



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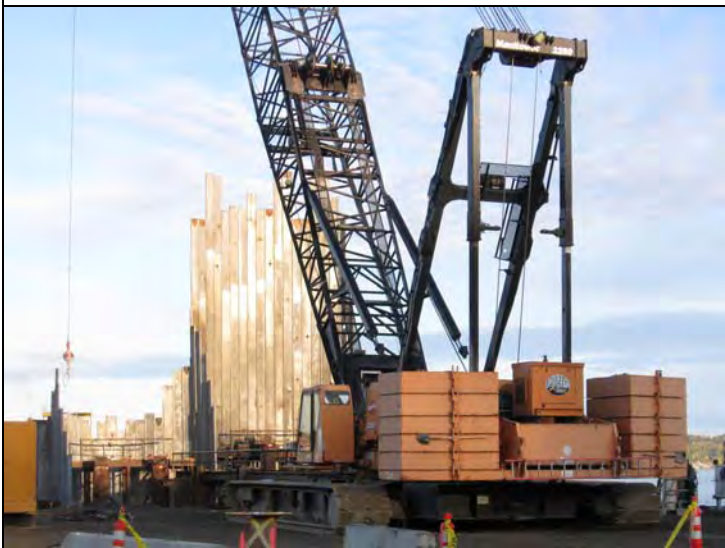
## Photographs



South pad, South end upon arrival – 2500 Blue w/ gangway picked to install in intermediate tail wall BG; 4100w Orange tip idle in background



South pad, South end at departure – 2500 Blue stabs intermediate tail wall BG sheets while 4100w Orange tip drives sheets tail wall BD (cell 58/59)



South pad, North end upon arrival – 2500 Orange holding manlift outside face of cell 39 for crew to weld doubler plates to outside of sheets



South pad, North end at departure – 2500 Orange returns Ape 200-6 towards cell 39 after setting down torn off sheet top

## Photographs



North Pad, South end upon arrival – 2500 Yellow driving sheets tail wall AE (cell 31) while 1500SC Lima sits idle w/ BSP SL30 picked, held for repairs in background



North Pad, South end at departure – 2500 Yellow drives tail wall AE sheets; 1500SC Lima returns Man Lift from from outside face cell 22 w/ crewman



North Pad, North end upon arrival – 4000w Vibracompactor working East of cell 15 w/ Volvo Loader and QAP water truck assisting; 4100W Black tip idle in background, boom on ground; Komatsu 61PX fills cells ~15-22



North Pad, North end at departure – 4000w Vibracompactor working East of cell 15 w/ Volvo Loader and QAP water truck assisting; cell filling operations continue in background



## Photographs



Wet Barge Berth at departure – 4100W Orange tip sits idle w/ Man Lift picked, on ground; NSES tracked auger in south WBB cell, drilling inside face of south end of cell

Crew indicates they cannot drill directly adjacent to inside face as sheets tend to toe inward, requiring drill to be placed further from edge of cell, and at an angle away from toe-in



Hitachi 450 installs CMP around sensor conduit while Komatsu 61PX continues to fill cells

Orange 2500 removes torn off top of doubled sheet cell 39

BY Ben Piccioni TITLE PND Inspector

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<b>Project: POA North Extension- OCSP®</b>			<b>Date: 10-09-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Friday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>		Rainy	<b>SHEET PILE</b>	10, 21-27, 29, 30, 49
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>		Light Wind	<b>TAIL WALL #'s</b>	I, J, AD, AJ, BE, BJ
Superintendent	Steve Stinsler	<b>TEMP</b>		47°F to 51°F		
Foreman	Larry, Ward	<b>TIME ON JOBSITE</b>		<b>(6hrs) PND</b>		
<b>EQUIPMENT USED:</b>					Sandstrom 1500SC White 'Lima'	<b>X</b>
Manitowoc 4000W Crane	<b>X</b>	Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift		<b>X</b>
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer		<b>X</b>
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer		<b>X</b>
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b>						
<ul style="list-style-type: none"> <li>• Arrival on site 9:00am</li> <li>• MKB South pad, South End - 2500 Blue on arrival setting sheets tail wall BJ (64S) w/ Ape 200-6 vibratory hammer</li> <li>• MKB South pad, South End – 4100W Orange Tip on arrival w/ man basket tail wall BE (59/60), trimming sheet tips <ul style="list-style-type: none"> <li>◦ Difficult driving w/ BSP SL 30, operation stopped to check hammer, later idle for hammer repair</li> </ul> </li> <li>• MKB South pad, South End – 1500SC Lima on arrival slinging cell face sheet brace east of cell 49</li> <li>• MKB South pad, North End – 2500 Yellow on arrival pulling sheet up in tail wall AJ (39N) w/ Ape 200-6 <ul style="list-style-type: none"> <li>◦ Difficulty w/ plumb/level of wye AJ – crew repeatedly applied tension and vibration to adjust</li> </ul> </li> <li>• MKB North pad, South End – 4100W Black Tip on arrival driving face sheets cells 30, 31, tail wall AD (30/31)</li> <li>• QAP North pad, South End – D10n, P61x bulldozers moving fill hauled by dumps – cells 21-27</li> <li>• MKB North pad, North End - 4000W Vibracompactor on arrival working east of filled cells ~16 w/ Ape 200-6</li> <li>• MKB North pad, North End – 2500 Orange pulling sheets tail wall I (10N)</li> <li>• North pad, North End – TWA surveying throughout site, using control primarily on north end</li> <li>• Wet Barge Berth – Dutra dredging outside south end of WBB cells, less than full buckets of granular fill &amp; clay observed</li> <li>• MKB South pad, South End - 2500 Blue at departure driving sheets tail wall BJ (64S) w/ Ape 200-6 vibratory hammer</li> <li>• MKB South pad, South End – 4100W Orange Tip at departure idle w/ BSP SL30 atop tail wall BE, bent sheet in jaws</li> <li>• MKB South pad, South End – 1500SC Lima idle in central pad area, stretching cables w/ QAP Loader</li> <li>• MKB South pad, North End – 2500 Yellow at departure setting sheets face 39S w/ Ape 200-6, hard driving observed</li> <li>• MKB North pad, South End – 4100w Black tip at departure idle, BSP SL30 impact hammer idle on ground</li> <li>• QAP North pad, South End – Komatsu P61 bulldozer, Hitachi EX450 filling, cleaning silt from cells 21-23 near cell faces</li> <li>• MKB North pad, North End – 4000w Vibracompaction crane at departure paused for a temp check on Ape 200-6</li> <li>• MKB North pad, North End – 2500 Orange pulling sheet tail wall J (10S) w/ Ape 200-6 vibratory hammer</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes, interlock fit issues at wye welds and splices, and cells without bracing.						



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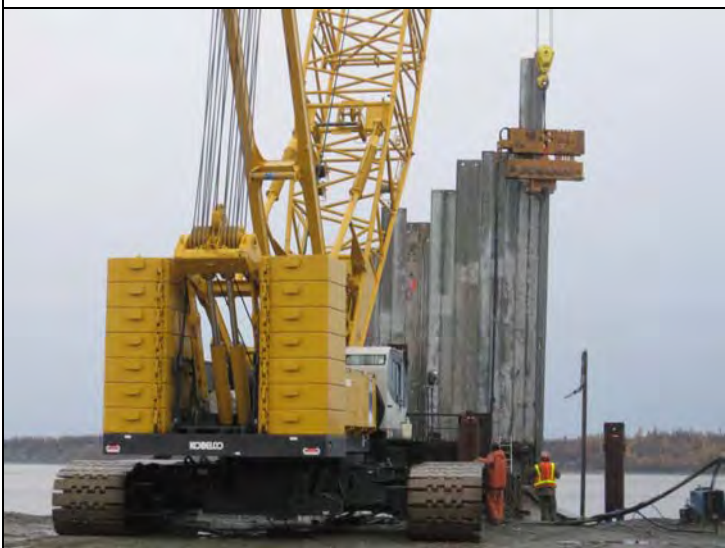
## Photographs



South pad, South end upon arrival – 2500 Blue setting face sheets tail wall BJ (cell 64s) w/ Ape 200-6; 4100w Orange tip carrying man lift to tail wall BE (cells 59/60) to trim sheets



South pad, South end at departure – 2500 Blue 2500 Blue driving sheets tail wall BJ (cell 64s) w/ Ape 200-6; 4100w Orange tip idle atop tail wall BE (cells 59/60) w/ BSP SL30, bent sheet tip beneath hammer

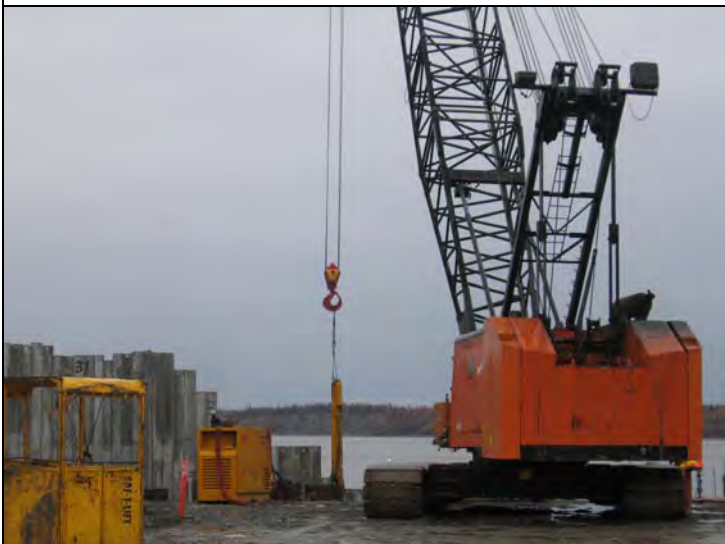


South pad, North end upon arrival – 2500 Yellow pulls face sheet tail wall AJ (39N) up; crew indicates it wasn't plumb and speculated it followed 'the old holes' from the previously installed sheets, since removed



South pad, North end at departure – 2500 Yellow setting face sheets cell 39S w/ Ape 200-6; note skew of hammer/bend of sheets and long, uneven sheet drives; hard driving observed

## Photographs



North Pad, South end upon arrival – 4100w Orange Tip driving face sheet cell 30 w/ BSP SL30



North Pad, South end at departure – 4100w Orange Tip idle, BSP SL30 impact hammer idle on ground



North Pad, North end upon arrival – 2500 Orange pulling sheet tail wall I (10N) w/ Ape 200-6 vibratory hammer



North Pad, North end at departure – 4000w Vibracompactor stopped for a temperature check of its Ape 200-6 vibratory hammer while 2500 Orange pauses w/ raised sheet from tail wall J (10S) to allow crew to affix safety cable to hammer prior to releasing sheet from hammer jaws, laying on sheet on pad



## Photographs



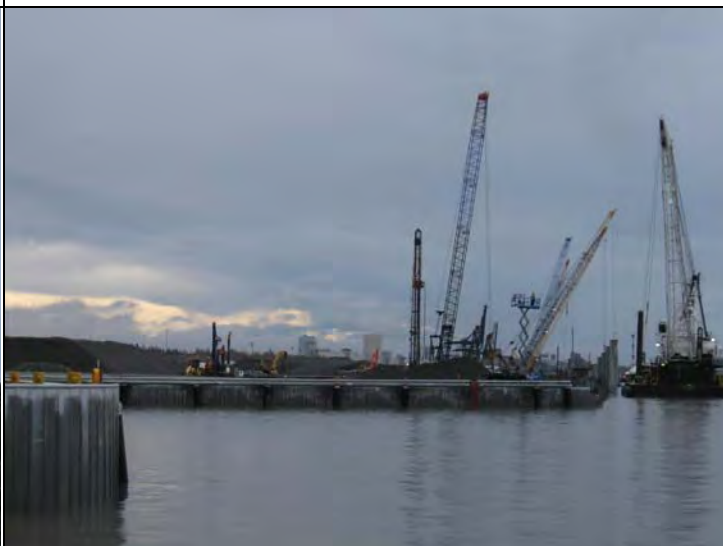
1500SC Lima and QAP loader stretch cables



QAP Komatsu P61 bulldozer, Hitachi EX450 help free QAP 'Lizard' belly dump from 15 yards of freshly dumped fill during cell 21-27 area filling operations



Steam and or water vapor obscure the Ape 200-6 vibratory hammer in a cloud of white mist atop the 4100w Vibracompaction crane



Project site as seen from north of the Dry barge berth at ~11:33, shortly after high tide ~27' MLLW; Dutra dredges outside south end of Wet Barge Berth

BY Ben Piccioni TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.



<b>Project: POA North Extension- OCSP®</b>			<b>Date: 10-13-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Tuesday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Overcast		<b>SHEET PILE</b>	11,12,32,39, 55,59,63,65
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light breeze		<b>TAIL WALL #'s</b>	AE,AX
QAP Superintendant	Steve Stichler, Richard Welker	<b>TEMP</b>	45			
Foreman	Steve Moe	<b>TIME ON JOBSITE</b>	<b>(6 hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane	<b>X</b>	Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift	<b>X</b>	
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer	<b>X</b>	
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer	<b>X</b>	
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 9:00 am</li> <li>• MKB South pad, South end - 2500 blue on arrival pulling and resetting soldier piles for cell 65.</li> <li>• Sandstrom South pad, South end – 1500 white on arrival hoisting man basket in cell 55 for instrumentation activities.</li> <li>• MKB South pad, South end - 4100W orange tip on arrival hoisting man basket at tail wall AX for fresh head activities.</li> <li>• MKB South pad, North end - 2500 yellow on arrival driving cell 39 face sheets with 200-6 vibe hammer.</li> <li>• MKB North pad North end - 2500 orange on arrival pulling cell 11 and 12 sheets.</li> <li>• MKB North pad – 4100W black tip on arrival driving tail wall AE sheets with BSP-SL30 impact hammer.</li> <li>• MKB loader pairing and staging sheets.</li> <li>• TWA on site shooting wyes, sheets, and settlement monitors</li> <li>• MKB South pad, South end - 2500 blue at departure pulling template from cell 63 for installation in cell 65.</li> <li>• MKB South pad, South end - 4100W orange tip at departure impact driving cell 59 face sheets with BSP-SL30 hammer.</li> <li>• Sandstrom South pad, South end – at departure hoisting man basket in cell 55 for instrumentation activities.</li> <li>• MKB South pad North end – 2500 yellow driving and plumbing cell 39 face sheets with 200-6 vibe hammer.</li> <li>• MKB North pad - 2500 orange at departure pulling cell 11 &amp; 12 sheets.</li> <li>• MKB North pad – 4100W black tip at departure driving cell 32 sheets with BSP-SL30 impact hammer</li> <li>• MKB North pad – 4000w vibracompaction operated off and on between repairs till noon then was moved to back of WBB area.</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes, driving with hammers out of plumb, interlock fit issues at wye welds and splices.</b>						

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## Photographs



South pad South end on arrival.



South pad South end at departure.



South pad North end on arrival.



South pad North end at departure.



## Photographs



North pad on arrival.



North pad at departure.



QAP staging fill in center stack.



QAP excavator heading down cell 43 for silt removal,

## Photographs



Denali drilling on site drilling SPT holes



Vibracompaction operated till around noon then move to WBB.



Note large differential fill between cells 12 & 13.



Note bend in sheet.

BY Kurt Johnson TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.



