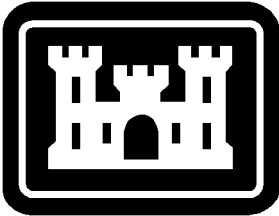


SOLICITATION NO: W912P6-09-B-0006



**US Army Corps  
of Engineers®**

CHICAGO DISTRICT  
LEADERS IN CUSTOMER CARE

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**CADY MARSH DITCH WETLAND  
MITIGATION**

**SOLICITATION AND SPECIFICATIONS**

**SOLICITATION  
March 06, 2009**

**PROJECT TABLE OF CONTENTS**

|

until 02:00 PM  
(Hour)

PAGE(S)

CODE

BID NOTES**Competition for this acquisition is restricted to SMALL BUSINESS CONCERNS (Total Small Business Set-Aside)**

a. *Project Title: Cady Marsh Ditch Project Mitigation: Implementation of Wet Savanna at Little Calumet River in Northwest Indiana*

b. *Project Description:* Under the documents provided herein, the Contractor will be required to provide all necessary labor, transportation, materials and equipment to perform the following work. This project involves restoring 2 acres of native wet savanna, including the clearing, herbiciding and removal of invasive woody and herbaceous plant material and the seeding and planting of native species and monitor, maintain and submit annual monitoring reports for the 2-acre wet savanna planting for a period of three (3) years after the initial installation year, which will be four (4) years from the award date of the proposed contract, or until performance standards have been met.

a. *Applicable Services Contract Wage Rates:* Wage Determination No.: 2005-2191, Revision No.: 6, Date of Revision: 05/29/2008

b. *NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM CODE:* 813312, with a small business size standard of \$7,000,000.00 Million

**c. Bidders shall submit all questions to Anita R. Simpkins via facsimile at (312) 886-5475. Report any transmission problems to Ms. Simpkins at (312) 846-5372 or Michael Jones at (312) 846-5375.**

d. *PRE-BID MEETING/SITE VISITATION:* The Contractor is STRONGLY ENCOURAGED to visit the site of the work in order to acquaint itself as to site conditions and other problems incident to the prosecution of the work.

The Pre-Bid Meeting and Site Visitation is Scheduled for Wednesday, March 18, 2009 at 1:30 P.M. All interested bidders will meet at Griffith Town Hall, 111 North Broad Street, in the Lower Level Conference Room, Griffith, IN 46319. The Site Visit will follow shortly after the Pre-Bid Meeting. The USACE's Point of Contact for this meeting is Mr. Douglas Anderson at 1-219-923-1763. **Note: In no event will failure to inspect the site constitute grounds for a claim after contract award.**

Section B - Supplies or Services and Prices

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001	<b>Mobilization and Demobilization</b>	1	Lump Sum		
	FIRM FIXED PRICE (FFP)				
	PURCHASE REQUEST NUMBER: W81G6690219721				

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002	<b>Project and Safety Signs</b>	1	Lump Sum		
	FFP				
	PURCHASE REQUEST NUMBER: W81G6690219721				

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NET AMT

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003	<b>Site Management and Monitoring</b>	1	Lump Sum		
	FFP				
	PURCHASE REQUEST NUMBER: W81G6690219721				

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NET AMT

ITEM NO SUPPLIES/SERVICES  
0004

**Debris Removal and Disposal**

This Item identifies information that relates directly to Sub-Items 0004AA and 0004AB; it is not to be scheduled separately for delivery, identified separately for shipment or performance, or priced separately for payment purposes. In that regard, the Offeror shall set forth its pricing at Sub-Items 0004AA and 0004AB. PURCHASE REQUEST NUMBER: W81G6690219721

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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
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ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0005	<b>Clearing</b> FFP PURCHASE REQUEST NUMBER: W81G6690219721	2	Acre		

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NET

Section E - Inspection and Acceptance

CLAUSES INCORPORATED BY FULL TEXT

52.246-4 INSPECTION OF SERVICES--FIXED-PRICE (AUG 1996)

- (a) Definitions. "Services," as used in this clause, includes services performed, workmanship, and material furnished or utilized in the performance of services.
- (b) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the services under this contract. Complete records of all inspection work performed by the Contractor shall be maintained and made available to the Government during contract performance and for as long afterwards as the contract requires.
- (c) The Government has the right to inspect and test all services called for by the contract, to the extent practicable at all times and places during the term of the contract. The Government shall perform inspections and tests in a manner that will not unduly delay the work.
- (d) If the Government performs inspections or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, at no increase in contract price, all reasonable facilities and assistance for the safe and convenient performance of these duties.
- (e) If any of the services do not conform with contract requirements, the Government may require the Contractor to perform the services again in conformity with contract requirements, at no increase in contract amount. When the



## 52.246-20 WARRANTY OF SERVICES (MAY 2001)

## (a) Definition.

"Acceptance," as used in this clause, means the act of an authorized representative of the Government by which the Government assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services, as partial or complete performance of the contract.

(b) Notwithstanding inspection and acceptance by the Government or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The Contracting Officer shall give written notice of any defect or nonconformance to the Contractor within 30 calendar days from the date of discovery of the defect or nonconformance. This notice shall state either (1) that the Contractor shall correct or reperform any defective or nonconforming services, or (2) that the Government does not require correction or reperformance.

(c) If the Contractor is required to correct or reperform, it shall be at no cost to the Government, and any services corrected or reperformed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or reperform, the Contracting Officer may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the Government thereby, or make an equitable adjustment in the contract price.

(d) If the Government does not require correction or reperformance, the Contracting Officer shall make an equitable adjustment in the contract price.

(End of clause)

## CLAUSES INCORPORATED BY FULL TEXT

## 252.246-7000 MATERIAL INSPECTION AND RECEIVING REPORT (MAR 2008)

(a) At the time of each delivery of supplies or services under this contract, the Contractor shall prepare and furnish to the Government a material inspection and receiving report in the manner and to the extent required by Appendix F, Material Inspection and Receiving Report, of the Defense FAR Supplement.

(b) Contractor submission of the material inspection and receiving information required by Appendix F of the Defense FAR Supplement by using the Wide Area WorkFlow (WAWF) electronic form (see paragraph (b) of the clause at 252.232-7003) fulfills the requirement for a material inspection and receiving report (DD Form 250). Two copies of the receiving report (paper copies of either the DD Form 250 or the WAWF report) shall be distributed with the shipment, in accordance with Appendix F, Part 4, F-401, Table 1, of the Defense FAR Supplement.

(End of clause)

Section F - Deliveries or Performance

CLAUSES INCORPORATED BY FULL TEXT

52.211-8 TIME OF DELIVERY (JUN 1997)

(a) The Government requires delivery to be made according to the following schedule:

REQUIRED DELIVERY SCHEDULE

(End of clause)

#### CLAUSES INCORPORATED BY FULL TEXT

##### 52.242-15 STOP-WORK ORDER (AUG 1989)

(a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. 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. Within a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, 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 or the period of the order or any extension thereof expires, 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 the 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 the claim submitted 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.

(End of clause)

##### 52.242-17 GOVERNMENT DELAY OF WORK (APR 1984)

(a) If the performance of all or any part of the work of this contract is delayed or interrupted (1) by an act of the Contracting Officer in the administration of this contract that is not expressly or impliedly authorized by this contract, or (2) by a failure of the Contracting Officer to act within the time specified in this contract, or within a reasonable time if not specified, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this contract caused by the delay or interruption and the contract shall be modified in writing accordingly. Adjustment shall also be made in the delivery or performance dates and any other contractual term or condition affected by the delay or interruption. However, no adjustment shall be made under this clause for any delay or interruption to the extent that performance would have been delayed or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an adjustment is provided or excluded under any

other term or condition of this contract.

(b) 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, and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the delay or interruption, but not later than the day of final payment under the contract.

(End of clause)



52.232-33	Payment by Electronic Funds Transfer--Central Contractor Registration	OCT 2003
52.233-1	Disputes	JUL 2002
52.237-3	Continuity Of Services	JAN 1991
52.242-13	Bankruptcy	JUL 1995
52.246-25	Limitation Of Liability--Services	FEB 1997
52.248-1	Value Engineering	FEB 2000
52.249-2	Termination For Convenience Of The Government (Fixed-Price)	MAY 2004
52.249-8	Default (Fixed-Price Supply & Service)	APR 1984
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2004
252.225-7001	Buy American Act And Balance Of Payments Program	JUN 2005
252.225-7002	Qualifying Country Sources As Subcontractors	APR 2003
252.226-7001	Utilization of Indian Organizations and Indian-Owned Economic Enterprises, and Native Hawaiian Small Business Concerns	SEP 2004
252.243-7002	Requests for Equitable Adjustment	MAR 1998

#### CLAUSES INCORPORATED BY FULL TEXT

##### 52.211-11 LIQUIDATED DAMAGES--SUPPLIES, SERVICES, OR RESEARCH AND DEVELOPMENT (SEP 2000)

(a) If the Contractor fails to deliver the supplies or perform the services within the time specified in this contract, the Contractor shall, in place of actual damages, pay to the Government liquidated damages of **\$729.00** per calendar day of delay.

(b) If the Government terminates this contract in whole or in part under the Default--Fixed-Price Supply and Service clause, the Contractor is liable for liquidated damages accruing until the Government reasonably obtains delivery or performance of similar supplies or services. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(c) The Contractor will not be charged with liquidated damages when the delay in delivery or performance is beyond the control and without the fault or negligence of the Contractor as defined in the Default--Fixed-Price Supply and Service clause in this contract.

(End of clause)

##### 52.211-16 VARIATION IN QUANTITY (APR 1984)

(a) A variation in the quantity of any item called for by this contract will not be accepted unless the variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified in paragraph (b) below.

(b) The permissible variation shall be limited to:

15% Percent increase

15% Percent decrease

This increase or decrease shall apply to **0004AA and 0004AB**.

(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.

#### 52.222-26 EQUAL OPPORTUNITY (MAR 2007)

(a) Definition. United States, as used in this clause, means the 50 States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and Wake Island.

(b)(1) 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 this clause, except for work performed outside the United States by employees who were not recruited within the United States. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(2) If the Contractor is a religious corporation, association, educational institution, or society, the requirements of this clause do not apply with respect to the employment of individuals of a particular religion to perform work connected with the carrying on of the Contractor's activities (41 CFR 60-1.5).

(c) (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

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 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  
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52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (SEP 2006)

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

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.

(b) General. (1) The Contractor shall not discriminate against the individual because the



## 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)

## 52.233-3 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 35.808 0 T5.on4(t)4(hu-4(014r-- )Tj( )Tj0.0017 Tc to2

(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.

(End of clause)

## 52.244-2 SUBCONTRACTS (JUN 2007)

(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.  
purchase orders.

(b) 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 (c) or (d) of this clause.

(c) 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.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent to subcontract for any subcontract that—

(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.

(f) 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.

(g) 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).

(h) 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

(End of clause)

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):

[www.arnet.gov](http://www.arnet.gov)

(End of clause)

252.204-7004 CENTRAL CONTRACTOR REGI



exactly as stated in the offer. The DUNS number will be used by the Contracting Officer to verify that the offeror is registered in the CCR database.

(c) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number-

(i) If located within the United States, by calling Dun and Bradstreet at 1-866-705-5711 or via the Internet at <http://www.dnb.com>; or

(ii) If located outside the United States, by contacting the local Dun a

agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (g)(1)(i) of this clause, or fails to perform the agreement at paragraph (g)(1)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(2) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see FAR Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(h) Offerors and Contractors may obtain information on registration and annual confirmation requirements via the internet at <http://www.ccr.gov> or by calling 1-888-227-2423, or 269-961-5757.

(End of clause)

#### 252.204-7006 BILLING INSTRUCTIONS (OCT 2005)

When submitting a request for payment, the Contractor shall--

- (a) Identify the contract line item(s) on the payment request that reasonably reflect contract work performance; and
- (b) Separately identify a payment amount for each contract line item included in the payment request.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this

## Section J - List of Documents, Exhibits and Other Attachments

DRAWING SHEETS

<u>SHEET NO.</u>	<u>SHEET REF. NO.</u>	<u>SHEET TITLE</u>
01	G-01	LOCALITY AND VICINITY MAPS
02	G-02	INDEX, SYMBOLS AND GENERAL NOTES
03	C-01	WORK LIMITS AND CONTROL
04	C-02	CLEARING, GRUBBING AND RESTORATION PLAN
05	C-03	PLANTING DETAILS



05250 - Motor Vehicle Upholstery Worker	19.00
05280 - Motor Vehicle Wrecker	19.86
05310 - Painter, Automotive	20.96
05340 - Radiator Repair Specialist	19.86
05370 - Tire Repairer	15.22
05400 - Transmission Repair Specialist	24.01
07000 - Food Preparation And Service Occupations	
07010 - Baker	13.09
07041 - Cook I	12.99
07042 - Cook II	14.40
07070 - Dishwasher	10.15
07130 - Food Service Worker	10.15
07210 - Meat Cutter	14.37
07260 - Waiter/Waitress	9.93
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	18.23
09040 - Furniture Handler	13.87
09080 - Furniture Refinisher	18.23
09090 - Furniture Refinisher Helper	14.81
09110 - Furniture Repairer, Minor	16.52
09130 - Upholsterer	18.23
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	11.17
11060 - Elevator Operator	11.17
11090 - Gardener	14.05
11122 - Housekeeping Aide	11.44
11150 - Janitor	12.47
11210 - Laborer, Grounds Maintenance	12.86
11240 - Maid or Houseman	10.97
11260 - Pruner	11.64
11270 - Tractor Operator	13.70
11330 - Trail Maintenance Worker	12.86
11360 - Window Cleaner	13.64
12000 - Health Occupations	
12010 - Ambulance Driver	15.71
12011 - Breath Alcohol Technician	18.40
12012 - Certified Occupational Therapist Assistant	19.56
12015 - Certified Physical Therapist Assistant	21.18
12020 - Dental Assistant	14.83
12025 - Dental Hygienist	30.29
12030 - EKG Technician	24.49
12035 - Electroneurodiagnostic Technologist	24.49
12040 - Emergency Medical Technician	15.71
12071 - Licensed Practical Nurse I	16.40
12072 - Licensed Practical Nurse II	18.40
12073 - Licensed Practical Nurse III	20.59
12100 - Medical Assistant	14.39
12130 - Medical Laboratory Technician	17.68
12160 - Medical Record Clerk	16.98
12190 - Medical Record Technician	17.38
12195 - Medical Transcriptionist	16.22
12210 - Nuclear Medicine Technologist	31.86
12221 - Nursing Assistant I	10.49
12222 - Nursing Assistant II	11.78
12223 - Nursing Assistant III	12.52
12224 - Nursing Assistant IV	14.08
12235 - Optical Dispenser	15.39
12236 - Optical Technician	14.38
12250 - Pharmacy Technician	14.86
12280 - Phlebotomist	14.08
12305 - Radiologic Technologist	28.44
12311 - Registered Nurse I	27.92
12312 - Registered Nurse II	30.22
12313 - Registered Nurse II, Specialist	30.22
12314 - Registered Nurse III	37.59
12315 - Registered Nurse III, Anesthetist	37.59
12316 - Registered Nurse IV	45.03
12317 - Scheduler (Drug and Alcohol Testing)	21.39
13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	19.55
13012 - Exhibits Specialist II	24.23
13013 - Exhibits Specialist III	29.65
13041 - Illustrator I	20.05
13042 - Illustrator II	25.06

