

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

> February 23, 2010 Subject: **Boothbay** State Pin No: 012630.00 **Amendment No. 7**

DAVID A. COLE COMMISSIONER

Dear Sir/Ms:

Make the following change to the Bid Document:

In the Bid Book, after page 39, ADD the following in the order indicated;
1. "SPECIAL PROVISION, SECTION 105.8.2, Permit Requirements", 1 page dated February 22, 2010.
2. "INFORMATIONA LETTER TO BRIDGE OWNERS", 9 pages total, undated.

The following question has been received:

**Question:** Please refer to Amendment #5, question on page #3. We find that 24" od x 5/8" wall pipe pile is available and your answer did not include the mill test reports or the source of the undersized wall thickness pipe pile that you say will be acceptable. Strength is a combination of wall thickness and yield, however, corrosion resistance is only wall thickness. Three Amendments have arrived since the question (RFI) window has been closed.

**Response:** Maine DOT will accept the API reject pipe with the attached material specifications. The following criteria shall be met if supplying API reject pipe: The pipe shall have the geometric requirements, for the size furnished, of ASTM A252 (12. Permissible Variations in Weight and Dimensions). The steel chemistry must comply with a base metal listed in AWS D1.1. The Contractor shall provide material certificates or mechanical and chemical test reports of the actual material being furnished. Test reports shall be recent; within 60 days of the date supplied. One test report per pipe diameter size is required. Welding of high strength steel (90 ksi and greater tensile strength) will require approved welding procedure(s) with 90 ksi filler metals and minimum preheat of 300° F.

Consider this change and information prior to submitting your bid on February 24, 2010.

Sincerely,

R-AL FOR

Scott Bickford Contracts & Specifications Engineer



Boothbay 012630.00 February 22, 2010

### SPECIAL PROVISION SECTION 105.8.2 Permit Requirements (Coast Guard Requirements)

The attached U.S. Coast Guard Bridge Administration - GENERAL CONSTRUCTION REQUIREMENTS include a description of the additional information required to be submitted by the Contractor prior to starting work. In addition to the submittal requirements, the Contractor shall comply with all other requirements included in this document.

Payment for the work associated with complying with this Special Provision shall not be made directly, but will be considered incidental to related Contract Pay Items.

## U.S. Coast Guard Bridge Administration Program INFORMATIONAL LETTER TO BRIDGE OWNERS

The U.S. Coast Guard Bridge Administration is a Federal Regulatory agency within the Department of Homeland Security. We exercise Federal oversight jurisdiction over all bridges over "*Navigable Waters of the United States*".

<u>Navigable Waterways</u> are defined as: all tidal waterways, and all non-tidal waterways that are, have been, or are susceptible for use, as avenues for interstate commerce.

Bridge owners are required to maintain their bridges, operating machinery, bridge protective fender systems, and bridge navigational lighting systems, in good operable condition at all times.

No, bridge maintenance, repairs, painting, or improvements, may be performed without written approval from the *Coast Guard Bridge Administration Program*.

No other Coast Guard units are authorized to approve any bridge repairs or closures. Often times, Bridge owners mistakenly contact other "*local Coast Guard Units*" regarding bridge issues, which does not satisfy your approval requirements under Federal Law.

Only the Bridge Administration Program Office can approve bridge maintenance or regulation changes. Our addresses and contact numbers are attached as enclosure (2) to this letter.

#### **Bridge Maintenance, Repairs and Construction**

Requests must be submitted in writing <u>from the owner of the bridge, not a consultant or a</u> <u>contractor</u>, for all proposed bridge maintenance, repairs, and construction at least 60-days prior to the anticipated start date of the work.

Early coordination with our office is encouraged to help coordinate any special requirements such as bridge closures and or special bridge operation regulations that will be necessary to prosecute the scheduled bridge maintenance project.

Your bridge construction request package should contain the following: 1.) a cover letter from the owner of the bridge describing the necessary work requesting approval to work over the waterway. 2.) a copy of the contractor's sequence and work schedule. 3.) a list of any closures or times and date that the bridge may need to operate under a different operation schedule. 4.) a contact list of persons with 24-hour contact numbers in case of an emergency situation during off-hours. Final approval for the work can not be granted until we receive the contractor's sequence and schedule.