<b>Project: POA North Extension- OCSP®</b>			<b>Date: 10-18-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Sunday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Clear		<b>SHEET PILE</b>	
					<b>CELL #'s</b>	
Project Manager	Andy Romine	<b>WIND</b>	Light breeze		<b>TAIL WALL #'s</b>	K,AJ,BG,BK
QAP Superintendant	Richard Welker	<b>TEMP</b>	45			
Foreman	Steve Moe	<b>TIME ON JOBSITE</b>	<b>(4 hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane		Manitowoc 2500 Crane Blue	<b>X</b>	Volvo L180C Loader/ Forklift		<b>X</b>
Manitowoc 4100W Crane black tip	<b>X</b>	Manitowoc 2500 Crane Orange	<b>X</b>	APE 200-6 Vibratory Hammer		<b>X</b>
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer		<b>X</b>
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 12:30 pm</li> <li>• MKB South pad, South end - 2500 blue on arrival driving extended tail wall BK with 200-6 vibe hammer.</li> <li>• MKB South pad, South end - 4100W orange tip on arrival driving tail wall BG with BSP-SL30 impact hammer.</li> <li>• Sandstrom South pad, South end -1500 white hoisting man basket for instrumentation activities.</li> <li>• MKB South pad, North end - 2500 yellow on arrival driving tail wall AJ with 200-6 vibe hammer.</li> <li>• MKB North pad - 2500 orange on arrival stabbing and driving tail wall K sheets with 200-6 vibe hammer.</li> <li>• MKB Wet Barge Berth – 4100W black tip on arrival idle while man basket is brought to pad for fresh heading.</li> <li>• MKB loader pairing and staging sheets and 2 welders repairing pulled sheets from cells 38 &amp; 39</li> <li>• AKUDS splice operations. AIX QC welds. IICS QC on coatings.</li> <li>• Manson dredge was outside cells 34-38 of the NE..</li> <li>• MKB South pad, South end - 2500 blue at departure driving extended tail wall BK with 400 vibe hammer &amp; stinger.</li> <li>• MKB South pad, South end - 4100W orange tip at departure impact driving tail wall BG with BSP-SL30 hammer.</li> <li>• Sandstrom South pad, South end -1500 white hoisting man basket for instrumentation activities.</li> <li>• MKB South pad North end – 2500 yellow hoisting man basket for doubler plates welded to sheets for pulling tail wall AJ.</li> <li>• MKB North pad - 2500 orange at departure idle while pulled sheets from cells 10-12 where being sorted and cleaned for re-stabbing.</li> <li>• MKB Wet Barge Berth – 4100W orange tip crane idle while BSP-SL30 hammer was being repaired.</li> <li>• MKB Wet Barge Berth – 4000w idle.</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b>						
<b>Sheet handling, Installed sheets, anchors and wyes out specified plan location, dike slopes, driving with hammers out of plumb, interlock fit issues at wye welds and splices.</b>						

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## Photographs



South pad South end on arrival.



South pad South end at departure.



South pad North end on arrival.



South pad North end at departure.

## Photographs



North pad/Wet Barge Berth on arrival.



North pad/Wet Barge Berth at departure.



Extended tail wall BJ cell 64, note the lean.



Shot down the line.



### Photographs



Wet Barge Berth cells 36&37 note recent fresh heading activities.



Wet Barge Berth cells 36-38 note the level of the water coming out through interlocks from the inside.



Repair work on the BSP-SL30 hammer at the WBB.



Sheets pulled from cells 10-12 sorted and being clean for re-stabbing in cell tail wall K.

BY Kurt Johnson TITLE PND Inspector

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.



<b>Project: POA North Extension- OCSP®</b>			<b>Date: 10-22-09</b>		<b>Reviewed By</b>	<b>DRAFT</b>
<b>PND Project No.: 061028</b>			<b>Day</b>	<b>Thursday</b>	<b>Reviewed Date</b>	
<b>CONTRACTOR:</b>	MKB Constructors	<b>WEATHER</b>	Overcast		<b>SHEET PILE CELL #’s</b>	12, 39, 62-63
Project Manager	Andy Romine	<b>WIND</b>	Light		<b>TAIL WALL #’s</b>	AJ ,K
Superintendant		<b>TEMP</b>	45degrees F			
Foreman	Larry/Ward	<b>TIME ON JOBSITE</b>	<b>(5hrs) PND</b>			
<b>EQUIPMENT USED:</b>						
Manitowoc 4000W Crane		Manitowoc 2250 Crane blue	<b>X</b>	Volvo L180C Loader/ Forklift	<b>X</b>	
Manitowoc 4100W Crane	<b>X</b>	Manitowoc 2250 Crane orange	<b>X</b>	APE 200-6 Vibratory Hammer	<b>X</b>	
Manitowoc 4100W Crane orange tip	<b>X</b>	Kobelco CK2500 Crane Yellow	<b>X</b>	BSP SL30 Hammer	<b>X</b>	
<b>OBSERVED PROGRESS, UNUSUAL CONDITIONS, MEETINGS:</b>					JM 115 Impact Hammer	
<b>Items Inspected/Locations/Comments</b> <ul style="list-style-type: none"> <li>• Arrival on site 12:00 pm.</li> <li>• MKB South pad: Blue 2250 crane setting third template for cell 66 end cell. Welders tacking in templates.</li> <li>• Orange tip 4100W crane impact driving cell 62 and 63.</li> <li>• Yellow 2500 crane stabbing and driving extended tail wall AJ sheets.</li> <li>• Lima crane held man basket but idle.</li> <li>• MKB North pad: Orange 2250 crane stabbing and driving extended tail wall K sheets.</li> <li>• Black tip 4100W in WBB used to fly skiff and as support for divers.</li> <li>• MKB loader staging/pairing sheets.</li> <li>• QAP hauling fill, grading, rolling cells 44-50 and cleaning silt from cell 51 and 52 at low tide.</li> <li>• TWA surveyors on site shooting wyes and settlement monitors.</li> <li>• Manson dredge was outside cell 64, 65 of the North Extension. QAP was concerned that dredging may be too close to the current cells.</li> <li>• Inclometers SKT1 (cell 54) and QAP (cell 55) were partially exposed while ramping down into cells for fill operations.</li> <li>• Global Offshore Divers on site for WBB sheet inspection. See attached email regarding inspection.</li> </ul>						
<b>Summary of Outstanding Deficiencies:</b> <p>Large fill differential at cell 13 causing some deformation of tail wall sheets.</p>						

PND is not responsible for Contractors safety programs, QC program, Contractors equipment, methods or procedures of operation.



## Photographs



South pad: setting 3<sup>rd</sup> template for cell 66 end cell.



Stabbing extended tail wall AJ.



Manson dredging off N. Extension cells.



Dredge working outside cell 65.

## Photographs



Grading and rolling cells 44-50.



Fill operations cell 51-53.



Inclinometers in cell 54 and 55 partially exposed by fill ramping.



Driving out extended tail wall K.



## Photographs



Global Offshore divers preparing to inspect WBB cells 36-38.



Suiting up.



Support boat over diver cell 36.



Coating repair on bracing welds cell 50.

BY Kai Vedenoja TITLE PND Staff Engineer

All work monitored was performed in accordance with the plans and specifications to the best of my knowledge, unless noted otherwise in this report.



## Kai Vedenoja

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**From:** Kai Vedenoja  
**Sent:** Thursday, October 22, 2009 6:25 PM  
**To:** 'Williams, John K.'; Garth Howlett; Jim Campbell  
**Cc:** 'Serenity Schmidt'; Chuck Kenley; Kurt Johnson  
**Subject:** POA Wet Barge Dive Inspection  
**Attachments:** WBB Dive Inspection.pdf

All-

Today Global Offshore Divers performed an underwater inspection of wet barge berth cells 36-38. The area in front of the cells was dredged to approximately -25 to -30 MLLW which was about ten feet from final sheet pile tip elevation. The inspection began at wye A1(35/36) and progressed south toward the end of the dredge trench near the corner of cell 38. The diver reported a pile of material between the toe of the sheets and the bottom of the dredge trench. He stated that most interlocks were relatively clear of soil and native material but some required cleaning with a hand sweep or knife. The diver knelt on the top of the pile and began the inspection from the mud line up approximately 5 feet. The diver used two methods for inspecting interlocks. First he ran his fingers or a knife down the inside of the thumb finger interface of the two sheets then used a bag of clean water pressed onto the interlock to visually check the interlock. The divers found two main areas of concern A1 and A2 labeled on the attached drawing. Face sheets on the inspected cells were numbered from 1-17 starting at the North side wye and ending at the South wye. All the sheets inspected were 70' PS31 face sheets.

A1: Cell 36 Sheet 2 and 3 were curled in toward the shore. The interlock between sheets 1 and 2 had separated to about 3.5' above mud line. The separation starts at about elevation -22 MLLW this is approximately 14' from the sheet pile tip. The diver reported that at mud line there was approximately a 3 foot horizontal (shoreward) displacement between the sheets. He reported reaching through the triangular shaped opening and touching the tail wall on the inside of the cell. The interlock between sheet 3 and 4 appeared to be intact above mud line but may be damaged below the mud.

A2: Cell 38 sheet 2 was again curled in toward the shore at about 2 feet above mud line. The separation of these two sheets starts at about -24 MLLW which is approximately 10.5' from the tip of the sheet. The diver reported about a 6 " horizontal separation between the sheets with sheet 2 displaced shoreward. The interlock between sheet 2 and 3 appeared to be intact in the area inspected.

All other interlocks appeared to be intact in the area inspected. The Dive team leader has been asked to provide a summary report of their findings. I will forward it on when it becomes available.

**Kai Vedenoja, EIT**  
**Staff Engineer**  
**P|N|D Engineers, Incorporated**  
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INSPECTOR: Robert Wilson (RKW)		WORK ORDER: A32280	
WEATHER: showers	REPORT ID.: 2009.08.28rkw	PAGE: 1 of 12	
TEMPERATURE: 45-60°F ±	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Tom Glenn	
Tide	AM High 1:01 @ 25.1'	PM High 2:35 @ 23.3'	AM Low 8:06 @ 3.9' PM Low 8:19 @ 11.5'

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Day Shift (6:00 am to 4:00 pm)

- Blue 2250 Crane: Exchanged hammers for the APE 200-4 with the extended jaw unit and drove extended tail wall 58/59 sheets to finish grade. It was then used to remove templates from the same location to enable a loader to backfill the wall just driven. They then went back to cells 56 and 57 and removed soldier piles and templates from there and began setting them up for cell 59.
- Orange 2250 Crane: Servicing crane for the first two hours of the day, then drove intermediate piles with Ape 200-6 hammer at tail wall 27/28 for just over an hour. Next the APE required service lasting just over an hour followed by stabbing extended tail wall piles taking another hour. The rest of the work day was spent driving extended tail wall 27/28 piles.
- 4100 (Orange tip) Crane: Drive shaft broken – Idle all shift.
- 4100 (Black tip) Crane: Idle the first three hours and then was used the rest of the day driving piles in cells 51/52 and 54/55 with the SL-30 impact hammer.
- 4000 Crane: Idle all shift
- Kobelco CK2500 Crane: They were placing soldier piles and template for extended tail wall 27/28 till 9:00, and then stabbing piles there for the next two hours. At 11:00 the crane moved to the north pad, picked up an APE 200-6 and power unit, and then took it to cell 35-37 area where it was used the rest of the day to vibra- compact the face of the fill the rest of the day.
- White 1500 SC Crane: Idle until 9:30 when the crane was moved to the wet barge area with a man basket to fresh head piles. At 1:30 it picked up a 7.2 HIH hammer and drove on sheets of cell 37 WBB.
- ADUS Welders: Full crew working.
- Denali Drilling: off cell NE14 doing SPT testing for a vibra-compaction test pattern.

**Topics** (when applicable)

<b>Visitors to job:</b>
<b>Inspections performed:</b>
<b>Discussions with QAP, MKB, PND, or QA Services:</b>
<b>Earthwork performed:</b> Backfill of extended tail wall 58/59, and hauling material from the pit to the center stockpile.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Whale observers in place all shift. One sighting reported. (15 minutes each on 4 cranes)
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> 22
<b>Personnel QAP:</b> 9
<b>Vibro-compaction probes:</b> yesterday's shift reported

## Sheet piles in place at beginning of shift

- Tail-Wall 9 /10 (I) has 43 piles and the intermediate anchor in place.
- Tail-Wall 10 /11 (J) has 43 piles and the intermediate anchor in place.
- Tail-Wall 11 /12 (K) has 43 piles and the intermediate anchor in place.
- Tail-Wall 12 /13 (L) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 13/14 (M) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 14/15 (N) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 15/16 (O) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 16/17 (P) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 17/18 (Q) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 18/19 (R) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 19/20 (S) has all piles in place and tail wall piles driven to below pad grade. (from 10 sheets past IA to end to FG)
- Tail-Wall 20/21 (T) has all piles in place and tail wall piles driven to below pad grade. (from 11 sheets past IA to end to FG)
- Tail-Wall 21/22 (U) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 22/23 (V) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 23/24 (W) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 24/25 (X) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 25/26 (Y) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 26/27 (Z) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 27/28 (AA) has all piles in place.
- 
- 
- Tail-Wall 37/38 (AI) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 38/39 (AJ) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 39/40 (AK) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 40 /41 (AL) has all piles in place and tail wall piles driven to below pad grade.(end 38± sheets driven to final grade)
- Tail-Wall 41 /42 (AM) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 42 /43 (AN) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 43 /44 (AO) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 44/45 (AP) has all piles in place and tail wall piles driven to below pad grade. (end 36± sheets to final grade)
- Tail-Wall 45/46 (AQ) has all piles in place and extended tail wall piles driven to final grade)
- Tail-Wall 46/47 (AR) has all piles in place and tail wall piles driven to below pad grade. (end 20± sheets to final grade)
- Tail-Wall 47/48 (AS) has all piles in place and tail wall piles driven to below pad grade ( IA + 2 to IA +25 to FG)
- Tail-Wall 48/49 (AT) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 49/50 (AU) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 50/51 (AV) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 51/52 (AW) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 52/53 (AX) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 53/54 (AY) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 54/55 (AZ) has all piles in place and tail wall piles driven to below pad grade. (IA+12 to end to final grade)
- Tail-Wall 55/56 (BA) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 56/57 (BB) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 57/58 (BC) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 58/59 (BD) has all piles in place.