13043 - Illustrator III	30.64
13047 - Librarian	27.85
13050 - Library Aide/Clerk	13.72
13054 - Library Information Technology Systems Administrator	25.66
13058 - Library Technician	15.80
13061 - Media Specialist I	17.49
13062 - Media Specialist II	19.55
13063 - Media Specialist III	21.81
13071 - Photographer I	16.66
13072 - Photographer II	18.66
13073 - Photographer III	23.16
13074 - Photographer IV	28.32
13075 - Photographer V	34.15
13110 - Video Teleconference Technician	14.47
14000 - Information Technology Occupations	
14041 - Computer Operator I	16.52
14042 - Computer Operator II	17.91
14043 - Computer Operator III	19.92
14044 - Computer Operator IV	22.77
14045 - Computer Operator V	24.51
14071 - Computer Programmer I (1)	22.61
14072 - Computer Programmer II (1)	
14073 - Computer Programmer III (1)	
14074 - Computer Programmer IV (1)	
14101 - Computer Systems Analyst I (1)	
14102 - Computer Systems Analyst II (1)	
14103 - Computer Systems Analyst III (1)	
14150 - Peripheral Equipment Operator	16.52
14160 - Personal Computer Support Technician	24.29
15000 - Instructional Occupations	
15010 - Aircrew Training Devices Instructor (Non-Rated)	29.94
15020 - Aircrew Training Devices Instructor (Rated)	36.55
15030 - Air Crew Training Devices Instructor (Pilot)	40.21
15050 - Computer Based Training Specialist / Instructor	29.94
15060 - Educational Technologist	27.62
15070 - Flight Instructor (Pilot)	40.21
15080 - Graphic Artist	22.91
15090 - Technical Instructor	27.45
15095 - Technical Instructor/Course Developer	25.09
15110 - Test Proctor	19.62
15120 - Tutor	16.63
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	8.85
16030 - Counter Attendant	8.85
16040 - Dry Cleaner	11.44
16070 - Finisher, Flatwork, Machine	8.85
16090 - Presser, Hand	8.85
16110 - Presser, Machine, Drycleaning	8.85
16130 - Presser, Machine, Shirts	8.85
16160 - Presser, Machine, Wearing Apparel, Laundry	8.85
16190 - Sewing Machine Operator	12.26
16220 - Tailor	13.13
16250 - Washer, Machine	9.73
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	20.30
19040 - Tool And Die Maker	27.21
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	16.10
21030 - Material Coordinator	21.40
21040 - Material Expediter	21.40
21050 - Material Handling Laborer	16.24
21071 - Order Filler	13.39
21080 - Production Line Worker (Food Processing)	16.10
21110 - Shipping Packer	16.19
21130 - Shipping/Receiving Clerk	16.19
21140 - Store Worker I	13.06
21150 - Stock Clerk	17.12
21210 - Tools And Parts Attendant	16.10
21410 - Warehouse Specialist	16.10
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	29.96
23021 - Aircraft Mechanic I	23.25
23022 - Aircraft Mechanic II	29.96
23023 - Aircraft Mechanic III	31.40

23040 - Aircraft Mechanic Helper  
23050 - Aircraft, Painter  
23060 - Aircraft Servicer

17.69  
22.10  
19.99



27030 - Detection Dog Handler	15.44
27040 - Detention Officer	28.70
27070 - Firefighter	27.04
27101 - Guard I	11.36
27102 - Guard II	15.44
27131 - Police Officer I	30.33
27132 - Police Officer II	33.11
28000 - Recreation Occupations	
28041 - Carnival Equipment Operator	11.55
28042 - Carnival Equipment Repairer	12.18
28043 - Carnival Equipment Worker	9.42
28210 - Gate Attendant/Gate Tender	13.85
28310 - Lifeguard	11.91
28350 - Park Attendant (Aide)	15.10
28510 - Recreation Aide/Health Facility Attendant	8.94
28515 - Recreation Specialist	15.46
28630 - Sports Official	12.34
28690 - Swimming Pool Operator	17.47
29000 - Stevedoring/Longshoremen Occupational Services	
29010 - Blocker And Bracer	20.52
29020 - Hatch Tender	20.52
29030 - Line Handler	20.52
29041 - Stevedore I	19.37
29042 - Stevedore II	21.66
30000 - Technical Occupations	
3001i                    lir Tra    Contr                    , C           (HFO   (2	
HFO   (2	
9001i                    2   lir Tra    Contr                    , Tererans (HFO   (2	

99050 - Desk Clerk	11.01
99095 - Embalmer	24.27
99251 - Laboratory Animal Caretaker I	11.69
99252 - Laboratory Animal Caretaker II	12.86
99310 - Mortician	26.70
99410 - Pest Controller	17.55
99510 - Photofinishing Worker	12.53
99710 - Recycling Laborer	18.46
99711 - Recycling Specialist	21.91
99730 - Refuse Collector	16.94
99810 - Sales Clerk	10.89
99820 - School Crossing Guard	11.22
99830 - Survey Party Chief	21.99
99831 - Surveying Aide	15.82
99832 - Surveying Technician	19.39
99840 - Vending Machine Attendant	11.94
99841 - Vending Machine Repairer	13.81
99842 - Vending Machine Repairer Helper	11.94

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ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$3.24 per hour or \$129.60 per week or \$561.60 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE PARENTHESES AFTER THEM RECEIVE THE FOLLOWING BENEFITS (as numbered):

1) Under the SCA at section 8(b), this wage determination does not apply to any employee who individually qualifies as a bona fide executive, administrative, or professional employee as defined in 29 C.F.R. Part 541. Because most Computer System Analysts and Computer Programmers who are compensated at a rate not less than \$27.63 (or on a salary or fee basis at a rate not less than \$455 per week) an hour would likely qualify as exempt computer professionals, (29 C.F.R. 541.400) wage rates may not be listed on this wage determination for all occupations within those job families. In addition, because this wage determination may not list a wage rate for some or all occupations within those job families if the survey data indicates that the prevailing wage rate for the occupation equals or exceeds \$27.63 per hour conformance may be necessary for certain nonexempt employees. For example, if an individual employee is nonexempt but nevertheless performs duties within the scope of one of the Computer Systems Analyst or Computer Programmer occupations for which this wage determination does not specify an SCA wage rate, then the wage rate for that employee must be conformed in accordance with the conformance procedures described in the conformance note included on this wage determination.

Additionally, because job titles vary widely and change quickly in the computer industry, job titles are not determinative of the application of the computer professional exemption. Therefore, the exemption applies only to computer employees who satisfy the compensation requirements and whose primary duty consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which

requires the same level of skills. (29 C.F.R. 541.400).

relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es)

## Section K - Representations, Certifications and Other Statements of Offerors

## CLAUSES INCORPORATED BY REFERENCE

52.203-11	Certification And Disclosure Regarding Payments To Influence Certain Federal Transactions	SEP 2007
52.222-38	Compliance With Veterans' Employment Reporting Requirements	DEC 2001
52.223-13	Certification of Toxic Chemical Release Reporting	AUG 2003
52.225-18	Place of Manufacture	SEP 2006
52.226-2	Historically Black College or University and Minority Institution Representation	OCT 2008
52.230-1	Cost Accounting Standards Notices And Certification	OCT 2008
252.209-7001	Disclosure of Ownership or Control by the Government of a Terrorist Country	JAN 2009
252.225-7000	Buy American Act--Balance Of Payments Program Certificate	JAN 2009

## 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 contrary to subparagraphs (a)(1) through (a)(3) of this provision; or

(2) (i) Has been authorized, in writing, to act as 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) of this provision \_\_\_\_\_ (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) of this provision.

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

(End of clause)

CLAUSES INCORPORATED BY FULL TEXT

52.204-3 TAXPAYER IDENTIFICATION (OCT 1998)

(a) Definitions.

Common parent, as used in this provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

Taxpayer Identification Number (TIN), as used in this provision, means the number required by the Internal Revenue Service (IRS) to be used by the offeror in reporting income tax and other returns. The TIN may be either a Social Security Number or an Employer Identification Number.

(b) All offerors must submit the information required in paragraphs (d) through (f) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the IRS. If the resulting contract is subject to the payment reporting requirements described in Federal Acquisition Regulation (FAR) 4.904, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(d) Taxpayer Identification Number (TIN).

\_\_\_ TIN:-----

\_\_\_ TIN has been applied for.

\_\_\_ TIN is not required because:

\_\_\_ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

- Offeror is an agency or instrumentality of a foreign government;
- Offeror is an agency or instrumentality of the Federal Government.

(e) Type of organization.

- Sole proprietorship;
- Partnership;
- Corporate entity (not tax-exempt);
- Corporate entity (tax-exempt);
- Government entity (Federal, State, or local);
- Foreign government;
- International organization per 26 CFR 1.6049-4;
- Other-----

(f) Common parent.

- Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this provision.
- Name and TIN of common parent:

Name-----

TIN-----

(End of provision)

CLAUSES INCORPORATED BY FULL TEXT

52.204-5 WOMEN-OWNED BUSINESS (OTHER THAN SMALL BUSINESS) (MAY 1999)

(a) Definition. Women-owned business concern, as used in this provision, means a concern 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 its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

(b) Representation. [Complete only if the offeror is a women-owned business concern and has not represented itself as a small business concern in paragraph (b)(1) of FAR 52.219-1, Small Business Program Representations, of this solicitation.] The offeror represents that it ( ) is a women-owned business concern.

(End of provision)

CLAUSES INCORPORATED BY FULL TEXT

52.204-8 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (JAN 2006)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **813312**.

(2) The small business size standard is **\$7,000,000.00**.

(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)(1) If the clause at 52.204-7, Central Contractor Registration, is included in this solicitation, paragraph (c) of this provision applies.

(2) If the clause at 52.204-7 is not included in this solicitation, and the offeror is currently registered in CCR, and has completed the ORCA electronically, the offeror may choose to use paragraph (b) of this provision instead of completing the corresponding individual representations and certifications in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

Paragraph (c) applies.

Paragraph (c) does not apply and the offeror has completed the individual representations and certifications in the solicitation.



(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, violating Federal criminal tax laws, 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 paragraph (a)(1)(i)(B) of this provision.; and

(D) Have [ballot], have not [ballot], within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds \$3,000 for which the liability remains unsatisfied.

(1) Federal taxes are considered delinquent if both of the following criteria apply:

(i) The tax liability is finally determined. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(ii) The taxpayer is delinquent in making payment. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(2) Examples. (i) The taxpayer has received a statutory notice of deficiency, under I.R.C. Sec. 6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(ii) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. Sec. 6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(iii) The taxpayer has entered into an installment agreement pursuant to I.R.C. Sec. 6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(2) Principal, for the purposes of this certification, means an officer, director, owner, partner, or a person 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).

(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)

#### CLAUSES INCORPORATED BY FULL TEXT

##### 52.219-1 SMALL BUSINESS PROGRAM REPRESENTATIONS (MAY 2004)

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is **813312**.

(2) The small business size standard is **\$7,000,000.00**.

(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.





the small disadvantaged business concern that is participating in the joint venture. [The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture: \_\_\_\_\_.]

(c) Penalties and Remedies. Anyone who misrepresents any aspects of the disadvantaged status of a concern for the purposes of securing a contract or subcontract shall:

- (1) Be punished by imposition of a fine, imprisonment, or both;
- (2) Be subject to administrative remedies, including suspension and debarment; and
- (3) Be ineligible for participation in programs conducted under the authority of the Small Business Act.

(End of provision)

#### 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)

#### 52.222-25 AFFIRMATIVE ACTION COMPLIANCE (APR 1984)

The offeror represents that

(a)  it has developed and has on file,  has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2), or

(b)  has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(End of provision)

#### 252.209-7001 DISCLOSURE OF OWNERSHIP OR CONTROL BY THE GOVERNMENT OF A TERRORIST COUNTRY (OCT 2006)

(a) "Definitions."

As used in this provision --

(a) "Government of a terrorist country" includes the state and des th

(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 subject to this provision include: Cuba, Iran, 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)

252.225-7000 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM CERTIFICATE (JUN 2005)

(a) Definitions. Domestic end product, foreign end product, qualifying country, qualifying country end product, and United States have the meanings given in the Buy American Act and Balance of Payments Program clause of this solicitation.

(b) Evaluation. The Government--

(1) Will evaluate offers in accordance with the policies and procedures of Part 225 of the Defense Federal Acquisition Regulation Supplement; and

(2) Will evaluate offers of qualifying country end products without regard to the restrictions of the Buy American Act or the Balance of Payments Program.

(c) Certifications and identification of country of origin.

(1) For all line items subject to the Buy American Act and Balance of Payments Program clause of this solicitation, the offeror certifies that--

(i) Each end product, except those listed in paragraph (c)(2) or (3) of this provision, is a domestic end product; and

(ii) Components of unknown origin are considered to have been mined, produced, or manufactured outside the United States or a qualifying country.

(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. 2407(a) prohibits a United States person from taking.

(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 L - Instructions, Conditions and Notices to Bidders

**1. BIDS OR MODIFICATIONS TO BIDS THAT ARE RECEIVED BY FACSIMILE OR**

## CLAUSES INCORPORATED BY REFERENCE

52.214-15	Period For Acceptance Of Bids	APR 1984
52.219-6	Notice Of Total Small Business Set-Aside	JUN 2003
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions	JUN 1995

## CLAUSES INCORPORATED BY FULL TEXT

## 52.204-6 DATA UNIVERSAL NUMBERING SYSTEM (DUNS) NUMBER (APR 2008)

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS number or "DUNS+4" that identifies the offeror's name and address exactly as stated in the offer. The DUNS number is a nine-digit number assigned by Dun and Bradstreet, Inc. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional CCR records for identifying alternative Electronic Funds Transfer (EFT) accounts (see Subpart 32.11) for the same concern.

(b) If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one.

(1) An offeror may obtain a DUNS number--

(i) Via the Internet at <http://fedgov.dnb.com/webform> or if the offeror does not have internet access, it may call Dun and Bradstreet at 1-866-705-5711 if located within the United States; or

(ii) If located outside the United States, by contacting the local Dun and Bradstreet office. The offeror should indicate that it is an offeror for a U.S. Government contract when contacting the local Dun and Bradstreet office.

(2) The offeror should be prepared to provide the following information:

(i) Company legal business name.

(ii) Tradestyle, doing business, or other name by which your entity is commonly recognized.

(iii) Company physical street address, city, state and Zip Code.

(iv) Company mailing address, city, state and Zip Code (if separate from physical).

(v) Company telephone number.

(vi) Date the company was started.

(vii) Number of employees at your location.

(viii) Chief executive officer/key manager.

(ix) Line of business (industry).

(x) Company HeadquNum(0N-2 Tw 22.239 0 Td0.0001h83VquNumecer/key man pi

(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.

(End of provision)

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--

(c) For each item offered, bidders shall (1) show the unit price, including, unless otherwise specified, packaging, packing, and preservation and (2) enter the extended price for the quantity of each item offered in the "Amount" column of the Schedule. In case of discrepancy between a unit price and an extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

(d) Bids for supplies or services other than those specified will not be considered unless authorized by the solicitation.

(e) Bidders must state a definite time for delivery of supplies or for performance of services, unless otherwise specified in the solicitation.

(f) Time, if stated as a number of days, will include Saturdays, Sundays, and holidays.

(End of provision)

#### 52.214-15 PERIOD FOR ACCEPTANCE OF BIDS (APR 1984)

In compliance with the solicitation, the bidder agrees, if this bid is accepted within 60calendar days from the date specified in the solicitation for receipt of bids, to furnish any or all items upon which prices are bid at the price set opposite each item, delivered at the designated point(s), within the time specified in the Schedule.

