

PORT OF NEWPORT COMMISSION SPECIAL MEETING AGENDA

Tuesday, December 23, 2014, Noon
Port of Newport Marina and RV Park Activities Room
2120 SE Marine Science Drive, Newport, OR 97365

Walter Chuck (Pos. #3), President; Dean Fleck (Pos. #5), Vice President; Ken Brown (Pos. #4), Secretary/Treasurer; JoAnn Barton (Pos. #1); David Jincks (Pos. #2)

- I. Call to Order
- II. Public Comment
- III. International Terminal Mitigation Construction Contract Amendment No. 32 w/ Natt McDougal Co. (\$501,342.22)
- IV. Public Comment
- V. Adjournment

To place a subject or issue on the agenda for presentation to the commission, please submit your request one week or more in advance of the regular scheduled meeting. Regular meetings are scheduled for the fourth Tuesday of every month at 6:00 p.m.

The Port Newport South Beach Marina and RV Park Activity Room is accessible to people with disabilities. A request for an interpreter for the hearing impaired or for other accommodations for persons with disabilities should be made at least 48 hours in advance of the meeting to Port of Newport Administration Office at 541-265-7758.

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AGENDA ITEM:

AMENDMENT NO. 32 WITH NATT MCDUGALL CO. TO UPGRADE CULVERT ON FERRY SLIP RD.
(\$501,342)

BACKGROUND

As the Port looks to complete the dredging and mitigation work related to the berth deepening at the International Terminal, it appears that the opportunities for state grants while still accomplishing the work within the in-water work window are dwindling. The formal supplemental budget will be adopted in January or February after proper noticing, but the Commission should approve the Natt McDougall amendment so the in-water work can be done in a timely manner. There are other projects that will also be affected by the amendment and I'll attempt to give you a preview of those funding sources as well.

TRANSFERS IN/OUT SUMMARY

\$350,000 FROM NOAA TO CONSTRUCTION FUND. As you can tell on the "International Terminal Construction Project" sheet, we are short \$200,000 based upon our projections (which also includes about \$20,000 in contingencies). Hopefully we won't need the difference, but it's there just in case something unforeseen occurs. The \$350,000 will come out of unrestricted cash reserves. (Of the \$5MM, approximately \$2.2MM is restricted.) The money will be received by the Construction Fund and appropriated through the Capital Outlay category. The expectation is that all funds received by the Construction Fund will be expended.

\$250,000 FROM NOAA FUND BALANCE TO CAPITAL OUTLAY. Amendment No. 31 included \$220,000 for dredging related to the NOAA eel grass mitigation effort. The \$250k plus \$350k equals the \$600k pulled from the fund balance.

\$75,000 EACH FROM GENERAL FUND PERSONAL SERVICES AND MATERIALS & SERVICE TO CAPITAL OUTLAY. This \$150,000 budget would allow for the land to the west of the terminal office to be paved. We discussed this issue a few months ago as we prepare to move off the Hall property. This one-time move pulls funds from personal services budgeted for a Director of Operations position and from a variety of other operational line items such as insurance, fuel, travel, and paving.

RECOMMENDATION

MOTION THAT THE PORT OF NEWPORT APPROVE AMENDMENT NO. 32 WITH NATT MCDUGALL COMPANY IN AN AMOUNT NOT TO EXCEED 502-THOUSAND DOLLARS AND TO DIRECT STAFF TO PRESENT A SUPPLEMENTAL BUDGET AT THE JANUARY MEETING.

INTERNATIONAL TERMINAL CONSTRUCTION PROJECT

	FY1415 Budget	12/31 Year to Date Paid Out	Projected Total	Savings Original Contracts
RESOURCES				
Grants				
MiNF #1	\$193,108	\$ -	\$193,108	
MiNF #2	\$0		\$0	
Overcharge Refund	\$0	\$ 1,502	\$1,502	
Other	\$445,385		\$0	
Interest	\$500	\$ 879	\$ 1,000	
Total Resources	\$638,993	\$2,381	\$195,610	
REQUIREMENTS				
Capital Outlay:				
Summer Dredging (silt)	\$ 75,760	\$ 75,760	\$75,760	\$0
Environmental	\$35,315	\$ 20,941	\$33,086	\$2,229
Geotechnical	\$25,723	\$ 7,344	\$25,723	\$0
Misc. Supplies & Safety Equipment	\$59,160		\$59,160	\$0
Day CPM Management	\$10,000	\$ 4,273	\$10,000	\$0
Contractor McDougall Amendment#31B				
Dike Dredging	\$223,895		\$223,895	\$0
Rip Rap RO-RO dock	\$33,077		\$33,077	\$0
Dredging (siltstone)	\$157,334	\$ 77,927	\$157,334	\$0
Insurance & Contingency	\$21,688		\$21,688	\$0
Amendment #32 - Culvert	\$501,342		\$501,342	\$0
Contingency	\$25,314		\$25,314	\$0
Total Requirements	\$1,168,608	\$186,245	\$1,166,379	\$2,229
NET CHANGE	(\$529,615)	(\$183,864)	(\$970,770)	
BEGINNING CASH	\$ 750,000	\$750,000	\$ 750,000	
ENDING CASH	\$220,385	\$566,136	(\$220,770)	

* Eel Grass NOAA dredging (\$220,000) included in Amendment 31B, but being funded through separate restricted resources.

NOAA OPERATING FUND			
	Adopted		Supplemental
	Budget	Change	Budget
Personal Services	\$ 106,975		\$ 106,975
Materials and Services	\$ 382,387		\$ 382,387
Capital Outlay	\$ -	\$ 250,000	\$ 250,000
Debt Service	2,001,500		\$ 2,001,500
Transfers	\$ 150,000	\$ 350,000	\$ 500,000
Contingencies	\$ 100,000		\$ 100,000
TOTAL APPROPRIATIONS	2,740,862	\$ 600,000	\$ 3,340,862
Unappropriated Ending Fund Balance	5,097,138	\$(600,000)	\$ 4,497,138
TOTAL ADOPTED BUDGET	\$7,838,000	\$ -	\$ 7,838,000
CONSTRUCTION FUND			
	Adopted		Supplemental
	Budget	Change	Budget
Capital Outlay	\$1,389,493	\$ 350,000	\$ 1,739,493
TOTAL APPROPRIATIONS	\$1,389,493	\$ 350,000	\$ 1,739,493
TOTAL ADOPTED BUDGET	\$1,389,493	\$ 350,000	\$ 1,739,493
GENERAL FUND			
	Adopted		Supplemental
	Budget	Change	Budget
Personal Services	\$1,124,806	\$ (75,000)	\$ 1,049,806
Materials and Services	\$1,328,297	\$ (75,000)	\$ 1,253,297
Capital Outlay	\$ -	\$ 150,000	\$ 150,000
Debt Service	\$ 578,205		\$ 578,205
TOTAL APPROPRIATIONS	\$3,031,308	\$ -	\$ 3,031,308
Unappropriated Ending Fund Balance	\$ 700,180	\$ -	\$ 700,180
TOTAL ADOPTED BUDGET	3,731,488	\$ -	\$ 3,731,488



Impacts and/or Restrictions

LEGEND
 D = Day Shift
 N = Night Shift
 X = Shift Dependent on Location
 H = Holiday
 T = Date is Tentative



Schedule of Work
 Amendment 31B & 32

			November 1, 2014					December 1, 2014					January 1, 2015				February 1, 2015				March 1, 2015								
No.	Activity	Durations	Weather	Availability & Schedule	Holidays	Agency Extension ?	11	11	11	11	12	12	12	12	12	1	1	1	1	2	2	2	2	3	3	3	3	3	
MOBILIZATION			Amendment 31B																										
1	Mobilize Float Equipment	5	◆																										
2	Assemble Barges	3	◆																										
INTERNATION TERMINAL			Amendment 31B																										
1	Excavate Siltstone	30	◆																Complete through the week of January 5, 2014										
2	Install Rip Rap	3	◆																										
3	Remove RO-RO Dock Piling	3	◆																										
NOAA - EEL GRASS DREDGE			Amendment 31B																										
1	Set up Dredging Equipment	3	◆																										
2	Dredge Eel Grass Site	25	◆																Complete through the week of January 5, 2014										
3	Disassemble Barges	3	◆																										
MITIGATION BERM REMOVAL			Amendment 31B																										
1	Develop Access	2	◆																										
2	Excavate Berm	7	◆																										
3	Remove Access & Restore	2	◆																										
"CULVERT WORK"			Amendment 32																										
1	Approval of Amendment 32	1																											
2	Sheet Pile Procurement	20	◆																Dec. 22 through January 13										
3	Procure Metal Decking/Reinforcing	30	◆																Dec. 22 through January 17										
4	Mob. Temp. Bridge/Equipment	20	◆																Dec. 22 through January 13										
5	Install Temp. Bridge	5	◆																										
6	Relocate Gas Line	5	◆																										
7	Set and Drive Sheet Pile	20	◆																January 28 - February 10										
8	Excavate Between Sheet Pile	5	◆																										
9	Construct Concrete Deck	5	◆																										
10	Cure Time for Concrete Deck	5	◆																										
11	Installation of Cathodic Protection	3	◆																										
12	Restore Roadway	3	◆																										
13	Restore Gas Line Service	3	◆																										
14	Removal of Temporary Bridge	3	◆																										
15	Demobilze Equipment	3	◆																March 11 - March 31										

Kevin Greenwood

From: John van Staveren <jvs@pacifichabitat.com>
Sent: Friday, December 19, 2014 4:48 PM
To: Kevin Greenwood; Frank Berg
Cc: Mike McDougall
Subject: RE: updated Am. 31 &32 schedule

Here's the scoop with the agencies.

Both the Corps of Engineers (Tom Taylor) and the Department of State Lands (Kirk Jarvie) feel the change in the plan (putting in sheet pile and opening it up to 8 feet) is positive and that no further approval by them is needed for that portion of the work. Kirk at DSL wants me to write up a short memo, so that he can update his file. DSL will not require additional information or need to provide additional approvals.

However, the Corps and the National Marine Fisheries Service feel that installing cathodic protection on the sheet pile may effect listed species. This proved to be a non-issue during the NOAA project and is going to be that way here, but Tom feels they need to enter into informal consultation with NMFS to dot the i's and cross the t's. We'll include a discussion of the cathodic protection in a short memo and send that off to Tom who will send to Jeff Young at NMFS. They will allow the cathodic protection to be installed, but we may not get approval before the end of the in-water work period. However, Tom Taylor said that installing the protection after the end of the in-water work period should not be a problem.