<b>Orange Manitowoc 2250</b> <span style="background-color: yellow;">Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.</span>													
Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
6:00				X									Crane idle while holding APE 200-6 at cell 23
				X									
				X									
				X									
7:00				X									
				X									
				X									
				X									Driving sheets with APE 200-6 vibrating hammer.
8:00				X									
								X			X	27/28	
								X			X		
								X			X		Servicing hammer
9:00								X			X		
								X			X		
					X								
				X									Work on template
10:00				X									
				X									
					X							27/28	
					X								Stabbing extended tail wall sheets
11:00						X						27/28	
						X							
						X							
						X							Driving with APE 200-6
12:00								X		X		27/28	
								X		X			Lunch
				X									
				X									Driving with APE 200-6
13:00								X		X		27/28	
								X		X			
								X		X			
								X		X			
14:00								X		X			Whale shut down
				O									
								X		X		27/28	Driving with APE 200-6
								X		X			
15:00								X		X			Removing tail wall template
					X							27	
					X								
16:00					X								

















Figure 01



Figure 02



Figure 03



Figure 04



Figure 05



Figure 06

**MKB Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
X		Manitowoc	Lattice Boom Crane	4100W–black tip	
	X	Manitowoc	Lattice Boom Crane	4100W– orange tip	
	X	Manitowoc	Lattice Boom Crane	4000	
X		Manitowoc	Lattice Boom Crane	2250 (blue)	
X		Manitowoc	Lattice Boom Crane	2250 (orange)	
X		Kobelco	Lattice Boom Crane	Yellow	
X		APE	Vib Hammer W/power unit	200-6	
X		APE	Vib Hammer W/power unit	200-6	
X		APE	Vib Hammer W/power unit	200	
	X	APE	Vib Hammer W/power unit	400	
	X	APE	Vib Hammer w/power unit	KING KONG	
X		BSP/PACO	Impact Hammer	SL-30	
	X	BSP/PACO	Impact Hammer	SL-30	
X		APE	Impact Hammer	7.2 HIH	
	X	Grove	Man Basket	MZ 116C	
	X	Grove	Man Basket	MZ 90	
X		Genie	Man Basket	1073606	
		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
			Utility Bed Truck	2006 (half ton)	
			Utility Bed Truck with welder	1997 ( )	
	X		Boat		AK6492L
X			Man Lift		
X		Volvo	Front End Loader	L180C	
X		Volvo	Front End Loader	L150E	

**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	X		Belly Dump Haul Truck	773B	2.72.022
	X		Belly Dump Haul Truck	773B	2.72.005
	X		Belly Dump Haul Truck	773B	2.72.015
	X		Belly Dump Haul Truck	773B	2.72.016
	X		Belly Dump Haul Truck	773B	2.72.004
	X		Belly Dump Haul Truck	773B	2.72.003
	X		End Dump Haul Truck	773D	2.72.018
	X		Belly Dump Haul Truck	773B	2.72.002
	X		End Dump Haul Truck	773B	2.72.021
3			End Dump Haul Truck	773D	2.72.017
	X		Belly Dump Haul Truck	773D	2.72.023
	X		End Dump Haul Truck	773B	2.72.006
X			Water Truck	K-1200	2.72.024
X		Kenworth	Fuel Truck		AK EMP748
		Dodge	Repair Truck	2500	
X			Flat Bed	INT1021	ENN 755
			Repair truck (NIC Mac)		Ak000812
	X	Volvo	Front end loader	L180F	
X		Volvo	Front End Loader	L220E	
X		CAT	Front end loader	988G	
	X	CAT	Front end loader	992C	
X		Ingersoll Rand	Roller		2.13.009
X		CAT	Dozer	D-10N	2.51.005
	X	CAT	Dozer	D-10N	2.51.003
X		Komatsu	Dozer	D61PX	
	X	CAT	Grader		2.40.013
	X	CAT	Grader		2-40-011
	X	Komatsu	Excavator	PC1100LC	2.33.008
X		Hitachi	Excavator	EX700	2.32.007
	X		Boat		



INSPECTOR: Paul Twichell (PT)		WORK ORDER: A32280	
WEATHER: clear	REPORT ID.: 2009.09.03pt	PAGE: 1 of 11	
TEMPERATURE: F ± 61; 60	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Steve Moe	
<b>Tide</b>	AM High: 7:13 @ 28.6'	<b>PM High: 7:50 @ 29.2'</b>	AM Low: 1:45 @ 3.3'
<b>Tide</b>	AM High 7:48 @ 29.5'	<b>PM High: 8:18 30.0'</b>	AM Low 2:21 @ 2.3'
			<b>PM Low: 2:06 @ -0.6'</b>
			<b>PM Low: 2:42 @ -0.3'</b>

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Night Shift (4:00 pm to 2:00 am)

- 2250 (blue) crane: finished tail wall BE to the intermediate anchor and then staged for the extended tail wall. QAP dug out the trench for the extended tail wall and they installed the tail wall template for the remainder of the shift.
- 4100 (orange) Crane: was down with a blown hydraulic hose until 20:00 then used the impact hammer on cell 55 and tail wall BA. After the marine mammal viability shut down they installed wye to wye braces.
- 2250 (orange) Crane: worked on the template in cell 27 until 18:00 then used the vibratory hammer on cell 28 and tail wall AA until the marine mammal shut down at 21:20. They worked on the template in cell 27 for the remainder of the shift.
- 4100 (Black tip) Crane: used the APE hammer operated by the operator of the other 4100 crane until that one was repaired. It was then idle for the remainder of the shift.
- 4000 Crane: Not in service this shift. Some work was on going at the beginning of the shift but stopped by 18:00.
- Kobelco 2500: flew the SL30 impact hammer on the face of cell 43 until the marine mammal visibility shut down at 21:35. They worked on the jetting for the remainder of the shift.
- White Sandstrom Crane: Not in service this shift.

**Topics** (when applicable)

<b>Visitors to job:</b> Kurt Johnson; Northstar crew
<b>Inspections performed:</b> none 23:45 until the end of the shift.
<b>Discussions with QAP, MKB, PND, or QA Services:</b>
<b>Earthwork performed:</b> dug out extended tail wall BE. Watered the job site. Cleaned up with the loader.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Low tide window was from 23:45 until the end of the shift. 1300m visibility shut down at: 21:20 800m (weather only): 350m visibility shut down was at: 21:35
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> Edward Burggraf; Steve Moe 10 pile bucks 3 crane operators 2 utility operator Impact driving observer
<b>Personnel QAP:</b> Richard Welker, 1 utility operator.
<b>Pile Driving Notes:</b> very little if any movement on driving cell 43.
<b>The jetting probe had been repaired by the time of the marine mammal visibility shut down and the crew and the crane worked on getting the probe into operation. The pump was turned on and the probe went to the desired depth.</b>



















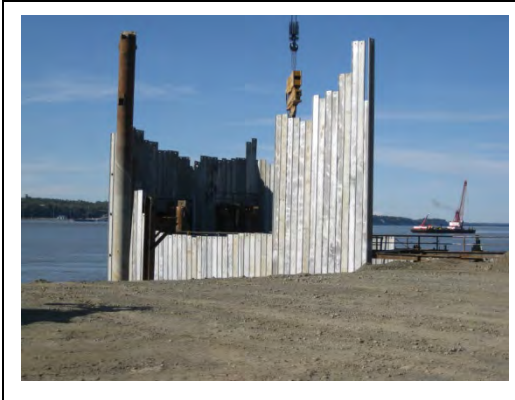


Figure 01

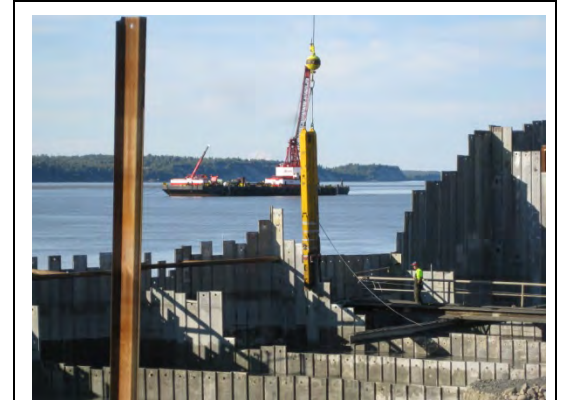


Figure 02



Figure 03



Figure 04



Figure 05



Figure 06

**MKB Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
x		Manitowoc	Lattice Boom Crane	4100W–black tip	
x		Manitowoc	Lattice Boom Crane	4100W– orange tip	
	x	Manitowoc	Lattice Boom Crane	4000	
x		Manitowoc	Lattice Boom Crane	2250 (blue)	
x		Manitowoc	Lattice Boom Crane	2250 (orange)	
x		Kobelco	Lattice Boom Crane	Yellow	
x		APE	Vib Hammer W/power unit	200-6	
x		APE	Vib Hammer W/power unit	200-6	
	x	APE	Vib Hammer W/power unit	200	
	x	APE	Vib Hammer W/power unit	400	
	x	APE	Vib Hammer w/power unit	KING KONG	
x		BSP/PACO	Impact Hammer	SL-30	
	x	BSP/PACO	Impact Hammer	SL-30	
x		APE	Impact Hammer	7.2 HIH	
x		Grove	Man Basket	MZ 116C	
x		Grove	Man Basket	MZ 90	
x		Genie	Man Basket	1073606	
	x	Whisperwatt	25KW Generator		982345
x		Ford	4 Door PU Truck		
x			Utility Bed Truck	2006 (half ton)	
x			Utility Bed Truck with welder	1997 ( )	
x			Boat		AK6492L
x			Man Lift		
x		Volvo	Front End Loader	L180C	
		Volvo	Front End Loader	L150E	

**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	x		Belly Dump Haul Truck	773B	2.72.022
	x		Belly Dump Haul Truck	773B	2.72.005
	x		Belly Dump Haul Truck	773B	2.72.015
	x		Belly Dump Haul Truck	773B	2.72.016
	x		Belly Dump Haul Truck	773B	2.72.004
	x		Belly Dump Haul Truck	773B	2.72.003
	x		End Dump Haul Truck	773D	2.72.018
	x		Belly Dump Haul Truck	773B	2.72.002
	x		End Dump Haul Truck	773B	2.72.021
	x		End Dump Haul Truck	773D	2.72.017
	x		Belly Dump Haul Truck	773D	2.72.023
	x		End Dump Haul Truck	773B	2.72.006
X			Water Truck	K-1200	2.72.024
	x	Kenworth	Fuel Truck		AK EMP748
	x	Dodge	Repair Truck	2500	
	x		Flat Bed	INT1021	ENN 755
	x		Repair truck (NIC Mac)		Ak000812
x		Volvo	Front end loader	L180F	
	x	Volvo	Front End Loader	L220E	
	x	CAT	Front end loader	988G	
	x	CAT	Front end loader	992C	
x		Ingersoll Rand	Roller		2.13.009
	x	CAT	Dozer	D-10N	2.51.005
	x	CAT	Dozer	D-10N	2.51.003
	x	Komatsu	Dozer	D61PX	
	x	CAT	Grader		2.40.013
	x	CAT	Grader		2-40-011
	x	Komatsu	Excavator	PC1100LC	2.33.008
x		Hitachi	Excavator	EX700	2.32.007
			Boat		

INSPECTOR: Paul Twichell (PT)		WORK ORDER: A32280	
WEATHER: clear	REPORT ID.: 2009.09.13pt	PAGE: 1 of 11	
TEMPERATURE: F ± 62; 48	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Steve Moe	
<b>Tide</b>	AM High: 1:29 @ 25.7'	<b>PM High: 3:31 @ 24.6'</b>	AM Low: 8:54 @ 2.8' <b>PM Low: 9:15 @ 9.8'</b>
<b>Tide</b>	AM High 3:06 @ 25.9'	<b>PM High: 4:53 @ 26.5'</b>	AM Low 10:17 @ 2.1' <b>PM Low: 10:43 @ 7.7'</b>

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Night Shift (4:00 pm to 2:00 am)

- 2250 (blue) crane: used the vibratory hammer on the face of cell 58 and 59 and tail walls BF and BD. By 19:00 they had driven the sheets as far as they could and were pulling cross arms out of the spud piles in cell 59. They pulled a double template out of cell 59 and replaced it with a single level.
- 4100(orange) Crane: used the impact hammer on the face of cell 56 and tail wall BB until the low tide window at 19:15. The crane was moved to cell 52. It remained idle for the rest of the shift.
- Kobelco 2500: Crane: held the man basket while crewmen put doubler plates on the top of sheets in cell 39. They then used the vibratory hammer to attempt to pull the sheets up. After the marine mammal visibility shut down they finished the shift with the man basket repairing a splice at tail wall AK.
- 4100 (Black tip) Crane: used the vibratory hammer on the face of cells 26 and 27 until the low tide window shut them down. The crane was moved to the area of cell 15 where the crew worked from the man basket to place a wye to wye brace in cell 17, install survey targets and cut 4 feet off of the intermediate anchor on tail wall U.
- 4000 Crane: vibraprobe worked in the area behind cell 10 until around 19:30 when bolts broke that hold the clamp jaws to the vibratory head. It was shut down for the shift because there are no replacement bolts on hand.
- 2250 (orange): stabbed sheets in extended tail wall AD all shift.
- White Lima 1500 SC Crane: did not operate this shift.

**Topics** (when applicable)

<b>Visitors to job:</b> Kurt Johnson;
<b>Inspections performed:</b> checked the sheets staged for the extended tail wall at 30. Observed the recoating of splice plate welds in cells 16 and 17.
<b>Discussions with QAP, MKB, PND, or QA Services:</b>
<b>Earthwork performed:</b> bailed cells 16 and 17 so that the splice plate welds could be recoated.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Low tide window was from 19:15 until 23:15.  1300m visibility shut down at: 20:40. The marine mammal observers were called off by MKB as there were no hammers in operation. 800m (weather only): 350m visibility shut down was at:
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> Steve Moe  14 pile bucks 5 crane operators 1 utility operator
<b>Personnel QAP:</b> Richard Welker, loader operator.
<b>Pile Driving Notes:</b> crewmen from MKB recoated the splice plates that were found to be too thin by PND.
<b>Cut approximately 4 feet off of the intermediate anchor in tail wall U.</b>





Blue Manitowoc 2250				Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.									
Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
15:30													
16:00													
								X		X		BF	
								X		X			
								X		X			
17:00								X		X			
								X		X		58	
								X		X			
								X		X			
18:00								X		X		BC	
								X		X			
								X		X			
								X		X			
19:00					X							59	Pull cross arms out of spud piles.
					X								
					X								
					X								
20:00					X								
					X								
					X								
					X								
					X								
21:00					X								
					X								
					X								
					X								
					X								
22:00					X							59	Pull two level template out of cell
					X								
					X								
					X								
23:00					X								
					X								
					X								
					X								
24:00					X								
					X								
					X								
					X							59	Install single level template in cell.
01:00					X								
					X								
					X								
					X								
2:00													
02:30													

[illegible]















Figure 01



Figure 02



Figure 03



Figure 04



Figure 05

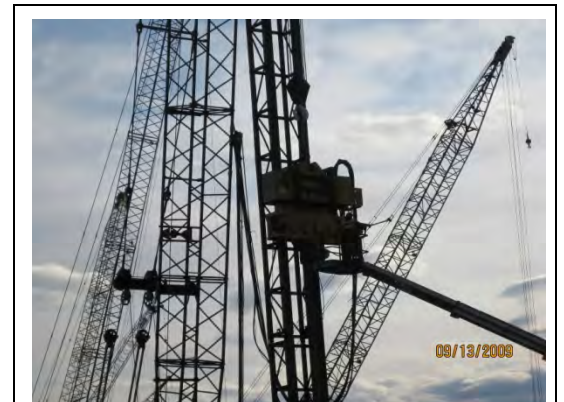


Figure 06



**MKB Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
x		Manitowoc	Lattice Boom Crane	4100W–black tip	
x		Manitowoc	Lattice Boom Crane	4100W– orange tip	
x		Manitowoc	Lattice Boom Crane	4000	
x		Manitowoc	Lattice Boom Crane	2250 (blue)	
x		Manitowoc	Lattice Boom Crane	2250 (orange)	
x		Kobelco	Lattice Boom Crane	Yellow	
x		APE	Vib Hammer W/power unit	200-6	
x		APE	Vib Hammer W/power unit	200-6	
	x	APE	Vib Hammer W/power unit	200	
	x	APE	Vib Hammer W/power unit	400	
x		APE	Vib Hammer w/power unit	KING KONG	
x		BSP/PACO	Impact Hammer	SL-30	
x		BSP/PACO	Impact Hammer	SL-30	
	x	APE	Impact Hammer	7.2 HIH	
x		Grove	Man Basket	MZ 116C	
x		Grove	Man Basket	MZ 90	
x		Genie	Man Basket	1073606	
	x	Whisperwatt	25KW Generator		982345
x		Ford	4 Door PU Truck		
x			Utility Bed Truck	2006 (half ton)	
x			Utility Bed Truck with welder	1997 ( )	
x			Boat		AK6492L
x			Man Lift		
x		Volvo	Front End Loader	L180C	
		Volvo	Front End Loader	L150E	