(End of clause)

#### 52.216-1 TYPE OF CONTRACT (APR 1984)

The Government contemplates award of a **FIRM FIXED PRICE SERVICE** contract resulting from this solicitation.

(End of provision)

#### 52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUN 2003)

(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 shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. 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 to construction or service contracts.

(End of clause)

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 II. 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)

52.233-2 SERVICE OF PROTEST (SEP 2006)

(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 Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from

**Regina G. Blair, Contracting Officer**  
**US Army Corps of Engineer – Chicago District Office**  
**111 North Canal Street, Suite 600**  
**Chicago, Illinois 60606**

(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)

52.237-1 SITE VISIT (APR 1984)

Offerors or quoters are urged and expected to inspect the site where services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds for a claim after contract award.

(End of provision)

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):

[www.arnet.gov](http://www.arnet.gov)

(End of provision)







SECTION 01 10 00.00 03

GENERAL PROVISIONS

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.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1

(2008) Safety -- Safety and Health  
Requirements

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 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Schedule; G, CS

Condition of Existing Structures

Coordination with Others; G, CS

Drug Free Workplace

SD-11 Closeout Submittals

As-Built Drawings; G, CS

1.5 REAL ESTATE

All required right-of-way to do the work is available to the Contractor, and is included on the contract drawings. In the event the Contractor requires any additional access roads and storage areas, he shall obtain such areas at his own expense. The Contractor shall furnish to the Contracting Officer copies of all legal documents or leases permitting his use of private or other properties other than included in the contract.

1.6 SCHEDULE

An initial baseline Schedule shall be submitted before and available during the precoordination meeting with the COR. This schedule shall use the date of Notice to Proceed as the start date and shall show the work completed date, as indicated by specifications. In addition to the initial baseline schedule, six copies of an updated Schedule Submittal shall be included with each payment estimate/request for payment. These schedule updates shall compare the initial baseline schedule to an updated schedule showing the actual work progress to date and a projection of the work schedule for the remainder of the Contract. All schedule submittals shall include a tabulated earnings projection, in a format acceptable to the COR, that lists the estimated earnings for each month of the Contract duration.

1.7 AS-BUILT DRAWINGS

1.7.1 GENERAL

An as-built drawing is a contract drawing revised to reflect the final as-built conditions of the project because of modifications, changes, corrections to the project design required during the contract, submittals and extensions of design. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings that are revised to be the "RECORD DRAWING AS-BUILTS".

The Contractor shall follow procedures identified in document: "CELRC-As-Built Guidance.PDF" (Revised 11-21-2007), posted at the following web address:

<http://www.lrc.usace.army.mil/ts-d-c/support/asbuilt/As-Built-ChicagoGuidance.htm>

As a resource to contractors a web page was developed that may assist in locating a trained CADD professional to develop the as-builts or train an existing employee to develop the as-builts.

<http://www.lrc.usace.army.mil/ts-d-c/support/asbuilt/BentleyResources.htm>

#### 1.7.2 GOVERNMENT-FURNISHED FILES

The Contractor will be provided files at the beginning of the contract for use during the work which are to be maintained during the contract for the preparation of as-builts. The Contractor shall enter changes and corrections on the working drawings on a weekly basis in accordance with Paragraph "Maintenance of Working As-Built Drawings" and update the CADD as-built drawings on a monthly basis. Both paper and electronic documents shall be available at all times and shall be provided promptly to the Contracting Officer when requested. The Contractor shall be responsible for backup of electronic files during the contract and for controlling release of information.

earthwork, structures or utilities if any changes were made from contract plans.

5. Additional as-built information that exceeds the detail shown on the Contract Drawings. These as-built conditions include those that reflect structural details, fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations and layouts, equipment, sizes, mechanical room layouts and other extensions of design, that were not shown in the original contract documents because the exact details were not known until after the time of approved shop drawings. It is recognized that these shop drawing submittals (revised showing as-built conditions) will serve as the as-built record without actual incorporation into the contract drawings. All such shop drawing submittals must include, along with the hard copy of the drawings, CADD files of the shop drawings in a commercially available digital format, compatible with the Using Agency System (see paragraph "Computer Aided Design and Drafting (CADD) Drawings")..

6. The topography, invert elevations and grades of drainage installed or affected as part of the project contract.

7. Changes or modifications which result from the final inspection.

8. Where contract drawings or specifications present options, only the option selected shall be shown on the final as-built drawings.

9. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.

10. Modifications (change order price shall include the Contractor's incidental cost to change working and final as-built drawings to reflect modifications) and compliance with the following procedures:

- (1) Directions in the modification for posting descriptive changes shall be followed.
- (2) A Modification Equilateral Triangle (3/8" per side) shall be placed at the location of each deletion.
- (3) For new details or sections which are added to a drawing, a Modification Equilateral Triangle shall be placed by the detail or section title.
- (4) For minor changes, a Modification Equilateral Triangle shall be placed by the area changed on the drawing (each location).
- (5) For major changes to a drawing, a Modification Equilateral Triangle shall be placed by the title of the affected plan, section, or detail at each location.
- (6) For changes to schedules or drawings, a Modification Equilateral Triangle shall be placed either by the schedule heading or by the change in the schedule.
- (7) All other changes shall be annotated with a triangle and sequential number at the following locations:

bottom of the revised detail  
right hand and bottom border aligned with the revised detail  
the revision block of the title block

1.7.4 RETAINAGE

a. The cost of as-built document preparation shall include all requirements of this clause:

1. Maintenance of working as-built drawings
2. Conversion of submittals and other miscellaneous documents into electronic files
3. Creation of a CD containing all required files.

scanned and provided in an organized manner in Adobe .pdf format.

Partial Occupancy. For projects where portions of the contract are to be occupied or activated before overall project completion, including portions of utility systems, as-built drawings for those portions of the facility being occupied or activated shall be supplied at the time the facility is occupied or activated. This same as-built information previously furnished must also be shown on the final set of as-built drawings at project completion.

#### 1.7.6 COMPUTER AIDED DESIGN AND DRAFTING (CADD) DRAWINGS

Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality to that of the originals. Line work, line weights, lettering, layering conventions, and symbols shall be the same as the original line work, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same guidance specified for original drawings. Three dimensional (3D) elements shall be placed in files in their proper locations when using 3D files with spatially correct elements. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD media files supplied by the Government. All work by the Contractor shall be done on files in the format in which they are provided. Translation of files to a different format, for the purpose of As-Built production, and then retranslating back to the format originally provided, will not be acceptable. The media files will be supplied by the Contractor to the COR. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make all required corrections, changes, additions, and deletions.

1. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 3/16 inch high. All other contract drawings shall be marked in the bottom right-hand corner of each drawing either "AS-BUILT" drawing denoting no revisions on the sheet, or "REVISED AS-BUILT" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

2. Revision markers defined in paragraph "Markings and Indicators" shall be placed as follows:

- (1) At the detail, placed in the design file where the revised graphics are located and the revision was placed.

- (2) Right hand and bottom border in the drawing sheet file revision block of the title block in the drawing sheet file.

#### 1.7.7 FINAL AS-BUILT DRAWING SUBMITTAL

Within 30 calendar days after receipt of the approved working as-built drawings and the Chicago District provided digital contract drawings in Microstation .DGN format, the Contractor shall prepare and make the final submittal. This submittal shall include the following:

1. One CD-ROM containing the electronic files for final as-built





participation in such surveys of existing structures as deemed necessary to permit determination and accurate assessment of any subsequent damage to existing structures that may be incurred during the period of the contract. Pictures or videos of all existing structures are acceptable. Damages to existing structures shall be restored to pre-existing conditions. Any re-vegetation shall be done with native grass, forb, shrub, and tree species.

#### 1.10 PRESERVATION OF HISTORICAL, ARCHAEOLOGICAL AND CULTURAL RESOURCES

If, during work activities, the Contractor observes items that might have historical or archaeological value, such observations shall be reported immediately to the Contracting Officer's Representative (COR) so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources.

#### 1.11 MINIMUM AMOUNT OF INSURANCE REQUIRED

In accordance with FAR CLAUSE entitled INSURANCE - WORK IN A GOVERNMENT INSTALLATION, the following minimum insurance coverages and limits are required. The term "Installation" referred to in this clause is deemed to mean Corps of Engineers project site or Federal property.

- a. Evidence of the following minimum insurance coverages and limits, with concurrent policy expiration dates, must be received by the Department of the Army, Corps of Engineers before the Contractor can begin work. This evidence must be on a fully-completed, signed and dated ACCORD Certificate of Insurance. In addition, policy endorsements must be issued by or in behalf of the insuring company or companies naming the Department of the Army, Corps of Engineers as Additional Interest Insured regarding the work. The endorsements must also provide that the Department of the Army, Corps of Engineers receive direct written notice at least thirty (30) calendar days before the effective date of any material changes to, any cancellation of, or any non-renewal of these coverages during the time period of the Contractor's work.
- b. Should the coverages expire or be terminated during the time period of the Contractor's work, the Department of the Army, Corps of Engineers must receive an ACCORD Certificate of Insurance as evidence of renewal or replacement insurance coverage and the supporting policy endorsements as specified above. The required evidence of renewal replacement insurance must be received by either the Contracting Officer or Contracting Officer's Representative at least ten (10) calendar days before the coverage expires or is being terminated.
- c. All insuring companies must be rated A- or Excellent or better, by A.M. Best Company, an independent insurance rating service. The ACCORD Certificate must list the A.M. Best Company insurance company code of listed insurance companies being offered.

Comprehensive General Liability (Occurrence policy form only)	
General Aggregate	\$2,000,000
Products/Completed Operations	\$2,000,000

Each Occurrence \$1,000,000  
 Fire Damage Legal Liability \$ 50,000

Comprehensive Automobile Liability  
 (Including Hired Automobile Liability  
 and Non-Owned Automobile Liability)  
 Combined Single Limit \$1,000,000

Employers' Liability  
 Each Occurrence \$ 500,000  
 Policy Limit \$ 500,000  
 Each Employee \$ 500,000

Workers Compensation  
 (As required by state law or Federal law)

Umbrella Liability  
 (Occurrence policy form only)  
 Each Occurrence and Aggregate \$5,000,000

- d. Prior to commencement of work hereunder, the Contractor shall furnish to the Contracting Officer a certificate or written statement of the above required insurance. The policies evidencing required insurance shall contain an endorsement to the effect that cancellation or any material change in the policies adversely affecting the interests of the Government in such insurance shall not be effective for such period as may be prescribed by the laws of the State in which contract is to be performed and in no event less than thirty (30) calendar days after written notice thereof to the Contracting Officer.

1.12 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER

This clause specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE entitled "DEFAULT (FIXED-PRICE Supply & Service)." In order for the Contracting Officer to award a time extension under this clause, the weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY  
 WORK DAYS BASED ON A FIVE (5) DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL
22	20	21	7	4	3	3
AUG	SEP	OCT	NOV	DEC		
5	3	5	7	15		

Upon acknowledgement of Notice to Proceed (NTP) and continuing throughout the contract, the Contractor shall record on the daily CQC report, the



clearances required by EM 385-1-1, Safety and Health Requirements Manual, shall be maintained. Work shall not proceed into dangerous

d. If a Contractor decides to use a Contractor-chosen borrow/disposal site or quarry, it is the Contractor's responsibility to ensure that all applicable Federal, state and local environmental statutory and regulatory requirements have been satisfied. Use of such a site or quarry must be approved by the Contracting Officer, and such approval shall not be granted unless all applicable requirements have been met and such use of the site does not pose significant environmental impacts.

(1) The specific requirements which must be met by the Contractor before a Contractor-chosen (or, when applicable, a Government-recommended) site or quarry shall be approved by the COR include, at a minimum, but are not necessarily limited to, compliance with the following environmental laws, regulations and executive orders:

Federal Laws, Regulations, and Executive Orders

<u>Name</u>	<u>Agency</u>
Section 404,	U.S. Army Corps of Engineers,



Government-recommended or Contractor-chosen borrow/disposal site or quarry because not all applicable Federal, state or local environmental statutory and regulatory requirements have been satisfied, or because the Government determines that such site or quarry could not be used for environmental reasons as a result of the environmental review under NEPA, it is the Contractor's responsibility to locate an alternate site or quarry and to perform all necessary reviews to obtain approval of the use of such alternative site or quarry. Any delays caused by the need to locate an alternate site or quarry, shall be solely the responsibility of the Contractor, at no additional cost to the Government.

(5) Nothing in this clause shall relieve the Contractor from the responsibility of obtaining all non-environmental permits and licenses which may be required under Federal, state or local statutes, regulations and ordinances.

#### 1.19 TAX EXEMPTION

- a. This contract is a construction contract which contains separate amounts applicable to the performance of the services and the furnishing of the materials as defined in State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002. Notwithstanding any other provisions of this contract, the contract price does not include any amount for Indiana Sales and Use Tax on materials to be incorporated by the Contractor or Subcontractor into the structure or improvement to real estate. The Contractor or Subcontractor should provide his supplier with a State of Indiana General Exemption Certificate for Construction Contractors (Form ST-134) with respect to such property.
- b. For the purpose of complying with the requirements of State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002, the Contractor, pursuant to the requirements of the solicitation shall furnish prior to contract award a breakdown separating pricing (1) materials to be incorporated into the structure or improvement to real estate, (2) services and other obligations of the construction contract, and (3) the total contract price. This breakdown is for the sole purpose of complying with the requirements of State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002 with regard to separate pricing of services and materials and has no other contractual significance.
- c. Any subcontracts awarded hereunder shall also contain separate amounts applicable to the performance of services and the furnishing of the materials.

#### 1.20 PROGRESS MEETINGS

A progress meeting will be held once every two weeks (biweekly). The meetings shall be held on-site, in the Contractor's field trailer, unless the Government elects to hold the meetings at an alternate off-site location. The day and time for conducting meetings will be mutually agreed to between the Contractor, the Government, the Local Sponsors and other



Unless the Contracting Officer's Representative (COR) specifically indicates in writing otherwise, the Contractor shall prepare meeting agendas and meeting minutes for each meeting. The agenda and minutes shall be prepared in a format acceptable to the COR and shall contain all information required by the COR, including, but not limited to:

- a. A listing of all meeting participants;
- b. The financial progress, including original and current contract amounts, the amount paid to date, and original and current contract completion dates;
- c. A list of work completed since the last meeting;
- d. A list of work activities scheduled for the upcoming two weeks;
- e. Critical work activities in the project schedule;
- f. Old business, including summaries of the status of unresolved issues discussed at previous progress meetings;
- g. New business, including summaries of issues that need to be addressed and have not been included in previous meeting minutes;
- h. Potential items of interest to the public, local sponsor, or local community;
- i. The status of submittals, including lists of outstanding submittals, key submittals in review, and upcoming submittals;
- j. A listing of all field changes/modifications.

The progress meeting minutes shall be submitted to the Government and all other meeting participants for review and approval within seven days of the meeting. The review and approval process will allow for mutual acceptance of the minutes as written. As directed by the Government, the Contractor shall edit the minutes to add, delete, and/or correct items that were covered in the weekly meeting. The edited meeting minutes shall then be resubmitted within 7 days of the receipt of the Government comments.

