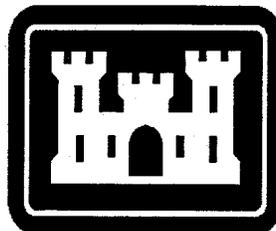


OPERATION AND MAINTENANCE
MISSISSIPPI RIVER
POOL NO. 10
CLAYTON COUNTY, IOWA

**SPECIFICATIONS
FOR**

**McMILLAN ISLAND EXCAVATION
AND DREDGING**

SEPTEMBER 2001



**US Army Corps
of Engineers**
St. Paul District

CONSTRUCTION PROJECT DOCUMENTS

OPERATIONS AND MAINTENANCE
MISSISSIPPI RIVER
POOL NO. 10
CLAYTON COUNTY, IOWA

MCMILLAN ISLAND EXCAVATION AND DREDGING

TABLE OF CONTENTS

NON-TECHNICAL REQUIREMENTS:

**DIVISION 00 – BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS
OF THE CONTRACT**

- 00010 SF 1442 AND BIDDING SCHEDULE
- 00100 INSTRUCTIONS, CONDITIONS AND NOTICE TO BIDDERS
- 00600 REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF BIDDERS
- 00700 CONTRACT CLAUSES
- 00800 SPECIAL CONTRACT REQUIREMENTS
- 00830 LIST OF ATTACHMENTS

TECHNICAL REQUIREMENTS:

DIVISION 01 – GENERAL

- 01000 GENERAL
- 01111 WATER QUALITY MONITORING PROGRAM
- 01270 MEASUREMENT AND PAYMENT
- 01330 SUBMITTAL PROCEDURES
- 01410 ENVIRONMENT PROTECTION
- 01451 CONTRACTOR QUALITY CONTROL
- 01500 TEMPORARY CONSTRUCTION FACILITIES
- 01566 IOWA POLLUTANT DISCHARGE ELIMINATION SYSTEM

DIVISION 02 – SITE WORK

- 02220 REMOVALS
- 02230 CLEARING AND GRUBBING
- 02300 EARTHWORK
- 02323 EXCAVATION OF DREDGE MATERIAL
- 02325 DREDGING
- 02327 DISPOSAL OF DREDGE MATERIAL
- 02630 STORM-DRAINAGE SYSTEM
- 02720 AGGREGATE BASE COURSE
- 02731 GRANULAR SHOULDER MATERIAL
- 02740 BITUMINOUS PAVING
- 02754 CONCRETE PAVEMENT

02763 PAVEMENT MARKINGS
02930 PLANTINGS
02935 ESTABLISHMENT OF TURF

DIVISIONS 03 THROUGH 16 – NOT USED

DRAWINGS

ATTACHED UNDER SEPARATE COVER

SOLICITATION, OFFER, AND AWARD (Continued)*(Construction, Alteration, or Repair)***OFFER (Must be fully completed by offeror)**14. NAME AND ADDRESS OF OFFEROR *(Include ZIP Code)*15. TELEPHONE NO. *(Include area code)*16. REMITTANCE ADDRESS *(Include only if different than Item 14)***See Item 14**

CODE

FACILITY CODE

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this offer is accepted by the Government in writing within _____ calendar days after the date offers are due. *(Insert any number equal to or greater than the minimum requirements stated in Item 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)*

AMOUNTS

SEE SCHEDULE OF PRICES

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGMENT OF AMENDMENTS*(The offeror acknowledges receipt of amendments to the solicitation -- give number and date of each)*

AMENDMENT NO.

DATE

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN
OFFER *(Type or print)*

20B. SIGNATURE

20C. OFFER DATE

AWARD (To be completed by Government)

21. ITEMS ACCEPTED:

SEE SCHEDULE

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

24. SUBMIT INVOICES TO ADDRESS SHOWN IN
*(4 copies unless otherwise specified)***ITEM**

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO

 10 U.S.C. 2304(c) 41 U.S.C. 253(c)

26. ADMINISTERED BY

CODE

27. PAYMENT WILL BE MADE BY

CODE

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE 28. NEGOTIATED AGREEMENT *(Contractor is required to sign this document and return _____ copies to issuing office.)* Contractor agrees to furnish and deliver all items or perform all work, requisitions identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications or incorporated by reference in or attached to this contract. 29. AWARD *(Contractor is not required to sign this document.)*

Your offer on this solicitation, is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*31A. NAME OF CONTRACTING OFFICER *(Type or print)*

30B. SIGNATURE

30C. DATE

31B. UNITED STATES OF AMERICA
BY

31C. AWARD DATE

SECTION 00010 Bidding Schedule

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	Performance & Payment Bond for Basic CLIN's only. FFP - Performance & Payment Bonds for Basic CLIN's only. PURCHASE REQUEST NUMBER W81G67-0188-7488	1.00	Lump Sum		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	Mobilization and Demobilization FFP	1.00	Lump Sum		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	Placement Site Preparation FFP	1.00	Lump Sum		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0004	Clearing and Grubbing, McMillan Island FFP	1.50	Acre		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	Excavation and Relocation of Existing Dredge Material from McMillan Island:				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AA		140,000.00	Cubic Yard		
	First 140,000 Cubic Yards FFP				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005AB		30,000.00	Cubic Yard		
	Over 140,000 Cubic Yards FFP				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006					
	Material transferred to Buck Creek Placement site above elevation 640.0				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006AA		40,000.00	Cubic Yard		
	First 40,000 Cubic Yards FFP				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0006AB		20,000.00	Cubic Yard		
	Over 40,000 Cubic Yards FFP				

ITEM NO 0007	SUPPLIES/SERVICES 30" RCP, Class III FFP	QUANTITY 285.00	UNIT Linear Foot	UNIT PRICE	AMOUNT
				_____.	_____.

ITEM NO 0008	SUPPLIES/SERVICES Storm Sewer Flared End Sections FFP	QUANTITY 6.00	UNIT Each	UNIT PRICE	AMOUNT
				_____.	_____.

ITEM NO 0009	SUPPLIES/SERVICES Removals FFP - IDOT Class C	QUANTITY 1.00	UNIT Lump Sum	UNIT PRICE	AMOUNT
				_____.	_____.

ITEM NO 0010	SUPPLIES/SERVICES Macadam Base Material FFP	QUANTITY 145.00	UNIT Cubic Yard	UNIT PRICE	AMOUNT
				_____.	_____.

ITEM NO 0011	SUPPLIES/SERVICES Bituminous Base Course FFP	QUANTITY 558.00	UNIT Square Yard	UNIT PRICE	AMOUNT
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0012	Bituminous Surface Course & Tack Coat FFP	432.00	Square Yard		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0013	Road Embankment Fill FFP	637.00	Cubic Yard		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0014	Aggregate Base Course FFP	500.00	Cubic Yard		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0015	8 " Portland Cement Concrete (PCC) FFP - IDOT Class C	1,215.00	Square Yard		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0016	Rumble Strips FFP	100.00	Linear Foot		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0017	Highway Signage FFP	1.00	Lump Sum		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0018	Traffic Control FFP	1.00	Lump Sum		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0019	Granular Shoulder Material FFP	40.00	Cubic Yard		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0020	Pavement Markings FFP	1,435.00	Linear Foot		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0021	Heitman Pond Excavation FFP	2,835.00	Cubic Yard		

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0022	Stripping and Placing Topsoil FFP	10,620.00	Cubic Yard		
				-----	-----

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0023	Turf Establishment FFP - Seeding Mix Type 1	3.85	Acre		
				-----	-----

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0024	Turf Establishment FFP - Seeding Mix Type 2	3.32	Acre		
				-----	-----

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0025	Plantings FFP	1.00	Lump Sum		
				-----	-----

TOTAL ESTIMATED AMOUNT FOR THE BASIC ITEMS

OPTIONAL ITEMS

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0026	All Bond Costs for Optional Items FFP	1.00	Lump Sum		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0027	Dredging - McMillan Island Cut FFP				
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0027AA	First 20,000 Cubic Yards FFP	20,000.00	Cubic Yard		
				_____.	_____.

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0027AB	First 20,000 Cubic Yards FFP	50,000.00	Cubic Yard		
				_____.	_____.

TOTAL ESTIMATED AMOUNT FOR THE OPTIONAL ITEMS _____

TOTAL ESTIMATED AMOUNT FOR BASIC & OPTIONAL ITEMS _____

CONTINUATION OF BLOCK 10 OF THE SF 1442.

There also is channel maintenance dredging of approximately 70,000 cubic yards of the McMillan Island Dredge cut located between river miles 618.4 and 619.6. Dredged material may be placed in the designated Buck Creek placement site located in Iowa at approximately river mile 618.0. Approximately 40,000 cubic yards of the material shall be placed in a mandatory placement site located adjacent to the Buck Creek site. Work also includes approximately 900 feet of highway pavement work. Perform placement site prep work, restoration and miscellaneous related work.

THIS PROCUREMENT IS 100% SET ASIDE FOR SMALL BUSINESS CONCERNS. The North American Industrial Classifications Systems Code (NAICS) is 234990 with a small business size standard of \$17 Million. In accordance with the size standard requirements, bidders are advised that to be considered a small business concern, a firm must perform at least 40% of the volume dredged with its own equipment or equipment owned by another small dredging concern. The estimated magnitude of construction in terms of physical characteristics and estimated price range is between \$1 Million and \$5 Million.

SCHEDULE NOTES

1. EFFECTIVE MAY 31, 1998, ALL CONTRACTORS MUST REGISTER WITH THE DEFENSE CENTRAL CONTRACTOR REGISTRATION (CCR) IN ORDER TO RECEIVE ANY CONTRACT AWARD. (other than those made via the Government credit card program). Contractors may register on line at <http://ccr.edi.disa.mil>. See Clause 252.204-7004 in Section 00700.

2. FACSIMILE OF BIDS/PROPOSALS AND FACSIMILE OF MODIFICATIONS THERETO, WILL NOT BE ACCEPTED.

3. All Quantities are estimated except where unit is given as "JB" (JOB) or "LS" (LUMP SUM).

4. The apparent low bidder will be requested to provide the following information as soon as possible after bid opening:

- a. A Financial Statement, to include a balance sheet and income statement, and
- b. A Bank Certification of Financial Capability (line of credit).

This information will be treated as confidential. The financial statements should be not over 60 days old. If over 60 days old, a certification should be attached stating that the financial condition of the firm is substantially the same or, if not the same, the changes that have taken place.

5. All extensions of the unit prices shown will be subject to verification by the Government. In case of a discrepancy between the unit price and the extension, the unit price will govern.

6. The original bid/proposal and any modifications must be complete as to all the items on the schedule. Award will be made to that bidder whose bid is most advantageous to the Government, based on price and the price related factors included in the solicitation.

7. The Government may determine a bid is nonresponsive if the prices proposed are materially unbalanced between line items or subline items and the lack of balance is determined by the Contracting Officer to pose an unacceptable risk to the Government. A bid is materially unbalanced when it is based on prices which are significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work. A materially unbalanced bid may be rejected if the Contracting Officer has a reasonable doubt that the bid will result in the lowest overall cost to the Government, even though it may be the low evaluated bid. Additionally, a bid that is so unbalanced so as to tantamount to an advance payment will be rejected as nonresponsive even if acceptance of the bid would result in the lowest overall cost to the government.

8. Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing in accordance with Section 00100, Contract Clause "Explanation To Prospective Bidders", NOT LATER THAN 10 DAYS PRIOR TO BID OPENING. Questions can be faxed to (651)290-5706, Attention Thomas H. Koopmeiners or e-mailed to thomas.h.koopmeiners@mvp02.usace.army.mil. Questions received after the deadline may not be answered prior to bid submittal.

9. Funding for this contract is contingent upon the conditions stated in Section 00800, Clause No. 52.232-5001, Continuing Contracts.

10. The addresses, phone numbers, and internet addresses (if available) for references cited in these specifications are listed in the Corps of Engineer Guide Specification (CEGS) 01090 SOURCES FOR REFERENCE PUBLICATIONS. CEGS 01090 is available on the TECHINFO page of the Corps of Engineers Huntsville District internet site: <http://www.hnd.usace.army.mil/>.

11. The official solicitation is available on CD-ROM and will be automatically mailed to all registered plan holders. HOWEVER, ANY FORTHCOMING AMENDMENTS WILL ONLY BE AVAILABLE ON THE USACE ST. PAUL DISTRICT WORLD WIDE WEB SITE AT <http://mvpwww.mvp.usace.army.mil/ebs/AdvertisedSolicitations.asp>. E-MAIL NOTIFICATIONS WILL BE SENT UPON ISSUANCE OF ANY AMENDMENTS TO ALL REGISTERED PLAN HOLDERS. BECAUSE E-MAIL MESSAGE NOTIFICATIONS MAY NOT BE RELIABLE BASED ON SYSTEM CONSTRAINTS, IT IS RECOMMENDED THAT EACH REGISTERED PLAN HOLDER CHECK THE WEB SITE PERIODICALLY FOR UPDATES. A PAPER HARD COPY OF EACH AMENDMENT WILL NOT BE MAILED UNLESS SPECIFICALLY REQUESTED IN WRITING VIA E-MAIL AT thomas.h.koopmeiners@mvp02.usace.army.mil OR VIA FACSIMILE AT 651-290-5706 TO THE ATTENTION OF THOMAS H. KOOPMEINERS.

12. Bid Bonds

- a. It is the responsibility of the bidder to include an acceptable bid guarantee with its bid. This bid note does not provide bidders with an all-inclusive checklist for submitting an acceptable bid bond – rather, it provides some “lessons learned” information as to the unacceptability of photocopied bid bonds.
- b. This solicitation requires bidders to submit a bid guarantee along with their bids (see clause 52.228-1). One acceptable form of bid guarantee is a bid bond. For a bid to be responsive, the bid bond accompanying the bid must unequivocally bind the bonding company – if it does not, the bid must be rejected as nonresponsive. Please note that a nonresponsive bid may not be corrected after bid opening to make it responsive – it must be rejected. The Contracting Officer has the authority and responsibility to determine whether the bid bond and its accompanying documentation clearly show that the person(s) executing the bid bond on behalf of the surety have the authority to unequivocally bind the bonding company. In order for a bid bond to be acceptable, it must be accompanied by a valid power-of-attorney issued by the surety (the bonding company, not the insurance agency writing the bond).
- c. Photocopied or faxed powers-of-attorney are not acceptable. In order for a power-of-attorney accompanying a bid bond to be acceptable, it must be: (i) an original power-of-attorney (containing original signatures and corporate seals), (ii) a copy of a power-of-attorney accompanied by an original certification (original means original signature and original corporate seal) by the secretary (or other authorized officer) of the surety stating that the copied power-of-attorney is still in full force and effect as of the date of the certification and has not been revoked, or (iii) a power-of-attorney with facsimile (stamped, printed or mechanically signed) signatures and facsimile corporate seals that: (A) contains language stating that the surety will be bound by facsimile seals and signatures and (B) also contains an ORIGINAL corporate seal at the certification block. (An original seal is (I) a raised, crimped seal, or (II) a paper or foil corporate seal that is manually attached to the power-of-attorney.)

TABLE OF CONTENTS

SECTION 00010 BIDDING SCHEDULE3

SECTION 00100 INSTRUCTIONS TO BIDDERS17

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99) 17

52.209-4001 BIDDER'S QUALIFICATIONS (APR 1984) FAR 9.105-1 17

52.214-1 SOLICITATION DEFINITIONS--SEALED BIDDING (JUL 1987)..... 18

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989) 18

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984) 18

52.214-5 SUBMISSION OF BIDS (MAR 1997) 18

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)..... 19

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999) 19

52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984) 20

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996) 20

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991) 21

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)..... 21

52.214-4001 INQUIRIES - BID INFORMATION 21

52.214-4002 ALL OR NONE QUALIFICATIONS (APR 1984) FAR 14.404-5..... 22

52.216-1 TYPE OF CONTRACT (APR 1984)..... 22

52.217-5 EVALUATION OF OPTIONS (JUL 1990)..... 22

52.225-10 NOTICE OF BUY AMERICAN ACT/BALANCE OF PAYMENTS PROGRAM
REQUIREMENT--CONSTRUCTION MATERIALS (FEB 2000) 22

52.233-2 SERVICE OF PROTEST (AUG 1996) 23

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)..... 24

52.236-4002 WORK PERFORMED BY THE CONTRACTOR 24

52.236-4005 UNAVAILABILITY OF UTILITY SERVICES 24

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)..... 24

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984) 25

SECTION 00600 REPRESENTATIONS & CERTIFICATIONS26

52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION (APR 1985) 26

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN
FEDERAL TRANSACTIONS (APR 1991)..... 27

52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT,
AND OTHER RESPONSIBILITY MATTERS (APR 2001) 27

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2001) ALTERNATE I (OCT 2000)
& ALTERNATE II (OCT 2000)..... 29

52.219-2 EQUAL LOW BIDS. (OCT 1995) 31

52.222-22 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)..... 31

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000) 32

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A
TERRORIST COUNTRY (MAR 1998) 32

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)..... 33

SECTION 00700 CONTRACT CLAUSES35

52.202-1 DEFINITIONS (MAY 2001) --ALTERNATE I (MAY 2001) 35

52.202-4001 DEFINITIONS (MAY 1995) EFARS PART 2.101 35

52.203-3 GRATUITIES (APR 1984) 36

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)..... 37

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995) 37

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER
ACTIVITY (JAN 1997)..... 38

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)..... 39

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997) 40

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000) 44

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995) 45

52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984) 46

52.214-26 AUDIT AND RECORDS--SEALED BIDDING. (OCT 1997) 46

52.214-27 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997) 47

52.214-28 SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997) 48

52.214-29 ORDER OF PRECEDENCE--SEALED BIDDING (JAN 1986) 49

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996) 49

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000) 50

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996) 51

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997) 52

52.222-3 CONVICT LABOR (AUG 1996) 52

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000) 53

52.222-6 DAVIS-BACON ACT (FEB 1995) 53

52.222-7 WITHHOLDING OF FUNDS (FEB 1988) 55

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988) 55

52.222-9 APPRENTICES AND TRAINEES (FEB 1988) 56

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988) 57

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988) 57

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988) 58

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988) 58

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988) 58

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988) 58

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999) 59

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999) 59

52.222-26 EQUAL OPPORTUNITY (FEB 1999) 60

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999) 62

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998) 65

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998) 67

52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999) 68

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998) 69

52.223-6 DRUG-FREE WORKPLACE (MAY 2001) 70

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000) 71

52.225-9 BUY AMERICAN ACT --BALANCE OF PAYMENTS PROGRAM—CONSTRUCTION MATERIALS (FEB 2000) 72

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000) 75

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000) 75

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995) 76

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996) 77

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984) 77

52.228-1 BID GUARANTEE (SEP 1996) 77

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997) 78

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997) 78

52.228-11 PLEDGES OF ASSETS (FEB 1992) 79

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999) 79

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-..... 83

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991) 83

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984). 84

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)..... 85

52.232-17 INTEREST (JUNE 1996)..... 87

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)..... 88

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (MAY 2001)..... 88

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR
REGISTRATION (MAY 1999)..... 94

52.233-1 DISPUTES. (DEC 1998)..... 96

52.233-3 PROTEST AFTER AWARD (AUG. 1996)..... 97

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)..... 98

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984) 99

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)..... 99

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)..... 100

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991) 100

52.236-8 OTHER CONTRACTS (APR 1984)..... 100

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND
IMPROVEMENTS (APR 1984)..... 101

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)..... 101

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984) 101

52.236-12 CLEANING UP (APR 1984) 102

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991) 102

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984) 103

52.236-16 QUANTITY SURVEYS (APR 1984) - ALTERNATE I (APR 1984) 104

52.236-17 LAYOUT OF WORK (APR 1984)..... 104

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)..... 104

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)..... 105

52.242-13 BANKRUPTCY (JUL 1995) 106

52.242-14 SUSPENSION OF WORK (APR 1984)..... 106

52.243-4 CHANGES (AUG 1987)..... 106

52.244-2 SUBCONTRACTS (AUG 1998) 107

(END OF CLAUSE) 109

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (MAY
2001) 109

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)..... 110

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994) 111

52.246-4001 LABORATORY AND TESTING FACILITIES 112

52.247-34 F.O.B. DESTINATION (NOV 1991)..... 112

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000) - ALTERNATE I (APR 1984)..... 113

52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SEP 1996) -
ALTERNATE I (SEP 1996)..... 116

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984) 118

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998) 119

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)..... 120

52.253-1 COMPUTER GENERATED FORMS (JAN 1991) 120

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)..... 120

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-
CONTRACT-RELATED FELONIES (MAR 1999) 121

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992) 122

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION.(MAR 2000) 122

252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC
1991)..... 123

252.209-7000	ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995).....	124
252.209-7003	COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (MAR 1998).....	124
252.209-7004	SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998).....	124
252.223-7006	PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS.....	125
252.225-7012	PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (AUG 2000).....	125
252.225-7031	SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992).....	126
252.227-7033	RIGHTS IN SHOP DRAWINGS (APR 1966).....	127
252.236-7000	MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991).....	127
252.236-7001	CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (AUG 2000).....	128
252.236-7002	OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC 1991).....	128
252.236-7004	PAYMENT FOR MOBILIZATION AND DEMOBILIZATION. (DEC 1991).....	129
252.236-7008	CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991).....	130
252.242-7000	POSTAWARD CONFERENCE (DEC 1991).....	130
252.243-7001	PRICING OF CONTRACT MODIFICATIONS (DEC 1991).....	130
252.243-7002	REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998).....	130
252.247-7023	TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000).....	131
252.247-7024	NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000).....	134
252.248-7000	PREPARATION OF VALUE ENGINEERING CHANGE PROPOSALS (MAY 1994).....	135
SECTION 00800 SPECIAL CONTRACT REQUIREMENTS.....		136
52.000-4004	PARTNERING.....	136
52.000-4008	SMALL BUSINESS SET ASIDE REQUIREMENTS FOR DREDGING (OCT 2000).....	136
52.211-10	COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) - ALTERNATE I (APR 1984).....	137
52.211-12	LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000).....	137
52.212-5000	EVALUATION OF SUBDIVIDED ITEMS (MAR 1995)--EFARS.....	137
52.212-5001	VARIATIONS IN ESTIMATED QUANTITIES, SUBDIVIDED ITEMS.....	137
52.217-4000	OPTION FOR ADDITIONAL WORK (CONSTRUCTION) (AUG 2000).....	138
52.228-4002	INSURANCE.....	138
52.228-4003	RAILROAD PROTECTIVE LIABILITY INSURANCE.....	139
52.228-4022	REQUIREMENT FOR BID GUARANTEE (FAR 28.101-2).....	140
52.229-4001	IOWA SALES AND USE TAX.....	140
52.231-5000	EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE.....	140
52.232-4004	INVOICE PROCEDURES.....	141
52.232-5001	CONTINUING CONTRACTS (MAR 1995)—EFARS.....	141
52.236-4	PHYSICAL DATA (APR 1984).....	142
52.236-4006	SAFETY AND HEALTH REQUIREMENTS MANUAL INTERIM CHANGES, EM 385-1-1 (APR 2001).....	143
52.236-4014	PURCHASE ORDERS.....	143
52.236-4025	FLOATING PLANT EQUIPMENT (MAY 1999).....	143
52.236-4061	OBSTRUCTION OF CHANNEL.....	144
52.236-4062	SIGNAL LIGHTS (JAN 1965).....	144
52.236-4063	RADIO.....	144
52.239-4001	YEAR 2000 COMPLIANCE (FAR 39.106) (JUL 1998).....	145
52.249-5000	BASIS FOR SETTLEMENT OF PROPOSALS.....	145

SECTION 00100 Instructions to Bidders

CLAUSES INCORPORATED BY FULL TEXT

52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (JUN 99)

(a) Contractor identification is essential for complying with statutory contract reporting requirements. Therefore, the offeror is requested to enter, in the block with its name and address on the Standard Form 33 or similar document, the annotation "DUNS" followed by the DUNS number which identifies the offeror's name and address exactly as stated in the offer.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror, if located within the United States, should call Dun and Bradstreet at 1-800-333-0505. The offeror should be prepared to provide the following information:

- (1) Company name.
- (2) Company address.
- (3) Company telephone number.
- (4) Line of business.
- (5) Chief executive officer/key manager.
- (6) Date the company was started.
- (7) Number of people employed by the company.
- (8) Company affiliation.

(c) Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet Home Page at <http://www.customerservice@dnb.com/>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at globalinfo@dnb.com.

(End of provision)

52.209-4001 BIDDER'S QUALIFICATIONS (APR 1984) FAR 9.105-1

Before a bid is considered for award, the bidder may be requested by the Government to submit a statement regarding his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the work.

52.214-1 SOLICITATION DEFINITIONS--SEALED BIDDING (JUL 1987)

"Government" means United States Government.

"Offer" means "bid" in sealed bidding.

"Solicitation" means an invitation for bids in sealed bidding.

(End of provision)

52.214-3 AMENDMENTS TO INVITATIONS FOR BIDS (DEC 1989)

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date in the space provided for this purpose on the form for submitting a bid, (3) by letter or telegram, or (4) by facsimile, if facsimile bids are authorized in the solicitation. The Government must receive the acknowledgment by the time and at the place specified for receipt of bids.

(End of provision)

52.214-4 FALSE STATEMENTS IN BIDS (APR 1984)

Bidders must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.

(End of provision)

52.214-5 SUBMISSION OF BIDS (MAR 1997)

(a) Bids and bid modifications shall be submitted in sealed envelopes or packages (unless submitted by electronic means) (1) addressed to the office specified in the solicitation, and (2) showing the time and date specified for receipt, the solicitation number, and the name and address of the bidder.

(b) Bidders using commercial carrier services shall ensure that the bid is addressed and marked on the outermost envelope or wrapper as prescribed in subparagraphs (a)(1) and (2) of this provision when delivered to the office specified in the solicitation.

- (c) Telegraphic bids will not be considered unless authorized by the solicitation; however, bids may be modified or withdrawn by written or telegraphic notice.
- (d) Facsimile bids, modifications, or withdrawals, will not be considered unless authorized by the solicitation.
- (e) Bids submitted by electronic commerce shall be considered only if the electronic commerce method was specifically stipulated or permitted by the solicitation.

52.214-6 EXPLANATION TO PROSPECTIVE BIDDERS (APR 1984)

Any prospective bidder desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective bidders before the submission of their bids. Oral explanations or instructions given before the award of a contract will not be binding. Any information given a prospective bidder concerning a solicitation will be furnished promptly to all other prospective bidders as an amendment to the solicitation, if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective bidders.

(End of provision)

52.214-7 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF BIDS (NOV 1999)

- (a) Bidders are responsible for submitting bids, and any modifications or withdrawals, so as to reach the Government office designated in the invitation for bids (IFB) by the time specified in the IFB. If no time is specified in the IFB, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that bids are due.
- (b)(1) Any bid, modification, or withdrawal received at the Government office designated in the IFB after the exact time specified for receipt of bids is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late bid would not unduly delay the acquisition; and--
 - (i) If it was transmitted through an electronic commerce method authorized by the IFB, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of bids; or
 - (ii) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of bids and was under the Government's control prior to the time set for receipt of bids.
- (2) However, a late modification of an otherwise successful bid that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(c) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the bid wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(d) If an emergency or unanticipated event interrupts normal Government processes so that bids cannot be received at the Government office designated for receipt of bids by the exact time specified in the IFB and urgent Government requirements preclude amendment of the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(e) Bids may be withdrawn by written notice received at any time before the exact time set for receipt of bids. If the IFB authorizes facsimile bids, bids may be withdrawn via facsimile received at any time before the exact time set for receipt of bids, subject to the conditions specified in the provision at 52.214-31, Facsimile Bids. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for receipt of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

(End of provision)

52.214-18 PREPARATION OF BIDS--CONSTRUCTION (APR 1984)

(a) Bids must be (1) submitted on the forms furnished by the Government or on copies of those forms, and (2) manually signed. The person signing a bid must initial each erasure or change appearing on any bid form.

(b) The bid form may require bidders to submit bid prices for one or more items on various bases, including--

(1) Lump sum bidding;

(2) Alternate prices;

(3) Units of construction; or

(4) Any combination of subparagraphs (1) through (3) above.

(c) If the solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "no bid" in the space provided for any item on which no price is submitted.

(d) Alternate bids will not be considered unless this solicitation authorizes their submission.

52.214-19 CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION (AUG 1996)

(a) The Government will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the Government, considering only price and the price-related factors specified elsewhere in the solicitation.

(b) The Government may reject any or all bids, and waive informalities or minor irregularities in bids received.

(c) The Government may accept any item or combination of items, unless doing so is precluded by a restrictive limitation in the solicitation or the bid.

(d) The Government may reject a bid as nonresponsive if the prices bid are materially unbalanced between line items or subline items. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the Government even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advance payment.

52.214-34 SUBMISSION OF OFFERS IN THE ENGLISH LANGUAGE (APR 1991)

Offers submitted in response to this solicitation shall be in the English language. Offers received in other than English shall be rejected.

(End of provision)

52.214-35 SUBMISSION OF OFFERS IN U.S. CURRENCY (APR 1991)

Offers submitted in response to this solicitation shall be in terms of U.S. dollars. Offers received in other than U.S. dollars shall be rejected.

(End of provision)

52.214-4001 INQUIRIES - BID INFORMATION

(a) Inquiries:

Any questions regarding this solicitation should be directed to Thomas H. Koopmeiners, Contracting Officer, at telephone number (651) 290-5409 (collect calls not accepted). It is requested that all technical questions on the plans and specifications be submitted to the Contract Specialist by facsimile transmission to (651) 290-5706. You may also email your questions to thomas.h.koopmeiners@mvp02.usace.army.mil.

The Planholder's List and bid results can be found on the St. Paul District web site at <http://www.mvp.usace.army.mil> (click on "Contracting/Bidders Info", then "Electronic Bid Solicitations").

(b) Bid Depository/Bid Opening Information:

Bids must be deposited prior to the date and time set for opening of bids. The bid depository is located in the Contracting Division, 6th Floor, of the St. Paul District, Corps of Engineers Centre, 190 Fifth Street East, St. Paul, Minnesota 55101-1638. A public bid opening will be held at the same location.

52.214-4002 ALL OR NONE QUALIFICATIONS (APR 1984) FAR 14.404-5

A bidder/offeror must quote on all items in this solicitation to be eligible for award. The Government will award on a "All or None" basis. Evaluation of bids/offers will be based, among other factors, upon the total price quoted for all items.

52.214-5000 ARITHMETIC DISCREPANCIES – EFARS

(a) For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of bidding schedule as submitted by the bidder:

- (1) Obviously misplaced decimal points will be corrected;
- (2) Discrepancy between unit price and extended price, the unit price will govern;
- (3) Apparent errors in extension of unit prices will be corrected;
- (4) Apparent errors in addition of lump sum and extended prices will be corrected.

(b) For the purpose of bid evaluation, the government will proceed on the assumption that the bidder intends his bid to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

- (c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.
(End of statement)

52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a firm, fixed price contract resulting from this solicitation.

(End of clause)

52.217-5 EVALUATION OF OPTIONS (JUL 1990)

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

(End of Provision)

52.225-10 NOTICE OF BUY AMERICAN ACT/BALANCE OF PAYMENTS PROGRAM REQUIREMENT--CONSTRUCTION MATERIALS (FEB 2000)

(a) Definitions. Construction material, domestic construction material, and foreign construction material, as used in this provision, are defined in the clause of this solicitation entitled "Buy American Act--Balance of Payments Program--Construction Materials" (Federal Acquisition Regulation (FAR) clause 52.225-9).

(b) Requests for determinations of inapplicability. An offeror requesting a determination regarding the inapplicability of the Buy American Act or Balance of Payments Program should submit the request to the Contracting Officer in time to allow a determination before submission of offers. The offeror shall include the information and applicable supporting data required by paragraphs (c) and (d) of the clause at FAR 52.225-9 in the request. If an offeror has not requested a determination regarding the inapplicability of the Buy American Act or Balance of Payments Program before submitting its offer, or has not received a response to a previous request, the offeror shall include the information and supporting data in the offer.

(c) Evaluation of offers. (1) The Government will evaluate an offer requesting exception to the requirements of the Buy American Act or Balance of Payments Program, based on claimed unreasonable cost of domestic construction material, by adding to the offered price the appropriate percentage of the cost of such foreign construction material, as specified in paragraph (b)(3)(i) of the clause at FAR 52.225-9.

(2) If evaluation results in a tie between an offeror that requested the substitution of foreign construction material based on unreasonable cost and an offeror that did not request an exception, the Contracting Officer will award to the offeror that did not request an exception based on unreasonable cost.

(d) Alternate offers.

(1) When an offer includes foreign construction material not listed by the Government in this solicitation in paragraph (b)(2) of the clause at FAR 52.225-9, the offeror also may submit an alternate offer based on use of equivalent domestic construction material.

(2) If an alternate offer is submitted, the offeror shall submit a separate Standard Form 1442 for the alternate offer, and a separate price comparison table prepared in accordance with paragraphs (c) and (d) of the clause at FAR 52.225-9 for the offer that is based on the use of any foreign construction material for which the Government has not yet determined an exception applies.

(3) If the Government determines that a particular exception requested in accordance with paragraph (c) of the clause at FAR 52.225-9 does not apply, the Government will evaluate only those offers based on use of the equivalent domestic construction material, and the offeror shall be required to furnish such domestic construction material. An offer based on use of the foreign construction material for which an exception was requested--

(i) Will be rejected as nonresponsive if this acquisition is conducted by sealed bidding; or

(ii) May be accepted if revised during negotiations.

(End of provision)

52.233-2 SERVICE OF PROTEST (AUG 1996)

(a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

US Army Corps of Engineers
 St. Paul District
 Thomas H. Koopmeiners, Contracting Officer
 190 5th Street East
 St. Paul, MN 55101-1638

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

52.236-27 SITE VISIT (CONSTRUCTION) (FEB 1995)

(a) The clauses at 52.236-2, Differing Site Conditions, and 52.236-3, Site Investigations and Conditions Affecting the Work, will be included in any contract awarded as a result of this solicitation. Accordingly, offerors or quoters are urged and expected to inspect the site where the work will be performed.

(b) Site visits may be arranged during normal duty hours by contacting: Not Applicable.

52.236-4002 WORK PERFORMED BY THE CONTRACTOR

The successful bidder must furnish the Contracting Officer within 10 days after the award, the items of work which he will perform with his own forces, the percentage of the total work this represents, and the estimated cost thereof. (See Section 00700, clause entitled "Limitations on Subcontracting").

52.236-4005 UNAVAILABILITY OF UTILITY SERVICES

The responsibility shall be upon the Contractor to provide and maintain at its expense, adequate utilities for its use for construction and domestic consumption, and to install and maintain necessary connections and lines for same, but only at such locations and in such manner as may be approved by the Contracting Officer. Before final acceptance, temporary connections and lines installed by the Contractor shall be removed in a manner satisfactory to the Contracting Officer.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov>

52.252-5 AUTHORIZED DEVIATIONS IN PROVISIONS (APR 1984)

(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the provision.

(b) The use in this solicitation of any FAR (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

SECTION 00600 Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

***52.203-2 CERTIFICATE OF INDEPENDENT PRICE DETERMINATION
(APR 1985)***

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to (i) those prices, (ii) the intention to submit an offer, or (iii) the methods of factors used to calculate the prices offered;

(2) The prices in this offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other offeror or competitor before bid opening (in the case of a sealed bid solicitation) or contract award (in the case of a negotiated solicitation) unless otherwise required by law; and

(3) No attempt has been made or will be made by the offeror to induce any other concern to submit or not to submit an offer for the purpose of restricting competition.

(b) Each signature on the offer is considered to be a certification by the signatory that the signatory --

(1) Is the person in the offeror's organization responsible for determining the prices offered in this bid or proposal, and that the signatory has not participated and will not participate in any action contradictory to subparagraphs (a)(1) through (a)(3) above; or

(2) (i) Has been authorized, in writing, to act as an agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs (a)(1) through (a)(3) above _____ (insert full name of person(s) in the offeror's organization responsible for determining the prices offered in this bid or proposal, and the title of his or her position in the offeror's organization);

(ii) As an authorized agent, does certify that the principals named in subdivision (b)(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above; and

(iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs (a)(1) through (a)(3) above.

(c) If the offeror deletes or modifies subparagraph (a)(2) above, the offeror must furnish with its offer a signed statement setting forth in detail the circumstances of the disclosure.

(End of clause)

**52.203-11 CERTIFICATION AND DISCLOSURE REGARDING
PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR
1991)**

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

**52.209-5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS
(APR 2001)**

(a)(1) The Offeror certifies, to the best of its knowledge and belief, that--

(i) The Offeror and/or any of its Principals --

(A) Are () are not () presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to

obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(D) of this provision.

(ii) The Offeror has () has not (), within a three-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(D) Have () have not (), within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(E) Are () are not () presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

THIS CERTIFICATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT CERTIFICATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(e) The certification in paragraph (a) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

(End of provision)

52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2001) ALTERNATE I (OCT 2000) & ALTERNATE II (OCT 2000)

- (a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 234990.
- (2) The small business size standard is \$17.0 Million.
- (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) Representations. (1) The offeror represents as part of its offer that it is, is not a small business concern.
- (2) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents, for general statistical purposes, that it is, is not a small disadvantaged business concern as defined in 13 CFR 124.1002.
- (3) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it is, is not a women-owned small business concern.
- (4) (Complete only if the offeror represented itself as a small business concern in paragraph (b)(1) of this provision.) The offeror represents as part of its offer that it is, is not a veteran-owned small business concern.
- (5) (Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (b)(4) of this provision.) The offeror represents as part of its offer that it is, is not a service-disabled veteran-owned small business concern.
- (6) (Complete only if offeror represented itself as small business concern in paragraph (b)(1) of this provision). The offeror represents, as part of its offer, that--
- (i) It is, is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material change in ownership and control, principal office, or HUBZone employee percentage has occurred since it was certified by the Small Business Administration in accordance with 13 CFR Part 126; and
- (ii) It is, is not a joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (b)(6)(i) of this provision is accurate for the HUBZone small business concern or concerns that are participating in the joint venture. (The offeror shall enter the name or names of the HUBZone small business concern or concerns that are participating in the joint venture: _____.) Each HUBZone small business concern participating in the joint venture shall submit a separate signed copy of the HUBZone representation.
- (7) (Complete if offeror represented itself as disadvantaged in paragraph (b)(2) of this provision.) The offeror shall check the category in which its ownership falls:
- Black American.
- Hispanic American.
- Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

() Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

() Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

(c) Definitions. As used in this provision--

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern --

(1) That is at least 51 percent owned by one or more women; in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Notice.

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small, HUBZone small, small disadvantaged, or women-owned small business concern in order to obtain a contract to be awarded under the preference programs established pursuant to section 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

(End of provision)

52.219-2 *EQUAL LOW BIDS. (OCT 1995)*

- (a) This provision applies to small business concerns only.
- (b) The bidder's status as a labor surplus area (LSA) concern may affect entitlement to award in case of tie bids. If the bidder wishes to be considered for this priority, the bidder must identify, in the following space, the LSA in which the costs to be incurred on account of manufacturing or production (by the bidder or the first-tier subcontractors) amount to more than 50 percent of the contract price.

- (c) Failure to identify the labor surplus area as specified in paragraph (b) of this provision will preclude the bidder from receiving priority consideration. If the bidder is awarded a contract as a result of receiving priority consideration under this provision and would not have otherwise received award, the bidder shall perform the contract or cause the contract to be performed in accordance with the obligations of an LSA concern.

52.222-22 *PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FEB 1999)*

The offeror represents that --

- (a) It has, has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation;
- (b) It has, has not, filed all required compliance reports; and
- (c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

(End of provision)

52.223-13 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

(i) The facility does not manufacture, process or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) The facility does not have 10 or more full-time employees as specified in section 313.(b)(1)(A) of EPCRA 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and the government of a terrorist country, as well as any political subdivision, agency, or instrumentality thereof.

(2) "Terrorist country" means a country determined by the Secretary of State, under section 6(j)(1)(A) of the Export

Administration Act of 1979 (50 U.S.C. App. 2405(j)(i)(A)), to be a country the government of which has repeatedly provided support for such acts of international terrorism. As of the date of this provision, terrorist countries include: Cuba, Iran, Iraq, Libya, North Korea, Sudan, and Syria.

(3) "Significant interest" means --

(i) Ownership of or beneficial interest in 5 percent or more of the firm's or subsidiary's securities. Beneficial interest includes holding 5 percent or more of any class of the firm's securities in "nominee shares," "street names," or some other method of holding securities that does not disclose the beneficial owner;

(ii) Holding a management position in the firm, such as a director or officer;

(iii) Ability to control or influence the election, appointment, or tenure of directors or officers in the firm;

(iv) Ownership of 10 percent or more of the assets of a firm such as equipment, buildings, real estate, or other tangible assets of the firm; or

(v) Holding 50 percent or more of the indebtedness of a firm.

(b) "Prohibition on award."

In accordance with 10 U.S.C. 2327, no contract may be awarded to a firm or a subsidiary of a firm if the government of a terrorist country has a significant interest in the firm or subsidiary or, in the case of a subsidiary, the firm that owns the subsidiary, unless a waiver is granted by the Secretary of Defense.

(c) "Disclosure."

If the government of a terrorist country has a significant interest in the Offeror or a subsidiary of the Offeror, the Offeror shall disclose such interest in an attachment to its offer. If the Offeror is a subsidiary, it shall also disclose any significant interest the government of a terrorist country has in any firm that owns or controls the subsidiary. The disclosure shall include --

(1) Identification of each government holding a significant interest; and

(2) A description of the significant interest held by each government.

(End of provision)

252.247-7022 REPRESENTATION OF EXTENT OF TRANSPORTATION BY SEA (AUG 1992)

(a) The Offeror shall indicate by checking the appropriate blank in paragraph (b) of this provision whether transportation of supplies by sea is anticipated under the resultant contract. The term supplies is defined in the Transportation of Supplies by Sea clause of this solicitation.

(b) Representation. The Offeror represents that it:

___ (1) Does anticipate that supplies will be transported by sea in the performance of any contract or subcontract resulting from this solicitation.

___ (2) Does not anticipate that supplies will be transported by sea in the performance of any contract or

subcontract resulting from this solicitation.

(c) Any contract resulting from this solicitation will include the Transportation of Supplies by Sea clause. If the Offeror represents that it will not use ocean transportation, the resulting contract will also include the Defense FAR Supplement clause at 252.247-7024, Notification of Transportation of Supplies by Sea.

(End of provision)

SECTION 00700 Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (MAY 2001) --ALTERNATE I (MAY 2001)

(a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.

(b) "Commercial component" means any component that is a commercial item.

(c) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

(d) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).

(e) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(f) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.

(End of clause)

52.202-4001DEFINITIONS (MAY 1995) EFARS Part 2.101

"Chief of Contracting Office" means the Chief of the Contracting Division at a District, or the Director of Contracting at a Division, Center, Laboratory, or other support activity.

"Command" means each USACE Division, each USACE District, The U.S. Army Engineering and Support Center (HNC), Transatlantic Programs Center (TAC), Transatlantic Programs Center (Europe) (TAE), Topographic Engineer Center (TEC), Cold Regions Research and Engineering Laboratory (CRREL), Construction Engineering

Research Laboratory (CERL), Humphreys Engineering Center Support Activity (HECSA), and Waterways experiment Station (WES).

"Commander" means the commanding officer of each USACE district and each USACE division, and the director or commander of HNC, TAC, TAE, ETL, CRREL, CERL, HECSA and WES.

"Head of Contracting Activity (HCA)" for USACE means the Chief of Engineers.

Centers. For determining contracting authority levels for this regulation, Centers (HNC, and TAC) will equate to a Division. As a subordinate unit to TAC, TAE's contracting authority will therefore equate to that of a district.

Level higher than the contracting officer. When a District or TAE chief of contracting is the contracting officer, a "level higher than the contracting officer" means the Division or Center Director of Contracting. When an operating Division, Center or Laboratory Director/Chief of Contracting is the contracting officer a "level higher than the contracting officer" means the PARC.

Local Cooperation Agreements (LCAs). See Project Cooperation Agreements.

Project Cooperation Agreements. Formerly referred to as Local Cooperation Agreements, these are agreements under 31 U.S.C. 6305 and 42 U.S.C. 1962d-5b. They are not contracts as defined by the FAR.

"USACE and HQUSACE" means the United States Army Corps of Engineers and its headquarters, respectively.

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996

(Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit

specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

- (1) The awarding of any Federal contract.
- (2) The making of any Federal grant.
- (3) The making of any Federal loan.
- (4) The entering into of any cooperative agreement.
- (5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a

special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
- (3) A special Government employee, as defined in section 202, title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person

for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or

pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

Printed or copied double-sided means printing or reproducing a document so that information is on both sides of a sheet of paper.

Recovered material, for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as --

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting

from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-18 VARIATION IN ESTIMATED QUANTITY (APR 1984)

If the quantity of a unit-priced item in this contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above 115 percent or below 85 percent of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the Contractor may request, in writing, an extension of time, to be received by the Contracting Officer within 10 days from the beginning of the delay, or within such further period as may be granted by the Contracting Officer before the date of final settlement of the contract. Upon the receipt of a written request for an extension, the Contracting Officer shall ascertain the facts and make an adjustment for extending the completion date as, in the judgement of the Contracting Officer, is justified.

52.214-26 AUDIT AND RECORDS--SEALED BIDDING. (OCT 1997)

(a) As used in this clause, records includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with the pricing of any modification to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

- (1) The proposal for the modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the modification; or
- (4) Performance of the modification.

(c) Comptroller General. In the case of pricing any modification, the Comptroller General of the United States, or an authorized representative, shall have the same rights as specified in paragraph (b) of this clause.

(d) Availability. The Contractor shall make available at its office at all reasonable times the materials described in reproduction, until 3 years after final payment under this contract, or for any other period specified in Subpart 4.7 of the Federal Acquisition Regulation (FAR). FAR Subpart 4.7, Contractor Records Retention, in effect on the date of this contract, is incorporated by reference in its entirety and made a part of this contract.

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement.

(2) Records pertaining to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to the performance of this contract shall be made available until disposition of such appeals, litigation, or claims.

(e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (e), in all subcontracts expected to exceed the threshold in FAR 15.403-4(a)(1) for submission of cost or pricing data.

52.214-27 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA - MODIFICATIONS - SEALED BIDDING. (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for the submission of cost or pricing data at FAR 15.403-4(a)(1), except that this clause does not apply to a modification if an exception under FAR 15.403-1(b) applies.

(1) Based on adequate price competition;

(2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(3) Set by law or regulation.

(b) If any price, including profit, negotiated in connection with any modification under this clause, was increased by any significant amount because

(1) the Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) any of these parties furnished data of any description that were not accurate, the price shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) above.

(c) Any reduction in the contract price under paragraph (b) above due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which:

(1) the actual subcontract; or

(2) the actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made:

(1) the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted;

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer;

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract; or

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2) Except as prohibited by subdivision (d)(2)(ii) of this clause:

(i) an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if:

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.