**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	x		Belly Dump Haul Truck	773B	2.72.022
	x		Belly Dump Haul Truck	773B	2.72.005
	x		Belly Dump Haul Truck	773B	2.72.015
	x		Belly Dump Haul Truck	773B	2.72.016
	x		Belly Dump Haul Truck	773B	2.72.004
	x		Belly Dump Haul Truck	773B	2.72.003
	x		End Dump Haul Truck	773D	2.72.018
	x		Belly Dump Haul Truck	773B	2.72.002
	x		End Dump Haul Truck	773B	2.72.021
	x		End Dump Haul Truck	773D	2.72.017
	x		Belly Dump Haul Truck	773D	2.72.023
	x		End Dump Haul Truck	773B	2.72.006
	x		Water Truck	K-1200	2.72.024
	x	Kenworth	Fuel Truck		AK EMP748
	x	Dodge	Repair Truck	2500	
	x		Flat Bed	INT1021	ENN 755
	x		Repair truck (NIC Mac)		Ak000812
	x	Volvo	Front end loader	L180F	
x		Volvo	Front End Loader	L220E	
	x	CAT	Front end loader	988G	
	x	CAT	Front end loader	992C	
	x	Ingersoll Rand	Roller		2.13.009
	x	CAT	Dozer	D-10N	2.51.005
	x	CAT	Dozer	D-10N	2.51.003
	x	Komatsu	Dozer	D61PX	
	x	CAT	Grader		2.40.013
	x	CAT	Grader		2-40-011
x		Komatsu	Excavator	PC1100LC	2.33.008
	x	Hitachi	Excavator	EX700	2.32.007
			Boat		

INSPECTOR: Robert Wilson (RKW)		WORK ORDER: A32280	
WEATHER: Rain showers	REPORT ID.: 2009.10.010rkW	PAGE: 1 of 12	
TEMPERATURE: 48-53°F ±	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Tom Glenn	
Tide	AM High -----	PM High 12:25 @ 26.2'	AM Low 6:30 @ 1.1' PM Low 6:31 @ 8.5'

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Day Shift (6:30 am to 4:30 pm)

- Blue 2250 Crane: Idle till 7:45 and then driving the intermediate anchor and a soldier pile for the extended tail wall 64/65. Setting extended tail wall template from 8:30 till 10:30 and then stabbing and driving piles for the rest of the shift.
- Orange 2250 Crane: Fresh heading at cells 10/11 until 9:15 when the visibility okay was given. They spent the rest of the shift removing sheets from cell 10 and 11
- 4100 (Orange tip) Crane: off shift till 8:00. Staging and sent the man basket to the face at cells 59-60 where a worker welded up the first sheet of the tail wall to the wye and the second sheet to the first one. This was completed at 3:30 and then they started driving sheets with an SL-30 impact hammer.
- 4100 (Black tip) Crane: Off shift till 8:00. First thing the crane was moved to cell 30/31 where it was used to drive sheets with an SL-30 hammer. The hammer broke down at 10:00 and the crane sat idle until it was repaired at about 2:30 and then drove sheets again for the rest of the day.
- 4000 Crane (set up for vibro-compaction): Broke down for 6.5 hours. Completed 3 holes today.
- Kobelco CK2500 Crane: worked on tail wall 38/39 stabbing and driving sheets for the entire shift. The sheets having been placed and removed once do not fit back together easily. The tail wall appears to be starting to develop a twist.
- White 1500 SC Crane: worked intermittently placing wye braces in cells. Idle approx 5 hours
- ADUS Welders: not working
- Denali Drilling: conducting SPT test in cell 19
- Swalling: not on site

**Topics** (when applicable)

<b>Visitors to job:</b>
<b>Inspections performed:</b>
<b>Discussions with QAP, MKB, PND, or QA Services:</b>
<b>Earthwork performed:</b> Backhoe removing material from inside the dry barge berth. Haul from pit with 4 trucks and backfilling on cells from 21 to 27.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Whale observers in place all shift. No shutdowns required. <ul style="list-style-type: none"> <li>• Stabbing etc allowed (after 350 meter visibility obtained) at 8:09 AM</li> <li>• Impact in-water work allowed (1/2 hour after 800 meter visibility obtained) at 8:48 AM</li> <li>• Vibratory in-water work allowed (1/2 hour after 1300 meter visibility obtained) at 8:51 AM</li> </ul>
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> 26 ±
<b>Personnel QAP:</b> Steve, 2 grade checkers and 5 operators
<b>Cells without bracing:</b> 28, 29, 40, 41, 60, 61
<b>Vibro-compaction probes completed this shift:</b> Three holes

**Sheet piles in place at beginning of shift**

- Tail-Wall 9 /10 (I) is being removed.
- Tail-Wall 10 /11 (J) has 43 piles and the intermediate anchor in place (likely to be removed and re-set).
- Tail-Wall 11 /12 (K) has 43 piles and the intermediate anchor in place (likely to be removed and re-set).
- Tail-Wall 12 /13 (L) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 13/14 (M) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 14/15 (N) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 15/16 (O) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 16/17 (P) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 17/18 (Q) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 18/19 (R) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 19/20 (S) has all piles in place and tail wall piles driven to below pad grade. (from 10 sheets past IA to end to FG)
- Tail-Wall 20/21 (T) has all piles in place and tail wall piles driven to below pad grade. (from 11 sheets past IA to end to FG)
- Tail-Wall 21/22 (U) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 22/23 (V) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 23/24 (W) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 24/25 (X) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 25/26 (Y) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 26/27 (Z) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 27/28 (AA) has all piles in place and tail wall piles driven to final grade.
- Tail-Wall 28/29 (AB) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 29/30 (AC) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 30/31 (AC) has all piles in place and tail wall piles driven to final grade.
- Cell 32 has all piles in place and extended tail wall piles driven to final grade
- 
- Tail-Wall 37/38 (AI) has will be removed.
- Face 38 has been removed.
- Tail-Wall 38/39 (AJ) has is 8 piles in place from the Wye back. The rest have been removed
- Face 39 has been replaced
- Tail-Wall 39/40 (AK) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 40 /41 (AL) has all piles in place and tail wall piles driven to below pad grade.(end 38± sheets driven to final grade)
- Tail-Wall 41 /42 (AM) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 42 /43 (AN) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 43 /44 (AO) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 44/45 (AP) has all piles in place and tail wall piles driven to below pad grade. (end 36± sheets to final grade)
- Tail-Wall 45/46 (AQ) has all piles in place and extended tail wall piles driven to final grade)
- Tail-Wall 46/47 (AR) has all piles in place and tail wall piles driven to below pad grade. (end 20± sheets to final grade)
- Tail-Wall 47/48 (AS) has all piles in place and tail wall piles driven to below pad grade ( IA + 2 to IA +25 to FG)
- Tail-Wall 48/49 (AT) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 49/50 (AU) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 50/51 (AV) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 51/52 (AW) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 52/53 (AX) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 53/54 (AY) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 54/55 (AZ) has all piles in place and tail wall piles driven to below pad grade. (IA+12 to end to final grade)
- Tail-Wall 55/56 (BA) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 56/57 (BB) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 57/58 (BC) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 58/59 (BD) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 59/60 (BE) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 60/61 (BF) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 61/62 (BG) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 62/63 (BH) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 63/64 (BI) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 64/65 (BH) has all piles in place to the intermediate anchor.
-



**Blue Manitowoc 2250**

Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.

Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
7:00					X								
					X								
					X								
								X			X	64/65	Drive intermediate anchor and set soldier pile for extended tail wall.
8:00								X			X		
								X			X		
					X							64/65	Work on extended template
					X								
9:00					X								
					X								
					X								
					X								
10:00					X								
					X								Stab sheets of extended tail wall
						X						64/65	
						X							
11:00						X							
						X							
						X							
						X							
12:00						X							Lunch
						X							
						X							
13:00				X									Stab extended tail wall (completed)
				X								64/65	
						X							
14:00						X							
						X							
						X							
						X							
15:00						X							Drive sheets with ape 200-6
								X		X		64/65	
								X		X			
								X		X			
16:00								X		X			
								X		X			
								X		X			
17:00								X		X			

<b>Orange Manitowoc 2250</b> <span style="float: right;">Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.</span>													
Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
7:00					x								Holding hammer waiting for visibility
					x								
					x								
					x								
8:00					x								Workers in man basket fresh heading
					x								
					x								
					x								
9:00					x								<div>10/11</div> <div>Removing sheets of cells 10 and 11</div>
								x		x			
								x		x			
								x		x			
10:00								x		x			
								x		x			
								x		x			
								x		x			
11:00								x		x			
								x		x			
								x		x			
								x		x			
12:00								x		x			
								x		x			
								x		x			
								x		x			
13:00								x		x			
								x		x			
								x		x			
								x		x			
14:00								x		x			
								x		x			
								x		x			
								x		x			
15:00								x		x			
								x		x			
								x		x			
								x		x			
16:00								x		x			
								x		x			
								x		x			
17:00								x		x			

<b>Manitowoc 4100 (Orange tip)</b> <span style="background-color: yellow;">Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.</span>													
Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
7:00				X									Shift starts at 8:00
				X									
				X									
				X									
8:00					X							59/60	Workers in man basket welding first tail wall sheet to wye
					X								
					X								
					X								
9:00					X								
					X								
					X								
					X								
10:00					X								
					X								
					X								
					X								
11:00					X								
					X								
					X								
					X								
12:00					X								Lunch
					X								
					X								
					X								
13:00					X								Still welding
					X								
					X								
					X								
14:00				X									Driving sheets with SL-30 hammer
				X									
					X								
					X								
15:00					X								Driving sheets with SL-30 hammer
					X								
					X								
					X								
16:00									X	X			Driving sheets with SL-30 hammer
									X	X			
									X	X			
									X	X			
17:00									X	X			

**Manitowoc 4100 (Black tip)**

Idle column X= idle for other than mechanical M= idle for mechanical reasons. O = Marine observers shut down Describe in notes.

Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
7:00				X									Shift starts at 8:00
				X									
				X									
				X									
8:00					X								Move crane to cell 30/31
					X								
					X								
					X								
9:00									X	X		29/30	Drive sheets with SL-30 hammer
									X	X			
									X	X			
									X	X			
10:00				X									Hammer broke down working on hammer
				X									
				X									
				X									
11:00				X									
				X									
				X									
				X									
12:00				X									
				X									
				X									
				X									
13:00				X									
				X									
				X									
14:00				X									
				X									
									X	X		29-30	Driving tail wall and face sheets again
									X	X			
15:00									X	X			
									X	X			
									X	X			
									X	X			
16:00									X	X			
									X	X			
									X	X			
17:00									X	X			







<b>White 1500 SC Crane</b> <span style="background-color: yellow;">Idle column X= idle for other than mechanical M=idle for mechanical reasons. O = Marine observers shut down Describe in notes.</span>													
Time	Driving Template			Work in progress						Water?		Cell / Piles	Notes:
	Piles	Frame	Deck	Idle	Staging	Stab	Vib-Stab	Vibe	Hammer	in	out		
7:00				X									Shift starts at 8:00
				X									
				X									
				X									
8:00					X								Hook up man basket and a wye brace and sit waiting.
					X								
					X								
				X									Idle waiting
9:00				X									
				X									
				X									
				X									
10:00				X									
				X									
				X									
11:00				X									Holding man basket for Terracon while they work on instrumentation
				X									
					X								
					X								
12:00					X								Idle
					X								
				X									
				X									
13:00				X									Holding man basket while wye brace is being placed at cell 46
				X									
				X									
				X									
14:00					X								
					X								
					X								
					X								
15:00					X								Holding man basket while wye brace is being placed at cell 46
					X								
					X								
					X								
16:00					X								
					X								
					X								
					X								
17:00					X								



Figure 01



Figure 02



Figure 03



Figure 04



Figure 05



Figure 06

**MKB Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
X		Manitowoc	Lattice Boom Crane	4100W–black tip	
X		Manitowoc	Lattice Boom Crane	4100W– orange tip	
X		Manitowoc	Lattice Boom Crane	4000	
X		Manitowoc	Lattice Boom Crane	2250 (blue)	
X		Manitowoc	Lattice Boom Crane	2250 (orange)	
X		Kobelco	Lattice Boom Crane	Yellow	
X		Lima	1500 SC Crane	White	
X		APE	Vib Hammer W/power unit	200-6	
X		APE	Vib Hammer W/power unit	200-6	
	X	APE	Vib Hammer W/power unit	200	
	X	APE	Vib Hammer W/power unit	400	
	X	APE	Vib Hammer w/power unit	KING KONG	
X		BSP/PACO	Impact Hammer	SL-30	
X		BSP/PACO	Impact Hammer	SL-30	
	X	APE	Impact Hammer	7.2 HIH	
	X	Grove	Man Basket	MZ 116C	
	X	Grove	Man Basket	MZ 90	
X		Genie	Man Basket	1073606	
		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
			Utility Bed Truck	2006 (half ton)	
			Utility Bed Truck with welder	1997 ( )	
	X		Boat		AK6492L
X			Man Lift		
X		Volvo	Front End Loader	L180C	
X		Volvo	Front End Loader	L150E	



**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	X		Belly Dump Haul Truck	773B	2.72.022
	X		Belly Dump Haul Truck	773B	2.72.005
	X		Belly Dump Haul Truck	773B	2.72.015
	X		Belly Dump Haul Truck	773B	2.72.016
	X		Belly Dump Haul Truck	773B	2.72.004
2			Belly Dump Haul Truck	773B	2.72.003
2			End Dump Haul Truck	773D	2.72.018
	X		Belly Dump Haul Truck	773B	2.72.002
	X		End Dump Haul Truck	773B	2.72.021
	X		End Dump Haul Truck	773D	2.72.017
	X		End Dump Haul Truck	773D	2.72.023
	X		End Dump Haul Truck	773B	2.72.006
X			Water Truck	K-1200	2.72.024
X	x	Kenworth	Fuel Truck		AK EMP748
		Dodge	Repair Truck	2500	
X			Flat Bed	INT1021	ENN 755
			Repair truck (NIC Mac)		Ak000812
	X	Volvo	Front end loader	L180F	
X		Volvo	Front End Loader	L220E	
X		CAT	Front end loader	988G	
	X	CAT	Front end loader	992C	
X		Ingersoll Rand	Roller		2.13.009
X		CAT	Dozer	D-10N	2.51.005
	X	CAT	Dozer	D-10N	2.51.003
X		Komatsu	Dozer	D61PX	
	X	CAT	Grader		2.40.013
	X	CAT	Grader		2-40-011
	X	Komatsu	Excavator	PC1100LC	2.33.008
X		Hitachi	Excavator	EX700	2.32.007
	X		Boat		