I brought up potentially needing an extension of the in-water work period. They cannot commit to an extension at this point, but we have had no trouble getting the work extended in the past, so it is safe to assume that will be the case here too.

Let me know if you have any questions.

John

John van Staveren
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PORT OF NEWPORT

Port of Newport International Terminal Renovation
Natt McDougall Company CM/GC
GMP AMENDMENT NO. 32
HATFIELD MARINE SCIENCE CENTER ROAD CULVERT REPLACEMENT
WORK SUMMARY

SCOPE OF WORK:

- See Remarks

SCHEDULE OF WORK:

1- Work to begin upon approval and completed by 04/30/2015.

REMARKS:

1 - Includes costs associated with furnishing and installing the Hatfield Marine Science Center Road Culvert Replacement as shown on the Peterson Structural Engineers drawings dated 11/26/14. NMC has included installation and removal of a temporary bridge in order to maintain access to the Oregon Coast Aquarium. Any special inspection requirements will be coordinated by NMC with any and all costs paid for by the Port.

THIS AMENDMENT to the Negotiated Construction Manager/General Contractor Contract, (CM/GC), Construction Agreement, ("the Agreement"), Article 12, "Prevailing Wage Rates" adds the following:

The remediation portion of the SS Pasley and SS Hennebique of this Project as stated within Article 1 "Scope of Work", of the Agreement and because the Port of Newport is receiving funding by Brownsfields Cleanup and ARRA Funding for Public Entities; all of the work for the remediation portion of this project shall be required to comply with the "Labor Standards Provisions" which are hereby inserted by Exhibit G of this Agreement, a copy of which is included herewith.

(Article 12 of the Agreement with this addition shall otherwise remain in full force and effect for all other work of the Agreement).





Port of Newport International Terminal Renovation
 Natt McDougall Company CM/GC
 GMP AMENDMENT NO. 32
 HATFIELD MARINE SCIENCE CENTER ROAD CULVERT REPLACEMENT
 COST SUMMARY

(1) GMP Amendment No. 32,	Total Estimated Costs.....	\$436,426.00
(2) GMP Amendment No. 32,	GL Insurance @ 0.002653.....	<u>\$1,157.84</u>
(3) GMP Amendment No. 32,	Subtotal, (5) + (6).....	<u>\$437,583.84</u>
(4) GMP Amendment No. 32,	Fee @ 10%.....	<u>\$43,758.38</u>
(5) GMP Amendment No. 32,	Subtotal, (7) + (8).....	<u>\$481,342.22</u>
(6) GMP Amendment No. 32,	Contingency.....	<u>\$20,000.00</u>
(7) GMP Amendment No. 32,	Subtotal, (9) + (10).....	<u><u>\$501,342.22</u></u>

AMENDMENT SUMMARY

(1) Previous Authorized Amendments, # 1 Thru # 31B.....	\$26,566,958.04
(3) Value of GMP Amendment No. 32.....	<u>\$501,342.22</u>
(4) Total GMP Committed to Date Through This Amendment No. 31B.....	<u><u>\$27,068,300.26</u></u>
(5) Net savings previously recognized from Amendments 1,2,3,4,5, 6,7,8,9,10,11,12,13,14,15,16,18,19,20,29, 31B, applied to budget.....	<u>(\$6,014,425.21)</u>
(6) Net savings recognized this Amendment.....	<u>\$0.00</u>
(7) Net committed GMP through Amendment 32.....	<u><u>\$21,053,875.05</u></u>

THIS AMENDMENT is executed in three original copies of which one is to be delivered to the CM/GC, and the remainder to Port.

CM/GC: Natt McDougall Company

Signature of Authorized Representative of CM/GC
 _____ Title PRESIDENT
 Date 12/12/14

OWNER: Port of Newport

Signature of Port's Authorized Representative
 _____ Title President
 Date December 23rd, 2014

Attachment: Cost Estimate
 Attachment:



Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Perm Labor	Constr Material	Equip Matl/Exp	Sub-Ment Contract	Total
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BID ITEM = 100
 Description = MOBILIZATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

100 Mobilize to Site Quan: 10.00 LD Hrs/Shift: 8.00 WC: NONE

NEWMOB	Newport Mobilization		80.00 CH	Prod:	1.0000 SU	Lab Pcs:	2.50	Eqp Pcs:	2.25
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	0.25	20.00 HR	37.260			745		745
8TRACTORKWO	KENWORTH '09 TRACTO	1.00	80.00 HR	71.970			5,758		5,758
8TRLLOWBOY	LOWBOY TRAILER 75T	1.00	80.00 HR	29.180			2,334		2,334
L2	Laborer Group 2	1.00	80.00 MH	29.140	3,883				3,883
O2	Operator Group 2	1.50	120.00 MH	42.560	7,835				7,835
\$20,555.83	20.0000 MH/LD		200.00 MH	[743.84]	11,719		8,837		20,556

200 Install & Remove Temp Bridge Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

Install Temporary Bridge to maintain aquarium access during installation of sheet pile and new bridge. Includes approaches and removal. Will utilize ecology blocks from the Port.

32AQ	Aquarium Bridge		56.00 CH	Prod:	7.0000 S	Lab Pcs:	5.00	Eqp Pcs:	2.00
3MISC	Miscellaneous Materials	6.00	LS	500.000		3,000			3,000
8CRANE110CRL	CRANE-110 TON CRAWL	1.00	56.00 HR	163.410			9,151		9,151
8EXC460LX	LINKBELT 460LX EXCA	1.00	56.00 HR	150.360			8,420		8,420
L2	Laborer Group 2	1.00	56.00 MH	29.140	2,718				2,718
O2	Operator Group 2	3.00	168.00 MH	42.560	10,970				10,970
OZ	Operator Zorza	1.00	56.00 MH	42.000	3,619				3,619
\$37,877.46	280.0000 MH/LS		280.00 MH	[11133.92]	17,306	3,000	17,571		37,877

210 Bridge Rental Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

3BRIDGERENTA	Bridge Rental		2.00 MO	5,000.000			10,000		10,000
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Item Totals: 100 - MOBILIZATION									
\$68,433.29	480.0000 MH/LS		480.00 MH	[18572.32]	29,025	13,000	26,408		68,433
68,433.290	1 LS				29,024.97	13,000.00	26,408.32		68,433.29

BID ITEM = 200
 Description = SHEET PILE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

100 Furnish Sheetpile Quan: 646.12 CWT Hrs/Shift: 8.00 WC: NONE

2AZ19700	AZ19-700 Sheet Pile		646.12 CWT	76.500		49,428			49,428
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110 Furnish Template Materials Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

Includes template materials and permanent angle

2TRANSCO	Transco Quote		1.00 LS	11,291.000		11,291			11,291
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111 Saw Cut AC Quan: 50.00 LF Hrs/Shift: 8.00 WC: NONE

4SAWCUT	SUB PLUG 235 ITEM		50.00 LF	40.000				2,000	2,000
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120 Set Template Quan: 1.00 EA Hrs/Shift: 8.00 WC: NONE

AM32SP	Am 32 Crew		16.00 CH	Prod:	2.0000 S	Lab Pcs:	6.00	Eqp Pcs:	7.00
IISC	Miscellaneous Materials	4.00	LS	500.000		2,000			2,000
AIRTOOLGR	AIR TOOL-GROUP	1.00	16.00 HR	6.700			107		107
8CRLBLS218H	LINKBELT CRANE LS-21	1.00	16.00 HR	194.070			3,105		3,105
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	16.00 HR	37.260			596		596
8LIFTJLG	LIFT-JLG-80'	1.00	16.00 HR	47.060			753		753

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Perm Labor	Constr Mat/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 200									
Description =	SHEET PILE		Unit =	LS	Takeoff Quan:	1.000	Engr Quan:		1.000
8TORCHC	TORCH-CUTTING	2.00	32.00 HR	0.550			18		18
8WELDINGM_A	WELDING MACHINE_A	1.00	16.00 HR	15.120			242		242
L2	Laborer Group 2	1.00	16.00 MH	29.140	777				777
O2	Operator Group 2	5.00	80.00 MH	42.560	5,224				5,224
\$12,821.19	96.0000 MH/EA		96.00 MH	[3871.04]	6,000	2,000	4,821		12,821
122 Hammer Rental Quan: 1.00 MO Hrs/Shift: 8.00 WC: NONE									
HPSI 300 monthly hammer rental									
3HAMMERRENT	Hammer Rental		1.00 MO	7,000.000			7,000		7,000
123 Mob Hammer Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE									
NEWMOB Newport Mobilization 12.00 CH Prod: 1.5000 S Lab Pcs: 2.50 Eqp Pcs: 2.25 **Unreviewed									
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	0.25	3.00 HR	37.260			112		112
8TRACTORKW0	KENWORTH '09 TRACTO	1.00	12.00 HR	71.970			864		864
8TRLOWBOY	LOWBOY TRAILER 75T	1.00	12.00 HR	29.180			350		350
L2	Laborer Group 2	1.00	12.00 MH	29.140	582				582
O2	Operator Group 2	1.50	18.00 MH	42.560	1,175				1,175
\$3,083.37	30.0000 MH/LS		30.00 MH	[1115.76]	1,758		1,326		3,083
130 Support Gas Line Quan: 1.00 EA Hrs/Shift: 8.00 WC: NONE									
AM32SP Am 32 Crew 12.00 CH Prod: 1.5000 S Lab Pcs: 6.00 Eqp Pcs: 7.00									
3MISC	Miscellaneous Materials		3.00 LS	500.000			1,500		1,500
8AIRTOOLGR	AIR TOOL-GROUP	1.00	12.00 HR	6.700			80		80
8CRLBLS218H	LINKBELT CRANE LS-21	1.00	12.00 HR	194.070			2,329		2,329
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	12.00 HR	37.260			447		447
8LIFTJLG	LIFT-JLG-80'	1.00	12.00 HR	47.060			565		565
8TORCHC	TORCH-CUTTING	2.00	24.00 HR	0.550			13		13
8WELDINGM_A	WELDING MACHINE_A	1.00	12.00 HR	15.120			181		181
L2	Laborer Group 2	1.00	12.00 MH	29.140	582				582
O2	Operator Group 2	5.00	60.00 MH	42.560	3,918				3,918
\$9,615.89	72.0000 MH/EA		72.00 MH	[2903.28]	4,500	1,500	3,616		9,616
150 Set & Drive Sheets Quan: 20.00 PR Hrs/Shift: 8.00 WC: NONE									
AM32SP Am 32 Crew 80.00 CH Prod: 4.0000 HU Lab Pcs: 6.00 Eqp Pcs: 7.00									
8AIRTOOLGR	AIR TOOL-GROUP	1.00	80.00 HR	6.700			536		536
8CRLBLS218H	LINKBELT CRANE LS-21	1.00	80.00 HR	194.070			15,526		15,526
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	80.00 HR	37.260			2,981		2,981
8LIFTJLG	LIFT-JLG-80'	1.00	80.00 HR	47.060			3,765		3,765
8TORCHC	TORCH-CUTTING	2.00	160.00 HR	0.550			88		88
8WELDINGM_A	WELDING MACHINE_A	1.00	80.00 HR	15.120			1,210		1,210
L2	Laborer Group 2	1.00	80.00 MH	29.140	3,883				3,883
O2	Operator Group 2	5.00	400.00 MH	42.560	26,118				26,118
\$54,105.93	24.0000 MH/PR		480.00 MH	[967.76]	30,001		24,105		54,106
200 Cut Off Sheets Quan: 20.00 PR Hrs/Shift: 8.00 WC: NONE									
AM32SP Am 32 Crew 12.00 CH Prod: 0.6000 HU Lab Pcs: 6.00 Eqp Pcs: 7.00									
8AIRTOOLGR	AIR TOOL-GROUP	1.00	12.00 HR	6.700			80		80
8CRLBLS218H	LINKBELT CRANE LS-21	1.00	12.00 HR	194.070			2,329		2,329
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	12.00 HR	37.260			447		447
LIFTJLG	LIFT-JLG-80'	1.00	12.00 HR	47.060			565		565
TORCHC	TORCH-CUTTING	2.00	24.00 HR	0.550			13		13
8WELDINGM_A	WELDING MACHINE_A	1.00	12.00 HR	15.120			181		181
L2	Laborer Group 2	1.00	12.00 MH	29.140	582				582
O2	Operator Group 2	5.00	60.00 MH	42.560	3,918				3,918