#### 1.21 Contractor Performance Evaluations

It is the Corps' standard operating procedure that the Contracting Officer evaluate the Contractor's performance and prepare a performance report using the web-based application CCASS (Construction Contractor Appraisal Support System) for contracts of \$100,000 or more. After an evaluation (interim or final) is written up by the Corps, the Contractor has a 30 day period to access, review and comment on the evaluation. Accessing and using CCASS requires having specific software, called PKI certification, installed on the user's computer. The certification, a Department of Defense requirement, was implemented to provide security in electronic transactions. The certification software could cost approximately \$100 - \$125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor, it is the responsibility of the Contractor to verify the current cost of the software. Current information about the PKI certification process, cost, and for contacting vendors can be found on the web site: <http://www.cpars.navy.mil/>. If the Contractor wishes to participate in the performance evaluation process, access to CCASS and PKI

certification is the sole responsibility of the Contractor.

PART 2 PRODUCTS (Not Applicable)

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-- End of Section --

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1.2.2.2 Unit of Measure

1.2.3 Broadcast and Selective Herbiciding (Bid Item 0006)

1.2.3.1 Payment

1.2.3.2 Unit of Measure

1.2.4 Native Seeding (Bid Item 0007)

1.2.4.1 Payment

1.2.4.2 Unit of Measure

1.2.5 Tree Planting (Bid Item 0008)

1.2.5.1 Payment

1.2.5.2 Unit of Measure

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01 22 00.00 10

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 LUMP SUM PAYMENT ITEMS

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the BIDDING SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor,

Payments shall be made yearly, for 3 years, and based on the performance criteria described in the above section. The Contractor shall be paid 30% of the lump sum price for year 1 and year 2, and the remaining 40% of the lump sum price after final approval in year 3. If the Contractor fails to establish the performance criteria in any year, none or partial amount of the payment percentage will be paid to the Contractor. The balance withheld from the previous year will then be paid the following year, if the performance criteria is met.

#### 1.1.3.2 Unit of Measure

Unit of measure: lump sum.

### 1.2 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

#### 1.2.1 Debris Removal and Disposal (Bid Items 0004AA and 0004AB)

##### 1.2.1.1 Payment

Payment will be made for costs associated with removing all debris located on the project site as described in Section 31 31 13 CLEARING AND DEBRIS REMOVAL.

##### 1.2.1.2 Measurement

Unit of measure: ton

##### 1.2.1.3 Unit of Measure

Unit of measure: ton

#### 1.2.2 Clearing (Bid Item 0005)

##### 1.2.2.1 Payment

Payment will be made for costs associated with clearing as specified in Section 31 31 13 CLEARING AND DEBRIS REMOVAL.

##### 1.2.2.2 Unit of Measure

Unit of measure: acre

#### 1.2.3 Broadcast and Selective Herbiciding (Bid Item 0006)

##### 1.2.3.1 Payment

Payment will be made for costs associated with treating and controlling the



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SECTION 01 33 00

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- 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
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- 1.7 SUBMITTAL REGISTER
- 1.8 SCHEDULING
- 1.9 TRANSMITTAL FORM (ENG FORM 4025)
- 1.10 DEVIATIONS
- 1.11 CONTROL OF SUBMITTALS
- 1.12 GOVERNMENT APPROVED SUBMITTALS
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- 1.14 STAMPS

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section Table of Contents --

SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SUBMITTAL IDENTIFICATION (SD)

Submittals required are identified by SD numbers and titles as follows:

SD-01 Preconstruction Submittals

- Certificates of insurance.
- Surety bonds.
- List of proposed subcontractors.
- List of proposed products.
- Construction Progress Schedule.
- Submittal schedule.
- Schedule of values.
- Health and safety plan.
- Work plan.
- Quality control plan.
- Environmental protection plan.

SD-03 Product Data

Catalog cuts, illustrations, schedules, diagrams, performance charts, instructions and brochures illustrating size, physical appearance and other characteristics of materials or equipment for some portion of the work.

Samples of warranty language when the contract requires extended product warranties.

SD-04 Samples

Physical examples of materials, equipment or workmanship that illustrate functional and aesthetic characteristics of a material or product and establish standards by which the work can be judged.

Color samples from the manufacturer's standard line (or custom color samples if specified) to be used in selecting or approving colors for the project.

Field samples and mock-ups constructed on the project site establish standards by which the ensuring work can be judged. Includes assemblies or portions of assemblies which are to be incorporated into the project and those which will be removed at conclusion of the work.

SD-07 Certificates

Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.



Document required of Contractor, or of a supplier, installer or subcontractor through Contractor, the purpose of which is to further quality of orderly progression of a portion of the work by documenting procedures, acceptability of methods or personnel qualifications.

Confined space entry permits.

SD-10 Operation and Maintenance Data

Data intended to be incorporated in operations and maintenance manuals.

SD-11 Closeout Submittals

Documentation to record compliance with technical or administrative requirements or to establish an administrative mechanism.

As-built drawings.

Special warranties.

Posted operating instructions.

Training plan.

1.2 SUBMITTAL CLASSIFICATION

Submittals are classified as follows:

1.2.1 Government Approved

Government 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 COR'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 Contractor Quality Control (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



#### 1.9 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) and instructions are 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 are included in the QCS software that the Contractor is required to use for this contract. 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.

#### 1.10 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.

#### 1.11 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."

#### 1.12 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. 4 copies of the submittal will be retained by the Contracting Officer and 2 copies of the submittal will be returned to the Contractor.

#### 1.13 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



TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR  
 MANUFACTURER'S CERTIFICATES OF COMPLIANCE  
 (Read instructions on the reverse side prior to initiating this form)

DATE

TRANSMITTAL NO.

**SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the contractor)**

TO:	FROM:	CONTRACT NO.	CHECK ONE: <input type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR FIO <input type="checkbox"/> GOVT <input type="checkbox"/> APPROVAL

ITEM NO.	DESCRIPTION OF ITEM SUBMITTED (Type size, model number/etc.)	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. (See Instruction no. 8)	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION (See instruction no. 6)	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
a.	b.	c.	d.	e.	f.	g.	h.	i.

REMARKS

I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated

NAME AND SIGNATURE OF CONTRACTOR

**SECTION II - APPROVAL ACTION**

ENCLOSURES RETURNED (List by Item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY

DATE





# SUBMITTAL REGISTER

CONTRACT NO.  
W912P6-09-B-0006

TITLE AND LOCATION

Cady Marsh Ditch Wetland Mitigation

CONTRACTOR

ACTIVITY NO	TRANSMITTAL NO	SPEC SECT	DESCRIPTION ITEM SUBMITTED	PARAGRAPH #	CLASSIFICATION GOVT OR A/E REVIEW	CONTRACTOR: SCHEDULE DATES		CONTRACTOR ACTION		APPROVING AUTHORITY			
						SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE ACTION	DATE FWD	AUTH/	DATE RCD
	32 01 90		Project Schedule	1.4	G CS								
	32 92 19		SD-03 Product Data Quantity Check Maintenance Records Seed handling records Seed List Schedule										
			SD-07 Certificates Seed	2.1									
	32 93 20		SD-03 Product Data Equipment Delivery Warranty Maintenance Record Application of Pesticide		G CS G CS								
			SD-04 Samples Basal mulch	2.2	G PL								
			SD-07 Certificates Plant Material Pesticide										
			SD-10 Operation and Maintenance Data Maintenance Instructions										



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SECTION 01 35 26

SAFETY REQUIREMENTS

PART 1 GENERAL

1.1 REFERENCES

1.2 SUBMITTALS

1.3 REGULATORY REQUIREMENTS

1.4 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.4.1 Personnel Qualifications

1.4.1.1 Site Safety and Health Officer (SSHO)

## SECTION 01 35 26

## SAFETY REQUIREMENTS

## 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 within the text by the basic designation only.

## U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2008) Safety -- Safety and Health Requirements

## 1.2 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. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

Government acceptance is required for submittals with a "G" designation.

## SD-01 Preconstruction Submittals

Accident Prevention Plan (APP); G, SO

Activity Hazard Analysis (AHA); G, SO

## 1.3 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with USACE EM 385-1-1, "Appendix A, Paragraph 11 and the following federal, state, and local, laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

## 1.4 SITE QUALIFICATIONS, DUTIES AND MEETINGS

## 1.4.1 Personnel Qualifications

## 1.4.1.1 Site Safety and Health Officer (SSHO)

Provide a site Safety and Health Officer (SSHO) at the work site at all

Ability to understand and recognize job hazards.  
Documented training in the company's health and safety program.  
Documented training in the use of all equipment to be used on site.  
Authority to stop work should hazards be uncovered. This authority shall be transmitted and documented by way of company letterhead.  
Speak fluent English and any other language needed to communicate advice, guidance, instructions, and safety warnings to all members of the work crew.  
Possess current American Red Cross approved adult first aid/CPR training.

#### 1.5 ACCIDENT PREVENTION PLAN (APP)

Use a qualified person to prepare the written site-specific APP. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Include any portions of the Contractor's overall safety and health program referenced in the APP in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

##### 1.5.1 EM 385-1-1 Contents

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

- a. Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel. Specify the duties of each position.
- b. Names and qualifications of foreman and of qualified persons.

#### 1.6 ACTIVITY HAZARD ANALYSIS (AHA)

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP.

controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

Develop the activity hazard analyses using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End of Section --

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

1.2 ORDERING INFORMATION

-- End of Section Table of Contents --

SECTION 01 42 00

SOURCES FOR REFERENCE PUBLICATIONS

PART 1 GENERAL

1.1 REFERENCES

Various publications are referenced in other sections of the specifications to establish requirements for the work. These references are identified in each section by document number, date and title. The document number used in the citation is the number assigned by the standards producing

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DIVISION 01 - GENERAL REQUIREMENTS

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- 1.2 QCS SOFTWARE
- 1.3 SYSTEM REQUIREMENTS
- 1.4 RELATED INFORMATION
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    - 1.6.2.2 Payment Requests
  - 1.6.3 Quality Control (QC)
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    - 1.6.3.6 Hazard Analysis
  - 1.6.4 Submittal Management
  - 1.6.5 Schedule

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of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

#### 1.6.1.6 Request For Information (RFI)

Exchange all Requests For Information (RFI) using the Built-in RFI generator and tracker in QCS.

#### 1.6.2 Finances

##### 1.6.2.1 Pay Activity Data

The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the project schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Group pay activities Contract Line Item Number (CLIN); the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

##### 1.6.2.2 Payment Requests

Prepare all progress payment requests using QCS. Complete the payment request worksheet, prompt payment certification, and payment invoice in QCS. Update the work completed under the contract, measured as percent or as specific quantities, at least monthly. After the update, generate a payment request report using QCS. Submit the payment request, prompt payment certification, and payment invoice with supporting data using the Government's SFTP repository built into QCS export function. If permitted by the Contracting Officer, e-mail or a CD-ROM may be used. A signed paper copy of the approved payment request is also required, which will govern in the event of discrepancy with the electronic version.

##### 1.6.3 Quality Control (QC)

QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements. Maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. Provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01 45 04.00 10, CONTR2f98 0 0 9.9998 82.98 525 Tm 1Lai.0201 Tm (QCS generated dass)Tj ET leta 2/T10 1p2c

#### 1.6.3.2 Deficiency Tracking.

The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

#### 1.6.3.3 QC Requirements

Develop and maintain a complete list of QC testing and required structural and life safety special inspections required by the International Code Council (ICC), transferred and installed property, and user training requirements in QCS. Update all data on these QC requirements as work progresses, and promptly provide this information to the Government via QCS.

its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update shall be produced using QCS. QCS and RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

#### 1.6.5 Schedule

Develop a project schedule consisting of pay activities. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF). The updated schedule data shall be included with each pay request submitted by the Contractor.

#### 1.6.6 Import/Export of Data

QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data from RMS, and schedule data using SDEF.

### 1.7 IMPLEMENTATION

Contractor use of QCS as described in the preceding paragraphs is mandatory. Ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

#### 1.8 DATA SUBMISSION VIA CD-ROM

The Government-preferred method for Contractor's submission of QCS data is by using the Government's SFTP repository built into QCS export function. Other data should be submitted using E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of CD-ROM for data transfer. Export data onto CDs using the QCS built-in export function. If used, submit CD-ROMs in accordance with the following:

##### 1.8.1 File Medium

Submit required data on CD-ROM. They shall conform to industry standards used in the United States. All data shall be provided in English.

##### 1.8.2 CD-ROM Labels

Affix a permanent exterior label to each CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

##### 1.8.3 File Names

The files will be automatically named by the QCS software. The naming convention established by the QCS software shall not be altered in any way by the Contractor.

#### 1.9 MONTHLY COORDINATION MEETING

Update the QCS database each workday. At least monthly, generate and submit an export file to the Government with schedule update and progress



payment request. As required in Contract Clause "Payments", at least one week prior to submittal, meet with the Government representative to review the planned progress payment data submission for errors and omissions.

Make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

#### 1.10 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. Take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, will be deemed sufficient for the purpose of notification.

#### PART 2 PRODUCTS

Not used.

#### PART 3 EXECUTION

Not used.

-- End of Section --

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SECTION 01 45 04.00 03

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

1.2 PAYMENT

## SECTION 01 45 04.00 03

## 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 within the text by the basic designation only.

## ASTM INTERNATIONAL (ASTM)

ASTM D 3740	(2004) 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	(2005b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

## 1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

## 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 01 33 00 SUBMITTAL PROCEDURES:

## SD-01 Preconstruction Submittals

## QUALITY CONTROL PLAN; G,CS

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 GENERAL REQUIREMENTS

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall consist of plans, procedures, and organization necessary to produce

the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all activities at the site.

### 3.2 QUALITY CONTROL PLAN

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. The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used. The Government will consider an interim plan for the first 15 days of operation. Service 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.

#### 3.2.1 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all 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.
- 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.

ing, and managing  
submittals, including those of subContractors, offsite  
fabricators, suppliers, and purchasing agents. These procedures



sufficient number of additional qualified personnel to ensure safety and contract compliance. The Safety and Health Manager shall receive direction and authority from the CQC System Manager and shall serve as a member of the CQC staff. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to 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 be a person with a minimum of 7 years in related work. This CQC System Manager shall be on the site at all times during contract work and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties except those of CQC System Manager. 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 Quality Management for Contractors

If the contract award is in excess of one million dollars \$1,000,000.00, the CQC system manager is required to have a current certificate of completion for the Corps of Engineers course, "Construction Quality Management for Contractors". If the CQC manager does not have a current training certificate, then he/she will be required to obtain the training within 60 days of the contract "Notice to Proceed". The training will take about 16 hours to complete. This course will be offered at the U.S. Army Corps of Engineers, Chicago District Office, 111 N. Canal Street, Suite 600, Chicago, Illinois. It is the Contractor's responsibility to arrange a time with the Construction section for the training. Point of contact for arranging this training will be Doug Anderson at 312-846-5473 or Natalie Mills at 219-923-1763.

#### 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 SUBMITTALS AND DELIVERABLES

Submittals, if needed, shall be made as specified in Section 01 33 00 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the

contract requirements.

### 3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the services, to include that of sub Contractors and suppliers, complies with the requirements of the contract. At least three phases of





### 3.7 TESTS

#### 3.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

testing laboratory and equipment to make assurance tests, and to check the Contractor's testing procedures, techniques, and test results at no

Government's additional inspection cost.

### 3.9 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 shall be identified (Preparatory, Initial, Follow-up). List of 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 and deliverables reviewed, with contract reference, by whom, and action taken.
- g. Offsite 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.
- k. As-built contract drawings consisting of two (2) full size sets of contract drawings marked in red to depict all conditions differing from the original plans.
- l. Shop drawings consisting of three (3) complete sets of prints as finally approved.
- m. 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 twenty-four (24) hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed unless no work was performed as a result of adverse weather. As a minimum, one

report shall be prepared and submitted for every seven 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.