INSPECTOR: David Frary (DF)		WORK ORDER: A32280	
WEATHER: Mostly cloudy	REPORT ID.: 2009.10.25df	PAGE: 1 of 13	
TEMPERATURE: 31-40F ±	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Tom Glenn	
Tide	AM High .....	PM High 1:04 @ 25.3'	AM Low 6:47 @ 3.6' PM Low 6:58 @ 10.3'

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Day Shift (7:30 am to 6:00 pm)

- Blue 2250 Crane: Working on stabbing and driving sheets on 66 tail wall until 12:30 then worked on pulling template out of cell 65 until about 4:45pm then crane was idle.
- Orange 2250 Crane: After visibility obtained, driving on 11/12 tail wall and face of 12 using 200-6 vibe until 12:30pm then working on moving and installing template in cell 11 until 6:00pm.
- 4100 (Orange tip) Crane: After visibility obtained, driving on face of cell 64 and tail wall of 64/65 until shutting down at about 4:45pm
- 4100 (Black tip) Crane: After visibility obtained, driving on face of 31 and 32 along with 30/31 tail wall until about 2:15pm. Hammer removed, basket attached and then cutting off tops of sheets near 31/32 wye. Finish at 5:30pm and go home.
- Kobelco CK2500 Crane: Driving on tail wall of cells 38/39 until 9:45 then move crane and equipment and work on template in cell 38 until done at 7:15pm.
- White 1500 SC Crane: Sat idle until most of day except from 10:30 until 11:15 and 3:15 until 6:30 when Terracon was working on electronics in cell 61.
- Denali Drilling: Not on site

**Topics** (when applicable)

<b>Visitors to job:</b>
<b>Inspections performed:</b>
<b>Discussions with QAP, MKB, PND, or QA Services:</b>
<b>Earthwork performed:</b> Hauling from pit with 4 trucks. Backfilling tail wall 38/39 from existing stock pile on site. Digging trench for conduit by 57/58 tail wall. Back filling some of cell 57.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Whale observers in place all shift. No shutdowns required. <ul style="list-style-type: none"> <li>• Stabbing etc allowed (after 350 meter visibility obtained) at 8:46am</li> <li>• Impact in-water work allowed (1/2 hour after 800 meter visibility obtained) at 8:52am</li> <li>• Vibratory in-water work allowed (1/2 hour after 1300 meter visibility obtained) at 8:59am</li> </ul>
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> 26 ±
<b>Personnel QAP:</b> Steve, 2 grade checkers and 5 operators
<b>Cells without bracing:</b> 28, 29, 40, 41, 60, 61
<b>Vibro-compaction probes completed this shift:</b> –none–

**Sheet piles in place at beginning of shift**

- Tail-Wall 11 /12 (K) has all piles in place, the extended tail wall is to grade 42±.
- Tail-Wall 12 /13 (L) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 13/14 (M) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 14/15 (N) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 15/16 (O) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 16/17 (P) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 17/18 (Q) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 18/19 (R) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 19/20 (S) has all piles in place and tail wall piles driven to below pad grade. (from 10 sheets past IA to end to FG)
- Tail-Wall 20/21 (T) has all piles in place and tail wall piles driven to below pad grade. (from 11 sheets past IA to end to FG)
- Tail-Wall 21/22 (U) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 22/23 (V) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 23/24 (W) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 24/25 (X) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 25/26 (Y) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 26/27 (Z) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 27/28 (AA) has all piles in place and tail wall piles driven to final grade.
- Tail-Wall 28/29 (AB) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 29/30 (AC) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 30/31 (AC) has all piles in place and tail wall piles driven to final grade.
- Cell 32 has all piles in place and extended tail wall piles driven to just above gravel pad grade
- 
- Tail-Wall 38/39 (AJ) has is 47 sheets in place past the intermediate anchor.
- Tail-Wall 39/40 (AK) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 40 /41 (AL) has all piles in place and tail wall piles driven to below pad grade.(end 38± sheets driven to final grade)
- Tail-Wall 41 /42 (AM) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 42 /43 (AN) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 43 /44 (AO) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 44/45 (AP) has all piles in place and tail wall piles driven to below pad grade. (end 36± sheets to final grade)
- Tail-Wall 45/46 (AQ) has all piles in place and extended tail wall piles driven to final grade)
- Tail-Wall 46/47 (AR) has all piles in place and tail wall piles driven to below pad grade. (end 20± sheets to final grade)
- Tail-Wall 47/48 (AS) has all piles in place and tail wall piles driven to below pad grade ( IA + 2 to IA +25 to FG)
- Tail-Wall 48/49 (AT) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 49/50 (AU) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 50/51 (AV) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 51/52 (AW) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 52/53 (AX) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 53/54 (AY) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 54/55 (AZ) has all piles in place and tail wall piles driven to below pad grade. (IA+12 to end to final grade)
- Tail-Wall 55/56 (BA) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 56/57 (BB) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 57/58 (BC) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 58/59 (BD) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 59/60 (BE) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 60/61 (BF) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 61/62 (BG) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 62/63 (BH) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 63/64 (BI) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 64/65 (BH) has all piles in place and extended tail wall piles driven to final grade.
-















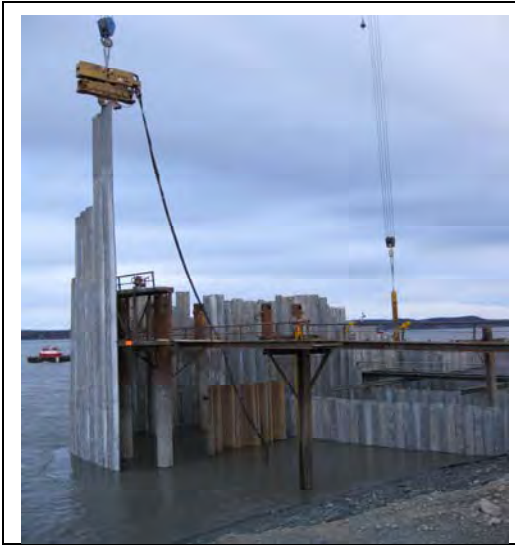


Figure 01



Figure 02



Figure 03



Figure 04



Figure 05

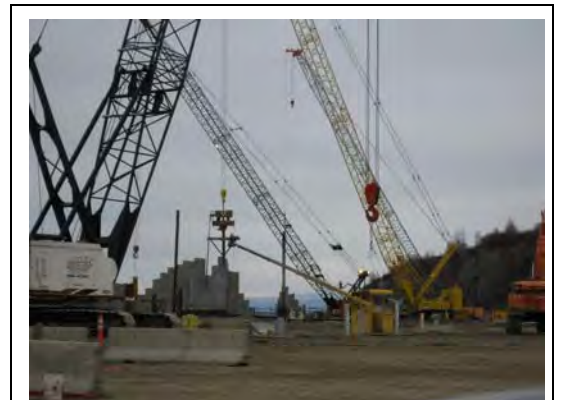


Figure 06





Figure 07



Figure 08



Figure 10



Figure 09



Figure 11



Figure 12

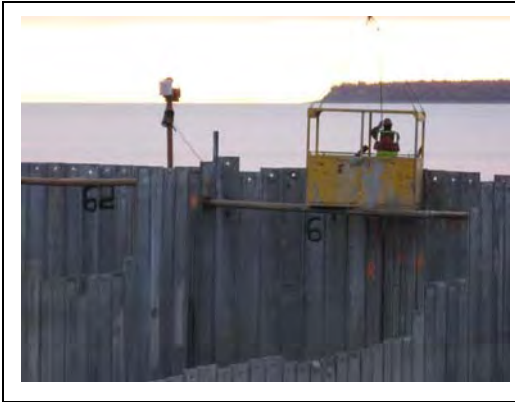


Figure 13



Figure 14

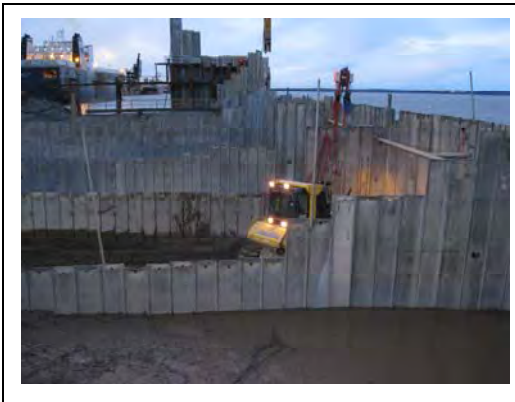


Figure 15



Figure 16



Figure 17

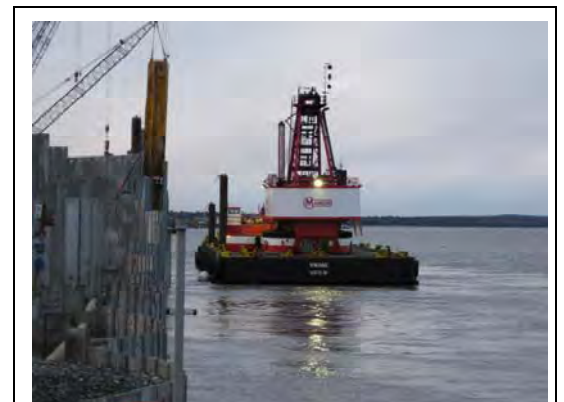


Figure 18

**MKB Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
X		Manitowoc	Lattice Boom Crane	4100W–black tip	
X		Manitowoc	Lattice Boom Crane	4100W– orange tip	
	X	Manitowoc	Lattice Boom Crane	4000	
X		Manitowoc	Lattice Boom Crane	2250 (blue)	
X		Manitowoc	Lattice Boom Crane	2250 (orange)	
X		Kobelco	Lattice Boom Crane	Yellow	
X		Lima	1500 SC Crane	White	
X		APE	Vib Hammer W/power unit	200-6	
X		APE	Vib Hammer W/power unit	200-6	
	X	APE	Vib Hammer W/power unit	200	
	X	APE	Vib Hammer W/power unit	400	
	X	APE	Vib Hammer w/power unit	KING KONG	
X		BSP/PACO	Impact Hammer	SL-30	
x		BSP/PACO	Impact Hammer	SL-30	
	X	APE	Impact Hammer	7.2 HIH	
	X	Grove	Man Basket	MZ 116C	
	X	Grove	Man Basket	MZ 90	
X		Genie	Man Basket	1073606	
		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
			Utility Bed Truck	2006 (half ton)	
			Utility Bed Truck with welder	1997 ( )	
	X		Boat		AK6492L
X			Man Lift		
X		Volvo	Front End Loader	L180C	
X		Volvo	Front End Loader	L150E	

**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	X		Belly Dump Haul Truck	773B	2.72.022
	X		Belly Dump Haul Truck	773B	2.72.005
	X		Belly Dump Haul Truck	773B	2.72.015
	X		Belly Dump Haul Truck	773B	2.72.016
	X		Belly Dump Haul Truck	773B	2.72.004
	X		Belly Dump Haul Truck	773B	2.72.003
	X		End Dump Haul Truck	773D	2.72.018
	X		Belly Dump Haul Truck	773B	2.72.002
	X		End Dump Haul Truck	773B	2.72.021
	X		End Dump Haul Truck	773D	2.72.017
	X		End Dump Haul Truck	773D	2.72.023
	X		End Dump Haul Truck	773B	2.72.006
X			Water Truck	K-1200	2.72.024
X	x	Kenworth	Fuel Truck		AK EMP748
		Dodge	Repair Truck	2500	
X			Flat Bed	INT1021	ENN 755
			Repair truck (NIC Mac)		Ak000812
	X	Volvo	Front end loader	L180F	
X		Volvo	Front End Loader	L220E	
X		CAT	Front end loader	988G	
	X	CAT	Front end loader	992C	
X		Ingersoll Rand	Roller		2.13.009
X		CAT	Dozer	D-10N	2.51.005
	X	CAT	Dozer	D-10N	2.51.003
X		Komatsu	Dozer	D61PX	
	X	CAT	Grader		2.40.013
	X	CAT	Grader		2-40-011
	X	Komatsu	Excavator	PC1100LC	2.33.008
X		Hitachi	Excavator	EX700	2.32.007
	X		Boat		

INSPECTOR: David Frary (DF)		WORK ORDER: A32280	
WEATHER: Mostly sunny	REPORT ID.: 2009.11.01DF	PAGE: 1 of 13	
TEMPERATURE: 23-38°F ±	REVIEWED BY:	REVIEW DATE:	
CONTRACTOR: QAP	PROJECT MGR: Tom Pitt	SUPERINTENDENT: Steve Stichler	
CONTRACTOR: MKB	PROJECT MGR: Andy Romine	SUPERINTENDENT: Tom Glenn	
Tide	AM High 6:08 @ 28.5'	PM High 6:03 @ 30.5'	AM Low 1:21 @ -0.1' PM Low 12:33 @ 4.3'

Report to: John Williams, Serenity Schmidt, Chris Locke, Corey Knowles (ICRC); Kai Vedenoja, Kurt Johnson (PND); Steve Schwicht (DOWL HKM)

**MAJOR ACTIVITY:** Day Shift (7:30 am to 6:00 pm)

- Blue 2250 Crane: Worked on cell 65 and 66 all day driving in 66 tail wall and face of 65 using 200-6 vibe. When not driving they were removing the template from 66.
- Orange 2250 Crane: After visibility was achieved and crane was moved into position, they worked on driving 37/38 tail wall most of the day except between 11:00 and 12:45 when they had to stop to repair the vibe hammer because of a leaking hose.
- 4100 (Orange tip) Crane: Crane idle until 9:45 visibility start up then driving on tail wall of 32 until 1:00. After moving crane, continued to drive with SL-30 hammer on face of 32 and 31/32 tail wall until visibility shut down at 5:30pm
- 4100 (Black tip) Crane: Moving crane until position near cells 10/11 and used the 200-6 vibe to drive on tail wall until 10:00 then stabbing sheets in tail wall and intermittently driving until 5:00pm
- Kobelco CK2500 Crane: Crane down
- White 1500 SC Crane: Crane was idle most of the day except between 11:15 and 2:00 when crew had basket attached and was working on electronics on outside of cells 18/19.
- Denali Drilling: not on site

**Topics** (when applicable)

<b>Visitors to job:</b> Kirt Johnson and Chris Locke
<b>Inspections performed:</b>
<b>Discussions with QAP, MKB, PND, or QA Services:</b> Was informed by MKB that night shift has been shut down.
<b>Earthwork performed:</b> QAP grading areas between cells 42 and 58 and between 12 and 29 on roadway. Also worked on grading near cells 35-38 at dry barge berth.
<b>Hindrances- MKB / QAP:</b>
<b>Whale info:</b> Whale observers in place all shift. No shutdowns required. <ul style="list-style-type: none"> <li>• Stabbing etc allowed (after 350 meter visibility obtained) at 8:15am <b>Shut down occurring at 5:15pm</b></li> <li>• Impact in-water work allowed (1/2 hour after 800 meter visibility obtained) at 9:32am <b>Shut down at 5:20pm</b></li> <li>• Vibratory in-water work allowed (1/2 hour after 1300 meter visibility obtained) at 11:16am <b>Shut down at 5:29pm</b></li> </ul>
<b>Force Account / change order tracking:</b>
<b>Personnel MKB:</b> 26 ±
<b>Personnel QAP:</b> Steve, 2 grade checkers and 5 operators
<b>Cells without bracing:</b> 30, 40, 63
<b>Vibro-compaction probes completed this shift:</b> -none-