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Mat/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 200										
Description =	SHEET PILE		Unit = LS	Takeoff Quan:		1.000	Engr Quan:	1.000		
\$8,115.89	3.6000 MH/PR		72.00 MH	[145.164]	4,500			3,616		8,116
210 Remove Template										
Quam: 1.00 EA Hrs/Shift: 8.00 WC: NONE										
AM32SP	Am 32 Crew		8.00 CH	Prod:	1.0000 S	Lab Pcs:	6.00	Eqp Pcs:	7.00	
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54		54	
8CRLBLS218H	LINKBELT CRANE LS-21	1.00	8.00 HR	194.070			1,553		1,553	
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	8.00 HR	37.260			298		298	
8LIFTJLG	LIFT-JLG-80'	1.00	8.00 HR	47.060			376		376	
8TORCHC	TORCH-CUTTING	2.00	16.00 HR	0.550			9		9	
8WELDINGM_A	WELDING MACHINE_A	1.00	8.00 HR	15.120			121		121	
L2	Laborer Group 2	1.00	8.00 MH	29.140	388					388
O2	Operator Group 2	5.00	40.00 MH	42.560	2,612					2,612
\$5,410.59	48.0000 MH/EA		48.00 MH	[1935.52]	3,000			2,410		5,411
300 Furnish Cathodic Protection										
Quam: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
4CATHODIC	Sheet Cathodic		1.00 LS	14,623.000				14,623		14,623
310 Install Anodes with Divers										
Quam: 14.00 EA Hrs/Shift: 8.00 WC: NONE										
14ea anodes to be welded on underwater at mudline										
20ea magnesium anodes on the land side - figure can install at sometime during construction with current crew.										
4DIVEMOBNEW	Newport Mob		1.00 LS	1,520.000				1,520		1,520
4NEWDIVE	Ballard Marine		3.00 LS	6,270.000				18,810		18,810
\$20,330.00				[]				20,330		20,330
====> Item Totals: 200 - SHEET PILE										
\$197,825.04	798.0000 MH/LS		798.00 MH	[32084.08]	49,760	60,719	10,500	39,893	36,953	197,825
197,825.040	1 LS				49,759.60	60,719.18	10,500.00	39,893.26	36,953.00	197,825.04
BID ITEM = 300										
Description =	EXCAVATION		Unit = LS	Takeoff Quan:		1.000	Engr Quan:	1.000		
100 Excavate Between Sheets										
Quam: 360.00 CY Hrs/Shift: 8.00 WC: NONE										
EXC32P	Excavation 32		24.00 CH	Prod:	15.0000 UH	Lab Pcs:	3.00	Eqp Pcs:	1.00	
8EXC460LX	LINKBELT 460LX EXCA	1.00	24.00 HR	150.360			3,609		3,609	
L2	Laborer Group 2	1.00	24.00 MH	29.140	1,165					1,165
O2	Operator Group 2	2.00	48.00 MH	42.560	3,134					3,134
\$7,907.77	0.2000 MH/CY		72.00 MH	[7.617]	4,299			3,609		7,908
110 Haul to Dump Site										
Quam: 360.00 CY Hrs/Shift: 8.00 WC: NONE										
DUMP32	Dump 32		24.00 CH	Prod:	15.0000 UH	Lab Pcs:	3.00	Eqp Pcs:	3.00	
8DOZD6	CAT D6R XL DOZER	1.00	24.00 HR	91.950			2,207		2,207	
8DUMP10YDKWKW	10YD REAR DUMP T	2.00	48.00 HR	62.170			2,984		2,984	
L2	Laborer Group 2	1.00	24.00 MH	29.140	1,165					1,165
O2	Operator Group 2	2.00	48.00 MH	42.560	3,134					3,134
\$9,490.09	0.2000 MH/CY		72.00 MH	[7.617]	4,299			5,191		9,490
====> Item Totals: 300 - EXCAVATION										
\$17,397.86	144.0000 MH/LS		144.00 MH	[5484.48]	8,598			8,800		17,398
17,397.860	1 LS				8,598.26			8,799.60		17,397.86

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 400										
Description = CONCRETE			Unit = LS		Takeoff Quan:		1.000	Engr Quan:		1.000
100 Furnish Rebar Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
2DIXON	Dixon Steel Rebar		1.00 LS	1,575.000			1,575			1,575
110 Furnish Concrete Quan: 20.00 CY Hrs/Shift: 8.00 WC: NONE										
2AM32MUD	AM32 Concrete		20.00 CY	138.000			2,760			2,760
120 Furnish Metal Decking Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
2METALDECK	Metal Decking		1.00 LS	2,440.000			2,440			2,440
130 Furnish Angle Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
Included in Sheet pile item <i>There are no cost resources for this activity.</i>										
140 Weld Angle Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
4DDJNEWPORT	DDJ Newport Trip		3.00 DAY	1,500.000					4,500	4,500
150 Install Metal Decking Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
<u>NEWCAR</u>	32 Carpenter		8.00 CH	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	4.00	
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54			54
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	8.00 HR	37.260			298			298
8GENPG	GENERATOR-PORTABL	1.00	8.00 HR	3.590			29			29
8VENTILATEEQ	VENTILATION EQUIPME	1.00	8.00 HR	1.830			15			15
C	Carpenter Journeyman	2.00	16.00 MH	33.940	896					896
CF	Carpenter Foreman	1.00	8.00 MH	36.660	474					474
L2	Laborer Group 2	1.00	8.00 MH	29.140	388					388
\$2,153.26	32.0000 MH/LS		32.00 MH	[1069.44]	1,758		395			2,153
160 Edge Forms & Rebar Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
<u>NEWCAR</u>	32 Carpenter		16.00 CH	Prod:	2.0000 S	Lab Pcs:	4.00	Eqp Pcs:	4.00	
8AIRTOOLGR	AIR TOOL-GROUP	1.00	16.00 HR	6.700			107			107
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	16.00 HR	37.260			596			596
8GENPG	GENERATOR-PORTABL	1.00	16.00 HR	3.590			57			57
8VENTILATEEQ	VENTILATION EQUIPME	1.00	16.00 HR	1.830			29			29
C	Carpenter Journeyman	2.00	32.00 MH	33.940	1,791					1,791
CF	Carpenter Foreman	1.00	16.00 MH	36.660	948					948
L2	Laborer Group 2	1.00	16.00 MH	29.140	777					777
\$4,306.50	64.0000 MH/LS		64.00 MH	[2138.88]	3,516		790			4,307
170 Place & Finish Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE										
<u>NEWCAR</u>	32 Carpenter		8.00 CH	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	4.00	
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54			54
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	8.00 HR	37.260			298			298
8GENPG	GENERATOR-PORTABL	1.00	8.00 HR	3.590			29			29
8VENTILATEEQ	VENTILATION EQUIPME	1.00	8.00 HR	1.830			15			15
C	Carpenter Journeyman	2.00	16.00 MH	33.940	896					896
CF	Carpenter Foreman	1.00	8.00 MH	36.660	474					474
L2	Laborer Group 2	1.00	8.00 MH	29.140	388					388
\$2,153.26	32.0000 MH/LS		32.00 MH	[1069.44]	1,758		395			2,153

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
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BID ITEM = 400

Description = CONCRETE Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

180 Clean Up Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

NEWCAR	32 Carpenter		16.00 CH	Prod:	2.0000 S	Lab Pcs:	4.00	Eqp Pcs:	4.00
8AIRTOOLGR	AIR TOOL-GROUP	1.00	16.00 HR	6.700			107		107
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	16.00 HR	37.260			596		596
8GENPG	GENERATOR-PORTABL	1.00	16.00 HR	3.590			57		57
8VENTILATEEQ	VENTILATION EQUIPME	1.00	16.00 HR	1.830			29		29
C	Carpenter Journeyman	2.00	32.00 MH	33.940	1,791				1,791
CF	Carpenter Foreman	1.00	16.00 MH	36.660	948				948
L2	Laborer Group 2	1.00	16.00 MH	29.140	777				777
\$4,306.50	64.0000 MH/LS		64.00 MH	[2138.88]	3,516		790		4,307