(ii) An offset shall not be allowed if:

(A) The understated data was known by the Contractor to be understated when the Certificate of Current Cost or Pricing Data was signed; or (B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid:

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

(2) A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data which were incomplete, inaccurate, or noncurrent.

**52.214-28 SUBCONTRACTOR COST OR PRICING DATA -
MODIFICATIONS - SEALED BIDDING. (OCT 1997)**

(a) The requirements of paragraphs (b) and (c) of this clause shall:

(1) become operative only for any modification to this contract involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at (FAR) 48 CFR 15.403-4(a)(1); and

(2) be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modifications involving aggregate increases and/or decreases in costs, plus applicable profits, expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1), the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1(b) applies.

(1) Based on adequate price competition;

(2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(3) Set by law or regulation.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in subsection 15.406-2 of the Federal Acquisition Regulation that, to the best of its knowledge and belief, the data submitted under paragraph (b) above were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(d) The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that, when entered into, exceeds the threshold for submission of cost or pricing data at FAR 15.403-4(a)(1).

52.214-29 ORDER OF PRECEDENCE--SEALED BIDDING (JAN 1986)

Any inconsistency in this solicitation or contract shall be resolved by giving precedence in the following order: (a) the Schedule (excluding the specifications); (b) representations and other instructions; (c) contract clauses; (d) other documents, exhibits, and attachments; and (e) the specifications.

(End of clause)

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996)

(a) Definition.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(c) Agreement. A small business concern submitting an offer in its own name agrees to furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States. The term "United States" includes its territories and possessions, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

- (1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;
- (2) No material change in disadvantaged ownership and control has occurred since its certification;
- (3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and
- (4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

- (1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.
- (d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

- (a) This clause does not apply to the unrestricted portion of a partial set-aside.
- (b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for--
 - (1) Services (except construction). At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.
 - (2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.
 - (3) General construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.
 - (4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract,

not including the cost of materials, with its own employees.

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice, including all relevant information, to the Contracting Officer.

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if-

- (a)(1) The worker is paid or is in an approved work training program on a voluntary basis;
 - (2) Representatives of local union central bodies or similar labor union organizations have been consulted;
 - (3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and
 - (4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
- (b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

(a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.

(b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding \$100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is

attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis -Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis -Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide

fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis -Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis -Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis -Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis -Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis -Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable

apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988))

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis -Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis -Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis -Bacon Act, Contract Work Hours and Safety Standards Act-- Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis -Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis -Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis -Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis -Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Goals for minority participation for each trade	Goals for female participation for each trade
0.5%	6.9%

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is **Clayton County, Iowa**.

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the

notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct

review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the

Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a)) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

Appropriate office of the State employment service system means the local office of the Federal-State national system of public employment offices with assigned responsibility to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans' status in all employment practices such as --

(i) Employment;

(ii) Upgrading;

(iii) Demotion or transfer;

(iv) Recruitment;

(v) Advertising;

(vi) Layoff or termination;

(vii) Rates of pay or other forms of compensation; and

(viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.

(3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

- (iii) Rates of pay or any other form of compensation and changes in compensation;
 - (iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
 - (v) Leaves of absence, sick leave, or any other leave;
 - (vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;
 - (vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
 - (viii) Activities sponsored by the Contractor, including social or recreational programs; and
 - (ix) Any other term, condition, or privilege of employment.
- (2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.
- (b) Postings. (1) The Contractor agrees to post employment notices stating--
- (i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and
 - (ii) The rights of applicants and employees.
- (2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.
- (3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.
- (c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.
- (d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

***52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND
VETERANS OF THE VIETNAM ERA (JAN 1999)***

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (APR 1998)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to determine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-9 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM—CONSTRUCTION MATERIALS (FEB 2000)

(a) Definitions. As used in this clause--

Component means any article, material, or supply incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows: None.

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

(i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent. For determination of unreasonable cost under the Balance of Payments Program, the Contracting Officer will use a factor of 50 percent;

(ii) The application of the restriction of the Buy American Act or Balance of Payments Program to a particular construction material would be impracticable or inconsistent with the public interest; or

(iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act or Balance of Payments Program. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

(A) A description of the foreign and domestic construction materials;

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act or Balance of Payments Program applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

Construction material description	Unit of measure	Quantity	Price (dollars) \1\
-----------------------------------	-----------------	----------	---------------------

Item 1

Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....

Item 2

Foreign construction material....	.....	.....	.....
Domestic construction material...	.....	.....	.....

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUL 2000)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitute not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW., MS 2626-MIB, Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of a cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee prime contract.

(iii) The target cost and ceiling price of a fixed-price incentive prime contract.

(iv) The price of a firm-fixed-price prime contract.

(3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified

acquisition threshold, does not affect this authorization and consent.)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101 to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

52.228-1 BID GUARANTEE (SEP 1996)

(a) Failure to furnish a bid guarantee in the proper form and amount, by the time set for opening of bids, may be cause for rejection of the bid.

(b) The bidder shall furnish a bid guarantee in the form of a firm commitment, e.g., bid bond supported by good and sufficient surety or sureties acceptable to the Government, postal money order, certified check, cashier's check, irrevocable letter of credit, or, under Treasury Department regulations, certain bonds or notes of the United States. The Contracting Officer will return bid guarantees, other than bid bonds, (1) to unsuccessful bidders as soon as

practicable after the opening of bids, and (2) to the successful bidder upon execution of contractual documents and bonds (including any necessary coinsurance or reinsurance agreements), as required by the bid as accepted.

(c) The amount of the bid guarantee shall be 20 percent of the bid price or \$3 Million, whichever is less.

(d) If the successful bidder, upon acceptance of its bid by the Government within the period specified for acceptance, fails to execute all contractual documents or furnish executed bond(s) within 10 days after receipt of the forms by the bidder, the Contracting Officer may terminate the contract for default.

(e) In the event the contract is terminated for default, the bidder is liable for any cost of acquiring the work that exceeds the amount of its bid, and the bid guarantee is available to offset the difference.

52.228-2 *ADDITIONAL BOND SECURITY (OCT 1997)*

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

(c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or

(d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

52.228-5 *INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)*

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____ (for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up

to United States \$ _____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. \$ _____ and

expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States \$ _____.

This draft is drawn under Irrevocable Letter of Credit No. _____.

[Beneficiary Agency]

By: _____

(End of clause)

**52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION
(JUL 2000)-**

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a

modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

**52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION
CONTRACTS (MAY 1997)**

- (a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.
- (b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.
- (1) The Contractor's request for progress payments shall include the following substantiation:
- (i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.
 - (ii) A listing of the amount included for work performed by each subcontractor under the contract.
 - (iii) A listing of the total amount of each subcontract under the contract.
 - (iv) A listing of the amounts previously paid to each such subcontractor under the contract.
 - (v) Additional supporting data in a form and detail required by the Contracting Officer.
- (2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--
- (i) Consideration is specifically authorized by this contract; and
 - (ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.
- (c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;
- (3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and
- (4) This certification is not to be construed as final acceptance of a subcontractor's performance.

(Name)

(Title)

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as --

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91 -day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the Federal Acquisition Regulation in effect on the date of this contract.

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (MAY 2001)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101 and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project:

(A) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date shall be the 14th day after the date of the Contractor's payment request, provided a proper payment request is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract or, if not specified, 30 days after approval for release to the Contractor by the Contracting Officer.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated

separately in the contract):

(A) The due date for making such payments shall be either the 30th day after receipt by the designated billing office of a proper invoice from the Contractor, or the 30th day after Government acceptance of the work or services completed by the Contractor, whichever is later. If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) On a final invoice where the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(2)(i) through (a)(2)(ix) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice, with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(4) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., prompt payment discount terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) For payments described in subdivision (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Any other information or documentation required by the contract.

(x) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(3) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no

disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(2) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in subdivision (a)(1)(ii) of this clause, Government acceptance or approval shall be deemed to have occurred constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. In the event that actual acceptance or approval occurs within the constructive acceptance or approval period, the determination of an interest penalty shall be based on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days.

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(5) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(6) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(6)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(4)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(6)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the [insert day as prescribed by Agency head; if not prescribed, insert 30th day] day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled

to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to include a payment clause and an interest penalty clause conforming to the standards set forth in subparagraphs (c)(1) and (c)(2) of this clause in each of its subcontracts, and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) A copy of any notice issued by a Contractor pursuant to subdivision (d)(3)(i) of this clause has been furnished to the Contracting Officer.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment

request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to subparagraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under subparagraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under subdivision (e)(5)(i) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under subparagraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under subdivision (e)(5)(i) of this clause.

(f) Third-party deficiency reports. (1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under subparagraph (e)(6) of this clause--

- (i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and
- (ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under subdivision (f)(1)(i) of this clause.
- (2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--
- (i) Pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor; or
- (ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (g) Written notice of subcontractor withholding. A written notice of any withholding shall be issued to a subcontractor (with a copy to the Contracting Officer of any such notice issued by the Contractor), specifying--
- (1) The amount to be withheld;
- (2) The specific causes for the withholding under the terms of the subcontract; and
- (3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.
- (h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.
- (i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the United States is a party. The United States may not be interpleaded in any judicial or administrative proceeding involving such a dispute.
- (j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.
- (k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the United States for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

(i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or

(ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.233-1 DISPUTES. (DEC 1998)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative dispute resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 *PROTEST AFTER AWARD (AUG. 1996)*

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the

Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

(f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-2 *DIFFERING SITE CONDITIONS (APR 1984)*

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

52.236-16 QUANTITY SURVEYS (APR 1984) - ALTERNATE I (APR 1984)

(a) Quantity surveys shall be conducted, and the data derived from these surveys shall be used in computing the quantities of work performed and the actual construction completed and in place.

(b) The Contractor shall conduct the original and final surveys and surveys for any periods for which progress payments are requested. All these surveys shall be conducted under the direction of a representative of the Contracting Officer, unless the Contracting Officer waives this requirement in a specific instance. The Government shall make such computations as are necessary to determine the quantities of work performed or finally in place. The Contractor shall make the computations based on the surveys for any periods for which progress payments are requested.

(c) Promptly upon completing a survey, the Contractor shall furnish the originals of all field notes and all other records relating to the survey or to the layout of the work to the Contracting Officer, who shall use them as necessary to determine the amount of progress payments. The

Contractor shall retain copies of all such material furnished to the Contracting Officer.

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION (FEB 1997)

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time

such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

52.236-26 *PRECONSTRUCTION CONFERENCE (FEB 1995)*

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

52.242-13 *BANKRUPTCY (JUL 1995)*

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 *SUSPENSION OF WORK (APR 1984)*

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

52.243-4 *CHANGES (AUG 1987)*

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes --

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the Government-furnished facilities, equipment, materials, services, or site; or

(4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

52.244-2 SUBCONTRACTS (AUG 1998)

(a) Definitions. As used in this clause--

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time -and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

n/a

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting--

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

n/a

(End of clause)

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (MAY 2001)

(a) Definitions. As used this clause--

"Commercial item", has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)(1) The following clauses shall be flowed down to subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$500,000 (\$1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (FEB 1999) (E.O. 11246).

(iii) 52.222-35, Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era (APR 1998) (38 U.S.C. 4212(a)).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

(v) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (JUN 2000) (46 U.S.C. Appx 1241) (flowdown not required for subcontracts awarded beginning May 1, 1996).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes

reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.246-21 WARRANTY OF CONSTRUCTION (MAR 1994)

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (i) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If the Government takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date the Government takes possession.

(c) The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of--

(1) The Contractor's failure to conform to contract requirements; or

(2) Any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

(e) The Contracting Officer shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall--

(1) Obtain all warranties that would be given in normal commercial practice;

(2) Require all warranties to be executed, in writing, for the benefit of the Government, if directed by the Contracting Officer; and

(3) Enforce all warranties for the benefit of the Government, if directed by the Contracting Officer.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the Government may bring suit at its expense to enforce a subcontractor's, manufacturer's, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the Government nor for the repair of any damage that results from any defect in Government-furnished material or design.

(j) This warranty shall not limit the Government's rights under the Inspection and Acceptance clause of this contract with respect to latent defects, gross mistakes, or fraud.

(End of clause)

52.246-4001 LABORATORY AND TESTING FACILITIES

The Contractor shall provide and maintain all measuring and testing devices, laboratory equipment, instruments, transportation, and supplies necessary to accomplish the required testing. All measuring and testing devices shall be calibrated at established intervals against certified standards. The Contractor's measuring and testing equipment shall be made available for use by the Government for verification of their accuracy and condition as well as for any inspection or test desired pursuant to SECTION 00700: INSPECTION OF CONSTRUCTION. The location of the laboratory shall be convenient to the site such that test results are available prior to proceeding with the next sequential phase of the work.

52.247-34 F.O.B. DESTINATION (NOV 1991)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located; and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If a rail carrier is used, supplies shall be

delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight." When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the contractor uses rail carrier or freight forwarded for less than carload shipments, the contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

- (1)(i) Pack and mark the shipment to comply with contract specifications; or
- (ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;
- (2) Prepare and distribute commercial bills of lading;
- (3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;
- (4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;
- (5) Furnish a delivery schedule and designate the mode of delivering carrier; and
- (6) Pay and bear all charges to the specified point of delivery.

**52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000) -
ALTERNATE I (APR 1984)**

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for (i) the affected portions of the existing contract requirement and (ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action. (1) The Contracting Officer shall notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer shall notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

(2) If the VECP is not accepted, the Contracting Officer shall notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

(3) Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing.

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by (i) 45 percent for fixed-price contracts or (ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(h) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering--Construction clause of contract , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations."

If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(j) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer will be the sole determiner of the amount of collateral savings.

(End of clause)

**52.249-2 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT
(FIXED-PRICE) (SEP 1996) - ALTERNATE I (SEP 1996)**

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination

inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the

Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

(v) floods,

(vi) epidemics,

(vii) quarantine restrictions,

(viii) strikes,

(ix) freight embargoes,

(x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov>

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any FAR (48 CFR 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) “Arising out of a contract with the DoD” means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) “Conviction of fraud or any other felony” means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) “Date of conviction” means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

- (1) The person involved;
- (2) The nature of the conviction and resultant sentence or punishment imposed;
- (3) The reasons for the requested waiver; and
- (4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.204-7004 REQUIRED CENTRAL CONTRACTOR REGISTRATION.(MAR 2000)

(a) Definitions.

As used in this clause--

(1) Central Contractor Registration (CCR) database means the primary DoD repository for contractor information required for the conduct of business with DoD.

(2) Data Universal Numbering System (DUNS) number means the 9-digit number assigned by Dun and Bradstreet Information Services to identify unique business entities.

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

(4) Registered in the CCR database means that all mandatory information, including the DUNS number or the DUNS+4 number, if applicable, and the corresponding Commercial and Government Entity (CAGE) code, is in the CCR database; the DUNS number and the CAGE code have been validated; and all edits have been successfully completed.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee must be registered in the CCR database prior to award, during performance, and through final payment of any contract resulting from this solicitation, except for awards to foreign vendors for work to be performed outside the United States.

(2) The offeror shall provide its DUNS or, if applicable, its DUNS+4 number with its offer, which will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(3) Lack of registration in the CCR database will make an offeror ineligible for award.

(4) DoD has established a goal of registering an applicant in the CCR database within 48 hours after receipt of a complete and accurate application via the Internet. However, registration of an applicant submitting an application through a method other than the Internet may take up to 30 days. Therefore, offerors that are not registered should consider applying for registration immediately upon receipt of this solicitation.

(c) The Contractor is responsible for the accuracy and completeness of the data within the CCR, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to confirm on an annual basis that its information in the CCR database is accurate and complete.

(d) Offerors and contractors may obtain information on registration and annual confirmation requirements by calling 1-888-227-2423, or via the Internet at <http://www.ccr2000.com>.

(End of clause)

252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)

(a) Definition.

"Cooperative agreement holder" means a State or local government; a private, nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (Pub. L. 93-268; 25 U.S.C. 450 (c))); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (Pub. L. 93-362; 25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Defense Logistics Agency to furnish procurement technical assistance to business entities.

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

252.209-7000 ACQUISITION FROM SUBCONTRACTORS SUBJECT TO ONSITE INSPECTION UNDER THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY (NOV 1995)

(a) The Contractor shall not deny consideration for a subcontract award under this contract to a potential subcontractor subject to on-site inspection under the INF Treaty, or a similar treaty, solely or in part because of the actual or potential presence of Soviet inspectors at the subcontractor's facility, unless the decision is approved by the Contracting Officer.

(b) The Contractor shall incorporate this clause, including this paragraph (b), in all solicitations and contracts exceeding the simplified acquisition threshold in part 13 of the Federal Acquisition Regulation, except those for commercial items.

252.209-7003 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (MAR 1998)

By submission of its offer, the offeror represents that, if it is subject to the reporting requirements of 37 U.S.C. 4212(d) (i.e., the VETS-100 report required by Federal Acquisition Regulation clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era), it has submitted the most recent report required by 38 U.S.C. 4212(d).

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed

subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS

MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

(1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

(2) "Toxic or hazardous materials" means:

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

252.225-7012 PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (AUG 2000)

(a) The Contractor agrees to deliver under this contract only such of the following articles that have been grown, reprocessed, reused, or produced in the United States, its possessions, or Puerto Rico --

(1) Food;

(2) Clothing;

(3) Tents, tarpaulins, or covers;

(4) Cotton and other natural fiber products;

- (5) Woven silk or woven silk blends;
 - (6) Spun silk yarn for cartridge cloth;
 - (7) Synthetic fabric, and coated synthetic fabric, including all textile fibers and yarns that are for use in such fabrics;
 - (8) Canvas products;
 - (9) Wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles); or
 - (10) Any item of individual equipment (Federal supply Classification 8465) manufactured from or containing such fibers, yarns, fabrics, or materials.
- (b) This clause does not apply --
- (1) To supplies listed in FAR section 25.104(a), or other supplies for which the Government has determined that a satisfactory quality and sufficient quantity cannot be acquired as and when needed at U.S. market prices;
 - (2) To foods which have been manufactured or processed in the United States, its possessions, or Puerto Rico;
 - (3) To chemical warfare protective clothing produced in the countries listed in subsection 225.872-1 of the Defense FAR Supplement; or
 - (4) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--
 - (i) The fabric is to be used as a component of an end item that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--
 - (a) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);
 - (B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;
 - (C) Upholstered seats (whether for household, office, or other use); and
 - (D) Parachutes (Federal Supply Class 1670); or
 - (ii) The fibers and yarns are para-aramid fibers and yarns manufactured in the Netherlands.
- (End of clause)

252.225-7031 SECONDARY ARAB BOYCOTT OF ISRAEL (JUN 1992)

- (a) Definitions. As used in this clause--
- (1) "Foreign person" means any person other than a United States person as defined in Section 16(2) of the Export Administration Act of 1979 (50 U.S.C. App. Sec 2415).
 - (2) "United States person" is defined in Section 16(2) of the Export Administration Act of 1979 and means any United States resident or national (other than an individual resident outside the United States and employed by other

than a United States person), any domestic concern (including any permanent domestic establishment of any foreign concern), and any foreign subsidiary or affiliate (including any permanent foreign establishment) of any domestic concern which is controlled in fact by such domestic concerns, as determined under regulations of the President.

(b) Certification. By submitting this offer, the Offeror, if a foreign person, company or entity, certifies that it--

(1) Does not comply with the Secondary Arab Boycott of Israel; and

(2) Is not taking or knowingly agreeing to take any action, with respect to the Secondary Boycott of Israel by Arab countries, which 50 U.S.C. App. Sec 2407(a) prohibits a United States person from taking.

(End of clause)

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

**252.236-7001 CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS
(AUG 2000)**

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

- (1) Check all drawings furnished immediately upon receipt;
- (2) Compare all drawings and verify the figures before laying out the work;
- (3) Promptly notify the Contracting Officer of any discrepancies;
- (4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and
- (5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

- (1) Large-scale drawings shall govern small-scale drawings; and
- (2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

(d) Omissions from the drawings or specifications or the misdescription of details of work that are manifestly necessary to carry out the intent of the drawings and specifications, or that are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed details of the work. The Contractor shall perform such details as if fully and correctly set forth and described in the drawings and specifications.

(e) The work shall conform to the specifications and the contract drawings identified on the following index of drawings:

Title	File	Drawing No.
-------	------	-------------

See Contract Drawing Index shown on Drawing No. M -P10-00/003 entitled "Drawing Schedule and Legend".

(End of clause)

**252.236-7002 OBSTRUCTION OF NAVIGABLE WATERWAYS. (DEC
1991)**

(a) The Contractor shall --

(1) Promptly recover and remove any material, plant, machinery, or appliance which the contractor loses, dumps, throws overboard, sinks, or misplaces, and which, in the opinion of the Contracting Officer, may be dangerous to or obstruct navigation;

(2) Give immediate notice, with description and locations of any such obstructions, to the Contracting Officer; and

(3) When required by the Contracting Officer, mark or buoy such obstructions until the same are removed.

(b) The Contracting Officer may --

(1) Remove the obstructions by contract or otherwise should the Contractor refuse, neglect, or delay compliance with paragraph (a) of this clause; and

(2) Deduct the cost of removal from any monies due or to become due to the Contractor; or

(3) Recover the cost of removal under the Contractor's bond.

(c) The Contractor's liability for the removal of a vessel wrecked or sunk without fault or negligence is limited to that provided in sections 15, 19, and 20 of the River and Harbor Act of March 3, 1899 (33 U.S.C. 410 et. seq.).

252.236-7004 PAYMENT FOR MOBILIZATION AND DEMOBILIZATION. (DEC 1991)

(a) The Government will pay all costs for the mobilization and demobilization of all of the Contractor's plant and equipment at the contract lump sum price for this item.

(1) 60 percent of the lump sum price upon completion of the contractor's mobilization at the work site.

(2) The remaining 40 percent upon completion of demobilization.

(b) The Contracting Officer may require the Contractor to furnish cost data to justify this portion of the bid if the Contracting Officer believes that the percentages in paragraphs (a) (1) and (2) of this clause do not bear a reasonable relation to the cost of the work in this contract.

(1) Failure to justify such price to the satisfaction of the Contracting Officer will result in payment, as determined by the Contracting Officer, of --

(i) Actual mobilization costs at completion of mobilization;

(ii) Actual demobilization costs at completion of demobilization; and

(iii) The remainder of this item in the final payment under this contract.

(2) The Contracting Officer's determination of the actual costs in paragraph (b)(1) of this clause is not subject to appeal.

252.236-7008 CONTRACT PRICES - BIDDING SCHEDULES. (DEC 1991)

(a) The Government's payment for the items listed in the Bidding Schedule shall constitute full compensation to the Contractor for --

- (1) Furnishing all plant, labor, equipment, appliances, and materials; and
- (2) Performing all operations required to complete the work in conformity with the drawings and specifications.

(b) The Contractor shall include in the prices for the items listed in the Bidding Schedule all costs for work in the specifications, whether or not specifically listed in the Bidding Schedule.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

 (Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

252.247-7023 *TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)*

(a) Definitions. As used in this clause --

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information --

- (1) Prime contract number;
 - (2) Name of vessel;
 - (3) Vessel flag of registry;
 - (4) Date of loading;
 - (5) Port of loading;
 - (6) Port of final discharge;
 - (7) Description of commodity;
 - (8) Gross weight in pounds and cubic feet if available;
 - (9) Total ocean freight in U.S. dollars; and
 - (10) Name of the steamship company.
- (f) The Contractor agrees to provide with its final invoice under this contract a representation that to the best of its knowledge and belief --
- (1) No ocean transportation was used in the performance of this contract;
 - (2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;
 - (3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM DESCRIPTION	CONTRACT LINE ITEMS	QUANTITY
_____	_____	_____
_____	_____	_____
_____	_____	_____
TOTAL		_____

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) The Contractor shall include this clause, including this paragraph (h), in all subcontractors under this contract that--

- (1) Exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation; and
- (2) Are for a type of supplies described in paragraph (b)(3) of this clause.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

- (1) Shall notify the Contracting Officer of that fact; and
- (2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

- (1) In all subcontracts under this contract, if this contract is a construction contract; or
- (2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

- (i) Noncommercial items; or
- (ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

252.248-7000 PREPARATION OF VALUE ENGINEERING CHANGE PROPOSALS (MAY 1994)

Prepare value engineering change proposals, for submission pursuant to the value engineering clause of this contract, in the format prescribed by the version of MIL-STD-973 in effect on the date of contract award.

(End of clause)

SECTION 00800 Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

52.000-4004PARTNERING

The Government proposes to form a partnering relationship with the contractor. This partnering relationship will strive to facilitate communication and draw on the strengths of each organization in an effort to achieve a quality project, within budget, and on schedule. Participation will be totally voluntary. Partnering will not alter or supersede any provision of this contract nor will it provide either party with any additional contractual rights or obligations. Participation in partnering will not affect award of this contract. Any cost associated with this partnering will be agreed to by both parties and will be shared equally, with no change in contract price.

52.000-4008SMALL BUSINESS SET ASIDE REQUIREMENTS FOR DREDGING (OCT 2000)

A. The terms 'dredging' and 'dredging equipment' are defined for the purposes of interpreting the Small Business Size Standard for Construction and Special Trades as found in the North American Industry Classification System (NAICS) Manual (available via the Internet at <http://www.census.gov/epcd/www/naics.html>), which best describes the principal natures of the product or service being acquired.

B. 'Dredging' is defined as the excavation of material from the bottom of the waterbody and its transportation to a designated disposal site by the use of 'dredging equipment'.

C. 'Dredging Equipment' is defined as follows:

(1) For purposes of hydraulic dredging, dredging equipment consists of the dredge, its attendant plant and the pipeline (including any intermediate pumping units) used to transport the dredged slurry to the disposal site or sites.

(2) For purposes of mechanical dredging, dredging equipment consists of a clamshell, dragline, backhoe, bucket ladder or other mechanical excavation equipment on a barge or other suitable floating plant and the barges and tenders used to transport the dredged spoil to shore.

(3) To comply with the Small Business requirement set forth at note (1) of Small Business Size Standard for Construction and Special Trades, the small business prime contractor must excavate 40% of the total yardage to be dredged AND transport 40% of the total yardage to be dredged with dredging equipment owned by the prime contractor or dredging equipment owned by another small dredging concern.

(END of CLAUSE)

52.211-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (APR 1984) - ALTERNATE I (APR 1984)

The Contractor shall be required to (a) commence work under this contract within 10 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 30 June 2003. An interim completion date of 30 October 2002 is established for completion of all excavation work and dredging work (if option(s) are exercised). The time stated for completion shall include final cleanup of the premises.

The completion date is based on the assumption that the successful offeror will receive the notice to proceed by 30 November 2001. The completion date will be extended by the number of calendar days after the above date that the Contractor receives the notice to proceed, except to the extent that the delay in issuance of the notice to proceed results from the failure of the Contractor to execute the contract and give the required performance and payment bonds within the time specified in the offer.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of \$410.00 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.212-5000 EVALUATION OF SUBDIVIDED ITEMS (MAR 1995)--EFARS

Item Nos. 0005, 0006 and 0027 are subdivided into two or more estimated quantities and are to be separately priced. The Government will evaluate each of these items on the basis of total price of its sub-items.

(End of provision)

52.212-5001 VARIATIONS IN ESTIMATED QUANTITIES, SUBDIVIDED ITEMS

(MAR 1995)--EFARS

This variation in estimated quantities clause is applicable only to Items Nos. 0005 and 0026.

(a) Variation from the estimated quantity in the actual work performed under any second or subsequent sub-item or elimination of all work under such a second or subsequent sub-item will not be the basis for an adjustment in contract unit price.

(b) Where the actual quantity of work performed for Items Nos. 0005 and 0019 is less than 85% of the quantity of the first sub-item listed under such item, the contractor will be paid at the contract unit price for that sub-item for the actual quantity of work performed and, in addition, an equitable adjustment shall be made in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.

(c) If the actual quantity of work performed under Items Nos. 0005 and 0019 exceeds 115% or is less than 85% of the total estimated quantity of the sub-item under that item and/or if the quantity of the work performed under the second sub-item or any subsequent sub-item under Items Nos. 0005 and 0019 exceeds 115% or is less than 85% of the estimated quantity of any such sub-item, and if such variation causes an increase or a decrease in the time required for performance of this contract the contract completion time will be adjusted in accordance with the clause FAR 52.211-18, Variation in Estimated Quantities.

(End of clause)

52.217-4000 OPTION FOR ADDITIONAL WORK (Construction) (AUG 2000)

The Government may require the Contractor to perform the work identified as optional item(s) (CLIN(s) 0025 and 0026) at the price stated in the Schedule. The Contracting Officer may exercise the option(s) by written notice to the Contractor at any time before the required completion date stated in Section 00800, Clause 52.211-10, or any extensions thereto. The Contracting Officer shall provide the Contractor notice of the Government’s intent to exercise the option at least 30 calendar days in advance of exercising the option. Notice of intent to exercise the option shall not constitute an exercise of the option and shall not bind the Government to exercise the option. If the Government should exercise the option(s) within 60 calendar days of the required interim completion date or any extension thereto, the Government shall extend the required interim contract completion date 60 calendar days after the date of the exercise of the option.

Exercise of the option shall be evidenced on Standard Form 30, citing this Section as the authority for exercising the option. Notice of intent to exercise the option shall be considered to have been given at the earlier of the occurrence of any of the following events: deposit of written notification in the mail, receipt by the Contractor of a facsimile notifying it of the Government’s intent to exercise the option, or receipt by the Contractor of an e-mail notifying the Contractor of the Government’s intent to exercise the option. The option shall be considered to have been exercised at the time the Government deposits written notification to the Contractor in the mail or, if earlier, at the time written notice is delivered to the Contractor.

52.228-4002 INSURANCE

As referenced in Contract Clause: INSURANCE--WORK ON A GOVERNMENT INSTALLATION, the following types and amounts of insurance are required under this contract.

Type	Amount
Worker's Compensation and Employer's Liability Insurance:	

Coverage A Worker's Compensation	Compliance with State of Iowa Worker's Compensation Law
-------------------------------------	--

Coverage B Employer's Liability	\$ 100,000
------------------------------------	------------

General Liability Insurance:

Bodily Injury	\$1,000,000 per occurrence
---------------	----------------------------

Property Damage	Not Required
-----------------	--------------

Automobile Liability Insurance (Comprehensive Policy Form):

Bodily Injury	\$ 500,000 per person and \$1,000,000 per occurrence
---------------	---

Property Damage	\$ 100,000 per occurrence
-----------------	---------------------------

52.228-4003 RAILROAD PROTECTIVE LIABILITY INSURANCE

This clause is applicable for Pipeline Permit No. 50,900,045 dated 21 January 1998.

a. In addition to any other insurance required by this contract, the Contractor shall furnish railroad protective liability insurance in accordance with the Standard Provisions for General Liability Policies (Railroad Protective Liability Form), the form of which shall be subject to the approval of the Contracting Officer. Said policy shall provide coverage for bodily injury liability, property damage liability and physical damage to property in the amount of \$2,000,000 (two million dollars) per each occurrence and \$6,000,000 (six million dollars) in the aggregate. I & M Rail Link, LLC shall be named as the insured under said railroad protective liability policy.

b. No work shall be performed within the right-of-way of the I & M Rail Link, LLC prior to the approval of the railroad protective liability insurance by the Contracting Officer. Said insurance shall remain in force and the Contractor completes AND the Government accepts all work to be performed in the railroad's right-of-way.

c. The Contractor shall, at least 5 (five) business days prior to commencing any work within the railroad's right-of-way, submit to the Contracting Officer a certificate of insurance warranting that the railroad protective insurance policy is in force and effect in accordance with the requirements of this contract. A duplicate original of said certificate shall be submitted to the railroad at the same time.

d. The Contractor shall, at the request of the railroad or the Government, provide a copy of the railroad protective insurance policy to the entity requesting it.

e. The railroad protective insurance policy and the certification of insurance shall contain an endorsement that any cancellation of, or change in, said policy shall not be effective unless written notice is given to the Contracting Officer AND the railroad at least 30 (thirty) days prior to the cancellation or change. The insurer's cancellation or modification of the insurance coverage shall in no way relieve the Contractor of its obligation to maintain insurance coverage in accordance with the terms of this contract.

52.228-4022 REQUIREMENT FOR BID GUARANTEE (FAR 28.101-2)

Each bidder shall submit with its bid a Bid Bond (Standard Form 24) with good and sufficient surety or sureties acceptable to the Government or other security as provided in the clause BID GUARANTEE in the form of twenty percent (20%) of the bid price or \$3,000,000 whichever is lesser. The bid bond penalty may be expressed in terms of a percentage of the bid price or may be expressed in dollars and cents.

52.229-4001 IOWA SALES AND USE TAX

a. In the event goods, wares, or merchandise with respect to which the Iowa sales or use tax has been paid by the Contractor, become an integral part of the project, the Contractor shall obtain appropriate forms from the Iowa State Tax Commission for recording the amount of purchases of such goods, wares, merchandise, and shall execute such forms and submit them to the Contracting Officer within 60 days after final settlement of the contract. The Contractor shall provide and report all data and information which may be necessary or required to enable the Contracting Officer to obtain all refunds from the Iowa Tax Commission to which the Federal Government may be entitled.

b. The Contractor shall insert a clause containing the substance of the foregoing Paragraph a. in every first-tier subcontract or purchase order, and shall require each first-tier subcontractor or vendor to include such a clause in any subcontract or purchase order which he places. The Contractor shall obtain completed forms from his subcontractors and suppliers for submission to the Contracting Officer before final settlement of the contract.

52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE

MAR 1995)—EFARS

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region IV. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback

arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

52.232-4004 INVOICE PROCEDURES

In accordance with CONTRACT CLAUSE titled "PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS", the contractor shall submit invoices as follows:

a. In order to qualify for a periodic payment, the Contractor must submit a proper invoice (request for payment) to the Contracting Officer's Representative (COR) and a determination must be made that supplies or services conform to the contract requirements. This determination will be made for the sole purpose of processing progress payments and will not constitute formal acceptance. The due date for making progress payments shall be as stated in the contract clause: PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS.

b. The submitted request for payment must be accompanied with documentation adequate to substantiate the amount requested. Substantiation shall be consistent with the clauses in the solicitation titled Quantity Surveys, Purchase Orders, Invoices, etc. satisfactory to the COR.

c. The Contractor must also include with the payment request a certification as described in the Clause "PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS".

d. Payment requests will be reviewed for propriety by the COR. Defective invoices will be returned to the Contractor for resolution with defects identified. Along with the returned invoice, the COR may include, at its option, an ENG FORM 93-PAYMENT ESTIMATE reflecting the substantiated and uncontested payment amount. The Contractor will then be given the option of signing and returning the FORM 93 for payment along with the original invoice and certification or resubmitting a revised invoice and certification. To expedite payment, the Contractor may request in writing that the COR retain the defective invoice and immediately process the payment request at the amount determined to be acceptable to the Government.

52.232-5001 CONTINUING CONTRACTS (MAR 1995)—EFARS

(a) This is a continuing contract, as authorized by Section 10 of the River and Harbor Act of September 22, 1922 (33 U.S. Code 621). The payment of some portion of the contract price is dependent upon reservations of funds from future appropriations, and from future contribution to the project having one or more non-federal project sponsors. The responsibilities of the Government are limited by this clause notwithstanding any contrary provision of the "Payments to Contractor" clause or any other clause of this contract.

(b) The sum of \$10,000.00 has been reserved for this contract and is available for payments to the contractor during the current fiscal year. It is expected that Congress will make appropriations for future fiscal years from which additional funds together with funds provided by one or more non-federal project sponsors will be reserved for this contract.

(c) Failure to make payments in excess of the amount currently reserved, or that may be reserved from time to time, shall not entitle the contractor to a price adjustment under the terms of this contract except as specifically provided in paragraphs (f) and (i) below. No such failure shall constitute a breach of this contract, except that this provision shall not bar a breach-of-contract action if an amount finally determined to be due as a termination allowance remains unpaid for one year due solely to a failure to reserve sufficient additional funds therefore.

(d) The Government may at any time reserve additional funds for payments under the contract if there are funds available for such purpose. The contracting officer will promptly notify the contractor of any additional funds reserved for the contract by issuing an administrative modification to the contract.

(e) If earnings will be such that funds reserved for the contract will be exhausted before the end of any fiscal year, the contractor shall give written notice to the contracting officer of the estimated date of exhaustion and the amount of additional funds which will be needed to meet payments due or to become due under the contract during that fiscal year. This notice shall be given not less than 45 nor more than 60 days prior to the estimated date of exhaustion.

(f) No payments will be made after exhaustion of funds except to the extent that additional funds are reserved for the contract. The contractor shall be entitled to simple interest on any payment that the contracting officer determines was actually earned under the terms of the contract and would have been made except for exhaustion of funds. Interest shall be computed from the time such payment would otherwise have been made until actually or constructively made, and shall be at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41, 85 STAT 97, as in effect on the first day of the delay in such payment.

(g) Any suspension, delay, or interruption of work arising from exhaustion or anticipated exhaustion of funds shall not constitute a breach of this contract and shall not entitle the contractor to any price adjustment under the "Suspension of Work" clause or in any other manner under this contract.

(h) An equitable adjustment in performance time shall be made for any increase in the time required for performance of any part of the work arising from exhaustion of funds or the reasonable anticipation of exhaustion of funds.

(i) If, upon the expiration of sixty (60) days after the beginning of the fiscal year following an exhaustion of funds, the Government has failed to reserve sufficient additional funds to cover payments otherwise due, the contractor, by written notice delivered to the contracting officer at any time before such additional funds are reserved, may elect to treat his right to proceed with the work as having been terminated. Such a termination shall be considered a termination for the convenience of the Government.

(j) If at any time it becomes apparent that the funds reserved for any fiscal year are in excess of the funds required to meet all payments due or to become due the contractor because of work performed and to be performed under the contract during the fiscal year, the Government reserves the right, after notice to the contractor, to reduce said reservation by the amount of such excess.

(End of clause)

52.236-4 PHYSICAL DATA (APR 1984)

Data and information furnished or referred to below is for the Contractor's information. The Government shall not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by surveys and subsurface exploration. The subsurface exploration included soil borings and soils testing noted on the boring logs. Graphic logs of borings located within the area of work under this contract are shown on the drawings. The borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches. Variations in stratigraphy and characteristics of the soil and rock are known to occur between borings. Normal variations in site geology will not be considered as differing materially within the purview of Contract Clause, FAR 52.236-2, Differing Site Conditions. Ground water elevations measured in borings are not constant and will fluctuate.

(b) Weather Conditions. Bidders should satisfy themselves before submitting bids as to hazards from weather conditions. Complete weather records and reports may be obtained from the local U.S. Weather Service.

(c) Transportation Facilities. Before submitting a bid, bidders should obtain necessary data as to access of highway and railroad facilities. The unavailability of transportation facilities shall not become a basis for claims for damages or time for completion of the work.

(d) River Conditions. Hydrographs of river stages are indicated on the drawings. These hydrographs include historic water levels and/or flows at the gauging stations. The Contractor has the responsibility to schedule its operations to take advantage of the most favorable river stages.

52.236-4006 SAFETY AND HEALTH REQUIREMENTS MANUAL INTERIM CHANGES, EM 385-1-1 (APR 2001)

This paragraph applies to contracts and purchase orders that require the contractor to comply with EM 385-1-1 (e.g., contracts that include the Accident Prevention clause at FAR 52.236-13 and/or other safety provisions). EM 385-1-1 and its changes are available at <http://www.hq.usace.army.mil> (at the HQ homepage, select Safety and Occupational Health). The Contractor shall be responsible for complying with the current edition and all changes posted on the web as of the effective date of this solicitation.

52.236-4014 PURCHASE ORDERS

Two legible copies of each purchase order issued by the Contractor or the Contractor's subcontractors for materials and equipment to be incorporated into the project, shall be furnished the Contracting Officer as soon as issued. Each purchase order shall (1) be clearly identified with applicable Department of Army contract number, (2) carry and identifying number, (3) be in sufficient detail to identify the material being purchased, and (4) indicate a definite delivery date. At the option of the Contractor, the copies of the purchase orders may or may not indicate the price of the articles purchased.

52.236-4025 FLOATING PLANT EQUIPMENT (MAY 1999)

When mechanized equipment is operated on floating plant, the contractor shall provide positive and acceptable means of preventing this equipment from moving or falling into the water. The type of equipment addressed by this clause includes front-end loaders, bulldozers, trucks (both on and off-road), backhoes, trackhoes, and similar equipment. If the Contractor plans to use such equipment on floating plant, an activity hazard analysis must be developed for this feature of work. The plan must include a detailed explanation of the type or types of physical barriers, curbs, structures, etc., which will be incorporated to protect the operator and prevent the equipment from entering the water. Nonstructural warning devices may be considered for situations where the use of structural barriers is determined to be impracticable. The activity hazard analysis must thoroughly address the procedure and be submitted to the Corps of engineers for review and acceptance prior to start of this feature of work.

52.236-4061 OBSTRUCTION OF CHANNEL

The Government will not undertake to keep the channel free from vessels or other obstructions, except to the extent of such regulations, if any, as may be prescribed by the Secretary of the Army, in accordance with the Provisions of Section 7 of the River and Harbor Act approved August 8, 1917. The Contractor will be required to conduct the work in such manner as to obstruct navigation as little as possible. The Contractor shall consult with the appropriate Coast Guard office to determine whether a Notice to Mariners will need to be issued for construction-related activities that might interfere with navigation or be interfered with by such navigation. (Point of Contact: Marine Safety Detachment, St. Paul, Minnesota, 651-290-3991) If the Contractor's plant so obstructs the channel as to make difficult or endanger the passage of vessels, said plant shall be promptly moved on the approach of any vessel to such an extent as may be necessary to afford a practicable passage. Upon the completion of the work the Contractor shall promptly remove his plant, including ranges, buoys, piles, and other marks placed by him under the contract whether in navigable waters or on shore.

52.236-4062 SIGNAL LIGHTS (JAN 1965)

The Contractor shall display signal lights and conduct his operations in accordance with the General Regulation of the Department of the Army and the Coast Guard governing lights and day signals to be displayed by towing vessels with tows on which no signals can be displayed, vessels working on wrecks, dredges, and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipe lines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passing by other vessels or floating plant working in navigable channels, as set forth in Commandant U.S. Coast Guard instruction M16672.2B, navigation rules: International-Inland (COMDTINST) M16672.2B, or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 33 CFR (Inland) as applicable.

52.236-4063 RADIO

The Contractor shall maintain a staff that is knowledgeable about radio communications to advise oncoming navigation of appropriate passing directions while the Contractor's floating plant is in the navigation channel. In particular, the Contractor shall monitor Marine Band Channel 13 for commercial navigation and Channel 16 for emergency communication.

52.239-4001 YEAR 2000 COMPLIANCE (FAR 39.106) (JUL 1998)

The contractor shall ensure that, with respect to any design, construction, goods, or services under this contract as well as any subsequent task/delivery orders issued under this contract (if applicable), all information technology contained therein shall be Year 2000 compliant. Specifically, the contractor shall perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task/delivery order which may be affected by the Year 2000 compliance requirement.

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

“Actual costs will be used to determine equipment costs for a settlement proposal submitted on the total cost basis under FAR 49.206-2(b). In evaluating a terminations settlement proposal using the total cost basis, the following principles will be applied to determine allowable equipment costs:

- (1) Actual costs for each piece of equipment, or groups of similar serial or series equipment, need not be available in the contractor's accounting records to determine total actual equipment costs.
- (2) If equipment costs have been allocated to a contract using predetermined rates, those charges will be adjusted to actual costs.
- (3) Recorded job costs adjusted for unallowable expenses will be used to determine equipment operating expenses.
- (4) Ownership costs (depreciation) will be determined using the contractor's depreciation schedule (subject to the provisions of FAR 31.205-11).
- (5) License, taxes, storage and insurance costs are normally recovered as an indirect expense and unless the contractor charges these costs directly to contracts, they will be recovered through the indirect expense rate.”

(End of Clause)

SECTION 00830

LIST OF ATTACHMENTS

<u>ATTACHMENT</u>	<u>DESCRIPTION</u>	<u>PAGE</u>
A	WAGE RATES	00830-A-1
B	RAILROAD PERMIT	00830-B-1
C	NEW HIGHWAY SIGNS	00830-C-1

SECTION 00830 – ATTACHMENTS

ATTACHMENT A

WAGE RATES

<u>General Decision No.</u>	<u>Construction Type</u>		<u>Page Numbers</u>
IL010019	Dredging	through	IL010019-1 IL010019-2
IA010001	Heavy Highway	through	IA010001-1 IA010001-5

General Decision Number IL010019
 Superseded General Decision No. IL000019
 State: Illinois Construction Type:
 DREDGING Dredging Construction Projects: Dredging the following rivers and
 their tributaries, the Kasakaski River from the mouth to
 Fayetteville, Illinois; Illinois River; Minnesota River;
 Mississippi River and the Ohio River.