We will respond to your request in writing as soon as possible. If your request is approved we will advise you of any special conditions or stipulations that you will be required to follow along with our "<u>General Construction Requirements</u>" enclosure (1), which is attached to this letter.

The requirements listed in our "<u>General Construction Requirements</u>" are required for all bridge related work and should be included in your project specifications and any advertisements for contract bids.

## **Drawbridge Operation Regulations**

#### Permanent changes:

Requests to make "*permanent changes*" to the Drawbridge Operation Regulations for moveable bridges must be submitted to the Bridge Administration Office in writing along with any supporting data such as bridge opening logs or vehicular traffic counts at least 180-days prior to the expected effective date of the proposed regulation change.

If the request is deemed reasonable we will publish a Notice of Proposed Rulemaking (NPRM) in the <u>Federal Register</u>. A 60-day public comment period is required as part of the regulatory process to provide the public with an opportunity to comment on the proposed rule change and to help the Coast Guard determine if the proposed regulation change will accomplish it's intended purpose while continuing to meet the reasonable needs of navigation.

After the 60-day comment period concludes the Coast Guard may, as a result of comments received, process the requested regulation as proposed, revise the requested regulation to address issues raised by public comment, or withdraw the requested regulation.

A Final Rule (NFRM), must then be published in the <u>Federal Register</u> to implement the new regulations. The new regulations become effective 30-days after the Final Rule is published in the Federal Register.

#### Temporary Changes:

Requests to make "*temporary changes*" to the Drawbridge Operation Regulations to facilitate scheduled bridge maintenance, repairs, or construction must be submitted to the Bridge Administration Office along with a description of the work, contractor's sequence and schedule, and the proposed regulatory changes.

Requests for regulation changes for periods up to, but not exceeding 60-days, must be submitted at least \*30-days prior to the anticipated start date along with all supporting data. This regulatory action is called a "<u>Temporary Deviation from the Drawbridge Operation</u> <u>Regulations</u>". This action requires a letter of approval from the District Commander approving the regulation change to be sent to the bridge owner and publication of a Notice of Temporary Deviation in the <u>Federal Register</u>.

Requests for regulation changes for periods greater than 60-days must be submitted at least \*90days prior to anticipated start date. This action requires publication of a Notice of Proposed Rulemaking (NPRM) with a \*30-day comment period and publication of a Final Rule (NFRM) effective \*30-days after publication in the <u>Federal Register</u>.

(\*) <u>Advance notice requirements may be waved</u> for processing temporary regulations for maintenance repairs when the maintenance repairs are determined to be "emergency repairs". <u>Emergency repairs</u> are repairs that are necessary vital repairs that must be done with all due speed in order to assure the continued safe reliable operation of the bridge. In other words, the repairs must be performed immediately otherwise the bridge may fail at any moment.

## U.S. Coast Guard Bridge Administration Program By direction of the Commander, First Coast Guard District

#### **GENERAL CONSTRUCTION REQUIREMENTS**

- 1. All waterway closures, channel restrictions, and vertical clearance reductions must be requested in writing, 60 days in advance, from the First Coast Guard District Bridge Branch Office. No substitution of bridges, closure times, or any extension of closures may be made without written approval from this office.
- 2. All submissions to the Coast Guard for review and approval must first be approved by the owner of the bridge or their authorized agent. All submission of plans, scope of work, and schedules of operation must be sent to the First Coast Guard District, Bridge Branch Office.
- 3. A copy of the contractor's construction plans, schedule, and sequence of operations, preferably in time line graphic format, including daily hours of operation, all anticipated bridge or channel closures, location of work barges during working and non-working hours, must be submitted to this office for approval. All bridge construction/repair requests must be submitted at least 30 days prior to commencement of any work. A drawing/plan of the entire project area must be included in all submissions requesting construction approval depicting the following: (1) the waterway and existing/proposed bridges. (2) The location of work barges, anchor lines during the various phases of the project. (3) A detailed drawing of scaffolding/netting indicating the location during working hours and off-hours. All vertical clearance reductions below low steel or concrete under the bridge as a result of the use of scaffolding must be clearly detailed and measured in feet.
- 4. Emergency 24 hour telephone numbers for all responsible individuals for this project must be submitted to this office before any phase of construction begins. Any changes in personnel or telephone numbers should be immediately forwarded to this office.
- 5. Scaffolding used under all spans of the bridge must be lighted with constant burning red lights on all corners. Scaffolding must not interfere with the ability of a moveable bridge to open for vessel traffic. Moveable bridges must continue to operate according to their normal schedule unless special drawbridge operation regulations have been requested. During daylight hours, warning signs for a three (3) mile range shall mark the location of these scaffoldings. The signs shall face upstream and downstream so as to draw the mariner's attention to the fact that the clearance has been reduced. Requests to change the operating schedule of a bridge should be submitted at a minimum of 90 days in advance of desired effective date.
- 6. All barges placed in the waterway must be lighted with constant burning white lights on all four corners of the barge. The contractor is required to comply with all provisions of the <u>Navigation Rules International-Inland</u>, regarding the use of work barges or floating equipment in the waterway. Copies are available from the U.S. Government Bookstore, Room 110, Federal Building, 26 Federal Plaza, New York, NY 10278. Telephone (212) 264-3825.