**Sheet piles in place at beginning of shift**

- Tail-Wall 10 /11 (J) has 2 piles in place,
- Tail-Wall 11 /12 (K) has all piles in place, the extended tail wall is to finish grade.
- Tail-Wall 12 /13 (L) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 13/14 (M) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 14/15 (N) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 15/16 (O) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 16/17 (P) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 17/18 (Q) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 18/19 (R) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 19/20 (S) has all piles in place and tail wall piles driven to below pad grade. (from 10 sheets past IA to end to FG)
- Tail-Wall 20/21 (T) has all piles in place and tail wall piles driven to below pad grade. (from 11 sheets past IA to end to FG)
- Tail-Wall 21/22 (U) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 22/23 (V) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 23/24 (W) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 24/25 (X) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 25/26 (Y) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 26/27 (Z) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 27/28 (AA) has all piles in place and tail wall piles driven to final grade.
- Tail-Wall 28/29 (AB) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 29/30 (AC) has all piles in place and tail wall piles driven to final grade
- Tail-Wall 30/31 (AC) has all piles in place and tail wall piles driven to final grade.
- Cell 32 has all piles in place and extended tail wall piles driven to just above gravel pad grade
- 
- Tail Wall 37/38 (AI) has 2 sheets in place
- Tail-Wall 38/39 (AJ) has all sheets in place; the extended tail wall is driven to final grade
- Tail-Wall 39/40 (AK) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 40 /41 (AL) has all piles in place and tail wall piles driven to below pad grade.(end 38± sheets driven to final grade)
- Tail-Wall 41 /42 (AM) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 42 /43 (AN) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 43 /44 (AO) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 44/45 (AP) has all piles in place and tail wall piles driven to below pad grade. (end 36± sheets to final grade)
- Tail-Wall 45/46 (AQ) has all piles in place and extended tail wall piles driven to final grade)
- Tail-Wall 46/47 (AR) has all piles in place and tail wall piles driven to below pad grade. (end 20± sheets to final grade)
- Tail-Wall 47/48 (AS) has all piles in place and tail wall piles driven to below pad grade ( IA + 2 to IA +25 to FG)
- Tail-Wall 48/49 (AT) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 49/50 (AU) has all piles in place and tail wall piles driven to below pad grade (end 20± sheets to final grade)
- Tail-Wall 50/51 (AV) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 51/52 (AW) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 52/53 (AX) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 53/54 (AY) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 54/55 (AZ) has all piles in place and tail wall piles driven to below pad grade. (IA+12 to end to final grade)
- Tail-Wall 55/56 (BA) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 56/57 (BB) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 57/58 (BC) has all piles in place and tail wall piles driven to below pad grade.
- Tail-Wall 58/59 (BD) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 59/60 (BE) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 60/61 (BF) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 61/62 (BG) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 62/63 (BH) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 63/64 (BI) has all piles in place and extended tail wall piles driven to final grade.
- Tail-Wall 64/65 (BH) has all piles in place and extended tail wall piles driven to final grade.
- Cell 66 has 13 sheets in place past the intermediate anchor

















Figure 01



Figure 02



Figure 03



Figure 04



Figure 05



Figure 06



Figure 07

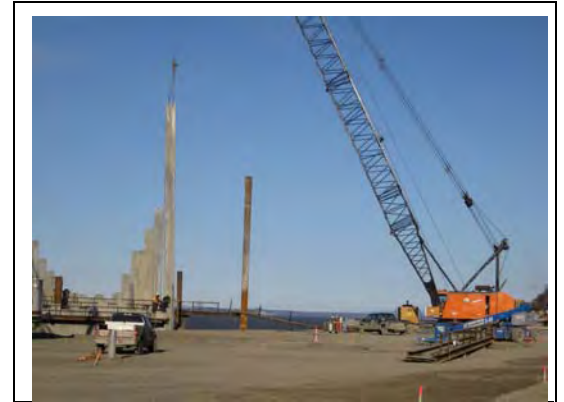


Figure 08

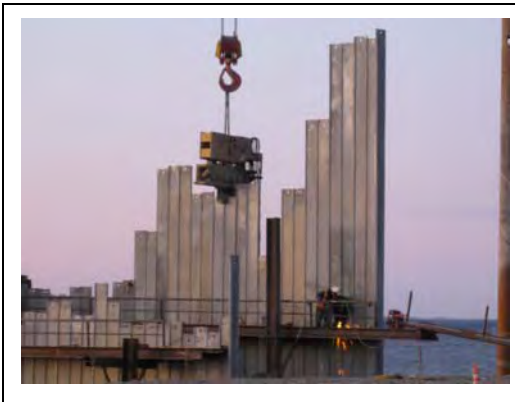


Figure 10

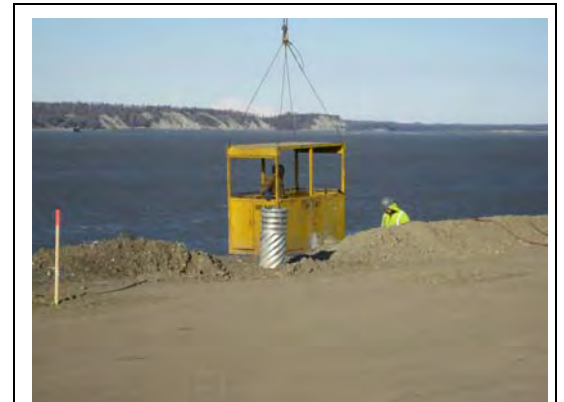


Figure 09



Figure 11



Figure 12



Figure 13

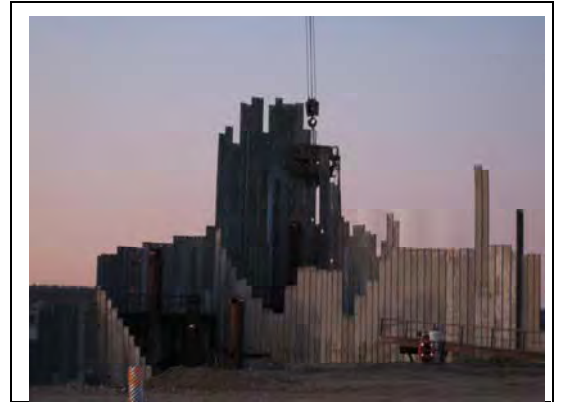


Figure 14

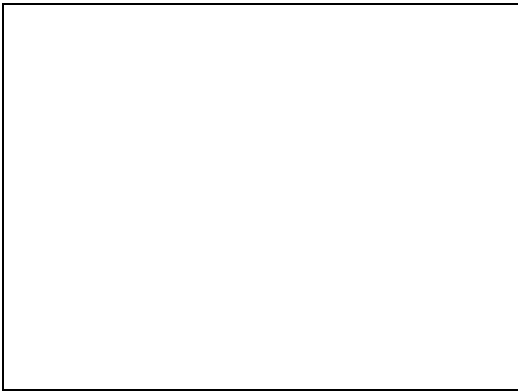


Figure 15

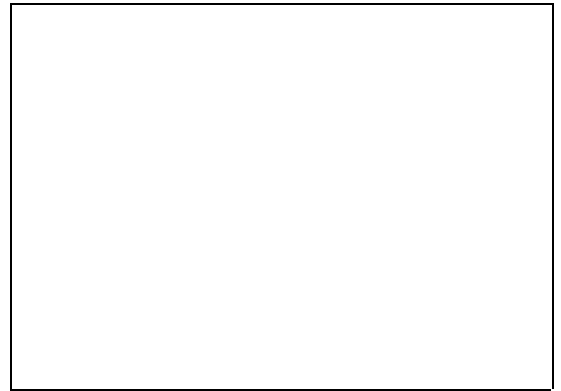


Figure 16



Figure 17



Figure 18



MKB Daily Equipment Log					
In Use	Idle	Make	Description	Model	Id No.
X		Manitowoc	Lattice Boom Crane	4100W–black tip	
X		Manitowoc	Lattice Boom Crane	4100W– orange tip	
	X	Manitowoc	Lattice Boom Crane	4000	
X		Manitowoc	Lattice Boom Crane	2250 (blue)	
X		Manitowoc	Lattice Boom Crane	2250 (orange)	
	x	Kobelco	Lattice Boom Crane	Yellow	
X		Lima	1500 SC Crane	White	
X		APE	Vib Hammer W/power unit	200-6	
X		APE	Vib Hammer W/power unit	200-6	
	X	APE	Vib Hammer W/power unit	200	
	X	APE	Vib Hammer W/power unit	400	
	X	APE	Vib Hammer w/power unit	KING KONG	
X		BSP/PACO	Impact Hammer	SL-30	
X		BSP/PACO	Impact Hammer	SL-30	
	X	APE	Impact Hammer	7.2 HIH	
	X	Grove	Man Basket	MZ 116C	
	X	Grove	Man Basket	MZ 90	
X		Genie	Man Basket	1073606	
		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
			Utility Bed Truck	2006 (half ton)	
			Utility Bed Truck with welder	1997 ( )	
	X		Boat		AK6492L
X			Man Lift		
X		Volvo	Front End Loader	L180C	
X		Volvo	Front End Loader	L150E	

**QAP Daily Equipment Log**

In Use	Idle	Make	Description	Model	Id No.
	X		Belly Dump Haul Truck	773B	2.72.022
	X		Belly Dump Haul Truck	773B	2.72.005
	X		Belly Dump Haul Truck	773B	2.72.015
	X		Belly Dump Haul Truck	773B	2.72.016
	X		Belly Dump Haul Truck	773B	2.72.004
	X		Belly Dump Haul Truck	773B	2.72.003
	X		End Dump Haul Truck	773D	2.72.018
	X		Belly Dump Haul Truck	773B	2.72.002
	X		End Dump Haul Truck	773B	2.72.021
	X		End Dump Haul Truck	773D	2.72.017
	X		End Dump Haul Truck	773D	2.72.023
	X		End Dump Haul Truck	773B	2.72.006
	x		Water Truck	K-1200	2.72.024
X		Kenworth	Fuel Truck		AK EMP748
		Dodge	Repair Truck	2500	
X			Flat Bed	INT1021	ENN 755
			Repair truck (NIC Mac)		Ak000812
	X	Volvo	Front end loader	L180F	
X		Volvo	Front End Loader	L220E	
X		CAT	Front end loader	988G	
	X	CAT	Front end loader	992C	
X		Ingersoll Rand	Roller		2.13.009
X		CAT	Dozer	D-10N	2.51.005
	X	CAT	Dozer	D-10N	2.51.003
X		Komatsu	Dozer	D61PX	
	X	CAT	Grader		2.40.013
	X	CAT	Grader		2-40-011
	X	Komatsu	Excavator	PC1100LC	2.33.008
X		Hitachi	Excavator	EX700	2.32.007
	X		Boat		

## INSPECTION REPORT (SOILS)

<b>PROJECT:</b>	P.O.A. Expansion	<b>PROJECT MGR:</b>	<b>DATE:</b>	8/11/08
<b>CLIENT:</b>	ICRC	<b>Superintendent:</b> <b>STEVE STICHLER</b> <b>/KEITH MOBLEY</b>	<b>WORK ORDER</b>	A32280
<b>CONTRACTOR:</b>	QAP/NORTH GEOTECHNICAL ENGINEERING	<b>FOREMAN:</b>	<b>PAGE:</b>	1 of 3
<b>INSPECTOR:</b>	Bob Teglund	<b>WEATHER:</b> clear	<b>TEMPERATURE:</b>	64 °F
		<b>Reviewed By: / Date:</b> <i>SJS 8/17/08</i>	<b>REPORT ID.:</b>	S2008.08.11rt

**MAJOR ACTIVITY:** Predrilling for vibrocompaction and soil haulage.

**Memo Issued:**

☐ YES

☒ NO

TIME	COMMENTS
7:00 am	<ul style="list-style-type: none"> <li>QAP had two trucks hauling soil for vibrocompaction from Elmendorf's pit to the North stockpile. Periodically the stockpile is leveled out by a dozer. I obtained a soil sample from the stockpile and transported it to the lab for a gradation.</li> <li>QAP had one backhoe salvaging rock from the soil face next to the bay from Sta. 63+00 to Sta.67+00 and placing the rock in one truck which transported it to Sta.49+00 where a backhoe sank it in the bay.</li> <li>Two dozers, one backhoe, and one roller are building the revetment Northwest into the bay. Trucks and bellydumps are placing granular soil from Sta. 49+00 Rt 500 to Sta. 50+00 Rt 500 and after the two dozers ramp the soil down, then it is rolled.</li> <li>Buzdor is taking compaction tests. Discussed with Steve his means and methods for placing the soil. He said soon he will be hauling both common and granular soil.</li> </ul>
7:00pm	<ul style="list-style-type: none"> <li>Ended shift at 7:00pm.</li> </ul>
8:00am	<ul style="list-style-type: none"> <li>Keith Mobley, the foreman for Northern Geotechnical Engineering, did the predrilling for the vibrocompaction tests. His number is 529-9180. They are drilling 10 holes for PND. Sandra Morris, P.E., Senior Engineer for PND (#907-561-1011) discussed with Keith what she wanted him to do. Katie, Chris, Robert Wilson, and myself also were there for the discussion.</li> <li>Keith Mobley gave ATL the soil samples that they took. Three holes were drilled B188 with 8 samples taken; B194 with eight samples taken; and B191 with nine samples taken. Katie Swenson called me and directed ATL to not do gradations on the first three samples of each hole but to do gradations on test hole B188 samples 4,5,6, and 7; test hole B194 samples 4,5,6, and 7; and test hole 4,5,6,7, and 8. Hydrometers should be run on the silts which are for test hole B188 sample eight; test hole B194 sample eight; and test hole B191 sample nine. Katie wants the first three samples of each test hole saved for possible future use. She will send an e-mail tomorrow to confirm the aforementioned testing requirements.</li> </ul>
3:30	<ul style="list-style-type: none"> <li>Ended shift at 3:30.</li> </ul>

## INSPECTION REPORT (Soils Continued)

**PROJECT:** Port Of Anchorage Expansion  
**INSPECTOR:** Bob Teglund

**DATE:** 8/11/08

**REPORT ID.:** S2008.08.11RT  
**PAGE:** 2 of 3

<b>Deficiencies:</b>	0
<b>Corrective Actions</b>	
<b>Outstanding Deficiencies</b>	0



## INSPECTION REPORT (Soils Continued)

**PROJECT:** Port Of Anchorage Expansion  
**INSPECTOR:** Bob Teglund

**DATE:** 8/11/08

**REPORT ID.:** S2008.08.11RT  
**PAGE:** 3 of 3



Figure 1 Vibrocompaction fill



Figure 2 Cell 24



Figure 3 Welding sheets together so when a sheet is driven other sheets will not run