Modification Number	Publication Date
0	03/02/2001
1	03/09/2001
2	08/24/2001

SUIL2002A 01/01/2001

	Rates	Fringes
Within the geographical jurisdiction of the St. Louis District, Corps of Engineers:		
Levermen, Engineer, Mechanic and Boatman	20.45	10.80
Oiler	18.47	10.80
AREA 2		
Within the geographical jurisdiction of the Louisville District, Corps of Engineers:		
Levermen, Engineers, Mechanic and Boatman	22.14	10.80
Oiler	18.37	10.80
AREA 3		
Within the geographical jurisdiction of the Huntington District, Corps of Engineers:		
Levermen, Engineer, Mechanic, and Boatman	23.01	10.80
Oiler	17.87	10.80
AREA 4		
Within the geographical jurisdiction of the St. Paul, Rock Island, and Chicago Districts, Corps of Engineers:		
Levermen, Engineer, Mechanic, and Boatman	21.30	9.05
Oiler	18.07	9.05
Leverman, operators on backhoes over 168,000 lbs., operators on cranes over 165 tons, and operators that required to have a license or certification to the work	22.96	10.80

 Unlisted classifications needed for work not included within
 the scope of the classifications listed may be added after
 award only as provided in the labor standards contract clauses
 (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates
 listed under that identifier do not reflect collectively
 bargained wage and fringe benefit rates. Other designations
 indicate unions whose rates have been determined to be

prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

General Decision Number IA010001
 Superseded General Decision No. IA000001 State: Iowa
 Construction Type:
 HEAVY
 HIGHWAY
 County(ies):
 STATEWIDE
 STATEWIDE EXCEPT SCOTT COUNTY
 HEAVY CONSTRUCTION PROJECTS (Does not include work on or
 pertaining to the Mississippi or Missouri Rivers or on Water and
 Sewage Treatment Plants), AND HIGHWAY PROJECTS (does not include
 building structures in rest areas)
 Modification Number Publication Date
 0 03/02/2001
 1 03/16/2001

COUNTY(ies):
 STATEWIDE
 * SUIA2006A 12/15/2000

	Rates	Fringes
CARPENTERS AND PILEDRIVERMEN:		
ZONE 1	19.15	4.55
ZONE 2	18.15	3.66
ZONE 3	17.16	4.55
ZONE 4	15.80	4.05
ZONE 5	15.25	3.00
CONCRETE FINISHERS:		
ZONE 1	16.12	3.95
ZONE 2	16.12	3.95
ZONE 3	16.12	3.95
ZONE 4	15.51	2.94
ZONE 5	13.20	3.10
ELECTRICIANS (STREET AND HIGHWAY LIGHTING AND TRAFFIC SIGNALS):		
ZONES 1, 2, & 3	16.25	3.00
ZONE 4	14.95	3.00
ZONE 5	12.70	3.00
IRONWORKERS (SETTING OF STRUCTURAL STEEL):		
ZONE 1	20.70	6.00
ZONE 2 AND 3	20.70	6.00
ZONE 4	17.69	3.41
LABORERS:		
ZONES 1 AND 2		
GROUP A	16.33	4.05
GROUP B	14.63	4.05
GROUP C	10.80	4.05
ZONE 3		
GROUP A	16.33	4.05
GROUP B	14.63	4.05
GROUP C	10.80	4.05
ZONE 4		
GROUP A	13.85	4.05
GROUP B	12.53	4.05
GROUP C	10.35	3.00
ZONE 5		

GROUP A	13.45	3.00
GROUP B	10.15	3.00
GROUP C	9.60	3.00
POWER EQUIPMENT OPERATORS:		
ZONE 1		
GROUP A	21.00	7.90
GROUP B	19.40	7.90
GROUP C	16.90	7.90
GROUP D	16.90	7.90
ZONE 2		
GROUP A	20.70	7.90
GROUP B	19.10	7.90
GROUP C	16.60	7.90
GROUP D	16.60	7.90
ZONE 3		
GROUP A	22.10	6.85
GROUP B	20.30	6.85
GROUP C	19.30	6.85
GROUP D	19.30	6.85
ZONE 4		
GROUP A	20.15	4.00
GROUP B	19.01	4.00
GROUP C	16.93	3.77
GROUP D	16.93	3.77
ZONE 5		
GROUP A	17.22	3.00
GROUP B	16.18	3.00
GROUP C	14.85	3.00
GROUP D	13.85	3.00
TRUCK DRIVERS:		
ZONE 1	16.05	4.90
ZONE 2	16.05	4.90
ZONE 3	15.78	4.90
ZONE 4	14.96	3.04
ZONE 5	12.80	3.00

ZONE DEFINITIONS

- ZONE 1 - The Counties of Polk, Warren and Dallas for all Crafts, and Linn County Carpenters Only.
- ZONE 2 - The Counties of Dubuque for all crafts and Linn County for all Crafts except Carpenters.
- ZONE 3 - The Cities of Burlington, Clinton, Fort Madison Keokuk, and Muscatine (and abutting municipalities of any such cities).
- ZONE 4 - Story, Black Hawk, Cedar, Jasper, Jones, Jackson, Madison and Marion Counties; Clinton County (except the City of Clinton), Johnson County, Muscatine County (except the City of Muscatine), the City of Council Bluffs, Lee County and Des Moines County.
- ZONE 5 - All areas of the state not listed above.

LABORER CLASSIFICATIONS - ALL ZONES

- GROUP A - Carpenter tender on bridges and box culverts; crab machine (without a seat); deck hand; diamond and core drills; drill operator on air tracs, wagon drills and similar drills; form setter/stringman on paving work; gunnite nozzleman; joint sealer kettleman; laser operator; pipelayer (sewer water and conduits); powderman tender; powerman/blaster; saw operator; tunnel laborer.
- GROUP B - Air, gas, electric tool operator; barco hammer; carpenter tender; caulker; chain sawman; compressor

(under 400cfm); concrete finisher tender; concrete processing materials and monitors; cutting torch on demolition; drill tender; dumpmen; electric drills; fence erectors; form line expansion joint assembler; form tamper; general laborer; grade checker; handling and placing metal mesh, dowel bars, reinforcing bars and chains; hot asphalt laborer; installing temporary traffic control devices; jackhammerman; jointer and painter(striper); mechanical grouter; paving breaker; planting trees; shrubs and flowers; power broom (not self/propelled); power buggyman; rakers; rodman (tying reinforcing steel); sandblaster; seeding and mulching; sewer utility topman/bottom man; spaders; stressor or stretcherman on pre or post tensioned concrete; stringman on re/surfacing/no grade control; swinging stage, tagline or block and tackle; tampers; timberman; tool room men and checkers; tree climber; tree groundman; underpinning and shoring caissons over twelve feet deep; vibrators; walk behind trencher; vibrating compactor; water pumps (under three inch); work from bosun chair.

GROUP C - Scale weigh person; traffic control/flagger, surveillance or monitor, water carrier

POWER EQUIPMENT OPERATOR CLASSIFICATIONS - ALL ZONES

GROUP A - Asphalt laydown machine; asphalt plant; bulldozer finish); central mix plant; concrete pump; crane; crawler tractor pulling scraper; directional drill (60,000(lbs) pullback and above); dragline and power shovel; dredge engineer; excavator (over 1/2 cu. yd.) front end loader (4 cy and over); horizontal boring machine; master mechanic; milling machine (over 350 hp); motor grader (finish); push cat; rubber tired backhoe (over 1/2 cu. yd.) scraper (12 cu. yd. and over or finish); sidebroom tractor; slipform portland concrete paver; tow or push boat; trenching machine (Cleveland 80 or similar).

GROUP B - Articulated off road hauler, asphalt breakdown roller (vibratory), asphalt heater/planer; asphalt material transfer vehicle; asphalt screed; belt loader or similar loader; bulldozer (rough); churn or rotarydrill; concrete curb machine, crawler tractor pulling ripper, disk or roller; directional drill (less than 60,000(lbs) pullback); distributor; excavator 1/2 cu. yd. and under); form riding concrete paver; front end loader (2 to less than 4 cu. yd.); group equipment greaser; mechanic; milling machine (350hp. and less); paving breaker; portland concrete dry batch plant; rubber tired backhoe 1/2 cu. yd. and under); paving breaker; scraper (under 12 cy), screening, washing and crushing plant (mobile, portable or stationary); shoulder machine; skid loader (1 cu. yd and over); subgrader or trimmer; trenching machine; water wagon on compaction, deck/oiler.

GROUP C - Asphalt roller, boom & winch truck, concrete spreader/belt placer, deep wells for dewatering; farm type tractor (over 75 hp.) pulling disc or roller; forklift; front end loader (under 2 cu. yd.); motor grader (rough); pile hammer power unit; pump (greater than three inch diameter); pumps on well points; safty boat; self/propelled roller (other than asphalt);

self/propelled sand blaster or shot blaster; skid loader (under 1 cu. yd.); truck mounted post driver. GROUP D - Boiler, compressor, cure and texture machine; dow box; farm type or utility tractor (under 75 hp.) pulling disk, roller or other attachments; group greaser tender; light plants; mechanic tender; mechanical broom; mechanical heaters; oiler; pumps (under tree inch diameter); tree chipping machine; truck cranedriver/oiler.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

SECTION 00830 – ATTACHMENTS

ATTACHMENT B

RAILROAD PERMIT

**PIPELINE ACROSS OR ALONG RAILROAD RIGHT OF WAY PERMIT No. 50,900,045
53GUTTENBERG**

This AGREEMENT, made this _____ day of _____, _____, wherein I&M RAIL LINK, LLC, a Delaware Limited Liability Company, hereinafter called "Railroad", whose address is Property Management Division, PO Box 16630, Missoula, Montana, 59808-6630, hereby grants permission to

whose mailing address is

hereinafter called "Permittee".

The Parties to this Permit are Railroad and Permittee.

In consideration of the mutual covenants and other valuable consideration, Railroad hereby grants permission to Permittee to excavate for, construct, maintain and operate **a dredge pipeline** hereinafter referred to as the "Facility", upon, along or across the right of way of Railroad, underneath the surface thereof, and under the tracks of its railroad, as the case may be, at Milepost **81.3**, Survey Station **n/a**, City of **Guttenburg**, County of **Clayton**, State of **Iowa** as shown on the attached plat, marked Exhibit "A", dated **December 2, 1997** and made a part hereof.

This permission is given upon the following terms and conditions:

Special Provisions **Permittee agrees the Facility will not be placed against any substructure elements of the timber pile trestle and it shall be placed to provide the smallest tripping hazard. permittee further agrees to anchor the Facility into its position with restraints suitable to resist displacement by water flow under the trestle or the flow of the dredged material and the Facility shall be placed in such a manner that it will not block the water flow of any of the Railroad's culverts or bridges on the line. The Facility must also be marked in such a manner to be highly visible, to reduce the tripping hazard, and clearly marked as to the contents of the pipe.**

1. RENTAL OBLIGATIONS:

- a. Permittee will pay ~~annually~~ **a one time payment** in advance to Railroad for this permit the sum of **One Thousand Two Hundred and Twenty Five Dollars (\$1,225.00)** _____ and will pay all taxes and assessments that may be levied against the facility. Failure to pay the ~~annual~~ premium for this agreement within sixty (60) days of the effective date shall terminate any rights Permittee may have under this agreement. However, such failure shall not operate to relieve Permittee of any liabilities assumed hereunder.
- b. Railroad reserves the right to review the rental rate of this permit. Railroad may make any necessary adjustments to the rate based on Railroad's standard rate review policies in effect at the time of the review. Railroad will provide Permittee written notice of any adjustment, within thirty (30) days of the review. Specifying a rental rate on a monthly, quarterly or annual basis and payment thereof in advance does not imply nor will it serve to convert the permit to a definite term.
- c. In case of nonpayment of rental, or other charges, the same shall, until paid, constitute a lien on any facility or other property owned by Permittee on the Premises, foreclosable according to law. Permittee shall not remove the facility or property until the rental, or other charges are paid, unless directed to do so by Railroad.
- d. Additions to or replacement of the Facility are subject to the prior written approval of Railroad. Railroad will, upon approval of application for addition or replacement facilities, advise Permittee in writing of any change in payment on account of such additions or replacements, and bills thereafter will be rendered accordingly.

2. RESERVATIONS BY RAILROAD:

- a. Permittee, at Permittee's sole cost and expense, shall excavate for, construct, reconstruct, maintain and repair the Facility placing the same in accordance with the specifications provided in application dated _____

- and approved by the Railroad's Chief Engineer. If excavation is necessary, Permittee shall fill in the excavation and restore the surface of the ground to its previous condition subject to the approval of the Railroad's Roadmaster. Also, Permittee, at Permittee's sole cost and expense, shall barricade any holes or pits that are to be left open during the hours of darkness in conjunction with the excavation, construction, maintenance or repair of the facility. The barricade shall be placed around the work site and approved by the Railroad's Chief Engineer. Furthermore, Permittee shall remove all false work and equipment used in the installation, repair or removal of the Facility.
- b. The Roadmaster shall have the right at any time when in the Roadmaster's judgment it becomes necessary or advisable, to require any material used in the work to be replaced with like material or with material of a more permanent character. The Roadmaster may require additional work or change of location of the Facility as a matter of safety, or of appearance, or on account of additional tracks being laid, change of grade, construction of a facility, or for any other reason whether or not connected with the operation, maintenance, or improvement of the railway of Railroad, all of which shall be done at the expense of Permittee in the manner herein provided. All repairs and changes shall be made promptly by Permittee at its sole expense within thirty (30) days after being requested to do so.
 - c. Permittee shall give the Roadmaster five (5) working days advance written notice of any work to be performed by Permittee in the excavation, construction, any reconstruction, maintenance, repair, change of location or removal of the Facility. Permittee shall conduct such work in such manner as not to interfere with the maintenance and operation of the railway. If there is a bona fide emergency, the five (5) working days advance notice may be waived; however, if emergency work is necessary, Permittee shall make every effort to notify Railroad that such work is to be performed. Permittee shall, at its own expense, restore any facilities on the Premises which are in any manner disturbed by such maintenance, repairs or removal.
 - d. If the Railroad, at the request of Permittee or any agent or contractor of Permittee, or for the protection of its property and operations, does any work, furnishes any material or flagging service or incurs any expense whatsoever on account of the excavation for, construction, reconstruction, maintenance, repair, change of location, removal of the Facility or otherwise, Permittee shall reimburse Railroad for the cost thereof within twenty (20) days after bills are rendered. If the excavation for construction, reconstruction, maintenance, repair, change of location, or removal of the Facility, requires any or all of the following work: removal and/or replacement of track, bridging, protection of track or other railway facilities by work or flagging, engineering and/or supervision, such work is to be performed by Railroad employees and the cost borne by Permittee.
 - e. Permittee hereby accepts Railroad's rights, and any others who have obtained or may obtain permission or authority from Railroad to (a) have unconditional access to any part of the Premises and to (b) construct, operate, maintain, renew and relocate any and all existing or future pipe, power, and communication lines and appurtenances and other facilities of like character upon, over or under the surface of the Premises; (c) construct, operate, maintain, renew and relocate such additional facilities; and (d) make such other use of the surface as Railroad deems necessary and desirable for railroad purposes.
 - f. Nothing herein contained shall imply or import a covenant on the part of Railroad for quiet enjoyment, or imply any warranty of title for peaceable possession.
 - g. If any cathodic electrolysis or other electrical grounding system is installed in connection with the Facility which, in the opinion of Railroad, in any way interferes with any train signals, telephone or telegraph lines, or other facilities of Railroad, or its other permittees. Permittee upon being informed by Railroad of such interference shall discontinue operation of and remove the grounding system, or take such steps as may be necessary to avoid and eliminate all such interference. The cost of any additions or removals of the grounding systems shall be borne solely by the Permittee. If the Railroad determines there is any interference covered by this paragraph that affects the safety of Railroad's operations, Permittee shall, upon notice from Railroad, cease using the Facility for any purpose whatsoever. Railroad may also require that the Facility be removed. In addition, Railroad may require any other protective measures as Railroad may deem advisable until the protective devices required by this paragraph have been installed, put in operation, tested, and found to be satisfactory to correct the interference. Permittee further agrees to indemnify and save harmless Railroad from and against any damages, claims, losses, suits or expenses in any manner arising from or growing out of interference with the signals, telephone or telegraph lines of Railroad by the operations, use or existence of any such grounding system.

3. **UTILITY NOTICE REQUIREMENTS:** Permittee shall notify all utility operators and other third parties who may have a facility located on the subject premises prior to commencement of any construction or excavation. Permittee assumes all liability for any damage caused to any utility operator or third party.
4. **EQUAL PROTECTION:** It is agreed that the provisions of this agreement are for the equal protection of other railroad companies, including National Railroad Passenger Corporation (AMTRAK), permitted to use Railroad's property.
5. **DEFAULT:**
 - a. If Permittee shall default on any covenant or agreement herein assumed, and such default shall not be remedied or corrected within thirty (30) days after written notice by Railroad to Permittee of such default, this Lease shall terminate without further notice. Any waiver by Railroad of any default shall not be construed as a waiver of any subsequent default. While such default continues Permittee shall not remove from said Premises any building or other property owned by Permittee unless directed to do so by Railroad, and shall remain subject to all terms and conditions contained herein.
 - b. If Permittee defaults on any covenant or agreement herein assumed, three (3) or more times in any given year, Railroad shall have the right to terminate this agreement immediately with or without notice to the Permittee. Railroad shall be entitled to recover its reasonable attorney fees and any costs associated with Permittee's default under this agreement.
 - c. Should it become necessary for Railroad to give Permittee written notice of the Permittee's default of any covenant or agreement herein assumed, Permittee shall pay to Railroad an additional sum of One Hundred Fifty Dollars (\$150.00) to cover Railroad's cost of giving said written notice. Said sum shall be paid whether or not an attorney is retained by Railroad. This additional sum shall be paid by Permittee at the time it corrects or cures its default, or the default shall not be considered cured.
6. **TERMINATION:**
 - a. Notwithstanding any requirement herein for payment of rental in advance for a term in excess of one month, it is further agreed that either party may terminate this Permit at any time upon giving the other party not less than thirty (30) days written notice of such termination. Rent shall be paid by Permittee until a final inspection has been made by Railroad approving the condition of the Premises. If this Permit is terminated, Permittee, shall, prior to the termination date, remove Permittee's property and any existing improvements (regardless of who made them) from the Premises. If Permittee fails to do so, Permittee hereby grants Railroad the absolute right to remove the property at the cost of Permittee, or keep, convey, destroy, or otherwise dispose of the property in any way Railroad chooses and, in addition, Permittee agrees to pay any net cost incurred by Railroad in doing so.
 - b. Except as otherwise provided in Sections 1c and 5 hereof, before the Permit expires, Permittee shall, at its own sole cost and expense, remove and cause to be removed all facilities, structures, foundations, footings, materials, signs or signboards, debris or other articles or facilities owned or used by Permittee or placed on, above or below the surface of the Premises by Permittee or by any person, firm or corporation, or former Permittee. Permittee agrees to restore and level the Premises to a condition satisfactory to Railroad.
 - c. It is expressly understood by Permittee that until such time as the Premises are surrendered to Railroad free and clear of all facilities, structures, foundations, footings, materials, signs or signboards, debris or other articles or facilities not belonging to Railroad, and the Premises are restored to a neat and orderly condition satisfactory to Railroad, Permittee shall be liable to Railroad for such rental, as determined by Railroad. Permittee shall also be liable to Railroad for any and all losses and/or damages which Railroad may sustain or become liable for as a result of Permittee's failure to restore the Premises to a neat and orderly condition satisfactory to Railroad. Railroad may at its own sole election dispose of any such property or improvements as provided in Section 6a above.
7. **ASSIGNMENT OF PERMIT:**
 - a. Without the prior written consent of Railroad, Permittee shall not assign or sublet this Permit or any interest therein, or grant a security interest in any facilities or improvements on the Premises, and no heir, personal representative, administrator, receiver, master, sheriff, trustee in bankruptcy, or other assignee by operation

of law shall assign or sublet without such written consent. However, such consent shall not be unreasonably withheld, conditioned, delayed or denied. For the purposes of this section, a merger or corporate reorganization of any entity controlled by, controlling or under common control of permittee shall not be deemed a transfer of assignment. Permittee shall provide evidence of such merger or reorganization that is satisfactory to Railroad.

- b. If this Permit is assigned, Railroad will credit all unearned rental hereunder to the assignee, unless advised otherwise. Any other disposition of unearned rental will be made by Railroad only upon the joint written request to both Permittee and Permittee's assignee at the time the assignment is submitted to Railroad for its consent.
8. **NOTICE REQUIREMENT:** All notices hereunder to be given by Railroad to Permittee may be given by letter from Railroad or its agents or attorney and forwarded by Certified Mail, Return Receipt Requested, postage prepaid, addressed to Permittee at Permittee's mailing address above stated or at such address as Permittee may later give Railroad in writing. All notices hereunder to be given by Permittee to Railroad may be given by letter from Permittee or Permittee agent or attorney and forwarded by Certified Mail, Return Receipt Requested, postage prepaid, addressed to Railroad's Property Management Division, PO Box 16630, Missoula, Montana, 59808-6630.
9. **COMPLIANCE WITH FIRE STANDARDS:** Permittee must obtain Railroad's written consent to use Premises for loading, unloading or storing hazardous materials as defined in 49 CFR parts 171 through 179 and identified in Tariff BOE 6000 M and subsequent issues. Permittee agrees to comply strictly with the standards of the National Board of Fire Underwriters as recommended by the National Fire Protection Association, as well as any applicable federal, state, or municipal regulations and laws, and shall also comply strictly with the provisions, if applicable, of "Rules Governing the Location, Maintenance and Operation of Facilities for Handling Flammable and Nonflammable Gases," hereto attached as Exhibit "B" and by this reference made a part of this Permit. For the purpose of providing protection from stray currents or static electricity, or to prevent interference with existing signaling Railroad may install bonding in the track serving the Premises, and Permittee shall reimburse Railroad for the cost thereof. Track bonding is required on Spur Lines used for loading or unloading flammable liquids at the location of the loading or unloading activity.
10. **INSURANCE COVERAGE** must be provided as follows:
 - a. Permittee agrees to obtain and to keep in force and effect during the entire term of this Permit automobile liability insurance to include owned, nonowned and hired automobiles and Commercial General Liability insurance to include the following: Premises and Operations, independent contractors, contractual liability, products and completed operations, personal injury and broad form property damage. The insurance shall be taken out with insurance companies satisfactory to Railroad and for limits of general liability not less than \$1,000,000 per occurrence and \$2,000,000 general aggregate, automobile liability of \$1,000,000 per occurrence, and employer's liability of \$100,000 each employee.* These policies shall contain a waiver of subrogation in favor of Railroad. If Permittee is a qualified self-insurer, Permittee agrees to treat Railroad as an additional insured as if there was insurance. Permittee agrees to be responsible for payment of any self-insured retention or deductible.
 - b. Permittee agrees to obtain, to keep in force and effect, and to pay premiums on worker's compensation insurance for those of its employees who are concerned in any way with Permittee's performance under this Permit.
 - c. Permittee will furnish Railroad with Certificates of Insurance for public liability and worker's compensation coverage in advance of any activity on railroad property. All of the above insurance policies and certificates, except for worker's compensation, must name Railroad, as an additional insured.
 - d. Whenever construction, demolition and/or any other repair operations occur within fifty (50) feet of any railroad track, a separate railroad protective policy, written in the name of Railroad, is required with minimum limits of \$2,000,000 per occurrence and \$6,000,000 aggregate*. The policy must be submitted to the Railroad and approved in advance of any activity on Railroad property.
 - e. Permittee, as an option to the above referenced insurance coverages, may provide Railroad with a letter from Permittee's Risk Management Division, or its respective Insurance Department, evidencing the necessary insurance coverages satisfactory to Railroad.

- f. Any party performing any work related to this Permit shall have a copy of the Permit at the designated job site.
- g. The furnishing of insurance required by this Agreement shall in no way limit or diminish the liability or responsibility of Permittee as provided under any section of the Agreement.

*Note: These are the minimum limit requirements of Railroad. Permittee's obligation under this section is not limited to this minimum amount. Furthermore, these are minimum limit requirements at the date this agreement is executed. Higher limits may be required in the future as reasonably determined from time to time by Railroad for agreements similar in nature to this agreement.

11. PERMITTEE'S RELEASES AND OBLIGATIONS TO INDEMNIFY:

- a. It is understood by Permittee that the Premises are in dangerous proximity to railroad tracks and that persons and property on the Premises will be in danger of injury, death or destruction incident to the operation of the railroad, including, without limitation, the risk of derailment, fire, or inadequate clearance (including sight clearance or vision obstruction problems at grade crossings on or adjacent to the Premises), and Permittee accepts this Permit subject to such dangers. Permittee agrees that the construction, operations, maintenance, use or removal of the Facility shall not damage the railroad or structures of Railroad or any other property upon the Premises of Railroad, or be a menace to the safety of Railroad's operations or any other operations conducted on the Premises.
- b. As a material consideration of this Permit, without which it would not be granted, Permittee agrees, to the fullest extent provided by law, to release Railroad, and to defend, indemnify and hold Railroad harmless from and against any liability, claim, cost or damage on account of personal injury to or death of any persons whomsoever, or damage to or destruction of property to whomsoever belonging, without regard to whether it was caused in part by Railroad or by defective trackage, equipment, or track structures. Nothing herein obligates Permittee to indemnify Railroad for Railroad's negligent acts or willful misconduct. However, Permittee shall be required to indemnify Railroad for any negligence attributed to Permittee's use or occupation of the premises.
- c. Permittee shall not create or permit any condition on the Facility that could present a threat to human health or to the environment. Permittee shall release, defend, indemnify and hold harmless Railroad from and against any suit, cause of action, claim, costs or obligations with respect to any environmental condition (including, without limitation, conditions of groundwater, soil, surface water and air) and/or any damages alleged (i) to arise from, or be related (in any way) to Permittee's tenancy, or (ii) to have been caused, in whole or in part, by Permittee's presence on and use of the Facility or Permittee's violation of any laws, ordinances, regulations or requirements pertaining to solid or other wastes, weeds, chemicals, oil and gas, toxic, corrosive, or hazardous materials, air, water (surface or groundwater) or noise pollution, and the storage, handling, use or disposal of any such material iii) to have occurred during the term of this Permit, including, without limitation, any release or migration of a hazardous substance. In connection with its obligations under this Permit, Permittee shall also give Railroad timely notice of all measures undertaken by or on behalf of Permittee to investigate, remediate, respond to or otherwise cure any environmental condition, release or violation. If Railroad receives notice from Permittee or otherwise of a release, violation of environmental laws, or of an environmental condition (which in Railroad's sole discretion requires a response) which occurred or is occurring during the term of this Permit, Railroad may require Permittee, at Permittee's sole expense, to take timely measures to investigate, remediate, respond to, or otherwise cure such release, environmental condition or violation regardless of the nature or cause of the release, environmental condition or violation. Permittee expressly agrees that the obligations to release, defend, indemnify and hold harmless it hereby assumes shall survive termination of this Permit, and that statutory limitation terms on actions to enforce these obligations shall not be deemed to commence until Railroad discovers any such environmental condition, health or environmental impairment, and Permittee hereby knowingly and voluntarily waives the benefits of any shorter limitation term.
- d. The obligations of Permittee to release, defend, indemnify, and hold harmless Railroad shall apply to any suit, cause of action, claim, cost or obligation including, without limitation, those alleged under the common law or pursuant to a federal or state statute or regulation such as those arising in tort, trespass, nuisance, and strict liability, and those asserted pursuant to the Resource Conservation and Recovery Act, 42 USC § 6901 et seq., the Comprehensive Environmental Response, Compensation and Liability Act, 42 USC § 9601 et seq.,

the Clean Water Act, 33 USC §§ 1251 et seq., and any other applicable state and federal law. Each as hereafter amended.

- e. Permittee agrees that the construction, operation, maintenance, use or removal of the Facility shall not damage the railroad or structures of Railroad, or any other property including property of any lessee or permittee upon the premises of Railroad, or be a menace to the safety of Railroad's operations or any other operations conducted on the premises.
12. SURVIVAL: All of the indemnities, assumption of liabilities and obligations of Permittee hereunder, shall survive termination of this Permit.
 13. ATTORNEY FEES: If either Party takes legal action to enforce any terms of this agreement, the prevailing Party shall be entitled to recover its reasonable attorney fees and all costs associated with the action.
 14. MISCELLANEOUS PROVISIONS:
 - a. The parties warrant and represent that the party signing this agreement on behalf of each has authority to enter into this agreement and to themselves be bound respectively, to the terms, covenants and conditions contained herein. Each party shall deliver to the other, upon request, all documents reasonably requested by the other evidencing such authority, including a copy of any corporate or partnership resolutions, consents or minutes reflecting the authority of persons or parties to enter into agreements on behalf of such party.
 - b. All questions regarding the interpretation or application of provisions of this Permit shall be decided by a court of competent jurisdiction and according to the laws of the State where the property is located.
 - c. If any term or provision of this agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each term and provision shall be valid and be enforced to the fullest extent permitted by law. A waiver of any right to enforce any provision of this permit in one instance shall not be deemed to be a waiver of any future right to enforce any provision hereof.
 - d. This Permit is the full and complete agreement between Railroad and Permittee with respect to all matters relating to use of the Premises, and supersedes any and all other agreements between the parties hereto relating to use of the Premises.

Subject to the foregoing provisions, this agreement and all of the covenants and promises thereof, shall inure to the benefit of and be binding upon the parties hereto, their respective personal representatives administrators, successors and assigns.

The parties hereto have executed this agreement the day and year first above written.

I&M RAIL LINK, LLC

By _____
Title Property Development Manager

PERMITTEE

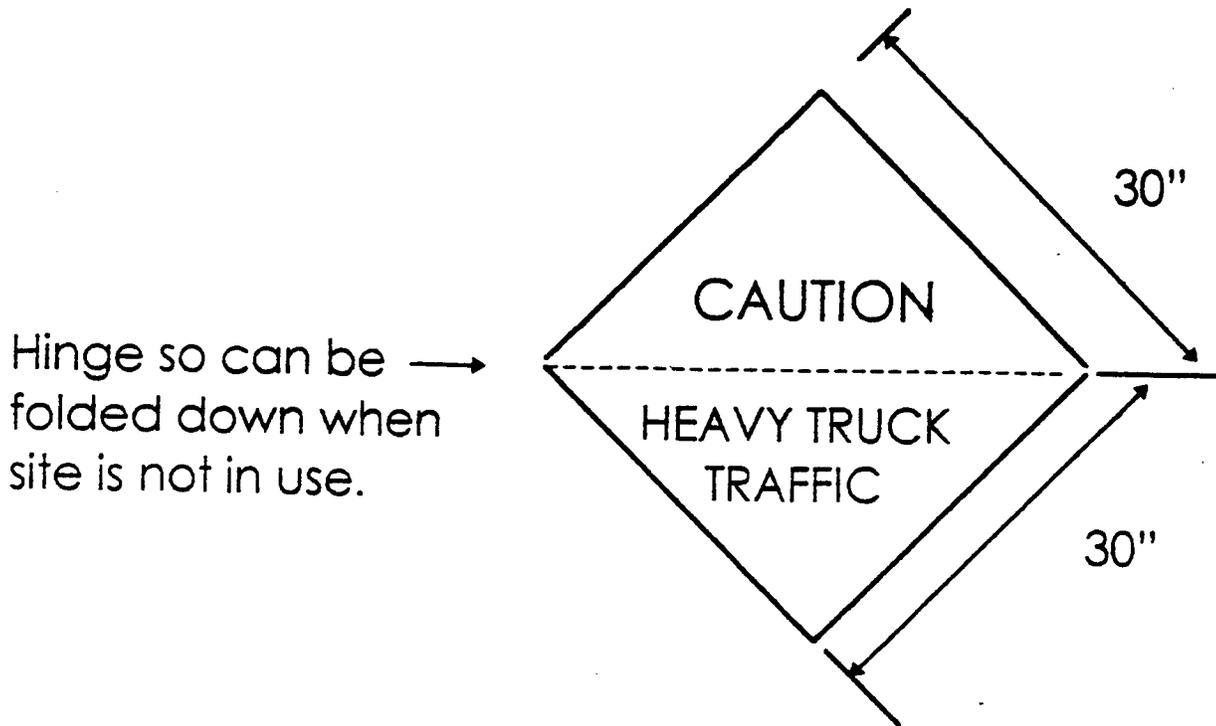
By _____
Title: _____

SECTION 00830 – ATTACHMENTS

ATTACHMENT C

NEW HIGHWAY SIGNS

There shall also be included two each 30 inch x 30 inch signs, includes installation as directed by County Engineer, as follows:



Signs shall be on 0.100 aluminum with High Intensity sheeting, black letters on orange sheeting.

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01000

GENERAL

PART 1 GENERAL

- 1.1 ORGANIZATION OF SPECIFICATIONS
- 1.2 REFERENCES
 - 1.2.1 Reference Standards
- 1.3 SUBMITTALS

PART 2 PRODUCTS

- 2.1 APPROVAL OF MATERIALS OR ALTERNATES
- 2.2 WARRANTIES.

PART 3 EXECUTION

- 3.1 GROUNDS AND ROADWAYS
 - 3.1.1 Availability of Grounds
 - 3.1.2 Esmann Island
 - 3.1.3 Drainage Facilities
 - 3.1.4 Roadways
 - 3.1.4.1 Traffic hazards.
 - 3.1.4.2 Haul routes.
 - 3.1.5 Signs
 - 3.1.5.1 Existing Roadway Signs
 - 3.1.5.2 New Roadway Signs
- 3.2 DISPOSAL OF DEBRIS AND WASTE
 - 3.2.1 Burning
 - 3.2.2 Disposal offsite for useful purposes.
 - 3.2.3 Disposal in a locally operated sanitary landfill.
 - 3.2.4 Disposal of Solid Construction Debris and Waste.
- 3.3 EXISTING UTILITIES
 - 3.3.1 General
 - 3.3.1.1 Iowa One Call Excavation Notice System
 - 3.3.2 Buried Utilities
 - 3.3.3 Interruption of Services
- 3.4 SCHEDULING
 - 3.4.1 General
 - 3.4.2 Notification
- 3.5 CONSTRUCTION RESTRICTIONS
 - 3.5.1 Placement of Material Excavated from McMillan Island or Channel Dredging
 - 3.5.2 Initial Placement Limit
 - 3.5.3 Work in I&M Rail Link Right-of-Way
 - 3.5.3.1 Right-of-Way Permit
 - 3.5.3.2 Pre-negotiated Permit
 - 3.5.4 Blasting
 - 3.5.5 Pavement Removal and Replacement
 - 3.5.6 Noise Restrictions
- 3.6 WORK PERFORMED BY OTHERS

- 3.6.1 Work Performed Under Separate Contract
- 3.7 FLOATING PLANT
 - 3.7.1 Equipment and Personnel
 - 3.7.2 Navigable Waters
- 3.8 SEWAGE AND BILGE WATER DISPOSAL
- 3.9 SURVEYS
 - 3.9.1 Layout
 - 3.9.1.1 Alignment
 - 3.9.1.2 Alignment Changes
 - 3.9.2 Quantity surveys

-- End of Section Table of Contents --

SECTION 01000

GENERAL

PART 1 GENERAL

1.1 ORGANIZATION OF SPECIFICATIONS

The specifications which govern the materials and equipment to be furnished and the work to be performed under this contract are listed in the Table of Contents. No attempt has been made in the specifications to segregate work to be performed by any trade, craft, or subcontractor. Any segregation between the trades or crafts shall be solely a matter for agreement between the Contractor, Contractor's employees, and subcontractors.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS (COE)

COE EM 385-1-1 (1996) Safety and Health Requirements Manual

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 2524 (1992) Highway Signing, Standard Specifications for Highway and Bridge Construction

1.2.1 Reference Standards

Reference to the standards, specifications, or codes of any technical society, organization, or association, or local, state, or Federal authority shall mean the specific edition or revision listed.

1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330: SUBMITTAL PROCEDURES:

PART 2 PRODUCTS

2.1 APPROVAL OF MATERIALS OR ALTERNATES

Requests for approval of materials and products, or substitutes thereof, will not be considered prior to award of the contract.

2.2 WARRANTIES.

Any items that are submitted for review or approval of the Contracting officer should include a copy of the manufacturer's standard warranty if one is available.

PART 3 EXECUTION

3.1 GROUNDS AND ROADWAYS

3.1.1 Availability of Grounds

The boundary limits of the grounds made available for the Contractor's use during the life of the contract are shown on the drawings. Any additional rights-of-way or grounds desired by the Contractor shall be obtained by the Contractor at its own expense, and copies of agreements for the use of such rights-of-way shall be furnished to the Contracting Officer before entering thereon. Such agreements shall clearly relieve the Government of any responsibility for damages resulting from the use of the grounds.

3.1.2 Esmann Island

All property and roads on Esmann Island are private and controlled by the Esmann Island Association. The Contractor shall obtain rights-of-way, at the Contractor's own expense, for use of any roads or property on Esmann Island in the performance of the contract project work.

3.1.3 Drainage Facilities

Insofar as natural drainage from the protected areas is obstructed by contract operations, it shall be the Contractor's responsibility to make adequate provision for accommodating such drainage in a satisfactory manner during the life of this contract, either by temporary means or by use of the permanent construction and operation of the permanent facilities.

3.1.4 Roadways

3.1.4.1 Traffic hazards.

When continuous haul operations or other condition created by the Contractor's operations result in interference or hazard to traffic on streets and highways, beyond that of ordinary public usage, the Contractor shall erect warning signs and provide flagging services as necessary to safeguard the public as required in SECTION: TEMPORARY CONSTRUCTION FACILITIES.

3.1.4.2 Haul routes.

The Contractor shall be responsible for securing all permits required along haul routes. The Contractor shall be the sole permittee and shall be responsible for meeting all obligations of the permits. A copy of each permit shall be submitted to the Contracting Officer. The Contractor, as between the Government and the Contractor, has sole responsibility for damage or deterioration of the Contractor's haul routes. Dust control shall be provided as stated in SECTION: ENVIRONMENTAL PROTECTION.

3.1.5 Signs

Signs for roadways shall conform to IDOT 2524.

3.1.5.1 Existing Roadway Signs

The Contractor shall remove and reinstall any existing signs affected by

the Contractor's work. Signs damaged by the Contractor shall be replaced at the expense of the Contractor.

3.1.5.2 New Roadway Signs

The Contractor shall install two flip-up signs indicating "CAUTION HEAVY TRUCK TRAFFIC." The requirements for the signs shall be as shown in SECTION: 00830 ATTACHMENTS. The locations of the signs will be selected by the County Engineer. The tentative locations are:

300 feet south of the bridge on Co. Rd. X56
1500 feet north of Buck Creek Road on Co. Rd. X56

3.2 DISPOSAL OF DEBRIS AND WASTE

The Contractor's attention is directed to SECTION: ENVIRONMENTAL PROTECTION and to the following CONTRACT CLAUSES: PERMITS AND RESPONSIBILITIES; PROTECTION OF EXISTING VEGETATION, STRUCTURES, UTILITIES, AND IMPROVEMENTS; OPERATIONS AND STORAGE AREAS; and CLEANING UP. Burning will not be permitted at the project site and debris or waste shall not be left at the relocation/placement site. Disposal of clearing and grubbing debris shall be by one of the following methods:

3.2.1 Burning

Burning will be allowed only if permitted in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning shall be subject to approval. Fires shall be confined to a closed vessel, guarded at all times, and shall be under constant surveillance until they have burned out or have been extinguished. Burning shall be thorough, reducing the materials to ashes.

3.2.2 Disposal offsite for useful purposes.

In the interest of conservation, it is required that the Contractor make a reasonable effort to dispose of the material offsite for some useful purpose. Timber may be cut into convenient lengths and utilized for making saw logs, posts, cordwood, wood chips for papermaking or other uses, or other similar use.

3.2.3 Disposal in a locally operated sanitary landfill.

Contractor shall select the disposal site with the approval of the Contracting Officer. The Contractor shall secure the required permits for disposal and provide copies of the permit to the Contracting Officer.

3.2.4 Disposal of Solid Construction Debris and Waste.

Disposal of Solid Construction Debris and Waste shall consist of removal from Government property and disposal in compliance with Federal, state, and local requirements for solid waste disposal. Contractor shall select the disposal site with the approval of the Contracting Officer.

3.3 EXISTING UTILITIES

3.3.1 General

The Contractor shall coordinate all utility relocation requirements and

make payment to the utility companies for all services, fees, and permits required to relocate and reestablish service. The Contractor shall be responsible for all costs related to protecting existing utilities. The Contractor shall coordinate with the utility representatives listed below:

3.3.1.1 Iowa One Call Excavation Notice System

For contract work performed within the State of Iowa, the Contractor shall meet the requirements of the State of Iowa. The following is the current notification center telephone number set up to assist the Contractor in complying with the above system:

Iowa One Call: (800) 292-8989

3.3.2 Buried Utilities

The approximate locations of known existing buried utilities are shown on the drawings to the extent of available information at the time the drawings were prepared. (In general, no service connections are shown.) Prior to commencing excavation, the Contractor shall accurately locate all such installations. In the event the Contractor damages any existing utility lines, report thereof shall be made immediately to the Contracting Officer. If the Contracting Officer determines that repairs shall be made by the Contractor, such repairs shall be performed immediately.

3.3.3 Interruption of Services

Utility services shall not be interrupted except for brief periods to facilitate cut-ins. The Contractor shall provide temporary service and shall relocate existing utilities as required to construct the work shown and insure uninterrupted service. If interruption of services is unavoidable, the Contractor shall request approval in writing at least 30 calendar days prior to the proposed interruption. This submittal shall fully describe all details of proposed interruption and the reasons why alternatives are not feasible. The Contractor shall further coordinate with the owner of the utility and notify affected consumers at least 10 calendar days in advance of interruption of services. The Contracting Officer will not in general approve proposals which require interruption of services for more than 4 continuous hours.

3.4 SCHEDULING

3.4.1 General

It shall be the responsibility of the Contractor to schedule and execute the work, incorporating the necessary requirements set forth in these specifications. The Contractor shall develop and submit a schedule in accordance with SECTION: SPECIAL CONTRACT REQUIREMENTS, CLAUSE: SCHEDULES FOR CONSTRUCTION CONTRACTS.

3.4.2 Notification

The Contractor shall inform the Government, in writing, within 5 days after receipt of notice to proceed and before work begins as to which hours of the day and days of the week work under this contract will be performed. The Contractor shall notify the Government at least 24 hours before work is to be conducted on overtime, in multiple shifts, on weekends, or on Federal Government holidays.

3.5 CONSTRUCTION RESTRICTIONS

3.5.1 Placement of Material Excavated from McMillan Island or Channel Dredging

The Contractor will not be allowed to place material excavated from McMillan Island or from the optional channel dredging on either the Buck Creek or the Heitman property placement sites prior to April 1, 2002 without prior approval from the Contracting Officer.

3.5.2 Initial Placement Limit

Both the Buck Creek Placement Site and the Heitman property placement site shall be limited to an initial placement height elevation of 640.0 ± 0.5 feet for a period of not less than six months. The Heitman property placement site may be used to temporarily place excavation or dredge material above the finished grade shown for the six month period. After the six month period, additional material shall be placed on the Buck Creek Placement Site above elevation 640.0 by either transferring material that was temporarily placed on the adjoining Heitman property placement site or by direct excavation and relocation from McMillan Island.

3.5.3 Work in I&M Rail Link Right-of-Way

Portions of this work may be conducted within right-of-way owned by the I&M Rail Link, LLC (I&M). Generally, the I&M right-of-way extends 50 feet on either side of the centerline of their railroad tracks. The contractor shall perform no work in I&M's right-of-way until a permit for that work is issued to the contractor by I&M and a copy of the fully executed permit and satisfactory evidence of the insurance coverage required by the permit has been provided to both I&M and the Contracting Officer.

3.5.3.1 Right-of-Way Permit

The contractor shall be responsible for obtaining the right-of-way permit from I&M and shall comply with all terms and conditions of that permit as it conducts its work under this contract. Those conditions may require the contractor to provide flagging, traffic control, site restoration, special insurance, and indemnification to I&M. The contractor shall insure that all of its subcontractors (at any tier), employees, or suppliers performing work in the I & M right-of-way comply with the restrictions and safety requirements contained in the I&M permit and this contract.

3.5.3.2 Pre-negotiated Permit

The Government has negotiated a permit with I&M for the contractor's use and paid the permit processing fee. A copy of that permit is attached in SECTION 00830: ATTACHMENTS. The contractor may use the pre-negotiated permit by signing it and obtaining a countersignature from I&M. I&M has agreed to execute the pre-negotiated permit and deliver it to the contractor upon receipt of a completed permit application from the contractor. Alternatively, the contractor may, at its own risk and expense, elect to apply for a separate permit from I&M. No adjustment in contract price or completion date will be made for: (i) any increased costs of performance or delays associated with obtaining a separate permit, or, (ii) any increased costs of performance or delays associated with performing the contract work under the terms of that separate permit.

3.5.4 Blasting.

Blasting will not be permitted.

3.5.5 Pavement Removal and Replacement

Where roads are cut, removed, or otherwise damaged in the prosecution of the work the Contractor shall replace all pavements or other surfacings so removed or damaged to their preconstruction condition. After backfill is completed on paved streets, a temporary surface shall be laid down and the street opened to the traffic in order to provide access to abutting property. Restoration of the original street surface construction shall be completed no later than 60 calendar days after starting excavation. Should weather conditions preclude the restoration of the original surface material, temporary resurfacing utilizing a bituminous mixture shall be installed with the final surface constructed no later than June 1 of the following construction season.

3.5.6 Noise Restrictions

The Contractor shall use proper mufflers on all equipment within 500 feet of any residential areas. Noise levels shall not exceed the levels as specified in the COE EM 385-1-1.

3.6 WORK PERFORMED BY OTHERS

The Contractor shall coordinate with others, including other contractors, in the performance of the contract project work and schedule such work in order to provide for a minimum of delays and interferences. The Contractor's contract project operations/activities shall not interfere with channel maintenance dredging activities by either the Corps of Engineers or under separate contract by others. Coordination shall be through the Contracting Officer.

3.6.1 Work Performed Under Separate Contract

Work listed below is currently under separate contract or is scheduled to be awarded as a separate contract prior to completion of contract project work under this contract. Each such contract will be considered in the application of CONTRACT CLAUSES - OTHER CONTRACTS.

(1) Hydraulic Maintenance Dredging, Mississippi and Minnesota Rivers, Minnesota, Wisconsin and Iowa, work is being performed by the Corps of Engineers, St. Paul District in calendar years 2001, 2002 and 2003.

(2) Mechanical Maintenance Dredging, Mississippi and Minnesota Rivers, Minnesota, Wisconsin and Iowa, contract work is being performed by L&S Industrial and Marine, Inc. in calendar year 2001. A separate contract should be awarded in early 2002 for work to be performed in 2002 and 2003.

3.7 FLOATING PLANT

3.7.1 Equipment and Personnel

Floating plant and personnel shall comply with the applicable U.S. Coast Guard regulations and licensing requirements. Floating plant equipment shall meet the applicable requirements of 46 CFR Chapter 1 Subchapter E and 46 CFR 44.05-10.

3.7.2 Navigable Waters

Floating vessels operating on the Mississippi River and its tributaries must be operated in accordance with 33 CFR 207.3, "Ohio River, Mississippi River above Cairo, Ill., and their tributaries; use, administration, and navigation."

3.8 SEWAGE AND BILGE WATER DISPOSAL

The Contractor's methods for disposal of sanitary sewage, and bilge water accumulated aboard floating plant equipment, shall meet applicable local, state, and federal requirements.

3.9 SURVEYS

3.9.1 Layout

The Contractor shall layout its work from the Government established bench marks in accordance with CONTRACT CLAUSE: LAYOUT OF WORK.

3.9.1.1 Alignment

The alignment for the construction of each feature of work shall follow the alignment(s) as indicated on the drawings. The Contractor shall have in place, at least 7 calendar days prior to commencing construction operations, sufficient stakes to enable the Contracting Officer to verify the proposed hydraulic pipeline alignment, clearing limits, proposed excavation limits for the dredge material pile site, mark trees/vegetation to be left undisturbed, and define areal limits. For each dredge material pile and relocation/placement site, these stakes shall define access locations, outermost cut/fill limits, staging area limits, storage area limits, work limits or other area limits as directed, such that the Contracting Officer can easily determine, without additional surveys, if alignment and/or limit adjustments need to be made. The Contracting Officer may waive these requirements for certain areas. No work shall take place without prior approval of all the alignments and limits by the Contracting Officer.

3.9.1.2 Alignment Changes

The Government reserves the right to make changes in the alignment of any feature of work as may be found necessary before completion of the work. If it becomes necessary, through no fault of the Contractor, to abandon any line or location on which work has been done, payment for material(s) placed will be made as specified in the respective MEASUREMENT AND PAYMENT paragraph of the section to which the work pertains. No alignment changes or abandonment shall take place without prior written notice from the Contracting Officer.

