

2. AMENDMENT/MODIFICATION NO. 001	3. EFFECTIVE DATE December 07, 2000	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
6. ISSUED BY Bureau of Reclamation Lower Colorado Region P.O. Box 61470 Boulder City NV 89006-1470		7. ADMINISTERED BY (If other than Item 6)	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and ZIP code)	(T)	9A. AMENDMENT OF SOLICITATION NO. 01-SI-30-0058
	T	9B. DATED (SEE ITEM 11) November 29, 2000
		10A. MODIFICATION OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE	FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[T] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [] is extended, [T] is not extended.

Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
 (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (if required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(T)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT/ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. **IMPORTANT:** Contractor [] is not, [] is required to sign and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible)

Project Title: Coatings at Headgate Rock Dam, Headgate Rock Hydroelectric Project, Arizona - California

Purpose of Amendment: The purpose of this amendment is to delete the requirements specifically for painting and protective coatings for the disconnect switches and all references made thereto.

Receipt of Offers: The date and time for receipt of bids remains 3:00 p.m., local time December 29, 2000. The place for receipt of offers remains the Bureau of Reclamation Lower Colorado Regional Office, Annex Building, Room AA-104, Nevada Highway and Park Street, Boulder City, Nevada.

Acknowledgment: See block 11 above regarding how to acknowledge this amendment. The acknowledgment must be received at the place designated for receipt of offers (see block 10 of the "Solicitation, Offer, and Award," Standard form 1442).

Offer Modification: See block 11 above if you have submitted your offer and now desire to modify it or withdraw it.
(Continued on following page(s))

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (TYPE OR PRINT)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

Description of the Changes:

A. The following pages in the Statement of Work (Attachment No. 1) are revised to reflect the changes made by this amendment:

Remove Existing Pages

09900 COATINGS - 1 & 2
09900 COATINGS - 13 & 14
09900 COATINGS - 21 & 22

Insert Attached Revised Pages

09900 COATINGS - 1 & 2
09900 COATINGS - 13 & 14
09900 COATINGS - 21 & 22

The requirements for work of painting and protective coatings specifically for the "Disconnect Switches" are removed and all references made thereto as deleted by the strikeouts.

DIVISION 9 FINISHES

SECTION 09900 - COATINGS

PART 1 PAINTING AND PROTECTIVE COATINGS

1.01 GENERAL

- A. The Contractor shall prepare, clean and apply protective coatings to the surfaces hereinafter specified. Coated surfaces shall be protected from abrasion or other damage at all times. Surfaces not to be painted shall be protected by appropriate means during cleaning and painting of adjacent surfaces. The principal features include:
1. Miscellaneous items: Unpainted: [Appendix Figures (7 through 21)]
 - a. Fixtures, stands and jigs
 2. Turbines: Three (3) units, including: [Appendix Figures (1,3, and 5)]
 - a. Turbine man doors
 - b. Draft tube
 - c. Generator-turbine shaft guard
 - d. Outer gate barrel
 - e. Slip joint
 - f. Discharge ring
 - g. Servomotors assembly, supports, etc.
 - h. Gate operating mechanisms
 - i. Air admission piping
 3. Generators: Three (3) units, including: [Appendix Figures (1 & 2)]
 - a. Bases
 - b. Air housing
 - c. Bearing housing (upstream and downstream)
 - ~~d. Disconnect Switches~~
 - e. Exciter and bus duct
 - f. Pipe, fittings and valves to generator
 4. Bulkhead gates with lifting frame (Green): [Appendix Figure (4)]
 5. Bulkhead gates (Black): [Appendix Figure (6)]
 6. Turbine-generator shafts (3 shafts): [Appendix Figures (1 & 5)]
 7. Watertight doors (3 doors)

1.02 COST

- A. Include cost of furnishing, preparing, and applying materials for cleaning, coating repair, or coating operations in the lump-sum price bid in the schedule, for cleaning, preparing, and applying coatings to the required surfaces. The cost shall include the cost for furnishing and submitting manufacturer's instructions, purchase orders, certifications, MSDS sheets, and all the labor and materials required to complete the requirements of these specifications.
- B. The costs for delays from additional testing resulting from unnecessary small purchases, rejection of materials submitted or due to inadequate coverage are the responsibility of the Contractor.

1.03 REFERENCES

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
 1. ASTM D 522-1993 Standard Test Methods for Mandrel Bend Test of Attached Organic Coatings
 2. ASTM D 870-1997 Standard Practice for Testing Water Resistance of Coatings Using Water Immersion
 3. ASTM D 1141-1998 Standard Specification for Substitute Ocean Water
 4. ASTM D 2244-1993 Standard Test Method for Calculation of Color Differences From Instrumentally Measured Color Coordinates
 5. ASTM D 2794-1993 Standard Test Method for resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
 6. ASTM D 3359-1997 Standard Test Methods for Measuring Adhesion by Tape Test
 7. ASTM D 3363-2000 Standard Test Method for Film Hardness by Pencil Test
 8. ASTM D 4060-1995 Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser
 9. ASTM D 4214-1997 Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
 10. ASTM D 4285-1993 Standard Test Method for Indicating Oil and Moisture in Compressed Air
 11. ASTM D 4541-1995 Standard Test Method for Pull-Off Strength of Coating Using Portable Adhesion Testers
 12. ASTM D 4587-1991 Standard Practice for Conducting Tests on Paint and Related Coatings and Materials Using a Fluorescent UV-Condensation Light- and Water-Exposure Apparatus
 13. ASTM D 5532-1994 Standard Test Method for Micaceous Iron Oxide Pigments (Paint)
 14. ASTM G 8 - 1996 Standard Test Method for Cathodic Disbonding of Pipeline Coatings
 15. ASTM G 42 - 1996 Standard Test Method for Cathodic Disbonding of Pipeline Coatings Subjected to Elevated Temperatures