====> Item Totals: 400 - CONCRETE

\$24,194.52	192.0000 MH/LS	192.00 MH	[6416.64]	10,549	6,775		2,370	4,500	24,195
24,194.520	1 LS			10,549.28	6,775.00		2,370.24	4,500.00	24,194.52

BID ITEM = 500

Description = UTILITIES Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

130 Install Support for Gas Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

NEWCAR	32 Carpenter		8.00 CH	Prod:	1.0000 S	Lab Pcs:	4.00	Eqp Pcs:	4.00
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54		54
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	1.00	8.00 HR	37.260			298		298
8GENPG	GENERATOR-PORTABL	1.00	8.00 HR	3.590			29		29
8VENTILATEEQ	VENTILATION EQUIPME	1.00	8.00 HR	1.830			15		15
C	Carpenter Journeyman	2.00	16.00 MH	33.940	896				896
CF	Carpenter Foreman	1.00	8.00 MH	36.660	474				474
L2	Laborer Group 2	1.00	8.00 MH	29.140	388				388
\$2,153.26	32.0000 MH/LS		32.00 MH	[1069.44]	1,758		395		2,153

131 Support Materials Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

NMC is to provide support structure for NW Natural gas to re-route existing gas line
3MISC Miscellaneous Materials 2.00 LS 500.000 1,000 1,000 **Unreviewed

140 NW Natural Gas Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

As of 12/11/14 NW Natural still working on quote however gave NMC verbal figure of \$36,000 (\$25,000 for work \$9,000 for other fees)
4NWNATURAL NW Natural 1.00 LS 36,000.000 36,000 36,000 **Unreviewed

200 Dispose Transite Pipe Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

Western States Environment to handle and dispose
4HAZPIPE Transite Pipe Disposal 1.00 LS 3,100.000 3,100 3,100

====> Item Totals: 500 - UTILITIES

\$42,253.26	32.0000 MH/LS	32.00 MH	[1069.44]	1,758		1,000	395	39,100	42,253
42,253.260	1 LS			1,758.22		1,000.00	395.04	39,100.00	42,253.26

BID ITEM = 600

Description = RESTORATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Matl/Exp	Equip Ment	Sub-Contract	Total
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BID ITEM = 600
 Description = RESTORATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

100 Furnish Backfill Quan: 160.00 TON Hrs/Shift: 8.00 WC: NONE

2NEWROCK Rock 160.00 TON 17.260 2,762 2,762

110 Place & Compact BF Quan: 80.00 TON Hrs/Shift: 8.00 WC: NONE

PC32	Place & Compact		8.00 CH	Prod:	1.0000 S	Lab Pcs:	3.00	Eqp Pcs:	2.00
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54		54
8BH580	CASE 580L BACKHOE	1.00	8.00 HR	29.940			240		240
L2	Laborer Group 2	1.00	8.00 MH	29.140	388				388
O2	Operator Group 2	2.00	16.00 MH	42.560	1,045				1,045
\$1,726.16	0.3000 MH/TON		24.00 MH	[11.426]	1,433		293		1,726

120 Prep Road Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

PC32	Place & Compact		8.00 CH	Prod:	1.0000 S	Lab Pcs:	3.00	Eqp Pcs:	2.00
8AIRTOOLGR	AIR TOOL-GROUP	1.00	8.00 HR	6.700			54		54
8BH580	CASE 580L BACKHOE	1.00	8.00 HR	29.940			240		240
L2	Laborer Group 2	1.00	8.00 MH	29.140	388				388
O2	Operator Group 2	2.00	16.00 MH	42.560	1,045				1,045
\$1,726.16	24.0000 MH/LS		24.00 MH	[914.08]	1,433		293		1,726

130 Pave Road Quan: 40.00 TON Hrs/Shift: 8.00 WC: NONE

Match existing section, for this amendment assume 6" depth
 4NEWPAVE Newport Pave Culvert 40.00 TON 118.000 4,720 4,720

====> Item Totals: 600 - RESTORATION
 \$10,933.92 48.0000 MH/LS 48.00 MH [1828.16] 2,866 2,762 586 4,720 10,934
 10,933.920 1 LS 2,866.08 2,761.60 586.24 4,720.00 10,933.92

BID ITEM = 700
 Description = DEMOBILIZATION Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

100 Demobilize from Site Quan: 15.00 LD Hrs/Shift: 8.00 WC: NONE

NEWMOB	Newport Mobilization		120.00 CH	Prod:	1.0000 SU	Lab Pcs:	2.50	Eqp Pcs:	2.25
8FORKLIFTJLG	LIFT TRUCK - JLB G9-43	0.25	30.00 HR	37.260			1,118		1,118
8TRACTORKW0	KENWORTH '09 TRACTO	1.00	120.00 HR	71.970			8,636		8,636
8TRLOWBOY	LOWBOY TRAILER 75T	1.00	120.00 HR	29.180			3,502		3,502
L2	Laborer Group 2	1.00	120.00 MH	29.140	5,825				5,825
O2	Operator Group 2	1.50	180.00 MH	42.560	11,753				11,753
\$30,833.76	20.0000 MH/LD		300.00 MH	[743.84]	17,578		13,256		30,834

====> Item Totals: 700 - DEMOBILIZATION
 \$30,833.76 300.0000 MH/LS 300.00 MH [11157.6] 17,578 13,256 30,834
 30,833.760 1 LS 17,577.96 13,255.80 30,833.76

BID ITEM = 800
 Description = OVERHEAD Unit = LS Takeoff Quan: 1.000 Engr Quan: 1.000

100 Indirect Costs Quan: 1.00 LS Hrs/Shift: 8.00 WC: NONE

Direct Cost Report

Activity Resource	Desc	Pcs	Quantity Unit	Unit Cost	Labor	Perm Material	Constr Mat/Exp	Equip Ment	Sub-Contract	Total
BID ITEM = 800										
Description =	OVERHEAD		Unit =	LS	Takeoff Quan:		1.000	Engr Quan:		1.000
3CELLPHONE	Phone Service	2.00	MO	100.000			200			200
3HOUSING	Housing	130.00	DAY	50.000			6,500			6,500
3PORTAPOTTY	Port-a-Potty	2.00	MO	100.000			200			200
4ENGINEERING	Project Engineer	1.00	MO	10,000.000					10,000	10,000
8OFFICE	==> Office	1.00	MO	500.000				500		500
8PICKUP	==> PICKUP 3/4TON	1,040.00	HR	26.110				27,154		27,154
\$44,554.40				[]			6,900	27,654	10,000	44,554
====> Item Totals: 800 - OVERHEAD										
\$44,554.40				[]			6,900	27,654	10,000	44,554
44,554.400		1 LS					6,900.00	27,654.40	10,000.00	44,554.40

\$436,426.05 ***** Report Totals ***** 1,994.00 MH 120,134 70,256 31,400 119,363 95,273 436,426

>>> indicates Non Additive Activity

-----Report Notes:-----

The estimate was prepared with TAKEOFF Quantities.

This report shows TAKEOFF Quantities with the resources.

"Unreviewed" Activities are marked.

Bid Date: 11/26/14 Owner: Engineering Firm:

Estimator-In-Charge:

JOB DOES NOT HAVE NOTES

* on units of MH indicate average labor unit cost was used rather than base rate.

[] in the Unit Cost Column = Labor Unit Cost Without Labor Burdens

In equipment resources, rent % and EOE % not = 100% are represented as XXX%YYY where XXX=Rent% and YYY=EOE%

-----Calendar Codes-----

PRELIMINARY – NOT FOR CONSTRUCTION

STRUCTURAL SHEETS:

- S1 GENERAL NOTES
- S2 FOUNDATION PLAN
- S3 FLOOR PLAN
- S4 ROOF FRAMING PLAN
- S5 SECTION & STRUCTURAL DETAILS
- S6 STRUCTURAL DETAILS

GENERAL STRUCTURAL NOTES:

1. THESE NOTES ARE GENERAL IN NATURE AND ARE INTENDED TO SET MINIMUM STANDARDS FOR CONSTRUCTION. THE CONTRACTOR SHALL BE COMPLETELY FAMILIAR WITH THE CONTRACT DOCUMENTS AND HAVE A COPY OF THEM ON SITE AT ALL TIMES.
2. FOR ANY PORTION OF THE CONSTRUCTION WHICH THE CONTRACTOR IS UNABLE TO ASCERTAIN THE REQUIRED CONSTRUCTION OR WHERE CONFLICTS EXIST, IT IS THE CONTRACTORS RESPONSIBILITY TO REQUEST ADDITIONAL INFORMATION (RFIs) AND/OR CLARIFICATIONS BEFORE CONSTRUCTION.
3. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE 2012 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE 2014 OREGON STRUCTURAL SPECIALTY CODE (OSSC). ALL BUILDING ELEMENTS AND COMPONENTS NOT SPECIFICALLY DETAILED IN THESE STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE FABRICATED AND CONSTRUCTED IN ACCORDANCE WITH THE MINIMUM STANDARDS 2012 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF OREGON.
4. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS BEFORE CONSTRUCTION. THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES.
5. THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. METHODS, PROCEDURES, AND SEQUENCE OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.
6. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOAD FOR THE STRUCTURE. PROVIDE SHORING AND/OR BRACING WHERE LOADS EXCEED DESIGN CAPACITY AND WHERE STRUCTURES HAVE NOT ATTAINED DESIGN STRENGTH.
7. CLADDING, WATERPROOFING, AND ARCHITECTURAL FEATURES ARE BY OTHERS AND ARE OUTSIDE THE SCOPE OF WORK. ANY DEPICTION OF SUCH FEATURES ON THE STRUCTURAL DRAWINGS ARE NOT INTENDED TO BE USED FOR CONSTRUCTION. REPRESENTATION OF SUCH FEATURES ON THESE DRAWINGS MAY OR MAY NOT BE ACCURATE. REFER TO ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS.