#### GEN

- 7. Placement of construction barges in the navigable channel shall be done so as to provide a minimum horizontal clearance reduction. Only one draw of a swing bridge may be blocked by work equipment at anytime. Barges must be moved out of the navigable channel during darkness, or after working hours unless approved in writing by this office at least 30 days in advance.
- 8. Barges held in place by anchor lines must be marked by anchor buoys, which should be lighted.
- 9. Changes in the horizontal or vertical clearances are not authorized as part of this construction project without Coast Guard approval. An as built survey must be taken upon completion of this project, approved by a professional engineer or land surveyor verifying the bridge clearances.
- 10. VHF-FM marine radios set to the bridge communication channels 16/13 or the designated channel for the bridge must be maintained at the project site monitored by the supervisor in charge. Additional marine radios monitoring the above channels must also be maintained at the main control of any floating equipment or barges on station.
- 11. Preventive measures must be taken to prevent any hot work, debris, or construction material from entering the waterway. This includes sandblasting material, paint, and any concrete work by-products. Welding and burning must cease upon approach of a vessel and shall not start again until the vessel has passed the bridge.
- 12. The project supervisors must contact the local Coast Guard Marine Safety Office (MSO) via marine radio and establish radio contact before commencement of any hot work. A cellular phone backup may be used to contact the local Coast Guard MSO at their listed phone number.
- 13. If permanent bridge navigational lighting cannot be maintained operational during any phase of this project, temporary battery/power lights must be installed at the same locations. These temporary lights must be visible for a distance of 2,000 yards on 90% of the nights of the year. Generally, a lamp of 20 footcandles will meet these requirements. Plans for temporary lighting shall be submitted to this office for written approval. Deviations from the approved temporary lighting shall be permitted only upon written authorization from this office.
- 14. Bridge protective fenders shall not be constructed or rebuilt with any metal surfaces on the rubbing face of the fender system. All bolts, spikes, or other metal fastening devices must be countersunk. Metal splicing plates, if used, shall be mounted on back of outer wales.
- 15. All piles including those previously damaged or broken that are not being used in the new or repaired fender shall be extracted rather than cut off at the mud line. Upon completion of all fender repairs a bottom sweep is required to determine if any piles or debris are present in the waterway. A wire-drag sweep or side-scan sonar is the preferred method.
- 16. During the progress of work should any debris or equipment enter the waterway and become a hazard to navigation, immediate notice shall be given to the Coast Guard and the object removed as soon as possible. Until removal can be effected, the obstruction shall be properly marked.

- 17. Spillage of oil and hazardous substances is specifically prohibited by the <u>Federal Water</u> <u>Pollution Control Act</u>, as amended. Approved spill containment equipment and absorbent material must be located at the project site in the event of a spill into the waterway or the shoreline. The Coast Guard must be notified immediately at (800) 424-8802.
- 18. The bridge owner is responsible to ensure that channel depths are not affected by this work. Upon request of the Coast Guard or Corps of Engineers, the bridge owner/contractor shall provide the necessary equipment and personnel to determine the presence of any suspected obstructions in the waterway.
- 19. This approval may be revoked and/or civil penalties imposed for failure to ensure that the above listed stipulations are adhered to or if work is determined to hazard or impair navigation.