3.9.2 Quantity surveys

Quantity surveys for channel dredging shall be specified in SECTION: MEASUREMENT AND PAYMENT. Quantity surveys for other work shall be in accordance with the following: The Contractor shall perform quantity and tolerance verification surveys for all features of work in accordance with CONTRACT CLAUSE: QUANTITY SURVEYS--ALTERNATE I. Unless changed by the Contracting Officer, the Contractor shall provide cross sections at 50 foot intervals to verify the required section. Areas where payment for material

is specified by volume, and/or weight, shall be surveyed by the Contractor, prior to commencement of construction of each feature and upon completion of each feature, in enough detail to accurately determine quantities and verify the required section. The Contractor shall also plot each cross section from the survey notes at a scale of 1" = 10' and provide a copy of the survey notes and cross sections to the Contracting Officer within 10 days after completion of the survey.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01111

WATER QUALITY MONITORING PROGRAM

PART 1 GENERAL

- 1.1 MONITORING PURPOSE
- 1.2 GOVERNMENT MONITORING PLAN
- 1.3 NOTIFICATION
- 1.4 POTABLE WATER

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01111

WATER QUALITY MONITORING PROGRAM

PART 1 GENERAL

The following considerations are concerned with hydraulic placement of material at the permanent placement site.

1.1 MONITORING PURPOSE

Hydraulic placement of dredged material results in percolation of carriage water into the ground. This percolation of carriage water will complement the natural infiltration from precipitation and surface waters. As the carriage water enters the groundwater system, it may create a temporary rise in the piezometric groundwater levels in the vicinity of the permanent placement area, and it will cause some temporary changes in the groundwater chemistry. The groundwater is being monitored to document changes in the groundwater quality and contaminant levels. Water quality monitoring results will be compared to drinking water standards and baseline conditions to determine the project effect on water quality.

1.2 GOVERNMENT MONITORING PLAN

The groundwater quality monitoring program will monitor piezometric levels and the groundwater chemistry. The sampling points currently planned include 1 residential well and 2 surface water sites; but the number and locations of sampling points could be revised at any time. Surface water sites to be sampled include the ponding area for the permanent dredge material placement site, and the Mississippi River upstream of the dredging activity. The government or its assigns will sample and analyze the residential wells and surface water sites. Monitoring will be conducted prior to the dredging activity (pre-project), during the dredging activity (project), and for a time after completion of dredging (post-project). The planned sampling schedule for chemical analysis includes the following: 3 pre-project samples, 3 post project samples, and 3 project sample sets collected at approximately 10-day intervals during the course of dredging. Chemical analysis will generally be conducted to screen for contaminants established for drinking water standards. Specific analytical methods may vary.

1.3 NOTIFICATION

The Contractor must notify the Contracting Officer's Representative and Mr. Jim Sentz (651) 290-5625 a minimum of 1 week prior to the onset of placement of dredged material at the permanent placement site so sampling during material placement can be coordinated.

1.4 POTABLE WATER

The Contractor shall be responsible for providing a potable water source to any residences using a drinking well within 1,000 feet of the edge of the selected permanent dredged material placement site. The Contractor shall notify the residents within this 1,000 feet a minimum of one month prior to dredged material placement in the permanent placement site that potable (bottled or water dispenser) water is available for the duration of the project at no cost to the resident. It is the resident's discretion to

receive or decline use of potable water. Any resident within the project area may start or discontinue receiving a potable water supply at any time during the project. The Contractor shall provide a potable water supply until project completion. The Contractor or its agents must deliver the potable water supply to each household requesting it and shall not use a central distribution system that requires the residents to pick up their own potable water.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 GENERAL

- 1.1 COMPENSATION
 - 1.1.1 Partial and Final Payments
- 1.2 FIELD MEASUREMENT
- 1.3 MEASUREMENT UNITS
- 1.4 DEFINITIONS
- 1.5 UNIT PRICES
 - 1.5.1 Bonds
 - 1.5.2 Mobilization and Demobilization
 - 1.5.3 Placement Site Preparation
 - 1.5.4 Clearing and Grubbing, McMillan Island
 - 1.5.5 Initial Excavation and Relocation of Existing Dredge Material from McMillan Island
 - 1.5.6 Secondary Excavation and Relocation of Existing Dredge Material from McMillan Island
 - 1.5.7 30" RCP, Class III
 - 1.5.8 Storm Sewer Flared End Sections
 - 1.5.9 Removals
 - 1.5.10 Macadem Base Marerial
 - 1.5.11 Bituminous Base Course
 - 1.5.12 Bituminous Surface Course and Tack Coat
 - 1.5.13 Aggregate Base Material
 - 1.5.14 Portland Cement Concrete (PCC) Pavement, IDOT Class C
 - 1.5.14.1 PCC Pavement Measurement
 - 1.5.14.2 PCC Pavement Payment
 - 1.5.15 Rumble Strips
 - 1.5.16 Highway Signage
 - 1.5.17 Traffic Control
 - 1.5.18 Granular Shoulder Material
 - 1.5.19 Pavement Markings
 - 1.5.20 Heitman Pond Excavation
 - 1.5.21 Stripping and Placing Topsoil
 - 1.5.22 Turf Establishment, Seed Mix Type 1
 - 1.5.23 Turf Establishment, Seed Mix Type 2
 - 1.5.24 Plantings
- 1.6 DREDGING
 - 1.6.1 Optional Bid Items
 - 1.6.2 Basis of Payment
 - 1.6.3 Measurement
 - 1.6.3.1 Project Depth
 - 1.6.3.2 Disputes
 - 1.6.4 Side Slopes
 - 1.6.5 Overdepth Dredging

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01270

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 COMPENSATION

The payment provided for in the contract shall constitute full compensation for furnishing all materials and for performing all work under the contract in a complete and acceptable manner. The contract work shall include providing plant, equipment, tools, supplies, labor, supervision, incidental materials, quality control, environmental protection, and meeting safety requirements, and for performing all work required for which separate payment is not otherwise provided. Compensation for all work shown, specified, or essential to completion of the project (whether or not the specific material or operation is indicated) shall be included on the bidding schedule. The payment provided for in the contract includes compensation for all risk, loss, damage, and expense arising out of the nature of the work or its prosecution, subject to conditions of the contract.

1.1.1 Partial and Final Payments

Partial payment will not exceed 90 percent of the contract amount until all incidental work, such as cleanup of the pipeline route and grading of the disposal area, is completed.

1.2 FIELD MEASUREMENT

The Contractor shall provide field surveys for quantity determination as specified in SECTION 01000.

1.3 MEASUREMENT UNITS

When materials are measured in units other than the measurement units specified as the basis of payment, the measured quantities shall be converted to the specified unit of measure. Factors for conversions from one basis or unit of measurement to another shall be approved by the Contracting Officer.

1.4 DEFINITIONS

Excavating and Filling. All excavation, except for channel dredging, will be unclassified. Excavation consists of the removal of material between the existing lines and grades shown to the new required lines and grades. The Contractor shall be responsible for transporting and placement of excavated dredged fill material and channel dredging material into the designated permanent relocation/placement site. Unsuitable material or excess material shall be left in-place or wasted only as directed. Excavation beyond the limits shown shall be performed only as directed.

1.5 UNIT PRICES

Payment items for the work of this contract are listed in the BIDDING SCHEDULE and described below. Generally, no discussion is provided for incidental contract work not provided for on the bidding schedule.

1.5.1 Bonds

Bonds will be paid for on a job basis (JB) in accordance with CONTRACT CLAUSE: 52.232-5 PAYMENTS UNDER FIXED PRICE CONSTRUCTION CONTRACTS.

1.5.2 Mobilization and Demobilization

Compensation for physical move of equipment and plant to the project site, move of equipment and plant off the site, construction of the pipeline, and removal of the pipeline shall be made for under the contract line item for Mobilization and Demobilization.

1.5.3 Placement Site Preparation

Placement Site Preparation will not be measured for payment. Payment will be made on a job basis, complete. This work will include constructing the access ramps, building permanent berms, clearing trees and brush, and all other incidental work not included in other contract line items. Aggregate base shall be included under the contract line items for Aggregate Base Material.

1.5.4 Clearing and Grubbing, McMillan Island

Clearing and Grubbing shall be measured in acres of clearing and grubbing on McMillan Island actually performed. Payment will be made at the contract unit price for clearing and grubbing, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.

1.5.5 Initial Excavation and Relocation of Existing Dredge Material from McMillan Island

The existing dredge material shall be excavated from the McMillan Island dredged material pile and relocated to the designated placement location and restricted to the initial placement height elevation of 640.0 + 0.5 feet within the limits of fill shown on the drawings. No consideration will be given to the nature of the materials, and all excavation will be designated as unclassified excavation. The work will be measured for payment by the cubic yard, in the original position, using the average-end-area method based on the required survey data and the indicated finish lines except final surveys shall be used for authorized over-depth excavation. Surveying shall be in accordance with SECTION 01000: GENERAL. Except for authorized over-depth excavation, no allowance will be made for materials removed outside of the lines and grades shown.

Work access by dredge cut for floating plant will not be measured for payment. Related work, including but not limited to material handling and grading at the relocation/placement site will not be measured for payment. All costs in connection therewith shall be included in the contract item(s) for which the work pertains.

1.5.6 Secondary Excavation and Relocation of Existing Dredge Material from McMillan Island

Additional dredge material to be relocated shall be excavated from the McMillan Island dredged material pile and relocated to the designated placement location at the option of the Contractor as follows:

(1) The material may be relocated in conjunction with the initial excavation of McMillan Island and temporarily placed on the Heitman property placement site. Material temporarily placed on the Heitman property shall be transferred to the adjoining Buck Creek Placement Site after six months and then both sites shaped to the finished grades as shown on the drawings.

(2) The material may be relocated from the McMillan Island dredged material pile six months after the initial relocation and placed directly on the Buck Creek Placement Site to the finished grades as shown on the drawings.

No consideration will be given to the nature of the materials, and all excavation will be designated as unclassified excavation. The work will be measured for payment by the cubic yard, in the original position, using the average-end-area method based on the required survey data and the indicated finish lines except final surveys shall be used for authorized over-depth excavation. Surveying shall be in accordance with SECTION 01000: GENERAL. Except for authorized over-depth excavation, no allowance will be made for materials removed outside of the lines and grades shown. Payment shall constitute full compensation for the relocation from McMillan Island and any transfer of material temporarily placed on the Heitman property to the adjoining Buck Creek Placement Site.

1.5.7 30" RCP, Class III

The length of Reinforced Concrete Pipe (RCP) installed will be measured along the centerlines of the pipe from end to end of pipe without deductions for diameter of manholes. Pipe will be paid for at the contract unit price for the number of linear feet of culverts or storm drains placed and shall include all related excavation, backfilling and compaction required in the accepted work.

1.5.8 Storm Sewer Flared End Sections

Storm Sewer Flared End Sections will be measured by the unit. Flared end sections will be paid for at the contract unit price for the various sizes in the accepted work.

1.5.9 Removals

Removals will not be measured for payment. Payment will be made on a job basis, complete. This work includes removal of the existing concrete bike lane and corrugated metal pipes as shown.

1.5.10 Macadam Base Material

Macadam Base Material will be measured for payment by the square yard (SY) in place. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified.

1.5.11 Bituminous Base Course

Bituminous Base Course will be measured for payment by the square yard (SY) in place. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified.

1.5.12 Bituminous Surface Course and Tack Coat

Bituminous Surface Course and Tack Coat will be measured for payment by the square yard (SY) in place. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified.

1.5.13 Aggregate Base Material

Aggregate Base Material will be measured for payment by the square yard (SY) in place. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified.

1.5.14 Portland Cement Concrete (PCC) Pavement, IDOT Class C

1.5.14.1 PCC Pavement Measurement

The quantity of PCC Pavement to be paid for will be the area of 8" concrete in square yards including monolithic curb, where required, placed in the completed and accepted pavement. Measurement is based on neat line dimensions, and no deductions are made for rounded edges or the space occupied by embedded items or voids.

1.5.14.2 PCC Pavement Payment

Payment will be made at the contract price per square yard for the scheduled item. Payment will constitute full compensation for furnishing all materials, equipment, plant and tools, and for all labor and other incidentals necessary to complete the PCC pavement. Aggregate base, rumble strips and pavement markings will be measured and paid for separately. No separate payment will be made for any cementitious materials, admixtures, steel reinforcement, dowels or tie bars, or for any joint materials.

1.5.15 Rumble Strips

Rumble Strips will be measured for payment by the lineal foot of rumble strips in place. Payment will be made at the contract unit price for rumble strips, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.

1.5.16 Highway Signage

Highway Signage will not be measured for payment. Payment will be made on a job basis, complete. This work includes removal and reinstalling any existing signs affected by the work and installing two new flip-up signs as specified.

1.5.17 Traffic Control

Traffic Control will not be measured for payment. Payment will be made on a job basis, complete. This includes all work to furnish, erect, maintain, move and remove all traffic control devices required to safely maintain

traffic during construction of the work as specified.

1.5.18 Granular Shoulder Material

Granular Shoulder Material will be measured for payment by the cubic yard (CY) in place. Payment will be made at the contract unit price and will constitute full compensation for furnishing all labor, materials and incidentals necessary to construct the work complete in place as specified.

1.5.19 Pavement Markings

Pavement Markings will be measured for payment by the lineal foot for the scheduled item. Payment will be made at the contract unit price to include both 4" white solid lines and 4" white skip lines, and this price shall constitute full compensation for all labor, equipment, tools, and incidentals necessary to complete the work specified herein.

1.5.20 Heitman Pond Excavation

The Heitman Pond Excavation will be measured for payment by the cubic yard (CY) of excavation performed. Payment will be made at the contract unit price and will constitute full compensation for all labor, equipment and incidentals necessary for the work of excavating the material, shaping the pond and stockpiling the material for use as topsoil.

1.5.21 Stripping and Placing Topsoil

Topsoil shall be measured by the cubic yard (CY) of material in place. Payment will be made at the contract unit price and will constitute full compensation for the work of stripping the material, stockpiling the material and spreading the material as shown on the drawings. Stripping shall be incidental to placement of topsoil and will not be measured for separate payment.

1.5.22 Turf Establishment, Seed Mix Type 1

Turf Establishment for Seed Mix Type 1 will be measured for payment by the acre (AC) seeded within the limits shown. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified. No measurement or payment shall be made for turf establishment outside of the limits shown for the required turfing, such as for turfing to restore areas damaged by the Contractor's operations.

1.5.23 Turf Establishment, Seed Mix Type 2

Turf Establishment for Seed Mix Type 2 will be measured for payment by the acre (AC) seeded within the limits shown. Payment will be made at the contract unit price and will constitute full compensation for furnishing the materials and constructing the work complete in place as specified. No measurement or payment shall be made for turf establishment outside of the limits shown for the required turfing, such as for turfing to restore areas damaged by the Contractor's operations.

1.5.24 Plantings

Plantings will not be measured for payment. Payment will be made on a job basis, complete. This includes all labor, equipment, tools and incidentals necessary to handle, plant, fertilize and protect the planting work

specified herein.

1.6 DREDGING

1.6.1 Optional Bid Items

There is an optional item for channel dredging in the bidding documents. The Government has the exclusive option to exercise this portion of the contract. If exercised, the Contractor shall be prepared to commence the option work within 72 hours. If the Contractor uses the same plant, the option work may interrupt the island excavation. Costs to move between the island excavation and the channel cuts, or mobilization costs for second plant or additional plant, shall not be measured for separate payment and costs therefore shall be included in the bid item to which the work pertains.

1.6.2 Basis of Payment

The material removed will be measured by cubic yard (CY) in place, by means of soundings taken before dredging. The payment quantity will be calculated as the volume of dredged material above the project depth within the defined cut area, including side slopes as defined herein. Payment under this item shall include all costs for dredging and satisfactory disposal of material in the designated relocation area. No separate payment will be made for movement of buoys, interruptions due to river traffic, layout and surveys, or other incidental work specified.

1.6.3 Measurement

The payment quantity will be computed by the Government. The Corps of Engineers will take pre-dredge soundings for quantity determination and provide them to the Contractor at least 48 hours prior to the date dredging will begin. The Contractor will notify the Contracting Officer at least 7 calendar days prior to the intended dredging date. These pre-dredge soundings will be by channel sweep method or by cross section taken at a maximum interval of 50 feet. Soundings will extend a minimum of 200 feet upstream and downstream of the cut. Soundings will be taken by lead line or sonic methods, or both, as determined by the Government; results of soundings by either or both methods will be the basis for payment. The Contractor has the option of being present when such soundings are made. Channel depths on the drawings represent existing conditions based on current available information, but will be verified and corrected by soundings taken before dredging in each locality.

1.6.3.1 Project Depth

The Contractor shall provide the Government with a minimum of 48 hours notice prior to completing work at each dredging site. Post-dredging soundings will be made by the Government within 48 hours after completion of dredging. In order to allow for the inaccuracies of the dredging process, the Contractor will be allowed a tolerance of 0.5 feet above project depth in isolated scattered areas, providing the total area of the under-excavated portions does not exceed 10 percent of the total dredge cut area, and providing the average depth of the dredge cut is equal to or greater than the specified project depth. In the event the post-dredge soundings show the contractor has not met the contract requirements, the Government may require the Contractor to complete the work with no additional compensation for mobilization. If the Government accepts the work as completed, the amount of material not dredged will be deducted from

the payment quantity.

1.6.3.2 Disputes

In the event the Contractor disputes the Government's soundings, the Contractor shall indicate so in writing to the Contracting Officer within 24 hours after receiving the Government's data. It shall be the Contractor's responsibility to document any inaccuracy.

1.6.4 Side Slopes

Dredging on side slopes shall follow, as closely as practicable, the lines indicated or specified. To account for sloughing which occurs subsequent to dredging at the edge of cuts, quantity for payment will include a one vertical on two horizontal neat line drawn away from the cut beginning at the intersection of the edge of cut with the project depth neat line and extending to the existing river bottom.

1.6.5 Overdepth Dredging

Some over-depth dredging to cover inaccuracies of the dredging process is necessary to attain full project depth. Over depth dredging will not be measured for payment.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

- 1.1 SUBMITTAL IDENTIFICATION
- 1.2 SUBMITTAL CLASSIFICATION
 - 1.2.1 Government Approved
 - 1.2.2 Information Only
- 1.3 APPROVED SUBMITTALS
- 1.4 DISAPPROVED SUBMITTALS
- 1.5 WITHHOLDING OF PAYMENT

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 SUBMITTAL REGISTER (ENG FORM 4288)
- 3.3 SCHEDULING
- 3.4 TRANSMITTAL FORM (ENG FORM 4025)
- 3.5 SUBMITTAL PROCEDURE
 - 3.5.1 Submittal Copies
 - 3.5.2 Schedule
 - 3.5.3 Shop Drawings
 - 3.5.4 Deviations
- 3.6 CONTROL OF SUBMITTALS
- 3.7 GOVERNMENT APPROVED SUBMITTALS
- 3.8 INFORMATION ONLY SUBMITTALS
- 3.9 STAMPS
- 3.10 CONTRACTOR RECORD DRAWINGS
 - 3.10.1 As-Built Shop Drawings

-- End of Section Table of Contents --

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION

Submittals required are identified by SD numbers as follows:

SD-01 Data

SD-04 Drawings

SD-06 Instructions

SD-07 Schedules

SD-08 Statements

SD-09 Reports

SD-13 Certificates

SD-14 Samples

SD-18 Records

SD-19 Operation and Maintenance Manuals

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Government Approved

Governmental approval is required for extensions of design, critical materials, deviations, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer. Within the terms of the Contract Clause entitled "Specifications and Drawings for Construction," they are considered to be "shop drawings."

1.2.2 Information Only

All submittals not requiring Government approval will be for information only. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.3 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work. After

submittals have been approved by the Contracting Officer, no resubmittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.4 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.5 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals. Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby. Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

3.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all inclusive and additional submittals may be required. If requested, the Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 7 calendar days after Notice to Proceed. The Contractor shall keep this

diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. The submittal register and the progress schedules shall be coordinated.

3.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently. Certifications to be submitted with the pertinent drawings shall be so scheduled. Adequate time (a minimum of 30 calendar days exclusive of mailing time) shall be allowed and shown on the register for review and approval. No delay damages or time extensions will be allowed for time lost in late submittals. The submittal register shall provide for a reasonable timely distribution of shop drawings as they are prepared (particularly within a specific discipline, i.e.: structural, mechanical).

3.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURE

3.5.1 Submittal Copies

The Contractor shall submit 6 copies of each submittal (both government approved and for information only) unless otherwise indicated. Each transmittal shall address only one submittal item. Transmittals returned for resubmission shall be resubmitted in their entirety. When approved by the Contracting Officer, routine test reports and delivery tickets may be submitted with daily quality control reports in place of following submittal procedures under this section.

3.5.2 Schedule

Shop drawings shall be submitted with ample time to secure Government approval prior to the time the items covered thereby are to be delivered to the site. Additional time should be allowed for possible resubmittal. Materials fabricated or delivered without Government approval of the shop drawing will be subject to rejection. All submittals shall be made prior to commencement of applicable work, and allow adequate time for government review acceptable to the Contracting Officer.

3.5.3 Shop Drawings

Shop drawings shall be reproductions on high quality paper with clear legible print. Drawings shall generally be bordered a minimum of one inch and trimmed to neat lines. Shop drawing quality will be subject to approval. Each shop drawing, including catalog data, shall be identified with a title block including the name of the Contractor, contract number, name and location of project, and name of the item of work or structure to

which the shop drawing applies. Catalog data, including specifications and full descriptive matter, may be submitted as shop drawings. Catalog data must be supplemented as necessary to include all pertinent data to verify conformance to the contract documents. When catalog data includes non applicable data, the applicable data shall be clearly indicated.

3.5.4 Deviations

For submittals which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Five copies of the submittal will be retained by the Contracting Officer and 1 copy of the submittal will be returned to the Contractor.

3.8 INFORMATION ONLY SUBMITTALS

Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. This does not relieve the Contractor from the obligation to furnish material conforming to the plans and specifications; will not prevent the Contracting Officer from requiring removal and replacement of nonconforming material incorporated in the work; and does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or for check testing by the Government in those instances where the technical specifications so prescribe.

3.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

<p>CONTRACTOR</p> <p>(Firm Name)</p> <p>_____ Approved</p> <p>_____ Approved with corrections as noted on submittal data and/or attached sheets(s).</p> <p>SIGNATURE: _____</p> <p>TITLE: _____</p> <p>DATE: _____</p>

3.10 CONTRACTOR RECORD DRAWINGS

The Contractor shall maintain a separate set of marked-up full-scale contract drawings indicating as-built conditions. These drawings shall be maintained in a current condition at all times until completion of the work and shall be available for review by Government personnel at all times. All variations from the contract drawings, for whatever reason, including those occasioned by modifications, optional materials, and the required coordination between trades, shall be indicated. These variations shall be shown in the same general detail utilized in the contract drawings. Revisions shall be shown on all drawings and details related to the changed feature. These drawings shall be neatly prepared with clear legible print.

Deleted items shall be indicated in red and added items or changed locations shall be shown in green. These drawings shall be furnished to the Contracting Officer within 30 days after the required contract completion date.

3.10.1 As-Built Shop Drawings

The Contractor shall record changes to shop drawings to indicate as-built conditions. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted.

-- End of Section --

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.
2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.
3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.
4. Submittals requiring expeditious handling will be submitted on a separate form.
5. Separate transmittal form will be used for submittals under separate sections of the specifications.
6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".
7. Form is self-transmittal, letter of transmittal is not required.
8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.
9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

- | | |
|---|---|
| A -- Approved as submitted. | E -- Disapproved (See attached). |
| B -- Approved, except as noted on drawings. | F -- Receipt acknowledged. |
| C -- Approved, except as noted on drawings.
Refer to attached sheet resubmission required. | FX -- Receipt acknowledged, does not comply
as noted with contract requirements. |
| D -- Will be returned by separate correspondence. | G -- Other (<i>Specify</i>) |

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

SUBMITTAL REGISTER
(ER 415 1-10)

CONTRACT NO.

TITLE AND LOCATION

McMillan Island Excavation and Dredging

CONTRACTOR

SPECIFICATION SECTION

02230

ACTIVITY NO. a.	TRANS-MITTAL NO. b.	ITEM NO. c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL										CLASSIFICATION	REVIEWER r.	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION		GOVERNMENT ACTION		REMARKS aa.				
					DRAWINGS f.	INSTRUMENTS g.	STATEMENTS h.	REPRODUCTION i.	CERTIFICATES j.	SPECIFICATIONS k.	RECOMMENDATIONS l.	O&M m.	INFORMATION n.	GOVERNMENT REVIEW o.			SUBMIT s.	APPROVAL NEEDED BY t.	MATERIAL NEEDED BY u.	CODE v.	DATE w.	SUBMIT TO GOVERNMENT x.	CODE y.		DATE z.			
																										CONTRACTOR ACTION		GOVERNMENT ACTION
			1.2	Clearing and Grubbing Disposal									X	X														

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01410

ENVIRONMENT PROTECTION

- 1.1 GENERAL REQUIREMENTS
 - 1.1.1 Subcontractors
 - 1.1.2 Definitions
 - 1.2 SUBMITTALS
 - 1.3 ENVIRONMENTAL PROTECTION PLAN
 - 1.3.1 Implementation.
 - 1.3.2 Compliance.
 - 1.3.3 Contents.
 - 1.4 PERMITS
 - 1.5 NOTIFICATION
 - 1.6 PREVIOUSLY USED EQUIPMENT
- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION
- 3.1 ENVIRONMENTAL RESOURCES.
 - 3.2 LAND RESOURCES
 - 3.2.1 Work Area Limits
 - 3.2.2 Landscape
 - 3.2.3 Unprotected Erodible Soils
 - 3.2.4 Disturbed Areas
 - 3.2.5 Contractor Facilities and Work Areas
 - 3.3 WATER RESOURCES
 - 3.3.1 Washing and Curing Water
 - 3.3.2 Cofferdam and Diversion Operations
 - 3.3.3 Stream Crossings
 - 3.3.4 Fish and Wildlife
 - 3.4 AIR RESOURCES
 - 3.4.1 Particulates
 - 3.4.2 Hydrocarbons and Carbon Monoxide
 - 3.4.3 Odors
 - 3.4.4 Sound Intrusions
 - 3.5 WASTE DISPOSAL
 - 3.5.1 Solid Wastes
 - 3.5.2 Chemical Wastes
 - 3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES
 - 3.7 POST CONSTRUCTION CLEANUP
 - 3.8 RESTORATION OF LANDSCAPE DAMAGE
 - 3.9 MAINTENANCE OF POLLUTION FACILITIES
 - 3.10 TRAINING OF CONTRACTOR PERSONNEL

-- End of Section Table of Contents --

SECTION 01410

ENVIRONMENT PROTECTION

1.1 GENERAL REQUIREMENTS

The Contractor shall perform the work minimizing environmental pollution and damage as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract.

1.1.1 Subcontractors

The Contractor shall insure that its subcontractors comply with the requirements of this section.

1.1.2 Definitions

For the purpose of this specification, environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual aesthetics, noise, solid waste, radiant energy, and radioactive materials, as well as other pollutants.

1.2 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following items shall be submitted in accordance with SECTION 01330: SUBMITTAL PROCEDURES.

SD-08 Statements

Environmental Protection Plan; GA.

The environmental protection plan shall be prepared in accordance with Paragraph: Environmental Protection Plan.

1.3 ENVIRONMENTAL PROTECTION PLAN

1.3.1 Implementation.

Prior to ordering required materials/equipment or commencing construction work, the Contractor shall:

a. Submit to the Contracting Officer an acceptable written Environmental Protection Plan;

b. Obtain the Contracting Officer's written acceptance of the Environmental Protection Plan; and

c. Meet with representatives of the Contracting Officer for the purpose of developing an understanding of the requirements and methods of administration of the Contractor's Environmental Protection Plan.

1.3.2 Compliance.

Notwithstanding the requirements of this section and notwithstanding approval by the Contracting Officer of the Contractor's Environmental Protection Plan, nothing herein shall be construed as relieving the Contractor of all applicable Federal, State, and local environmental protection laws and regulations.

1.3.3 Contents.

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring that the Environmental Protection Plan is adhered to.
- b. Name(s) of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.
- e. Methods for protection of features to be preserved within authorized work areas. The Contractor shall prepare a listing of methods to protect resources needing protection, i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, and historical, archaeological, and cultural resources.
- f. Procedures to be implemented to provide the required environmental protection, to comply with the applicable laws and regulations, and to correct pollution due to accident, natural causes, or failure to follow the procedures of the environmental protection plan.
- g. Methods and locations for waste disposal. Licenses or permits shall be submitted for solid waste disposal sites that are not an operating commercial facility. Evidence of disposal facility acceptance shall be submitted for any hazardous or toxic waste.
- h. Drawings showing locations of any proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.
- i. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.
- j. Traffic control plans.
- k. Methods of protecting surface and ground water during construction activities.

- l. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas.
- m. Drawing of borrow areas.
- n. Plans for restoration of landscape damage.

1.4 PERMITS

Permits obtained by the Government related to the work of this contract are attached in SECTION 00830: ATTACHMENTS, or referenced in SECTION 01000: GENERAL. The Contractor is responsible for obtaining all applicable permits or licenses (those not obtained by the Government). The Contractor shall be responsible for implementing the terms and requirements of the permits held by the Contractor or the Government. A copy of permits referenced in SECTION 01000: GENERAL are available for inspection in the Office of the District Engineer, Army Corps of Engineers Centre, 190 Fifth Street East, St. Paul, Minnesota 55101-1638.

1.5 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with the previously mentioned Federal, State or local laws or regulations, permits, and other elements of the Contractor's environmental protection plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of proposed corrective action and take such action when approved. If the Contractor fails to comply promptly, the Contracting Officer may issue an order stopping (suspending) all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or costs or damages allowed to the Contractor for any such suspensions. Failure of the Contracting Officer to notify the Contractor of any noncompliance with Federal, State, or local laws or regulations does not relieve the Contractor of the obligation to be in conformance with those requirements.

1.6 PREVIOUSLY USED EQUIPMENT

The Contractor shall thoroughly clean all construction equipment previously used at other sites before it is brought into the work areas, ensuring that soil residuals are removed and that egg deposits from plant pests are not present; the Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 ENVIRONMENTAL RESOURCES.

The environmental resources within the project boundaries and those affected outside the limits of permanent work under this contract shall be protected during the entire period of this contract. The Contractor shall confine its activities to areas defined by the drawings and specifications.

3.2 LAND RESOURCES

Prior to the beginning of any construction, the Contractor shall identify all land resources to be preserved within the Contractor's work area. The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without permission from the Contracting Officer. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. Where such special emergency use is permitted, the Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, earth or other material displaced into uncleared areas shall be removed.

3.2.1 Work Area Limits

Prior to any construction, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are to be saved and protected shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

3.2.3 Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in cases where the constructed feature obscures borrow areas, quarries, and waste material areas, these areas shall not initially be totally cleared. Clearing of such areas shall progress in reasonably sized increments as needed to use the developed areas as approved by the Contracting Officer.

3.2.4 Disturbed Areas

The Contractor shall effectively prevent erosion and control sedimentation through approved methods including, but not limited to, the following:

- a. Retardation and control of runoff. Runoff from the construction site or from storms shall be controlled, retarded, and diverted to protected drainage courses by means of diversion ditches, benches, berms, and by any measures required by area wide plans under the Clean Water Act.
- b. Erosion and sedimentation control devices. The Contractor shall construct or install temporary and permanent erosion and sedimentation control features as indicated or required. Berms, dikes, drains, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.

- c. Sediment basins. Sediment from construction areas shall be trapped in temporary or permanent sediment basins. The sediment basins shall be constructed in accordance with basin plans when shown on the drawings. The basins shall accommodate the runoff of a local 5 year storm, except that the design storm event required by the watershed district, watershed management board, or similar governing agency shall be used if available. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed to maintain basin effectiveness. Overflow shall be controlled by paved weirs or by vertical overflow pipes. The collected topsoil sediment shall be reused for fill on the construction site, and/or stockpiled for use at another site. The Contractor shall institute effluent quality monitoring programs as required by State and local environmental agencies.

3.2.5 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Borrow areas shall be managed to minimize erosion and to prevent sediment from entering nearby waters. Dredged material areas shall be managed and controlled to limit dredged material intrusion into areas designated on the drawings and to prevent erosion of soil or sediment from entering nearby waters. Dredged material areas shall be developed in accordance with the grading plan indicated on the drawings. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas from despoilment.

3.3 WATER RESOURCES

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination of the fresh water reserve. Monitoring of water areas affected by construction shall be the Contractor's responsibility. All water areas affected by construction activities shall be monitored by the Contractor.

3.3.1 Washing and Curing Water

Waste waters directly derived from construction activities shall not be allowed to enter water areas. Waste waters shall be collected and placed in retention ponds where suspended material can be settled out or the water evaporates to separate pollutants from the water.

3.3.2 Cofferdam and Diversion Operations

Construction operations for dewatering, water return for hydraulic dredging, removal of cofferdams, tailrace excavation, and tunnel closure shall be controlled at all times to limit the impact of water turbidity on the habitat for wildlife and on water quality for downstream use. The Contractor shall plan its operations and perform all work necessary to minimize adverse impact or violation of the water quality standards applicable to this contract.

3.3.3 Stream Crossings

Stream crossings shall be controlled during construction. Crossings shall provide movement of materials or equipment which do not violate water pollution control standards of Federal, State, or local governments.

3.3.4 Fish and Wildlife

The Contractor shall minimize interference with, disturbance to, and damage of fish and wildlife. Species that require specific attention along with measures for their protection shall be listed by the Contractor prior to beginning of construction operations.

3.4 AIR RESOURCES

Equipment operation and activities or processes performed by the Contractor in accomplishing the specified construction shall be in accordance with State air pollution statutes, rules, and regulations and all Federal emission and performance laws and standards. Ambient Air Quality Standards set by the Environmental Protection Agency shall be maintained. Monitoring of air quality shall be the Contractor's responsibility. All air areas affected by the construction activities shall be monitored by the Contractor.

3.4.1 Particulates

Dust particles; aerosols and gaseous by-products from construction activities; and processing and preparation of materials, such as from asphaltic batch plants; shall be controlled at all times, including weekends, holidays and hours when work is not in progress. The Contractor shall maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and other work areas within or outside the project boundaries free from particulates which would cause the air pollution standards to be exceeded or which would cause a hazard or a nuisance. Sprinkling, chemical treatment of an approved type, light bituminous treatment, baghouse, scrubbers, electrostatic precipitators or other methods will be permitted to control particulates in the work area. Sprinkling, to be efficient, must be repeated to keep the disturbed area damp at all times. The Contractor must have sufficient, competent equipment available to accomplish these tasks. Particulate control shall be performed as the work proceeds and whenever a particulate nuisance or hazard occurs.

3.4.2 Hydrocarbons and Carbon Monoxide

Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and State allowable limits at all times.

3.4.3 Odors

Odors shall be controlled at all times for all construction activities, processing and preparation of materials.

3.4.4 Sound Intrusions

The Contractor shall keep construction activities under surveillance and control to minimize environment damage by noise. The Contractor shall use methods and devices to control noise emitted by equipment to within the levels specified in the "Safety and Health Requirements Manual" referenced in the clause "Accident Prevention" in SECTION: CONTRACT CLAUSES.

3.5 WASTE DISPOSAL

The Contracting Officer shall be informed of any waste disposal requirements identified during the work and not covered in the Environmental Protection Plan. Waste disposal plans shall be updated and submitted as required.

3.5.1 Solid Wastes

Solid wastes (excluding dredge material and clearing debris) shall be placed in containers which are emptied on a regular schedule. Handling and disposal shall be conducted to prevent contamination. Segregation measures shall be employed so that no hazardous or toxic waste will become co-mingled with solid waste. The Contractor shall transport solid waste off Government property and dispose of it in compliance with Federal, State, and local requirements for solid waste disposal. The Contractor shall comply with Federal, State, and local laws and regulations pertaining to the use of landfill areas.

3.5.2 Chemical Wastes

Chemical waste shall be stored in corrosion resistant containers, removed from the work areas, and disposed of in accordance with Federal, State, and local laws and regulations.

3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Existing historical, archaeological, and cultural resources within the Contractor's work area will be so designated by the Contracting Officer if any have been identified. The Contractor shall take precautions to preserve all such resources as they existed at the time they were first pointed out. The Contractor shall provide and install protection for these resources and be responsible for their preservation during the life of the contract. If during excavation or other construction activities any previously unidentified or unanticipated resources are discovered or found, all activities that may damage or alter such resources shall be temporarily suspended. Resources covered by this paragraph include but are not limited to: any human skeletal remains or burials; artifacts; shell, midden, bone, charcoal, or other deposits; rocks or coral alignments, pavings, wall, or other constructed features; and any indication of agricultural or other human activities. Upon such discovery or find, the Contractor shall immediately notify the Contracting Officer.

3.7 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction.

3.8 RESTORATION OF LANDSCAPE DAMAGE

The Contractor shall restore all landscape features damaged or destroyed during construction operations outside the neat lines of project features. Such restoration shall be in accordance with the Environmental Protection Plan. This work shall be accomplished at the Contractor's expense and at no additional cost to the Government.

3.9 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length

of time construction activities create the particular pollutant.

3.10 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection. The training shall include methods of detecting and avoiding pollution, familiarization with pollution standards, both statutory and contractual, and installation and care of facilities, devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental pollution control.

-- End of Section --

SECTION TABLE OF CONTENTS
DIVISION 01 - GENERAL REQUIREMENTS
SECTION 01451
CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 QUALITY CONTROL PLAN
 - 3.2.1 General
 - 3.2.2 Content of the CQC Plan
 - 3.2.3 Acceptance of Plan
 - 3.2.4 Notification of Changes
- 3.3 COORDINATION MEETING
- 3.4 QUALITY CONTROL ORGANIZATION
 - 3.4.1 General
 - 3.4.2 CQC System Manager
 - 3.4.3 Additional Requirement
 - 3.4.4 Organizational Changes
- 3.5 SUBMITTAL PROCEDURES
- 3.6 CONTROL
 - 3.6.1 Preparatory Phase
 - 3.6.2 Initial Phase
 - 3.6.3 Follow-up Phase
 - 3.6.4 Additional Preparatory and Initial Phases
- 3.7 COMPLETION INSPECTION
 - 3.7.1 Punch-Out Inspection
 - 3.7.2 Pre-Final Inspection
 - 3.7.3 Final Acceptance Inspection
- 3.8 DOCUMENTATION
- 3.9 SAMPLE FORMS
- 3.10 NOTIFICATION OF NONCOMPLIANCE
- 3.11 IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SYSTEM FOR CONTRACTOR QUALITY CONTROL OF CONTRACT
 - 3.11.1 Revisions
 - 3.11.2 Pay Activity

-- End of Section Table of Contents --

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740 (1996) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction

ASTM E 329 (1995b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following items shall be submitted in accordance with SECTION 01330: SUBMITTAL PROCEDURES.

Contractor Quality Control Plan; GA.

The plan as specified in paragraph: Quality Control Plan shall be submitted.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

3.2 QUALITY CONTROL PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 15 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Construction will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent or someone higher in the Contractor's organization.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.
- e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking construction deficiencies from

identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

- h. Reporting procedures, including proposed reporting formats.
- i. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

3.2.3 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Government reserves the right to require the Contractor to make changes in his CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 10 calendar days prior to the Coordination Meeting.

During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the

contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall have a minimum of 5 years of construction experience on projects similar to the construction on this contract. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned as System Manager but may have duties as project superintendent in addition to quality control. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 Additional Requirement

In addition to the above qualifications, the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered through the Government in the Minneapolis - St. Paul, Minnesota metropolitan area.

3.4.4 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

3.5 SUBMITTAL PROCEDURES

Submittals shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract drawings.
- c. A check to assure that all materials and/or equipment have been

tested, submitted, and approved.

- d. Review of provisions that have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
- g. A review of the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. Discussion of the initial control phase.
- k. The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall

be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

- g. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if the quality of on-going work is unacceptable, if there are changes in the applicable CQC staff, onsite production supervision or work crew, if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.7 COMPLETION INSPECTION

3.7.1 Punch-Out Inspection

Near the completion of all work or any increment thereof established by a completion time stated in the Special Clause entitled "Commencement, Prosecution, and Completion of Work," or stated elsewhere in the specifications, the CQC System Manager shall conduct an inspection of the work and develop a punch list of items which do not conform to the approved drawings and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

3.7.2 Pre-Final Inspection

The Government will perform this inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

3.7.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

3.8 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List deficiencies noted along with corrective action.
- e. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.
- f. Submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.
- i. Instructions given/received and conflicts in plans and/or specifications.
- j. Contractor's verification statement.

These records shall indicate a description of trades working on the

project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.9 SAMPLE FORMS

The following sample forms are enclosed at the end of this section:

- a. Construction Quality Control Management Report
- b. CQC Report
- c. Preparatory Phase Checklist
- d. Initial Phase Checklist

3.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

3.11 IMPLEMENTATION OF GOVERNMENT RESIDENT MANAGEMENT SYSTEM FOR CONTRACTOR QUALITY CONTROL OF CONTRACT

The Contractor shall utilize the Contractor Quality Control (CQC) module of the Resident Management System (RMS). The RMS-CQC module is a computer program which is executable on IBM compatible computers with 80386, 80486 and Pentium processors. This module includes a daily CQC reporting form which must be used. The module shall be completed to the satisfaction of the Contracting Officer prior to any contract payment and shall be updated as required. The Contractor shall complete module elements including:

- Prime Contractor staffing
- Subcontractor information, including name, address, trade, and point of contact
- Submittal information, including description, activity number, review period, expected procurement period
- Quality control testing
- Definable features of work

Installed property listing
Transfer property listing
Pay activity and activity information
Planned cumulative progress earnings
Scheduled employee education required by the specifications
Insurance expiration dates

3.11.1 Revisions

The Contractor shall acknowledge receipt of Government comments relating to the RMS-CQC module by specific number reference on his Daily CQC report. The daily CQC report shall also report when corrections are implemented.

3.11.2 Pay Activity

The sum of all pay activity values shall equal the contract amount. Bid items may include multiple activities, but activities shall only be assigned to one bid item.

-- End of Section --

CQC Report

1. Work performed today: (Indicate location and description of work performed by prime and/or subcontractors by letter in table above).

2. Results of control activities: (Indicate whether P - Preparatory, I - Initial, or F - Follow-up Phase. When a P or I meeting is conducted, complete attachment 1-A or 1-B, respectively. When network analysis system is used, identify work by use of I-J numbers)

3. Test performed as required by plans and/or specifications:

4. Material received:

CQC Report (Cont'd)

5. Submittals Reviewed:

(a) Submittal No.	(b) Spec/Plan Reference	(c) By Whom	(d) Action
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

6. Off-site surveillance activities, including action taken:

7. Job safety: (Report violations; Corrective instructions given; Corrective actions taken).

8. Remarks: (Instructions received or given. Conflict(s) in Plans and/or Specifications)

Contractor's Verification: On behalf of the Contractor, I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications, to the best of my knowledge, except as noted above.

CQC System Manager

PREPARATORY PHASE CHECKLIST

Contract No.: _____ Date: _____
Definable Feature: _____ Spec Section: _____

Government Rep Notified _____ Hours in Advance Yes _____ No _____

I. Personnel Present.

Name	Position	Company/Government
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		

(List additional personnel on reverse side)

II. Submittals.

1. Review submittals and/or submittal log 4288. Have all submittals been approved? Yes _____ No _____

If No, what items have not been submitted?

- a. _____
- b. _____
- c. _____

2. Are all materials on hand? Yes _____ No _____

- a. _____
- b. _____

c. _____

3. Check approved submittals against delivered material. (This should be done as material arrives).

Comments: _____

III. Material Storage.

Are materials stored properly? Yes _____ No _____

If No, what action is taken?

Preparatory Phase Checklist (Cont'd)

IV. Specifications.

1. Review each paragraph of specifications.

2. Discuss procedure for accomplishing the work.

3. Clarify any differences.

V. Preliminary Work.

Ensure preliminary work is correct.

If not, what action is taken? _____

VI. Testing.

1. Identify test to be performed, frequency, and by whom.

2. When required? _____

3. Where required? _____

4. Review Testing Plan. _____

5. Has test facilities been approved? _____

VII. Safety.

1. Review applicable portion of EM 385-1-1. _____

2. Activity Hazard Analysis approved? Yes _____ No _____

VIII. Corps of Engineers comments during meeting.

CQC System Manager

INITIAL PHASE CHECKLIST

Contract No.: _____ Date: _____

Definable Feature: _____

Government Rep Notified: _____ Hours in Advance Yes _____ No _____

I. Personnel Present:

Name	Position	Company/Government
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		

(List additional personnel on reverse side)

II. Identify full compliance with procedures identified at preparatory. Coordinate plans, specifications, and submittals.

Comments: _____

III. Preliminary Work. Ensure preliminary work is complete and correct. If not, what action is taken? _____

IV. Establish Level of Workmanship.

1. Where is work located? _____
2. Is a sample panel required? Yes _____ No _____
3. Will the initial work be considered as a sample? Yes _____ No _____
(If yes, maintain in present condition as long as possible).

V. Resolve any Differences.

Comments: _____

Review job conditions using EM 385-1-1 and job hazard analysis.

Comments: _____

CQC System Manager

SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

- 1.1 GENERAL REQUIREMENTS
 - 1.1.1 SUBMITTALS
 - 1.1.2 Site Plan
 - 1.1.3 Employee Parking
- 1.2 AVAILABILITY AND USE OF UTILITY SERVICES
 - 1.2.1 Temporary Electrical Facilities
 - 1.2.2 Sanitation
 - 1.2.3 Telephone
- 1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN
 - 1.3.1 Bulletin Board
 - 1.3.2 Project and Safety Signs
- 1.4 PROTECTION AND MAINTENANCE OF TRAFFIC
 - 1.4.1 Haul Roads
 - 1.4.2 Barricades
- 1.5 CONTRACTOR'S TEMPORARY FACILITIES
 - 1.5.1 Administrative Field Offices
 - 1.5.2 Staging Area
- 1.6 PLANT COMMUNICATION
- 1.7 CLEANUP
- 1.8 RESTORATION OF STORAGE AREA

-- End of Section Table of Contents --

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

1.1 GENERAL REQUIREMENTS

1.1.1 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with SECTION 01330: SUBMITTAL PROCEDURES:

SD-08 Statements

Traffic Control Plan; GA.

The Contractor shall coordinate with the local County Engineer and submit information on the proposed control of traffic for the road work operations on this contract:

1.1.2 Site Plan

The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within reasonable walking distance of the construction site. Contractor employee parking shall not interfere with existing and established parking requirements at the project site.