DESIGN LOADS: PER 2012 AASHTO, 2014 OREGON BDDM, & 2012 IBC

AASHTO 3.5.1 – PERMANENT DEAD LOADS:

SLAB WEIGHT	225 PLF/FT
BARRIER WEIGHT	320 PLF
FUTURE WEARING SURFACE	25 PSF

AASHTO 3.6.1.3 – HL-93 VEHICULAR LIVE LOADS:

DESIGN LANE LOAD	640 PLF
TANDEM LOAD	25 KIPS/AXLE
DESIGN TRUCK, FRONT AXLE	8 KIPS
DESIGN TRUCK, REAR AXLES	32 KIPS/AXLE

IBC 1603.1.5 – EARTHQUAKE DESIGN CRITERIA:

RISK CATEGORY	II
SEISMIC IMPORTANCE FACTOR, I_e	1.00
SPECTRAL ACCELERATION, S_s	1.675 g
SPECTRAL ACCELERATION, S_1	0.758 g
SITE CLASS	D
SPECTRAL RESPONSE COEFFICIENT, S_{ps}	1.117 g
SPECTRAL RESPONSE COEFFICIENT, S_{p1}	0.758 g
SEISMIC DESIGN CATEGORY	CATEGORY D

FOUNDATIONS:

1. GEOTECHNICAL DRAFT REPORT WAS PREPARED BY GRI OF BEAVERTON, OREGON. PHONE: (503) 641-3478, DATED NOVEMBER 25, 2014 (THEIR FILE No. 4673-A). THE CONTRACTOR SHALL BE FAMILIAR WITH THAT REPORT AND CONFORM TO THE RECOMMENDATIONS CONTAINED THEREIN.
2. ALL FOUNDATIONS TO BEAR ON UNDISTURBED NATIVE MATERIAL, OR GRANULAR COMPACTED ENGINEERED FILL, PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. EXCAVATIONS FOR FOUNDATIONS SHALL BE OBSERVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING OF CONCRETE FOR FOUNDATION.
3. SOIL DESIGN CRITERIA, PER GEOTECHNICAL ENGINEER:
 - 3.1. SITE CLASS – D
 - 3.2. SHEET PILE LATERAL FORCES:

3.2.1. PASSIVE PRESSURE:	175 PCF
3.2.2. ACTIVE PRESSURE ABOVE CUT:	51 PCF
3.2.3. ACTIVE PRESSURE BELOW CUT:	34H+16D PCF
3.2.4. SEISMIC EQUIVALENT PRESSURE:	30 PSF
3.2.5. EXCAVATION SURCHARGE:	650 PSF
3.2.6. OPERATION SURCHARGE:	300 PSF

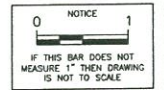
CONCRETE:

1. ALL CONCRETE SHALL BE HARD ROCK CONCRETE MEETING REQUIREMENTS OF ACI-301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS". MIX PROPORTIONS SHALL BE PER ACI-301, METHOD 2 OR THE ALTERNATE PROCEDURE. SUBMIT MIX DESIGN FOR REVIEW BY STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
2. STRUCTURAL CONCRETE SHALL ATTAIN THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

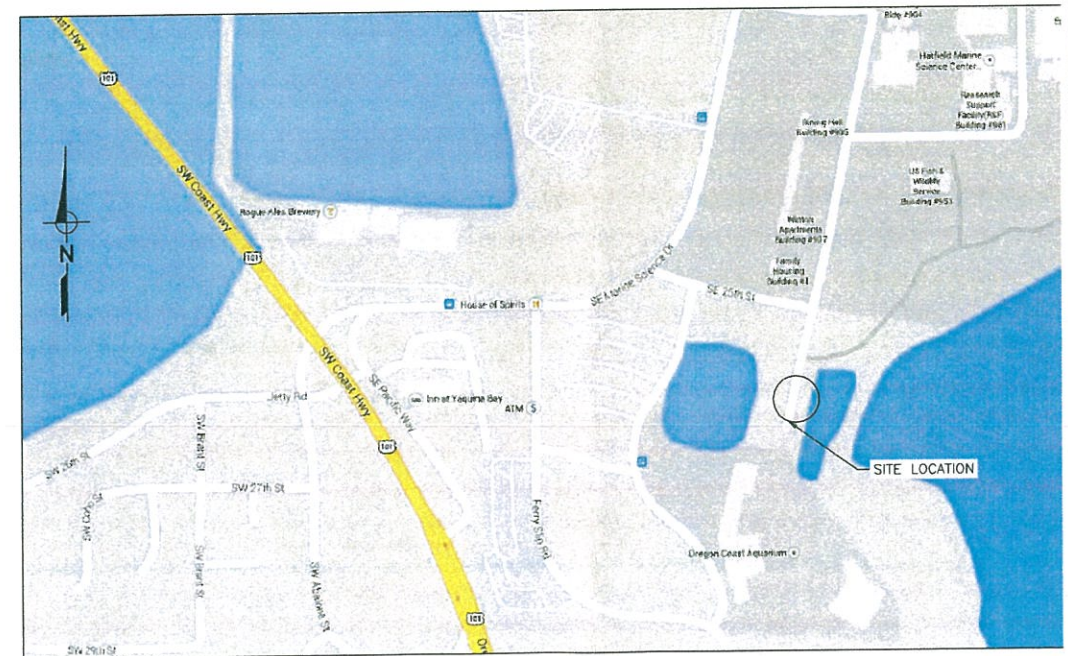
TYPE	f'_c	SLUMP	w/c	AIR
SLABS	4,000 psi	1-4"	0.40	5%
3. ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 5% (\pm) 1% AIR ENTRAINMENT BY VOLUME. AIR ENTRAINMENT SHALL BE IN CONFORMANCE WITH ASTM C260 AND C494.
4. COLD WEATHER PLACEMENT SHALL CONFORM TO ACI-306. HOT WEATHER PLACEMENT SHALL CONFORM TO ACI-305. MECHANICALLY VIBRATE ALL FORMED CONCRETE. DO NOT OVER-VIBRATE. PLACE CONCRETE MONOLITHICALLY BETWEEN CONSTRUCTION OR CONTROL JOINTS. PROTECT ALL CONCRETE FROM PREMATURITY DRYING.
5. CHAMFER ALL EXTERIOR CORNERS 1/2" UNLESS SHOWN OTHERWISE.
6. SLUMP LIMITS MAY BE INCREASED BY ADDITION OF ADMIXTURES PROVIDED THAT THE WATER/CEMENT RATIO OF THE ORIGINAL MIX DESIGN IS NOT EXCEEDED. WATER REDUCING ADMIXTURE SHALL BE IN CONFORMANCE WITH ASTM494, USED IN CONFORMANCE WITH MANUFACTURER'S INSTRUCTIONS. SUBMIT ADMIXTURES TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.
7. CEMENT SHALL BY TYPE I OR II IN CONFORMANCE WITH ASTM C150. AGGREGATES SHALL BE IN CONFORMANCE WITH ASTM C33. COARSE AGGREGATES SHALL NOT EXCEED 3/4". WATER SHALL BE CLEAN AND POTABLE.
8. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. GRADE 40 MAY BE USED FOR #3 AND SMALLER TIES AND STIRRUPS. DETAIL AND PLACE ACCORDING TO ACI MANUAL SP-66.
9. UNLESS OTHERWISE NOTED, MINIMUM COVER SHALL BE 3" EVERYWHERE. SUPPORT REINFORCEMENT WITH APPROVED CHAIRS, SPACERS, OR TIES.
10. PROVIDE MINIMUM 48 BAR DIAMETERS AT SPLICES. NO MORE THAN 50% OF REINFORCING SHALL BE SPLICED AT ANY LOCATION. UNLESS OTHERWISE NOTED, BEND ALL HORIZONTAL REINFORCING A MINIMUM OF 2'-0" AT CORNERS AND WALL INTERSECTIONS.
11. FORMWORK SHALL BE IN ACCORDANCE WITH ACI-347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK". FORMS SHALL BE DESIGNED BY THE CONTRACTOR. BRACING SHALL BE PROVIDED AS REQUIRED OR UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED 28-DAY STRENGTH. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. FORMWORK, SUPPORTS, AND SHORING SHALL PROVIDE FINISHED CONCRETE SURFACES AT ALL FACES: LEVEL, PLUMB, AND TRUE TO DIMENSIONS AND ELEVATIONS SHOWN IN THE DRAWINGS.

SHEET PILES:

1. AZ 19-700 SHEET PILES MANUFACTURED BY SKYLINE STEEL OR APPROVED EQUAL.
2. SHEET PILE PROPERTIES (PER MANUFACTURER)
 - 2.1. $A = 6.88$
 - 2.2. $S_x = 34.8 \text{ in}^2/\text{FT}$
 - 2.3. $I_x = 288.4 \text{ in}^4/\text{FT}$
3. SHEET PILE INSTALLATION PROCEDURES
4. THE TOP OF THE SHEET PILE WALL SHALL BE INSTALLED AT +14.2 FT.
5. NO REFUSAL CONDITION
 - 5.1. ALL SHEET PILES SHALL BE EMBEDDED TO AN ELEVATION OF -15.8 FT.
6. NOTIFY ENGINEER OF RECORD IF SHALLOW REFUSAL IS EXPERIENCED.
7. CONTRACTOR TO PROVIDE CATHODIC CORROSION PROTECTION OF SHEET PILES BY USE OF SACRIFICIAL ZINC PLATES. SUBMITTAL OF CORROSION PROTECTION PLAN TO EOR IS REQUIRED.