### 3.10 SAMPLE FORMS

The web-based Quality Control System (QCS) will generate the CQC Daily Report and other forms needed to track and manage the project.

### 3.11 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.

-- End of Section --

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## SECTION 01 57 20.02 03

## ENVIRONMENTAL PROTECTION FOR INDIANA

## 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.

## U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(2008) Safety -- Safety and Health Requirements
WETLAND MANUAL	Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1

## U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

33 CFR 328	Definitions of Waters of the United States
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 152 - 186	Pesticide Programs
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 279	Standards for the Management of Used Oil
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (IDEM)

326 IAC 6	Indiana Administrative Code, Volume 6, Title 326, Article 6. Particulate Rules
327 IAC 2-6.1	Indiana Administrative Code, Volume 6, Title 327, Article 2, Rule 6.1. Spills; Reporting, Containment, and Response
327 IAC 15-5	Indiana Administrative Code, Volume 6, Title 327, Article 15, Section 5. Storm

Water Run-off Associated with Construction Activity

- 327 IAC 15-5-6 Indiana Administrative Code, Volume 6, Title 327, Article 15, Section 5-6. Submittal of an NOI letter and construction plans
- 327 IAC 15-5-6.5 Indiana Administrative Code, Volume 6, Title 327, Article 15, Section 5-6.5. Requirements for Construction Plans
- 327 IAC 15-5-7 Indiana Administrative Code, Volume 6, Title 327, Article 15, Section 5-7. General Requirements for Storm Water Quality Control
- IC 15-3-3.6 Pesticide Use and Application

1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is 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 humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and





#### 1.4 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

#### 1.5 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations.

#### 1.6 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 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

##### Environmental Protection Plan; G, DH

The environmental protection plan. Requirements for this plan are given in paragraph 1.7.

#### 1.7 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction site activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plan. The Environmental Protection Plan shall be current and maintained on site by the Contractor. Approval of the Contractor's plan will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures.

##### 1.7.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During construction, the Contractor shall

be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.7.2 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

acre, it is the responsibility of the Contractor to have the Construction Plan, which includes the Storm Water Pollution Prevention Plan, reviewed and approved by the applicable reviewing agency. The State of Indiana designates different reviewing agencies for different counties in the state. Commonly, the reviewing agency is the local Soil and Water Conservation District (SWCD) or Department of Natural Resources Division of Soil Conservation. Information on approving agencies can be obtained from the Indiana Department of Environmental Management. The reviewing agency has up to 28 days from the date of submittal to review the Construction Plan. The Environmental Protection Plan must include documentation of the reviewing agency's approval of the Construction Plan, or the Contractor shall submit, in the instance that the reviewing agency has exceeded the 28 day review period, documentation that the reviewing agency has exceeded the review period. If notice of a deficient plan is received, the plans must be revised to satisfy the deficiencies in accordance with 327 IAC 15-5-6 and resubmitted to the reviewing agency, at which time the 28-day review period starts over.

3. The Government will review the Environmental Protection Plan, including the Construction and Storm Water Pollution Prevention Plans. If land disturbing activities are greater than or equal to one acre, the Government will then submit the Notice of Intent (NOI), along with the proof of public notice and permit fee, to the Indiana Department of Environmental Management and the appropriate reviewing agency after the plan has been approved. The Contractor will be notified of the submission date for the NOI. No land disturbing activity shall take place until 48 hours after submission of the NOI. Approval of the Contractor's plan will not relieve the Contractor of his responsibility for adequate and continuing control of pollutants and other environmental protection measures.

4. The Government will provide copies of the NOI, and all other Government correspondence with IDEM, to the Contractor. The Contractor shall post the information required in 327 IAC15-5-7 (b)(6) in a publicly accessible location near the main entrance of the project site. The location will be jointly agreed to by the Contractor and the Government during the Pre-Construction Conference. The Contractor shall take all actions necessary to keep the NOI and correspondence protected from the weather so that it remains legible. If, in the judgment of the Contracting Officer's Representative, the documents degrade to the point of being illegible, the Contractor shall replace the documents with fresh copies and remedy the problems that caused the degradation.

g. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

h. Traffic control plan that includes measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. The traffic control plan shall also include measures to prevent and minimize the amount of mud transported onto paved public roads by vehicles or runoff. Should mud or dirt be transported onto paved public roads by vehicles or runoff, the Contractor shall as

needed or directed by the Contracting Officer remove the mud or dirt from the pavement using commercial street cleaning equipment, such as a "street sweeper," or other equipment approved by the Contracting Officer's Representative.

i. 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 including methods for protection of features to be preserved within authorized work areas.

j. A Spill Control Plan including the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan supplements the requirements of EM 385-1-1. The plan shall meet the requirements of 327 IAC 2-6.1. This plan shall include as a minimum:

1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Contracting Officer and the local fire department or emergency response agency in addition to the legally required Federal, State, and local reporting channels (including the National Response Center 1-800-424-8802) if a reportable quantity is released to the environment. The plan shall contain a list of the required reporting channels and telephone numbers.

2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.

3. Training requirements for Contractor's personnel and any subcontractors, and methods of accomplishing the training.

4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.

5. The names and locations of suppliers of containment materials and locations of additional fuel oil recovery, cleanup, restoration, and material-placement equipment available in case of an unforeseen spill emergency.

6. The methods and procedures to be used for expeditious contaminant cleanup.

k. A non-hazardous solid waste disposal plan identifying methods and locations for solid waste disposal, including clearing debris. Specific information shall be provided on the proposed off-site disposal of solid waste, if necessary. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the waste shall be attached to this plan during the construction. The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or

diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October). The report shall indicate the total amount of waste generated and total amount of waste diverted in cubic yards or tons along with the percent that was diverted.

l. A recycling and solid waste minimization plan with a list of measures to reduce consumption of energy and natural resources. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.

m. An air pollution control plan detailing provisions to assure that dust, debris, materials, trash, etc. do not become airborne and travel off the project site. The air pollution control plan shall include a dust control plan. Air pollution control shall comply with 326 IAC 6.

n. A contaminant prevention plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the Contaminant Prevention Plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

o. A historical, archaeological, cultural resources, biological resources, and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be on site or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer.

p. A plan for any plant (including trees, roots, vegetation) material that will be removed from within a quarantined area. The Contractor must identify the current quarantine areas, the specific pests, and the method(s) for compliance with any quarantines. The Contractor is responsible for obtaining any permits or approvals necessary for plant purchase, movement, or disposal within a quarantine area.

q. A pesticide treatment plan shall be included and updated, as information becomes available. The plan shall include: sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (i.e. pounds of active ingredient applied), equipment used for application and calibration of equipment. The Contractor is responsible for Federal, State, Regional and Local pest management record keeping and reporting requirements.

### 1.7.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination

documents shall be attached, as an appendix, to the Environmental Protection Plan.

#### 1.8 PROTECTION FEATURES

Prior to the start of any on-site construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

#### 1.9 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer determines that the proposed alternate method will have an adverse environmental impact.

#### 1.10 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental 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 the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

### PART 2 PRODUCTS (NOT USED)

### PART 3 EXECUTION

#### 3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

This paragraph supplements the Contractor's responsibility under the contract clause "PERMITS AND RESPONSIBILITIES" to the extent that the Government has obtained the Section 401 Water Quality Certification. The Contractor shall comply with the terms and conditions of the 401 Certification attached at the end of this section.

The Contractor shall comply with the terms and conditions of the State of





### 3.2.3 Erosion Control and Sediment Controls

The Contractor shall be responsible for providing erosion and sediment control measures in accordance with Federal, State, and local laws and regulations. The erosion and sediment controls selected and maintained by the Contractor shall be such that water quality standards are not violated as a result of the Contractor's construction activities. The area of bare soil exposed at any one time by construction operations should be kept to a minimum. The Contractor shall construct or install temporary and permanent erosion and sediment control best management practices (BMPs). BMPs may include, but not be limited to, vegetation cover, stream bank stabilization, slope stabilization, silt fences, construction of terraces, interceptor channels, sediment traps, inlet and outfall protection, diversion channels, and sedimentation basins. The Contractor's best management practices shall also be in accordance with the State of Indiana National Pollutant Discharge Elimination System (NPDES) Storm Water Pollution Prevention requirements. Any temporary measures shall be removed after the area has been stabilized.

### 3.2.4 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. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent and minimize sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

## 3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by a Clean Water Act permit.

### 3.3.1 Stream Crossings

Stream crossings shall allow movement of materials or equipment without violating water pollution control standards of the Federal, State, and local governments. The Contractor shall comply with the State of Indiana water quality standards and anti-degradation provisions, Section 404 of the Clean Water Act, and the Section 401 Water Quality Certification for construction of stream crossing for this project. If the Contractor proposes additional temporary or permanent stream crossings not shown on the project drawings, or authorized under an existing permit, the Contractor must obtain all necessary permits for construction of the proposed stream crossing prior to the start of work.

### 3.3.2 Wetlands

The Contractor shall not allow discharge of contaminants into any wetlands. The Contractor shall be responsible for the protection of wetlands. Authorization to enter specific wetlands identified shall not

relieve the Contractor from any obligation to protect other wetlands within, adjacent to, or in the vicinity of the construction site and associated boundaries.

### 3.3.3 Control of Aquatic Nuisance Species





- d. Waste Sent to Waste-To-Energy Incineration Plant (This amount should not be included in the recycled amount) = \_\_\_\_\_ in cubic yards or tons, as appropriate.

### 3.8 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Historical, archaeological, and cultural resources are not known to exist within the Contractor's work area. If during excavation or other construction activities any previously unidentified or unanticipated historical, archaeological, and cultural 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; rock 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 so that the appropriate authorities may be notified and a determination made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in impact to or the destruction of these resources. The Contractor shall secure the area and prevent employees or other persons from trespassing on, removing, or otherwise disturbing such resources.

### 3.9 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

### 3.10 INTEGRATED PEST MANAGEMENT

In order to minimize impacts to existing fauna and flora, the Contractor shall coordinate with the Contracting Officer Representative at the earliest possible time prior to pesticide application. The Contractor shall discuss integrated pest management strategies with the Contracting Officer Representative and receive concurrence from the Contracting Officer Representative prior to the application of any pesticide associated with these specifications. The use and management of pesticides are regulated under 40 CFR 152 - 186 and IC 15-3-3.6 and IC 15-3-3.6.

#### 3.10.1 Pesticide Delivery and Storage

Pesticides shall be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Pesticides shall be stored according to manufacturer's instructions and under lock and key when unattended.

#### 3.10.2 Qualifications

For the application of pesticides, the Contractor shall use the services of a subcontractor whose principal business is pest control. The subcontractor shall be licensed and certified in Indiana.

### 3.10.3 Pesticide Handling Requirements

The Contractor shall formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and shall use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Material Safety Data Sheets (MSDS) shall be available for all pesticide products.

### 3.10.4 Application

Pesticides shall be applied by a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator shall wear clothing and personal protective equipment as specified on the pesticide label. The Contractor shall not allow the equipment to overflow. Prior to application of pesticide, all equipment shall be inspected for leaks, clogging, wear, or damage and shall be repaired prior to being used.

### 3.11 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds.

### 3.12 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.

### 3.13 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel and subcontractor personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. As a minimum, the training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

### 3.14 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

-- End of Section --

















# **ATTACHMENT A**







Thank you again for reviewing our submittal, Marty. Please call Greg at 312/846-5586 or e-mail him at [gregory.moore@lrc02.usace.army.mil](mailto:gregory.moore@lrc02.usace.army.mil) if you have questions.

Sincerely,



Imad Samara  
Cady Marsh Ditch Project Manager

Enclosure:

Little Calumet River Project Area Mitigation Specifications



# **ATTACHMENT B**





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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 58 00.00 03

PROJECT SIGN AND SAFETY SIGN

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- 1.2 APPLICABLE PUBLICATIONS

PART 2 PRODUCTS

- 2.1 PROJECT SIGNS
  - 2.1.1 Project Identification Sign
  - 2.1.2 Safety Performance Sign
  - 2.1.3 Project Identification Label
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PART 3 EXECUTION

- 3.1 INSTALLATION
- 3.2 MAINTENANCE
- 3.3 QUALITY CONTROL
  - 3.3.1 Records

-- End of Section Table of Contents --

SECTION 01 58 00.00 03

PROJECT SIGN AND SAFETY SIGN

PART 1 GENERAL

1.1 SCOPE

The work covered by this Section consists of providing the fabrication, erection and maintenance of one (1) Project Identification Sign and one (1) Safety Performance Sign. The items furnished in accordance with this Section shall be furnished within 10 calendar days after Notice to Proceed

- b. The safety performance record shall be updated daily.

#### 2.1.3 Project Identification Label

The two plates at the end of the section are generic because the project identification is not included. For this particular project, the project identification label shall be identified as the following on both signs:

FOR LINE 1, CADY MARSH DITCH  
FOR LINE 2, WETLAND MITIGATION

#### 2.1.4 Materials

The following are requirements for all of the project signs.

- a. The sign faces shall be electronically printed on white non-reflective vinyl decals four (4) mil thick.
- b. The sign face decals shall be mounted on panels of 1/2" thick White Board with single-sided vinyl facing. The entire circumference of the sign panels will be sealed and protected with white vinyl trim cap.
- c. A protective overlamine film shall be applied over the sign face decals capable of minimizing the deteriorating effects of ultraviolet radiation and providing additional protection against weathering and application of graffiti.
- d. 2"x4" struts will be installed between the 4"x4" support posts to reinforce the top and bottom edges of the sign panels.
- e. Wood material for the posts shall be preservative treated, structural grade Douglas Fir or No. 1 Southern Pine, or better. All other wood members shall be of well seasoned, kiln dried, clear redwood, bald cypress, red cedar, Douglas fir, spruce, tulip poplar, or white pine. The lumber materials shall be free of splits, wane, and loose knots or pitch pockets. All members of the sign shall be fastened with screws or bolts of type, size, number, and spacing to provide rigid construction and neat appearance. If the vertical supports system does not rigidly support the sign due to local soil conditions and/or wind loading additional bracing of the sign supports shall be provided. This additional bracing shall be composed of 2"X4" bracing bolted to the inside face of each 4"x4" support post and firmly anchored to the ground behind the sign. This additional bracing is not required to be treated lumber.
- f. All bolts shall be 0.375" diameter and 4" long Allen head bolts, threaded to match T-nuts.

### PART 3 EXECUTION

#### 3.1 INSTALLATION

The Contractor shall affix the panels to the posts with the Allen head bolts prior to erection of the signs, including drilling counter-sunk 0.375 inch diameter holes in the posts to match the T-nut locations. The Contractor shall take all precautions necessary to protect the faces of the



signs from damage during assembly and construction. The signs shall be installed upon commencement of the work under this contract. The location in which each sign is to be installed shall be cleared and leveled to facilitate the installation of, and provide easy visual contact with, the signs. Installation and positioning of the sign plate and posts shall be as indicated on Plates 01 58 00.00 03-1 and 01 58 00.00 03-2, found at the end of this section. Excavation and backfilling of the holes for posts and installation of the posts, braces, and stakes shall be such that signs are installed plumb and level.

### 3.2 MAINTENANCE

The Contractor shall maintain the signs in good condition and the sign site in a neat condition throughout the contract work period.