Enclosure (1)

#### BRIDGE ADMINISTRATION OFFICE ADDRESSES

<u>New York – New Jersey – Connecticut:</u>

Commander (obr) First Coast Guard District One South Street Battery Park Building New York, NY 10004-5073 Voice: (212) 668-7165 Fax: (212) 668-7967

Massachusetts - Rhode Island - Maine - New Hampshire - Vermont

Commander (obr) First Coast Guard District 408 Atlantic Avenue Boston, MA 02110-3350 Voice: (617) 223-8364 Fax: (617) 223-8026

ENCLOSURE (2)

# **U.S. Coast Guard Bridge Administration**

#### GENERAL CONSTRUCTION REQUIREMENTS

- 1. <u>All bridge closures, or bridge operating schedule changes, must be requested in writing, 60</u> <u>days in advance, from the First Coast Guard District Bridge Branch Office</u>. No channel restrictions, or vertical clearance reductions may be made without written approval from the above office. <u>Waterway closures or safety zones must also be requested 60 days in advance</u>.
- 2. All submissions to the Coast Guard for review and approval must first be approved by the *owner of the bridge or their authorized agent*. All submission of plans, scope of work, and schedules of operation must be sent to the First Coast Guard District, Bridge Branch Office.
- 3. <u>At least 30 days prior to commencement of any work</u>, we must have for our review, a copy of the construction plans, contractor' schedule, preferably depicted in a time line graphic format, and the contractor's daily hours of operation. The construction plan package must show the following: (1) a plan of the entire waterway area in the vicinity of the project. (2) The location of work barges and any anchor lines during working and off-hours. (3) In addition, a drawing must be included, if applicable, depicting any scaffolding or containment used indicating the location and the total vertical or horizontal channel reduction. <u>All vertical clearance reductions below low steel or concrete under the bridge as a result of the use of scaffolding must be clearly detailed on the drawings shown in total feet</u>. (4) Emergency 24 hour telephone numbers for all responsible individuals for this project must be submitted to this office before any phase of construction begins in case of an emergency situation during off-hours.
- 4. Scaffolding used under ANY span of the bridge must be lighted with constant burning red lights every 50 feet and on all corners. The placement of scaffolding must not interfere with the ability of a moveable bridge to open for vessel traffic. Moveable bridges must continue to operate according to their normal schedule unless special drawbridge operation regulation changes have been requested. Warning signs must be posted on both sides of the bridge, visible for a 1-mile range, to warn mariners of the vertical clearance reduction. The signs shall face upstream and downstream so as to draw the mariner's attention to the fact that the clearance has been reduced.
- All barges placed in the waterway must be lighted with constant burning white lights on all four corners of the barge. The contractor is required to comply with all provisions of the <u>Navigation Rules International-Inland</u>, regarding the use of work barges or floating equipment in the waterway. Copies are available from the U.S. Government Bookstore, Room 110, Federal Building, 26 Federal Plaza, New York, NY 10278. Telephone (212) 264-3825.
- 6. Placement of construction barges in the navigable channel shall be done so as to provide a minimum horizontal clearance reduction. <u>Only one navigation channel of a swing bridge may be blocked by work equipment at anytime.</u> Barges must be moved out of the navigable channel after working hours unless approved in writing by this office.
- 7. Barges held in place by anchor lines must be marked by anchor buoys, which should be lighted.

**ENCLOSURE** (1)

- 8. An as built survey must be taken upon completion of this project, approved by a professional engineer or land surveyor verifying the bridge clearances.
- 9. The on-scene contractor must have a VHF-FM marine radio set to the bridge communication channels 16/13 or the designated channel for the bridge. Additional marine radios monitoring the above channels must also be maintained at the main control of any floating equipment or barges on station.
- 10. Preventive measures must be taken to prevent any hot work, debris, or construction material from entering the waterway. This includes sandblasting material, paint, and any concrete work by-products. Welding and burning must cease upon approach of a vessel and shall not start again until the vessel has passed the bridge.
- 11. The project manager must contact the Coast Guard Sector Northern New England via marine radio before commencement of any and after completion of any Hot Work. A cell phone back-up may be used to contact the above Coast Guard Unit at (207) 780-3251.
- 12. If permanent bridge navigational lighting cannot be maintained operational during any phase of this project, temporary battery/power lights must be installed at the same locations. These temporary lights must be visible for a distance of 2,000 yards on 90% of the nights of the year. Generally, a lamp of (50 candela) will meet these requirements. Plans for temporary lighting shall be submitted to this office for written approval. Deviations from the approved temporary lighting shall be permitted only upon written authorization from this office.