SITE VICINITY PLAN 1
N.T.S. S1



SITE VICINITY MAP 2
N.T.S. S1

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Portland, Oregon 97221
(503) 292-1635

**HATFIELD MARINE SCIENCE CENTER
RD. CULVERT REPLACEMENT**
PROJECT SITE:
HATFIELD MARINE SCIENCE CENTER RD.
NEWPORT, OR

14-206-01
GENERAL NOTES
SITE VICINITY PLAN
SITE VICINITY MAP

JOB No. 14-206

DRAWN PK CHECKED TGM

DATE 11/26/14

REVISIONS

SHEET 1 OF 4

PRELIMINARY - NOT FOR CONSTRUCTION

SPECIAL INSPECTIONS:

1. AN INDEPENDENT TESTING LABORATORY CHOSEN BY THE OWNER SHALL PROVIDE SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AS OUTLINED IN TABLE 2 FOR THE STRUCTURAL SYSTEMS OUTLINED HEREIN. ALL OTHER ELEMENTS SHALL COMPLY WITH THE SPECIAL INSPECTION & TESTING REQUIREMENTS OF CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.
2. THE TESTING AGENCY SHALL PROVIDE THE ENGINEER OF RECORD, THE OWNER, AND THE BUILDING OFFICIAL COPIES OF ALL RELEVANT TEST REPORTS AND SPECIAL INSPECTIONS.
3. THE FOLLOWING COMPANIES HAVE BEEN PRE-APPROVED FOR SPECIAL INSPECTION. ALTERNATES SHALL BE SUBMITTED TO, AND APPROVED BY, THE ENGINEER PRIOR TO USE:

CARLSON TESTING, INC.
8430 S.W. HUNZIKER ROAD
TIGARD, OREGON 97223
PHONE: 503.684.3460

MAYES TESTING ENGINEERS, INC.
7911 NE 33rd DRIVE, SUITE 190
PORTLAND, OREGON 97211
PHONE 503.281.7515

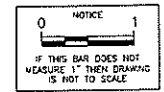
PROFESSIONAL SERVICES INDUSTRIES (PSI)
6302 N. CUTLER CIRCLE, SUITE 480
PORTLAND, OREGON 97217
PHONE: 503.289.1778

CLAIR COMPANY
525 NW 2nd STREET
CORVALLIS, OREGON 97330
PHONE: 541.758.1302

SUBMITTALS:

THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD AND THE BUILDING OFFICIAL SUBMITTALS FOR APPROVAL, PRIOR TO CONSTRUCTION, FOR THE FOLLOWING ITEMS:

1. CONCRETE MIX DESIGN AND PROPOSED ADMIXTURES
2. CONCRETE REINFORCING STEEL SHOP DRAWINGS
3. STRUCTURAL STEEL
 - 3.1. SHEET PILES
 - 3.2. TEMPORARY SHORING
 - 3.3. BRIDGE METAL DECK
4. SHEET PILE CORROSION PROTECTION PLAN



SYSTEM or MATERIAL	INSPECTION			REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY Continuous Periodic	
SOILS				
GEOTECHNICAL INVESTIGATIONS	1803			GEOTECHNICAL INVESTIGATION SHALL INCLUDE ITEMS OF SPECIAL INSPECTION AND TESTING AS NOTED IN TABLES OF THE GUIDELINES
VERIFY FOOTING BEARING CAPACITY AND SUBGRADE PREPARATION FOR FILLS	1705.6	GEOTECHNICAL REPORT	X (a)	BY THE GEOTECHNICAL ENGINEER
FILL MATERIAL VERIFICATION			X	
FILL PLACEMENT & COMPACTION			X	
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	TABLE 1705.6		X (a)	BY THE GEOTECHNICAL ENGINEER
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	TABLE 1705.9		X	
PERFORM CLASSIFICATION OF COMPACTED FILL MATERIALS	TABLE 1705.6 1803.5.1		X	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	TABLE 1705.6		X	BY THE GEOTECHNICAL ENGINEER
PRIOR TO PLACEMENT OF COMPACTED FILL OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	TABLE 1705.9		X	
DRIVEN DEEP FOUNDATIONS				
INSTALLATION	1705.7	GEOTECHNICAL REPORT	X	BY THE GEOTECHNICAL ENGINEER
VERIFY ELEMENT MATERIALS, SIZES AND LENGTHS COMPLY WITH THE REQUIREMENTS	TABLE 1705.7		X	
DETERMINE CAPACITIES OF TEST ELEMENTS AND CONDUCT ADDITIONAL LOAD TESTS, AS REQUIRED	TABLE 1705.7		X	OBSERVATION BY GEOTECHNICAL ENGINEER
OBSERVE DRIVING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH ELEMENT	TABLE 1705.7		X	
VERIFY PLACEMENT LOCATIONS AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, DETERMINE REQUIRED PENETRATIONS TO ACHIEVE DESIGN CAPACITY, RECORD TIP AND BUTT ELEVATIONS AND DOCUMENT AND DAMAGE TO FOUNDATION ELEMENT	TABLE 1705.7		X	
FOR STEEL ELEMENTS, PERFORM ADDITIONAL INSPECTIONS IN ACCORDANCE WITH SECTION 1704.3	TABLE 1705.7			
FOR SPECIALTY ELEMENTS, PERFORM ADDITIONAL INSPECTIONS AS DETERMINED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE	TABLE 1705.7			

SYSTEM or MATERIAL	INSPECTION			REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY Continuous Periodic	
CONCRETE				
INSPECTION OF REINFORCING STEEL, INCLUDING PRESTRESSING TENDON, AND PLACEMENT	TABLE 1705.3 1910.4	ACI 318.3.5 ACI 318.7.1-7.7	X	TOLERANCES AND REINFORCING PLACEMENT PER ACI 7.5; SPACING LIMITS FOR REINFORCING ACI 7.6
INSPECTION OF REINFORCING STEEL WELDING	TABLE 1705.3	ACI 318.3.5.2 AWS D1.4		IN ACCORDANCE WITH TABLE 1705.2.2, ITEM 2B
INSPECTION OF ANCHORS CAST IN CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED	TABLE 1705.3 1906.5 1909.1	ACI 318.8.1.3 ACI 318.21.1.8	X	ALL BOLTS VISUALLY INSPECTED
VERIFY USE OF REQUIRED DESIGN MIX	TABLE 1705.3 1904.2 1910.2 1910.3	ACI 318.8H.4 ACI 318.5.2-5.4	X	
INSPECTION OF CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	TABLE 1705.3 1910.5 1910.7 1910.8	ACI 318.6.9, 5.10	X	
INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES	TABLE 1705.3 1910.6	ACI 318.5.11-5.13	X	
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	TABLE 1705.3	ACI 318.6.1.1	X	SPECIAL INSPECTIONS APPLY TO SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED
STEEL				
FABRICATION OF STRUCTURAL ELEMENTS	1704.2.5		X	REFER TO INSPECTION OF FABRICATOR REQUIREMENTS
MATERIAL VERIFICATION OF STRUCTURAL STEEL	1705.2 2203.1	ASTM A6 AISC 360 A3.1	X	CERTIFIED MILL TEST REPORTS
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS	1705.2	AISC 360 A3.4	X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS	1705.2	AISC 360 A3.5	X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S			X	COPY OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS			X	COPY OF QUALIFICATION CARDS
COMPLETE AND PARTIAL PENETRATION GROOVE WELDS	1705.2.2.1	AWS D1.1 SECTION 6	X	
MULTIPASS FILLET WELDS			X	
SINGLE PASS FILLET WELDS GREATER THAN 5/16"			X	ALL WELDS VISUALLY INSPECTED PER AWS D1.1 8.9
SINGLE PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16"			X	
INSTALLATION OF COMPOSITE SLAB DECKING	1703.4.2	ICC EVALUATION REPORT ASCE 9 CHAPTER 3	X	SPECIAL INSPECTIONS APPLY TO DECKING TYPE, DEPTH, GAGE, AND FASTENING
FLOOR AND ROOF DECK WELDS		AWS D1.3 SECTION 7	X	ALL WELDS INSPECTED PER AWS D1.3 7.1
WELDING STUDS EXCEPT AS NOTED OTHERWISE	1704.3.1	AWS D1.1 SECTION 7	X	ALL WELDS VISUALLY INSPECTED PER AWS D1.1 7.8
WELDING STUDS IN STRUCTURAL DIAPHRAGMS			X	
MATERIAL VERIFICATION OF REINFORCING STEEL FOR WELDING	1704.2.2.1.2	ACI 318.3.5.2 AWS D1.4 SECTION 7	X	CERTIFIED MILL TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS			X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S			X	COPY OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS			X	COPY OF QUALIFICATION CARDS
WELDING REINFORCING EXCEPT AS NOTED OTHERWISE			X	ALL WELDS VISUALLY INSPECTED PER AWS D1.4 7.5
WELDING REINFORCING STEEL IN SHEAR WALL BOUNDARY ELEMENTS			X	
a. WHERE APPLICABLE, SEE ALSO SECTION 1705.11, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN c. FREQUENCY REFERS TO THE FREQUENCY OF INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODICALLY DURING THE d. REQUIRED FOR THE FIRST 5000 SQUARE FEET OF AAC MASONRY. e. THE FABRICATOR OR ERECTOR, AS APPLICABLE SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OF MEMBER CAN f. WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN AREA, VISUALLY INSPECT THE WEB AREA FOR CRACKS WITHIN 3 in. OF WELD				

SYSTEM or MATERIAL	TESTING			REMARKS
	IBC CODE REFERENCE	CODE or STANDARD REFERENCE	FREQUENCY Continuous Periodic	
GEOTECHNICAL				
GEOTECHNICAL ENGINEER TO PERFORM TESTING OF COMPACTED FILL MATERIALS	1803		X	TESTING PER GEOTECHNICAL REPORT
FILL IN-PLACE DENSITY OR PREPARED SUBGRADE DENSITY		VARIABLES: MINIMUM PER IBC APPENDIX J107.6	X	BY THE GEOTECHNICAL ENGINEER
MATERIAL VERIFICATION	TABLE 1705.6 1803.6.1	VARIABLES: CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS	X	BY THE GEOTECHNICAL ENGINEER
CONCRETE				
AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	TABLE 1705.3	ASTM C 172 ASTM C 31 ACI 318.5.8, 5.9	X	FABRICATE SPECIMENS AT TIME FRESH CONCRETE IS PLACED ONCE EACH DAY FOR A GIVEN CLASS OF CONCRETE, OR LESS THAN ONCE FOR EACH 150 YDS OF CONCRETE, OR LESS THAN ONCE FOR EACH 5,000 FT2 OF SURFACE AREA FOR SLABS/WALLS. ONCE EACH SHIFT FROM IN-PLACE WORK OR FROM TEST PANEL AND MINIMUM ONE SPECIMEN FOR EACH 50 CUBIC YARDS. "PRE-CONSTRUCTION TESTS AS REQUIRED PER THE BUILDING OFFICIAL."
CONCRETE STRENGTH	TABLE 1705.3	ASTM C39	X	
CONCRETE SLUMP		ASTM C143	X	
CONCRETE AIR CONTENT		ASTM C231	X	
CONCRETE TEMPERATURE		ASTM C1064	X	
STEEL				
MAGNETIC PARTICLE (MT) AND ULTRASONIC (UT) TESTING OF WELDS	1705.2	MT - AWS D1.1 6.14.4 UT - AWS D1.1 8.13 & 8.14.3		PER DRAWINGS
PRE-CONSTRUCTION TESTING OF WELDING STUDS	1705.2	AWS D1.1 7.7.1		EACH SIZE AND TYPE OF STUD EACH SHIFT
PRE-INSTALLATION TESTING OF WELDING STUDS WELDED THROUGH DECKING	1705.2	AWS D1.1 7.6		EACH STUD SIZE AND DECK GAGE COMBINATION