### 3.3 QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for all operations performed under this section to assure compliance with contract requirements. The Contractor shall maintain records of his quality control for all operations performed, including, but not limited to, the following:

- a. Quality of materials and workmanship
- b. Overall appearance of signs and site
- c. Observance of safety regulations

#### 3.3.1 Records

A copy of the record of inspections, as well as records of any corrective action taken, shall be furnished to Contracting Officer in accordance with SECTION 01 45 04.00 03 CONTRACTOR QUALITY CONTROL.

-- End of Section --

|

Design and Construction  
Supervised by:

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4"X4" F

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4' -0"

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DIVISION 31 - EARTHWORK

SECTION 31 31 13

CLEARING AND DEBRIS REMOVAL

PART 1 GENERAL

1.1 SCOPE

The scope of this section shall include the selective removal of woody invasives, the disposal of brush by burning and follow-up herbiciding of cut stumps and resprouts. Contractor shall furnish all labor and equipment, and perform all work required, for clearing invasive trees and shrubs,

disposal regulations. In addition to the requirements of the "Contract Clauses," safety requirements shall conform to ANSI/ASSE A10.6 and EM 385-1-1.

#### 1.4 DEFINITIONS

##### 1.4.1 Clearing

Clearing shall consist of the removal of invasive trees, brush, and downed timber, snags, and other woody debris occurring in the areas to be cleared and in all other areas within the project boundaries depicted on the plans.

##### 1.4.2 Debris Removal

Debris removal shall consist of the collection and satisfactory disposal of all debris and rubbish designated for removal, including but not limited to, concrete pieces, tires, appliances, furniture, and all other debris and rubbish occurring in the areas to be cleared and in all other areas within the project boundaries depicted on the plans.

##### 1.4.3 Girdling

Girdling involves cutting a groove or notch into the trunk of a tree to interrupt the flow of sap between the roots and crown of the tree. The groove must completely encircle the trunk and should penetrate into the wood to a depth of at least 1/2 inch, preferably 1 to 1-1/2 inches on larger trees. Girdling ultimately results in the death of the tree.

##### 1.4.4 Hand Cutting

Hand cutting is the physical cutting, by hand, of trees or shrubs using chain saws, brush clearing saws, handsaws and loppers.

#### 1.5 ENVIRONMENTAL PROTECTION

All work and Contractor operations shall comply with the requirements of Section 01 57 20.02 03, ENVIRONMENTAL PROTECTION FOR INDIANA.

#### 1.6 DISPOSAL OF MATERIAL AND DEBRIS

##### 1.6.1 Open Burning of Brush Cuttings

All cuttings of woody vegetation shall be placed in compact piles and burned in such a way as to protect nearby native woody and herbaceous

1.8 QUALITY CONTROL

The Contractor shall establish and maintain a quality control system for the work under this section to ensure compliance with the contract requirements and Section 01 45 04.00 03 CONTRACTOR QUALITY CONTROL.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 CLEARING (TREE AND SHRUB REMOVAL)

3.1.1 Removal Methods

All areas slated for tree and shrub removal are designated on the Clearing and Debris Removal plans and shall be verified in the field by the Contracting Officer prior to the start of any work. Trees, shrubs or other

for approval by the Contracting Officer prior to the start of any clearing work. Shredded material may remain on the sites to decompose, but may not accumulate to a depth of greater than one (1) inch. **All cutting of woody vegetation shall be performed by hand using chain saws, brush clearing**

Box Elder	Acer negundo
Silver Maple	Acer sacharinum
Japanese barberry	Berberis thunbergii
Grey Dogwood	Cornus racemosa
Burning Bush	Euonymus alatus
European Spindle Tree	Euonymus europaeus
Exotic Honeysuckles	Lonicera maackii, L. X muendenien, L. tatarica
Mulberries	Morus alba
Eastern Cottonwood	Populus deltoides
Exotic Buckthorns	Rhamnus cathartica, R. frangula
Multiflora Rose	Rosa multiflora
Willows	Salix alba, S. discolor, S. x glatfelteri, S. interior, S. nigra, S. x. rubens
Siberian Elm	Ulmus pumila
Highbush Cranberry	Viburnum opulus

Plus any other non-native species encountered

**Aggressive Natives to be Selectively Removed, Including, but Not Limited to:**

<u>Common Name</u>	<u>Species</u>	
Red-Osier Dogwood	Cornus stolonifera	75% removal 1/
Hawthorns	Cratageus spp.	50% removal 2/
White Ash	Fraxinus americana	50% removal 3/
Green Ash	Fraxinus pennsylvanica	100% removal 3/
Black Cherry	Prunus serotina	100% removal 3/
Native Elms	Ulmus americana, U. rubra	100% removal 3/

- 1/ Except small clumps marked by the Contracting Officer
- 2/ Preference for saving shall be given to open grown individuals
- 3/ Any trees greater than 14 inch diameter at breast height shall remain

Any other non-listed native woody species encountered shall be brought to the attention of the Contracting Officer and shall not be cut unless instructed to do so at that time.

**3.2 HERBICIDE APPLICATION**

Refer to Section 31 31 19 HERBICIDING INVASIVES for specific application instructions.

**3.3 DEBRIS REMOVAL**

Refer to Section 01 10 00.00 03 GENERAL PROVISIONS for specific disposal requirements for all debris other than cuttings of woody vegetation, which is discussed in paragraph 1.6 of this Section.

**3.4 FINAL ACCEPTANCE**

The Contractor must achieve a 90 percent success rate in the reduction of target species from the pre-existing condition in any given ten (10) square meters (107.6 square feet) within the cleared area. In instances, for example, where removal goals are specified at 50 percent removal of the specified target species, then a 90 percent success rate of the 50% goal (i.e. 45%) shall be achieved. Should the average live stem densities of all target species identified in paragraph 3.1 of this Section not achieve



a 90 percent success rate in the reduction of target species within one growing season after the completion of the tree and shrub removal, the Contractor shall continue to treat all regrowth as indicated in Section 31.31.19, HERBICIDING INVASIVES. The Contractor shall bear the sole responsibility for this work. These applications shall be repeated as necessary, with repeat inspections by the Contracting Office. Tm reinue tol,wbET 1 g 82.9

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SECTION 31 31 19

HERBICIDING INVASIVES

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  - 1.5.1 Delivery
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- 2.1 HERBICIDE SAFETY MATERIALS
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- 2.2 PRODUCTS

PART 3 EXECUTION

- 3.1 SIGNS AND PUBLIC NOTIFICATION
- 3.2 TIMING OF HERBICIDE APPLICATIONS
- 3.3 SPOT HERBICIDE APPLICATIONS
- 3.3 Non-Wetland Area Woody Stems

## SECTION 31 31 19

## HERBICIDING INVASIVES

## PART 1 GENERAL

## 1.1 SCOPE

This specification covers the requirements for furnishing all labor and equipment and performing all work required for treating the stems of all invasive tree and shrub species designated for removal. The Contractor is also responsible for herbiciding herbaceous vegetation according to the specifications.

## 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 designation only.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

7 USC Section 136

Federal Insecticide, Fungicide, and  
Rodenticide Act

## 1.3 REGULATORY REQUIREMENTS

The Contractor shall comply with Federal, State and local herbiciding regulations. Safety requirements shall conform to 7 USC Section 136.

## 1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only or as otherwise designated. 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 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Materials Safety Data Sheets (MSDS)

The Contractor shall have on site at all times the appropriate materials safety data sheets (MSDS) for all substances utilized in this work. The Contractor must provide copies of all such data to the Contracting Officer prior to the start of any work on the project sites.

SD-07 Certificates

Herbicide License

Herbicides shall be applied by State licensed applicators or licensed operators working under the supervision of a licensed applicator. The Contractor shall demonstrate that all persons

applying herbicide as part of this work have current herbicide

prior to a rain event, or immediately following a rain event that has saturated the vegetation to a degree that the chemical cannot be effectively absorbed by the plant. Wind speed and direction must also be considered, and applications suspended if winds may cause herbicide drift and off-target damage. Chemical applications shall be suspended when temperatures exceed 90 degrees Fahrenheit because herbicides are typically less effective when performed at air temperatures exceeding that level. Chemical applications shall always be performed in accordance with the pesticide label.

### 3.3 SPOT HERBICIDE APPLICATIONS

#### 3.3 Non-Wetland Area Woody Stems

In areas not subject to flooding or inundation, the stems shall be cut at a height of no more than 2 inches above the soil surface, followed by the application of a 20-30% solution of triclopyr in oil or oil-water mixtures (except honeysuckles) to the freshly cut surface and down to the root collar according to label specifications. The herbicide application shall take place the same day that the trees and shrubs are cut, weather conditions permitting. A sponge or wick applicator shall be used to apply herbicide to the stumps. No herbicide applications may be made with broadcast spray equipment. No open containers of herbicide shall be permitted in the work area due to the hazard of spilling. Honeysuckle species shall be treated with 50-100% solution of glyphosate mixed with water.

#### 3.4 Submerged/Flooded Area Woody Stems

All stems in submerged or aquatic zones shall be cut at a height of 4 inches above the water or ice surface. The cutting of stems shall be followed by the application of a 50-100% solution of Rodeo with approved aquatic, non-ionic surfactant in water to the freshly cut surface and two (2) inches down the sides of the stumps. Rodeo herbicide cannot be applied during freezing weather.

#### 3.5 Growing Season Applications

All other applications of herbicides are considered to be growing season applications and require that procedures for treating resprouts be followed according to Part 3.5 FOLLOW-UP HERBICIDE APPLICATIONS below.

#### 3.6 Herbaceous Weedy Species

If small scattered populations or individual plants of herbaceous weed species are present, they shall be controlled with spot herbicide applications in order to avert large-scale colonization. Special care must be taken to avoid damage to non-target vegetation. It is imperative, therefore, that the applicator be competent in the identification of both native and non-native species.

### 3.7 BROADCAST HERBICIDE APPLICATIONS

If either the site or the target plant colonies are large enough so that selective spot applications are neither practical nor economically feasible, then broadcast applications may be used to treat undesirable species.

Cady Marsh Ditch Wetland Mitigation

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SECTION 31 31 20

CONTROLLED BURNING

PART 1 GENERAL

1.1 SCOPE

1.2 REFERENCES

1.3 DEFINITIONS

1.4 SUBMITTALS

1.5 BURN PLANS AND PERMIT APPLICATIONS

1.5.1 Permit Applications and Regulations

SECTION 31 31 20  
CONTROLLED BURNING

PART 1 GENERAL

1.1 SCOPE

The Contractor will provide all labor, materials and equipment required or inferred from the plan documents and this specification to complete the indicated work. Work detailed in this section relates to the burning of brush piles during clearing operations as well as to the use of prescribed fire for landscape management, maintenance and stewardship purposes. The goal of this specification is to provide essential care for the initial and successful establishment of an annual controlled burn regimen for the restored landscapes, while providing those controlled burning services in a safe, responsible manner that involves both the proper authorities as well as people with either direct or indirect interest in the restoration.

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 designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2008) Safety -- Safety and Health Requirements

1.3 DEFINITIONS

Burn Coordinator: The Burn Coordinator is a person who is highly trained and experienced in the prescribed burning and fire management of open areas. The Burn Coordinator is responsible for coordinating prescribed burns for the project and has the authority to delay, modify or terminate burning activities depending upon weather conditions and concerns for public safety.

1.4 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 01 33 00 SUBMITTAL PROCEDURES:

SD-03 Product Data

Equipment and Manpower; G,CS

A listing of equipment and manpower to be used for the burning



## SD-07 Certificates

Burn Plan; G,CS

Open Burn Permit; G,CS

Post Burn Permit; G,CS

Prior to burn activities, certificates of compliance attesting that the burn plan and permit application meet the specified requirements.

## 1.5 BURN PLANS AND PERMIT APPLICATIONS

## 1.5.1 Permit Applications and Regulations

The Contractor is responsible for obtaining and paying for all required permits. Burning activities must comply with all other Federal, State and local laws, rules and ordinances. State permit applications can be obtained from Indiana Department of Environmental Management, Office of Air Management at the URL site or mailing address listed below. Burn activities must comply with 326 IAC, Article 4 - Burning Regulations (Exhibit A).

Indiana Department of Environmental Management  
Office of Air Management - Compliance  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: (317) 233-0178 or 1-800-451-6027 (Indiana Residents Only)  
URL: <http://www.state.in.us/idem/oam/comply/burn.html>

## 1.5.2 Permit Types

Two types of burn permits are necessary under this contract:

## 1.5.2.1 Brush Piles

Prior to beginning clearing operations, the Contractor must obtain an open burn permit for the burning of brush piles on the project sites. The Contractor will need to obtain and complete State Form 43692 (R/2-00) - Request for Variance from 326 IAC 4-1 (Tree Waste or Clean Wood Waste), and any other documentation required to complete the application submittal.

## 1.5.2.2 Prescribed Burning

In subsequent years, when the fuel load allows, the Contractor shall prepare burn plans for the project sites and obtain open burn permits for the burning of natural areas for restoration and management purposes. A prescribed burn can be scheduled to occur from October to April, as weather permits.

## 1.6 BURN PLANS

Burn plans shall include the following information at a minimum and must fully comply with EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual.

1.6.1 Description of Burn Unit

The plans shall include a brief description of the individual burn units consisting of a brief description of vegetation types, their locations, sizes in acres, percent slope and exposures.

1.6.2 Site Maps

The plans shall include topographic surveys of the project sites with unit boundaries. Aerial photographs of the project sites with unit boundaries and fire breaks/lanes identified shall also be included.

1.6.3 Defined Goals and Objectives

The plans should clearly define the goals and objectives to be achieved from burning activities.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.1 BURN SEQUENCE

## 3.1.1 Brush Piles

All cuttings of woody vegetation shall be stockpiled and burned in such a way as to protect native woody and herbaceous species from heat damage. The collection and stockpiling of cuttings, brush or logs must not result in pitting, rutting or any other disturbance of the soil, aside from changes caused by heating. Brush piles shall be kept as small in diameter and as compact as possible in order to minimize soil sterilization and damage to non-target species. All burning shall occur under constant supervision. At least 30 days prior to burning activities, the Contractor must apply for and obtain an Open Burning Permit. The Contractor must notify all appropriate local authorities, including fire departments, police departments and the local municipality of the planned dates to burn brush piles.

## 3.1.2 Prescribed Burns

Following is a basic outline of the burn activity schedule:

1. Immediately prior to scheduling a burn day, confirm site conditions, including homes or other properties in close proximity to the site, and address any unexpected hazards such as new debris accumulation, etc.
2. Organize the burn crew and equipment
3. Verify weather forecast and review smoke management
4. Mow fire breaks and wet entire perimeter and areas around trees, shrubs or other elements requiring protection
5. Establish fire lanes and safe areas
6. Start backfires
7. Complete burn unit
8. Monitor and control any hot spots remaining after the burn
9. Submit post burn report
10. Have a contingency plan in place to ensure that the fire can be extinguished should smoke become a nuisance to surrounding homes, businesses or roadways.

## 3.2 CREW ORGANIZATION AND EQUIPMENT

The burn crew must be under direct control of a qualified Burn Coordinator who will also have authority to delay, modify or terminate burning activities depending upon weather conditions and concerns for public safety. Several additional support members must also be present to assist in burn activities. All participants should be outfitted with nomex coveralls, hard hats, goggles and leather gloves. Necessary burn equipment includes, but is not limited to, water pumper, drip torches, fire rakes, flappers, water packs, all-terrain vehicle with water capabilities and a mop-up tool set. Additional items of importance include a first aid kit, portable radios, cellular phones and drinking water. Each member of the burn crew shall have a walkie talkie in order to communicate and receive direction from the Burn Coordinator.