Figure 4 QAP filling at sta. 49+00



Figure 5 Predrilling for vibrocompaction

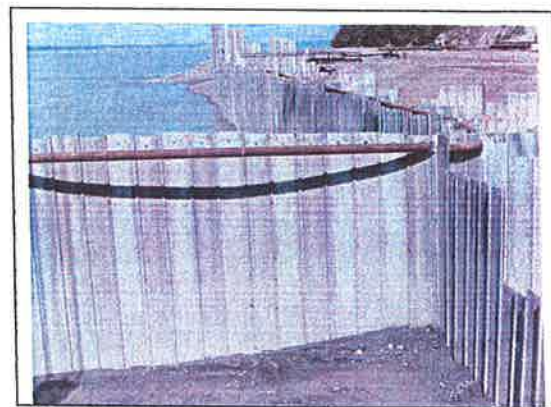


Figure 6 Crossbracing a cell



## INSPECTION REPORT (PILE DRIVING)

<b>PROJECT:</b>	P.O.A. Expansion	<b>PROJECT MGR:</b>	Andy Romine	<b>DATE:</b>	8/11/08
<b>CLIENT:</b>	ICRC	<b>Superintendent:</b>	Tom Glenn	<b>WORK ORDER</b>	A32280
<b>CONTRACTOR:</b>	MKB Constructor	<b>FOREMAN:</b>		<b>PAGE:</b>	1 of 5
<b>INSPECTOR:</b>	Robert Wilson	<b>WEATHER:</b>	clear	<b>TEMPERATURE:</b>	62 °F
		<b>Reviewed By: / Date:</b>	<u>SS 8/14/08</u>	<b>REPORT ID.:</b>	p2008.11.08rkwl

### MAJOR ACTIVITY:

Memo Issued:

☐ YES

☐ NO

TIME	COMMENTS
7:00	On Site. Both cranes have the booms down for servicing. I checked through the site and talked with Bob Teglund (ATL) and Kai Vedenoja (PND) regarding the work in progress.
8:00	The 4100 crane began removing the template for Pile cell #22. The 4000 walked to the north end and returned with the APE 300-4 Vibe head. Then it began driving piles in the tail section between cells 19 and 20.
11:30	The 4100 Crane has set the template for cell #24 and is preparing to begin setting sheet-pile sections on the template. Kai is checking the joints of piles to be placed with a gage. The Ape 300-4 Vibe Hammer sprung an oil leak and the crew is checking it out.
12:00	Off site
2:30	Back on site. The 4000 crane is idle now because the APE 300-4 Vibe Hammer is down. It looks like it will be down some time. They called the supplier and were trying to decide whether to bring in another hammer or fly someone up to try and fix this one on site. Before it broke down they completed driving the tail piles between 19 and 22 to final grade.  The 4100 crane is continuing to set sheet-pile on the template at cell 24. They have set from east to west and are almost to the west wye.
3:30	To the field office to work with bob on reports.
6:30	Back to the docks. The 4100 completed setting all piles for cell 24 with the exception of the termination pile on the tail between 24 and 25.
7:00	Back to the field office to complete this report.
7:40	Off site

## INSPECTION REPORT (Continued)

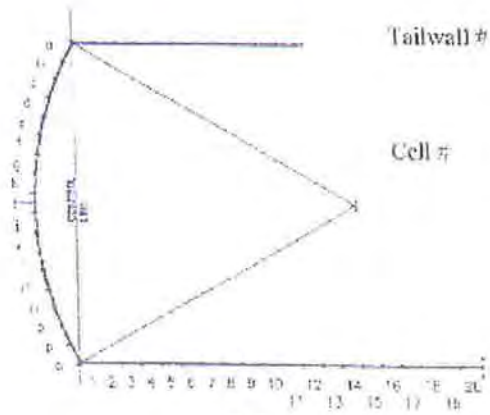
<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/11/08	<b>REPORT ID.:</b>	p2008.11.08rkw
<b>INSPECTOR:</b>	Robert Wilson			<b>PAGE:</b>	2 of 5

### PHOTO LOCATION

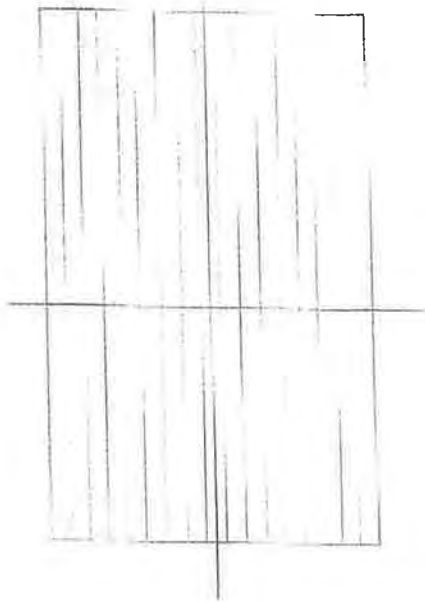
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### COMMENTS

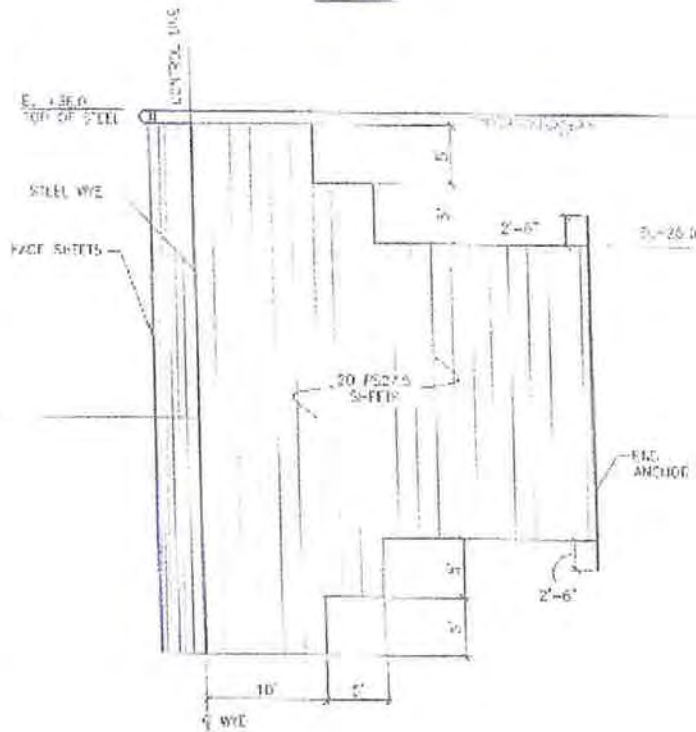
1.



PLAN



FACE ELEVATION



TAILWALL SECTION

**PND Engineers, Inc. Sheet Piling Reference Detail**

## INSPECTION REPORT (Continued)

<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/11/08	<b>REPORT ID.:</b>	p2008.11.08rkW
<b>INSPECTOR:</b>	Robert Wilson			<b>PAGE:</b>	3 of 5

### Field Checklist

KEY	C	NC	C = Conforming, NC = Non Conforming	KEY	C	NC	C = Conforming, NC = Non Conforming
<b>A</b>			<b>Pre Driving - Mandatory</b>	<b>B</b>			<b>Driving Suggested</b>
1	X		General Conformance with Pile Driving Plan	21			Time to drive, type of hammer, in-water time, energy input
2		X	Hammer and Equipment operating properly	21			Unsupported length of sheet pile cannot support weight of hammer
3			Material heat reports supplied	22			Coating damage from driving, repairs
4			Wye Fabrication Inspection Reports supplied				
5			Galvanizing Inspection reports supplied	<b>C</b>			<b>Post Driving - Mandatory</b>
6	X		Pile Storage – ground base, Dunage < 10', and vertically aligned,	1	X		Template removal
7			Approved Mill Cert. of material to be driven	2			Brace Inspection
8	X		Confirm Sheet length, Thickness for location- (Color code)	3			Sheet pile elevation after driving
9	X		Interlocks –visual	4			Initial filling
10	X		Interlocks – run with sheet pile thumb	5			Differential step filling
12	X		SWC – Butt joints	6			Fill layer placement
13	X		Sweep, Camber, Twist	7			Bulkhead distortion –filling, compaction
				8			Survey Wyes per schedule
			<b>Pre Driving - Suggested</b>	9			Survey locations of tail walls
20			Track heat number with final sheet location				
21			Interlock tolerances – finger thickness, gap opening, thumb root thickness				<b>Post Driving Suggested</b>
22			Coating damage, repairs	20			Monitor Piezometers
23			Monitoring Equipment	21			Survey face-sheet and tail wall movement, settlement plates

<b>B</b>			<b>Driving - Mandatory</b>	Non Conforming Items
1	X		Template stability – movement	
2	X		Sequence	
3	X		Pile Staging, lofting, handling, threading, stabbing	
4	X		3 – point contact on interlocks	
5	X		Pile plumb and skew –particularly for face sheets	
6	X		Lead distance – Normal <5', Hard <2.5'	
7	X		Swing angle –smooth, <10 degree	
8	X		Wye – driven location difference from theoretical	
9		X	Sheet damage – grips, interlocks, bottom	
10	s		Hard or soft driving	
11	X		Obstructions – note size and depth, monitor moving or removal, inspect piles for damage	
12			Driving out of interlock	
13			Approval for additional welding	
14			Approval for realignment of tail walls	

## INSPECTION REPORT (Continued)

<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/11/08	<b>REPORT ID.:</b>	p2008.11.08rkw
<b>INSPECTOR:</b>	Robert Wilson			<b>PAGE:</b>	4 of 5

### Equipment on Site

In Use	Idle	Make	Description	Model	Id No.
MKB					
X		APE	Vibratory Hammer with power unit	300-4	
X		APE	Vibratory Hammer with power unit	200-6	
X		Volvo	Front End Loader	L180C	
X		Manitowoc	Lattice Boom Crane	4100W	
X		Manitowoc	Lattice Boom Crane	4000W	
X		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
X			Utility Bed Truck	2006 (half ton)	
X			Utility Bed Truck with welder	1997 ( )	
X			Boat		AK6492L
X			Man Lift	S-80	
X			Man Lift	S-85	



## INSPECTION REPORT (Continued)

**PROJECT:** Port Of Anchorage Expansion  
**INSPECTOR:** Robert Wilson

**DATE:** 8/11/08

**REPORT ID.:** p2008.11.08rkw  
**PAGE:** 5 of 5



Figure 01 Sheet-Piles standing in place on the template at cell 24



Figure 02 Preparing to drive tail piles



Figure 03 View from the north end of the project



Figure 04 Looking north at the tail piles along the barge dry dock.

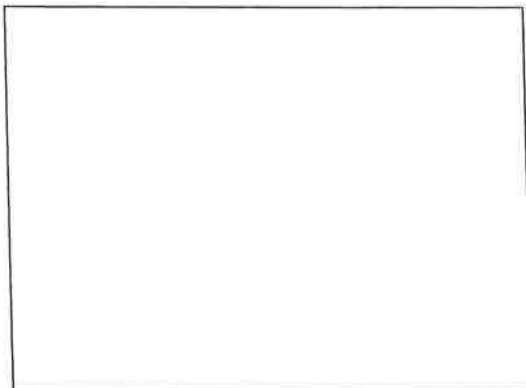


Figure 05

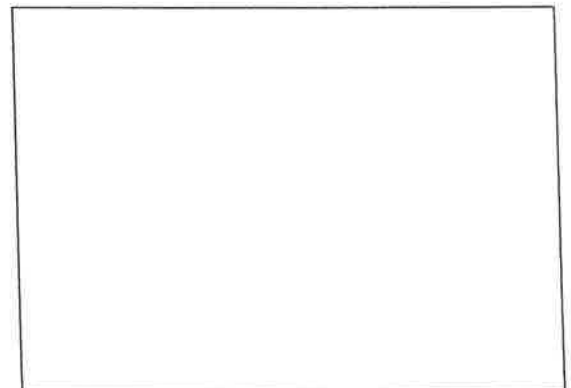


Figure 06



## INSPECTION REPORT (PILE DRIVING)

<b>PROJECT:</b>	P.O.A. Expansion	<b>PROJECT MGR:</b>	Andy Romine	<b>DATE:</b>	8/12/08
<b>CLIENT:</b>	ICRC	<b>Superintendent:</b>	Tom Glenn	<b>WORK ORDER</b>	A32280
<b>CONTRACTOR:</b>	MKB Constructor	<b>FOREMAN:</b>		<b>PAGE:</b>	1 of 4
<b>INSPECTOR:</b>	Paul Twichell	<b>WEATHER:</b>	clear	<b>TEMPERATURE:</b>	62 °F
		<b>Reviewed By: / Date:</b>	<u>SS 8/14/08</u>	<b>REPORT ID.:</b>	p2008.08.12pt

**MAJOR ACTIVITY:** Drive sheet pile

**Memo Issued:**

☐ YES

☒ NO

TIME	COMMENTS
	High tide: 4:27 am 23.7 ft: 6:18 pm 25.6 ft Low tide 11:40 am 2.3ft; In water work 3:30 to 7:00 pm Out of water work: 7:00 am to 3:30 pm  9:00 ar site: meet with Bob Tegland, get overview of job. Meet Andy Romine, Tom Glen and Ron Davis.  10:00 Set soldier piles. Had trouble with knife plate which vibrator connects to. Vibrator has shattered knife plate. 11:00 Pull soldier piles to reweld knife plates. 4000w crane down for repair at north end of job site. 12:00 Lunch break 12:30 not going to drive soldier piles at this time. 1:30 Vibrate tail sheets between 23-24 cell 2:45 Vibrate in face sheets 23 cell. 2:55 Vibrate in face sheets 22 cell. 4:00 Continue vibrating sheets 21- 22 wall and 25-26 walls. 7:00 Shut down.  Three man crew working on probe and soldier pile at lay-down area 12 hrs.

## INSPECTION REPORT (Continued)

<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/12/08	<b>REPORT ID.:</b>	P2008.08.12
<b>INSPECTOR:</b>	Paul Twichell	<b>PAGE:</b>	2 of 4		

<b>Pre-Driving:</b>	All sheets were previously inspected and in place and partially driven in cells 22, 23, 24, 25.
<b>Driving:</b>	Sheets in cells 22' 23' 24' and 25 driving completed.
<b>Deficiencies:</b>	Soldier pile knife plate to which the vibration unit attaches shattered and the pipe along the vertical welds at the knife plate cracked and deformed the top of the pipe.
<b>Corrective Actions</b>	Soldier piles not put in until corrective measures can be taken.
<b>Outstanding Deficiencies</b>	Failure of knife plate.