STRUCTURAL OBSERVATION REQUIREMENTS:

1. THE OWNER SHALL EMPLOY THE ENGINEER OF RECORD OR AN ALTERNATE OREGON LICENSED PROFESSIONAL ENGINEER, APPROVED BY THE ENGINEER OF RECORD, TO PERFORM STRUCTURAL OBSERVATIONS IN ACCORDANCE WITH SECTION 1704.5 OF THE INTERNATIONAL BUILDING CODE.
2. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY A REGISTERED DESIGN PROFESSIONAL FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR ANY OTHER INSPECTION CRITERIA, INCLUDING SPECIAL INSPECTION, AS REQUIRED BY THE BUILDING OFFICIAL OR AS INDICATED WITHIN THE INTERNATIONAL BUILDING CODE.
3. DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER AND THE BUILDING OFFICIAL (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION). AT THE CONCLUSION OF THE STRUCTURAL WORK INCLUDED WITHIN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL AND THE OWNER (AND THE ENGINEER OF RECORD IF AN ALTERNATE ENGINEER IS USED FOR STRUCTURAL OBSERVATION) A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.
4. THE CONTRACTOR SHALL MAKE AVAILABLE ALL MEANS AND METHODS NECESSARY FOR THE STRUCTURAL OBSERVER TO PERFORM THE REQUIRED STRUCTURAL OBSERVATIONS. IN ADDITION, THE CONTRACTOR SHALL NOTIFY THE OWNER AND STRUCTURAL OBSERVER A MINIMUM OF 48 HOURS BEFORE THE TIME AT WHICH THE SPECIFIED STRUCTURAL OBSERVATIONS MAY BE PERFORMED. IN ADDITION THE CONTRACTOR SHALL UPDATE THE STRUCTURAL OBSERVER OF THE CONSTRUCTION PROGRESS.
5. STRUCTURAL OBSERVATIONS SHALL BE PERFORMED FOR THE FOLLOWING AREAS OF WORK:
 - 5.1. FOLLOWING THE INSTALLATION OF THE TEMPORARY SHORING PRIOR TO ANY FURTHER EXCAVATION.
 - 5.2. FOLLOWING THE PLACEMENT OF STEEL REINFORCING IN BRIDGE DECK PRIOR TO POURING THE CONCRETE SLAB.

PSI
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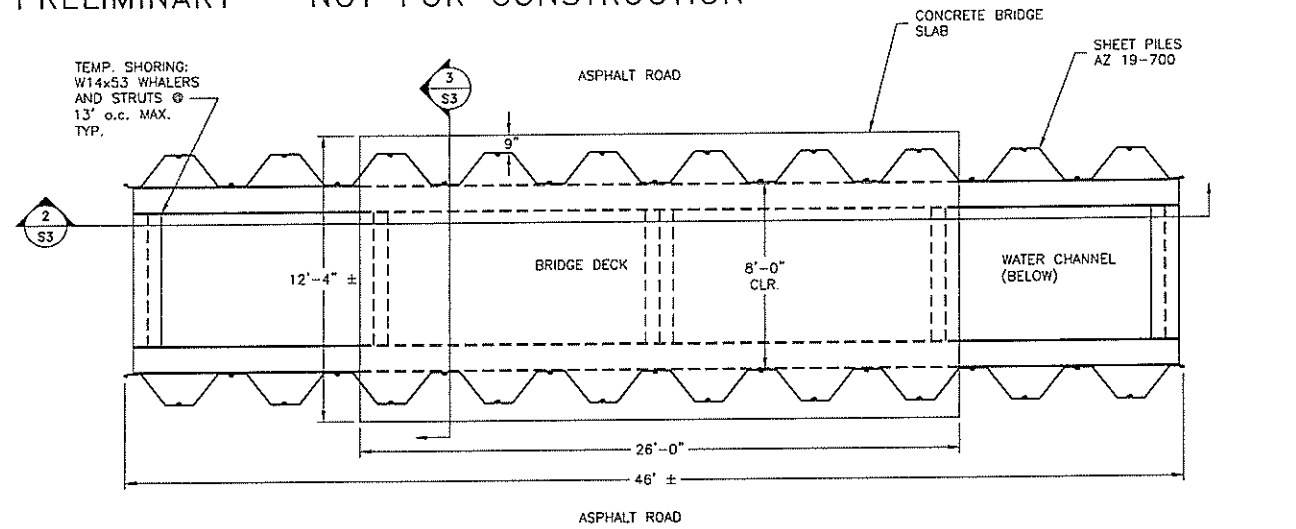
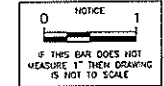
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14-206-01

QUALITY ASSURANCE

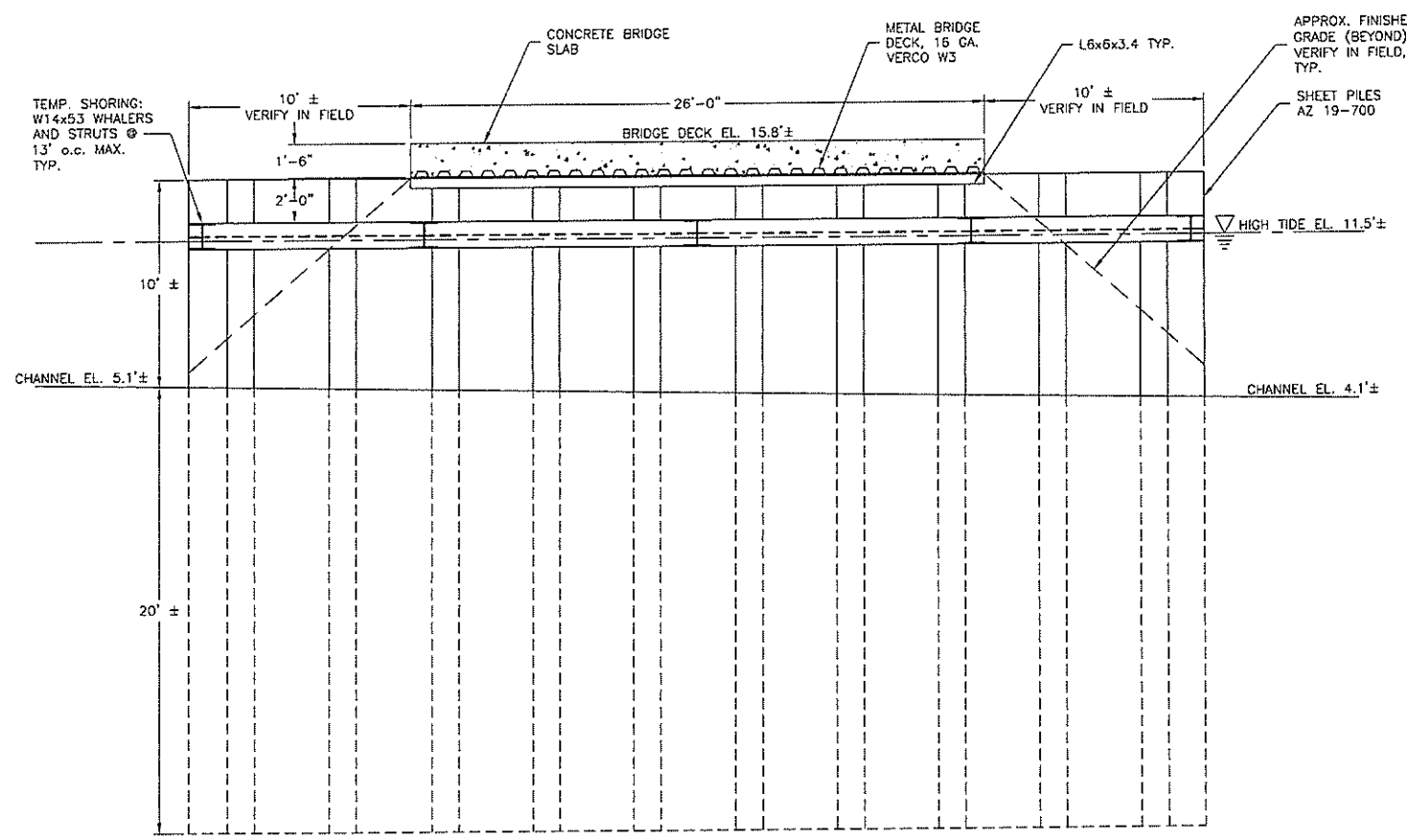
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SHEET	2 of 4