1.2 AVAILABILITY AND USE OF UTILITY SERVICES

1.2.1 Temporary Electrical Facilities

The Contractor shall be responsible for coordination and costs for electrical power required for the Contractor's operations, including all costs for utility company hookup, installation/dismantling of transformers and distribution lines.

1.2.2 Sanitation

The Contractor shall provide and maintain within the construction area field-type sanitary facilities in accordance with EM 385-1-1. These facilities shall include but not be limited to toilet, washing, and drinking water facilities.

1.2.3 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired. Government personnel will not take or deliver messages for the Contractor.

1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

1.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall provide a weatherproof glass-covered bulletin board not less than 36 by 48 inches in size for displaying the Equal Employment Opportunity poster, a copy of the wage decision contained in the contract, Wage Rate Information poster, and other information approved by the Contracting Officer. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

1.3.2 Project and Safety Signs

The Contractor shall furnish and erect a Project sign and a Safety sign in a location selected by the Contracting Officer at the project site within 15 days after receipt of the notice to proceed. The requirements for the signs and their content shall be as shown on the drawings at the end of this section. The data required by the safety sign shall be corrected daily. Signs shall be maintained throughout the construction period, and upon completion of the project, the signs shall be removed from the site. The PROJECT DESCRIPTION and PROJECT NAME shall be as follows:

PROJECT DESCRIPTION

OPERATION AND MAINTENANCE, MISSISSIPPI RIVER

PROJECT NAME

MC MILLAN ISLAND EXCAVATION AND DREDGING
MISSISSIPPI RIVER, POOL 10
GUTTENBERG, IOWA

1.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall maintain and protect traffic on all affected roads during the construction period except as otherwise specifically directed by the Contracting Officer. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads.

1.4.1 Haul Roads

The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

1.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required whenever safe public access to paved areas such as roads, parking areas or sidewalks is prevented by construction activities or as otherwise necessary to ensure the safety of both pedestrian and vehicular traffic. Barricades shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.5 CONTRACTOR'S TEMPORARY FACILITIES

1.5.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities at its own option.

1.5.2 Staging Area

The boundary limits of the grounds made available for the Contractor's use during the life of the contract are shown on the drawings as Work Limits. Trailers, materials, or equipment shall not be placed or stored outside the work limits.

1.6 PLANT COMMUNICATION

Whenever the Contractor has the individual elements of its plant so located that operation by normal voice between these elements is not satisfactory, the Contractor shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.7 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.8 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including top soil and seeding as necessary.

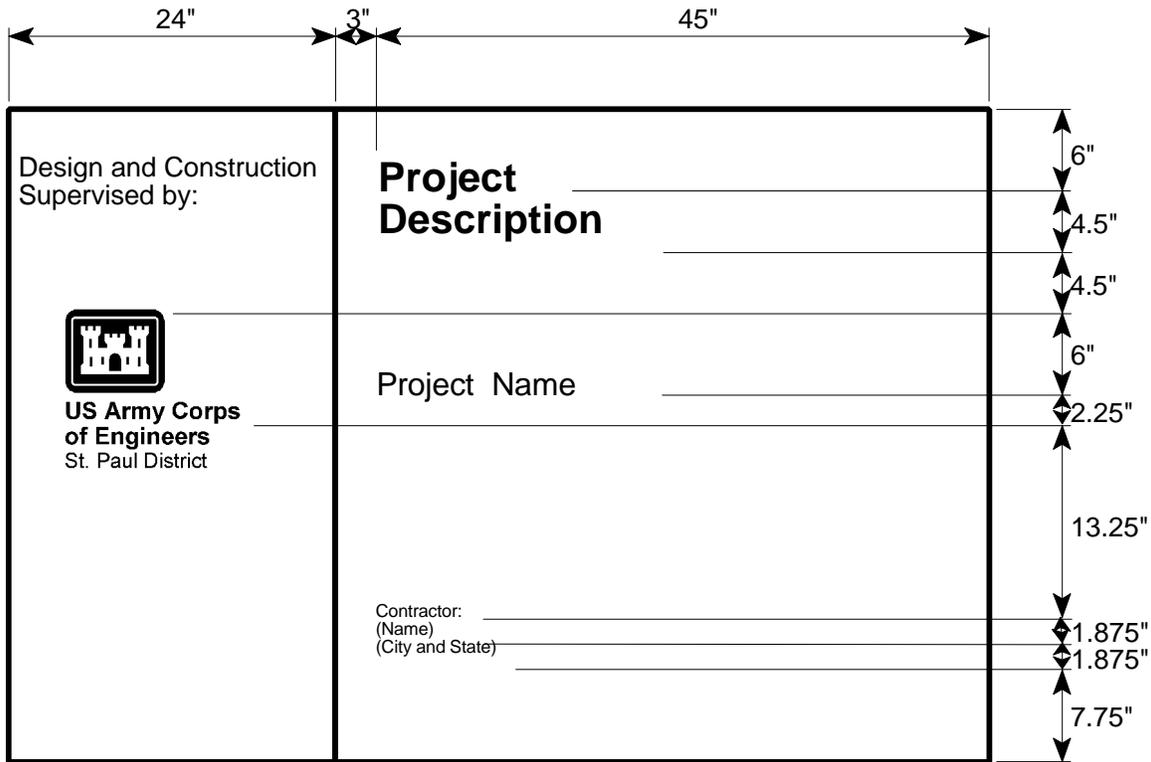
PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

PROJECT SIGN

The graphic format for this 4' x 6' sign panel follows the legend guidelines and layout as specified below. The large 4' x 4' section of the panel on the right is to be white with black legend. A 2' x 4' decal provided by the Corps shall be placed on the left side of the sign panel.



Project Description:

One to three line project title legend describes the work being done under this contract.
 Color: Black; Typeface: 3" Helvetica Bold; Maximum line length: 42".

Project Name:

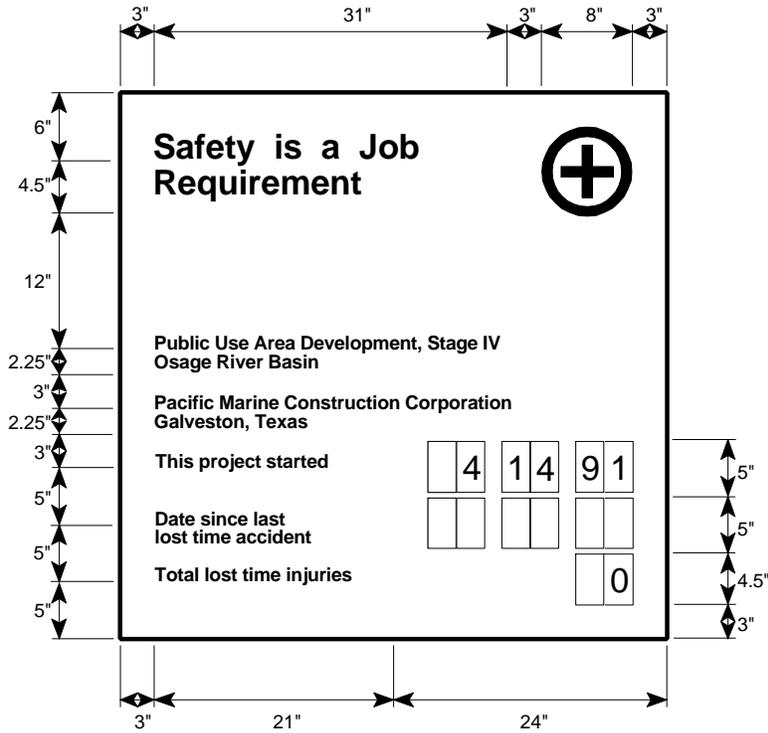
One to three line identification of project or facility.
 Color: Black; Typeface: 1.5" Helvetica Bold; Maximum line length: 42".
 Cross-align the first line of PROJECT NAME with the first line of the Corps Signature as shown.

Contractor:

One to five line identification of prime contractors including: type (architect, general contractor, etc.), corporate or firm name, city, state.
 Color: Black; Typeface: 1.25" Helvetica Bold; Maximum line length: 21".

All typography is flush left and ragged right, upper and lower case with initial capitals only as shown. Letter and word spacing to follow Corps Standards (EP 310-1-6a and 6b).

SAFETY SIGN



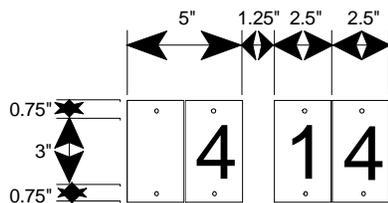
All typography is flush left and rag right, upper and lower case with initial capitals only as shown. Letter and word spacing to follow Corps Standards (EP 310-1-6a and 6b).

Legend Group 1: Standard two-line title "Safety is a Job Requirement" with (8" od.) Safety Green First Aid logo. Typeface: 3" Helvetica Bold; Color: Black.

Legend Group 2: One- to two-line project title legend describes the work being done under this contract and name of host project. Typeface: 1.5" Helvetica Regular; Color: Black; Maximum line length: 42".

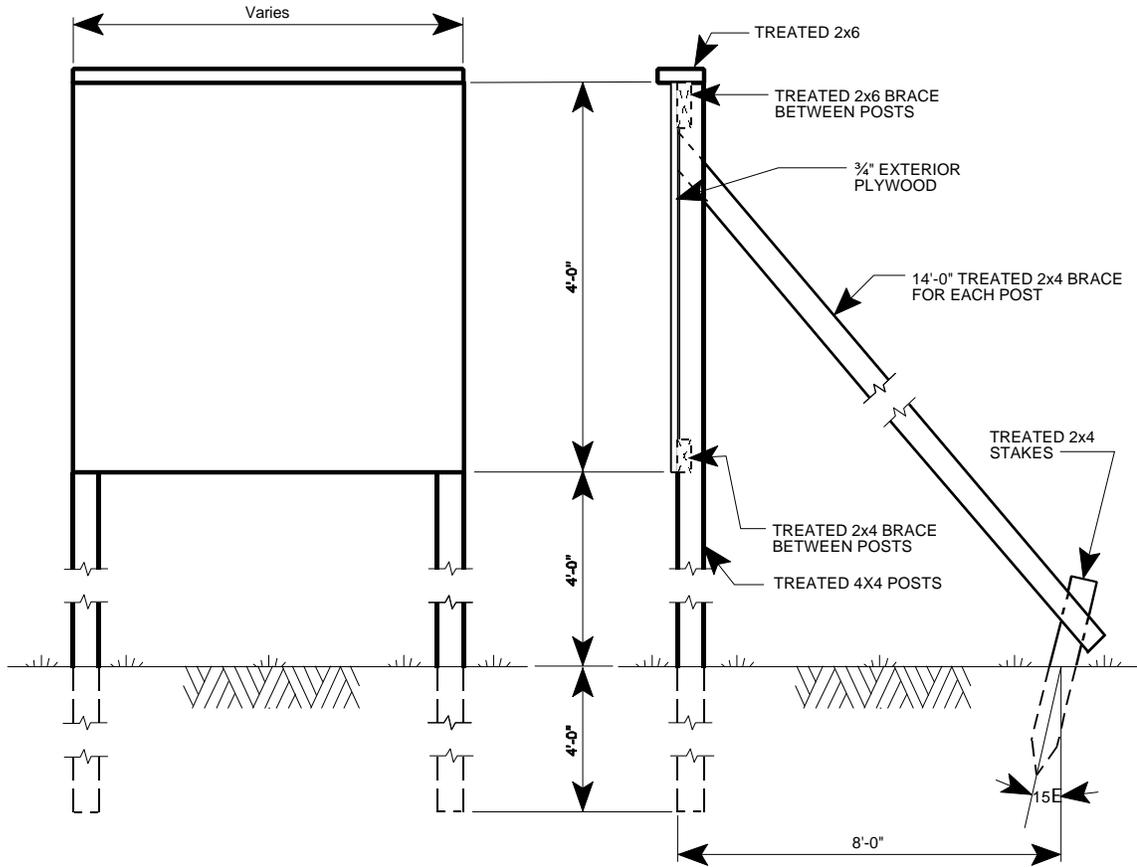
Legend Group 3: One- to two-line identification: name of prime contractor and city, state address. Typeface: 1.5" Helvetica Regular; Color: Black; Maximum line length: 42".

Legend Group 4: Standard safety record captions as shown. Typeface: 1.25" Helvetica Regular; Color: Black.



Replaceable numbers are to be mounted on white 0.060 aluminum plates and screw-mounted to background. Typeface: 3" Helvetica Regular; Color: Black; Plate size: 2.5" x 4.5".

SIGN ERECTION DETAILS



SECTION TABLE OF CONTENTS

DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01566

IOWA POLLUTANT DISCHARGE ELIMINATION SYSTEM

- 1.1 GENERAL
 - 1.1.1 Definitions
 - 1.1.2 Contract Drawings
 - 1.2 REFERENCES
 - 1.3 SUBMITTALS
 - 1.4 PERMIT COMPLIANCE AND ADDITIONAL REQUIREMENTS
 - 1.4.1 Schedule
 - 1.4.2 Temporary erosion and sediment control plan
 - 1.4.3 Notice of Intent (NOI)
 - 1.4.4 Permanent erosion and sediment control plan
- PART 2 PRODUCTS
- 2.1 SILT FENCE
 - 2.2 STRAW BALES
 - 2.3 OTHER PRODUCTS
- PART 3 EXECUTION
- 3.1 IMPLEMENTATION
 - 3.2 MAINTENANCE
 - 3.3 RECORDS
 - 3.4 ATTACHMENTS

-- End of Section Table of Contents --

SECTION 01566

IOWA POLLUTANT DISCHARGE ELIMINATION SYSTEM

1.1 GENERAL

This section covers best management practices to be implemented for prevention of storm water pollution as required by the National Pollutant Discharge Elimination System (NPDES). The Iowa Department of Natural Resources is responsible for administering permits for NPDES in the state of Iowa. The Government has determined that the project work included under this contract requires NPDES permitting. The requirements herein supplement those covered in SECTION 01410: ENVIRONMENTAL PROTECTION.

1.1.1 Definitions

The following terms apply to this specification and the general permit, unless redefined in subsequent paragraphs.

- a. "Plan" means the Temporary Erosion and Sediment Control Plan.
- b. "EPA" means the United States Environmental Protection Agency.
- c. "IDNR" means the Iowa Department of Natural Resources.
- d. "NPDES" means the National Pollutant Discharge Elimination System.
- e. "IPDES" means the Iowa Pollutant Discharge Elimination System.
- f. "Owner" as referred to in the general permit shall mean the Federal Government.
- g. "Permittees" as referred to in the general permit shall mean the Contractor.
- h. "General Permit" means the general permit authorization to discharge storm water associated with a construction activity under the National Pollutant Discharge Elimination System/State Disposal System Permit Program.
- i. "Notice of Intent (NOI)" means the application to be filed with the state DNR to receive a general permit for storm water discharges associated with a construction activity.
- j. "BMP" means Best Management Practices.

1.1.2 Contract Drawings

The following features are shown on or can be determined from the contract drawings:

- a. The drainage patterns and approximate slopes anticipated after the major grading activities.
- b. Areas of soil disturbance.
- c. The location(s) where stabilization practices are expected to occur.
- d. Typical details showing suggested Best Management Practices (BMP's) for erosion and sediment control.
- e. Waters of the State.
- f. Final site stabilization.

1.2 REFERENCES

The publications listed below form a part of this specification to the

extent referenced. The publications are referred to in the text by basic designation only.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA/832/R-92/005

Storm Water Management for Construction
Activities - Developing Pollution
Prevention Plans and Best Management
Practices

IOWA DEPARTMENT OF NATURAL RESOURCES

Rule 567

Iowa Administrative Code

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 4196

Standard Specification for Highway and
Bridge Construction, Engineering Fabric

1.3 SUBMITTALS

Government approval is required for all submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Drawings

Temporary Erosion And Sediment Control Plan; FIO.

A specific Temporary Erosion and Sediment Control Plan shall be submitted in accordance with PARAGRAPH: PERMIT COMPLIANCE AND ADDITIONAL REQUIREMENTS.

SD-18 Records

Public Notification; GA.

A copy of the public notice of storm water discharge shall be submitted to the Contracting Officer prior to notifying the newspapers.

Notice of Intent (NOI); GA.

A copy of the NOI (IDNR Form 542-1415) shall be submitted to the Contracting Officer at the same time it is transmitted to the state.

Notice of Discontinuation; FIO.

A copy of the Notice of Discontinuation shall be submitted to the Contracting Officer at the same time it is transmitted to the state.

1.4 PERMIT COMPLIANCE AND ADDITIONAL REQUIREMENTS

The Contractor shall comply with the requirements of General Permit No. 2.

The following define additional requirements and clarify which requirements of the General Permit are to be performed by either the Contractor, the Government, or both.

1.4.1 Schedule

No contract project construction activities which requires an NPDES permit may commence until the IPDES permit is valid.

1.4.2 Temporary erosion and sediment control plan

The contract drawings show a typical details of suggested best management practices (BMP's) for erosion and sediment control taken from EPA/832/R-92/005. The BMP's, together with applicable portions of the site drawings and specifications form an initial plan for temporary erosion and sediment control. The Contractor shall finalize and implement the plan. The finalized plan, together with documentation, shall be in accordance with General Permit No. 2. The plan shall be maintained at the site and made available to federal, state, and local officials as requested. The Contractor shall determine the specific BMP's for erosion and sediment control (including the types, locations, and installation scheduling of erosion and sediment controls). These BMP's and corresponding material specifications and shop drawings shall be included in the Plan.

1.4.3 Notice of Intent (NOI)

The NOI must be signed by the Government and the Contractor. A blank copy of the Application form is included at the end of this section. Immediately after contract award, the Contractor shall provide a public notification in local newspapers, complete the Notice of Intent, and submit the form to the state. The NOI shall be postmarked at least 24 hours in advance of any ground breaking activities. The Contractor is responsible for payment of the application fee.

1.4.4 Permanent erosion and sediment control plan

The Government has developed the Permanent Erosion and Sediment Control Plan and will maintain availability of the plan to federal, state, and local officials as required in the General Permit.

PART 2 PRODUCTS

2.1 SILT FENCE

Silt fence shall be manufactured and installed as shown on drawings. On level sites with minimal potential for sediment loading, the wire fabric may be omitted. Fabric for silt fence shall conform to requirements given in IDOT 4196.

2.2 STRAW BALES

Straw shall be baled from oats, wheat, rye, barley, rice, or other coarse fiber vegetation that will percolate water. Hay baled from grass, alfalfa and clover is not acceptable.

2.3 OTHER PRODUCTS

Any products proposed for use that are not included on drawing Z2-22 shall be described fully, with catalog cuts and manufacturer's instructions for use, in the temporary erosion and sediment control plan.

PART 3 EXECUTION

As between the Government and the Contractor, the Contractor shall be responsible for fulfilling the obligations of Part IV, "Storm Water Pollution Prevention Plans", in the general permit.

3.1 IMPLEMENTATION

The Contractor shall install the sediment and erosion control system in accordance with the plan submitted to the Contracting Officer. The BMP's shall be modified if inspection indicates distress to the system or reveals unforeseen circumstances, or if directed by the Contracting Officer. Any updates to the plan shall be recorded. Permanent stabilization shall be initiated as soon as practicable in any portion of the site where construction activities are complete.

3.2 MAINTENANCE

The Contractor shall be responsible for implementing and managing the erosion and sediment control BMP's before and during the construction activities; and ensure that the Plan will be implemented and stay in effect until the work has been completed, the entire work site has undergone final stabilization, and a Notice of Termination has been submitted to the Contracting Officer and the state permitting authority.

3.3 RECORDS

The contractor shall record on CQC reports: (1) dates when major stripping and grading activities occur, (2) dates when construction activities temporarily or permanently cease on a portion of the site, (3) when permanent stabilization practices are initiated, and (4) activities associated with inspection and maintenance.

3.4 ATTACHMENTS

NOTICE OF INTENT FOR NPDES COVERAGE UNDER GENERAL PERMIT, IOWA
DEPARTMENT OF NATURAL RESOURCES (IDNR Form 542-1415, with
instructions and public notice template) 5 Pages

Iowa DNR NPDES General Permit No. 2 15 Pages

-- End of Section --

**IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION**

Cashier's Use Only
17-1709 -

NOTICE OF INTENT FOR NPDES COVERAGE UNDER GENERAL PERMIT

No. 1 FOR "STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY"

or

No. 2 FOR "STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES"

or

No. 3 FOR "STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM ASPHALT PLANTS, CONCRETE BATCH PLANTS, ROCK CRUSHING PLANTS, AND CONSTRUCTION SAND AND GRAVEL FACILITIES."

PERMIT INFORMATION

Has this storm water discharge been previously permitted (Check One) Yes No.

If yes, please list authorization number or permit number _____

What General Permit are you applying for coverage under ?

General Permit No. 1 General Permit No. 2 General Permit No. 3

NPDES PERMIT FEE OPTIONS

For coverage under the NPDES General Permit the following fees apply:

Annual Permit Fee \$150 (per year)

or

5-year Permit Fee \$600

4-year Permit Fee \$450

3-year Permit Fee \$300

(Coverage provided by the 5-year, 4-year, and 3-year permit fees expires no later than the expiration date of the general permit (October 1, 2002). Maximum coverage is five years, four years, and three years, respectively.)

FACILITY OR PROJECT INFORMATION

Enter the name and full address/location (not mailing address) of the facility or project for which permit coverage is requested.

1.	NAME:	ADDRESS / LOCATION OF SITE:		
CITY:	COUNTY:	STATE:	ZIP CODE:	

(General Permit No. 3 only, attach additional location information on separate pages as needed).

2.	NAME:	ADDRESS / LOCATION OF SITE:		
CITY:	COUNTY:	STATE:	ZIP CODE:	

OPERATOR / CONTACT INFORMATION. Give legal name of person, firm, or public organization which operates the facility described in this application. Include name, mailing address and telephone number of a contract person if different from operator or owner. (Attach additional information on separate pages as needed). General Permit No. 2 applicants (Construction Activities only) list contractors and subcontractor.

NAME:		ADDRESS:		
CITY:	STATE:	ZIP CODE:	TELEPHONE ()	

Check the appropriate box to indicate the legal status of the operator of the facility.

Federal State Public Private Other (specify) _____

SIC CODE* (General Permit No. 1 & 3 Applicants Only)

* SIC code refers to Standard Industrial Classification code number used to classify establishments by type of economic activity.

FACILITY LOCATION OR LOCATION OF CONSTRUCTION SITE

Give the location by section/township/range or latitude/longitude (Attach additional information on separate pages as needed).

1/4 SECTION	SECTION	TOWNSHIP	RANGE	LATITUDE			LONGITUDE		
				DEGREES	MINUTES	SECONDS	DEGREES	MINUTES	SECONDS
1									
2									

OWNER INFORMATION

(If other than operator) Enter the name and full address of the owner and/or contact for the facility.

NAME:		ADDRESS:			
CITY:		STATE:	ZIP CODE:	TELEPHONE: ()	

OUTFALL INFORMATION

Discharge Start Date _____

Is any quantitative information available describing the concentration of pollutants in storm water discharges? Yes No.

NOTE: Do not attach any storm water pollutant information as part of this Notice of Intent.

Receiving Water(s):

GENERAL PERMIT NO. 2 (CONSTRUCTION ACTIVITIES ONLY) AND GENERAL PERMIT NO 3 APPLICANTS COMPLETE THIS SECTION.

Description of Project:

Estimated Timetable For Activities / Projects:

Number of Acres of Disturbed Soil: _____

	Yes	No
Compliance with the following conditions:		
1. Will this Notice of Intent be included in the pollution prevention plan?		
2. Has the pollution prevention plan, required in General Permit No. 2, Part III.C., been developed prior to the submittal of this Notice of Intent to the department?		
3. Will the Storm Water Pollution Prevention Plan comply with approved State (Section 467A.64, Code of Iowa) or local sediment and erosion plans?		
4. Has two (2) public notices been published for at least one day in newspapers with the largest circulation in the area where the discharge is located.		

CERTIFICATION

I certify under penalty of law that this document was prepared under my direction or supervision in accordance with a system designed to assure that qualified people properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, this information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME (please print)	TITLE:
SIGNATURE:	DATE:

**"HOW TO FILE A COMPLETE
NOTICE OF INTENT"**

for

NPDES General Permit No.1
for "Storm Water Discharge
Associated With Industrial Activity"

or

NPDES General Permit No.2
for " Storm Water Discharge
Associated with Industrial Activity
for Construction Activities"

or

NPDES General Permit No.3
for "Storm Water Discharge Associated with
Industrial Activity for Asphalt Plants,
Concrete Batch Plants, Rock Crushing Plants
and Construction Sand and Gravel Facilities"

These instructions are provided to dischargers who need to notify the IDNR that their storm water discharge will be covered under either Iowa's NPDES General Permit No.1, General Permit No.2, or General Permit No. 3. The instructions are the same for all general permits. When a discharger provides a complete Notice of Intent with the IDNR, its storm water discharges will be subject to the terms and conditions of the appropriate general permit unless notified by the IDNR.

To file a complete Notice of Intent you must provide the following three items:

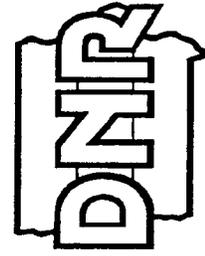
1. A completed Form 1415 entitled "*Notice of Intent for NPDES Coverage Under General Permit*",
2. Proof of Public notification: and,
3. Permit fee.

Each of these items are discussed in detail on the back side of this page

November 1997

Mail your completed Notice of Intent to the following address:

IOWA DEPARTMENT OF NATURAL
RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
WASTEWATER PERMITS SECTION
502 E. 9TH STREET
DES MOINES, IOWA 50319-0034



Storm Water Coordinator
Department of Natural Resources
502 E. 9th Street
Des Moines, Iowa 50319-0034

1. Notice of Intent for NPDES Coverage Under General Permit No.1, General Permit No.2 or General Permit No.3.

(Form 1415)

Form 1415 provides the Iowa Department of Natural Resources with a Notice of Intent that the discharge will be covered under the appropriate general permit (General Permit No.1, General Permit No.2, or General Permit No.3). By submitting a completed Form 1415 to the IDNR you are agreeing that the storm water discharge will meet the terms and conditions of the general permit.

You must complete the form and it must be signed by a qualified official.

Those qualified to sign are:

- a. *Corporations* - A principal executive officer of at least the level of vice-president.
- b. *Partnership* - A general partner.
- c. *Sole proprietorship* - the proprietor.

d. *Public facilities.* For a municipal, state, or other public facility, either the principal executive officer, or the ranking elected official.

e. In the case of a storm water discharge associated with industrial activity from construction as identified in 40 Code of Federal Regulations (CFR) 122.26(b)(14)(x), either the owner of the site or the general contractor.

2. Proof of Public Notification

Iowa law requires dischargers to make public notice for seeking coverage under a general permit. The public notice must be published at least one day at your own expense in two newspaper with the largest circulation in the area where the discharge is located.

The wording to use in the public notice is specified as a rule of the IDNR and is included as a separate page for your convenience. This wording contains the minimum information that must be

provided in the public notice. Dischargers may add more information to the notice if they choose.

To determine which newspapers have the largest circulation ask your local newspaper or call the Iowa Newspaper Association (INA) at (515) 244-2145 for circulation information. You can contact the individual newspapers directly or place your public notice order through the INA. The INA is located at 319 E. Fifth Street, Des Moines, Iowa 50309.

When you send your Notice of Intent to the IDNR, enclose a clipping of each public notice with the names of the newspaper and date published, or an affidavit from each newspaper to demonstrate your public notification requirement.

3. Fees

There is a permit fee for each general permit. The fee schedule is the same for General Permit No.1, No.2, or No.3.

The applicant has the option of paying an annual permit fee or a multi-year permit fee.

Option 1. You may choose to submit an annual permit fee of \$150 each year. A bill will be mailed to you each year. Failure to pay will void coverage under the general permit.

or

Option 2. Multi-year which provides for coverage under the general permit until the permit expires on October 1, 2002.

- 5-year Permit Fee \$600
- 4-year Permit Fee \$450
- 3-year Permit Fee \$300

(Coverage provided by the 5-year, 4-year, and 3-year permit fees expires no later than the expiration date of the general permit. Maximum coverage is five years, four years, and three years, respectively.)

Enclose a check or money order make payable to the Iowa Department of Natural Resources for the sum of the permit fee.

If you need assistance contact the IDNR at (515) 281-7017 or (515) 281-6782 "storm water general permit assistance."

Instructions - To complete the public notice, fill in the blanks with the required information or select the appropriate response.

PUBLIC NOTICE OF STORM WATER DISCHARGE

The _____ plans to submit a Notice of Intent to the
(applicant name)

Iowa Department of Natural Resources to be covered under the NPDES General Permit

(select the appropriate general permit - No. 1 "Storm Water Discharge Associated with Industrial Activity", General Permit No. 2 "Storm Water Discharge Associated with Industrial Activity for Construction Activities, or General Permit No. 3 "Storm Water Discharge Associated With Industrial Activity From Asphalt Plants, Concrete Batch Plants, Rock Crushing Plants, And Construction Sand And Gravel Facilities")

The storm water discharge will be from _____
(description of industrial activity)

located in _____
(1/4 section, township, range, county)

Storm water will be discharged from _____ point source(s) and will be discharged to
(number)

the following streams: _____
(stream name(s))

Comments may be submitted to the Storm Water Discharge Coordinator, IOWA DEPARTMENT OF NATURAL RESOURCES, Environmental Protection Division, Henry A. Wallace Building, 502 E 9th Street, Des Moines, IA 50319-0034. The public may review the Notice of Intent from 8 a.m. to 4:30 p.m., Monday through Friday, at the above address after it has been received by the department.



TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

IOWA DEPARTMENT OF NATURAL RESOURCES

**NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM (NPDES)**

GENERAL PERMIT NO. 2

**EFFECTIVE DATE
OCTOBER 1, 1997 THROUGH OCTOBER 1, 2002**

FOR

**STORM WATER DISCHARGE ASSOCIATED WITH
INDUSTRIAL ACTIVITY FOR CONSTRUCTION
ACTIVITIES**

NPDES GENERAL PERMIT NO. 2
TABLE OF CONTENTS

PART I. COVERAGE UNDER THIS PERMIT.....1

A. PERMIT AREA.1

B. ELIGIBILITY.1

C. REQUIRING AN INDIVIDUAL PERMIT.....1

D. AUTHORIZATION.....2

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS2

A. DEADLINES FOR FILING A NOTICE OF INTENT.2

B. FAILURE TO NOTIFY.3

C. CONTENTS OF THE NOTICE OF INTENT.....3

D. WHERE TO SUBMIT.....4

E. RENOTIFICATION.4

F. TRANSFER OF COVERAGE UNDER THIS PERMIT.....4

G. NOTICE OF DISCONTINUATION.....4

**PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-
NUMERIC LIMITATIONS.....4**

A. PROHIBITION ON NON-STORM WATER DISCHARGES.....4

B. RELEASES IN EXCESS OF REPORTABLE QUANTITIES.....5

PART IV. STORM WATER POLLUTION PREVENTION PLANS5

A. DEADLINES FOR POLLUTION PREVENTION PLAN PREPARATION AND COMPLIANCE.5

B. SIGNATURE AND PLAN REVIEW.5

C. KEEPING PLANS CURRENT.6

D. CONTENTS OF THE POLLUTION PREVENTION PLAN.6

PART V. RETENTION OF RECORDS10

PART VI. STANDARD PERMIT CONDITIONS.....10

A. DUTY TO COMPLY.10

B. CONTINUATION OF THE EXPIRED GENERAL PERMIT.10

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.	10
D. DUTY TO MITIGATE.	10
E. DUTY TO PROVIDE INFORMATION.	10
F. OTHER INFORMATION.	10
G. SIGNATORY REQUIREMENTS.	10
H. CERTIFICATION.	11
I. OIL AND HAZARDOUS SUBSTANCE LIABILITY.	11
J. PROPERTY RIGHTS.	11
K. SEVERABILITY.	11
L. TRANSFERS.	11
M. PROPER OPERATION AND MAINTENANCE.	11
N. INSPECTION AND ENTRY.	12
O. PERMIT ACTIONS.	12
P. ENVIRONMENTAL LAWS.	12
PART VII. REOPENER CLAUSE	12
PART VIII. DEFINITIONS	12

PART I. COVERAGE UNDER THIS PERMIT

A. PERMIT AREA. This permit covers all areas of the State of Iowa.

B. ELIGIBILITY.

1. A. Except for discharges identified under Parts I.B.2. and I.B.3., this permit may authorize the discharge of storm water associated with industrial activity from construction sites, (those sites or common plans of development or sale that will result in the disturbance of five or more acres total land area), (hereafter referred to as storm water discharge associated with industrial activity for construction activities) occurring after the effective date of this permit (including discharges occurring after the effective date of this permit where the construction activity was initiated before the effective date of this permit), including storm water discharge associated with industrial activity from areas that are dedicated to producing earthen materials, such as soils, sand and gravel, for use at a single construction site.

B. This permit may authorize storm water discharge from a construction site that is mixed with storm water discharge associated with industrial activity from sources other than construction activities provided that the storm water discharge from the industrial (non-construction) source is in compliance with the terms of a NPDES general permit, other than this general permit, or individual permit authorizing such discharge. In addition, the storm water other than from construction, shall be in compliance with Part IV.D.6. of this permit.

2. **LIMITATIONS ON COVERAGE.** The following storm water discharges associated with industrial activity for construction activities are not authorized by this permit:

A. storm water discharges that are mixed with sources of non-storm water other than

discharges identified in Part III.A.2. of this permit;

B. storm water discharges associated with industrial activity for construction activities which are covered by an existing individual NPDES permit or which are issued a permit in accordance with Part I.C. of this permit.

Storm water discharges authorized by an existing individual NPDES permit will be eligible to apply for coverage under this general permit as the existing individual permit expires; and

C. storm water discharges associated with industrial activity for construction activities that the Iowa Department of Natural Resources has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard.

3. **EXCLUSIONS.** The following "storm water discharges associated with industrial activity" from construction activities do not require a NPDES permit:

discharges from agricultural and silvicultural activities including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations as defined in 40 CFR 122.23, concentrated aquatic production facilities as defined in 40 CFR 122.24, discharges to aquaculture projects as defined in 40 CFR 122.25, and discharges from silvicultural point sources as defined in 40 CFR 122.27.

C. REQUIRING AN INDIVIDUAL PERMIT.

1. The Department may require any person authorized by this permit to apply for and obtain an individual NPDES permit. The Department may require any owner or operator authorized to discharge under this permit to apply for an individual NPDES permit only if the owner or operator has been notified in writing that a permit application is required. This notice shall include a brief

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002

statement of the reasons for this decision, an application form, a statement setting a deadline for the owner or operator to file the application, and a statement that on the effective date of the individual NPDES permit, coverage under this general permit shall automatically terminate. If an owner or operator fails to submit an individual NPDES permit application required by the Department under this paragraph, coverage of this general permit automatically is terminated at the end of the day specified for submittal of the individual NPDES application.

2. Any person authorized to discharge under this permit may apply for an individual NPDES permit. In such cases, the discharger shall submit the following in accordance with the requirements of subrule (567)--64.3(4) in the Iowa Administrative Code:
 - A. an individual application, using DNR Form 1 and EPA Form 2F, and,
 - B. all applicable fees identified in rule (567)--64.16 in the Iowa Administrative Code.
3. When an individual NPDES permit is issued to a discharger covered under this general permit, the applicability of this general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual NPDES permit.

When an individual NPDES permit is denied to a discharger otherwise subject to this permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the date of such denial, unless otherwise specified by the Department.

D. AUTHORIZATION.

1. A discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II of this permit in order for storm water discharge associated with industrial activity for construction activities pursuant to Part I.B. of this permit to be authorized to discharge under this general permit.

2. Unless notified by the Department to the contrary, dischargers who submit a Notice of Intent (NOI) in accordance with the requirements of Part II of this permit are authorized to discharge storm water associated with industrial activity for construction activities under the terms and conditions of this permit on the date the completed Notice of Intent was received by the Department or the date construction is scheduled to begin as provided on Form 542-1415 (Notice of Intent) whichever is later. Upon review of the Notice of Intent, the Department may deny coverage under this permit and require submittal of an application for an individual NPDES permit.

PART II. NOTICE OF INTENT (NOI) REQUIREMENTS

A. DEADLINES FOR FILING A NOTICE OF INTENT.

1. Except as provided in Parts II.A.2. and II.A.3. of this permit, Individuals who intend to obtain coverage for an existing storm water discharge associated with industrial activity for construction activities which expired on or after October 1, 1997, shall submit a complete Notice of Intent (NOI) in accordance with the requirements of Part II.C. on or before April 1, 1998.
2. For storm water discharge associated with industrial activity for construction activities where construction begins after October 1, 1992, the NOI requirements specified in Part II.C. of this permit shall be submitted to the Department at least 24 hours prior to the start of construction.

3. **DEFERMENTS.** The application deadline and requirements for storm water discharge associated with industrial activity for construction activities in which the discharge is owned or operated by a municipality serving a population less than 100,000 have been waived until a later date and as requirements are established by the U.S.

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002

Environmental Protection Agency in 40 CFR 122.26.

B. FAILURE TO NOTIFY. Dischargers who fail to notify the Department of their intent to be covered, and discharge pollutants to water of the United States within Iowa, without an NPDES permit, are in violation of the Clean Water Act and the Code of Iowa.

C. CONTENTS OF THE NOTICE OF INTENT. A complete Notice of Intent shall include the items described in Parts II.C.1., II.C.2., and II.C.3. of this permit.

1. A completed Notice of Intent (NOI) form, DNR Form 542-1415, signed in accordance with Part VI.G. of this permit. The information on the form shall include the following:

A. Name, mailing address, and location of the construction site for which this notification is submitted. The location should be provided as the 1/4 section, township, and range, or the latitude and longitude, and the county in which the storm water discharge is located.

B. The owner's name, address, telephone number, and status (federal, state, private, public or other entity).

C. The name, address and telephone number of any operator (contractor) that has been identified as having a role in the storm water pollution prevention plan for the site required under Part IV.D.7. of this permit. Contractors (operators) identified after the submittal of the completed Notice of Intent shall be identified in the pollution prevention plan.

D. The type of discharge (new or existing as related to October 1, 1992); whether or not the discharge is to a municipal separate storm sewer system; the date the discharge is to commence; the permit status of the discharge; and, the name of the receiving waters.

E. An indication if any existing quantitative data is available describing the concentration of pollutants in storm water discharges and a summary of available existing data. (Existing data should not be included as part of the NOI, it should be retained as part of the Pollution Prevention Plan).

F. A brief description of the project; an estimated timetable for major activities; and, an estimate of the number of acres of the site on which soil will be disturbed.

G. A certification that compliance with G.(1) through G.(4) are met:

G.(1). the pollution prevention plan has been developed before this Notice of Intent is submitted to the Department;

G.(2). the pollution prevention plan will be implemented on October 1, 1997 for any existing storm water discharge associated with industrial activity for construction activities. For a storm water discharge associated with industrial activity for construction activities that commence after October 1, 1997, the pollution prevention plan shall be implemented with the start of construction activities;

G.(3). this Notice of Intent will be included and incorporated into the pollution prevention plan and will be updated as required; and.

G.(4). the storm water pollution prevention plan provides compliance with section 467A.64 of the Code of Iowa and local sediment and erosion plans and are consistent with the requirements of Part IV of this general permit.

2. APPLICABLE FEES. The applicable fees specified in Iowa Administrative Code 567 -- 64.16(455B).

3. PUBLIC NOTIFICATION. A demonstration that the public notice specified in Iowa Administrative Code 567--64.6(1)"c"(2) was published at least one day, in at least two

newspapers with the largest circulation in the area in which the facility is located or the activity will occur.

- D. **WHERE TO SUBMIT.** Facilities which discharge storm water associated with industrial activity for construction activities must submit items described in Parts II.C.1., 2., and 3. of this permit to the Department at the following address:

Storm Water Coordinator
Iowa Department of Natural Resources
Henry A. Wallace Building
502 E. 9th St.
Des Moines, IA 50319-0034

- E. **RENOTIFICATION.** Within 180 days after this general permit expires, the permittee is required to resubmit a completed Notice of Intent with the Department for coverage under the new general permit. If a general permit has not been reissued within 180 days after expiration, the storm water discharger must apply for an individual NPDES permit according to the procedures identified in Iowa Administrative Code 567--64.3(4).

- F. **TRANSFER OF COVERAGE UNDER THIS PERMIT.** For storm water discharge associated with industrial activity for construction activities where the ownership changes, the Department must be notified of the title transfer within 30 days. If a storm water discharge associated with industrial activity for construction activities is covered by this general permit, the new owner(s) shall be subject to all terms and conditions of this general permit. A copy of the notice of transfer that was sent to the Department shall be included in the pollution prevention plan.

- G. **NOTICE OF DISCONTINUATION.**

1. Within 30 days after final stabilization at a construction site (as defined in Part VIII of this permit), the operator or owner of the facility shall submit a Notice of Discontinuation to the Department.

2. The Notice of Discontinuation shall include the following information:

A. the name of the owner/operator to which the permit was issued;

B. the general permit number and permit authorization number;

C. the date the construction site reached final stabilization; and,

D. the following certification signed in accordance with Part VI.G. of this permit:

"I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time. I understand that by submitting this Notice of Discontinuation, that I am no longer authorized to discharge storm water associated with industrial activity for construction activities by Iowa Department of Natural Resources General NPDES Permit No. 2. and that discharging pollutants from storm water associated with industrial activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit."

PART III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. **PROHIBITION ON NON-STORM WATER DISCHARGES.**

1. All discharges authorized by this permit shall be composed entirely of storm water except for non-storm discharges listed in Part III.A.2.
2. Discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles in accordance with Part IV.D.2.C.(2).; potable water sources including waterline flushings; irrigation drainage; routine external building washdown which does not use detergents; pavement washwaters

where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; springs; and foundation or footing drains where flows are not contaminated with process materials such as solvents; may be authorized by this permit provided the non-storm water component of the discharge is in compliance with Part IV.D.5. of this permit.

- B. RELEASES IN EXCESS OF REPORTABLE QUANTITIES.** Any owner or operator identified in the pollution prevention plan is subject to the spill notification requirements as specified in 455B.386 of the Iowa Code. Iowa law requires that as soon as possible but not less than six hours after the onset of a "hazardous condition" the Department and local sheriff's office or the office of the sheriff of the affected county be notified.

The storm water pollution prevention plan described in Part IV of this permit must be modified within 14 calendar days of knowledge of the release to provide a description of the release and the circumstances leading to the release and to identify and provide for the implementation of steps to prevent the reoccurrence of such releases and to respond to such releases.

PART IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of the storm water discharge from the construction activities. In addition, the plan shall describe and ensure the implementation of practices which will be used to reduce the pollutants in storm water discharge associated with industrial activity for construction activities at the construction site and to assure compliance with the terms and conditions of this permit. Facilities must implement the provisions

of the storm water pollution prevention plan required under this part as a condition of this permit.

A. DEADLINES FOR POLLUTION PREVENTION PLAN PREPARATION AND COMPLIANCE.

- 1. POLLUTION PREVENTION PLAN PREPARATION DEADLINE.** The pollution prevention plan shall be completed prior to the submittal of an NOI to the Department to be covered under this permit and shall be updated as appropriate.

- 2. POLLUTION PREVENTION PLAN COMPLIANCE DEADLINE.** The pollution prevention plan shall provide for compliance with the terms and schedule of the plan with the initiation of construction activities.

B. SIGNATURE AND PLAN REVIEW.

- 1.** The plan shall be signed in accordance with Part VI.G., and be retained at the construction site from the date construction activities begin to the date of final stabilization.
- 2.** The permittee shall make plans available to the Department upon request, or in the case of a storm water discharge associated with industrial activity for construction activities which discharge through a large or medium municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system.
- 3.** The Department may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. After such notification from the Department, the permittee shall make changes to the plan and shall submit to the Department a written certification that the requested changes have been made. Unless otherwise provided by the Department, the permittee shall have 7 days after such notification to make the necessary changes.
- 4.** All storm water pollution prevention plans received by the Department from the permittee are considered reports that shall be available to the public under Section 308(b) of

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002

the CWA and Chapter 22 of the Code of Iowa. However, the permittee may claim any portion of a storm water pollution plan as confidential in accordance with Chapter 22 of the Code of Iowa and Iowa Administrative Code (561)--2.5.

- C. **KEEPING PLANS CURRENT.** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified in Part IV.D.2. of this permit, or in otherwise achieving the general objectives of controlling pollutants in storm water discharge associated with industrial activity for construction activities. In addition, the pollution prevention plan shall be updated to: include contractors identified after the submittal of the Notice of Intent as CO-permittees, described in Part IV.D.7. of this permit; identify any change in ownership or transference of the permit and permit responsibilities; or, if required, by the occurrence of a hazardous condition (as defined in Part VIII of this permit). Amendments to the plan may be reviewed by the Department of Natural Resources in the same manner as Part IV.B.2.

- D. **CONTENTS OF THE POLLUTION PREVENTION PLAN.** The storm water pollution prevention plan shall include the following items:

1. **SITE DESCRIPTION.** Each plan shall, provide a description of the following:
- A. a description of the nature of the construction activity;
 - B. estimates of the total area of the site and the area of the site that is expected to be disturbed by excavation, grading, or other activities;
 - C. an estimate of the runoff coefficient of the site after construction activities are

completed and existing data describing the soil or the quality of any discharge from the site;

- D. a site map indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water; and

- E. the name of the receiving water(s) and the ultimate receiving water(s).

2. **CONTROLS.** Each plan shall include a description of appropriate controls that will be implemented at the construction site. The plan will clearly describe the intended sequence of major activities and for each activity, the appropriate control measures and the timing during the construction process that the measures will be implemented. (For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization). The description of controls shall address the following minimum components:

A. **EROSION AND SEDIMENT CONTROLS.**

- A.(1). **STABILIZATION PRACTICES.** A description of temporary and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed areas are stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod

stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as precluded by snow cover, stabilization measures shall be initiated on all disturbed areas as soon as practical but in no case where construction activity will not occur for a period of 21 or more calendar days later than the 14th day after no construction activity has occurred on such area. Where the initiation of stabilization measures by the 14th day after no construction activity occurs is precluded by snow cover, then stabilization measures shall be initiated as soon as practicable thereafter.

A.(2). STRUCTURAL PRACTICES. A description of structural practices to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas of the site. Such practices may include silt fences, earth dikes, brush barriers, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA.

A.(2).(a). For common drainage locations that serve an area with more than 10 disturbed acres at one time, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. The 3,600 cubic feet of storage area per acre drained does not apply to flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment basin. For drainage locations which serve more than 10 disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control is not attainable, sediment traps, silt fences, or

equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area.

A.(2).(b). For drainage locations serving 10 or less acres, sediment traps, silt fences or equivalent sediment controls are required for all sideslope and downslope boundaries of the construction area or a sediment basin providing storage for 3,600 cubic feet of storage per acre drained.