## 3.3 WEATHER RESTRICTIONS

It is essential that National Weather Service weather forecasts be obtained

12 hours and 2 hours prior to the burn in order to coordinate activities. On-site weather must be obtained 1 hour prior to the burn and as necessary during the burn if weather conditions change. At no time should a burn be conducted if the weather conditions vary from the established burn parameters.

Air Temperature:	35 - 75 degrees F
Relative Humidity:	25% - 50%
Wind Direction:	see paragraph entitled SMOKE MANAGEMENT
Wind Speed:	3 - 15 mph
Effective Windspeed:	1.2 - 6 mph

#### 3.4 SMOKE MANAGEMENT

The resulting smoke from the burn will be minimized by burning during the daytime when transport winds and mixing heights are such that smoke can be lifted and dispersed safely away from smoke sensitive areas. Warning signs shall be placed along main roads to alert vehicles of the burn activities. Once the prairie plantings are burned there will be little, if any, additional smoke production because the Burn Coordinator should have prevented burning of any other organic or inorganic materials.

#### 3.5 MOWING AND FIRE LANES

Some standing vegetation before or after the burn will have to be mowed. Situations that may warrant mowing are: green stands of vegetation that would not burn, lignous stalks that remain upright after the burn, areas near trees, fences, signs, power boxes, under power lines (that should have low, controlled flames) or wet swales that must dry out before a fire will carry through them. Such areas shall be mowed to a height of 4 inches. Fire lanes must be kept free of debris and available for use at all times. Hand crews with flappers and water packs should be staged along established firebreaks to suppress any fire that escapes the designated burn area.

#### 3.6 IGNITION PATTERNS

Ignition should be conducted using a ring-headfire pattern. Two person crews should proceed in opposite directions from a common starting point. The initial ignition should include backfiring and flanking until safe burn-in zones have been achieved, at which time headfire ignition may be conducted.

#### 3.7 MONITORING AND CLEAN-UP

Before the burn crew is disbanded after the initial headfire carries through the landscape, check all areas for embers and smoking to ensure these hot zones are extinguished. Remove all inorganic trash. Ash or fuel spills must be cleared from the landscape using appropriate removal and dissipation techniques that conform to environmental regulations.

Any damage to the existing landscape, including any trees or fences, and existing roads and structures by fire, fuel spills, dead wildlife etc., due to negligence of the contractor shall be replaced in kind at no additional cost to the Government.

#### 3.8 ACCEPTANCE

The burn will be reviewed by the Contracting Officer during or immediately after the burn is completed. The success of the burn will be determined by:

1) the amount of vegetation that ignited and how the fire carried, 2) whether all the land mass was covered by the fire, and 3) how much residual ash (or blackness) remained after the burn.

-- End of Section --

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- 1.4 PROJECT SCHEDULE
- 1.5 RESTORATION POLICY, GOALS AND OBJECTIVES
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    - 3.1.1.3 Herbiciding Invasives
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    - 3.1.3.1 Supplemental Seeding
- 3.2 SUMMARY OF LANDSCAPING ACTIVITIES AND PROJECT SCHEDULE

-- End of Section Table of Contents --



1.5.1.1 Restoration Goals

The purpose of the project is to offset wetland impacts associated with the Cady Marsh Ditch flood control project by restoring a native wet savanna plant community. As an added benefit, the project will also expand the existing Little Calumet River in-project mitigation area, help to recharge the shallow aquifer and reduce runoff into the Little Calumet River. The project will remove invasive native herbaceous and woody weed species and the seeding, planting and monitoring and maintenance of 2 acres of wet savanna.

1.5.1.2 Restoration Objectives

The objectives of the restoration include the installation and management of native landscapes that, within 10 years, will age 88 e 444 72.26 98ntectiE.04 T 82.98



seeding of the prairie matrix. Due to limitations of access, seed may not be drilled into the ground using a drill seeder or other mechanical equipment. Instead, the seed will be hand broadcast and raked into the ground. See Section 32 92 19 NATIVE SEEDING for the permanent prairie seed and specifications.

### 3.1.2.2 Post-planting Care

Post planting care includes site evaluations, restoration monitoring, weed control, erosion remediation, watering and general site maintenance.

#### A. Site Evaluations

Regular site evaluations by the designated Site Steward are necessary in order to schedule general site maintenance activities in a timely and efficient manner and to document the conditions of the newly installed landscape.

#### B. Restoration Monitoring

In 2500120Evpandef2dhen6ineduf82ldgSöwengised8s82.98a54702 August through 2 m82.exasse2.d9 early October) the restoration should be monitored by means of vegetation sampling. Sampling shall include meander surveys as well as permanent, repeatable transect lines. The results shall be presented in a report with photo graphs and data on site quality assessment data, a list of plant species and quantities seeded, general observations and any other information that serves to document the initial installation of the native landscape.

#### C. Weed Control

Weed control in the first year will include 2 mowings/cuttings at a height of 8 to 12 inches, one in mid July and another in September. Any areas of problem weeds, including but not limited to Field Thistle (*Cirsium arvense*), Giant Reed (*Phragmites australis*), Purple Loosestrife (*Lythrum salicaria*), Garlic Mustard (*Alliaria petiolata*) and Reed Canary Grass (*Phalaris arundinacea*) must be spot herbicided as well. Lastly, watering and/or erosion gully repair may be necessary depending upon weather conditions and as directed by the designated Site Steward.

### 3.1.3 Phase 3: Establishment-period8 82.98 54702 Tm 0 d.stabYluds 2-382.E98 335.28 348

of additional site-appropriate species as the landscape matures, can be accomplished through overseeding as the landscape matures.

A. Site Evaluations

Site evaluations by the designated Site Steward will be accomplished as necessary through the end of the fourth growing season in order to assess the growing conditions and schedule specific maintenance activities, such as weed control, erosion remediation and overseeding. At the invitation of the Contractor, at least one of these site evaluation visits will be attended annually by the Contracting Officer during the growing season.

B. Restoration Monitoring

Restoration monitoring shall be repeated every year, with the sampling procedure following that established in year 1. The results shall be summarized in a report that includes floristic quality assessment data, photographs and recommendations for land management. The annual monitoring report shall be due by 1 February for monitoring performed the previous year.

C. Controlled Burning

Controlled burning is a fundamental management tool that should be conducted every year. Typically, the first burn will not occur until after the second full growing season when there is sufficient fuel to carry a fire. More detail on burn management is provided in Section 31 31 20 CONTROLLED BURNING.

D. General Site Maintenance/Stewardship

General site maintenance/stewardship includes all activities associated with the management of the developing landscape, including weed control (through mowing, herbicide applications and hand weeding), litter removal, overseeding, repair of any project signs or other remedial actions as directed by the Site Steward. These activities will be necessary in order for the Contractor to meet performance standards described in Section 32 01 92 RESTORATION MONITORING, MAINTENANCE AND PERFORMANCE STANDARDS. The performance standards must be achieved in order for the Contractor to receive final acceptance by the Contracting Officer.

3.2 SUMMARY OF LANDSCAPING ACTIVITIES AND PROJECT SCHEDULE

The table below summarizes the landscape implementation activities that the Contractor shall perform within the wetland, prairie and savanna landscape types. An (X) indicates that the activity shall occur, and a dash (-) indicates that the activity will not be required, in the implementation year indicated.

Restoration Activity	Year of Restoration			
	1	2	3	4
Phase 1: Site Preparation				
Site Preparation	X	-	-	-
Phase 2: Installation & Post-planting Care				
Seed Installation	X	X	-	-
Post-planting Care	X	-	-	-
Phase 3: Establishment-period Stewardship				
Site Evaluations	-	X	X	X
Restoration Monitoring	-	X	X	X
Controlled Burning	-	-	X	X
General Site Maintenance/Stewardship	-	X	X	X

-- End of Section --



## SECTION 32 01 92

## RESTORATION MONITORING, MAINTENANCE AND PERFORMANCE STANDARDS

## PART 1 GENERAL

## 1.1 SCOPE

Monitoring the development of the native landscapes during all phases of the restoration process will be one of the primary responsibilities of the Contractor's Site Steward. Formal monitoring events shall occur every year during the period from May through June and from late August through early October, when the vegetation will be sampled using Floristic Quality Assessment methodology (FQA). This will include both meander surveys of the restoration site and transect sampling. Permanent photo stations will be [REDACTED] field at appropriate locations as well. The data shall be presented in year-end reports that include an assessment of the field data and recommendations for land management in the following year. The maintenance and monitoring portion of the contract will be for a four-year period following installation and preliminary acceptance by the Contracting Officer.

## 1.2 CITATIONS

Swink, Floyd and Gerould Wilhelm. 1994. Plants of the Chicago Region. 4th ed. Indianapolis: Indiana Academy of Science.

## PART 2 PRODUCTS (Not Used)

## PART 3 EXECUTION

## 3.1 PERFORMANCE STANDARDS

Performance standards or criteria are tied to each of the three phases of the restoration process and are presented below.

Phase 1: Site Preparation

Phase 2: Installation and Post-planting Care of Seeded Areas

Phase 3: Establishment-period Stewardship

## 3.1.1 Phases 1 &amp; 2: Site Preparation and Installation and Post-planting (year 1)

3.1.1.1 In the year of installation, restoration monitoring shall document



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SECTION 32 92 19

NATIVE SEEDING

PART 1 GENERAL

1.1 SCOPE

The Contractor shall furnish all labor, materials and equipment required or inferred from the plan documents and this section to complete the indicated work. Seeding shall take place within designated areas utilizing appropriate methods as indicated in the project drawings. The ultimate goal of seeding the selected species is to create a native prairie landscape that is biologically diverse and self-replicating.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

U.S. DEPARTMENT OF AGRICULTURE (USDA)

AMS Seed Act

(1940; R 1988; R 1998) Federal Seed Act

1.2.1 Other Citations

Swink, Floyd and Gerould Wilhelm. 1994. Plants of the Chicago Region. 4th ed. Indianapolis: Indiana Academy of Science.

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



Delivery dates, storage and handling information.

Seed List

List of species available from nurseries, to be purchased upon approval by the Contracting Officer.

Schedule

Immediately following Notice to Proceed, the Contractor shall begin seed procurement. (See Paragraph 3.1.1.) Within two weeks following seeding/planting, submit a description of schedule for maintenance (refer to paragraph 3.5 for maintenance requirements).

SD-07 Certificates

Seed

## 1.5 DELIVERY, STORAGE, AND HANDLING

### 1.5.1 Delivery

All seed must be viable and warranted to be genetically from a source within 200 miles of the project location. No rebagged or relabeled seed from beyond this limit will be acceptable on this project. If some required seeds cannot be obtained within the specified locations, the Contractor may obtain them from alternate locations upon documentation of non-availability.

Seed shall be packaged in accordance with standard commercial practice.

All seed shall be kept dry and protected from temperature extremes to maintain dormancy and viability while in transit, storage or during planting operations.

Seed delivery, storage and handling must be documented with all records submitted to the Contracting Officer. This information should be recorded

2) date of receipt of seed test results, 3) storage conditions,

storage conditions, temperatures and humidity for each day held. A delivery schedule shall be provided at least 10 calendar days prior to the first day of delivery.

### 1.5.2 Inspection

Seed shall be inspected upon arrival at the job site for conformity to species and quality. Seed that is wet, moldy, or bears a test date five months or older, shall be rejected. Other materials shall be inspected for

grasses (Table A) shall be sown at 8 pounds per acre total. The percentage shown for each of the grasses indicates the relative amount that each species should comprise. Forbs (Table B) shall be sown at 2 pounds per acre total. Individual seeding rates are not given, since rates and seed availability vary considerably. Instead, the Contractor shall procure as much seed diversity as possible when obtaining seed material.

Species enrichment can be accomplished by means of overseeding as the prairie landscape matures (typically no sooner than after the third full growing season). Upon review of annual restoration monitoring reports, the Contractor will determine what species to include and where they should be placed in the landscape. Species should be native to Lake County, Indiana according to *Plants of the Chicago Region*, 4th Edition (Swink and Wilhelm 1994).

Table A: Grasses and Sedges (@ 8 lbs/acre total)

Species	Common Name	Quantity/Proportion
<i>Andropogon gerardii</i>	big bluestem grass	15%
<i>Andropogon scoparius</i>	little bluestem grass	45%
<i>Carex bicknellii</i>	copper-shouldered oval sedge	5%
<i>Carex brevior</i>	plains oval sedge	5%
<i>Elymus canadensis</i>	Canada wild rye	5%
<i>Panicum virgatum</i>	switch grass	10%
<i>Sorghastrum nutans</i>	Indian grass	10%

Table B: Forbs (@ 2 lbs/acre total)

Species	Common Name
<i>Allium canadense</i>	wild onion
<i>Allium cernuum</i>	nodding wild onion
<i>Aquilegia canadensis</i>	wild columbine
<i>Asclepias tuberosa</i>	

Species	Common Name
<i>Parthenium integrifolium</i>	wild quinine
<i>Penstemon digitalis</i>	foxglove beard tongue
<i>Petalostemum purpureum</i>	purple prairie clover
<i>Physostegia virginiana</i> var.	virginiana obedient plant
<i>Potentilla arguta</i>	prairie cinquefoil
<i>Pycnanthemum virginianum</i>	common mountain mint
<i>Ratibida pinnata</i>	yellow coneflower
<i>Rudbeckia hirta</i>	black-eyed Susan
<i>Rudbeckia subtomentosa</i>	sweet black-eyed Susan
<i>Silphium integrifolium</i>	rosin weed
<i>Silphium laciniatum</i>	compass plant
<i>Silphium perfoliatum</i>	cup plant
<i>Silphium terebinthinaceum</i>	prairie dock
<i>Smilacina stellata</i>	starry false Solomon's seal
<i>Solidago graminifolia</i>	grass-leaved goldenrod
<i>Solidago riddellii</i>	Riddell's goldenrod
<i>Solidago rigida</i>	stiff goldenrod
<i>Solidago speciosa</i>	showy goldenrod
<i>Thalictrum dasycarpum</i>	purple meadow rue
<i>Tradescantia ohiensis</i>	common spiderwort
<i>Vernonia fasciculata</i>	common ironweed
<i>Veronicastrum virginicum</i>	Culver's root
<i>Zizia aurea</i>	golden Alexanders

### 2.1.3 Quality

Non-native seed shall be a maximum one-percent by weight of the total mixture.

### 2.1.4 Seed Mixing

All seeds shall have the proper stratification and/or scarification to break seed dormancy for spring planting. No treatment will be used for seed included in summer or fall plantings. All legumes shall be inoculated with the proper rhizobia at the appropriate time prior to planting. Seed shall be true to their name as specified. Their origin shall be from within a 200-mile radius of the project site. No rebagged or relabeled plants or seeds from beyond this distance shall be accepted. If some required seeds cannot be obtained within the specified locations, the Contractor may obtain them from alternate locations upon documentation of non-availability. Provide an affidavit verifying authenticity and proof of seed and plant sources.

Native seed shall be applied with a cover crop of Annual Rye (*Lolium multiflorum*) at 10 pounds/acre and 30 pounds/acre of either Seed Oats (*Avena sativa*) for spring seeding or Winter Wheat (*Triticum aestivum*) fall or dormant seeding.

### 2.1.5 Substitutions

Substitutions will not be allowed without written request and approval from the Contracting Officer prior to seeding. The Contractor must supply written proof that the seed specified is not obtainable. The notification must be submitted no later than 30 days after award of Contract and shall include proposed species of the nearest equivalent variety.

The above provisions shall not relieve the Contractor of the responsibility for obtaining specified seed in advance if special growing conditions or

other arrangements must be made in order to supply specific materials.