PRELIMINARY - NOT FOR CONSTRUCTION

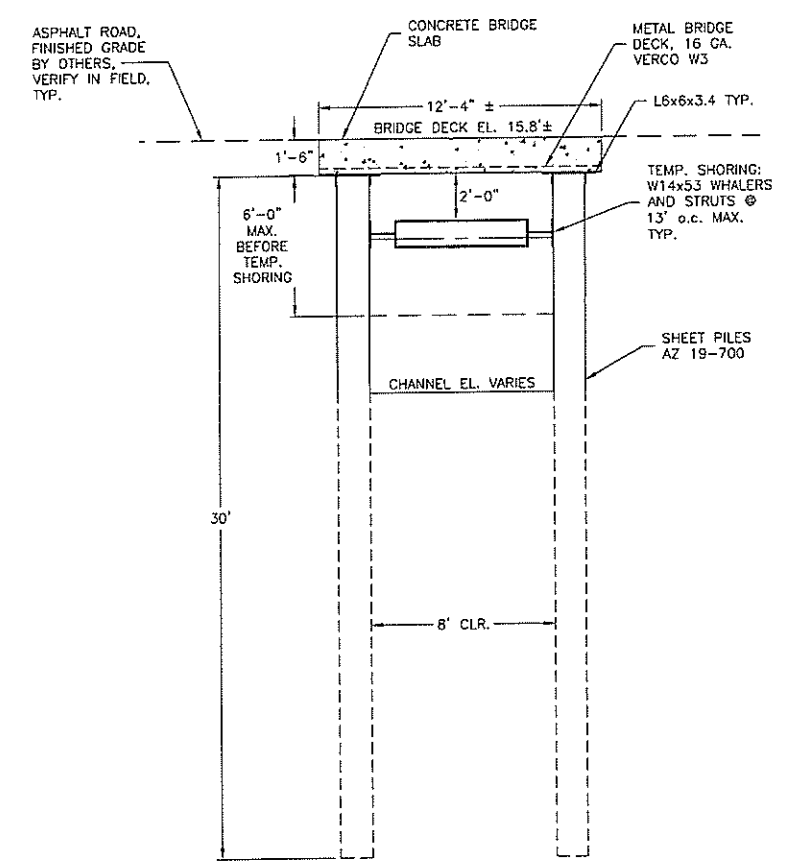


- NOTE:**
- DO NOT EXCAVATE BEYOND 6'-0" DEPTH BEFORE CONSTRUCTING TEMPORARY SHORING.
 - TEMP. SHORING MUST REMAIN IN PLACE UNTIL BRIDGE DECK IS FULLY CONSTRUCTED.
 - CUT EXCESS PILE ON EACH SIDE OF BRIDGE DECK TO 2'-0" ABOVE FINISHED GRADE AFTER BRIDGE DECK IS FULLY CONSTRUCTED.
 - SEE S4 FOR BRIDGE DECK TO SHEET PILE CONNECTION DETAILS. L6x6x3/4 NOT SHOWN IN 1/S3 FOR CLARITY.

BRIDGE SCHEMATIC PLAN 1
1/4" = 1'-0"



BRIDGE TRANSVERSE SECTION 2
1/4" = 1'-0"



BRIDGE LONGITUDINAL SECTION 3
1/4" = 1'-0"

PSE
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14-206-01
BRIDGE SCHEMATIC PLAN
BRIDGE TRANSVERSE SECTION
BRIDGE LONGITUDINAL SECTION

JOB No.
14-206

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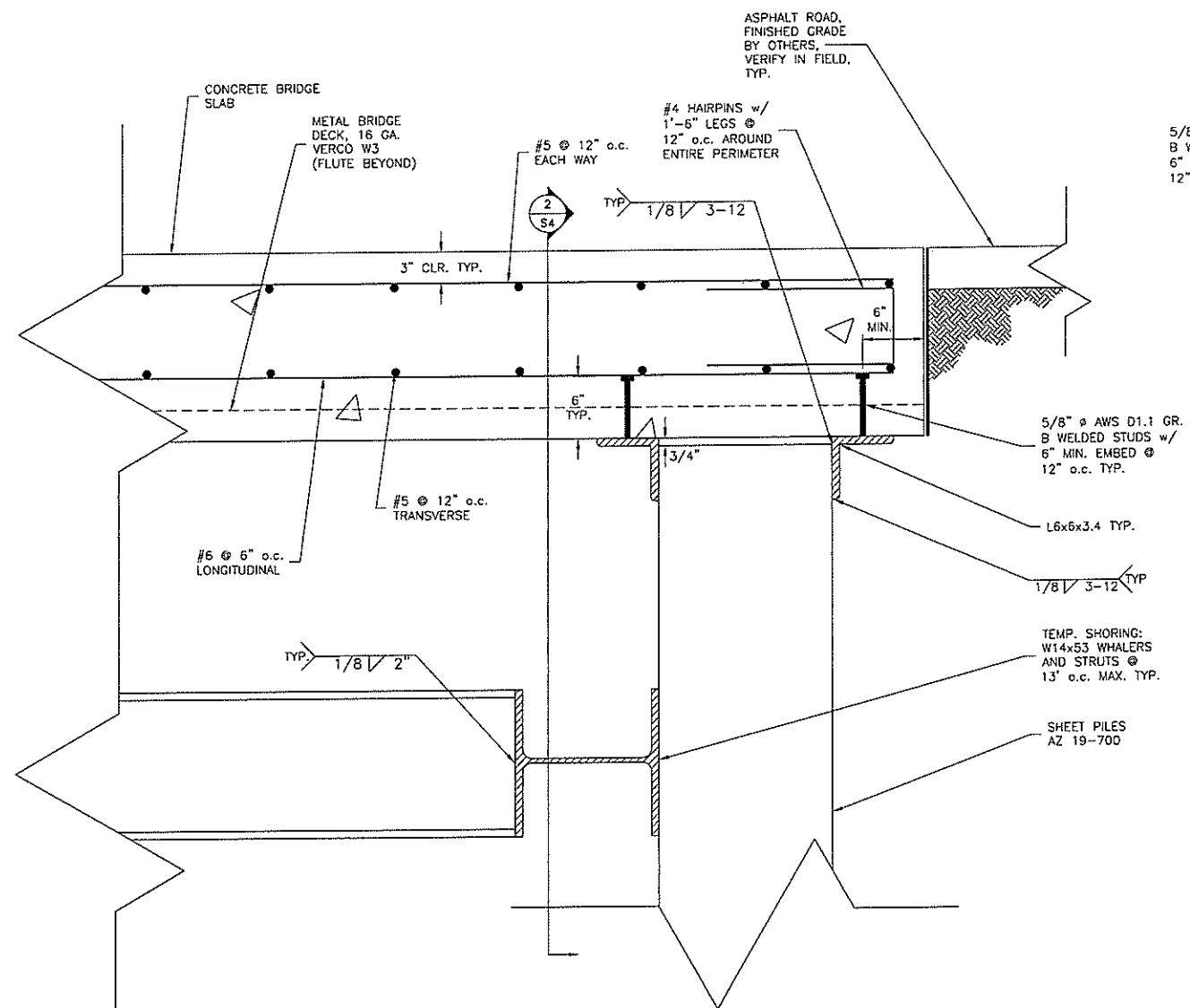
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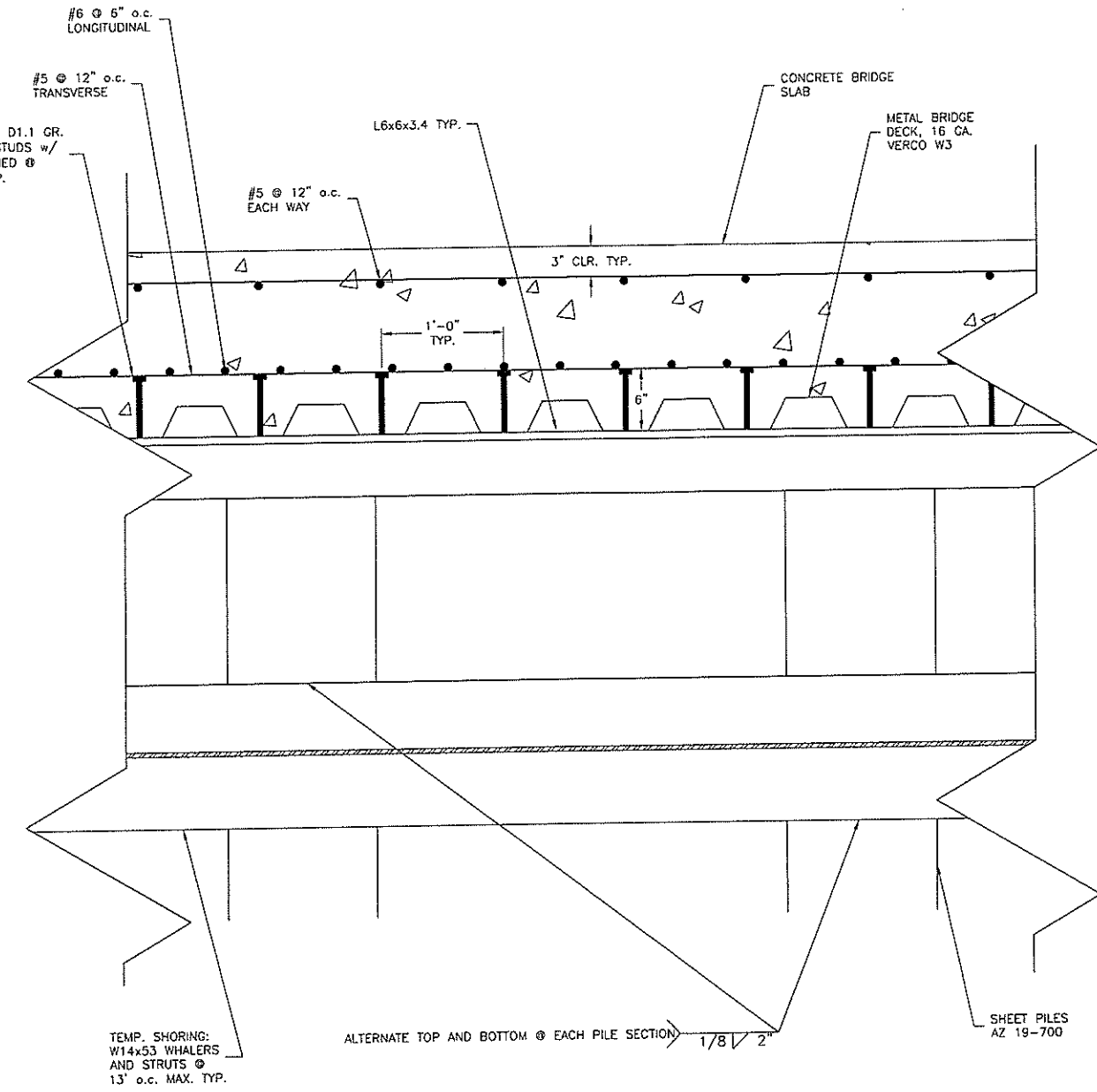
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PRELIMINARY - NOT FOR CONSTRUCTION

0 INCHES 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



BRIDGE DECK CONNECTION DETAIL 1
1 1/2" = 1'-0" S4



BRIDGE DECK CONNECTION SECTION DETAIL 2
1 1/2" = 1'-0" S4

NOTE: PROVIDE #6 CORNER BARS T&B @ EACH CORNER OF BRIDGE DECK

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BRIDGE DECK CONNECTION DETAILS	
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