B. STORM WATER MANAGEMENT. A description of measures that will be installed during construction to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are only responsible for the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.

B.(1). Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; and infiltration of runoff onsite; and sequential systems (which combine several practices). A goal of 80 percent removal of total suspended solids from those flows which exceed predevelopment levels should be used in designing and installing storm water management controls (where practicable). Where this goal is not met, the permittee shall provide justification for rejecting each practice based on site conditions.

B.(2). Velocity dissipation devices shall be placed at discharge locations and along the

**IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002**

length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, present prior to the initiation of construction activities)..

C. OTHER CONTROLS.

C.(1). WASTE DISPOSAL. All wastes composed of building materials must be removed from the site for disposal in permitted disposal facilities. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.

C.(2). Off-site vehicle tracking of sediments shall be minimized.

C.(3). The plan shall ensure and demonstrate compliance with applicable State or local waste disposal, sanitary sewer or septic system regulations.

D. APPROVED STATE OR LOCAL PLANS.

Facilities which discharge storm water associated with industrial activity for construction activities must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by State or local officials. Applicable requirements specified in sediment and erosion plans, site permits or storm water management plans approved by State or local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit even if they are not specifically included in a storm water pollution prevention plan required under this permit.

Operators of facilities seeking alternative permit requirements shall submit an individual permit application in accordance

with Part I.C.2. of this permit along with a description of why requirements in approved State or local plans should not be applicable as a condition of an NPDES permit.

3. MAINTENANCE. A description of procedures to maintain in good and effective operating conditions vegetation, erosion and sediment control measures and other protective measures identified in the site plan.

4. INSPECTIONS. Qualified personnel (provided by the discharger) shall inspect disturbed areas of the construction site that have not been finally stabilized at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater.

A. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

B. Based on the results of the inspection, the description of potential pollutant sources identified in the plan in accordance with paragraph IV.D.1. of this permit and pollution prevention measures identified in the plan in accordance with paragraph IV.D.2. of this permit shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the plan within 7 calendar days following the inspection.

C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water

pollution prevention plan, and actions taken in accordance with paragraph IV.D.4.B. of the permit shall be made and retained as part of the storm water pollution prevention plan for at least three years or until project termination. The report shall be signed in accordance with Part VI.G. of this permit.

5. **NON-STORM WATER DISCHARGES.** Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2. of this permit that are combined with storm water discharges associated with industrial activity from construction activities must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

6. **ADDITIONAL REQUIREMENTS FOR STORM WATER DISCHARGE FROM INDUSTRIAL ACTIVITIES OTHER THAN CONSTRUCTION, INCLUDING DEDICATED ASPHALT PLANTS, AND DEDICATED CEMENT PLANTS.** This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:

A. the industrial source other than construction is located on the same site as the construction activity;

B. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and,

C. storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated cement plants) are in compliance with the terms and conditions, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.

7. **CONTRACTORS.**

A. The storm water pollution prevention plan must clearly identify for each measure in the plan, the contractor(s) and/or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part IV.D.7.B. of this permit in accordance with Part VI.G. of this permit. Upon signing the certification, the contractor or sub-contractor is a co-permittee with the owner and other co-permittee contractors. All certifications must be included in the storm water pollution prevention plan.

B. **CERTIFICATION STATEMENT.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with Part IV.D.7.A. of this permit shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the owner(s) and other contractors and subcontractors signing such certifications, to the Iowa Department of Natural Resources NPDES General Permit No. 2 for "Storm Water Discharge Associated with Industrial Activity for Construction Activities" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Iowa, to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under this NPDES permit and the terms of this NPDES permit."

The certification must include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Water Act (CWA) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

PART V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports required by this permit, and records of all data used to complete the Notice of Intent to be covered by this permit, for a period of at least three years from the date that the site is finally stabilized.
- B. The permittee shall retain a copy of the storm water pollution prevention plan required by this permit at the construction site from the date of project initiation to the date of final stabilization.
- C. ADDRESSES. All written correspondence to the Department should be sent to the following address:

Storm Water Coordinator
Iowa Department of Natural Resources
Henry A. Wallace Building
502 E. 9th St.
Des Moines, IA 50319-0034

PART VI. STANDARD PERMIT CONDITIONS

A. DUTY TO COMPLY.

- 1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Code of Iowa and the Clean Water Act and is grounds for enforcement action; for termination of coverage under this general permit; or, for denial of a request for coverage under a reissued general permit.
- 2. TOXIC POLLUTANTS. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean

- B. CONTINUATION OF THE EXPIRED GENERAL PERMIT. This permit expires on October 1, 2002. An expired general permit continues in force for 180 days after the expiration date. Only those facilities authorized to discharge under the expiring general permit are covered by the 180-day continuation of the expired general permit.

- C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- D. DUTY TO MITIGATE. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

- E. DUTY TO PROVIDE INFORMATION. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine compliance with this permit. The permittee shall also furnish to the Department upon request copies of records required to be kept by this permit.

- F. OTHER INFORMATION. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Department, he or she shall promptly submit such facts or information.

- G. SIGNATORY REQUIREMENTS. All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the Department or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be

maintained by the permittee, shall be signed in accordance with rule 567--64.3(8) of the Iowa Administrative Code as follows:

64.3(8) *Identity of signatories of operation permit applications.* The person who signs the application for an operation permit shall be:

a. *Corporations.* In the case of corporations, a principal executive officer of at least the level of vice-president.

b. *Partnerships.* In the case off a partnership, a general partner.

c. *Sole proprietorships.* In the case of a sole proprietorship, the proprietor.

d. *Public facilities.* In the case of a municipal, state, or other public facility, by either the principal executive officer, or the ranking elected official.

e. *Storm water discharge associated with industrial activity from construction activity.* In the case of a storm water discharge associated with industrial activity from construction as identified in 40 CFR 122.26(b)(14)(x), either the owner of the site or the general contractor.

The person who signs NPDES reports shall be the same, except that in the case of a corporation or a public body, monitoring reports required under the terms of the permit may be submitted by the person who is responsible for the overall operation of the facility from which the discharge originated.

H. **CERTIFICATION.** Any person signing documents under paragraph VI.G. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure

that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I. **OIL AND HAZARDOUS SUBSTANCE LIABILITY.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the Clean Water Act.

J. **PROPERTY RIGHTS.** The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

K. **SEVERABILITY.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

L. **TRANSFERS.** This permit is not transferable to any person except after notice to the Department. The Department may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C.

M. **PROPER OPERATION AND MAINTENANCE.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and

maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of this permit.

N. **INSPECTION AND ENTRY.** The permittee shall allow the Department or an authorized representative of EPA, the State, or, in the case of a facility which discharges through a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and,

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment).

O. **PERMIT ACTIONS.** Coverage under this permit may be terminated for cause. The filing of a request by the permittee for a permit discontinuance, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

P. **ENVIRONMENTAL LAWS.** No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

PART VII. REOPENER CLAUSE

If there is evidence indicating potential or realized impacts or water quality due to any storm water discharge associated with industrial activity for

construction activities covered by this permit, the owner or operator of such discharge may be required to obtain individual permit in accordance with Part I.C of this permit.

PART VIII. DEFINITIONS

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"CWA" or "Clean Water Act" means the Federal Water Pollution Control Act.

"Dedicated portable asphalt plant" means a portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to.

"Dedicated portable concrete plant" means a portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" means an operation that produces sand and/or gravel for a single construction project.

"Department" means the Iowa Department of Natural Resources.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% for the area has been established or equivalent stabilization measures have been employed.

"Hazardous condition" means any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance on to the land, into a water of the state, or into the atmosphere,

which creates an immediate or potential danger to the public health or safety or to the environment. 455B.381(2) 1991, Code of Iowa

"Hazardous substance" means any substance or mixture of substances that presents a danger to the public health or safety and includes, but is not limited to, a substance that is toxic, corrosive, or flammable, or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons, radioactive materials; sludges; and organic solvents. "Hazardous substances" may include any hazardous waste identified or listed by the administrator of the United State Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, or any toxic pollutant listed under section 307 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous substance designated under section 311 of the federal Water Pollution Control Act as amended to January 1, 1977, or any hazardous material designated by the secretary of transportation under the Hazardous Materials Transportation Act (49 CFR 172.101). 455B.381(1), 1991 Code of Iowa

"Large and Medium Municipal Separate Storm Sewer System" means all municipal separate storm sewers that are either:

(i.) located in an incorporated place with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census; or

(ii.) located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii.) owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

"Municipality" means a city, town, borough, county, parish, district, association, or other public body created by or under State law.

"NOI" means Notice of Intent to be covered by this permit (see Part II of this permit.)

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm water discharge associated with industrial activity" means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR part 122. For the categories of industries identified in paragraphs (i) through (x) of this definition, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

For the categories of industries identified in paragraph (xi) of this definition, the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water. For the purposes of this paragraph,

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002

material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in these paragraphs (i)-(xi) of the definition) include those facilities designated under 40 CFR 122.26(a)(1)(v). The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this definition;

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) of this definition);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373;

(iii). Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include

sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim);

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under Subtitle D of RCRA;

(vi) facilities involved in the recycling of materials, including metal scrap yards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-4225), 43, 44, 45 and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (i)-(vii) or (ix)-(xi) of this definition are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is

IOWA DEPARTMENT OF NATURAL RESOURCES NPDES GENERAL PERMIT NO. 2
STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES
EFFECTIVE DATE - OCTOBER 1, 1997 TO OCTOBER 1, 2002

beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with 40 CFR 503;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225, (and which are not otherwise included within categories (ii)-(x));

"Storm water discharge associated with industrial activity for construction activities" means activities that fall under subparagraph (x) in the definition of storm water discharge associated with industrial activity.

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02220

REMOVALS

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 GENERAL REQUIREMENTS
- 1.3 SUBMITTALS
- 1.4 DUST CONTROL
- 1.5 PROTECTION
 - 1.5.1 Protection of Personnel
 - 1.5.2 Protection of Trees
- 1.6 USE OF EXPLOSIVES

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 DISPOSITION OF MATERIAL
 - 3.2.1 Salvageable Items and Material
 - 3.2.1.1 Material Salvaged for the Contractor
 - 3.2.2 Unsalvageable Material
- 3.3 CLEAN UP
- 3.4 PAVEMENTS
- 3.5 CORRUGATED METAL PIPES

-- End of Section Table of Contents --

SECTION 02220

REMOVALS

PART 1 GENERAL

This section covers the removal of concrete pavement and corrugated metal pipes.

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ENGINEERING MANUALS (EM)

EM 385-1-1 (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual

1.2 GENERAL REQUIREMENTS

The work includes removals, salvage of identified items and materials, and removal of resulting rubbish and debris. Rubbish and debris shall be removed from Government property daily, unless otherwise directed, to avoid accumulation at the removal site. Materials that cannot be removed daily shall be stored in areas specified by the Contracting Officer. In the interest of occupational safety and health, the work shall be performed in accordance with EM 385-1-1. In the interest of conservation, salvage shall be pursued to the maximum extent possible; salvaged items and materials shall be disposed of as specified.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Work Plan; GA.

The procedures proposed for the accomplishment of the work. The procedures shall provide for safe conduct of the work, careful removal and disposition of materials specified to be salvaged, protection of property which is to remain undisturbed and coordination with other work in progress. The procedures shall include a detailed description of the methods and equipment to be used for each operation, the control of dust and the sequence of operations in accordance with EM 385-1-1.

1.4 DUST CONTROL

The amount of dust resulting from removals shall be controlled to prevent the spread of dust to occupied portions of the construction site and to

avoid creation of a nuisance in the surrounding area.

1.5 PROTECTION

1.5.1 Protection of Personnel

During removal work the Contractor shall continuously evaluate the condition and take immediate action to protect all personnel working in and around the removal site.

1.5.2 Protection of Trees

Trees within the project site which might be damaged during removals, and which are indicated to be left in place, shall be protected by marking, fencing or any other approved techniques.

1.6 USE OF EXPLOSIVES

Use of explosives will not be permitted.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The work includes removal of all construction indicated or specified. All material resulting from removals work shall become the property of the Contractor and shall be removed promptly.

3.2 DISPOSITION OF MATERIAL

3.2.1 Salvageable Items and Material

Contractor shall salvage items and material to the maximum extent possible.

3.2.1.1 Material Salvaged for the Contractor

Material salvaged for the Contractor shall be stored as approved by the Contracting Officer and shall be removed from Government property before completion of the contract. Material salvaged for the Contractor shall not be sold on the site.

3.2.2 Unsalvageable Material

Concrete, masonry, and other noncombustible material, except concrete permitted to remain in place, shall be disposed of off site. Combustible material shall be disposed of off site.

3.3 CLEAN UP

Debris shall be removed and transported in a manner that prevents spillage on streets or adjacent areas. Local regulations regarding hauling and disposal shall apply.

3.4 PAVEMENTS

Existing pavements designated for removal shall be saw cut and removed in accordance with the details shown on the drawings and to the limits and depths indicated on the drawings.

3.5 CORRUGATED METAL PIPES

Existing corrugated metal pipes designated for removal shall be removed in accordance with the details shown on the drawings.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02230

CLEARING AND GRUBBING

PART 1 GENERAL

- 1.1 DEFINITIONS
 - 1.1.1 Clearing
 - 1.1.2 Grubbing
- 1.2 SUBMITTALS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 CLEARING
 - 3.1.1 Relocation/Placement Site
- 3.2 GRUBBING
- 3.3 TREE REMOVAL
- 3.4 DISPOSAL OF MATERIALS
 - 3.4.1 Placement Site
 - 3.4.1.1 Salable Timber
 - 3.4.2 McMillan Island

-- End of Section Table of Contents --

SECTION 02230

CLEARING AND GRUBBING

PART 1 GENERAL

1.1 DEFINITIONS

1.1.1 Clearing

Clearing shall consist of the felling, trimming, and cutting of trees into sections and the satisfactory disposal of the trees and other vegetation designated for removal, including down timber, snags, brush, and rubbish occurring in the areas to be cleared.

1.1.2 Grubbing

Grubbing shall consist of the removal and disposal of stumps, roots larger than 3 inches in diameter including the entire root ball, and matted roots from the designated grubbing areas.

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-18 Records

Clearing and Grubbing Disposal; FIO.

Written permission to dispose of such products on private property shall be filed with the Contracting Officer.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 CLEARING

Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be cut off flush with or below the original ground surface, except such trees and vegetation as may be indicated or directed to be left standing. Trees designated to be left standing within the cleared areas shall be trimmed of dead branches 1-1/2 inches or more in diameter and shall be trimmed of all branches the heights indicated or directed. Limbs and branches to be trimmed shall be neatly cut close to the bole of the tree or main branches. Cuts more than 1-1/2 inches in diameter shall be painted with an approved tree-wound paint. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations by the erection of barriers or by such other means as the circumstances require.

3.1.1 Relocation/Placement Site

Clearing at the relocation/placement site shall be completed in full prior to fill operations. The clearing limits in the designated relocation/placement site are defined by the limits of fill.

3.2 GRUBBING

Material to be grubbed, together with logs and other organic or metallic debris not suitable for foundation purposes, shall be removed to a depth of not less than 18 inches below the original surface level of the ground in areas indicated to be grubbed and in areas indicated as construction areas under this contract. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with the original adjacent surface of the ground.

3.3 TREE REMOVAL

Where indicated or directed, trees and stumps, including the entire root ball, that are designated as trees shall be removed from areas outside those areas designated for clearing and grubbing. This work shall include the felling of such trees and the removal of their stumps and roots as specified in paragraph GRUBBING. Trees shall be disposed of as specified in paragraph DISPOSAL OF MATERIALS.

3.4 DISPOSAL OF MATERIALS

3.4.1 Placement Site

Logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations at the placement site, except for salable timber, shall be disposed of outside the limits of Government controlled land at the Contractor's responsibility. The Contractor shall select the disposal site with the approval of the Contracting Officer. The Contractor shall secure the required permits for disposal and furnish copies of each permit to the Contracting Officer.

3.4.1.1 Salable Timber

In the interest of conservation, it is required that the Contractor make a reasonable effort to dispose of the material offsite for some useful purpose. All felled timber from which saw logs, pulpwood, posts, poles, ties, mine props, or cordwood can be produced shall be considered as salable timber, and shall be trimmed of limbs and tops, sawed into salable lengths and disposed of for some useable purpose by the Contractor.

3.4.2 McMillan Island

All felled timber, logs, stumps, roots, brush, rotten wood, and other refuse from the clearing and grubbing operations on McMillan Island may be disposed of in an onsite area designated by the Contracting Officer. Such directive will state the conditions covering the disposal of such products and will also state the areas in which they may be placed. Approximately 20-30 of the large root balls removed may be placed in the buffer zone along the shoreline as directed by the Contracting Officer.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02300

EARTHWORK

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEFINITIONS
 - 1.2.1 Satisfactory Materials
 - 1.2.2 Degree of Compaction
 - 1.2.3 Topsoil
 - 1.2.4 Dredge Fill Material
 - 1.2.5 Road Embankment Fill
- 1.3 SUBMITTALS
- 1.4 SUBSURFACE DATA
- 1.5 BLASTING

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL EXCAVATION
 - 3.1.1 Ditches
- 3.2 DREDGE FILL MATERIAL
- 3.3 PREPARATION OF GROUND SURFACE FOR ROAD EMBANKMENTS
 - 3.3.1 General Requirements
- 3.4 ROAD EMBANKMENTS
- 3.5 SUBGRADE PREPARATION
- 3.6 SHOULDER CONSTRUCTION
- 3.7 FINISHING
 - 3.7.1 Pavement Subgrade Tolerances
- 3.8 PLACING TOPSOIL
- 3.9 COMPACTION
 - 3.9.1 Moisture Control
 - 3.9.2 Placement And Compaction
- 3.10 TESTING
 - 3.10.1 Fill and Backfill Material Gradation
 - 3.10.2 In-Place Densities
 - 3.10.3 Optimum Moisture and Laboratory Maximum Density
- 3.11 SUBGRADE AND EMBANKMENT PROTECTION

-- End of Section Table of Contents --

SECTION 02300

EARTHWORK

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 136	(1996a) Sieve Analysis of Fine and Coarse Aggregates
ASTM D 698	(1991; R 1998) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³) (600 KN-m/m ³)
ASTM D 1556	(1990; R 1996) Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D 2487	(1998) Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D 2922	(1996) Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)

1.2 DEFINITIONS

1.2.1 Satisfactory Materials

Satisfactory materials shall comprise any materials classified by ASTM D 2487 as SP, SP-SM, SM or SC with less than 50 percent by weight passing the No. 200 sieve, shall be comprised of stones less than 6 inches, except for fill material for pavements which shall be comprised of stones less than 3 inches in any dimension.

1.2.2 Degree of Compaction

Degree of compaction required is expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D 698 abbreviated as a percent of laboratory maximum density.

1.2.3 Topsoil

Material suitable for topsoils shall be obtained from stripping and pond excavation areas indicated on the drawings.

1.2.4 Dredge Fill Material

Dredge fill material shall be material obtained from the excavation of

McMillan Island or the optional channel dredging.

1.2.5 Road Embankment Fill

Road embankment fill shall be dredge fill material meeting the requirements of satisfactory material.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-06 Test Reports

Compaction Testing; FIO.

A summary of compaction testing results.

SD-08 Statements

Earthwork Plan of Operations; FIO.

Include plan and schedule to accomplish placement site preparation, construction of road embankment and pond excavation.

1.4 SUBSURFACE DATA

Subsurface soil boring logs are shown on the drawings. The subsoil investigation report and samples of materials taken from subsurface investigations may be examined at St. Paul District Office. These data represent the best subsurface information available; however, variations may exist in the subsurface between boring locations.

1.5 BLASTING

Blasting will not be permitted.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL EXCAVATION

The Contractor shall perform excavation of every type of material encountered within the limits of the project to the lines, grades, and elevations indicated and as specified. Grading shall be in conformity with the typical sections shown and the tolerances specified in paragraph FINISHING. During construction, excavation and fill shall be performed in a manner and sequence that will provide proper drainage at all times.

3.1.1 Ditches

Excavation of ditches shall be accomplished by cutting accurately to the cross sections, grades, and elevations shown. Ditches shall not be

excavated below grades shown. The Contractor shall maintain excavations free from detrimental quantities of leaves, brush, sticks, trash, and other debris until final acceptance of the work.

3.2 DREDGE FILL MATERIAL

Dredge fill material shall be obtained from the existing McMillan Island dredged material pile or dredging operations. Necessary clearing, grubbing, and satisfactory drainage and the disposal of debris thereon shall be considered related operations to the placement of dredge fill.

3.3 PREPARATION OF GROUND SURFACE FOR ROAD EMBANKMENTS

3.3.1 General Requirements

Ground surface on which fill is to be placed for road embankments shall be stripped of live, dead, or decayed vegetation, rubbish, debris, and other unsatisfactory material; plowed, disked, or otherwise broken up to a depth of 6 inches; pulverized; moistened or aerated as necessary; thoroughly mixed; and compacted to at least 90 percent laboratory maximum density for cohesive materials or 95 percent laboratory maximum density for cohesionless materials. Compaction shall be accomplished by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment. The prepared ground surface shall be scarified and moistened or aerated as required just prior to placement of embankment materials to assure adequate bond between embankment material and the prepared ground surface.

3.4 ROAD EMBANKMENTS

Fills for road embankments and access ramps shall be constructed at the locations and to lines and grades indicated. Fill shall be as specified in paragraph Road Embankment Fill above. The material shall be placed in successive horizontal layers for the full width of the cross section and shall be compacted to 100 percent of the Standard Proctor density. Each layer shall be compacted before the overlaying lift is placed.

3.5 SUBGRADE PREPARATION

All areas upon which fill is to be placed for road embankments shall be stripped before the fill is started. Material shall not be placed on surfaces that are muddy, frozen, contain frost, or where unsatisfactory material remains in or under the fill. For cohesionless soils, the subgrade surface shall be compacted to at least 100 Percent of the Standard Proctor density. For cohesive soils, the subgrade shall be proof rolled with rubber tired equipment and any soft areas shall be brought to the Contracting Officer's attention. Sloped ground surfaces steeper than one vertical to four horizontal on which fill is to be placed shall be stepped such that the fill material will bond with the existing surface.

3.6 SHOULDER CONSTRUCTION

Shoulders shall be constructed of aggregate base course and granular shoulder material. Shoulders shall be constructed as soon as possible after adjacent paving is complete, but in the case of rigid pavements, shoulders shall not be constructed until permission of the Contracting Officer has been obtained. The entire shoulder area shall be compacted to at least the percentage of maximum density as specified in paragraph SUBGRADE PREPARATION above, for specific ranges of depth below the surface

of the shoulder. Shoulder construction shall be done in proper sequence in such a manner that adjacent ditches will be drained effectively and that no damage of any kind is done to the adjacent completed pavement. The completed shoulders shall be true to alignment and grade and shaped to drain in conformity with the cross section shown.

3.7 FINISHING

Unless specifically required otherwise in the contract documents, applicable permit(s) or otherwise approved by the Contracting Officer, the Contractor shall finish the surface of excavations, embankments, and subgrades to a smooth and compact surface in accordance with the lines, grades, and cross sections or elevations shown. The degree of finish for graded areas shall provide a finish surface reasonably smooth and free from irregular surface changes (the degree of finish required is that ordinarily obtainable from blade-dozer operations) except that the degree of finish for subgrades shall be specified in paragraph SUBGRADE PREPARATION. Ditches shall be finished in a manner that will result in effective drainage. The surface of areas to be turfed shall be finished to a smoothness suitable for the application of turfing materials.

3.7.1 Pavement Subgrade Tolerances

When the final layer of base has been completed, and at the time any additional construction is to be placed thereon, the finished surface of the base shall not vary more than 0.05 feet from the plan elevation.

3.8 PLACING TOPSOIL

The placement of topsoil shall be in accordance with Section: ESTABLISHMENT OF TURF.

3.9 COMPACTION

3.9.1 Moisture Control

Control of moisture in the fill shall be maintained to provide acceptable compaction. Dried or crusted cohesive soils shall be plowed, disked or otherwise broken up before compaction. If water is added to fills, the layer shall be spread in even lifts, moistened as necessary, thoroughly mixed, and compacted.

3.9.2 Placement And Compaction

Each layer shall be spread uniformly on an acceptable soil surface. The type of fill, its maximum uncompacted lift thickness, and the minimum compaction requirements (Percent of Standard Proctor density) to which each type of fill shall be compacted shall be as listed below.

Embankments and subgrade under pavements shall be placed in uncompacted lifts not exceeding 9 inches and compacted to at least 100 Percent of Standard Proctor density.

3.10 TESTING

Testing shall be the responsibility of the Contractor and performed at no additional cost to the Government. Testing shall be performed by an approved commercial testing laboratory or by the Contractor subject to approval. Tests shall be performed in sufficient number to ensure that

specified density is being obtained. The Contracting Officer reserves the right to direct where and when moisture-density tests shall be performed. Testing shall be immediately submitted to the Contracting Officer.

3.10.1 Fill and Backfill Material Gradation

One test per 1,000 cubic yards of fill placed, minimum of two tests. Gradation of fill and backfill material shall be determined in accordance with ASTM C 136.

3.10.2 In-Place Densities

- a. In-Place Densities (ASTM D 1556 or ASTM D 2922)

Typical, 2 tests per each 2 feet of vertical fill placed.

3.10.3 Optimum Moisture and Laboratory Maximum Density

Tests shall be made for each type material or source of material to determine the optimum moisture and laboratory maximum density values. One representative test for each material variation, not less than 2 tests total.

3.11 SUBGRADE AND EMBANKMENT PROTECTION

During construction, embankments and excavations shall be kept shaped and drained. Ditches and drains along subgrade shall be maintained to drain effectively at all times. The finished subgrade shall not be disturbed by traffic or other operation and shall be protected and maintained by the Contractor in a satisfactory condition until subbase, base, or pavement is placed. The storage or stockpiling of materials on the finished subgrade will not be permitted. No subbase, base course or pavement shall be laid until the subgrade has been checked and approved, and in no case shall subbase, base, surfacing or pavement be placed on a muddy, spongy or frozen subgrade.

-- End of Section --

SECTION TABLE OF CONTENTS
DIVISION 02 - SITE WORK
SECTION 02323
EXCAVATION OF DREDGE MATERIAL

PART 1 GENERAL

- 1.1 DEFINITIONS
 - 1.1.1 Definitions
- 1.2 SUBMITTALS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 SCOPE
- 3.2 LOCATION
- 3.3 ACCESS TO MCMILLAN ISLAND
- 3.4 McMILLAN ISLAND DREDGED MATERIAL CHARACTERISTICS
 - 3.4.1 Changes in Native Soil Type
- 3.5 DIRECTION OF WORK
- 3.6 BERM
- 3.7 LINES AND GRADES
- 3.8 PROTECTION OF TREES

-- End of Section Table of Contents --

SECTION 02323

EXCAVATION OF DREDGE MATERIAL

PART 1 GENERAL

The work under this section includes excavating and transferring the existing dredge material from the material pile indicated on the drawings to the placement site. The following items of related work are covered under other sections:

1. Dredging: SECTION: DREDGING
2. Dredged material disposal/relocation: SECTION: DISPOSAL OF DREDGE MATERIAL

1.1 DEFINITIONS

1.1.1 Definitions

Excavating and Filling. All excavation, except for channel dredging, will be unclassified. The Contractor shall perform excavation of every description. Excavation consists of the removal of material between the existing lines and grades shown to the new required lines and grades. The Contractor shall be responsible for transporting and placement of excavated dredged fill material and channel dredging material into the designated permanent relocation/placement site. Unsuitable material or excess material shall be left in-place or wasted only as directed. Excavation beyond the limits shown shall be performed only as directed.

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Excavation Plan; GA.

(1) Methods of excavation and material handling including types of equipment proposed for the separable operations.

(2) A schedule of operations indicating the sequence of removal of materials from McMillan Island and the disposition of the material in the designated relocation/placement site.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 SCOPE

Excavation, regardless of material encountered, shall be performed to the lines and grades indicated. Excavated material shall be transported to and placed in fill areas of the designated relocation/placement site within the limits shown.

3.2 LOCATION

The McMillan Island dredged material pile is located at River Mile 618.7 (approx.) in lower pool 10 of the Mississippi River as shown.

3.3 ACCESS TO MCMILLAN ISLAND

The Contractor will be permitted to cut into the McMillan Island Dredged Material Pile from the Mississippi River to provide access. The Contractor's access shall be limited to a 100 foot wide corridor at the location shown.

3.4 MCMILLAN ISLAND DREDGED MATERIAL CHARACTERISTICS

The Contractor is responsible for determining the character of the existing material to the extent necessary for it's own purposes before commencing excavation work. McMillan Island is composed primarily of dredged material piles placed through previous dredging operations. Past projects for excavation of temporary dredge piles have encountered trees and some other minor amounts of debris as described herein. The Contractor shall implement a method for removing and disposing of the trees and debris. All material that can not be transported hydraulically shall be disposed of as debris and waste in accordance with SECTION: GENERAL.

The material to be relocated above elevation 612 can be assumed to consist of predominantly previously dredged sand from the river channel. The dredged material may contain obstructions including but not limited to stones, rubble, wire rope, stumps & trees from snagging operations, and other debris. Predominantly native soils exist below elevation 612. The native soils at McMillan Island have not been specifically identified but borings taken around the perimeter of the island indicate approximately six feet of organic silty clay underlain by sands. It shall be the responsibility of the Contractor to make a determination of the characteristics of the native soils at McMillan Island.

3.4.1 Changes in Native Soil Type

The Contractor shall track the soil type below the water line on McMillan Island during excavation by probing with a rod or action of the cutter head. The Contractor shall notify the Contracting Officer if the type of excavated material changes from sand to fines.

3.5 DIRECTION OF WORK

The Contracting Officer reserves the right to direct the sequence and quantity of excavation at McMillan Island to control the amount of fines transported hydraulically. If substantial fines are encountered in the lower portion of the excavation, a second pass to remove the lower portion of material may be considered by the Contracting Officer. If the fines contain low levels of contaminants, the Contracting Officer may direct a raise in the bottom elevation of the excavation.

3.6 BERM

The Contractor shall maintain an outside berm around McMillan Island as shown on the drawings. The cut made for access of floating plant shall be closed after completion of excavation.

3.7 LINES AND GRADES

The Contractor shall remove all material from the excavation lines indicated on the drawings. Excavation will be restricted to the limits shown. Upon completion of excavation operations, the Contractor shall shape all inside slopes of the ring dike so that no slope is steeper than indicated.

3.8 PROTECTION OF TREES

Unloading and loading of equipment shall be performed in a manner that eliminates or minimizes the need to remove live healthy trees (especially mature trees). Tree removal must be approved in writing by the Contracting Officer. Construction equipment shall not be operated in vegetated areas outside the construction limits.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02325

DREDGING

PART 1 GENERAL

- 1.1 DEFINITIONS
- 1.2 REFERENCES
- 1.3 SUBMITTALS
- 1.4 ORDER OF WORK
 - 1.4.1 Optional Bid Items
 - 1.4.1.1 Criteria for Scheduling Optional Work
- 1.5 MATERIAL TO BE REMOVED
- 1.6 GENERAL REQUIREMENTS

PART 2 PRODUCTS

- 2.1 PLANT
- 2.2 PIPELINES
- 2.3 NAVIGATION WARNINGS
- 2.4 METHOD OF COMMUNICATION
- 2.5 INSPECTION

PART 3 EXECUTION

- 3.1 NAVIGATION BUOYS
- 3.2 PIPELINES
- 3.3 SAFETY OF STRUCTURES
 - 3.3.1 Utilities
- 3.4 PLANT REMOVAL

-- End of Section Table of Contents --

SECTION 02325

DREDGING

PART 1 GENERAL

The work of this section includes the optional work item consisting of dredging the Mississippi River channel for maintenance purposes. Specific requirements for hydraulic dredging, if used, are included in this section.

1.1 DEFINITIONS

a. Plant is defined as all marine and land based equipment necessary to accomplish the work as outlined in these specifications.

b. "Cuts" and "cut areas" are defined as those areas on the drawings in which dredging is to be accomplished.

c. Project depth. The elevation of clear swept channel to be acquired will be determined by the Government at the time that pre-dredge surveys are completed. A project depth measured in feet below Low Control Pool (LCP) will be supplied to the Contractor for control of grades. Typical project depth for past dredging programs in the area has been 12 or 13 feet below LCP.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced.

U. S. ARMY CORPS OF ENGINEERS, St. Paul District (CEMVP)

CEMVP (1996) Channel Maintenance Management Plan

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-04 Drawings

Pipeline; FIO.

Indicate pipeline location, type (aluminum or HDPE), and portions floating or submerged.

SD-08 Statements

Dredging Plant; FIO.

The Contractor shall submit information on the following items to be used on this contract:

1. Dredge: Name, length, beam, draft, and mobilization speed.

2. Booster pumps: horsepower, diameter, and location.
3. Available pipe: length of each diameter & material combination.
4. Cutter: type, horsepower, and ladder length.
5. Tenders.
6. Spuds.

Daily Report Forms; FIO.

The Contractor's daily report forms shall be supplied to the Contracting Officer on a regular basis as directed; this may include sending daily facimiles of the previous day's report to the Contracting Officer. Frequent transmittal of daily reports do not need to follow formal submittal procedures. The Contractor's standard form may be substituted, provided it contains the basic information indicated on the Sample Daily Report Form attached at the end of this section.

1.4 ORDER OF WORK

The Contracting Officer will direct the Contractor on the order of work. The Government reserves the right to change the order of work at any time.

1.4.1 Optional Bid Items

The contractor must have adequate equipment such as second plant or additional pipeline and boosters available for immediate mobilization to perform the channel dredging. The Contractor shall be prepared to commence channel dredging within 72 hours after receiving the Contracting Officer's order.

1.4.1.1 Criteria for Scheduling Optional Work

Scheduling of the channel dredging is dependent on the amount of shoaling. The Corps of Engineers Channel Maintenance Management Plan defines the amount of shoaling that comprises "imminent closure" or "emergency closure." If either of these conditions is determined to exist, the Contracting Officer will direct the Contractor to commence channel dredging within 72 hours.

1.5 MATERIAL TO BE REMOVED

The material to be removed from the channel maintenance cuts consists of shoaling composed primarily of fine to medium sand with some gravel and silt. Stumps, trees and other miscellaneous debris are occasionally encountered.

1.6 GENERAL REQUIREMENTS

- a. Dredged material shall not be rehandled in the water.
- b. Interference with Navigation. The Contractor shall minimize interference with the use of channels and passages by recreational watercraft. The dredging equipment and pipeline shall not interfere with barge traffic. Any dredge pipeline crossing the main navigation channel of the river shall be submerged, or broken to allow passage of each commercial or government tow boats without delay.
- c. Frenchtown Lake Access. The Contractor shall provide recreational boating access to the Frenchtown Lake area.

PART 2 PRODUCTS

2.1 PLANT

Plant shall be subject to the inspection of the Contracting Officer at all times. The Contractor is responsible for supervision and direction of dredging operations, including the safe and efficient operation of plant. The Contractor shall maintain the plant, scows, coamings, barges, pipelines, and associated equipment to meet the requirements of the work.

2.2 PIPELINES

a. Submerged pipeline shall rest on the channel bottom, and the top of the pipeline and any anchor securing shall be no higher than 12 feet below low control pool if located in the navigation channel.

To provide recreational boating access to the Frenchtown Lake area and backwater lakes adjacent to Essman Island, a 100-foot section of the pipeline shall be submerged with at least 4 feet of water over the top of the pipeline. Lights will be placed on the pipeline on both sides of the submerged section extending a minimum of 100 feet. The pipeline will be conspicuously marked at intervals in the backwater area to warn boaters.

b. If submerged pipeline is of buoyant or semi-buoyant material, the Contractor shall securely anchor the pipe to prevent it from lifting, under any condition, off the bottom. Pipelines shall not be permitted to fluctuate between the water surface and the channel bottom, or lie partially submerged.

c. Floating pipeline shall be visible from a distance of 2000 feet at the water line.

2.3 NAVIGATION WARNINGS

The Contractor shall furnish and maintain navigation warning signs along the pipeline. Submerged pipeline shall be marked.

2.4 METHOD OF COMMUNICATION

The dredge and tenders shall be equipped with radios to provide for communication between the dredge operator, tender and other vessels. Provide a system of communication between the dredge crew and the crew at the disposal area. A portable two-way radio is acceptable.

2.5 INSPECTION

When required, provide transportation for the Contracting Officer and inspectors to and from the disposal area and between the dredging plant and adjacent points on shore.

PART 3 EXECUTION

The Contractor shall layout the cut in accordance with the pre-dredge survey drawings. The Contractor is required to dredge the entire area within the defined cut that is shallower than the specified dredging depth, (unless otherwise shown).

3.1 NAVIGATION BUOYS

The Contractor shall move navigation buoys as necessary to avoid damage during dredging operation. The buoys shall be replaced to mark the newly dredged channel. Other buoys in the immediate vicinity of the dredging operations may be required to be moved to adequately delineate the navigating area.

3.2 PIPELINES

a. Pipeline Operation and Repair. All pipelines shall be kept in good condition at all times. If a leak occurs in the discharge pipeline, immediately discontinue using the line until leaks are repaired. Remove material placed due to leaks or breaks.

b. Submerged Pipe. Routine underwater surveys of the submerged pipe shall be conducted to ensure anchorage. All anchors and related material shall be removed when the submerged pipe is removed.

c. Shore Pipeline. Excavation or grading of the shoreline to accommodate lay of pipeline shall require approval of the Contraction Officer. No penetrations in dikes or levees will be allowed.

3.3 SAFETY OF STRUCTURES

The prosecution of work shall ensure the stability of piers, bulkheads, and other structures lying on or adjacent to the site of the work, insofar as structures may be jeopardized by dredging operations.

3.3.1 Utilities

The Contractor shall identify pipelines and other utilities in the vicinity of the work and insure that adequate measures are taken to avoid damage or disruption of those facilities. The government does not warrant that utility information shown on the drawings is current or complete.

3.4 PLANT REMOVAL

Upon completion of the work, promptly remove plant, including ranges, buoys, piles, and other markers or obstructions.

-- End of Section --

SAMPLE DAILY REPORT FORM

CONTRACTOR _____

DATE _____

PROJECT _____

REPORT # _____

CONTRACT NO. _____

WEATHER _____

POOL EL. _____

DREDGING LOCATION _____

FILLING LOCATION _____

OPERATING PIPELINE LENGTH:

Floating _____

Submerged _____

Shore _____

Filling _____

Total _____

MATERIAL TYPE: Sand _____% Silt _____% Gravel _____% Rock _____%

COMPILATION OF QUANTITIES:

Daily: Volume _____ CY Area _____ SY

Cumulative Total: Volume _____ CY Area _____ SY

NON-EFFECTIVE TIME:

a) Changes in Discharge Line _____ hrs. _____ min.

b) Passing Vessels _____ hrs. _____ min.

c) Debris Removal _____ hrs. _____ min.

d) Suspension of work _____ hrs. _____ min.

e) Disposal Site Delay _____ hrs. _____ min.

f) Other (explain in remarks) _____ hrs. _____ min.

OPERATING TIME:

HOURS PERCENT

TODAY _____

CUMULATIVE _____

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02327

DISPOSAL OF DREDGE MATERIAL

PART 1 GENERAL

- 1.1 CONTRACTOR-FURNISHED DISPOSAL SITES
 - 1.1.1 Cultural and Environmental Assessments
 - 1.1.2 Beneficial Use
- 1.2 CONTRACTOR PROPOSED PIPELINE ROUTE
 - 1.2.1 Esmann Island
- 1.3 SUBMITTALS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

- 3.1 GENERAL
- 3.2 STRIPPING
- 3.3 PREPARATION OF RELOCATION/PLACEMENT SITE
- 3.4 PLACEMENT OF MATERIAL
 - 3.4.1 Direction of Work
 - 3.4.2 Runoff and Sluice Water
 - 3.4.3 Effluent Containment Dike
- 3.5 FINISHED EXCAVATION, FILLS, AND EMBANKMENTS
- 3.6 TOPSOIL
- 3.7 PROTECTION

-- End of Section Table of Contents --

SECTION 02327

DISPOSAL OF DREDGE MATERIAL

PART 1 GENERAL

The work under this section includes filling, grading and other related work for placement of all excavated and dredged material. The following items of related work are covered under other sections:

1. Excavation: SECTION: EXCAVATION OF DREDGE MATERIAL
2. Dredging: SECTION: DREDGING

1.1 CONTRACTOR-FURNISHED DISPOSAL SITES

The Offeror shall base their bid on deposition of material in the Government furnished disposal area designated on the drawings. If the Contractor elects to furnish its own disposal site(s) in addition or as a substitute to the designated relocation/placement site, then a plan shall be developed and submitted as a value engineering change proposal in accordance with CONTRACT CLAUSE 52.248-3. The proposal shall provide written agreement from the landowner stating approval and condition of disposal. The Contractor shall be responsible for obtaining all Federal, State, and local permits for Contractor-furnished disposal areas. Material deposited in a Contractor-furnished disposal site becomes the Contractor's or landowners property.

1.1.1 Cultural and Environmental Assessments

The use of alternative disposal sites may require the Government to prepare cultural and environmental assessments. Preparation of an assessment by the Government would be at the expense of the Contractor and may result in conditions on the use of the alternate disposal site to offset or avoid environmental and cultural impacts.

1.1.2 Beneficial Use

The Contractor will be allowed to utilize or arrange for material to be transferred and used for beneficial purposes. For the purpose of distinguishing beneficial use from alternate disposal sites, beneficial use will be defined as material transferred by mechanical means (not hydraulic dredging) and will comprise a beneficial use, such as fill for property development or road construction, landfill cover, or aggregate supply. Material for beneficial use shall be borrowed directly from the dredged material placement piles, and not transferred through the placement site. The contractor shall furnish the Contracting Officer written documentation of the quantity and location of material borrowed from the dredged material piles for beneficial use during this contract.

1.2 CONTRACTOR PROPOSED PIPELINE ROUTE

If the Contractor elects to propose its own pipeline route(s) as a substitute to the designated pipeline route, then the Contractor shall provide to the Contracting Officer written agreement from the landowner

stating approval and condition of access. The Contractor shall be responsible for obtaining all Federal, State, and local permits for any Contractor proposed pipeline route.

1.2.1 Esmann Island

Significant archaeological and cultural resources have been identified as existing on Esmann Island. If the Contractor proposes to cross Esmann Island with a pipeline route, the Contractor, at his own expense, will be required to have a cultural survey performed by someone qualified to perform such work. The results of the survey on any proposed pipeline route crossing Esmann Island shall be approved by the Contracting Officer.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Disposal Plan; GA.

The plan shall indicate the horizontal and vertical limits of temporary work, such as berms and access roads. The plan have a one inch to 100 foot minimum scale, with five foot contours. The Contractor shall describe the means by which he plans to contain all excavated material, dredged material, sluice and runoff water and sediment retention basins within the specified limits.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

Disposal of material into the designated relocation/placement site shall be in accordance with all permits obtained by the Government.

3.2 STRIPPING

Where indicated or directed, live, dead or decayed surface vegetation shall be stripped. Brush, litter, objectional weeds, roots, stones larger than 2 inches in diameter, and other objectional materials shall be disposed of as specified in SECTION: GENERAL. Topsoil shall be stripped and stockpiled as required to obtain topsoil for reuse in final grading operations.

3.3 PREPARATION OF RELOCATION/PLACEMENT SITE

The relocation/placement site will require clearing, stripping and construction of permanent containment berms as shown prior to deposition of dredged material.

3.4 PLACEMENT OF MATERIAL

3.4.1 Direction of Work

The Contracting Officer may require the specific placement and movement of the discharge end, the laying of shore pipe, and specific operation of tractor equipment to effect a proper disposition that is consistent with environmental constraints and permits. When the parameters of the operation are established, the absence or presence of the Contracting Officer does not relieve the Contractor of the responsibility to maintain a proper disposition operation. The Contracting Officer is authorized to stop operations if the disposal operation is not meeting permit requirements.

3.4.2 Runoff and Sluice Water

Runoff and sluice water shall be contained within the limits of the relocation/placement site.

3.4.3 Effluent Containment Dike

A dike shall be constructed where necessary to prevent sediment from leaving the designated relocation site. Dikes shall be constructed of compacted soil with 2 feet of freeboard, a 10 feet wide top, and stable side slopes 2H:1V or flatter.

3.5 FINISHED EXCAVATION, FILLS, AND EMBANKMENTS

The Contractor shall finish excavation, fills, and embankments in all areas covered by the contract project documents including adjacent transition areas. The finished surface shall be reasonably smooth, compacted, and free from irregular surface changes suitable for the application of turbing materials (the degree of finish required is that ordinarily obtainable from blade-dozer operations). Ditches shall be finished to permit adequate drainage.

3.6 TOPSOIL

Topsoil placement is covered in SECTION: ESTABLISHMENT OF TURF. The finished grade shall be such that after subsequent treatment (tillage, topsoiling and planting) the planted grade shall be even with adjoining turfed areas.

3.7 PROTECTION

The Contractor shall protect newly graded areas from traffic and from erosion, and shall repair settlement and/or washing away of placed fill material that may occur from any cause, prior to acceptance, and re-establish grade to the required elevations and slopes. All work shall be conducted in accordance with the environmental protection requirements of the contract.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02630

STORM-DRAINAGE SYSTEM

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, STORAGE, AND HANDLING
 - 1.3.1 Delivery and Storage
 - 1.3.2 Handling

PART 2 PRODUCTS

- 2.1 PIPE FOR CULVERTS AND STORM DRAINS
 - 2.1.1 Concrete Pipe
 - 2.1.2 Concrete Flared End Sections
 - 2.1.3 Joints

PART 3 EXECUTION

- 3.1 EXCAVATION FOR PIPE CULVERTS, STORM DRAINS, AND DRAINAGE STRUCTURES
- 3.2 PLACING PIPE
 - 3.2.1 Concrete Pipe Bedding
 - 3.2.2 Concrete Pipe
 - 3.2.3 Multiple Culverts
- 3.3 JOINTS
 - 3.3.1 Flexible Watertight Joints
- 3.4 BACKFILLING
 - 3.4.1 Backfilling Pipe in Fill Sections
 - 3.4.2 Movement of Construction Machinery
 - 3.4.3 Compaction
 - 3.4.3.1 General Requirements
 - 3.4.3.2 Minimum Density
 - 3.4.4 Testing
 - 3.4.4.1 Testing Schedule

-- End of Section Table of Contents --

SECTION 02630

STORM-DRAINAGE SYSTEM

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
(AASHTO)

AASHTO M 198 (1994) Joints for Circular Concrete Sewer and Culvert Pipe Using Flexible Watertight Gaskets

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 76 (1997) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

ASTM C 443 (1994) Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets

ASTM D 698 (1991) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³) (600 KN-m/m³)

ASTM D 1556 (1996) Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D 2922 (1996) Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth)

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-09 Reports

Testing; FIO.