Tabulation No. 03. - The exterior surfaces of the items listed below, have an existing finish of alkyd enamel. The entire exterior surfaces of the items listed below shall be prepared and coated in accordance with this tabulation. Items to be coated:		
1. TURBINES - THREE (3) UNITS a. Turbine mandoor. b. Draft tube. c. Turbine-Generator shaft guard. d. Outer gate barrel. e. Slip joint. f. Discharge ring. g. Servomotors assembly, support column assembly and ladder. h. Gate operating mechanisms. i. Air admission piping		
2. GENERATORS - THREE (3) UNITS a. Bases b. Air housings. c. Bearing housing. d. Disconnect switches. e. Exciter 5-kW and exciter bus duct f. Pipe, fittings, and valves to the generator		
3. TRENCH FRAMES AND TRENCH COVERS		
Coating materials	Number and thickness of coats	Surface preparation method
Base coats: Categories: IE-1J	2 or more coats 6-mil DFT, minimum, per coat 12-mil DFT, minimum, for base coat, plus edge coats	B followed by: B-1 For spotty, damaged, rusted, oily or greasy areas of the surface to be coated or repaired
Finish coat(s): Category: IE-1DT (Colors and glosses as shown in the color schedule.)	2 to 4 mils DFT, minimum, for finish coat, per coat 14-mil DFT, minimum, for total system, excluding edge coats	Follow the manufacturer's specific application instructions for surface preparation before applying next coat.
Expansion joints, bronze, stainless steel, machined surfaces, and concrete surfaces shall be protected during surface preparation and coating operations.		

<p>Tabulation No. 04. -</p> <p>The surfaces of the metalwork listed below are intermittently submerged and are presently coated. The entire surfaces shall be cleaned, and the areas that require coating repair shall be prepared and coated in accordance with the following.</p> <p>Items to be coated:</p> <ol style="list-style-type: none"> 1. Bulkhead Gates and Lifting Frame (existing finish of 3M Scotchkote 306; Color Green) 		
Coating materials	Number and thickness of coats	Surface preparation method
<p>3M Scotchkote 306 Liquid Epoxy Coating: by 3M Corrosion Protection Products 6801 River Place Blvd. Austin, TX 78726-9000 or equal</p> <p>(Colors and glosses as shown in the Color Schedule.)</p>	<p>1 or more coats, to produce a DFT between 8 to 10 mils per coat, excluding edge coats</p> <p>16-mil DFT, minimum, for total system, excluding edge coats</p>	<p>C</p> <p>Follow the Manufacturer's specific application instructions for surface preparation, application, and curing.</p>
<p>NOTE: Do not damage or coat the seals.</p>		

Category IES-2D

QUV Accelerated weathering test: (ASTM 4587, ASTM G 53)	passes 3,000 hour test with no blisters evident on either the scribed or unscribed sides, minimal chalking (ASTM D 4214) or color difference (ASTM D 2244).
Direct impact resistance: (ASTM D 2794)	greater than 150 inch pounds
Flexibility: (ASTM D 522, 180 degree bend over ½-inch mandrel)	passes
Pencil hardness: (ASTM D 3363)	2B, minimum
Pulloff Adhesion: (ASTM D 4541) (Elcometer)	greater than 500 psi
Tape adhesion: (ASTM D 3359)	equal to or better than 4A

* Additional recoat time is required at temperatures of 20 to 40 degrees F and humidities of 10 to 30 percent.

C-IE-2D.898

3.09 COLOR

- A. Colors and gloss of finish coats: see Color Table below.
- B. Obtain an accurate match of color and gloss for coated surfaces.
- C. For items required to be coated but not listed in Color Table, Contracting Officer to select colors from Color Table.
- D. Color reference numbers:
 1. 5-digit number: Federal Standard No. 595B; General Services Administration, (3F BP-W), Specification Unit, Suit 8100, 470 L'Enfant Plaza SW, Washington DC 20407; telephone (202) 755-0325/0326; Individual color chips available from General Services Administration
 2. Manufacturer's standard color varies.
- E. Gloss abbreviations:
 1. SG: Semigloss
 2. LG: Low Gloss
- F. Color Table
 1. Numbers listed in "Tabulation No." column refer to corresponding item to be coated in tabulations.

Tabulation No.	Item Surface	Color	Color No.	Gloss
01	a. Fixtures, stands and jigs	Safety Yellow	MFR	SG
02	a. Turbine-Generator shaft b. Watertight door c. Bulkhead gates (existing color Black)	Black	MFR.	LG
03	1. Turbines: a. Turbine man doors b. Draft tube c. Generator-turbine shaft guard d. Outer gate barrel e. Slip joint f. Discharge ring g. Servomotors assembly, supports, etc h. Gate operating mechanisms I. Air admission piping 2. Generators a. Bases b. Air housing c. Bearing housing (u/s and d/s) d. Disconnect switches e. Exciter and bus duct f. Pipe, fittings and valves to generator	Blue	04035	LG
04	a. Bulkhead gates with lifting frame (Existing color Green)	Blue-Green	MFR.	LG

END OF SECTION