## INSPECTION REPORT (Continued)

<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/12/08	<b>REPORT ID.:</b>	P2008.08.12
<b>INSPECTOR:</b>	Paul Twichell	<b>PAGE:</b>			3 of 4

### Field Checklist

KEY	C	NC	C = Conforming, NC = Non Conforming	KEY	C	NC	C = Conforming, NC = Non Conforming
<b>A</b>			<b>Pre Driving - Mandatory</b>	<b>B</b>			<b>Driving Suggested</b>
1	X		General Conformance with Pile Driving Plan	21			Time to drive, type of hammer, in-water time, energy input
2	X		Hammer and Equipment operating properly	21			Unsupported length of sheet pile cannot support weight of hammer
3	X		Material heat reports supplied	22			Coating damage from driving, repairs
4	X		Wye Fabrication Inspection Reports supplied				
5	X		Galvanizing Inspection reports supplied	<b>C</b>			<b>Post Driving - Mandatory</b>
6	X		Pile Storage – ground base, Dunage < 10', and vertically aligned,	1	X		Template removal
7	X		Approved Mill Cert. of material to be driven	2			Brace Inspection
8	X		Confirm Sheet length, Thickness for location- (Color code)	3	X		Sheet pile elevation after driving
9	X		Interlocks –visual	4			Initial filling
10	X		Interlocks – run with sheet pile thumb	5			Differential step filling
12	X		SWC – Butt joints	6			Fill layer placement
13	X		Sweep, Camber, Twist	7			Bulkhead distortion –filling, compaction
				8			Survey Wyes per schedule
			<b>Pre Driving - Suggested</b>	9			Survey locations of tail walls
20			Track heat number with final sheet location				
21			Interlock tolerances – finger thickness, gap opening, thumb root thickness				<b>Post Driving Suggested</b>
22	X		Coating damage, repairs	20			Monitor Piezometers
23			Monitoring Equipment	21			Survey face-sheet and tail wall movement, settlement plates

<b>B</b>			<b>Driving - Mandatory</b>
1	X		Template stability – movement
2	X		Sequence
3	X		Pile Staging, lofting, handling, threading, stabbing
4	X		3 – point contact on interlocks
5	X		Pile plumb and skew –particularly for face sheets
6	X		Lead distance – Normal <5', Hard <2.5'
7	X		Swing angle –smooth, <10 degree
8	X		Wye – driven location difference from theoretical
9	X		Sheet damage – grips, interlocks, bottom
10	X		Hard or soft driving
11			Obstructions – note size and depth, monitor moving or removal, inspect piles for damage
12			Driving out of interlock
13	X		Approval for additional welding
14	X		Approval for realignment of tail walls

#### Non Conforming Items



## INSPECTION REPORT (Continued)

<b>PROJECT:</b>	Port Of Anchorage Expansion	<b>DATE:</b>	8/12/08	<b>REPORT ID.:</b>	P2008.08.12
<b>INSPECTOR:</b>	Paul Twichell	<b>PAGE:</b>	4 of 4		

### Equipment on Site

In Use	Idle	Make	Description	Model	Id No.
<b>MKB</b>					
X		APE	Vibratory Hammer with power unit	300-4	
	X	APE	Vibratory Hammer with power unit	200-6	
X		Volvo	Front End Loader	L180C	
X		Manitowoc	Lattice Boom Crane	4100W	
X		Manitowoc	Lattice Boom Crane	4000W	
X		Whisperwatt	25KW Generator		982345
X		Ford	4 Door PU Truck		
X			Utility Bed Truck	2006 (half ton)	
X			Utility Bed Truck with welder	1997 ( )	
X			Boat		AK6492L
X			Man Lift	S-80	
X			Man Lift	S-85	

## INSPECTION REPORT (SOILS)

<b>PROJECT:</b>	P.O.A. Expansion	<b>PROJECT MGR:</b>	Tom Pitt	<b>DATE:</b>	8/12/08
<b>CLIENT:</b>	ICRC	<b>Superintendent:</b>	Steve Stichler	<b>WORK ORDER</b>	A32280
<b>CONTRACTOR:</b>	QAP	<b>FOREMAN:</b>		<b>PAGE:</b>	1 of 2
<b>INSPECTOR:</b>	Bob Teglund	<b>WEATHER:</b>	clear	<b>TEMPERATURE:</b>	62 °F
		<b>Reviewed By: / Date:</b>	<i>SJS</i> 8/14/08	<b>REPORT ID.:</b>	S2008.12.08rt

**MAJOR ACTIVITY:** Hauled soil from Elmendorf pit to sta. 49+00 and stockpiled vibrocompaction fill

**Memo Issued:**

☐ YES

☒ NO

TIME	COMMENTS
7:00am	<ul style="list-style-type: none"> <li>QAP continues to haul vibrofill soil to the stockpile at the North end of the job from Elmendorf pit where CQC is processing the material. Per John's direction ATL is taking a soil sample there every other day.</li> <li>Riprap is being excavated from two places by a backhoe ,i.e., at sta. 63+00 and sta. 67+00 where one backhoe is placing soil into one truck. The rock has been salvaged from the shoreline and it is being placed in the bay by another backhoe.</li> <li>The bellydumps and trucks are hauling granular soil from the Elmendorf pit and are placing the soil between sta. 49+00 rt 500 and sta.50+00 rt 500, then the three dozers are ramping it towards the bay and a medium compactor is rolling it. Buzdor Engineering is doing the QA testing. One blade is smoothing the slope's edge.</li> <li>Discussed with Steve, QAP's superintendant, his soil game plan. He intends to haul just granular soil for the next four or five days and then haul both common and granular soil.</li> <li>Obtained two granular samples and transported them to the lab for gradations.</li> <li>Discussed the project with John and he stated that he wants common fill to be sampled every once in a while. Will take a sample every two weeks.</li> </ul>
7:00pm	<ul style="list-style-type: none"> <li>End of shift</li> </ul>

<b>Deficiencies:</b>	none
<b>Corrective Actions</b>	none
<b>Outstanding Deficiencies</b>	none



## INSPECTION REPORT (SOILS)

<b>PROJECT:</b>	P.O.A. Expansion	<b>PROJECT MGR:</b>	<b>DATE:</b>	8/12/08
<b>CLIENT:</b>	ICRC	<b>Superintendent:</b>	<b>WORK ORDER</b>	A32280
<b>CONTRACTOR:</b>	N. Geotechnical	<b>FOREMAN:</b>	<b>PAGE:</b>	1 of 2
<b>INSPECTOR:</b>	Bob Teglund	<b>WEATHER:</b>	<b>TEMPERATURE:</b>	62 °F
		<b>Reviewed By: / Date:</b>	<u>SJS 8/14/08</u>	<b>REPORT ID.:</b> S2008.08.12rt

**MAJOR ACTIVITY:** Hauled soil from Elmendorf pit to sta. 49+00 and stockpiled vibrocompaction fill

**Memo Issued:**

☐ YES

☒ NO

TIME	COMMENTS
7:00am	Keith bored four holes B189 to 46.5 feet, B190 to 46.5 feet, GH173 to 41.5 feet, and BH174 to 41.5 feet. I discussed with Katie Swenson via telephone what she wanted tested. The following was what samples she wanted tested: B189 sample 3,4,5,6,and 7 with a hydrometer on 8; B190 sample 4,5,6,7,and 8 with a hydrometer on 9; BH173 sample 3,4,5,6,and 7A with hydrometers on 7B and 8; and BH174 sample 3,4,5,6,and 7 with a hydrometer on 8. I received the samples from Keith and will transport them to the lab to be run tomorrow morning.
5:00pm	End of shift.

<b>Deficiencies:</b>	none
<b>Corrective Actions</b>	none
<b>Outstanding Deficiencies</b>	none

**Item H8:**

**RFI #51 – Driving Conditions**



	Integrated Concepts and Research Corporation	<b>REQUEST FOR INFORMATION (RFI)</b>	P. 1 of <u>3</u>
	421 West First Avenue, Suite 200		
	Anchorage, AK 99501		
	Office 907.561.4272 • Fax 907.561.4271		

1. COMPANY NAME: MKB Constructors	2. RFI NUMBER: <u>51</u>	3. RFI SUBJECT: Driving Conditions	4. DATE REQUESTED: October 14, 2008
5. DATE REQUIRED: Immediate	6. SUBCONTRACT NUMBER:	7. PROJECT TITLE: Port of Anchorage Expansion	
8. SITE LOCATION: Dry Barge Berth		9. REQUESTED BY: Andy Romine/MKB Project Manager	
10. DESCRIPTION OF REQUEST:  <p>At the request of ICRC we are providing this RFI to discuss the driving conditions being encountered at the Wet Barge Berth. As we indicated in our e-mail of 10/8/08 we are experiencing significant resistance at depths of 10-15' above tip elevation. Our preconstruction analysis of the soils materials to be encountered indicated that all materials would be drivable with a combination of the vibratory and impact hammers we submitted within the practical limits of the hammers. Currently we are exceeding the practical limit of the impact hammer while driving the last 10' of the piles to tip. We are experiencing blow counts that exceed 200 per foot. As mentioned by the on-site engineer the areas coming into and out of the wyes and the wyes themselves seem to be the most problematic but all the sheets are experiencing significant resistance. We have taken steps to limit any slope movement that may tend to bind the sheets by utilizing additional pipe pile driven into the slope. We have also procured z-shaped sheet pile that will be installed at future locations. Although our preliminary analysis of the soils conditions indicated that we would be able to drive the piles within the limits of the equipment that we submitted with our driving plan and brought to site we have reviewed the plan suggested driving aids and feel that none of them are a practical solution to the driving resistance we are encountering. We are also concerned about the planned work on the north end of the North Extension portion of the project where the piles are driven 10' deeper into materials that we are already experiencing difficulties with. Additionally we are concerned of the ability of the planned splice to accommodate these driving conditions.</p> <p><input type="checkbox"/> See attached.</p>			
11. ENGINEER RESPONSE AND ACKNOWLEDGMENT:  <p>It is our understanding that MKB has reportedly experienced piles that required 200 blows per foot using a partial hammer stroke. From discussion with MKB they say they are "getting them in" but they are concerned about hard driving next year where sheet pile will be driven 10 deeper for about 300 feet of bulkhead, until the pre-dredged area is encountered. When MKB was queried about their schedule they still say they are "on schedule".</p> <p>The design drawings did indicate (BB Phase 2, sheet 4, section 4E) that "Soil conditions are hard and dense. Driving is expected to be difficult. The specifications reference methods such as pre-boring and trenching that may be required if driving becomes difficult.</p> <p><input checked="" type="checkbox"/> See attached. Continues on Page 2 of 3</p>			
12. DISCIPLINE ENGINEER SIGNATURE:		13. TITLE:	14. DATE:
15. ICRC'S RESPONSE AND ACKNOWLEDGEMENT:  <p>Resubmit pile drilling plan prior to starting next year's work incorporating the recommendations of APE on optimal equipment for these difficult conditions and recommendations from your engineer regarding your equipment selection and known conditions.</p>			
16. CONSTRUCTION ENGINEER/MANAGER SIGNATURE:		17. TITLE:	18. DATE:
19. ICRC'S REP/PROJECT MANAGER SIGNATURE:		20. TITLE:	21. DATE:

NOTE: Subcontractor proceeds at his own risk without the written approval of ICRC.

Cont. pg. 2 of 3 (RFI# 051)

Our understanding is that MKB will be sending their rented equipment back south until spring time.

We would suggest that the contractor revisit the equipment needs with both APE and GRL with any additional information and modify their equipment as necessary. We would suggest that MKB use the time over their winter shut-down to tune up some of their methods as well as consider other methods for improving driving conditions.

The sub-contractors field methods do not exactly match their pile driving submittal from their pile driving experts, GRL Engineers Inc. Some of these variations may be creating additional problems.

Another issue to consider is that the ram weight (11 kips) to pile weight (12 kips) is certainly on the high side. The hammer is currently buckling the top end of the sheets. We would recommend APE and GRL revisit the driving equipment for driving sheets for this project. With their current setup the two sheet scenario interferes with the pant legs. Their wide pant legs spacing appears to allow the piles to buckle. Another observed problem is that the driving helmet appears to be damaged, not contacting the sheet squarely, which may be causing additional eccentricity to the sheets, exacerbating the buckling problem.

Currently Duttra is on standby for the ACOE dredging contract and they will likely be back next year. They could dredge along the sheetpile to minimize driving difficulties. In order to minimize potential for a slope failure we would suggest at a minimum that they trench and backfill maintaining no more than say a 50 foot open section of trench at a time. There will be some soil arching around the dredged zone that will tend to restrain the slope failure. Obviously the contractor would need to reduce other impacts if a slope failure were to occur.

Jetting might work. We have discussed jetting with a local contractor that has had good success jetting Cook Inlet silts and clays. The typical jetting is relatively low pressure erosion of the material with water. For silts and clays cutting the material with high pressure (200+ psi) combined with compressed air reportedly works effectively. The water/air jet could be incorporated with their vibratory probe with the 1000 horsepower vibratory hammer they have on site.

One compounding problem, that MKB seems to have recognized, is the over-steepened fore-slopes are sloughing as they install sheets, creating more tension, interlock friction and driving resistance.

Again these are some ideas that may be helpful for the sub-contractor tune up their driving program to be more successful.

In regards to the sheet pile splice adequacy, the first step is to determine the tensile and compressive forces generated by the driving conditions. This would have already been done in the wave equation pile analysis performed by GRL Engineers, Inc.

We suggest updating the pile driving plan. As is often necessary, analysis assumptions that were made were not entirely accurate. The pile driving analysis should be updated to reflect the actual conditions including: hammer, driving helmet, pant legs, soil driving conditions, etc.



Specifically, the initial analysis assumed vibratory driving of one sheet and impact driving of two sheets. The current impact hammer arrangement requires three sheets to be driven at a time. The analysis was performed on a similar hammer but not the exact one being used for impact driving. The current impact hammer configuration of pants and drive cap are causing the sheets to buckle at the tops when the full hammer stroke is employed. The pants need to provide more lateral support to the sheets to avoid buckling the sheets. The pile driving equipment provider and driving analysis should be consulted on possible ways to avoid this situation.



**Item H9:**

**QAP Letter 087 Seaward Wall Movement**





## GENERAL CONTRACTORS

240 W. 68th Avenue, Anchorage, Alaska 99518

Telephone (907) 522-2211 Fax (907) 344-5798

June 1, 2009

John K. Williams  
Construction Manager III  
ICRC - Anchorage Port Expansion Team  
421 West Post Ave.  
Anchorage, AK 99501

**Re: Port of Anchorage Expansion Project  
2008 Marine Terminal Redevelopment  
Sea ward wall movement  
Letter No. 087**

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Mr. Williams

Please see the attached letter from our subcontractor MKB outlining changes to the original work plan. MKB is reassigning crew efforts to drive tail wall sections to grade as to minimize cell movement sea ward. This reallocation of resources was not planned in the original schedule of work as it does affect the overall schedule. QAP will provide ICRC with an updated schedule as soon as a new work plan can be created. At this time QAP and MKB will not continue to drive new cells southbound until this issue of sea ward movement can be resolved.

Thank you,

Tim Dudley  
Project Superintendent





Tim Dudley  
Quality Asphalt Paving  
240 W. 68<sup>th</sup> Avenue  
Anchorage, AK 99518

May 29, 2009

Re: Port of Anchorage Expansion Project  
2008 Marine Terminal Redevelopment

Gentlemen;


We have previously notified you we are experiencing a general sea ward (west) movement of the wye locations during the installation of the sheet pile cells. In response to several meetings concerning this issue we implemented a number of changes to the work plan for the installation of the cell structures in an attempt to mitigate this issue. These changes included moving the temporary sheet pile wall down slope and installing to a deeper elevation, moving the crane work areas back approximately 20 to 25', vibro probing the slope prior to installation of the cells, installing the extended tail walls, and sloping the work dike from the temporary wall to the top of the work pad slope at an approximately 3.5 to 1.

These changes were initiated prior to the latest cell construction on the project (15/16 and 45/46). As we reported in the weekly progress meeting of May 27, 2009 we are still experiencing movement in the walls, as much as a foot or more and the walls are only partially driven. Based on this information and the fact that you have engaged a testing firm to conduct tests concerning this issue we are changing our work program and reassigning our work crews to installation of the extended tail walls at cells already in place.

We will evaluate future work efforts based on the progress and the needs of the testing program and other factors as appropriate.

If you have any questions please contact me.

Sincerely,  
MKB Constructors

  
Andrew Romine  
Alaska Regional Manager