A summary of compaction testing results shall be submitted when the site work is substantially complete. See PARAGRAPH: BACKFILLING for draft correspondence.

SD-13 Certificates

Certificate for Pipeline; FIO.

Test reports demonstrating conformance of pipe to applicable pipe specifications shall be submitted to the Contracting Officer before delivery of pipe to the work site. Strength tests for concrete pipe as required in applicable specifications shall be by the three-edge bearing tests.

Hydrostatic Test on Watertight Joints; FIO.

Certified copies of test reports demonstrating conformance to applicable pipe specifications, before pipe is installed.

1.3 DELIVERY, STORAGE, AND HANDLING

1.3.1 Delivery and Storage

Materials delivered to site shall be inspected for damage, unloaded, and stored with a minimum of handling. Materials shall not be stored directly on the ground. The inside of pipes and fittings shall be kept free of dirt and debris. Gasket materials and plastic materials shall be protected from exposure to direct sunlight over extended periods of time.

1.3.2 Handling

Materials shall be handled in a manner that ensures delivery to the trench in sound, undamaged condition. Pipe shall be carried to the trench, not dragged.

PART 2 PRODUCTS

2.1 PIPE FOR CULVERTS AND STORM DRAINS

Pipe for culverts and storm drains shall be of the sizes indicated and shall conform to the requirements specified.

2.1.1 Concrete Pipe

Pipe for culverts and storm drains shall conform to ASTM C 76, Class III.

2.1.2 Concrete Flared End Sections

Concrete flared end sections shall be of a standard safety slope apron design of the pipe manufacturer and manufactured of the same materials specified for the pipe to which the flared end section is to be jointed to.

2.1.3 Joints

Flexible watertight joints shall be made with plastic or rubber-type gaskets for concrete pipe. The design of joints and the physical requirements for plastic gaskets shall conform to AASHTO M 198, and rubber-type gaskets shall conform to ASTM C 443. Rubber gaskets shall comply with the oil resistant gasket requirements of ASTM C 443. Gaskets shall have not more than one factory-fabricated splice. Alternate types of watertight joint may be furnished, if specifically approved.

PART 3 EXECUTION

3.1 EXCAVATION FOR PIPE CULVERTS, STORM DRAINS, AND DRAINAGE STRUCTURES

Excavation of trenches, and for appurtenances and backfilling for culverts and storm drains, shall be in accordance with the requirements specified below.

3.2 PLACING PIPE

Each pipe shall be thoroughly examined before being laid; defective or damaged pipe shall not be used. Pipelines shall be laid to the grades and alignment indicated. Proper facilities shall be provided for lowering sections of pipe into trenches. Pipe shall not be laid in water, and pipe shall not be laid when trench conditions or weather are unsuitable for such work. Diversion of drainage or dewatering of trenches during construction shall be provided as necessary. All pipe in place shall be inspected before backfilling, and those pipes damaged during placement shall be removed and replaced.

3.2.1 Concrete Pipe Bedding

The bedding surface for the pipe shall provide a firm foundation of uniform density throughout the entire length of the pipe. When no bedding class is specified or detailed on the drawings, concrete pipe shall be bedded in a soil foundation accurately shaped and rounded to conform to the lowest one-fourth of the outside portion of circular pipe or to the lower curved portion of pipe arch for the entire length of the pipe or pipe arch. When necessary, the bedding shall be tamped. Bell holes and depressions for joints shall be not more than the length, depth, and width required for properly making the particular type of joint.

3.2.2 Concrete Pipe

Laying shall proceed upgrade with spigot ends of bell-and-spigot pipe and tongue ends of tongue-and-groove pipe pointing in the direction of the flow.

3.2.3 Multiple Culverts

Where multiple lines of pipe are installed, adjacent sides of pipe shall be at least half the nominal pipe diameter or 3 feet apart, whichever is less.

3.3 JOINTS

3.3.1 Flexible Watertight Joints

Gaskets and jointing materials shall be as recommended by the particular manufacturer in regard to use of lubricants, cements, adhesives, and other special installation requirements. Surfaces to receive lubricants, cements, or adhesives shall be clean and dry. Gaskets and jointing materials shall be affixed to the pipe not more than 24 hours prior to the installation of the pipe, and shall be protected from the sun, blowing dust, and other deleterious agents at all times. Gaskets and jointing materials shall be inspected before installing the pipe; any loose or improperly affixed gaskets and jointing materials shall be removed and replaced. The pipe shall be aligned with the previously installed pipe, and the joint pushed home. If, while the joint is being made the gasket becomes visibly dislocated the pipe shall be removed and the joint remade.

3.4 BACKFILLING

3.4.1 Backfilling Pipe in Fill Sections

For pipe placed in fill sections, backfill material and the placement and compaction procedures shall be as specified below. The fill material shall be uniformly spread in layers longitudinally on both sides of the pipe, not exceeding 6 inches in compacted depth, and shall be compacted by rolling parallel with pipe or by mechanical tamping or ramming. Prior to commencing normal filling operations, the crown width of the fill at a height of 12 inches above the top of the pipe shall extend a distance of not less than twice the outside pipe diameter on each side of the pipe or 12 feet, whichever is less. After the backfill has reached at least 12 inches above the top of the pipe, the remainder of the fill shall be placed and thoroughly compacted in layers not exceeding 12 inches.

3.4.2 Movement of Construction Machinery

When compacting by rolling or operating heavy equipment parallel with the pipe, displacement of or injury to the pipe shall be avoided. Movement of construction machinery over a culvert or storm drain at any stage of construction shall be at the Contractor's risk. Any damaged pipe shall be repaired or replaced at no cost to the Government.

3.4.3 Compaction

3.4.3.1 General Requirements

Cohesionless materials include gravels, gravel-sand mixtures, sands, and gravelly sands. Cohesive materials include clayey and silty gravels, gravel-silt mixtures, clayey and silty sands, sand-clay mixtures, clays, silts, and very fine sands. When results of compaction tests for moisture-density relations are recorded on graphs, cohesionless soils will show straight lines or reverse-shaped moisture-density curves, and cohesive soils will show normal moisture-density curves.

3.4.3.2 Minimum Density

Backfill over and around the pipe and backfill around and adjacent to drainage structures shall be compacted at the approved moisture content and the density shall not be less than 90 percent of maximum density for cohesive material and 95 percent of maximum density for cohesionless material.

3.4.4 Testing

Testing shall be the responsibility of the Contractor and performed at no additional cost to the Government. Testing shall be performed by an approved commercial testing laboratory or by the Contractor subject to approval. Tests shall be performed in sufficient number to ensure that specified density is being obtained. The Contracting Officer reserves the right to direct where and when moisture-density tests shall be performed. Testing shall be immediately submitted to the Contracting Officer.

3.4.4.1 Testing Schedule

- a. Moisture-Density Relations (ASTM D 698)

One test for each material variation, not less than 2 tests total.

- b. In-Place Densities (ASTM D 1556 or ASTM D 2922)

Typical, 1 test per 1,000 CY of fill placed.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02720

AGGREGATE BASE COURSE

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS

PART 2 PRODUCTS

- 2.1 AGGREGATE BASE FOR PCC PAVEMENTS
- 2.2 MACADAM BASE FOR BITUMINOUS PAVEMENTS
- 2.3 MATERIAL SOURCES

PART 3 EXECUTION

- 3.1 GENERAL
 - 3.1.1 Definitions
- 3.2 EQUIPMENT
- 3.3 WEATHER LIMITATION
- 3.4 STOCKPILING MATERIAL
- 3.5 PREPARATION OF SUBGRADE
- 3.6 GRADE CONTROL
 - 3.6.1 Grade and Cross Section Tolerances
- 3.7 PLACING
- 3.8 COMPACTION
 - 3.8.1 Requirements
 - 3.8.2 Finishing
- 3.9 SMOOTHNESS TEST
- 3.10 THICKNESS CONTROL
- 3.11 TESTING
 - 3.11.1 Sieve Analysis (ASTM C117 and C136)
 - 3.11.2 Correction
- 3.12 MAINTENANCE

-- End of Section Table of Contents --

SECTION 02720

AGGREGATE BASE COURSE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 4121 Granular Subbase Material, Standard Specifications for Highway and Bridge Construction

IDOT 4122 Crushed Stone Base Material, Standard Specifications for Highway and Bridge Construction

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 117 (1995) Materials Finer Than 75 micrometer (No. 200) Sieve in Mineral Aggregates by Washing

ASTM C 136 (1996a) Sieve Analysis of Fine and Coarse Aggregates

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08 Statements

Aggregate Sources; FIO.

Material sources as specified in Paragraph MATERIAL SOURCES.

SD-09 Reports

Testing; FIO.

Testing results as specified in Paragraph TESTING.

PART 2 PRODUCTS

2.1 AGGREGATE BASE FOR PCC PAVEMENTS

Aggregate base material for Portland Sement Concrete (PCC) pavements shall meet the requirements of IDOT 4121.

2.2 MACADAM BASE FOR BITUMINOUS PAVEMENTS

Macadam base material for bituminous pavements shall meet the requirements of IDOT 4122.02.

2.3 MATERIAL SOURCES

It shall be the responsibility of the Contractor to make its own investigations for a source of suitable materials and to make its own arrangements with the owners of the pits for procuring the required quantity of suitable material. Aggregate sources on private lands shall be conditioned in agreement with local laws or authorities. The Contractor shall designate in writing only one source or one combination of sources from which it proposes to furnish aggregate. A 50 pound sample shall be provided to the Contracting Officer. Approval of samples from a source of aggregate is not to be construed as approval of all materials from that source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels when such materials are unsuitable for aggregate as determined by the Contracting Officer. Materials produced from an approved source shall meet all the requirements of this section.

PART 3 EXECUTION

3.1 GENERAL

Aggregate base course shall be constructed in accordance with the requirements of the referenced state standard specification sections unless specified otherwise.

3.1.1 Definitions

The term "Engineer" referenced in the state standard specifications shall mean the Contracting Officer.

3.2 EQUIPMENT

All plant, equipment, and tools used in the performance of the work will be subject to approval and shall be maintained in satisfactory working condition at all times. The equipment shall meet the requirements of the referenced state standard specification sections. The base course shall be compacted using a steel-wheeled roller, vibratory smooth drum roller unless other special compaction equipment is approved.

3.3 WEATHER LIMITATION

Base courses shall be placed when the atmospheric temperature is above 35 degrees F. Base shall not be constructed on subgrades that are frozen or contain frost. Areas of completed base course that are damaged by freezing, rainfall, or other weather conditions shall be corrected to meet specified requirements.

3.4 STOCKPILING MATERIAL

Prior to stockpiling of material, storage sites shall be cleared and leveled by the Contractor. Materials obtained from different sources shall be stockpiled separately.

3.5 PREPARATION OF SUBGRADE

Prior to constructing the aggregate base course, the subgrade shall be cleaned of all foreign substances. Ruts or soft, yielding spots in the subgrade, areas having inadequate compaction, and deviations of the surface from the requirements specified shall be corrected by loosening and removing soft or unsatisfactory material and by adding satisfactory material with a consistency and texture similar to the surrounding subgrade, reshaping to line and grade, and recompacting to specified density requirements. The finished subgrade shall not be disturbed by traffic or other operations and shall be maintained by the Contractor in a satisfactory condition until the base course is placed.

3.6 GRADE CONTROL

During construction, the lines and grades, including crown and cross slope indicated for the base course, shall be maintained by means of line and grade stakes placed by the Contractor. Grade stakes shall be in lines parallel to the centerline of the area under construction and suitably spaced for string lining. The Contractor may use an approved laser system in lieu of a grade stake system. Adequate drainage shall be provided during the entire period of construction to prevent water from collecting or standing on the area to be constructed.

3.6.1 Grade and Cross Section Tolerances

Subgrade. 0.05 foot above or below prescribed elevation.

Base Courses. 0.05 foot below prescribed elevation.

3.7 PLACING

The mixed material shall be placed on the prepared subgrade or subbase in loose lifts not exceeding 6 inches in thickness. The layers, when compacted, shall be true to the grades or levels required, with the least possible surface disturbance. If base course becomes contaminated by traffic or sedimentation, the surface shall be cleaned prior to completing subsequent work by sweeping with power sweepers, power brooms, or hand brooms.

3.8 COMPACTION

3.8.1 Requirements

Each layer shall be compacted until there is no further evidence of consolidation. Water shall be applied to the base material during the mixing, spreading, and compacting operations when and in the quantities the Contracting Officer considers necessary for proper compaction.

3.8.2 Finishing

The surface of the top layer shall be finished to grade and cross section shown. Finished surface shall be of uniform texture. Light blading during compaction may be necessary for the finished surface to conform to the lines, grades, and cross sections. Should the surface for any reason

become rough, corrugated, uneven in texture, or traffic marked prior to completion, such unsatisfactory portion shall be scarified, reworked, or replaced as directed.

3.9 SMOOTHNESS TEST

The surface of the top layer shall not deviate more than 1/2 inch when tested with a 10 foot straightedge applied parallel with and at right angles to the centerline of the area to be paved. Deviations exceeding 1/2 inch shall be corrected.

3.10 THICKNESS CONTROL

The thickness of the base course shall be measured at intervals of one measurement for at least each 500 square yards of base course. The depth measurement shall be made by test holes at least 3 inches in diameter. The work shall be scheduled when the Contracting Officer can observe the testing; and the Contracting Officer shall select the locations of the test holes, unless waived.

3.11 TESTING

The following tests shall be performed by and at the expense of the Contractor. Samples shall be taken when and where directed. Tests of materials not meeting the requirements specified will not be counted as part of the required tests. Copies of test results shall be submitted to the Contracting Officer.

3.11.1 Sieve Analysis (ASTM C117 and C136)

Aggregate Base. One test prior to placing or hauling and one test per 250 cy or fraction thereof (in place measure)

3.11.2 Correction

When any source of materials is changed or deficiencies are found, the initial analysis shall be repeated and the material already placed shall be retested to determine the extent of unacceptable material. All in-place unacceptable material shall be replaced.

3.12 MAINTENANCE

The base course shall be maintained in a condition that will meet specification requirements until accepted.

-- End of Section --

SECTION TABLE OF CONTENTS
DIVISION 02 - SITE WORK
SECTION 02731
GRANULAR SHOULDRER MATERIAL

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEGREE OF COMPACTION
- 1.3 EQUIPMENT
- 1.4 SAMPLING AND TESTING
 - 1.4.1 Sampling
 - 1.4.2 Testing
 - 1.4.2.1 Gradation
 - 1.4.2.2 Liquid Limit and Plasticity Index
- 1.5 WEATHER LIMITATIONS

PART 2 PRODUCTS

- 2.1 AGGREGATES
 - 2.1.1 Gradation Requirements
- 2.2 LIQUID LIMIT AND PLASTICITY INDEX REQUIREMENTS

PART 3 EXECUTION

- 3.1 PREPARATION OF UNDERLYING COURSE SUBGRADE
- 3.2 GRADE CONTROL
- 3.3 LAYER THICKNESS
- 3.4 COMPACTION
- 3.5 SMOOTHNESS TEST
- 3.6 THICKNESS CONTROL
- 3.7 MAINTENANCE

-- End of Section Table of Contents --

SECTION 02731

GRANULAR SHOULDRER MATERIAL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 117	(1995) Materials Finer Than 75 micrometer (No. 200) Sieve in Mineral Aggregates by Washing
ASTM D 75	(1987; R 1997) Sampling Aggregates
ASTM D 422	(1963; R 1998) Particle-Size Analysis of Soils
ASTM D 698	(1991; R 1998) Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/cu. ft. (600 kN-m/cu. m.))
ASTM D 3740	(1999c) Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM D 4318	(1998) Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM E 11	(1995) Wire-Cloth Sieves for Testing Purposes

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 2121	Granular Surfacing of Shoulders, Standard Specifications for Highway and Bridge Construction
-----------	--

1.2 DEGREE OF COMPACTION

Degree of compaction is a percentage of the maximum density obtained by the test procedure presented in ASTM D 698 abbreviated herein as present laboratory maximum density.

1.3 EQUIPMENT

All plant, equipment, and tools used in the performance of the work covered

by this section will be subject to approval by the Contracting Officer before the work is started and shall be maintained in satisfactory working condition at all times. The equipment shall be adequate and shall have the capability of producing the required compaction, and meeting the grade controls, thickness controls, and smoothness requirements set forth herein.

1.4 SAMPLING AND TESTING

Sampling and testing shall be the responsibility of the Contractor. Sampling and testing shall be performed by an approved commercial testing laboratory or by the Contractor, subject to approval. If the Contractor elects to establish its own testing facilities, approval of such facilities will be based on compliance with ASTM D 3740. No work requiring testing will be permitted until the Contractor's facilities have been inspected and approved.

1.4.1 Sampling

Sampling for material gradation, liquid limit, and plastic limit tests shall be taken in conformance with ASTM D 75. When deemed necessary, the sampling will be observed by the Contracting Officer.

1.4.2 Testing

1.4.2.1 Gradation

Aggregate gradation shall be made in conformance with ASTM C 117, ASTM C 136, and ASTM D 422. Sieves shall conform to ASTM E 11.

1.4.2.2 Liquid Limit and Plasticity Index

Liquid limit and plasticity index shall be determined in accordance with ASTM D 4318.

1.5 WEATHER LIMITATIONS

Granular shoulder surface courses shall not be constructed when the ambient temperatures is below 35 degrees F and on subgrades that are frozen or contain frost. It shall be the responsibility of the Contractor to protect, by approved method or methods, all areas of surfacing that have not been accepted by the Contracting Officer. Surfaces damaged by freeze, rainfall, or other weather conditions shall be brought to a satisfactory condition by the Contractor.

PART 2 PRODUCTS

2.1 AGGREGATES

Aggregates shall consist of clean, sound, durable particles of natural gravel, crushed gravel, crushed stone, sand, slag, soil, or other approved materials processed and blended or naturally combined. Aggregates shall be free from lumps and balls of clay, organic matter, objectionable coatings, and other foreign materials. The Contractor shall be responsible for obtaining materials that meet the specification and can be used to meet the grade and smoothness requirements specified herein after all compaction and proof rolling operations have been completed.

2.1.1 Gradation Requirements

Gradation requirements as specified in IDOT 2121 shall apply to the completed granular shoulder material. It shall be the responsibility of the Contractor to obtain materials that will meet the gradation requirements after mixing, placing, compacting, and other operations.

2.2 LIQUID LIMIT AND PLASTICITY INDEX REQUIREMENTS

The portion of the completed granular shoulder material passing the No. 40 sieve shall have a maximum liquid limit of 35 and a plasticity index of 4 to 9.

PART 3 EXECUTION

3.1 PREPARATION OF UNDERLYING COURSE SUBGRADE

The subgrade, including shoulders, shall be cleaned of all foreign substances. At the time of surface course construction, the subgrade shall contain no frozen material. Ruts or soft yielding spots in the subgrade areas having inadequate compaction and deviations of the surface from the requirements set forth herein shall be corrected by loosening and removing soft or unsatisfactory material and by adding approved material, reshaping to line and grade and recompacting to density requirements specified in Section 02720 AGGREGATE BASE COURSE. The completed subgrade shall not be disturbed by traffic or other operations and shall be maintained by the Contractor in a satisfactory condition until the surface course is placed.

3.2 GRADE CONTROL

During construction, the lines and grades including crown and cross slope indicated for the granular shoulder material shall be maintained by means of line and grade stakes placed by the Contractor in accordance with the SPECIAL CONTRACT REQUIREMENTS.

3.3 LAYER THICKNESS

The granular shoulder material shall be placed on the subgrade in layers of uniform thickness. When a compacted layer of 6 inches or less is specified, the material may be placed in a single layer; when a compacted thickness of more than 6 inches is required, no layer shall exceed 6 inches nor be less than 3 inches when compacted.

3.4 COMPACTION

Each layer of the granular shoulder material shall be compacted with approved compaction equipment. The water content during the compaction procedure shall be maintained at optimum or at the percentage specified by the Contracting Officer. In locations not accessible to the rollers, the mixture shall be compacted with mechanical tampers. Compaction shall continue until each layer through the full depth is compacted to at least 100 percent of laboratory maximum density. Any materials that are found to be unsatisfactory shall be removed and replaced with satisfactory material or reworked to produce a satisfactory material.

3.5 SMOOTHNESS TEST

The surface of each layer shall not show any deviations in excess of 3/8 inch when tested with a 10 foot straightedge applied both parallel with and

at right angles to the centerline of the area to be paved. Deviations exceeding this amount shall be corrected by the Contractor by removing material, replacing with new material, or reworking existing material and compacting, as directed.

3.6 THICKNESS CONTROL

The completed thickness of the granular shoulder material shall be within 1/2 inch, plus or minus, of the thickness indicated on plans. The thickness of the granular shoulder material shall be measured at intervals in such manner that there will be a thickness measurement for at least each 500 square yards of the granular shoulder material. The thickness measurement shall be made by test holes at least 3 inches in diameter through the granular shoulder material. When the measured thickness of the granular shoulder material is more than 1/2 inch deficient in thickness, the Contractor, at no additional expense to the Government, shall correct such areas by scarifying, adding mixture of proper gradation, reblading, and recompacting, as directed. Where the measured thickness of the granular shoulder material is more than 1/2 inch) thicker than that indicated, it shall be considered as conforming with the specified thickness requirements plus 1/2 inch. The average job thickness shall be the average of the job measurements determined as specified above, but shall be within 1/4 inch of the thickness indicated. When the average job thickness fails to meet this criterion, the Contractor shall, at no additional expense to the Government, make corrections by scarifying, adding or removing mixture of proper gradation, and reblading and recompacting, as directed.

3.7 MAINTENANCE

The granular shoulder material shall be maintained in a condition that will meet all specification requirements until accepted.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02740

BITUMINOUS PAVING

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DEFINITIONS
- 1.4 PLANT, EQUIPMENT, MACHINES, AND TOOLS
 - 1.4.1 Straightedge
- 1.5 WEATHER LIMITATIONS
- 1.6 PROTECTION OF PAVEMENT
- 1.7 GRADE AND SURFACE-SMOOTHNESS REQUIREMENTS
 - 1.7.1 Plan Grade
 - 1.7.2 Surface Smoothness
- 1.8 AGGREGATE SOURCES AND SAMPLING
- 1.9 ACCESS TO PLANT AND EQUIPMENT

PART 2 PRODUCTS

- 2.1 TACK COAT
- 2.2 BITUMINOUS MATERIAL
- 2.3 BITUMINOUS HOT MIX
- 2.4 JOB MIX FORMULA

PART 3 EXECUTION

- 3.1 PREPARATION
- 3.2 TRANSPORTATION OF BITUMINOUS MIXTURE
- 3.3 TACK COATING
- 3.4 PLACING BITUMINOUS
- 3.5 COMPACTION OF MIXTURE
 - 3.5.1 Correcting Deficient Areas
- 3.6 TESTING

-- End of Section Table of Contents --

SECTION 02740

BITUMINOUS PAVING

PART 1 GENERAL

Work under this section shall include all bituminous paving, including surface and base courses and tack coat for paving of roads.

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 2303 Asphalt Cement Concrete Mixtures, Standard Specifications for Highway and Bridge Construction

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 136 (1996a) Sieve Analysis of Fine and Coarse Aggregates

ASTM D 2172 (1995) Quantitative Extraction of Bitumen from Bituminous Paving Mixtures

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Mixture Data; FIO.

Mixture data for the bituminous pavement as specified in PARAGRAPH: JOB MIX FORMULA.

SD-13 Certificates

Certificates of Compliance; FIO.

Certificates of compliance stating that materials incorporated in the work meet the requirements of these specifications.

SD-18 Records

Delivery Tickets; FIO.

Delivery tickets showing type of material and quantity of material incorporated in the work.

1.3 DEFINITIONS

Engineer: The term "Engineer" referenced in IDOT Standard Specifications for Highway and Bridge Construction shall mean the Contracting Officer.

1.4 PLANT, EQUIPMENT, MACHINES, AND TOOLS

1.4.1 Straightedge

The Contractor shall furnish and maintain at the site one 12-foot straightedge for each bituminous paver. Straightedge shall be made available for Government use.

1.5 WEATHER LIMITATIONS

Bituminous course or coat shall be applied only on a dry surface. No material shall be placed when the temperature of the substrate surface is below 40 degree F.

1.6 PROTECTION OF PAVEMENT

After final rolling, no vehicular traffic of any kind shall be permitted on the pavement until the pavement has cooled to 140 degrees F.

1.7 GRADE AND SURFACE-SMOOTHNESS REQUIREMENTS

Finished surface of bituminous courses shall conform to gradeline and elevations shown and to surface-smoothness requirements specified.

1.7.1 Plan Grade

The grade of the completed surface shall not deviate more than 0.05 foot from the plan grade.

1.7.2 Surface Smoothness

When a 12-foot straightedge is laid on the surface parallel with the centerline of the paved area or transverse from crown to pavement edge, the surface shall vary not more than 1/4 inch from the straightedge.

1.8 AGGREGATE SOURCES AND SAMPLING

It shall be the responsibility of the Contractor to make its own investigations for sources of suitable aggregate for the bituminous mixture and to make its own arrangements with the owners of the pits for procuring the required quantity of suitable material. After the award of the contract and at least 30 calendar days prior to placing, the Contractor shall designate in writing only one source or one combination of sources from which it proposes to furnish aggregates. Samples shall be provided to the Contracting Officer at the construction site at the expense of the Contractor. Approval of samples from a source of aggregate is not to be construed as approval of all materials from that source. The right is reserved to reject materials from certain localized areas, zones, strata, or channels when such materials are unsuitable for aggregate as determined by the Contracting Officer. Materials produced from an approved source shall meet all the requirements of this section.

1.9 ACCESS TO PLANT AND EQUIPMENT

The Contracting Officer shall have access at all times to all parts of the paving plant for checking adequacy of the equipment in use; inspecting operation of the plant; verifying weights, proportions, and character of materials; and checking temperatures maintained in preparation of the mixtures.

PART 2 PRODUCTS

2.1 TACK COAT

IDOT 2303.17.

2.2 BITUMINOUS MATERIAL

IDOT 2303.02, Asphalt Cement (AC).

2.3 BITUMINOUS HOT MIX

- a. Bituminous Base Course. IDOT 2303, Type B Base.
- b. Bituminous Surface Course. IDOT 2303, type as shown.

2.4 JOB MIX FORMULA

Mixture for each bituminous course shall be determined by one of the following methods.

1. A mixture meeting the specified State specification may be used provided:

- a. The mixture is currently approved by the State for use in a State paving project in the local area;
- b. Evidence satisfactory to the Contracting Officer is submitted indicating such State approval;
- c. The mixture uses the same aggregate source that is selected by the Contractor, and
- d. The mixture is approved by the Contracting Officer.

2. A written job-mix formula proposal by the Contractor, submitted to the Contracting Officer for approval setting forth:

- a. a specific source or combination of sources for aggregate
- b. a definite percentage of the aggregate passing each sieve;
- c. the percentage of bituminous material; and
- d. the temperature at which the mixture will be delivered to the worksite.

The proposal shall be accompanied by representative samples of aggregate to be used and shall be submitted to the Contracting Officer at least 15 calendar days prior to the beginning of bituminous pavement operations.

PART 3 EXECUTION

Bituminous pavement operations shall not begin until approval of the mixture for each course. Prior to paving operations, the lines and grades

will be verified and/or corrected to be as indicated and within the tolerances specified in SECTION: AGGREGATE BASE COURSE.

3.1 PREPARATION

Prior to placing each bituminous course or coat, the underlying surface shall be cleared of all foreign and objectionable matter using power blowers, power brooms, or hand brooms. The Contracting Officer will inspect the underlying course or coat for conformance with the specifications and drawings. If the underlying course or coat is acceptable, work on the next bituminous course or coat may commence; if not acceptable, the Contractor shall take such corrective actions as directed to bring the underlying course or coat into conformance with the specifications and drawings before placing the next bituminous course or coat.

3.2 TRANSPORTATION OF BITUMINOUS MIXTURE

Each load of bituminous mixture having a temperature of less than 235 degrees F. when dumped into the bituminous paver, or when dumped for spreading when a bituminous paver is not used, will be rejected. Bituminous mixtures that are crusted or have become wet by precipitation shall be rejected.

3.3 TACK COATING

Prior to placing bituminous surface course over the base course, the entire surface shall be treated with a tack coat in conformance with IDOT 2303.17. Rate of application shall be 0.05 to 0.15 gallons per square yard as determined by the Contracting Officer to suit field conditions.

3.4 PLACING BITUMINOUS

Bituminous base course and surface course shall be placed in accordance with IDOT 2303.09.

3.5 COMPACTION OF MIXTURE

The compaction shall be monitored in accordance with IDOT 2303.14. One test strip shall be conducted for each day of paving operations. Additional test strip shall be conducted if the Contracting Officer determines that temperature, rate of placement, or other conditions change significantly. The contractor shall have on site a nuclear density meter that is designed for testing bituminous and/or concrete surfaces and an operator who is familiar with its use and certified to use nuclear gages. The specified density shall be obtained before the mat temperature drops below 185 degrees F.

3.5.1 Correcting Deficient Areas

Mixtures that become contaminated or are defective shall be removed to the full thickness of the course. Edges of the area to be removed shall be cut so that sides are perpendicular and parallel to the direction of traffic and so that the edges are vertical. Fresh paving mixture shall be placed in the excavated areas in sufficient quantity so that the finished surface will conform to grade and smoothness requirements. Paving mixture shall be compacted to the density specified herein. Skin patching of an area that has been rolled shall not be permitted.

3.6 TESTING

The following testing shall be performed by and at the expense of the Contractor. Samples shall be taken when and where directed by the Contracting Officer. Tests of materials not meeting the requirements specified will not be counted as part of the required tests.

TABLE. BITUMINOUS TESTING

<u>Test</u>	<u>Material</u>	<u>Frequency</u>
Sieve Analysis ASTM C 136	Aggregates from Base and Surface Courses	One test per 125 cubic yards or fraction thereof for each type of material
Extraction of Bitumen ASTM D 2172	Base Course and Surface Course	One sample each course

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02754

CONCRETE PAVEMENT

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 ACCEPTABILITY OF WORK
 - 1.2.1 Surface Smoothness Requirements
 - 1.2.2 Surface Smoothness Testing Method
- 1.3 SUBMITTALS
- 1.4 EQUIPMENT
 - 1.4.1 Paver-Finisher
 - 1.4.2 Sawing Equipment
 - 1.4.3 Straightedge

PART 2 PRODUCTS

- 2.1 CEMENTITIOUS MATERIALS
- 2.2 AGGREGATES
- 2.3 CHEMICAL ADMIXTURES
- 2.4 CURING MATERIALS
- 2.5 WATER
- 2.6 JOINT MATERIALS
- 2.7 REINFORCING
- 2.8 DOWELS AND TIE BARS
 - 2.8.1 Dowels
 - 2.8.2 Tie Bars
- 2.9 SPECIFIED CONCRETE STRENGTH AND OTHER PROPERTIES

PART 3 EXECUTION

- 3.1 CONDITIONING OF UNDERLYING MATERIAL
- 3.2 WEATHER LIMITATIONS
- 3.3 CONCRETE PRODUCTION
 - 3.3.1 General Requirements
- 3.4 PAVING
 - 3.4.1 Required Results
 - 3.4.2 Fixed Form Paving
 - 3.4.3 Slipform Paving
 - 3.4.4 Placing Reinforcing Steel
 - 3.4.5 Placing Dowels and Tie Bars
 - 3.4.5.1 Contraction Joints
- 3.5 FINISHING
 - 3.5.1 Texturing
 - 3.5.2 Edging
 - 3.5.3 Rumble Strip
- 3.6 CURING
 - 3.6.1 Membrane Curing
 - 3.6.2 Moist Curing

- 3.7 JOINTS
- 3.8 REPAIR, REMOVAL, AND REPLACEMENT OF SLABS
 - 3.8.1 Removal and Replacement of Full Slabs
 - 3.8.2 Repairing Spalls Along Joints
 - 3.8.3 Areas Defective in Plan Grade or Smoothness
- 3.9 EXISTING CONCRETE PAVEMENT REMOVAL AND REPAIR
- 3.10 PAVEMENT PROTECTION
- 3.11 TESTING AND INSPECTION FOR CONTRACTOR QUALITY CONTROL (CQC)
 - 3.11.1 Concrete Mixture
 - 3.11.2 Cold-Weather Protection

-- End of Section Table of Contents --

SECTION 02754
CONCRETE PAVEMENT

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN CONCRETE INSTITUTE (ACI)

ACI 305R (1991) Hot Weather Concreting
ACI 306R (1988) Cold Weather Concreting

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 31 (1996) Making and Curing Concrete Test Specimens in the Field
ASTM C 33 (1993) Concrete Aggregates
ASTM C 39 (1996) Compressive Strength of Cylindrical Concrete Specimens
ASTM C 94 (1996) Ready-Mixed Concrete
ASTM C 150 (1995) Standard Specification for Portland Cement

IOWA DEPARTMENT OF TRANSPORTATION (IDOT)

IDOT 2301 Portland Cement Concrete Pavement, Standard Specification for Highway and Bridge Construction
IDOT 4136 Joint Fillers and Sealers, Standard Specification for Highway and Bridge Construction
IDOT 4151 Steel Reinforcement, Standard Specification for Highway and Bridge Construction

NATIONAL READY-MIXED CONCRETE ASSOCIATION (NRMCA)

NRMCA CPMB 100 (1990) Concrete Plant Standards

1.2 ACCEPTABILITY OF WORK

The pavement will be accepted on the basis of tests made by the Government and by the Contractor or its suppliers, as specified herein. The Government may, at its discretion, make check tests to validate the results of the Contractor's testing. Concrete samples shall be taken by the

Contractor at the placement to determine the slump, air content, and strength of the concrete. Test cylinders shall be made for determining conformance with the strength requirements of these specifications and, when required, for determining the time at which pavements may be placed into service. All air content measurements shall be determined in accordance with ASTM C 231. All slump tests shall be made in accordance with ASTM C 143. All test cylinders shall be 6 by 12 inch cylinders and shall be fabricated in accordance with ASTM C 192/C 192M, cured in accordance with ASTM C 31/C 31M, and tested in accordance with ASTM C 39. The Contractor shall furnish all materials, labor, and facilities required for molding, curing, testing, and protecting test specimens at the site and in the laboratory.

1.2.1 Surface Smoothness Requirements

The finished surfaces of the pavements shall have no abrupt change of 1/8 inch or more, and all pavements shall be within the tolerances specified in Table 1 when checked with the straightedge.

TABLE 1
STRAIGHTEDGE SURFACE SMOOTHNESS--PAVEMENTS

Pavement Category	Direction of Testing	Tolerances inches
Roads and Streets	Longitudinal	3/16
	Transverse	1/4

1.2.2 Surface Smoothness Testing Method

The surface of the pavement shall be tested with the straightedge to identify all surface irregularities exceeding the tolerances specified above. The entire area of the pavement shall be tested in both a longitudinal and a transverse direction on parallel lines approximately 15 feet apart. The straightedge shall be held in contact with the surface and moved ahead one-half the length of the straightedge for each successive measurement. The amount of surface irregularity shall be determined by placing the straightedge on the pavement surface and allowing it to rest upon the two highest spots covered by its length and measuring the maximum gap between the straightedge and the pavement surface, in the area between these two high points.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Equipment; GA.

Manufacturer's literature on the concrete plant; mixing equipment; hauling equipment; placing and finishing, and curing equipment; at least 7 days prior to start of paving.

SD-08 Statements

Mixture Proportions; GA.

The report of the Contractor's mixture proportioning studies showing the proportions of all ingredients and supporting information on aggregate and other materials that will be used in the manufacture of concrete, at least 14 days prior to commencing concrete placing operations.

SD-09 Reports

Expansion Joint Survey; GA.

A survey of the location, type and thickness of expansion joints in the existing pavement shall be submitted after removal of the existing shoulder.

1.4 EQUIPMENT

1.4.1 Paver-Finisher

The paver-finisher shall be a heavy-duty, self-propelled machine designed specifically for paving and finishing high quality pavement. The paver-finisher shall spread, consolidate, and shape the plastic concrete to the desired cross section in one pass.

1.4.2 Sawing Equipment

Equipment for sawing joints and for other similar sawing of concrete shall be standard diamond-tip-bladed concrete saws mounted on a wheeled chassis.

1.4.3 Straightedge

The Contractor shall furnish and maintain at the job site one 12 foot straightedge for testing concrete surface smoothness. The straightedge shall be constructed of aluminum or magnesium alloy and shall have blades of box or box-girder cross section with flat bottom, adequately reinforced to insure rigidity and accuracy. Straightedges shall have handles for operation on the pavement.

PART 2 PRODUCTS

2.1 CEMENTITIOUS MATERIALS

Cementitious materials shall be portland cement and pozzolan and shall conform to ASTM C 150.

2.2 AGGREGATES

Coarse aggregate shall consist of gravel, crushed stone, or a combination thereof. Fine aggregate shall consist of natural sand, manufactured sand, or a combination of the two, and shall be composed of clean, hard, durable particles. The aggregates as delivered to the mixer shall meet the quality requirements of ASTM C 33, table 3 for the appropriate type or location of concrete construction for use in a severe climate.

2.3 CHEMICAL ADMIXTURES

Air-entraining admixture shall conform to ASTM C 260. An accelerator shall be used only when specified in paragraph SPECIFIED CONCRETE STRENGTH AND OTHER PROPERTIES and shall not be used to reduce the amount of cementitious

material used. Accelerator shall conform to ASTM C 494, Type C. Calcium chloride and admixtures containing calcium chloride shall not be used. A water-reducing or retarding admixture shall meet the requirements of ASTM C 494. Type G or H admixtures are not allowed.

2.4 CURING MATERIALS

Membrane forming curing compound shall be a white pigmented compound conforming to COE CRD-C 300. Burlap shall be new or shall be clean material never used for anything other than curing concrete.

2.5 WATER

Water for mixing and curing shall be clean, potable, and free of injurious amounts of oil, acid, salt, or alkali.

2.6 JOINT MATERIALS

Contraction joint sealer and preformed expansion joint filler and sealer shall meet the requirements of IDOT 4136.

2.7 REINFORCING

Reinforcing bars shall conform to ASTM A 615/A 615M Grade 60 or higher. Bar mats shall conform to ASTM A 184/A 184M. Reinforcement shall be epoxy-coated bars conforming to IDOT 4151.

2.8 DOWELS AND TIE BARS

2.8.1 Dowels

Dowels shall be single piece, plain (non-deformed) steel bars conforming to ASTM A 615 Grade 60 or higher. Dowels shall be epoxy-coated bars conforming to IDOT 4151.

2.8.2 Tie Bars

Tie bars shall be deformed steel bars conforming to ASTM A 615/A 615M Grade 60 or higher. Grade 60 or higher shall not be used for bars that are bent and straightened during construction. Tie bars shall be epoxy-coated conforming to IDOT 4151.

2.9 SPECIFIED CONCRETE STRENGTH AND OTHER PROPERTIES

Specified compressive strength, $f'c$, for concrete is 4500 psi at 28 days. Maximum allowable water-cementitious material ratio is 0.45. The concrete shall be air-entrained with a total air content of 6 plus or minus 1 percent. The maximum allowable slump of the concrete shall be 3 inches for pavement constructed with fixed forms. For slipformed pavement, the maximum allowable slump shall be 1-1/4 inches.

PART 3 EXECUTION

3.1 CONDITIONING OF UNDERLYING MATERIAL

Subgrade and base course upon which concrete is to be placed shall be clean, damp, and free from debris, waste concrete or cement, frost, ice, and standing or running water. After the underlying material has been

prepared for concrete placement, no equipment shall be permitted thereon.

3.2 WEATHER LIMITATIONS

Hot weather and cold weather paving shall be constructed in accordance with ACI.

3.3 CONCRETE PRODUCTION

Concrete for roadways shall meet the requirements in IDOT 2301 for Portland Cement Concrete (PCC) Pavement, Class C.

3.3.1 General Requirements

Concrete shall be deposited in front of the paver within 90 minutes from the time cement has been charged into the mixing drum. Every load of concrete delivered to the paving site shall be accompanied by a batch ticket from the operator of the batching plant. Tickets shall show at least the mass, or volume, of all ingredients in each batch delivered and the time of day. Tickets shall be delivered to the placing foreman who shall keep them on file and deliver them to the Government daily.

3.4 PAVING

Pavement shall be constructed with paving and finishing equipment utilizing fixed forms or slipforms.

3.4.1 Required Results

The paver-finisher shall be operated to produce a thoroughly consolidated slab throughout, true to line and grade within specified tolerances. The paver-finishing operation shall produce a surface finish free of irregularities, tears, voids of any kind, and any other discontinuities. It shall produce only a very minimum of paste at the surface. Multiple passes of the paver-finisher shall not be permitted. The equipment and its operation shall produce a finished surface requiring no hand finishing, other than the use of cutting straightedges, except in very infrequent instances. No water, other than true fog sprays (mist), shall be applied to the concrete surface during paving and finishing.

3.4.2 Fixed Form Paving

Forms shall be steel, except that wood forms may be used for curves having a radius of 150 feet or less, and for fillets. Forms may be built up with metal or wood, added only to the base, to provide an increase in depth of not more than 25 percent. The base width of the form shall be not less than eight-tenths of the vertical height of the form, except that forms 8 inches or less in vertical height shall have a base width not less than the vertical height of the form. Wood forms for curves and fillets shall be adequate in strength and rigidly braced. Forms shall be set on firm material cut true to grade so that each form section when placed will be firmly in contact with the underlying layer for its entire base. Forms shall not be set on blocks or on built-up spots of underlying material. Forms shall remain in place at least 12 hours after the concrete has been placed. Forms shall be removed without injuring the concrete.

3.4.3 Slipform Paving

The slipform paver shall shape the concrete to the specified and indicated

cross section in one pass, and shall finish the surface and edges so that only a very minimum amount of hand finishing is required.

3.4.4 Placing Reinforcing Steel

Reinforcement shall be installed in conformance with IDOT 2301.

3.4.5 Placing Dowels and Tie Bars

Except as otherwise specified below, location of dowels shall be within a horizontal tolerance of plus or minus 5/8 inch and a vertical tolerance of plus or minus 3/16 inch.

3.4.5.1 Contraction Joints

Dowels in longitudinal and transverse contraction joints within the paving lane shall be held securely in place by means of rigid metal basket assemblies. The dowels shall be held firmly by mechanical locking arrangements that will prevent them from becoming distorted during paving operations. The basket assemblies shall be held securely in the proper location by means of suitable anchors.

3.5 FINISHING

3.5.1 Texturing

The concrete finish shall conform to the requirements in IDOT 2301.19A.

3.5.2 Edging

After texturing has been completed, the edge of the slabs along the forms shall be carefully finished with an edging tool to form a smooth rounded surface of 1/8 inch radius. No water shall be added to the surface during edging.

3.5.3 Rumble Strip

Rumble strip shall be constructed as indicated on the drawings.

3.6 CURING

Immediately after placement, concrete shall be protected from premature drying, extremes in temperatures, rapid temperature change, freezing, and mechanical injury. All materials and equipment needed for adequate curing and protection shall be available and at the placement site prior to start of concrete placement. Concrete shall be protected from the damaging effects of rain for 12 hours. When the ambient temperature is greater than 85°F, concrete shall be shielded from direct rays of the sun for three days. No fire or excessive heat shall be permitted near or in direct contact with concrete at any time. All concrete shall be cured by an approved method for the period of time given below, corresponding to the cementing materials used in the concrete.

Type I portland cement	7 days
Type II portland cement	14 days
Type I or II portland cement blended with pozzolan	21 days

3.6.1 Membrane Curing

A uniform coating of white-pigmented membrane-forming curing compound shall be applied to the entire exposed surface of the concrete including pavement edges as soon as the free water has disappeared from the surface after finishing. If evaporation is high and no moisture is present on the surface even though bleeding has not stopped, fog sprays shall be used to keep the surface moist until setting of the cement occurs. Curing compound shall then be immediately applied.

3.6.2 Moist Curing

Concrete to be moist-cured shall be maintained continuously wet for the entire curing period, commencing immediately after finishing. Surfaces shall be cured by ponding, by continuous sprinkling, by continuously saturated burlap or cotton mats, or by continuously saturated plastic coated burlap. Impervious sheet curing shall not be used.

3.7 JOINTS

Joints shall be constructed in accordance with IDOT 2301.

3.8 REPAIR, REMOVAL, AND REPLACEMENT OF SLABS

New pavement slabs that contain full-depth cracks shall be removed and replaced, as specified herein at no cost to the Government. Removal and replacement shall be full depth, shall be full width of the paving lane, and the limit of removal shall be from each original transverse joint. The Contracting Officer will determine whether cracks extend full depth of the pavement and may require minimum 6 inch diameter cores to be drilled on the crack to determine depth of cracking. Cores shall be drilled and the hole later filled by the Contractor with a well consolidated concrete mixture bonded to the walls of the hole with epoxy resin. Drilling of cores and refilling holes shall be at no expense to the Government. Cracks that do not extend full depth of slab shall be cleaned and then pressure injected with epoxy resin, Type IV, Grade 1. The Contractor shall ensure that the crack is not widened during epoxy resin injection. Where a full depth crack intersects the original transverse joint, the slab(s) containing the crack shall be removed and replaced, with dowels installed, as required below. Spalls along joints shall be repaired as specified.

3.8.1 Removal and Replacement of Full Slabs

Unless there are keys or dowels present, all edges of the slab shall be sawcut full depth. If keys, dowels, or tie bars are present along any edges, these edges shall be sawed full depth 6 inches from the edge if only keys are present, or just beyond the end of dowels or tie bars if they are present. These joints shall then be carefully sawed on the joint line to within 1 inch of the depth of the dowel or key. The main slab shall be further divided by sawing full depth, at appropriate locations, and each piece lifted out and removed. The narrow strips along keyed or doweled edges shall be carefully broken up and removed. Care shall be taken to prevent damage to the dowels, tie bars, or keys or to concrete to remain in place. Protruding portions of dowels shall be painted and lightly oiled. The joint face below keys or dowels shall be suitably trimmed so that there is no abrupt offset. If underbreak occurs at any point along any edge, the area shall be hand-filled with concrete, producing an even joint face from top to bottom, before replacing the removed slab. If underbreak over 4 inches deep occurs, the entire slab containing the underbreak shall be removed and replaced. Where there are no dowels, tie bars, or keys on an

edge, or where they have been damaged, dowels of the size and spacing as specified for other joints in similar pavement shall be installed by epoxy grouting them into holes drilled into the existing concrete. Original damaged dowels or tie bars shall be cut off flush with the joint face. All four edges of the new slab shall thus contain dowels or original keys or original tie bars. Prior to placement of new concrete, the underlying material shall be graded and recompact, and the surfaces of all four joint faces shall be cleaned of all loose material and contaminants, and coated with a double application of membrane forming curing compound as bond breaker. Placement of concrete shall be as specified for original construction. The resulting joints around the new slab shall be prepared and sealed as specified.