### PART 3 EXECUTION

#### 3.1 INSTALLING SEED TIME AND CONDITIONS

##### 3.1.1 Seeding Time

All seeding shall be done between April 1 and June 15 or after October 1. Deviation from these planting dates shall be permitted only when approved in writing by the Contracting Officer. Actual seeding shall be performed during the above period only when soil conditions and weather are suitable and in accordance with locally accepted practices, as approved by the Contracting Officer. Seeding operations shall be suspended during periods when air temperature is below freezing or above 85°F.

##### 3.1.2 Seeding Conditions

Seeding operations 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.

It is the Contractor's responsibility to examine site and verify that conditions are suitable for seeding as specified and that no defects or errors are present which would cause defective installation of products or cause latent defects in workmanship and function. The Contractor must notify the Contracting Officer in writing of such unsuitable conditions prior to commencement of work.

##### 3.1.3 Equipment Calibration

Immediately prior to the commencement of seeding operations, calibration tests shall be conducted on the equipment to be used. These tests shall confirm that the equipment is operating within the manufacturer's specifications and will meet the specified criteria. The equipment shall be calibrated a minimum of once every day during the operation. The calibration test results shall be documented and provided within 1 week of testing.

#### 3.2 SITE PREPARATION

##### 3.2.1 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 condition prevails, the work shall be stopped when directed by the Contracting Officer.

##### 3.2.2 Removal of Debris and Rubbish and Repair of Ruts

Debris and rubbish shall include both items found within the work limits and items resulting from site preparation, and shall be disposed of in accordance with Section 31 31 13 CLEARING AND GRUBBING.

##### 3.2.3 Existing Ground Cover

Existing ground cover shall be treated as specified in Section 31 31 13 CLEARING AND GRUBBING unless otherwise indicated in the plans. Herbicide

shall be applied as specified in Section 31 31 19 HERBICIDING INVASIVES. All cut material shall be disposed of in accordance with Section 31 31 20 CONTROLLED BURNING.

#### 3.2.4 Protection

Areas with the prepared surface shall be protected from compaction or damage by vehicular or pedestrian traffic and surface erosion.

### 3.3 INSTALLATION

Due to access limitations, the seeding method shall be Broadcast Seeding. Seeding procedure shall ensure even coverage. Seeding operations shall not take place when the wind velocity will prevent uniform seed distribution.

#### 3.3.1 Broadcast Seeding

Although drill seedling is generally the preferred method, broadcast seeding is required here due to access limitations. Broadcast seeding is feasible due to the small size of the project site. Seed shall be uniformly broadcast at the rate of 8 pounds per acre for grasses and 2 pounds per acre for forbs using broadcast seeders or hand broadcasting. Half the total rate of seed application shall be broadcast in 1 direction, with the remainder of the seed rate broadcast at 90 degrees from the first direction. Seed shall be covered a maximum 1/4 inch depth by hand raking or other approved method.

### 3.4 FIELD QUALITY CONTROL

#### 3.4.1 Demonstration of Seed Calibration

Seeding equipment shall be calibrated to correspond to the specified seeding rates. Proper calibration shall be demonstrated to the Contracting Officer.

#### 3.4.2 Confirmation of Seed Use

For materials provided in bags, the empty bags shall be retained for recording the amount used. For materials provided in bulk, the weight certificates shall be retained as a record of the amount used. The amount of material used shall be compared with the total area covered to determine the rate of application used. Differences between the quantity applied and the quantity specified shall be adjusted as directed.

#### 3.4.3 Interim Field Observation Reviews by Contracting Officer

The Contracting Officer reserves the right to inspect seeds, either at place of growth or at site before planting, for compliance with requirements for name, variety, quantity, quality and mix proportion.

#### 3.4.4 Supplemental Seeding

The Contractor shall notify the Contracting Officer and map locations within 5 days after completing initial and/or supplemental plantings in each planting area.

#### 3.4.5 Contracting Officer Inspection

The Contractor must contact the Contracting Officer to schedule an

inspection of planting results by July 15 following the first full growing season. Results of this inspection will be used in the development of any remedial planting plan or warranty work.

#### 3.4.6 Management and Monitoring

The Contractor shall begin management and monitoring activities following the first full growing season following seeding activities and continue for three years, or until the Contracting Officer grants final approval of the project, whichever is the later. Reference Section 32 01 90 IMPLEMENTATION AND MANAGEMENT and Section 32 01 92 RESTORATION MONITORING AND PERFORMANCE STANDARDS for additional details.

##### 3.4.6.1 Maintenance Record

A record of each site visit shall be furnished, which describes the maintenance work performed, areas repaired or reinstalled, and which furnishes a diagnosis for unsatisfactory establishment of native plants.

#### 3.5 RESTORATION AND CLEAN UP

Excess and waste material shall be removed daily. Existing areas that have been damaged or scarred during planting operations shall be restored to their original condition at the Contractor's expense.

#### 3.6 PRELIMINARY REVIEW AND ACCEPTANCE

Upon the complete installation of the native seeding work, the Contractor must request a review by the Contracting Officer to determine whether work conforms to the requirements of the contract documents.

##### 3.6.1 Corrective Work

The Contracting Officer shall notify the Contractor should the seeding work not conform to the requirements of the Contract Documents. In this event, the Contractor shall receive written notification from the Contracting Officer outlining any deficiency or deficiencies preventing preliminary acceptance of the work and specifying the corrective work necessary in order to grant preliminary acceptance of the work. Corrective work must be completed within fourteen calendar days after the date of the preliminary review notification. Upon completion of the corrective work, the Contractor must request another preliminary review to determine whether seeding work conforms to the requirements of the contract documents. Corrective work, followed by the Contracting Officer's review, shall be required until the corrective work is approved by the Contracting Officer.

##### 3.6.2 Preliminary Acceptance

Upon successful completion of all implementation work, the Contractor shall request an inspection by the Contracting Officer. When the Contracting Officer determines that all site work, including the native seeding work, conforms to the requirements of the contract documents, the Contractor shall receive a written notification of Preliminary Acceptance. The three-year management and monitoring period shall begin on the date that the notification of Preliminary Acceptance is issued. Refer to Section 32 01 90 IMPLEMENTATION AND MANAGEMENT and Section 32 01 92 RESTORATION MONITORING AND PERFORMANCE STANDARDS for additional details pertaining to the three-year management and monitoring requirements.

3.7 SEED WARRANTY

3.7.1 Warranty Period

The Contractor shall warrant that forbs, grasses and sedges shall meet the Performance Standards within 3 years from date of Preliminary Acceptance, i.e. the end of implementation and maintenance year 1. Performance Standards are included in Section 32 01 92 RESTORATION MONITORING AND



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SECTION 32 93 20

PLANTING

PART 1 GENERAL

1.1 SCOPE

The Contractor shall furnish all labor, materials and equipment required or inferred from the plan documents and this section to complete the indicated work. Planting shall take place within designated areas utilizing appropriate methods as indicated in the specifications and drawings.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

dates and times. The pesticide trade name, EPA registration number, chemical composition, formulation, concentration of original and diluted material, application rate of active ingredients, method of application, area treated, amount applied; and the name and state license number of the state certified applicator shall be included.

SD-04 Samples

Basal mulch; G,PL

A 4.5 kg (10 pound) sample

SD-07 Certificates

Plant Material

Pesticide

Prior to delivery of materials, certificates of compliance attesting that materials meet the specified requirements. Certified copies of the material certificates shall include the following.

a. Plant Material: Classification, botanical name, common name, size, quantity by species and location where grown.

b. Pesticide. EPA registration number and registered uses.

SD-10 Operation and Maintenance Data

Maintenance Instructions

Instruction for year-round care of installed plant material.

1.4 SOURCE INSPECTIONS

The nursery or source of plant material and the source of delivered topsoil shall be subject to inspection.

1.5 DELIVERY, INSPECTION, STORAGE, AND HANDLING

1.5.1 Delivery

A delivery schedule shall be provided at least 10 calendar days prior to the first day of delivery.

1.5.1.1 Plant Material Identification

Plant material shall be identified with attached, durable, waterproof labels and weather-resistant ink, stating the correct botanical plant name and size.

1.5.1.2 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.

### 1.5.2 Inspection

Plant material shall be well-shaped, vigorous and healthy with a healthy, well-branched root system, free from disease, harmful insects and insect eggs, sun-scald injury, disfigurement or abrasion. Plant material shall be checked for unauthorized substitution and to establish nursery grown status. Plant material showing desiccation, abrasion, sun-scald injury, disfigurement, or unauthorized substitution shall be rejected. 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. Plant material with broken or cracked balls; or broken containers shall be rejected. Bare-root plant material that is not dormant or is showing roots were pulled from the ground shall be rejected. Other materials shall be inspected for compliance with paragraph 2.1.

### 1.5.3 Storage

#### 1.5.3.1 Plant Material Storage

Plant material not installed on the day of arrival at the site shall be stored and protected in designated areas. Plant material shall not be

PART 2 PRODUCTS

2.1 PLANT MATERIAL

2.1.1 Plant Material Classification

The plant material shall be nursery grown stock conforming to ANLA Z60.1 and shall be the species specified in Table A.

species of tree specified and with the crown in good balance with the trunk. The trees shall not be "poled" or the leader removed. The trunk shall be reasonably straight and symmetrical with crown and have a persistent main leader.

#### 2.1.8 Plant Material Size

Plant material shall be furnished in sizes indicated. Plant material larger in size than specified may be provided at no additional cost to the Government.

#### 2.1.9 Plant Material Measurement

Plant material measurements shall be in accordance with ANLA Z60.1.

### 2.2 BASAL MULCH

#### 2.2.1 Basal Mulch

Basal mulch shall be shredded hardwood bark material and shall be free from weeds, mold and other deleterious materials. Basal mulch materials shall be native to the region.

### 2.3 STAKING MATERIAL

#### 2.3.1 Wood Ground Stakes

Wood ground stakes shall be rough sawn hardwood or fir free from knots, rot, cross grain or other defects that would impair their strength. Wood ground stakes shall be a minimum of 2 x 2 inches square and a minimum 3 feet long with a point at one end. All stakes are to be driven below finished grade. Only wood staking may be used; no steel staking shall be permitted unless determined appropriate by the Contracting Officer.

#### 2.3.2 Bracing Stake

Wood bracing stakes shall be a minimum 2 x 2 inches square and a minimum 8 feet long with a point at one end. Stakes shall be set without damaging rootball.

#### 2.3.3 Deadmen

Wood deadmen shall be a minimum 4 x 4 x 36 inches long.

#### 2.3.4 Hose

Half inch diameter black reinforced rubber or plastic garden hose, cut to required lengths, shall be used to protect tree trunks from damage by wires. Used hose is acceptable.

### 2.4 FLAGGING

Plastic flag material, a minimum 6 inches long, shall be used on guying material. Tape color shall be consistent and visually complimentary to the entire project area and shall meet pedestrian visual safety requirements for day and night.

Cady Marsh Ditch Wetland Mitigation



### 3.4.2 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. Additional requirements are as follows.

#### 3.4.2.1 Balled and Burlapped

Biodegradable burlap and tying material shall be carefully opened and folded back from the top a minimum 1/3 depth from the top of the root ball. Backfill mixture shall be added to the plant pit in 6 inch layers with each layer tamped.

#### 3.4.3 Earth Berm

An earth berm, consisting of backfill soil mixture, shall be formed with a minimum 4 inch height around the edge of the plant pit to aid in water retention and to provide soil for settling adjustments.

#### 3.4.4 Watering

Plant pits and plant beds shall be watered immediately after backfilling, until completely saturated.

#### 3.4.5 Staking and Guying

Staking will be required only when trees are unstable or will not remain set due to their size, shape or exposure to high wind velocity. The Contractor will be responsible for conducting periodic inspections of the plant material to determine if staking and guying is necessary and shall consider such work as part of the base contract.

##### 3.4.5.1 One Bracing Stake

Trees 4 to 6 feet tall shall be firmly anchored in place with one bracing stake. The bracing stake shall be placed on the side of the tree facing the prevailing wind. The bracing stake shall be driven vertically into firm ground and shall not injure the ball or root system. The tree shall be held firmly to the stake with a double strand of guying material. The guying material shall be firmly anchored at a minimum 1/2 tree height and shall prevent girdling. A chafing guard shall be used when metal is the guying material.

##### 3.4.5.2 Two Bracing Stakes

Trees from 6 to 8 feet tall shall be firmly anchored in place with 2 bracing stakes placed on opposite sides. Bracing stakes shall be driven vertically into firm ground and shall not injure the ball or root system. The tree shall be held firmly between the stakes with a double strand of guying material. The guying material shall be firmly anchored at a minimum 1/2 tree height and shall prevent girdling. Chafing guards shall be used when metal is the guying material.

##### 3.4.5.3 Flags

A flag highly visible to pedestrians shall be securely fastened to each guy line equidistant between the tree and the stake, deadman or earth anchor.

### 3.5 FINISHING

#### 3.5.1 Placing Basal mulch

The placement of basal mulch shall occur around the dripline of the tree a maximum of 24 hours after planting. Basal mulch, used to reduce soil water loss, regulate soil temperature and prevent weed growth, shall be spread to

### 3.8 RESTORATION AND CLEAN UP

#### 3.8.1 Restoration

Seeded areas, haul roads and parking drives and lots that have been damaged from the planting operation shall be restored to original condition at the Contractor's expense.

#### 3.8.2 Clean Up

Excess and waste material shall be removed from the installed area and shall be disposed offsite. Adjacent paved areas shall be cleared.

### 3.9 PLANT ESTABLISHMENT PERIOD

#### 3.9.1 Commencement

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 a minimum of 90 days or the remaining contract time period, whichever is longer, 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. The plant establishment period shall be coordinated with Section 32 92 19 NATIVE SEEDING. The plant establishment period shall be modified for inclement weather shut down periods, or for separate completion dates for areas.

#### 3.9.2 Maintenance During Establishment Period

Maintenance of plant material shall include straightening plant material, straightening stakes, tightening guying material, correcting girdling, supplementing basal mulch, pruning dead or broken branch tips, maintaining plant material labels, watering, eradicating weeds, insects and disease as well as removing and replacing unhealthy plants.

##### 3.9.2.1 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. An adequate supply of moisture is estimated to be the equivalent of 1 inch of absorbed water per week, delivered in the form of rain or augmented by watering. Run-off, puddling and wilting shall be prevented.

##### 3.9.2.2 Plant Pit Settling

When settling occurs to the backfill soil mixture, additional backfill soil shall be added to the plant pit or plant bed until the backfill level is equal to the surrounding grade. Serious settling that affects the setting of the plant in relation to the maximum depth at which it was grown requires replanting in accordance with paragraph INSTALLATION.

#### 3.9.3 Maintenance Record

A record shall be furnished describing the maintenance work performed, the number of plants lost, diagnosis of the plant loss and the number of replacements made on each site visit.

#### 3.9.4 Unhealthy Plant Material

A tree shall be considered unhealthy or dead when the main leader has died back, or 25 percent or more of the crown 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.

#### 3.9.5 Replacement Plant Material

Unless otherwise directed, plant material shall be provided for replacement in accordance with paragraph 2.1 PLANT MATERIAL. Replacement plant material shall be installed in accordance with paragraph 3.4 INSTALLATION and recommendations in paragraph 3.9 PLANT ESTABLISHMENT PERIOD. Plant material shall be replaced in accordance with paragraph 1.6 WARRANTY. An extended plant establishment period shall not be required for replacement plant material.

-- End of Section --