

ADDENDUM TO THE CONTRACT for the **CBJ Water Reservoir 2010 Corrosion Repairs &** Valve Vault Painting Contract No. E10-217

ADDENDUM NO.:

FOUR

CURRENT DEADLINE FOR BIDS:

July 28, 2010

PREVIOUS ADDENDA: THREE

ISSUED BY:

City and Borough of Juneau ENGINEERING DEPARTMENT 155 South Seward Street Juneau, Alaska 99801

DATE ADDENDUM ISSUED:

The following items of the contract are modified as herein indicated. All other items remain the same. This addendum has been issued and is posted online. Please refer to the CBJ Engineering Contracts Division webpage at:

http://www.juneau.org/engineering ftp/contracts/Contracts.php

GENERAL INFORMATION:

Attached is information regarding existing paint adhesion pull-off test results, dated July 2, 2010. Tests were performed on both the Auke Lake and Lemon Creek reservoir tanks by Charlie Williams, Valley Paint Center Inc., Juneau AK on July 1, 2010.

PROJECT MANUAL:

Item No. 1 SECTION 09971 WELDED STEEL WATER TANK PREPARATION AND PAINTING Delete Article 2.3 COATING SYSTEM FOR EXTERIOR STEEL in its entirety and replace with the following:

- 2.3 COATING SYSTEM FOR EXTERIOR STEEL
- Α. Spot Prime: all prepared bare steel surfaces with three coats of either:
 - 1. Tnemec Series 27 F. C. Typoxy at 3.0 to 6.0 mils dry film thickness,
 - 2. Sherwin-Williams Corothane I Galvapac at 3.0 to 6.0 mils dry film thickness, or
 - 3. One coat of Amerlock Sealer 100% epoxy penetrating sealer at 1.5 mils dry film thickness, PLUS two coats of Amerlock 2 Epoxy at 5.0 to 8.0 mils dry film thickness.

NOTE: Minimum primed dry film thickness shall be 10.0 mils.

- В. Finish: all primed surfaces shall be finished with one coat of the same manufacturer's finish coat, either:
 - 1. Tnemec Series 73 Endurashield at 3.0 to 5.0 mils dry film thickness,
 - 2. Sherwin-Williams Macropoxy 646 Fast Cure Epoxy at 3.0 to 5.0 mils dry film thickness, or
 - 3. Amercoat PSX 1001 at 3.0 to 5.0 mils dry film thickness.

NOTE: Minimum total dry film thickness of the coating system shall be 13.0 mils.

- Item No. 2 SECTION 09971 WELDED STEEL WATER TANK PREPARATION AND PAINTING *Add* the following paragraph to PART 3 EXECUTION, Article 3.3 SURFACE PREPARATION OF STEEL:
 - C. Insure that the anchor pattern created by power tool cleaning is at least 2.5 mils. Remove the paint adjacent to the rusty areas until clean metal is observed. Featheredge sand all transition areas to provide as smooth a surface as possible.
- Item No. 3 SECTION 09971 WELDED STEEL WATER TANK PREPARATION AND PAINTING **Add** the following:
 - 3.11 WARRANTY BY MANUFACTURER OF COATING SYSTEMS

"The Contractor shall obtain a written five (5) year minimum warranty from the coating manufacturer against rust through or failure of the coating system when applied per the manufacturer's recommendations."

Jennifek Mannix, Contract Administrator

Date: 7/20/10

Total number of pages contained within this Addendum: 3

Steve Tada

CBJ Engineer

I have performed the adhesion pull-off tests at the Lemon Creek and Auke Lake water tanks per your request.

I conducted the tests as follows:

I identified 11 spots on the south/southeast side and 4 spots on the top of the Lemon Creek tank. I chose these areas because the paint appeared to be most weathered in these areas (based on a visual evaluation of the paint). I labeled the Lemon Creek side wall test areas with L 1 thru 11 and the top of this tank with L 11-15. I used the same visual evaluation method to identify 10 spots on the south/southeast/west side of the Auke Lake tank. I labeled each of the side wall test areas with A 1 thru 10 and the top of this tank test areas with AT 11 thru 15.

After cleaning each area with VM&P Naptha solvent, I scuffed an area equal to the dolly size I used. I then rewashed the area with VM&P Naptha solvent. After allowing the solvent to evaporate, I glued the dollies onto the tank with two part epoxy adhesive. I then applied duct tape to hold the dollies in place until the adhesive cured. After allowing 48 hours for the epoxy to cure, I scored the circumference of the paint around the dolly. I then used a hydraulic pulling tool with a dial indicator guage to vertically pull the dollies off. I recorded each measurement before moving to the next dolly. The table below contains the values I obtained from these tests.

L1 = 2000 PSI	A1 = 2000 PSI
L2 = 2175 PSI	A2 = 2050 PSI
L3 = NO READING OBTAINED note 1	A3 = 2500 PSI
L4 = 1900 PSI	A4 = 3000 PSI
L5 = 2200 PSI	A5 = 1500 PSI
L6 = GREATER THAN 1700 PSI note 2	A6 = 2100 PSI
L7 = 1700 PSI	A7 = 2250 PSI
L8 = 1500 PSI	A8 = 2600 PSI
L9 = 2600 PSI	A9 = GREATER THAN 900 PSI note 3
L10 = 2200 PSI	A10 = 2400 PSI
L11 = 2500 PSI	AT11 = 1300 PSI .
LT12 = 1700 PSI	AT12 = 2400 PSI
LT13 = 2200 PSI	AT13 = 1600 PSI
LT14 = 1600 PSi	AT14 = 2100 PSI
LT15 = 2400 PSI	AT15 = 2350 PSI

Note 1: L3 the disc slipped and was adhered only on one side, no test was possible

Note 2: L6 the adhesive pulled off (leaving the paint) at 1700 psi

Note 3: A9 the adhesive pulled off, (leaving the paint) at 900 psi

Please let me know if you need anything further on these tests,

Charlie Williams
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9321 Glacier Highway

3321 Glacier Highway

Juneau, AK 99801