3.8.2 Repairing Spalls Along Joints

Spalls along joints and cracks shall be repaired by first making a vertical saw cut at least 1 inch outside the spalled area and to a depth of at least 2 inches. Saw cuts shall be straight lines forming rectangular areas. The concrete between the saw cut and the joint, or crack, shall be chipped out to remove all unsound concrete. The cavity shall be thoroughly cleaned with high pressure water jets supplemented with compressed air to remove all loose material. Immediately before filling the cavity, a prime coat shall be applied to the dry cleaned surface of all sides and bottom of the cavity, except any joint face. The prime coat shall be applied in a thin coating and scrubbed into the surface with a stiff-bristle brush. Prime coat for portland cement repairs shall be a neat cement grout and for epoxy resin repairs shall be epoxy resin, Type III, Grade 1. The cavity shall be filled with low slump portland cement concrete or mortar, or with epoxy resin concrete or mortar. Portland cement concrete shall be used for larger spalls, those more than 1/3 cu. ft. in size after removal operations; portland cement mortar shall be used for spalls between 0.03 and 1/3 cu. ft.; and epoxy resin mortar or Type III, Grade 3 epoxy resin for those spalls less than 0.03 cu. ft. in size after removal operations. Portland cement concretes and mortars shall be very low slump mixtures, proportioned, mixed, placed, tamped, and cured. [If the materials and procedures are approved in writing, latex modified concrete mixtures may be used for repairing spalls less than 1/3 cu.ft. in size.] Epoxy resin mortars shall be made with Type III, Grade 1, epoxy resin, using proportions, mixing, placing, tamping and curing procedures as recommended by the manufacturer. Any repair material on the surrounding surfaces of the existing concrete shall be removed before it hardens. Where the spalled area abuts a joint, an insert or other bond-breaking medium shall be used to prevent bond at the joint face. A reservoir for the joint sealant shall be sawed to the dimensions required for other joints. [In lieu of sawing, spalls not adjacent to joints, and popouts, both less than 6 inches in maximum dimension, may be prepared by drilling a core 2 inches in diameter greater than the size of the defect, centered over the defect, and 2 inches deep or 1/2 inch into sound concrete, whichever is greater. The core hole shall be repaired as specified above for other spalls.]

3.8.3 Areas Defective in Plan Grade or Smoothness

In areas not meeting the specified limits for surface smoothness and plan grade, high areas shall be reduced to attain the required smoothness and grade, except as depth is limited below. High areas shall be reduced by grinding the hardened concrete with a surface grinding machine after the concrete is 14 days or more old. The depth of grinding shall not exceed 1/4 inch. All pavement areas requiring plan grade or surface smoothness corrections in excess of the specified limits, shall be removed and

replaced. In pavement areas given a wire comb or tined texture, areas exceeding 25 square feet that have been corrected by rubbing or grinding shall be retextured by grooving machine sawn grooves meeting the requirements for the wire comb or tined texture. All areas in which grinding has been performed will be subject to the thickness tolerances specified in paragraph Thickness. Any grinding performed on individual slabs with excessive deficiencies shall be performed at the Contractor's own decision without entitlement to additional compensation if eventual removal of the slab is required.

3.9 EXISTING CONCRETE PAVEMENT REMOVAL AND REPAIR

Existing concrete pavement shall be removed as indicated and as specified in Section 02220 REMOVALS, and conform to IDOT 2301 and expanded as specified herein. Removal, repair and replacement shall be made as indicated and as specified in paragraph REPAIR, REMOVAL, AND REPLACEMENT OF SLABS.

3.10 PAVEMENT PROTECTION

The Contractor shall protect the pavement against all damage prior to final acceptance of the work. Traffic shall be excluded from the new pavement. As a construction expedient in paving intermediate lanes between newly paved pilot lanes, operation of the hauling equipment will be permitted on the new pavement after the pavement has been cured for 14 days and the joints have been sealed or otherwise protected. All new and existing pavement carrying construction traffic or equipment shall be continuously kept completely clean.

3.11 TESTING AND INSPECTION FOR CONTRACTOR QUALITY CONTROL (CQC)

3.11.1 Concrete Mixture

- a. Air Content Testing. Air content tests shall be made when test specimens are fabricated. In addition, at least two other tests for air content shall be made on randomly selected batches of each separate concrete mixture produced during each 8-hour period of paving.
- b. Slump Testing. Slump tests shall be made when strength specimens are fabricated.
- c. Temperature. The temperature of the concrete shall be measured when strength specimens are fabricated.
- d. Concrete Strength Testing. Four (4) cylinders from the same batch shall be fabricated, cured and tested for compressive strength, testing 1 cylinder at 7-days, 2 cylinders at 28-days, and the last cylinder at 56 days if either of the two 28-day breaks are below the specification.

3.11.2 Cold-Weather Protection

At least once per day, an inspection shall be made of all areas subject to cold-weather protection. Any deficiencies shall be noted, corrected, and reported.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02763

PAVEMENT MARKINGS

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY AND STORAGE
- 1.4 EQUIPMENT

PART 2 PRODUCTS

- 2.1 PAINT

PART 3 EXECUTION

- 3.1 SURFACE PREPARATION
- 3.2 APPLICATION
 - 3.2.1 Paint
 - 3.2.1.1 Rate of Application
 - 3.2.1.2 Drying

-- End of Section Table of Contents --

SECTION 02763

PAVEMENT MARKINGS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
(AASHTO)

AASHTO M 248 (1991I) Ready-Mixed White and Yellow
Traffic Paints

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-01 Data

Equipment Lists; FIO.

Lists of proposed equipment, including descriptive data, and notifications of proposed Contractor actions as specified in this section.

1.3 DELIVERY AND STORAGE

All materials shall be delivered and stored in sealed containers that plainly show the designated name, formula or specification number, batch number, color, date of manufacture, manufacturer's name, and directions, all of which shall be plainly legible at time of use.

1.4 EQUIPMENT

All machines, tools and equipment used in the performance of the work shall be approved and maintained in satisfactory operating condition. Equipment operating on roads shall display low speed traffic markings and traffic warning lights. Hand-operated push-type machines of a type commonly used for application of paint to pavement surfaces will be acceptable for marking small streets. Applicator machine shall be equipped with the necessary paint tanks and spraying nozzles, and shall be capable of applying paint uniformly at coverage specified. Sandblasting equipment shall be provided as required for cleaning surfaces to be painted. Hand-operated spray guns shall be provided for use in areas where push-type machines cannot be used.

PART 2 PRODUCTS

2.1 PAINT

The paint shall be homogeneous, easily stirred to smooth consistency, and shall show no hard settlement or other objectionable characteristics during a storage period of 6 months. Paint shall conform to ASSHTO M 248, color as indicated. Pavement marking paints shall comply with applicable state and local laws enacted to ensure compliance with Federal Clean Air Standards. Paint materials shall conform to the restrictions of the local Air Pollution Control District.

PART 3 EXECUTION

3.1 SURFACE PREPARATION

Surfaces to be marked shall be thoroughly cleaned before application of the pavement marking material. Dust, dirt, and other granular surface deposits shall be removed by sweeping, blowing with compressed air, rinsing with water or a combination of these methods as required. Rubber deposits, surface laitance, existing paint markings, and other coatings adhering to the pavement shall be completely removed with scrapers, wire brushes, sandblasting, approved chemicals, or mechanical abrasion as directed. Pavement surfaces shall be allowed to dry, when water is used for cleaning, prior to striping or marking.

3.2 APPLICATION

All pavement markings and patterns shall be placed as shown on the plans.

3.2.1 Paint

Paint shall be applied to clean, dry surfaces, and only when air and pavement temperatures are above 40 degrees F and less than 95 degrees F. Paint temperature shall be maintained within these same limits. New asphalt pavement surfaces and new Portland concrete cement shall be allowed to cure for a period of not less than 30 days before applications of paint.

Paint shall be applied pneumatically with approved equipment at rate of coverage specified. The Contractor shall provide guide lines and templates as necessary to control paint application. Special precautions shall be taken in marking numbers, letters, and symbols. Edges of markings shall be sharply outlined.

3.2.1.1 Rate of Application

Paint shall be applied evenly to the pavement surface to be coated at a rate of 105 plus or minus 5 square feet per gallon.

3.2.1.2 Drying

The maximum drying time requirements of the paint specifications will be strictly enforced to prevent undue softening of bitumen, and pickup, displacement, or discoloration by tires of traffic. If there is a delay in drying of the markings, painting operations shall be discontinued until cause of the slow drying is determined and corrected.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02930

PLANTINGS

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, STORAGE, AND HANDLING
 - 1.3.1 Delivery
 - 1.3.1.1 Plant Material Identification
 - 1.3.1.2 Protection During Delivery
 - 1.3.1.3 Conditioners and Amendments
 - 1.3.2 Storage
 - 1.3.3 Handling
- 1.4 SCHEDULE
- 1.5 INSPECTION

PART 2 PRODUCTS

- 2.1 PLANT MATERIAL
 - 2.1.1 Quality
 - 2.1.2 Method of Shipment to Maintain Health of Root System
 - 2.1.2.1 Balled and Burlapped (B&B) Plant Material
 - 2.1.2.2 Container-Grown (POT) Plant Material
 - 2.1.3 Growth of Trunk and Crown
 - 2.1.3.1 Deciduous Trees
 - 2.1.3.2 Deciduous Shrubs
 - 2.1.3.3 Coniferous Evergreen Plant Material
- 2.2 TOPSOIL
- 2.3 MULCH
- 2.4 WEED BARRIERS
- 2.5 MYCORRHIZAL FUNGI INOCULUM
- 2.6 TRUNK WRAPPING MATERIAL

PART 3 EXECUTION

- 3.1 PROTECTION OF EXISTING VEGETATION
- 3.2 PERCOLATION TEST
- 3.3 SITE PREPARATION
 - 3.3.1 Layout
- 3.4 INSTALLATION
 - 3.4.1 Setting Plant Material
 - 3.4.2 Backfill Soil Mixture
 - 3.4.3 Backfill Procedure
 - 3.4.4 Staking and Guying
- 3.5 FINISHING
 - 3.5.1 Placing Mulch
 - 3.5.2 Pruning
 - 3.5.3 Wrapping

- 3.6 MAINTENANCE DURING PLANTING OPERATION
- 3.7 RESTORATION AND CLEAN UP
- 3.8 MAINTENANCE

-- End of Section Table of Contents --

SECTION 02930

PLANTINGS

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA)

ANLA ANSI/ANLA Z60.1 (1996) American Standard for Nursery Stock

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A300 (1995) Tree Care Operations - Trees, Shrubs and other Woody Plant Maintenance

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 5268 (1992; R1996) Topsoil Used for Landscaping Purposes

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Schedules

Plant Installation Schedule; GA.

Plant installation schedule shall be submitted a minimum of 30 days before beginning plant installation. Schedule shall specify planting season (spring or fall), dates, locations, and plant materials to be installed.

SD-08 Statements

Plant Establishment Period; FIO

Upon completion of the last day of the planting operation, the plant establishment period for maintaining installed plant material in a healthy growing condition shall commence and shall be in effect for the remaining contract time period, not to exceed 12 months. Written calendar time period shall be furnished for the plant establishment period. When there is more than one plant establishment period, the boundaries of the planted area covered for each period shall be described.

SD-18 Records

Maintenance Record; FIO.

A record shall be furnished describing the maintenance work performed, the quantity of plant losses, diagnosis of the plant loss, the quantity and date of replacements made, and pesticide application.

1.3 DELIVERY, STORAGE, AND HANDLING

1.3.1 Delivery

1.3.1.1 Plant Material Identification

Plant material shall be identified with attached, durable, waterproof labels and weather-resistant ink, stating the common name, correct botanical plant name and size.

1.3.1.2 Protection During Delivery

Plant material shall be protected during delivery to prevent desiccation and damage to the branches, trunk, root system, or earth ball. Branches shall be protected by tying-in. Exposed branches shall be covered during transport.

1.3.1.3 Conditioners and Amendments

Soil conditioners and amendments shall be delivered to the site in the original, unopened containers bearing the manufacturer's chemical analysis and name. In lieu of containers, soil conditioners and amendments may be furnished in bulk and a certificate from the manufacturer indicating the above information shall accompany each delivery.

1.3.2 Storage

Plants stored on the work site shall be protected from any drying at all times by covering the balls or roots with moist sawdust, wood chips, shredded bark, peat moss, or other similar mulching material. Plants, including those in containers, shall be kept in a moist condition by watering with a fine mist spray until planted.

Storage of other material shall be in designated areas. Soil amendments shall be stored in dry locations and away from contaminants. Chemical treatment material shall be stored according to manufacturer's instructions and not with plants or other materials.

1.3.3 Handling

Plant material shall not be injured in handling. Cracking or breaking the earth ball of balled and burlapped plant material shall be avoided. Plant material shall not be handled by the trunk or stems. Materials shall not be dropped from vehicles.

1.4 SCHEDULE

Planting shall be scheduled within the dates in the Optimal Planting Date table shown on the drawings. When special conditions warrant a variance to the planting operations, proposed planting times shall be submitted for approval. Planting operations shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture, frozen ground or other unsatisfactory conditions prevail, the work shall be

stopped when directed.

1.5 INSPECTION

Plants shall be subject to inspection at any time prior to planting. Plants may be inspected at the nursery prior to shipment, but such inspection shall not be considered as acceptance. Upon request of the Contracting Officer, the contractor shall accompany the government inspector to the nursery and identify plant material to be furnished. Unacceptable material shall be promptly removed from the job site.

PART 2 PRODUCTS

2.1 PLANT MATERIAL

Trees shall be delivered to the jobsite without wrapping (bark shall be visible for inspection).

2.1.1 Quality

Well shaped, well grown, vigorous plant material having healthy and well branched root systems in accordance with ANLA ANSI/ANLA Z60.1 shall be provided. Plant material shall be provided free from disease, harmful insects and insect eggs, sun-scald injury, disfigurement and abrasion. Plant material shall be free of shock or damage to branches, trunk, or root systems, which may occur from the digging and preparation for shipment. Plant material shall be well shaped, vigorous and healthy with a healthy, well branched root system. Plant material shall be checked for unauthorized substitution and to establish nursery grown status. The plant material shall exhibit typical form of branch to height ratio; and meet the caliper and height measurements specified. Plant material that measures less than specified, or has been poled, topped off or headed back, shall be rejected. Container-grown plant material shall show new fibrous roots and the root mass shall contain its shape when removed from the container.

2.1.2 Method of Shipment to Maintain Health of Root System

2.1.2.1 Balled and Burlapped (B&B) Plant Material

Ball size and ratio shall be in accordance with ANLA ANSI/ANLA Z60.1. The ball shall be of a diameter and depth to encompass enough fibrous and feeding root system necessary for the full recovery of the plant. The plant stem or trunk shall be centered in the ball. All roots shall be clean cut at the ball surface. Roots shall not be pulled from the ground. Before shipment the root ball shall be dipped in gels containing mycorrhizal fungi inoculum. The root ball shall be completely wrapped with burlap or other suitable material and securely laced with biodegradable twine. Plant material with broken or cracked balls; or broken containers shall be rejected.

2.1.2.2 Container-Grown (POT) Plant Material

Container size shall be in accordance with ANLA ANSI/ANLA Z60.1. Plant material shall be grown in a container over a duration of time for new fibrous roots to have developed and for the root mass to retain its shape and hold together when removed from the container. Container-grown plant material shall be inoculated with mycorrhizal fungi during germination in

the nursery. Before shipment the root system shall be dipped in gels containing mycorrhizal fungi inoculum. The container shall be sufficiently rigid to hold ball shape and protect root mass during shipping.

2.1.3 Growth of Trunk and Crown

2.1.3.1 Deciduous Trees

A height to caliper relationship shall be provided in accordance with ANLA ANSI/ANLA Z60.1. Height of branching shall bear a relationship to the size and species of tree specified and with the crown in good balance with the trunk. The trees shall not be "poled" or the leader removed.

- a. Single stem: The trunk shall be reasonably straight and symmetrical with crown and have a persistent main leader.
- b. Multi-stem: All countable stems, in aggregate, shall average the size specified. To be considered a stem, there shall be no division of the trunk which branches more than 6 inches from ground level.
- c. Specimen: The tree provided shall be well branched and pruned naturally according to the species. The form of growth desired, which may not be in accordance with natural growth habit, shall be as indicated.

2.1.3.2 Deciduous Shrubs

Deciduous shrubs shall have the height and number of primary stems recommended by ANLA ANSI/ANLA Z60.1. Acceptable plant material shall be well shaped, with sufficient well-spaced side branches, and recognized by the trade as typical for the species grown in the region of the project.

2.1.3.3 Coniferous Evergreen Plant Material

Coniferous Evergreen plant material shall have the height-to-spread ratio recommended by ANLA ANSI/ANLA Z60.1. The coniferous evergreen trees shall not be "poled". The leader shall be whole and unpruned, including the tip.

2.2 TOPSOIL

Topsoil shall be as defined in ASTM D 5268. When available, the topsoil shall be the existing surface soil stripped and stockpiled onsite.

2.3 MULCH

Mulch shall be free from weeds, mold, and other deleterious materials. Rotted manure and recycled mulch including compost, plastics, or pine needles is not acceptable. Wood chips and shredded or ground bark shall be treated to retard the growth of mold and fungi.

2.4 WEED BARRIERS

Weed barrier shall be an inert membrane specifically manufactured and marketed for landscaping. Weed barrier shall consist of a heat bonded non-woven geotextile composed of fiberglass, polyester, or polypropylene fibers. Polymers shall be stabilized for ultraviolet light degradation.

2.5 MYCORRHIZAL FUNGI INOCULUM

Mycorrhizal fungi inoculum shall be composed of multiple-fungus inoculum as recommended by the manufacturer for the plant material specified.

2.6 TRUNK WRAPPING MATERIAL

Tree wrap shall be two thicknesses of crinkled paper cemented together with a layer of bituminous material. Wrapping material shall be a minimum of 4 inches in width and shall stretch 33 percent without breakage. Waterproof tape shall be used to bind wrapping to tree.

PART 3 EXECUTION

3.1 PROTECTION OF EXISTING VEGETATION

If turf areas have been established prior to planting operations, the surrounding turf shall be covered before excavations are made in a manner that will protect turf areas. Existing trees, shrubbery, and beds that are to be preserved shall be protected in accordance with the approved Environmental Protection Plan and SECTION: GENERAL.

3.2 PERCOLATION TEST

[Test for percolation shall be done to determine positive drainage of plant pits and beds. A positive percolation shall consist of a minimum 1 inch per 3 hours. If a negative percolation test occurs, no planting shall be continued in the area represented by the test until changes are directed by the Contracting Officer.]

3.3 SITE PREPARATION

The Contractor shall verify that finished grades are as indicated on drawings, and that the placing of topsoil, the smooth grading, and the compaction requirements have been completed in accordance with Section 02300 EARTHWORK, prior to the commencement of the planting operation. The location of underground utilities and facilities in the area of the planting operation shall be verified. Damage to underground utilities and facilities shall be repaired at the Contractor's expense.

3.3.1 Layout

Tree locations and bed outlines shall be staked by the Contractor on the project site and approved by the Contracting Officer before any plant pits or beds are dug.

3.4 INSTALLATION

3.4.1 Setting Plant Material

Plant material shall be set plumb and held in position until sufficient soil has been firmly placed around root system or ball. Balled and burlapped and container grown plants shall be handled and moved only by the ball or container. Plastic wrap and metal baskets shall be completely removed before the placement of backfill. Container grown stock shall be removed from containers without damaging plant or root systems. After centering the plant in pit, all ropes secured to the trunk shall be removed and burlap opened on the top 1/3 of the root ball.

3.4.2 Backfill Soil Mixture

The backfill soil mixture may be a mix of topsoil and soil amendments suitable for the plant material specified. When practical, the excavated soil from the plant pit that is not amended provides the best backfill and shall be used. Mycorrhizal fungi inoculum shall be added as recommended by the manufacturer for the plant material specified.

3.4.3 Backfill Procedure

Prior to backfilling, all metal, wood, synthetic products, or treated burlap devices shall be removed from the ball or root system avoiding damage to the root system. The backfill procedure shall remove air pockets from around the root system. Plant pits and plant beds shall be watered immediately after backfilling, until completely saturated.

3.4.4 Staking and Guying

Staking will be required when trees are unstable or will not remain set due to their size, shape, or exposure to high wind velocity. Trees that are staked and guyed shall be completed as shown.

3.5 FINISHING

3.5.1 Placing Mulch

Care shall be taken to avoid contaminating the mulch with the planting soil. Mulch shall be kept out of the crowns of shrubs, and shall be kept off buildings, sidewalks, fences, and other facilities.

3.5.2 Pruning

New plant material shall be pruned in accordance with recommended dates for each species in the following manner: prune dead and broken branches, cross branches, weak branches, and for shape. Typical growth habit of individual plants shall be retained with as much height and spread as is practicable. The pruning of trees shall be in accordance with ANSI A300. Clean cuts shall be made flush with the parent trunk. Improper cuts, stubs, dead and broken branches shall be removed. "Headback" cuts at right angles to the line of growth will not be permitted. Trees shall not be poled or the leader removed, nor shall the leader be pruned or "topped off". Trimmings shall be disposed of as specified for clearing and grubbing debris in SECTION: 01000 GENERAL.

3.5.3 Wrapping

The trunks of deciduous trees, planted during the fall, shall be wrapped within 24 hours after planting. Trees planted during the spring shall not be wrapped until October of the year when planted. Wrap shall be removed in the following spring. The wrapping shall be securely tied at the top and bottom and at 18-inch maximum intervals with waterproof tape.

3.6 MAINTENANCE DURING PLANTING OPERATION

Installed plant material shall be maintained in a healthy growing condition. Maintenance operations shall begin immediately after each plant is installed to prevent desiccation and shall continue until the plant establishment period commences. Installed areas shall be kept free of weeds, grass, and other undesired vegetation. The maintenance includes

maintaining the mulch, watering, and adjusting settling.

3.7 RESTORATION AND CLEAN UP

Turf areas, pavements and facilities that have been damaged from the planting operation shall be restored to original condition at the Contractor's expense. Excess and waste material shall be removed from the installed area and shall be disposed offsite. Adjacent paved areas shall be cleared.

3.8 MAINTENANCE

Maintenance of plant material shall include straightening plant material, straightening stakes; tightening guying material; correcting girdling; supplementing mulch; pruning dead or broken branch tips; maintaining plant material labels; watering; eradicating weeds, insects and disease; post-fertilization; and removing and replacing unhealthy plants.

a. Watering Plant Material. The plant material shall be watered as necessary to prevent desiccation and to maintain an adequate supply of moisture within the root zone. All watering shall be done in a manner which will provide uniform coverage but which will not cause erosion or damage to the finished surface. Water shall not be applied with a force sufficient to displace mulch and shall not be applied at such a rate that it cannot be absorbed by the mulch and plants.

b. Weeding. Grass and weeds in the installed areas shall not be allowed to reach a maximum 3 inches height before being completely removed, including the root system.

c. Post-Fertilization. The plant material shall be topdressed at least once during the period of establishment with controlled release fertilizer. Apply at the rate of 2 pounds per 100 square feet of plant pit or bed area. Dry fertilizer adhering to plants shall be flushed off. The application shall be timed prior to the advent of winter dormancy. Fertilizer in packet or tablet form shall be placed prior to backfilling and in accordance with the approved manufacturer's written recommendations.

d. Unhealthy Plant Material. A tree shall be considered unhealthy or dead when the main leader has died back, or up to a maximum 25 percent of the crown has died. A shrub shall be considered unhealthy or dead when up to a maximum 25 percent of the plant has died. This condition shall be determined by scraping on a branch an area 1/16 inch square, maximum, to determine if there is a green cambium layer below the bark. The Contractor shall determine the cause for unhealthy plant material and shall provide recommendations for replacement. Unhealthy or dead plant material shall be removed immediately and shall be replaced as soon as seasonal conditions permit.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 02 - SITE WORK

SECTION 02935

ESTABLISHMENT OF TURF

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 SUBMITTALS
- 1.3 DELIVERY, STORAGE AND HANDLING
 - 1.3.1 Delivery
 - 1.3.2 Storage
 - 1.3.3 Handling

PART 2 PRODUCTS

- 2.1 SEED
 - 2.1.1 Seed Classification
 - 2.1.2 Seed Mixtures
 - 2.1.3 Testing
 - 2.1.4 Weed Seed
 - 2.1.5 Inoculant
- 2.2 OTHER MATERIALS
 - 2.2.1 Mulches
 - 2.2.2 Straw Mulch
 - 2.2.3 Water
 - 2.2.4 Herbicide
- 2.3 SPECIAL SEEDING AND MULCHING EQUIPMENT
 - 2.3.1 Pneumatic Tired Tractors
 - 2.3.2 Seed Mixes

PART 3 EXECUTION

- 3.1 STRIPPING
- 3.2 SEEDING TIMES
- 3.3 SITE PREPERATION
 - 3.3.1 Topsoil Placement for Preperation of Seeding Areas
 - 3.3.1.1 Stripped Materials
 - 3.3.1.2 Additional Topsoil
 - 3.3.1.3 Equipment
 - 3.3.1.4 Spreading Topsoil
 - 3.3.1.5 Dressing
 - 3.3.1.6 Tolerances
 - 3.3.1.7 Grading
 - 3.3.1.8 Unsatisfactory Environmental Conditions
 - 3.3.2 Existing Ground Cover
 - 3.3.3 Tillage
 - 3.3.3.1 Minimum Depth
 - 3.3.4 Finished Grading
 - 3.3.4.1 Preperation
 - 3.3.4.2 Debris
 - 3.3.4.3 Protection
- 3.4 SEEDING

- 3.4.1 General
- 3.4.2 Broadcast Seeding
- 3.4.3 Drill Seeding
- 3.4.4 Seeding Rate
- 3.4.5 Applying and Anchoring Mulch
- 3.4.6 Watering
- 3.4.7 Winter Months
- 3.4.8 Temporary Winter Cover
- 3.5 RESTORATION AND CLEANUP
- 3.6 PROTECTION OF TURFED AREAS
- 3.7 TURF ESTABLISHMENT PERIOD
 - 3.7.1 Length of Period
 - 3.7.2 Stand of Turf
 - 3.7.3 Maintenance During Establishment Period
 - 3.7.3.1 Mulched Areas
 - 3.7.3.2 Seeded Areas
 - 3.7.3.3 Mowing of Turf
 - 3.7.3.4 Watering
 - 3.7.3.5 Post-Seeding Fertilization
 - 3.7.3.6 Erosion Control
 - 3.7.3.7 Repair
- 3.8 QUALITY CONTROL

-- End of Section Table of Contents --

SECTION 02935

ESTABLISHMENT OF TURF

PART 1 GENERAL

This section includes the furnishing and planting of native grasses as shown and specified.

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AGRICULTURAL MARKETING SERVICE (AMS)

AMS-01 (Aug 95) Federal Seed Act Regulations Part 201-202

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-06 Instructions

Manufacturer's Literature; FIO.

Manufacturer's literature discussing physical characteristics, applications, guarantees and installation.

SD-07 Schedules

Delivery Schedule; FIO.

Submittal of the schedule shall be at least 10 days before delivery.

SD-08 Statements

Experience Statement; FIO.

The Contractor shall submit a statement indicating that the work to establish the turf will be supervised by an individual with a minimum of 5 years experience with establishment and restoration of native plant communities. That statement shall include an experience record for this individual that demonstrates the required experience.

SD-13 Certificates

Certificates of Compliance; FIO.

Prior to the delivery of materials, certificates of compliance and certified laboratory test reports shall be submitted certifying that

materials meet the requirements specified. Certified copies of the reports for the following materials shall be submitted.

A. Seeds: For mixture percentage, pure live seed, weed seed content and germination.

SD-18 Records

Proof of Seed Order; FIO.

The Contractor shall submit proof of seed order for all seed mixes as specified within this section within 30 days of notice to proceed.

SD-19 Operations and Maintenance Manuals

Maintenance Instructions; FIO.

Three copies written instructions for long-term and year-round care of turfed areas.

1.3 DELIVERY, STORAGE AND HANDLING

1.3.1 Delivery

Seed material shall be inspected upon arrival at the jobsite. The Contractor will insure that all seed materials are delivered in manufacture's original, unopened containers with labels and tags intact and legible. The Contracting Officer shall certify that all seed materials received proper handling during delivery (including moisture content and temperature control), especially grasses and forbs that need special attention between gathering to planting. Materials violating any of the above mentioned shall be removed from the the jobsite at no additional cost to the Government. Seed that has become wet, moldy or otherwise damaged will not be acceptable.

1.3.2 Storage

Materials shall be stored in areas provided by the Contractor. Seed shall be stored in cool, dry locations away from contaminants. Chemical treatment materials shall not be stored with other landscape materials.

1.3.3 Handling

Except for bulk deliveries, materials shall not be dropped or dumped from vehicles.

PART 2 PRODUCTS

2.1 SEED

2.1.1 Seed Classification

All seed weights, are given as Pure Live Seed (P.L.S.). State-certified native seed of the latest season's crop, gathered from within 250 miles of the jobsite, shall be provided in original sealed packages bearing the producer's guaranteed analysis for mixture percentage, purity, germination, weed seed content and inert material. Labels shall be in conformance with AMS 01, Federal Seed Act Regulations and applicable state seed laws.

2.1.2 Seed Mixtures

There are 2 different seed mixes. The drawings indicate which areas are to be seeded with each seed mix. Tables 1 and 2 at the end of this section show the 2 different seed mixes.

2.1.3 Testing

The seed mixes may be subject to testing by the state agriculture department to verify species and viability. Seed mixes that do not meet the minimum requirements specified shall be replaced by the Contractor at no additional cost to the Government.

2.1.4 Weed Seed

Weed seed shall not exceed 1 percent by weight of the total mixture. Wet, moldy or otherwise damaged seed will be rejected. Create field mixes on site in the presence of the Contracting Officer's Representative.

2.1.5 Inoculant

Inoculant shall consist of the proper bacteria applied in the amount and manner recommended by the manufacturer to all legumes in the seed mix.

2.2 OTHER MATERIALS

2.2.1 Mulches

Mulches shall be free from weed, mold and other deleterious materials.

2.2.2 Straw Mulch

Straw mulch materials shall consist of wheat, oat or rye straw, hay, grass cut from native grasses or other plants approved by the Contracting Officer. The mulch material shall be air dry, reasonably light in color and shall not be musty, moldy, caked or otherwise of low quality. The mulch shall be seed free or fumigated to prevent introduction of weeds. The use of mulch that contains noxious weeds will not be accepted. Dry mulching material which breaks and does not bend is unacceptable. Mulch shall have a consistency for placing with commercial mulch blowing equipment.

2.2.3 Water

Water shall be of a quality suitable for irrigation.

2.2.4 Herbicide

Herbicide shall be broad spectrum that leaves no lasting harmful residues and allows planting within 10 to 14 days after application. The herbicide shall be glyphosate based. Herbicide shall be applied per manufacturer's recommendations.

2.3 SPECIAL SEEDING AND MULCHING EQUIPMENT

2.3.1 Pneumatic Tired Tractors

Only pneumatic tired tractors shall be permitted on berm sections having

topsoil. Special equipment such as mulch spreaders may be used if approved by the Contracting Officer. The request for approval shall be made well in advance of the planned planting date and shall include full information on the equipment and materials.

2.3.2 Seed Mixes

Seed mixes 1 and 2 shall be planted using a Truax or equal seed drill.

PART 3 EXECUTION

3.1 STRIPPING

Stripping shall consist of the removal of surface humus, vegetal-laden matter and other objectionable surface material. Areas as indicated on the drawings shall be stripped to the limits and depths shown unless directed otherwise. Areas within the fill limits not designated to be stripped may be stripped as required to obtain topsoil.

3.2 SEEDING TIMES

Seed mixes 1 and 2 shall be sown from May 1 to July 1. Seed mixes 1 and 2 may be dormant seeded from October 15 until the ground freezes.

3.3 SITE PREPERATION

3.3.1 Topsoil Placement for Preperation of Seeding Areas

3.3.1.1 Stripped Materials

Stripped materials suitable for use as topsoil, shall be spread on areas already graded and prepared for topsoil; or when so specified topsoil shall be transported and deposited in stockpiles convenient to areas that are to receive application of the topsoil later, or at locations indicated or specified by the Contracting Officer. Topsoil shall be kept sepearate from other unusable excavated materials, brush, litter, objectionable weeds, roots, stones larger than 2 inches in diameter and other materials that would interfere with planting and maintenance operations. Unusable material shall be removed and disposed of properly.

3.3.1.2 Additional Topsoil

If existing stockpiled topsoil from stripping and the Heitman pond excavation is not sufficient to cover areas as required, additional topsoil shall be a natural, friable loamy material with an organic content between 3 and 20 percent by weight and characteristic of representative, productive soils in the vicinity. Topsoil shall be free from subsoil, noxious weeds, stones roots, lime concrete, ashes, slag, toxic substance, and all materials and substances that may be harmful and/or hinder grading, planting, establishment, and maintenance operations. The pH range shall be between 6.1 and 7.8. Topsoil shall be obtained from off-site sources selected by the Contractor and approved by the Contracting Officer.

3.3.1.3 Equipment

Topsoil shall be spread using a bladed dozer having ground pressures less than 4.5 psi and operating weight less than 35,000 pounds or with rubber tired equipment having operating weight less than 10,000 pounds. The work

shall be coordinated such that equipment for hauling the topsoil does not travel over the topsoil in place.

3.3.1.4 Spreading Topsoil

Topsoil shall be distributed and spread uniformly to one half (1/2) the thickness shown on the plans and tilled to a depth of 4 inches. The remaining half of the topsoil shall then be placed. Topsoil shall be spread such that planting can proceed with little additional soil preparation or tillage. Surface irregularities resulting from topsoiling or other operation shall be leveled to prevent depressions. Compacted soil shall be slightly scarified or disced to assure bond.

3.3.1.5 Dressing

All areas requiring topsoil shall be brought to not less than the prescribed gross cross section at all points. The surface shall be finished to a smoothness suitable for the application of turfing materials.

3.3.1.6 Tolerances

For topsoil, a tolerance of 1 inch above the thickness as shown on the drawings will be permitted. No tolerance will be allowed for the drainage ditches and swales.

3.3.1.7 Grading

The Contractor shall verify that the finished grades were executed as indicated on drawings, and that the placing of topsoil and the grading have been completed. Deviations in the ground surface in relation to the grades indicated on the drawings shall be corrected prior to turfing.

3.3.1.8 Unsatisfactory Environmental Conditions

Site preparation work shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped when directed by the Contracting Officer.

3.3.2 Existing Ground Cover

Existing ground cover shall be mowed unless otherwise indicated on the plans. Herbicide shall be applied to mowed areas.

3.3.3 Tillage

3.3.3.1 Minimum Depth

Soil shall be tilled to a minimum depth of 4 inches by plowing, disking, harrowing, rototilling or other approved method. On slopes 2 horizontal to 1 vertical and steeper, the soil shall be tilled to a maximum depth of 2 inches by scarifying with heavy rakes or other approved method. Rototillers shall be used where soil conditions and length of slope permit. On slopes 1 horizontal to 1 vertical or steeper, no tillage is required.

3.3.4 Finished Grading

3.3.4.1 Preparation

Turf areas shall be filled as needed or have surplus soil removed to attain the finished grade. Drainage patterns shall be maintained as indicated on the drawings. Turf areas compacted by construction operations shall be completely pulverized by tillage. Finished grade shall be 1 inch below the adjoining grade of any surfaced area. New surfaces shall be blended to existing areas.

3.3.4.2 Debris

Graded areas within the work limits shall have debris and stones larger than 2 inches in any dimension removed from the surface.

3.3.4.3 Protection

Finished graded areas shall be protected from damage by vehicular or pedestrian traffic and erosion.

3.4 SEEDING

Prior to seeding, any previously prepared seedbed compacted or damaged by interim rains, traffic or other cause, shall be reworked to restore the ground condition previously specified. Seed will not be broadcast when the wind velocity is great enough to prevent uniform seed distribution.

3.4.1 General

Seed shall be applied to the areas designated on the plans immediately following the completion of site preparation. Climatic conditions should be favorable for growth. Wherever possible, all seed must be drilled, using a Truax seed drill or other approved equipment. Other seeding methods are subject to approval. When drills are used, markers or other means shall be provided to insure that the successive seeded strips shall overlap or be separated by a space no, greater than equipment row spacings.

When delays in operations extend the work beyond the most favorable planting season for species designated, or when conditions are unsuitable due to drought, high winds, excessive moisture or other factors so that satisfactory results are not likely to be obtained, work shall be halted as directed and resumed only when conditions are favorable or when approved alternate or corrective measures and procedures have been effected. If inspection during seeding operations or after germination indicates that strips wider than the space between the rows planted have been left unplanted, additional seed shall be sown as directed.

3.4.2 Broadcast Seeding

In areas inaccessible to drill seeding, seed shall be broadcast by hand. Seed shall be distributed uniformly over designated areas. Half of seed shall be sown with sower moving in one direction, and the remainder with sower moving at right angles to first sowing. Seed shall be covered to an average depth of 1/4 inch by brush harrow, spike-tooth harrow, chain harrow, cultipacker, hand rake with wood tines or other approved device. Seed shall not be broadcast when wind speed exceeds 5 miles per hour.

3.4.3 Drill Seeding

For seed mixes 1 and 2, drill seeding shall be accomplished with approved equipment with drills set not more than 6 inches apart. Seed shall be drilled in two directions, applying approximately half the seed in each direction. Seed distribution must be uniform and set to an average depth

of 1/2 inch to 3/4 inch. When slopes exceed 1 vertical on 5 horizontal, baffle plates spaced not more than 6 inches apart shall be installed in the seed box.

3.4.4 Seeding Rate

Seed shall be uniformly mixed and applied at the rate stated in the seed mix tables.

3.4.5 Applying and Anchoring Mulch

Immediately after the seeding has been completed, mulch shall be spread uniformly in a continuous blanket at a rate of 1 1/2 tons per acre. Mulch shall be spread by hand, manure spreader, modified grain combine with straw-spreader attachment, or a blower-type mulch spreader. Mulching shall be started at the windward side of relatively flat areas, or at the upper part of a steep slope, and continued uniformly until the area is covered. Mulch shall not be bunched. Immediately following the spreading, the mulch shall be anchored to the soil by a V-type wheel land packer, a scalloped-disk land packer designed to force mulch into the soil surface, or other suitable equipment. The number of passes needed, not to exceed three, will be determined by the Contracting Officer. All areas seeded on any given day must be mulched on that same day.

3.4.6 Watering

Immediately upon completion of seeding and mulching, all seeded areas shall be given one watering. Sufficient water to penetrate the seed bed to a minimum of 3 inches shall be applied. Water shall be delivered through a system which will insure even distribution. Watering shall be done in manner which will provide uniform coverage, prevent erosion, and prevent damage to the finished surface by the watering equipment. Water shall be applied at a rate to insure moist soil conditions to a depth of 2 inches. Runoff and puddling shall be prevented. The Contractor shall water seeded areas so that adequate growth and development are maintained.

3.4.7 Winter Months

No finished construction area shall be left untopsoiled and unseeded during the winter months. All construction areas finished before June 15th shall be topsoiled and spring-seeded; all construction finished before October 1st shall be topsoiled and seeded in fall seeding.

3.4.8 Temporary Winter Cover

When the completion schedule of the work under the contract requires a delay in the seeding operations due to the limitation dates above, the areas not yet seeded or which do not have grass shall be planted with temporary winter cover during the period of time from October until the ground is frozen. Temporary winter cover seed species shall be *Elymuscanadensis* (Canada wild rye) at 2 lbs/acre. The areas to be seeded to a temporary winter cover shall be thoroughly mowed prior to seeding in the same manner as specified for the permanent planting. Areas which have been provided with temporary winter cover shall be thoroughly mowed and turfed with permanent species in accordance with PARAGRAPH: SEEDING TIMES. All areas seeded with temporary winter cover shall be staked in the field and marked on the plans. A copy of the plans shall then be submitted to the Contracting Officer.

3.5 RESTORATION AND CLEANUP

Excess and waste material shall be removed and properly disposed of off the site. Adjacent paved areas shall be cleaned. Existing turf areas which have been damaged during the contract operations, and which are outside of the limits designated to be seeded, shall be restored following the requirements in this section, at no additional cost to the Government.

3.6 PROTECTION OF TURFED AREAS

Immediately after turfing, the area shall be protected against traffic or other use by erecting barricades and providing signage as required or as directed by the Contracting Officer.

3.7 TURF ESTABLISHMENT PERIOD

3.7.1 Length of Period

On completion of the last day of the turfing operation, the Turf Establishment Period will begin. Establishment period shall extend for 12 months after completion of the seeding on the entire project, unless desired growth is established, and shortening the period of the Contractor's responsibility for acceptably established areas is authorized by the Contracting Officer.

3.7.2 Stand of Turf

A proper stand of turf from the seeding of Seed Mixtures 1 and 2 is defined as a minimum of 2 to 4 plants per square foot and where no gaps larger than 6 inches in diameter occur anywhere in the turfed area. The plants shall be one or more of the species listed in the seed mix tables at the end of this section.

3.7.3 Maintenance During Establishment Period

3.7.3.1 Mulched Areas

Mulched areas shall be maintained until all work or designated portions thereof have been completed and accepted. Any damage shall be repaired, and mulch material that has been removed by wind or other causes shall be replaced and secured. Maintenance shall include protecting embankments and ditches from erosion and maintaining erosion control material.

3.7.3.2 Seeded Areas

The Contractor shall be responsible for the proper care of seeded areas during the period of establishment or until the project is accepted, whichever requires the longer period of maintenance.

3.7.3.3 Mowing of Turf

Areas seeded shall be mowed during the first growing season to control pioneering weeds and other competition. For the purposes of this project a weed is defined as any plant not included in the seed mix. Mowing should be done before the general height is 6 to 10 inches, when the weedy foliar cover reaches 50 percent of the seeded area, or when the weed species begin to flower. Mowing shall occur before the weed species set seed. The first mowing shall be at a height of 3 inches with the following mowings to be set at a height of 4 to 8 inches. Rotary, flail, or sickle bar type mowing

equipment is acceptable.

3.7.3.4 Watering

Watering is not required but may be watered at the Contractor's discretion.

3.7.3.5 Post-Seeding Fertilization

Areas seeded to seed mixtures 1 and 2 shall not be fertilized.

3.7.3.6 Erosion Control

The Contractor shall control erosion during the maintenance period by using ditch checks, sod swales, silt fences or other methods until a proper stand of turf is established.

3.7.3.7 Repair

If any portion of the surface becomes rilled, gullied, damaged, or destroyed, that portion shall be repaired to re-establish the area without additional cost to the Government.

3.8 QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for the work under this section, in accordance with SECTION 01440, CONTRACTOR QUALITY CONTROL, including but not limited to the following:

- (1) Materials:
 - (a) Seed
 - (b) Mulch
- (2) Seeding and mulching.
- (3) Maintenance and turf establishment.
- (4) Repair of damaged areas.
- (5) Soil Erosion Control

A copy of the records of inspections and tests, as well as the records of corrective action taken, shall be furnished the Government as directed by the Contracting Officer.

TABLE 1

Seed Mix 1: Native Grasses and Forbs for Mesic Areas*

Grasses :**

<u>Species</u>	<u>Variety</u>	<u>PLS lbs./acre</u>	
		<u>Drilled</u>	<u>Broadcast</u>
<i>Andropogon scoparius</i> Little bluestem	Blaze, Wisc. or Minn. Common	4	6
<i>Bouteloua curtipendula</i> Side oats grama	Pierre, Trailway or Minn. Common	4	6
<i>Bromus kalmii</i> Kalm's Brome	Iowa, Wisc. or Minn. Common	2	3
<i>Koeleria cristata</i> June grass	Iowa, Wisc. or Minn. Common	2	3
<i>Sporobolus heterolepis</i> Prairie dropseed	Iowa, Wisc. or Minn. Common	4	6

Forbes (use a minimum of 7):

<i>Amorpha canescens</i> Leadplant	Iowa, Wisc. or Minn. Common	2 oz. bulk
<i>Coreopsis palmata</i> Stiff tickseed	Iowa, Wisc. or Minn. Common	1 oz. bulk
<i>Asclepias tuberosa</i> Butterfly weed	Iowa, Wisc. or Minn. Common	1 oz. bulk
<i>Liatris aspera</i> Rough blazing star	Iowa, Wisc. or Minn. Common	2 oz. bulk
<i>Monarda fistulosa</i> Wild bergamot	Iowa, Wisc. or Minn. Common	1 oz. bulk
<i>Petalostemum sp.</i> Prairie clovers	Iowa, Wisc. or Minn. Common	4 oz. bulk
<i>Rudbeckia hirta</i> Black-eyed susan	Iowa, Wisc. or Minn. Common	2 oz. bulk
<i>Zizia aurea</i> Golden alexander	Iowa, Wisc. or Minn. Common	2 oz. bulk

* If planting takes place in the Fall, add Winter wheat at the rate of 20 lbs/acre to the mix. If planting takes place in the Spring, add Oats at the rate of 20 lbs/acre to the mix.

** If any of these species are not available, equivalent amounts by weight should be added of either Side oats grama, Kalm's brome or Little bluestem.

TABLE 2

Seed Mix 2: Native Grasses Dry Areas*

Grasses (Minimum of 8):**

<u>Species</u>	<u>Variety</u>	<u>PLS lbs./acre</u>	
		<u>Drilled</u>	<u>Broadcast</u>
<i>Andropogon geradi</i> Big bluestem	PM-SD-27, Wisc. or Minn. Common	2	4
<i>Andropogon scoparius</i> Little bluestem	Blaze, Wisc. or Minn. Common	3	5
<i>Bouteloua curtipendula</i> Side oats grama	Pierre, Trailway or Minn. Common	3	5
<i>Calamovilfa longifolia</i> Prairie sandreed	Goshen or Minn. Common	2	3
<i>Elymus canadensis</i> Canada rye	Iowa, Wisc. or Minn. Common	3	4
<i>Koeleria cristata</i> June grass	Iowa, Wisc. or Minn. Common	2	2
<i>Sorghastrum nutans</i> Indian grass	Holt, Wisc. or Minn. Common	2	3
<i>Sporobolus cryptandrus</i> Sand dropseed	Iowa or SD Common	2	3
<i>Sporobolus heterolepis</i> Prairie dropseed	Iowa, Wisc. or Minn. Common	3	4
<i>Stipa spartea</i> Porcupine grass	Iowa, Wisc. or Minn. Common	2	3

* If planting takes place in the Fall, add Winter wheat at the rate of 20 lbs/acre to the mix. If planting takes place in the Spring, add Oats at the rate of 20 lbs/acre to the mix.

** If any of these species are not available, equivalent amounts by weight should be added of either Side oats grama, Prairie dropseed or Little bluestem.

-- End of Section --