#### 13. <u>All newly constructed bridge piers, or those in the process of demolition, must be</u> <u>lighted with either red or white flashing (60 flashes per minute) lights. All cofferdams</u> <u>used during construction must also be lighted with red or white flashing (60 flashes per</u> <u>minute) on all four corners.</u>

- 14. Bridge protective fenders shall not be constructed or rebuilt with any metal surfaces on the rubbing face of the fender system. All bolts, spikes, or other metal fastening devices must be countersunk. Metal splicing plates, if used, shall be mounted on back of outer wales.
- 15. All piles including those previously damaged or broken that are not being used in the new or repaired fender shall be extracted rather than cut off at the mud line. Upon completion of all fender repairs a bottom sweep is required to determine if any piles or debris are present in the waterway. A wire-drag sweep or side-scan sonar is the preferred method.
- 16. During the progress of work should any debris or equipment enter the waterway and become a hazard to navigation, immediate notice shall be given to the Coast Guard and the object removed as soon as possible. Until removal can be effected, the obstruction shall be properly marked.
- 17. Spillage of oil and hazardous substances is specifically prohibited by the <u>Federal Water</u> <u>Pollution Control Act</u>, as amended. Approved spill containment equipment and absorbent material must be located at the project site in the event of a spill into the waterway or the shoreline. The Coast Guard must be notified immediately at (800) 424-8802.

- 18. The bridge owner is responsible to ensure that channel depths are not affected by this work. Any material, machinery or equipment lost, dumped, thrown into, or otherwise entering the waterway must be removed immediately. If immediate removal is impractical and the object entering the waterway could possibly obstruct or hazard navigation, the object must be marked immediately to protect navigation and the Coast Guard shall be notified as soon as possible. Upon request of the Coast Guard or Corps of Engineers, the bridge owner/contractor shall provide the necessary equipment and personnel to determine the presence of any suspected obstructions in the waterway.
- 19. This approval may be revoked and/or civil penalties imposed for failure to ensure that the above listed stipulations are adhered to or if work is determined to hazard or impair navigation.

Founded 1929 St. Louis Testing Laboratories

2810 Clark Avenue • St. Louis, MO 63103-2574 = (314) 531-8080 • FAX (314) 531-8085 Chemical, Metallurgical, Mechanical, Nondestructive, Environmental Testing, Analyses and Field Service.

L.B. Foster Company 168 South Street, Suite 5 OSTER Plainville, MA 02762 (800) 255-4500 (508) 643-0351

**METHOD DETECTION LIMIT:** 

September 30, 2008 Lab No. 08C-1548 Invoice No. 98511 P. O. No. 21704 SWD Page 1 of 1

#### **REPORT OF ANALYSIS**

MATERIAL:

#### 24.000" O.D. x .556" Wall, Steel Pipe

SUBJECT:

Compositional Analysis & Tensile Test

TEST METHODS:

ASTM E 415-99a(2005) & ASTM A 370-06a

UNITS:

.01% for vanadium

**RESULTS:** 

ANALYTE	PIPE
Total Carbon	.08
Silicon	.21
Sulfur	.012
Manganese	1.67
Phosphorus	.011
Nickel	.04
Chromium	.04
Molybdenum	.25
Copper	.03
Vanadium	<.01
Aluminum	.05

#### **RESULTS:**

Sample ID	Width Inches	Thickness Inches	Area Sq. Inches	Yield Strength PSI	Tensile Strength _PSI	Elong (2.0" Gag in.	
PIPE	0.510	0.550	0.2805	108000	109100	0.49	24.5

Rectangular, reduced section tensile

Yield taken at .2% offset

Identification of tested specimen provided by the client.

Robin E. Sinn Laboratory Director



Contificate No. 0387-01 Centificate No. 0387-01 Centificate No. 0397-02

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